City Council

Agenda

Tuesday, December 20, 2022
Council Chambers
749 Main Street
6:00 PM

Members of the public are welcome to attend and give comments remotely; however, the in-person meeting may continue even if technology issues prevent remote participation.

- *You can call in to +1 408 638 0968 or 833 548 0282 (Toll Free), Webinar ID #876 9127 0986.*
- *You can log in via your computer. Please visit the City's website here to link to the meeting: www.louisvilleco.gov/council*

The Council will accommodate public comments during the meeting. Anyone may also email comments to the Council prior to the meeting at Council@LouisvilleCO.gov.

1. CALL TO ORDER & ROLL CALL

2. APPROVAL OF AGENDA

3. PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA AND ITEMS ON THE CONSENT AGENDA

Public comments are limited to 3 minutes per speaker. When several people wish to speak on the same position on a given item, Council requests they select a spokesperson to state that position.

4. CONSENT AGENDA

The following items on the City Council Agenda are considered routine by the City Manager and shall be approved, adopted, accepted, etc., by motion of the City Council and voice vote unless the Mayor or a City Council person specifically requests an item be considered under "Regular Business." In such an event the item shall be removed from the "Consent Agenda" and Council action taken separately on said item in the order appearing on the Agenda. Those items so approved under the heading "Consent Agenda" will appear in the Council Minutes in their proper order.

A. Approval of Bills
B. Award Bid for 2022 Storm Sewer System Maintenance Project
C. Approval of Use of Funding from Denver Bronco Stadium Sale

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Citizen Information

If you wish to speak at the City Council meeting in person, please fill out a sign-up card and present it to the City Clerk at the meeting; if you are attending remotely, please use the "raise hand" icon to show you wish to speak in public comments.

Persons planning to attend the meeting who need sign language interpretation, translation services, assisted listening systems, Braille, taped material, or special transportation, should contact the City Clerk's Office (303.335.4536 or 303.335.4574) or ClerksOffice@LouisvilleCO.gov. A forty-eight-hour notice is requested.

Si requiere una copia en español de esta publicación o necesita un intérprete durante la reunión del Consejo, por favor llame a la Ciudad al 303.335.4536 o 303.335.4574 o email ClerksOffice@LouisvilleCO.gov.

D. Approval of Traffic Signal Maintenance Contract Amendment with Lumin8
E. Approval of 2023 Board and Commission Appointments
F. Approval of Broker Services Contract
G. Approval of January 10 as a Regular City Council Meeting and January 17 and 24 as Special City Council Meetings
H. Approval for Purchase of Additional Snow Removal Deicing Materials

5. COUNCIL INFORMATIONAL COMMENTS ON PERTINENT ITEMS NOT ON THE AGENDA (Council general comments are scheduled at the end of the Agenda.)

6. CITY MANAGER'S REPORT

7. REGULAR BUSINESS

A. 612 JEFFERSON AVENUE REQUEST FOR LANDMARK AND HISTORIC PRESERVATION GRANT

i. RESOLUTION NO. 51, SERIES 2022 – A RESOLUTION APPROVING THE LANDMARK DESIGNATION FOR 612 JEFFERSON AVENUE, THE LECOMTE-HICKS HOUSE

ii. RESOLUTION NO. 52, SERIES 2022 – A RESOLUTION APPROVING A PRESERVATION AND RESTORATION GRANT FOR THE LECOMTE-HICKS HOUSE AT 612 JEFFERSON AVENUE

- Mayor Opens Public Hearing
- Staff Presentation
- Public Comments (Please limit to three minutes each)
- Mayor Closes Public Hearing
- Council Questions & Comments
- Action

B. 600 LINCOLN AVENUE REQUEST FOR LANDMARK AND HISTORIC PRESERVATION GRANT

i. RESOLUTION NO. 53, SERIES 2022 – A RESOLUTION APPROVING THE LANDMARK DESIGNATION FOR 600 LINCOLN AVENUE, THE PETRUN HOUSE

ii. RESOLUTION NO. 54, SERIES 2022 – A RESOLUTION APPROVING A HISTORIC PRESERVATION FUND GRANT FOR THE PETRUN HOUSE, 600 LINCOLN AVENUE

- Mayor Opens Public Hearing
- Staff Presentation
- Public Comments (Please limit to three minutes each)
- Mayor Closes Public Hearing
- Council Questions & Comments
- Action

C. ORDINANCE NO. 1845, SERIES 2022 – AN ORDINANCE AMENDING CHAPTER 15.18.030 OF THE LOUISVILLE MUNICIPAL CODE CONCERNING AMENDMENTS AND DELETIONS TO THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE TO INCLUDE REQUIREMENTS FOR COMMERCIAL ENERGY USE INTENSITY PERFORMANCE TARGETS AND RESTRICTIONS OF FOSSIL FUEL SPACE AND WATER HEATING EQUIPMENT – 2nd READING, PUBLIC HEARING (advertised *Daily Camera* 12/2/22) *continued from 12/6/22*

- Mayor Opens Public Hearing
- Staff Presentation
- Public Comments (Please limit to three minutes each)
- Council Questions & Comments
- Additional Public Comments
- Mayor Closes Public Hearing
- Action

D. RESOLUTION NO. 55, SERIES 2022 – A RESOLUTION AMENDING THE 2022 BUDGET BY AMENDING APPROPRIATIONS IN THE SOLID WASTE & RECYCLING FUND AND GOLF COURSE FUND FOR ADDITIONAL APPROPRIATIONS WITHIN SUCH FUNDS – PUBLIC HEARING (advertised *Daily Camera* 12/16/2022)

- Mayor Opens Public Hearing
- Staff Presentation
- Public Comments (Please limit to three minutes each)
- Mayor Closes Public Hearing
- Council Questions & Comments
- Action

E. NORTH END BLOCK 11 – 1501 E SOUTH BOULDER ROAD

i. ORDINANCE NO. 1846, SERIES 2022 – AN ORDINANCE APPROVING A FOURTH AMENDMENT TO THE NORTH END GENERAL DEVELOPMENT PLAN TO AMEND ALLOWED RESIDENTIAL USES ON PLANNING AREA 1 AND STANDARDS FOR ROOF OVERHANG ENCROACHMENTS WITHIN SETBACKS AND EASEMENTS FOR BLOCK 11 – 1ST READING, SET PUBLIC HEARING 1/03/2023

- Introduction
- Action

ii. ORDINANCE NO. 1847, SERIES 2022 – AN ORDINANCE APPROVING A PARTIAL VACATION OF SIX PORTIONS OF AN EXCLUSIVE CITY UTILITY EASEMENT ON BLOCK 11 OF THE NORTH END, BLOCK 11 – REPLAT OF NORTH END PARCEL 1, OUTLOT H & OUTLOT K REPLAT SUBDIVISION – 1ST READING, SET PUBLIC HEARING 1/03/2023

- Introduction
- Action

8. CITY ATTORNEY'S REPORT

9. COUNCIL COMMENTS, COMMITTEE REPORTS, AND IDENTIFICATION OF FUTURE AGENDA ITEMS

10. ADJOURN

CASH ACCOUNT: 001000 101001 WARRANT: 120122 12/01/2022

VENDOR	VENDOR NAME	PURPOSE	AMOUNT
14154	ALLSTREAM	ACCT #936665	802.15
14164	ALPINE BANK	#5300177601 SOLAR PANEL L	5,429.18
14164	ALPINE BANK	#5300089001 SOLAR PANEL L	3,729.33
15503	AVA NORINE HAMILTON	INDIGENOUS HISTORY, CLIMA	300.00
13964	CHANDLER ASSET MANAGEMENT	OCT 2022 INVESTMENT FEES	3,017.41
9710	INDUSTRIAL CHEMICALS CORP	CUST #4218000 Water Plan	15,210.00
9761	INTERMOUNTAIN SWEEPER CO	Sweeper, Unit # 3260 Repa	4,074.94
14002	KANSAS PAYMENT CENTER/ SN20DM0	Payroll Run 1 - Warrant 1	34.50
15499	KATHRYN A MIHELIC	PICKLEBALL 11/3/22 - 11/1	1,456.00
9750	LEGALSHIELD	#22554 NOV 2022 EMPLOYEE	525.30
7735	LINCOLN FINANCIAL GROUP	000010008469 DEC 2022 LIF	6,838.66
7735	LINCOLN FINANCIAL GROUP	000010008470 DEC 2022 LTD	3,546.79
14604	MEGAN DAVIS	REIMBURSE MILEAGE 10/21/2	166.26
99999	JOSH GILBERTSON	COMPUTER LOAN	1,329.98
99999	GARY HICKOX	MILEAGE REIMBURSEMENT 11/	71.26
99999	RONDA HENGER	RETURNED ACH PP24 - HSA C	368.10
99999	MARIA HERNANDEZ	REFUND DEPOSIT - BABY SHO	710.00
99999	PATRICK BROWN	REIMBURSE TRAVEL 11/3/22	657.89
99999	STEVEN DANIELS	REIMBURSE WORK BOOTS	133.19
15501	RYDER BAILEY	REIMBURSE TRAVEL 11/3/22-	999.20
15014	WATTLE & DAUB CONTRACTORS	Improve Drainage around H	52,815.00
10884	WORD OF MOUTH CATERING INC	LUNCHES SERVED 11/28/22 -	1,710.75
3875	XCEL ENERGY	ACCT #53-1879600-8	93,794.85
	23 INVOICES	WARRANT TOTAL	197,720.74

CASH ACCOUNT: 001000 101001 WARRANT: 120822 12/08/2022

VENDOR	VENDOR NAME	PURPOSE	AMOUNT
15142	BRANDON SHUPICK	GOLF LESSONS 11/19/22-12/	70.00
13280	INSIGHT PUBLIC SECTOR INC	ACCT #10669545	133.24
14973	JULIES CULINARY SERVICES LLC	Catering for Winter Staff	3,305.87
99999	KAHLIL AND TAWNYA SOMAUROO	MARSHALL FIRE USE TAX CR	13,368.62
99999	LISA ATALLAH	REFUND LOUISVILLE REC CEN	120.00
99999	DONALD HUCKSTADT	REFUND LOUISVILLE REC CEN	242.00
99999	KATHERINE WILLIAMS	REFUND LOUISVILLE REC CEN	40.00
99999	LENA JOHANNESSEN	REFUND LOUISVILLE REC CEN	100.00
10951	PINNACOL ASSURANCE	POLICY #4206615	2,481.27
10884	WORD OF MOUTH CATERING INC	LUNCHES SERVED 12/1/22-12	2,945.25
3875	XCEL ENERGY	ACCT #53-1879600-8 09/28	16.96
3875	XCEL ENERGY	ACCT #53-1879596-1 PARKIN	34,902.18
3875	XCEL ENERGY	ACCT #53-1879593-8 SPRINK	111.78
3875	XCEL ENERGY	ACCT #53-1879594-9 FLASHE	18.36
3875	XCEL ENERGY	ACCT #53-1879596-1 TRAFF	89.59
	15 INVOICES	WARRANT TOTAL	57,945.12

CASH ACCOUNT: 001000 101001 WARRANT: 122022 12/20/2022

VENDOR	VENDOR NAME	PURPOSE	AMOUNT
15495	ABBOTTS CLEANUP AND RESTORATIO	Emergency Smoke/Ash Mitig	59,977.43
15495	ABBOTTS CLEANUP AND RESTORATIO	Emergency Smoke/Ash Mitig	113,456.92
15449	AECOM TECHNICAL SERVICES, INC.	AECOM Lot Grading	8,075.50
4160	ALARM DETECTION SYSTEMS, INC.	ACCT #870159	10,394.23
4160	ALARM DETECTION SYSTEMS, INC.	ACCT #802604	348.96
14737	ALEX THOELE	GUITAR GLASSES NOVEMBER	756.00
13556	AQUATIC CHEMICAL SOLUTIONS INC	Install filter at Memory	27,828.40
14756	ASCENT COMMUNITY CHURCH	10/27/22 FACILITY USE 10/	75.00
13659	AVID4 ADVENTURE INC	MONTHLY RENTAL OVERPAYMEN	29,292.10
14841	AXE ROOFING LLC	SNOW GUARDRAILS	1,078.00
500	BAKER AND TAYLOR	ACCT #415337 L121376 4 B0	21.99
500	BAKER AND TAYLOR	ACCT #415337 L121376 4 B0	21.99
15324	BIG HEART FILM INC	Marshall Fire - Recovery	2,300.00
14730	BLUE 360 MEDIA LLC	ACCT #B100105039510 2023	3,324.08
15465	BOSS PRINTING	PUBLIC NOTICE POSTCARDS	381.65
640	BOULDER COUNTY	BOULDER COUNTY USE TAX NO	148,979.53
7706	BRANNAN SAND & GRAVEL CO LLC	2022 Asphalt Hot MIx	429.93
15098	BRIDGE HOUSE	NOVEMBER 2022 RTW Contrac	6,684.40
15098	BRIDGE HOUSE	November 2022 RTW Contrac	8,048.48
14502	C & L WATER SOLUTIONS INC	Roosevelt Emergency Sewer	44,227.00
10773	CENTRIC ELEVATOR CORP	DEC 2022 MONTHLY MAINT	354.09
10773	CENTRIC ELEVATOR CORP	DEC 2022 MONTHLY MAINT	593.04
10773	CENTRIC ELEVATOR CORP	DEC 2022 MONTHLY MAINT	308.58
10773	CENTRIC ELEVATOR CORP	DEC 2022 MONTHLY MAINT	348.67
4785	CINTAS CORPORATION #66	CUST #12522401	289.88
4785	CINTAS CORPORATION #66	CUST #12522401	246.35
4785	CINTAS CORPORATION #66	CUST #12522401	289.88
4025	CINTAS FIRST AID AND SAFETY	CUST #10389214	153.07
15393	CIVICPLUS, LLC	Municipal Code Codificati	1,142.90
15486	CLEARESULT CONSULTING INC.	NOV 2022 HOME ENERGY SQUA	850.00

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VENDOR	VENDOR NAME	PURPOSE	AMOUNT
1120	COLORADO ANALYTICAL LABORATORI	CLIENT PROJECT #CO0107487	99.00
1120	COLORADO ANALYTICAL LABORATORI	CLIENT PROJECT #CO0107487	381.00
1120	COLORADO ANALYTICAL LABORATORI	CLIENT PROJECT #CO0107487	126.00
1120	COLORADO ANALYTICAL LABORATORI	CLIENT PROJECT #CO0107487	31.20
1120	COLORADO ANALYTICAL LABORATORI	CLIENT PROJECT #CO0107487	207.00
1120	COLORADO ANALYTICAL LABORATORI	CLIENT PROJECT #CO0107487	32.40
1120	COLORADO ANALYTICAL LABORATORI	CLIENT PROJECT #CO0107487	171.00
1120	COLORADO ANALYTICAL LABORATORI	BAC-T TESTING 740 S. PIER	58.00
1120	COLORADO ANALYTICAL LABORATORI	WWTP EFFLUENT QUARTERLY	59.40
1120	COLORADO ANALYTICAL LABORATORI	WWTP INFLUENT WEEKLY	126.00
1120	COLORADO ANALYTICAL LABORATORI	WWTP INFLUENT WEEKLY	126.00
1120	COLORADO ANALYTICAL LABORATORI	WWTP INFLUENT WEEKLY	126.00
1120	COLORADO ANALYTICAL LABORATORI	WWTP REUSE MONTHLY	229.50
1120	COLORADO ANALYTICAL LABORATORI	WWTP SOLIDS MONTHLY	240.00
1120	COLORADO ANALYTICAL LABORATORI	WWTP INFLUENT MONTHLY	139.50
1120	COLORADO ANALYTICAL LABORATORI	WWTP EFFLUENT MONTHLY	105.30
1120	COLORADO ANALYTICAL LABORATORI	WWTP REG 85 MONTHLY	391.50
1120	COLORADO ANALYTICAL LABORATORI	WWTP INFLUENT WEEKLY	126.00
13820	COLORADO BARRICADE CO	CUST #838536 Neighborhoo	21,827.66
14909	COLORADO CHRISTMAS LIGHTS	City Christmas Lights and	66,503.00
14909	COLORADO CHRISTMAS LIGHTS	City Christmas Lights and	696.00
11346	COLORADO COMMUNICATIONS & UTIL	2023 CCUA MEMBERSHIP DUES	1,100.00
11353	COLORADO LIBRARY CONSORTIUM	ACCT #L5687	1,199.00
13897	COMPASS MINERALS AMERICA INC	2022 Qwicksalt (Complex C	3,163.02
13897	COMPASS MINERALS AMERICA INC	2022 Qwicksalt (Complex C	4,442.87
13162	CORE & MAIN LP	Marshall Fire Water Meter	14,230.08
15036	DAVID J. THROWER	NOVEMBER 2022 COURT SERVI	2,800.00
15149	DENALI WATER SOLUTIONS LLC	CUST #1120056	3,264.92
14469	DESIGNSCAPES COLORADO	Community Park Irrigation	27,481.50
14469	DESIGNSCAPES COLORADO	Community Park Irrigation	53,424.00
14469	DESIGNSCAPES COLORADO	Community Park Irrigation	111,735.00
1785	ECO-CYCLE INC	2022 Leaf Collection Prog	7,623.49
4012	ELDORADO ARTESIAN SPRINGS INC	ACCT #19441456	22.90
15233	ELEVATE HOLDINGS LLC	FACADE IMPR PROGRAM	640.00
15476	ELITE HOOD CLEANING CO.	Exhaust repairs	4,440.00

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VENDOR	VENDOR NAME	PURPOSE	AMOUNT
14896	FASTSIGNS OF BROOMFIELD	MLK/BLACK HISTORY BANNERS	525.00
14896	FASTSIGNS OF BROOMFIELD	X4 PUBLIC NOTICE SIGN	195.27
2020	FISHER SCIENTIFIC CO LLC	ACCT #481513-002	550.11
2020	FISHER SCIENTIFIC CO LLC	ACCT #481513-002	192.42
14893	FLATIRONS STUMP REMOVAL	STUMP REMOVAL PIRATES PAR	368.00
15358	FRONT RANGE WINWATER WORKS CO	Marshall Fire Water Meter	29,469.97
15358	FRONT RANGE WINWATER WORKS CO	CUST #00369-001891 Marsh	17,432.94
6847	GENERAL AIR SERVICE & SUPPLY	NOVEMBER 2022 CYLINDER RE	85.22
2310	GRAINGER	ACCT #882881923	241.50
2310	GRAINGER	ACCT #882881923	241.50
2310	GRAINGER	ACCT #882881923	241.50
2310	GRAINGER	ACCT #882881923	120.30
2310	GRAINGER	ACCT #882881923	10.10
2310	GRAINGER	ACCT #882881923	48.80
2310	GRAINGER	ACCT #882881923	213.04
2310	GRAINGER	ACCT #882881923	98.92
2310	GRAINGER	ACCT #882881923	158.19
2310	GRAINGER	ACCT #882881923	55.76
15146	HAZEN AND SAWYER DPC	Utility Master Plan	30,826.25
14472	HILL AND POLLOCK LLC	NOVEMBER 2022 WATER-RELAT	8,154.00
645	HUMANE SOCIETY OF BOULDER VALL	3RD QTR 2022 Animal Impou	2,880.00
15329	IMEG CORP	10/24/22 - 11/27/22	300.00
9710	INDUSTRIAL CHEMICALS CORP	CUST #4218000 Water Plan	350.00
2615	INGRAM LIBRARY SERVICES INC	ACCT #20P9782	65.06
2615	INGRAM LIBRARY SERVICES INC	ACCT #20P9782	30.76
2615	INGRAM LIBRARY SERVICES INC	ACCT #20P9782	28.34
2615	INGRAM LIBRARY SERVICES INC	ACCT #20P9782	24.28
2615	INGRAM LIBRARY SERVICES INC	ACCT #20P9782	24.57
2615	INGRAM LIBRARY SERVICES INC	ACCT #20P9782	15.94
2615	INGRAM LIBRARY SERVICES INC	ACCT #20P9782	320.16
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050766	315.65
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050766	17.98
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050766	388.65
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050766	33.54
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050766	30.27
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050766	207.96
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050766	202.04
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050766	248.92

CASH ACCOUNT: 001000 101001 WARRANT: 122022 12/20/2022

VENDOR	VENDOR NAME	PURPOSE	AMOUNT
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050766	315.00
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050766	432.31
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050766	248.40
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050766	360.02
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050766	536.69
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	395.18
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	83.46
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	24.92
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	20.24
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	122.69
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	94.68
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	48.40
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	153.60
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	62.35
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	43.95
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	87.76
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	124.40
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	40.03
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	51.31
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	132.86
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	71.40
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	51.15
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	37.13
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	52.28
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	296.83
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	114.79
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	-21.04
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	-24.00
2615	INGRAM LIBRARY SERVICES INC	ACCT #2050772	-84.00
10772	INTEGRATED SAFETY SERVICES LLC	MUSEUM ANNUAL FIRE EXTING	30.00
10772	INTEGRATED SAFETY SERVICES LLC	LIBRARY ANNUAL FIRE EXTIN	60.00
10772	INTEGRATED SAFETY SERVICES LLC	PARKS DEPT ANNUAL FIRE EX	82.50
10772	INTEGRATED SAFETY SERVICES LLC	POLICE DEPT ANNUAL FIRE E	45.00
10772	INTEGRATED SAFETY SERVICES LLC	POLICE DEPT ANNUAL FIRE E	7.50
10772	INTEGRATED SAFETY SERVICES LLC	ARTS & POOL FIRE EXTINGUI	30.00
10772	INTEGRATED SAFETY SERVICES LLC	WATER TREATMENT PLANT FIR	60.00
13778	INVISION GIS LLC	GIS CONSULTING AND UPGRAD	1,443.75
13778	INVISION GIS LLC	Marshall Fire Professiona	798.75
13778	INVISION GIS LLC	GIS & AM Implementation S	5,081.25
2700	J & S CONTRACTORS SUPPLY	ORDER #0101700	76.00
11289	JVA INC	WWTP Solids Handling Upgr	21,600.00
2360	KELLY PC	LEGAL SERVICES NOVEMBER 2	16,982.20
14219	KIMLEY-HORN AND ASSOCIATES INC	Future 42-Connecting Peop	25,987.50

CASH ACCOUNT: 001000 101001 WARRANT: 122022 12/20/2022

VENDOR	VENDOR NAME	PURPOSE	AMOUNT
15415	LEVITATE JUMP ROPE TEAM, LLC	JUMP ROPE TEAM 8/29/22 -	1,470.00
13692	LIGHTNING MOBILE SERVICES LLC	JAN, MAR, MAY, JUL, SEPT,	335.00
3070	LL JOHNSON DISTRIBUTING CO	CUST #158907	2,349.99
3070	LL JOHNSON DISTRIBUTING CO	CUST #158907	41,052.52
3100	LOUISVILLE CHAMBER OF COMMERCE	2022 PARADE OF LIGHTS	4,750.00
5432	LOUISVILLE FIRE PROTECTION DIS	FIRE PROTECTION DIST FEES	4,480.00
5432	LOUISVILLE FIRE PROTECTION DIS	Transport 11/10/22 LOUIS	250.00
5115	LUMIN8 TRANSPORTATION TECHNOLO	Signal Maintenance Additi	33,724.00
5115	LUMIN8 TRANSPORTATION TECHNOLO	CUST #10921 Signal Main	1,850.35
10630	MARVS QUALITY TOWING INC	TOWING PD 001ICQ	135.00
14918	MIZUNO USA INC - NDC	CUST #161027 2022 Resale	109.03
14673	NORTHWEST ROOFING	Replacement of the Roof a	71,986.56
99999	CRISTINA CHAVIRA	REFUND CONTRACTOR'S LICEN	166.00
99999	BOULDER AREA LABOR COUNCIL	SPECIAL EVENT PERMIT - RE	500.00
99999	KPE CONSTRUCTION LLC	REFUND PROF LICENSE C & D	83.00
99999	CHARLES AND JODI EALY	MARSHALL FIRE USE TAX CR	18,250.00
99999	MARK CARSON	MARSHALL FIRE USE TAX CR	14,894.00
99999	FREDERICK JOHNSON AND GENA LEO	MARSHALL FIRE USE TAX CR	9,390.00
99999	CHRISTOPHER LEWANDOWSKI AND CY	MARSHALL FIRE USE TAX CR	26,258.10
99999	GREENPOINT ROOFING	REFUND PERMIT #MISC-9313-	610.58
14899	OTAK INC	SBR at Grade Construction	12,498.50
14899	OTAK INC	Marshall Fire Site Superv	8,598.50
13649	OVERDRIVE INC	CUST ID #1100-0005	129.47
13649	OVERDRIVE INC	CUST ID#1100-0005	120.00
13649	OVERDRIVE INC	CUST ID#1100-0005	552.95
700	PRAIRIE MOUNTAIN MEDIA	ACCT #1053506	22.00
14844	REPUBLIC SERVICES INC #535	ACCT #3-0535-0109715	4,109.92
14844	REPUBLIC SERVICES INC #535	ACCT #3-0535-9535390	119,743.52
14844	REPUBLIC SERVICES INC #535	ACCT #3-0535-7999998	66.81
13419	ROADSAFE TRAFFIC SYSTEMS CORP	CUST #11720	947.30
15296	ROCKSOL CONSULTING GROUP INC	Marshall Fire Professiona	3,917.18
15493	RONALD E KAUFFMAN	RES2965, RES2969, RES3022	700.00
15085	SAGACITY GOLF TECHNOLOGIES INC	MARKETING SOFTWARE FEES	295.00

CASH ACCOUNT: 001000 101001 WARRANT: 122022 12/20/2022

VENDOR	VENDOR NAME	PURPOSE	AMOUNT
15497	SENERGY PETROLEUM LLC	ACCT #100000096	834.97
11395	SHRED-IT USA LLC	CUST #1000157150 REC CEN	160.31
15251	SHUMS CODA ASSOCIATES INC	PLAN REVIEW/INSPECTIONS 3	437.50
15251	SHUMS CODA ASSOCIATES INC	COMMERCIAL EUI - VIRTUAL	250.00
14612	SOME LIKE IT GREEN	DECEMBER 2022 MONTHLY PLA	88.00
13059	SPRAGUE PEST SOLUTIONS	12/7/22 ART CENTER	75.00
13059	SPRAGUE PEST SOLUTIONS	12/7/22 MUSEUM	75.00
13059	SPRAGUE PEST SOLUTIONS	12/9/22 LIBRARY	75.00
13059	SPRAGUE PEST SOLUTIONS	12/9/22 CITY HALL	75.00
13059	SPRAGUE PEST SOLUTIONS	12/9/22 WATER TREATMENT P	82.50
14396	SPRONK WATER ENGINEERS INC	OCT 2022 Water Rights E	9,435.00
14396	SPRONK WATER ENGINEERS INC	JULY 2022 Water Rights	8,160.00
14396	SPRONK WATER ENGINEERS INC	8/1/22 - 9/4/22 Water Ri	9,605.00
14619	SRIXON / CLEVELAND GOLF / XXIO	CUST #5908	154.50
15161	STANLEY CONSULTANTS INC	OCT 2022 104th St. Trai	709.25
14641	STRANGE BIRD DESIGNS INC	STREET LIGHT BANNERS-BLAC	465.00
15355	STUDIO CPG	GENERAL MAINT & MANAGEMEN	19,898.01
7404	SUN BADGE COMPANY	BADGES	935.00
10414	TANK EQUIPMENT INC	HBWTP Replacement Chemica	57,713.00
15478	TINDAKAN	Prairie Dog Control via F	4,834.00
14353	TRANSPARENT INFORMATION SERVIC	BACKGROUND CHECKS	689.45
6609	TRAVELERS	ACCT #3667M0083	3,997.25
4765	UNCC	NOV 2022 LOCATES	3,763.50
13851	VELOCITY PLANT SERVICES LLC	SCWTP Raw Water Valve Rep	7,162.05
13851	VELOCITY PLANT SERVICES LLC	SCWTP Raw Water Valve Rep	1,899.25
4900	VRANESH AND RAISCH LLP	CLIENT #0751 OCTOBER 202	662.00
4900	VRANESH AND RAISCH LLP	ACCT #0751 AUGUST 2022	636.25
14373	WEIFIELD GROUP CONTRACTING INC	NEW VALVE WIRING AND DEMO	490.00
14373	WEIFIELD GROUP CONTRACTING INC	11/8 SOLAR ARRAY TROUBLES	1,440.00
14373	WEIFIELD GROUP CONTRACTING INC	11/7/22 TROUBLESHOOT SOLA	2,056.83
14373	WEIFIELD GROUP CONTRACTING INC	INSTALL TEMPORARY SWITCH	352.58

CASH ACCOUNT: 001000 101001 WARRANT: 122022 12/20/2022

VENDOR	VENDOR NAME	PURPOSE	AMOUNT
14407	WESTERN MECHANICAL SOLUTIONS L	GEAR BOX WARRANTY SHIPPIN	20.43
13790	ZAYO GROUP LLC	ACCT #018253 DEC 2022	1,500.00
	212 INVOICES	WARRANT TOTAL	1,491,593.35

CITY OF LOUISVILLE

PURCHASE CARD SUMMARY

STATEMENT PERIOD 10/22/22 - 11/21/22

SUPPLIER	SUPPLIER LOCATION	CARDHOLDER	DEPARTMENT	TRANS DATE	AMOUNT
1-800-PACK-RAT (L102)	800-722-5728	KEVIN FREY	FACILITIES	10/21/2022	258.99
1000BULBS.COM	800-624-4488	KEVIN FREY	FACILITIES	11/03/2022	345.66
ABC-NV	913-8954600	SHANE MAHAN	OPERATIONS	11/11/2022	100.00
ABC-NV	913-8954600	BENJAMIN FRANCISCO	OPERATIONS	10/25/2022	100.00
ADAMSON POLICE PRODUCT	FREDERICK	MIKE MILLER	POLICE	11/08/2022	41.97
ADOBE *ACROPRO TRIAL	4085366000	KURT KOWAR	PUBLIC WORKS	11/08/2022	29.99
AFW-WESTMINSTER #28	WESTMINSTER	RONDA HENGER	HUMAN RESOURCES	11/11/2022	507.98
AFW-WESTMINSTER #28	WESTMINSTER	RONDA HENGER	HUMAN RESOURCES	11/11/2022	580.50
AFW-WESTMINSTER #28	WESTMINSTER	RONDA HENGER	HUMAN RESOURCES	11/11/2022	580.50
ALARM PROCESSING CENTE	AURORA	JANET BRANHAM	PARKS	11/01/2022	935.10
ALLDATA	800-859-3282	MASON THOMPSON	OPERATIONS	11/02/2022	125.00
AMAZON.COM*H00UX1NK1 A	AMZN.COM/BILL	KATRINA KEHM	POLICE	10/26/2022	79.78
AMAZON.COM*H03TE6Y51 A	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/01/2022	20.97
AMAZON.COM*H04K60KK0 A	AMZN.COM/BILL	TANYA SCOTT	FINANCE	10/29/2022	6.94
AMAZON.COM*H05K35JM0 A	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	10/25/2022	5.39
AMAZON.COM*H06V50EK2 A	AMZN.COM/BILL	ELIZABETH SCHETTLER	PLANNING	11/01/2022	73.95
AMAZON.COM*H070G72A0 A	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	10/28/2022	112.99
AMAZON.COM*H07UL6UY0 A	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	10/29/2022	23.54
AMAZON.COM*H093B8G42 A	AMZN.COM/BILL	KATIE TOFTE	REC CENTER	11/01/2022	28.98
AMAZON.COM*H231D9B40 A	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/03/2022	42.63
AMAZON.COM*H23RI4MY1 A	AMZN.COM/BILL	DANNY WEIONSTOCK	REC CENTER	11/05/2022	6.17
AMAZON.COM*H24849CI1 A	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/01/2022	249.99
AMAZON.COM*H818N0I70 A	AMZN.COM/BILL	KATRINA KEHM	POLICE	10/23/2022	15.99
AMAZON.COM*H88A43II0 A	AMZN.COM/BILL	KATRINA KEHM	POLICE	10/23/2022	76.47
AMAZON.COM*HB00H55B2 A	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	11/15/2022	14.06
AMAZON.COM*HB12L7V50 A	AMZN.COM/BILL	JANET BRANHAM	PARKS	11/10/2022	44.15
AMAZON.COM*HB4BM8PV1 A	AMZN.COM/BILL	CATHERINE JEPSON	PARKS	11/10/2022	150.00
AMAZON.COM*HB7MF8BG1 A	AMZN.COM/BILL	JOEY MITCHELL	REC CENTER	11/12/2022	40.80
AMERICAN PLANNING A	3124319100	ROBERT ZUCCARO	PLANNING	11/15/2022	749.00
AMERICAN RED CROSS	800-733-2767	DANNY WEIONSTOCK	REC CENTER	11/18/2022	350.00
AMERICAN WATER COLLEGE	VALLEY MILLS	GREG VENETTE	WATER	11/14/2022	149.99
AMERICAN WATER WORKS A	303-794-7711	GREG VENETTE	WATER	11/14/2022	233.00
AMERLIBASSOC ECOMMERCE	866-746-7252	PEGGY NORRIS	LIBRARY	10/28/2022	236.00
AMZN MKTP US*H00G66LI1	AMZN.COM/BILL	KEVIN FREY	FACILITIES	10/26/2022	65.99
AMZN MKTP US*H23RC3FE2	AMZN.COM/BILL	LESLIE RINGER	HUMAN RESOURCES	11/06/2022	8.99
AMZN MKTP US*H23X54R80	AMZN.COM/BILL	LESLIE RINGER	HUMAN RESOURCES	11/06/2022	4.99
AMZN MKTP US*H85164452	AMZN.COM/BILL	KATRINA KEHM	POLICE	10/23/2022	223.99
AMZN MKTP US*HB2F29330	AMZN.COM/BILL	GREG VENETTE	WATER	11/08/2022	322.00
AMZN MKTP US*HB4LD6LV1	AMZN.COM/BILL	PEGGY NORRIS	LIBRARY	11/08/2022	28.78
AMZN MKTP US*HB69S5M42	AMZN.COM/BILL	KATRINA KEHM	POLICE	11/15/2022	20.78

AMZN MKTP US*HB7807WL2	AMZN.COM/BILL	DAWN BURGESS	CITY MANAGER	11/17/2022	31.77	
AMZN MKTP US*HB7YS5TU2	AMZN.COM/BILL	RONDA HENGER	HUMAN RESOURCES	11/13/2022	6.79	
AMZN MKTP US*HB86C3Y12	AMZN.COM/BILL	GREG VENETTE	WATER	11/17/2022	60.79	
AMZN MKTP US*HB9X22DH1	AMZN.COM/BILL	DANNY WEIONSTOCK	REC CENTER	11/13/2022	12.95	
AMZN MKTP US*HI1324G51	AMZN.COM/BILL	KATRINA KEHM	POLICE	11/17/2022	12.49	
AMZN MKTP US*HI2292C71	AMZN.COM/BILL	ALINA KIRCHNER	HUMAN RESOURCES	11/15/2022	12.44	
AMZN MKTP US*HI3A15O50	AMZN.COM/BILL	LIGEA FERRARO	CITY MANAGER	11/14/2022	125.91	
AMZN MKTP US*HI3G158U0	AMZN.COM/BILL	PATRICIA MORGAN	REC CENTER	11/17/2022	64.99	
AMZN MKTP US*HI43513K2	AMZN.COM/BILL	ALINA KIRCHNER	HUMAN RESOURCES	11/18/2022	554.35	
AMZN MKTP US*HI4VV8EH1	AMZN.COM/BILL	MARLA OLSON	PARKS	11/17/2022	15.29	
AMZN MKTP US*HI8M24CH0	AMZN.COM/BILL	RONDA HENGER	HUMAN RESOURCES	11/13/2022	141.04	
AMZN MKTP US*HT54B1UB2	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	10/21/2022	141.10	
AMZN MKTP US	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	11/18/2022	558.00	
AMZN MKTP US	AMZN.COM/BILL	KATRINA KEHM	POLICE	11/01/2022	239.70	
AMZN MKTP US	AMZN.COM/BILL	KERRY KRAMER	PARKS	10/27/2022	78.23	
AMZN MKTP US	AMZN.COM/BILL	CATHERINE JEPSON	PARKS	10/27/2022	248.32	
AMZN MKTP US*H00JD1HW0	AMZN.COM/BILL	MICHAEL CLEVELAND	OPERATIONS	10/28/2022	74.87	
AMZN MKTP US*H013E9CP2	AMZN.COM/BILL	JULIE SEYDEL	REC CENTER	10/30/2022	9.98	
AMZN MKTP US*H015D9Q51	AMZN.COM/BILL	JOSH GILBERTSON	IT	10/30/2022	49.99	
AMZN MKTP US*H01EE58X0	AMZN.COM/BILL	TANYA SCOTT	FINANCE	10/28/2022	3.06	
AMZN MKTP US*H01W59I11	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/01/2022	103.65	
AMZN MKTP US*H024S3N30	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	10/25/2022	252.55	
AMZN MKTP US*H02EJ8OS2	AMZN.COM/BILL	JULIE SEYDEL	REC CENTER	10/30/2022	70.84	
AMZN MKTP US*H02GM89Q2	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/05/2022	66.90	
AMZN MKTP US*H031R3VN0	AMZN.COM/BILL	KERRY KRAMER	PARKS	10/27/2022	149.98	
AMZN MKTP US*H039Y5MP2	AMZN.COM/BILL	GREG VENETTE	WATER	11/02/2022	39.63	
AMZN MKTP US*H055Q5QQ1	AMZN.COM/BILL	PATRICIA MORGAN	REC CENTER	10/30/2022	11.03	
AMZN MKTP US*H05JS9J70	AMZN.COM/BILL	JOSH GILBERTSON	IT	10/26/2022	15.29	
AMZN MKTP US*H05TE8IO0	AMZN.COM/BILL	PATRICIA MORGAN	REC CENTER	10/30/2022	69.49	
AMZN MKTP US*H063X36S0	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	10/29/2022	21.99	
AMZN MKTP US*H065S26K0	AMZN.COM/BILL	KATRINA KEHM	POLICE	10/28/2022	239.70	
AMZN MKTP US*H06W73K82	AMZN.COM/BILL	KATRINA KEHM	POLICE	11/04/2022	239.70	
AMZN MKTP US*H07365ZL1	AMZN.COM/BILL	KEVIN FREY	FACILITIES	10/27/2022	16.09	
AMZN MKTP US*H08MO5BE1	AMZN.COM/BILL	JULIE SEYDEL	REC CENTER	10/30/2022	19.95	
AMZN MKTP US*H09076BS0	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	10/28/2022	558.00	
AMZN MKTP US*H09D53JU2	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	11/01/2022	39.93	
AMZN MKTP US*H09J01S52	AMZN.COM/BILL	JOHN KIPP	WASTEWATER	11/04/2022	134.94	
AMZN MKTP US*H09PQ0BK1	AMZN.COM/BILL	DEVIN MADIGAN	WASTEWATER	10/30/2022	120.59	
AMZN MKTP US*H09S18UR1	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/01/2022	9.99	
AMZN MKTP US*H21AI8T21	AMZN.COM/BILL	KATRINA KEHM	POLICE	11/03/2022	12.99	
AMZN MKTP US*H21H29XP2	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/09/2022	6.99	
AMZN MKTP US*H228T1BC1	AMZN.COM/BILL	JEFF FISHER	POLICE	11/06/2022	105.95	
AMZN MKTP US*H22O88D72	AMZN.COM/BILL	KATRINA KEHM	POLICE	11/11/2022	16.50	
AMZN MKTP US*H22WX5YX0	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/07/2022	169.98	
AMZN MKTP US*H22ZL1MU2	AMZN.COM/BILL	JOHN KIPP	WASTEWATER	11/09/2022	19.19	

AMZN MKTP US*H231B6LO1	AMZN.COM/BILL	JULIE SEYDEL	REC CENTER	11/02/2022	6.89	
AMZN MKTP US*H241E93O1	AMZN.COM/BILL	JOHN KIPP	WASTEWATER	11/03/2022	28.49	
AMZN MKTP US*H25AJ3Z31	AMZN.COM/BILL	JULIE SEYDEL	REC CENTER	11/03/2022	50.99	
AMZN MKTP US*H25BA7LV0	AMZN.COM/BILL	PATRICIA MORGAN	REC CENTER	11/01/2022	71.96	
AMZN MKTP US*H25FI7EB0	AMZN.COM/BILL	MICHAEL CLEVELAND	OPERATIONS	11/02/2022	889.40	
AMZN MKTP US*H26GQ06I0	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/05/2022	48.85	
AMZN MKTP US*H26QT40E0	AMZN.COM/BILL	JULIE SEYDEL	REC CENTER	11/02/2022	33.97	
AMZN MKTP US*H270F7F20	AMZN.COM/BILL	JULIE SEYDEL	REC CENTER	11/01/2022	76.74	
AMZN MKTP US*H28L239C2	AMZN.COM/BILL	DAVID DEAN	GOLF COURSE	11/11/2022	51.84	
AMZN MKTP US*H28WM4L92	AMZN.COM/BILL	PAMELA LEMON	REC CENTER	11/07/2022	329.00	
AMZN MKTP US*H292226R1	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/07/2022	253.40	
AMZN MKTP US*H29422ZD2	AMZN.COM/BILL	DEVIN MADIGAN	WASTEWATER	11/07/2022	25.99	
AMZN MKTP US*H29FS73J1	AMZN.COM/BILL	KATRINA KEHM	POLICE	11/03/2022	37.00	
AMZN MKTP US*H807E0M61	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	10/22/2022	32.60	
AMZN MKTP US*H80RS3KW2	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	10/28/2022	558.00	
AMZN MKTP US*H815D6Y20	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	10/24/2022	7.99	
AMZN MKTP US*H81TA76L1	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	10/24/2022	72.94	
AMZN MKTP US*H821F1WJ1	AMZN.COM/BILL	GREG VENETTE	WATER	10/26/2022	19.73	
AMZN MKTP US*H82H99QY0	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	10/22/2022	19.38	
AMZN MKTP US*H82UP8G02	AMZN.COM/BILL	JULIE SEYDEL	REC CENTER	10/26/2022	19.29	
AMZN MKTP US*H82ZW40U2	AMZN.COM/BILL	KERRY HOLLE	PUBLIC WORKS	10/25/2022	18.99	
AMZN MKTP US*H83L07KW1	AMZN.COM/BILL	TANYA SCOTT	FINANCE	10/24/2022	79.99	
AMZN MKTP US*H84TQ6252	AMZN.COM/BILL	LINDSEY WITTY	REC CENTER	10/28/2022	46.09	
AMZN MKTP US*H86P27CV2	AMZN.COM/BILL	EMILY HOGAN	CITY MANAGER	10/23/2022	21.21	
AMZN MKTP US*H871Q49M0	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	10/23/2022	17.99	
AMZN MKTP US*H875L6SN0	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	10/22/2022	223.65	
AMZN MKTP US*H88Y99OS2	AMZN.COM/BILL	KATIE BEASLEY	REC CENTER	10/23/2022	26.99	
AMZN MKTP US*H89L94290	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	10/22/2022	16.20	
AMZN MKTP US*HB0Q47YC1	AMZN.COM/BILL	LINDSEY WITTY	REC CENTER	11/15/2022	45.66	
AMZN MKTP US*HB0TR4IS0	AMZN.COM/BILL	MEREDYTH MUTH	CITY MANAGER	11/13/2022	22.88	
AMZN MKTP US*HB1DK0AU2	AMZN.COM/BILL	GENEVIEVE KLINE	CITY CLERK	11/14/2022	37.43	
AMZN MKTP US*HB1NR7M20	AMZN.COM/BILL	MEREDYTH MUTH	CITY MANAGER	11/10/2022	14.69	
AMZN MKTP US*HB2E51O52	AMZN.COM/BILL	DANNY WEIONSTOCK	REC CENTER	11/13/2022	23.84	
AMZN MKTP US*HB2IE1GU0	AMZN.COM/BILL	DEVIN MADIGAN	WASTEWATER	11/10/2022	389.10	
AMZN MKTP US*HB3DC1MD1	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	11/12/2022	31.90	
AMZN MKTP US*HB3O22AV1	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/10/2022	147.96	
AMZN MKTP US*HB3QZ1DC1	AMZN.COM/BILL	JANET BRANHAM	PARKS	11/13/2022	17.76	
AMZN MKTP US*HB3YY9XV1	AMZN.COM/BILL	JANET BRANHAM	PARKS	11/11/2022	102.94	
AMZN MKTP US*HB4ZM93Q2	AMZN.COM/BILL	DAWN BURGESS	CITY MANAGER	11/14/2022	65.23	
AMZN MKTP US*HB62J8EA0	AMZN.COM/BILL	KEVIN FREY	FACILITIES	11/09/2022	14.38	
AMZN MKTP US*HB63H66L1	AMZN.COM/BILL	TANYA SCOTT	FINANCE	11/13/2022	65.68	
AMZN MKTP US*HB6G60U62	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/17/2022	17.09	
AMZN MKTP US*HB6O80XQ2	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	11/15/2022	19.98	
AMZN MKTP US*HB71Y78B1	AMZN.COM/BILL	MEREDYTH MUTH	CITY MANAGER	11/13/2022	16.99	
AMZN MKTP US*HB7Q61OD2	AMZN.COM/BILL	EMILY HOGAN	CITY MANAGER	11/13/2022	13.99	

AMZN MKTP US*HB7UQ69P2	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/17/2022	52.64	
AMZN MKTP US*HB8G988P1	AMZN.COM/BILL	DANNY WEIONSTOCK	REC CENTER	11/13/2022	7.00	
AMZN MKTP US*HB8KQ8DM0	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	11/12/2022	17.95	
AMZN MKTP US*HB90P2LT2	AMZN.COM/BILL	BRIDGET BACON	LIBRARY	11/13/2022	60.18	
AMZN MKTP US*HB92D6FO0	AMZN.COM/BILL	JANET BRANHAM	PARKS	11/08/2022	11.34	
AMZN MKTP US*HB9AP99X0	AMZN.COM/BILL	BENJAMIN FRANCISCO	OPERATIONS	11/13/2022	17.98	
AMZN MKTP US*HB9T344D1	AMZN.COM/BILL	LINDSEY WITTY	REC CENTER	11/09/2022	31.99	
AMZN MKTP US*HI08B9ZD2	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	11/18/2022	39.99	
AMZN MKTP US*HI0DE1NV1	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/16/2022	32.85	
AMZN MKTP US*HI0SU9QH1	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/19/2022	17.98	
AMZN MKTP US*HI2589K20	AMZN.COM/BILL	KATRINA KEHM	POLICE	11/18/2022	20.85	
AMZN MKTP US*HI2JD6DR1	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/19/2022	6.92	
AMZN MKTP US*HI2K383X1	AMZN.COM/BILL	JULIE SEYDEL	REC CENTER	11/17/2022	11.20	
AMZN MKTP US*HI3IZ9BM1	AMZN.COM/BILL	PAMELA LEMON	REC CENTER	11/19/2022	227.70	
AMZN MKTP US*HI3PS1GD0	AMZN.COM/BILL	LIGEA FERRARO	CITY MANAGER	11/17/2022	73.26	
AMZN MKTP US*HI4FO2OF1	AMZN.COM/BILL	GREG VENETTE	WATER	11/16/2022	46.15	
AMZN MKTP US*HI4FP6OF1	AMZN.COM/BILL	PAUL BORTH	REC CENTER	11/16/2022	43.50	
AMZN MKTP US*HI4G88LI0	AMZN.COM/BILL	LINDSEY WITTY	REC CENTER	11/15/2022	9.99	
AMZN MKTP US*HI5D76T51	AMZN.COM/BILL	LIGEA FERRARO	CITY MANAGER	11/17/2022	90.06	
AMZN MKTP US*HI5SD2Z40	AMZN.COM/BILL	DEVIN MADIGAN	WASTEWATER	11/15/2022	443.15	
AMZN MKTP US*HI5XC9132	AMZN.COM/BILL	LANCE PFEIFER	GOLF COURSE	11/20/2022	14.99	
AMZN MKTP US*HI5ZF1ER1	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/17/2022	125.97	
AMZN MKTP US*HI7T33901	AMZN.COM/BILL	KEVIN FREY	FACILITIES	11/20/2022	131.97	
AMZN MKTP US*HI8HL6EC2	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/20/2022	43.99	
AMZN MKTP US*HI8J88XU2	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/21/2022	23.54	
AMZN MKTP US*HI90B1LP2	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/18/2022	121.09	
AMZN MKTP US*HI9LU2QB1	AMZN.COM/BILL	PATRICIA MORGAN	REC CENTER	11/19/2022	373.74	
AMZN MKTP US*HI9QU1GZ2	AMZN.COM/BILL	ERICA BERZINS	POLICE	11/20/2022	33.99	
AMZN MKTP US*HT7Y37UW2	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	10/22/2022	39.76	
AMZN MKTP US*HT8BX1KQ2	AMZN.COM/BILL	DEVIN MADIGAN	WASTEWATER	10/21/2022	54.03	
AMZN MKTP US*HW4IP7O60	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/20/2022	13.99	
AMZN MKTP US*HW8VC9L90	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/21/2022	52.20	
ARMY NAVY SURPLUS STOR	303-426-0488	JACK MANIAN	OPERATIONS	10/25/2022	279.98	
ARROWHEAD AWARDS	303-447-9407	LIGEA FERRARO	CITY MANAGER	11/10/2022	15.00	
ARROWHEAD AWARDS	303-447-9407	LIGEA FERRARO	CITY MANAGER	10/26/2022	17.00	
ARROWSTAGELINES.COM	OMAHA	KATIE BEASLEY	REC CENTER	11/15/2022	955.00	
ARROWSTAGELINES.COM	OMAHA	KATIE BEASLEY	REC CENTER	11/15/2022	767.00	
ATT*TECH SUPPORT 360	877-88TS360	CHRISTOPHER NEVES	IT	11/11/2022	10.00	
AXON	SCOTTSDALE	RICKY BLACKNEY	POLICE	11/14/2022	33.17	
AMAZON.COM*H01NW51G1	AMZN.COM/BILL	GREG VENETTE	WATER	10/28/2022	50.98	
AMAZON.COM*H04X15H11	AMZN.COM/BILL	PATRICIA MORGAN	REC CENTER	10/30/2022	160.00	
AMAZON.COM*H05JX1722	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/05/2022	24.98	
AMAZON.COM*H05V434U2	AMZN.COM/BILL	JANET BRANHAM	PARKS	10/31/2022	119.11	
AMAZON.COM*H06531401	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	10/26/2022	21.99	
AMAZON.COM*H06HF6391	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	10/27/2022	11.96	

AMAZON.COM*H06OY8PB0	AMZN.COM/BILL	AMANDA PERERA	REC CENTER	10/26/2022	208.99	
AMAZON.COM*H08OA8TH0	AMZN.COM/BILL	LIGEA FERRARO	CITY MANAGER	10/26/2022	40.47	
AMAZON.COM*H20F00GA1	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/05/2022	24.98	
AMAZON.COM*H23UD4X00	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/03/2022	11.19	
AMAZON.COM*H254K2EQ1	AMZN.COM/BILL	ELIZABETH SCHETTLER	PLANNING	11/04/2022	20.94	
AMAZON.COM*H25AO0DK1	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/07/2022	13.98	
AMAZON.COM*H25LU8J72	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/08/2022	35.92	
AMAZON.COM*H26NR0GE1	AMZN.COM/BILL	KATRINA KEHM	POLICE	11/05/2022	64.18	
AMAZON.COM*H27939A51	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/04/2022	9.53	
AMAZON.COM*H27DP5ES0	AMZN.COM/BILL	JOSH GILBERTSON	IT	11/02/2022	35.99	
AMAZON.COM*H27QQ24G0	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/01/2022	39.92	
AMAZON.COM*H29WX6EW2	AMZN.COM/BILL	KATRINA KEHM	POLICE	11/08/2022	14.98	
AMAZON.COM*H802O72Y1	AMZN.COM/BILL	TANYA SCOTT	FINANCE	10/24/2022	1,049.00	
AMAZON.COM*H80IP5BK2	AMZN.COM/BILL	KATRINA KEHM	POLICE	10/27/2022	5.59	
AMAZON.COM*H817324X2	AMZN.COM/BILL	BRIDGET BACON	LIBRARY	10/24/2022	17.18	
AMAZON.COM*H82AQ7QA1	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	10/23/2022	12.97	
AMAZON.COM*H84PP3K02	AMZN.COM/BILL	GREG VENETTE	WATER	10/28/2022	422.07	
AMAZON.COM*H87W90X71	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	10/22/2022	39.92	
AMAZON.COM*HB2AX3PW2	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/15/2022	10.99	
AMAZON.COM*HB38461L2	AMZN.COM/BILL	PAUL BORTH	REC CENTER	11/15/2022	14.32	
AMAZON.COM*HB48X7RR1	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/15/2022	107.81	
AMAZON.COM*HB4P507X0	AMZN.COM/BILL	SANDRA ANDRETICH	OPERATIONS	11/13/2022	14.29	
AMAZON.COM*HB7057532	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/16/2022	11.99	
AMAZON.COM*HB7GB15Y2	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/16/2022	54.93	
AMAZON.COM*HI1IH4M32	AMZN.COM/BILL	ERICA BERZINS	POLICE	11/21/2022	79.90	
AMAZON.COM*HI2361L80	AMZN.COM/BILL	JULIE SEYDEL	REC CENTER	11/15/2022	25.99	
AMAZON.COM*HI44S0HA1	AMZN.COM/BILL	DAWN BURGESS	CITY MANAGER	11/18/2022	9.48	
AMAZON.COM*HI5QN61I0	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/16/2022	35.92	
AMAZON.COM*HI5YJ8HG0	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/18/2022	11.99	
AMAZON.COM*HI6RO0HB0	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/18/2022	39.97	
AMAZON.COM*HI70351U2	AMZN.COM/BILL	JOSH GILBERTSON	IT	11/20/2022	26.99	
AMAZON.COM*HI8VQ3M81	AMZN.COM/BILL	JILL SIEWERT	LIBRARY	11/18/2022	9.99	
BAGHOUSE AMERICA	800-641-1980	JOHN KIPP	WASTEWATER	10/28/2022	370.10	
BIZWEST-DIGITAL	FORT COLLINS	ROBERT ZUCCARO	PLANNING	11/12/2022	9.00	
BLACKJACK PIZZA - CO 0	LOUISVILLE	RONDA HENGER	HUMAN RESOURCES	11/09/2022	16.99	
BLACKJACK PIZZA - CO 0	LOUISVILLE	SANDRA ANDRETICH	OPERATIONS	11/01/2022	169.87	
BRANDCROWD	PASADENA	LIGEA FERRARO	CITY MANAGER	11/07/2022	8.00	
BRIDGEPAY NETWORK SOLU	407-9008967	TANYA SCOTT	FINANCE	11/07/2022	31.10	
BROOMFIELD RENTALS INC	BROOMFIELD	JACK MANIAN	OPERATIONS	10/31/2022	33.00	
CALENDLY	AVONDALE ESTA	DAVID BARIL	GOLF COURSE	11/09/2022	15.00	
CANVA* I03609-17680849	CAMDEN	MIKE MILLER	POLICE	11/19/2022	119.99	
CENTER COPY PRINTING	303-4406000	KATRINA KEHM	POLICE	11/14/2022	181.44	
CENTER COPY PRINTING	303-4406000	ERIN OWEN	LIBRARY	11/10/2022	53.11	
CHILDHEALTHCONNECTION	FORT COLLINS	AMANDA PERERA	REC CENTER	11/16/2022	80.00	
CLYFFORD STILL MUS	DENVER	KATIE BEASLEY	REC CENTER	11/03/2022	140.00	

CO PARK* INV-113	WHEAT RIDGE	DANNY WEIONSTOCK	REC CENTER	10/29/2022	419.00	
COAL CREEK ACE HARDWAR	LOUISVILLE	JOEY MITCHELL	REC CENTER	11/04/2022	2.97	
COAL CREEK ACE HARDWAR	LOUISVILLE	PHIL LIND	FACILITIES	10/25/2022	13.86	
COAL CREEK ACE HARDWAR	LOUISVILLE	BRIAN GARDUNO	OPERATIONS	10/24/2022	22.54	
COLORADO ASSOCIATION O	720-6747275	JEFF FISHER	POLICE	10/21/2022	125.00	
COLORADO CWP	719-545-6748	SHANE MAHAN	OPERATIONS	11/04/2022	50.00	
COLORADO CWP	719-545-6748	THOMAS CZAJKA	OPERATIONS	11/04/2022	50.00	
COLORADO GOLF AND TURF	LITTLETON	LANCE PFEIFER	GOLF COURSE	10/26/2022	47.85	
COLORADO PLASTIC PRODU	LOUISVILLE	DEVIN MADIGAN	WASTEWATER	10/31/2022	177.66	
COMCAST CABLE COMM	800-COMCAST	ERICA SCHMITT	LIBRARY	11/13/2022	111.95	
COMCAST CABLE COMM	800-COMCAST	JANET BRANHAM	PARKS	10/28/2022	531.37	
COMCAST DENVER	800-266-2278	JILL SIEWERT	LIBRARY	11/16/2022	298.12	
CONSOLIDATED HARDWOODS	BROOMFIELD	MIKE MILLER	POLICE	11/08/2022	35.02	
CORE & MAIN LP - CO054	HENDERSON	STEVEN HUIZENGA	PARKS	10/24/2022	157.92	
CORNWELL TOOLS	DACONO	MASON THOMPSON	OPERATIONS	11/09/2022	203.45	
CROWN AWARDS INC	8002271557	ERIN OWEN	LIBRARY	11/03/2022	73.33	
CRUMBL	LINDON	KATRINA KEHM	POLICE	11/16/2022	92.22	
DAILY CAMERA	3034443444	JILL SIEWERT	LIBRARY	11/17/2022	741.00	
DAILY CAMERA	3034443444	EMILY HOGAN	CITY MANAGER	11/10/2022	14.99	
DEN PUBLIC PARKING	DENVER	CHRISTOPHER NEVES	IT	10/27/2022	70.00	
DENVER BOTANIC GARDENS	720-8653520	KATIE TOFTE	REC CENTER	11/07/2022	220.00	
DENVER BOTANIC GARDENS	720-8653520	KATIE BEASLEY	REC CENTER	11/07/2022	220.00	
DENVER BOTANIC GARDENS	720-8653520	KATIE BEASLEY	REC CENTER	11/07/2022	110.00	
DOLLAR TREE	WESTMINSTER	LANA FAUVER	REC CENTER	11/05/2022	11.25	
DROPBOX*9FJXTV7VLPF1	DROPBOX.COM	EMILY HOGAN	CITY MANAGER	11/18/2022	11.99	
DROPBOX*V9FMKXKBVXKJ	DROPBOX.COM	KERRY HOLLE	PUBLIC WORKS	10/27/2022	119.88	
DTV*DIRECTV SERVICE	800-347-3288	PAMELA PETERSON-HOHS	GOLF COURSE	10/25/2022	240.51	
E 470 EXPRESS TOLLS	303-5373470	TANYA SCOTT	FINANCE	10/27/2022	2.00	
EARL S SAW SHOP	BOULDER	LUKE LAYTON	PARKS	11/16/2022	63.98	
ECO PROMOTIONAL PRODUC	847-520-1771	KAYLA BETZOLD	CITY MANAGER	11/02/2022	551.56	
ENVIRONMENTAL RESOURCE	3034318454	JOHN KIPP	WASTEWATER	11/03/2022	286.68	
EZCATERSNARFS SANDWIC	8004881803	MEAGAN BROWN	HUMAN RESOURCES	11/15/2022	155.23	
EZCATERSNARFS SANDWIC	8004881803	LIGEA FERRARO	CITY MANAGER	11/10/2022	187.64	
EZCATERSNARFS SANDWIC	8004881803	MEAGAN BROWN	HUMAN RESOURCES	11/07/2022	186.42	
EZCATERSNARFS SANDWIC	8004881803	LIGEA FERRARO	CITY MANAGER	11/05/2022	306.80	
FASTSIGNS 371501	303-4101122	ERICA SCHMITT	LIBRARY	10/27/2022	160.00	
FEDEX 553394059	800-4633339	DAVID BARIL	GOLF COURSE	10/23/2022	369.81	
FEDEX 553589809	800-4633339	DAVID BARIL	GOLF COURSE	10/26/2022	17.90	
FEDEX 95616494	MEMPHIS	GREG VENETTE	WATER	11/19/2022	87.87	
FEDEX OFFIC74200007427	LOUISVILLE	DAVID BARIL	GOLF COURSE	11/02/2022	102.00	
FEDEX OFFICE 800000836	PLANO	DAVID BARIL	GOLF COURSE	11/01/2022	97.77	
FEDEX OFFICE 800000836	PLANO	DAVID BARIL	GOLF COURSE	11/01/2022	97.77	
FIREHOUSE SUBS 1528 QS	SUPERIOR	DAVID D HAYES	POLICE	10/23/2022	436.31	
FIRST CHOICE-BOYER S C	303-9649400	LIGEA FERRARO	CITY MANAGER	11/04/2022	140.24	
FIRST CHOICE-BOYER S C	303-9649400	LIGEA FERRARO	CITY MANAGER	11/03/2022	133.64	

FIRST CHOICE-BOYER S C	303-9649400	DAVID DEAN	GOLF COURSE	11/03/2022	114.88	
FIRST CHOICE-BOYER S C	303-9649400	LIGEA FERRARO	CITY MANAGER	11/03/2022	70.00	
FLOWCODE PRO	NEW YORK	GINGER CROSS	GOLF COURSE	11/05/2022	95.00	
FSP*CGFOA	303-922-4647	TANYA SCOTT	FINANCE	11/02/2022	450.00	
FSP*COLORADO ASSOCIATI	303-433-4446	KRISTEN BODINE	LIBRARY	11/01/2022	95.00	
GEORGE T SANDERS 09	LOUISVILLE	ROSS DAVIS	OPERATIONS	10/26/2022	127.53	
GOLF CART KING LLC	AUSTIN	DAVID BARIL	GOLF COURSE	11/11/2022	300.00	
GOVERNMENT FINANCE OFF	CHICAGO	TANYA SCOTT	FINANCE	10/25/2022	135.00	
GRAINGER	877-2022594	KERRY KRAMER	PARKS	11/08/2022	799.24	
GRAINGER	877-2022594	DEVIN MADIGAN	WASTEWATER	11/08/2022	68.00	
GRAINGER	877-2022594	NICHOLAS POTOPCHUK	PARKS	10/25/2022	27.94	
GREEN CO2 SYSTEMS	970-482-0203	PAUL BORTH	REC CENTER	11/16/2022	782.98	
GREEN CO2 SYSTEMS	970-482-0203	PAUL BORTH	REC CENTER	11/15/2022	867.00	
HD SUPPLY FACILITIES	8003453000	KATHLEEN D LORENZO	PARKS	11/04/2022	828.56	
HD SUPPLY FACILITIES	8003453000	KATHLEEN D LORENZO	PARKS	10/21/2022	664.08	
HILLYARD INC DENVER	3033211227	PAMELA PETERSON-HOHS	GOLF COURSE	11/03/2022	32.62	
HILLYARD INC DENVER	3033211227	PAMELA PETERSON-HOHS	GOLF COURSE	10/25/2022	31.56	
HOBBY-LOBBY #0034	LONGMONT	LARISSA HOFFMAN	REC CENTER	10/20/2022	38.41	
HOBBY-LOBBY #891	WHEAT RIDGE	KATRINA KEHM	POLICE	11/08/2022	22.38	
HOLIDAY INNS	CANON CITY	MEREDYTH MUTH	CITY MANAGER	10/21/2022	151.05	
HOLIDAY INNS	CANON CITY	MEGAN DAVIS	CITY MANAGER	10/21/2022	144.00	
IAD DULLES GAR 2 74	DULLES	CHRISTOPHER NEVES	IT	10/27/2022	5.00	
ICMA ONLINE	2029623680	JEFF DURBIN	CITY MANAGER	11/11/2022	1,200.00	
IN *KAISER LOCK & KEY	303-4493880	PAMELA PETERSON-HOHS	GOLF COURSE	11/01/2022	120.00	
IN *LANDMARK	262-6798484	DAVID DEAN	GOLF COURSE	11/11/2022	181.13	
IN *TEE CLAW SPORTS IN	714-4792580	DAVID DEAN	GOLF COURSE	11/11/2022	59.96	
INSTANT IMPRINTS LOUIS	3036641633	KAYLA BETZOLD	CITY MANAGER	11/16/2022	40.00	
JAX - 06	LAFAYETTE	THOMAS CZAJKA	OPERATIONS	11/16/2022	139.99	
JAX - 06	LAFAYETTE	JACK MANIAN	OPERATIONS	11/15/2022	150.00	
JAX - 06	LAFAYETTE	CATHERINE JEPSON	PARKS	10/28/2022	48.43	
JAX - 06	LAFAYETTE	ROSS DAVIS	OPERATIONS	10/27/2022	20.48	
JAX - 06	LAFAYETTE	JEFF ROBISON	FACILITIES	10/27/2022	74.97	
JAX - 06	LAFAYETTE	ROSS DAVIS	OPERATIONS	10/27/2022	136.45	
JERSEY MIKES 22024	LOUISVILLE	SHAIRA WHITTLE	POLICE	10/24/2022	57.73	
JIMMY JOHNS - 2668	LOUISVILLE	GREG VENETTE	WATER	11/09/2022	150.82	
JIMMY JOHNS - 2668 - E	LOUISVILLE	SANDRA ANDRETICH	OPERATIONS	11/03/2022	22.58	
KING SOOPERS #0013	LOUISVILLE	PATRICIA MORGAN	REC CENTER	11/09/2022	181.13	
KING SOOPERS #0013	LOUISVILLE	PATRICIA MORGAN	REC CENTER	11/01/2022	154.31	
KING SOOPERS #0013	LOUISVILLE	NICHOLAS POTOPCHUK	PARKS	10/27/2022	50.88	
LAMARS DONUTS-	LOUISVILLE	JEN KENNEY	POLICE	11/14/2022	29.98	
LANDS END BUS OUTFITTE	8003324700	JEN KENNEY	POLICE	11/17/2022	309.75	
LANGUAGE LINE	8316487439	MEREDYTH MUTH	CITY MANAGER	11/04/2022	2.51	
LEISURE TIME AWARDS, I	BOULDER	KATRINA KEHM	POLICE	11/16/2022	110.00	
LES MILLS US TRADING	6308285949	LINDSEY WITTY	REC CENTER	11/08/2022	350.00	
LEXISNEXIS EPIC	866-208-1420	KATRINA KEHM	POLICE	11/09/2022	77.50	

LL JOHNSON DIST CO	DENVER	LANCE PFEIFER	GOLF COURSE	11/07/2022	66.25	
LL JOHNSON DIST CO	DENVER	LANCE PFEIFER	GOLF COURSE	11/07/2022	70.06	
LL JOHNSON DIST CO	DENVER	LANCE PFEIFER	GOLF COURSE	11/07/2022	164.60	
LL JOHNSON DIST CO	DENVER	LANCE PFEIFER	GOLF COURSE	11/07/2022	10.98	
LL JOHNSON DIST CO	DENVER	LANCE PFEIFER	GOLF COURSE	11/07/2022	150.78	
LL JOHNSON DIST CO	DENVER	LANCE PFEIFER	GOLF COURSE	11/07/2022	286.36	
LL JOHNSON DIST CO	DENVER	LANCE PFEIFER	GOLF COURSE	11/07/2022	64.51	
LL JOHNSON DIST CO	DENVER	LANCE PFEIFER	GOLF COURSE	11/07/2022	352.14	
LL JOHNSON DIST CO	DENVER	LANCE PFEIFER	GOLF COURSE	11/07/2022	53.75	
LOCK PAPER SCISSORS ES	LOS ANGELES	MARLA OLSON	PARKS	11/04/2022	29.00	
LOUISVILLE ARC THRIFT	LOUISVILLE	SANDRA ANDRETICH	OPERATIONS	10/28/2022	39.41	
LOUISVILLE CHAMBER OF	3036665747	TANYA SCOTT	FINANCE	11/10/2022	2,000.00	
LOWES #01989*	WESTMINSTER	NORMAN MERLO	GOLF COURSE	11/17/2022	156.44	
LOWES #03444*	ERIE	PHIL LIND	FACILITIES	11/18/2022	22.96	
LOWES #03444*	ERIE	NORMAN MERLO	GOLF COURSE	11/16/2022	170.41	
LOWES #03444*	ERIE	MARYANN DORNFELD	PARKS	11/02/2022	125.88	
LOWES #03444*	ERIE	MARYANN DORNFELD	PARKS	10/28/2022	69.08	
MAILCHIMP *MISC	MAILCHIMP.COM	EMILY HOGAN	CITY MANAGER	11/18/2022	391.00	
MARCOS PIZZA - 6005	SUPERIOR	DAVID D HAYES	POLICE	11/03/2022	142.86	
MARCOS PIZZA - 6005	SUPERIOR	JEFF FISHER	POLICE	11/02/2022	104.22	
MARCOS PIZZA - 6005	SUPERIOR	JEN KENNEY	POLICE	10/27/2022	166.89	
MARCOS PIZZA - 6005	SUPERIOR	DAVID D HAYES	POLICE	10/25/2022	126.12	
METRO 024-UNION STN S	WASHINGTON	CHRISTOPHER NEVES	IT	10/27/2022	13.00	
METRO 118-WIEHLE-RESTO	RESTON	CHRISTOPHER NEVES	IT	10/24/2022	15.00	
MICHAELS STORES 2059	SUPERIOR	KRISTEN PORTER	REC CENTER	11/13/2022	20.78	
MICHAELS STORES 2059	SUPERIOR	CATHERINE JEPSON	PARKS	10/21/2022	32.39	
MILE HIGH TURFGRASS LL	3039880969	DAVID DEAN	GOLF COURSE	11/11/2022	845.00	
MILE HIGH TURFGRASS LL	3039880969	DAVID DEAN	GOLF COURSE	10/29/2022	217.00	
MSFT * E0500KR7I5	MSFT AZURE	CHRISTOPHER NEVES	IT	11/01/2022	112.03	
NAPA AUTO 0025122	BOULDER	TANYA SCOTT	FINANCE	11/01/2022	229.01	
NAPA AUTO 0025122	BOULDER	TANYA SCOTT	FINANCE	10/31/2022	2,154.45	
NAPA AUTO 0025122	BOULDER	TANYA SCOTT	FINANCE	10/27/2022	2,568.51	
NATIONAL STORMWATER CE	7722886852	VICKIE ILKO	OPERATIONS	11/16/2022	824.00	
NOCO SEPTIC	MEAD	PAMELA PETERSON-HOHS	GOLF COURSE	11/02/2022	525.00	
NOODLES & CO 168	BROOMFIELD	JANET BRANHAM	PARKS	10/25/2022	98.95	
NORTHWEST PARKWAY LLC	303-9262500	KATRINA KEHM	POLICE	11/14/2022	18.20	
O MEARA FORD	NORTHGLENN	NICK CASE	OPERATIONS	11/09/2022	35.92	
OFFICE DEPOT #1080	800-463-3768	DAVID BARIL	GOLF COURSE	11/03/2022	27.99	
OFFICE DEPOT #1080	800-463-3768	DAVID BARIL	GOLF COURSE	11/03/2022	26.99	
OFFICE DEPOT #567	WESTMINSTER	AUSTIN BROWN	CITY MANAGER	10/24/2022	39.99	
OFFICEMAX/DEPOT 6616	SUPERIOR	KATIE BEASLEY	REC CENTER	10/31/2022	43.69	
ORANGE WHIP TRAINER	864-5521620	DAVID BARIL	GOLF COURSE	11/09/2022	522.24	
PANERA BREAD #202432 O	720-304-7000	MARLA OLSON	PARKS	11/05/2022	52.74	
PARKER STORE LOUISVILL	LOUISVILLE	KERRY KRAMER	PARKS	11/14/2022	6.64	
PASTPERFECT SOFTWARE	8005626080	BRIDGET BACON	LIBRARY	10/27/2022	996.00	

PAYFLOW/PAYPAL	8888839770	TANYA SCOTT	FINANCE	11/02/2022	19.95	
PAYFLOW/PAYPAL	8888839770	TANYA SCOTT	FINANCE	11/02/2022	59.95	
PAYPAL *COURSE	4029357733	DIANE M KREAGER	FINANCE	11/18/2022	139.00	
PAYPAL *HEDOCELL HEDOC	4029357733	LANA FAUVER	REC CENTER	10/26/2022	9.84	
PHOENIX PARK HOTEL	WASHINGTON	CHRISTOPHER NEVES	IT	10/27/2022	886.26	
PLUG N PAY TECHNOLOGIE	631-8707735	JULIE SEYDEL	REC CENTER	11/07/2022	66.82	
POOL WAREHOUSE	800-5151747	JOEY MITCHELL	REC CENTER	10/24/2022	299.98	
PREMIER CHARTERS INC	303-289-2222	KATIE BEASLEY	REC CENTER	11/04/2022	600.00	
PURAQUA PRODUCTS INC	8039807100	JOEY MITCHELL	REC CENTER	10/27/2022	480.58	
PURAQUA PRODUCTS INC	8039807100	JOEY MITCHELL	REC CENTER	10/25/2022	501.13	
PET SCOOP	DENVER	JANET BRANHAM	PARKS	11/01/2022	540.00	
QDOBA 2526 ONLINE	720-890-7877	KAYLA BETZOLD	CITY MANAGER	11/16/2022	396.25	
QUALITY INNS	7208105009	GENEVIEVE KLINE	CITY CLERK	10/21/2022	448.80	
RANGE SERVANT AMERICA	7704488055	DAVID DEAN	GOLF COURSE	11/10/2022	311.03	
RED WING SHOE STORE 1	ARVADA	NICHOLAS POTOPCHUK	PARKS	11/15/2022	150.00	
RIVER WALK FLORIST AND	719-5434119	LIGEA FERRARO	CITY MANAGER	11/08/2022	83.19	
RMWEA	3037480321	GREG VENETTE	WATER	11/02/2022	400.00	
ROCKY MOUNTAIN REGIONA	7209353840	DAVID DEAN	GOLF COURSE	11/14/2022	280.00	
SAFEWAY #2812	LOUISVILLE	KATRINA KEHM	POLICE	11/16/2022	66.74	
SAFEWAY #2812	LOUISVILLE	KATRINA KEHM	POLICE	11/09/2022	99.86	
SAFEWAY #2812	LOUISVILLE	MARLA OLSON	PARKS	11/10/2022	2.99	
SAFEWAY #2812	LOUISVILLE	DANNY WEIONSTOCK	REC CENTER	10/21/2022	52.44	
SAFEWAY #2812	LOUISVILLE	CATHERINE JEPSON	PARKS	10/20/2022	20.95	
SHERWIN WILLIAMS 70348	LAFAYETTE	PHIL LIND	FACILITIES	11/18/2022	39.70	
SHOWCASES	3217835586	JILL SIEWERT	LIBRARY	10/21/2022	323.46	
SIMPLEKPI.COM	ANDOVER	EMILY HOGAN	CITY MANAGER	11/15/2022	297.00	
SIP.US	4045964206	JOHN KIPP	WASTEWATER	11/09/2022	29.98	
SNARFS 34 LOUISVILLE	LOUISVILLE	MARLA OLSON	PARKS	11/10/2022	121.06	
SOIL HORIZONS INC	937-642-5501	DAVID DEAN	GOLF COURSE	10/22/2022	150.00	
SP THE BIG GREEN BOX	ANAHEIM	PEGGY NORRIS	LIBRARY	11/14/2022	65.00	
SPI*CENTURYLINK/LUMEN	800-423-8994	TANYA SCOTT	FINANCE	10/28/2022	2,529.10	
SQ *B.O.B.S. DINER	LOUISVILLE	JOHN KIPP	WASTEWATER	11/03/2022	157.40	
SQ *CHARM WINDOW	BOULDER	JOHN KIPP	WASTEWATER	10/24/2022	18.00	
SQ *PICA'S LOUISVILLE	LOUISVILLE	BRIDGET BACON	LIBRARY	11/12/2022	691.15	
SQ *SUC N UP	LONGMONT	NICHOLAS POTOPCHUK	PARKS	10/24/2022	575.00	
SQ *UNITED WOOD PRODUC	LONGMONT	NICHOLAS POTOPCHUK	PARKS	10/26/2022	175.26	
SS GRAPHICS, INC.	734-2461230	EMILY HOGAN	CITY MANAGER	11/17/2022	760.49	
STAPLS7367534778000001	877-8267755	JILL SIEWERT	LIBRARY	11/01/2022	68.92	
STAPLS7367534778000002	877-8267755	JILL SIEWERT	LIBRARY	11/05/2022	8.99	
STAPLS7367534778000003	877-8267755	JILL SIEWERT	LIBRARY	11/05/2022	12.99	
STAPLS7368118886000001	877-8267755	KATRINA KEHM	POLICE	11/09/2022	186.37	
STATEFOODSAFETYCOM	8014941416	KATIE TOFTE	REC CENTER	11/01/2022	12.00	
STICKERGIANT.COM	3038488174	JOSH GILBERTSON	IT	11/01/2022	148.79	
STK*SHUTTERSTOCK	8666633954	EMILY HOGAN	CITY MANAGER	11/19/2022	99.00	
STORQUEST-LOUISVILLE/L	800-784-9176	BRIDGET BACON	LIBRARY	10/31/2022	391.00	

SURVEYMONK* T 43432642	SAN MATEO	ERICA SCHMITT	LIBRARY	10/28/2022	99.00	
SUN MOUNTAIN SPORTS, I	4067289224	DAVID BARIL	GOLF COURSE	11/07/2022	193.00	
TAFT ENGINEERING	3037534584	KEVIN FREY	FACILITIES	11/18/2022	767.22	
TARGET 00017699	SUPERIOR	REBECCA ST ORES	REC CENTER	11/05/2022	8.37	
TARGET 00017699	SUPERIOR	CATHERINE JEPSON	PARKS	10/27/2022	21.29	
TARGET 00017699	SUPERIOR	DAVID D HAYES	POLICE	10/23/2022	43.37	
TARGET 00021972	BROOMFIELD	ERICA SCHMITT	LIBRARY	10/27/2022	70.95	
THE GRILL AT COAL CREE	LOUISVILLE	DAVID D HAYES	POLICE	10/31/2022	33.00	
THE GRILL AT COAL CREE	LOUISVILLE	TANYA SCOTT	FINANCE	10/27/2022	1,789.65	
THE GRILL AT COAL CREE	LOUISVILLE	CHRIS LICHTY	PARKS	10/26/2022	37.50	
THE HOME DEPOT #1506	LOUISVILLE	DAVID BARIL	GOLF COURSE	11/18/2022	155.31	
THE HOME DEPOT #1506	LOUISVILLE	KEVIN FREY	FACILITIES	11/18/2022	62.17	
THE HOME DEPOT #1506	LOUISVILLE	STEVEN HUIZENGA	PARKS	11/16/2022	24.30	
THE HOME DEPOT #1506	LOUISVILLE	JACK MANIAN	OPERATIONS	11/16/2022	19.94	
THE HOME DEPOT #1506	LOUISVILLE	JONATHAN KINGSLEY	PARKS	11/16/2022	42.49	
THE HOME DEPOT #1506	LOUISVILLE	JACK MANIAN	OPERATIONS	11/15/2022	10.94	
THE HOME DEPOT #1506	LOUISVILLE	NICHOLAS POTOPCHUK	PARKS	11/15/2022	147.52	
THE HOME DEPOT #1506	LOUISVILLE	MICHAEL CLEVELAND	OPERATIONS	11/14/2022	120.91	
THE HOME DEPOT #1506	LOUISVILLE	REMY RODRIGUES	IT	11/09/2022	59.97	
THE HOME DEPOT #1506	LOUISVILLE	BENJAMIN FRANCISCO	OPERATIONS	11/10/2022	194.94	
THE HOME DEPOT #1506	LOUISVILLE	VICKIE ILKO	OPERATIONS	11/09/2022	15.28	
THE HOME DEPOT #1506	LOUISVILLE	NORMAN MERLO	GOLF COURSE	11/11/2022	131.86	
THE HOME DEPOT #1506	LOUISVILLE	DAVID BARIL	GOLF COURSE	11/10/2022	19.12	
THE HOME DEPOT #1506	LOUISVILLE	SCOTT MOORE	POLICE	11/10/2022	367.97	
THE HOME DEPOT #1506	LOUISVILLE	BRADLEY AUSTIN	PARKS	11/11/2022	8.97	
THE HOME DEPOT #1506	LOUISVILLE	KEVIN FREY	FACILITIES	11/08/2022	22.86	
THE HOME DEPOT #1506	LOUISVILLE	PHIL LIND	FACILITIES	11/08/2022	32.80	
THE HOME DEPOT #1506	LOUISVILLE	DAVID BARIL	GOLF COURSE	11/05/2022	3.48	
THE HOME DEPOT #1506	LOUISVILLE	REMY RODRIGUES	IT	11/03/2022	23.96	
THE HOME DEPOT #1506	LOUISVILLE	DAVID DEAN	GOLF COURSE	11/04/2022	58.82	
THE HOME DEPOT #1506	LOUISVILLE	LESLIE RINGER	HUMAN RESOURCES	11/04/2022	88.13	
THE HOME DEPOT #1506	LOUISVILLE	MICHAEL CLEVELAND	OPERATIONS	11/02/2022	11.70	
THE HOME DEPOT #1506	LOUISVILLE	KEVIN FREY	FACILITIES	11/02/2022	268.00	
THE HOME DEPOT #1506	LOUISVILLE	VICKIE ILKO	OPERATIONS	11/02/2022	46.18	
THE HOME DEPOT #1506	LOUISVILLE	NICK CASE	OPERATIONS	11/02/2022	28.35	
THE HOME DEPOT #1506	LOUISVILLE	CHRISTOPHER NEVES	IT	11/01/2022	38.28	
THE HOME DEPOT #1506	LOUISVILLE	GREG VENETTE	WATER	10/31/2022	10.82	
THE HOME DEPOT #1506	LOUISVILLE	MARYANN DORNFELD	PARKS	10/31/2022	49.00	
THE HOME DEPOT #1506	LOUISVILLE	JEFF ROBISON	FACILITIES	10/31/2022	10.97	
THE HOME DEPOT #1506	LOUISVILLE	ANDY ELLIS	PARKS	10/28/2022	65.52	
THE HOME DEPOT #1506	LOUISVILLE	JONATHAN KINGSLEY	PARKS	10/27/2022	62.76	
THE HOME DEPOT #1506	LOUISVILLE	NICHOLAS POTOPCHUK	PARKS	10/27/2022	99.40	
THE HOME DEPOT #1506	LOUISVILLE	NICHOLAS POTOPCHUK	PARKS	10/27/2022	94.33	
THE HOME DEPOT #1506	LOUISVILLE	JONATHAN KINGSLEY	PARKS	10/26/2022	21.98	
THE HOME DEPOT #1506	LOUISVILLE	KEVIN FREY	FACILITIES	10/26/2022	79.66	

THE HOME DEPOT #1506	LOUISVILLE	NORMAN MERLO	GOLF COURSE	10/25/2022	5.79	
THE HOME DEPOT #1506	LOUISVILLE	LANCE PFEIFER	GOLF COURSE	10/25/2022	232.98	
THE HOME DEPOT #1506	LOUISVILLE	JEFF ROBISON	FACILITIES	10/25/2022	23.92	
THE HOME DEPOT #1506	LOUISVILLE	VICKIE ILKO	OPERATIONS	10/25/2022	26.98	
THE HOME DEPOT #1506	LOUISVILLE	DAVID DEAN	GOLF COURSE	10/24/2022	21.27	
THE HOME DEPOT #1506	LOUISVILLE	BEN REDARD	POLICE	10/23/2022	71.76	
THE HOME DEPOT #1506	LOUISVILLE	JULIAN CLARK	POLICE	10/23/2022	19.80	
THE HOME DEPOT #1506	LOUISVILLE	KEVIN FREY	FACILITIES	10/21/2022	39.97	
THE HOME DEPOT #1506	LOUISVILLE	CATHERINE JEPSON	PARKS	10/20/2022	407.96	
THE HOME DEPOT #1506	LOUISVILLE	LESLIE RINGER	HUMAN RESOURCES	10/22/2022	38.46	
THE UPS STORE 5183	SUPERIOR	JULIAN CLARK	POLICE	11/10/2022	192.92	
TOSHIBA BUSINESS SOLUT	801-5563471	AMANDA PERERA	REC CENTER	11/04/2022	226.91	
TOWN OF SUPERIOR	SUPERIOR	JANET BRANHAM	PARKS	11/05/2022	125.37	
TRACTOR SUPPLY #2105	LAFAYETTE	CATHERINE JEPSON	PARKS	10/28/2022	248.47	
TRACTOR SUPPLY #2105	LAFAYETTE	CATHERINE JEPSON	PARKS	10/21/2022	27.96	
TST* BITTERSWEET - CAF	LOUISVILLE	LIGEA FERRARO	CITY MANAGER	11/18/2022	93.60	
TST* BUSABA THAI	303-665-0330	JEFF FISHER	POLICE	11/09/2022	54.59	
TST* STEM CIDERS - ACR	LAFAYETTE	CRAIG DUFFIN	PUBLIC WORKS	10/27/2022	115.00	
TWO MEN AND A TRUCK 03	THORNTON	KEVIN FREY	FACILITIES	11/03/2022	1,337.50	
ULINE *SHIP SUPPLIES	800-295-5510	DAVID BARIL	GOLF COURSE	11/08/2022	154.50	
US AUTOFORCE	920-730-7187	DAVID DEAN	GOLF COURSE	10/24/2022	253.50	
USA BLUE BOOK	8004939876	DEVIN MADIGAN	WASTEWATER	11/18/2022	182.97	
USA BLUE BOOK	8004939876	DEVIN MADIGAN	WASTEWATER	11/03/2022	213.64	
USERWAY	WILMINGTON	EMILY HOGAN	CITY MANAGER	11/05/2022	307.00	
USPS.COM CLICKNSHIP	800-782-6724	GENEVIEVE KLINE	CITY CLERK	10/25/2022	9.90	
UTILITY ASSOCIATES INC	DECATUR	JEN KENNEY	POLICE	11/17/2022	135.00	
VENNGAGE.COM	TORONTO	EMILY HOGAN	CITY MANAGER	11/15/2022	19.00	
VZWRLSS*MY VZ VB P	800-922-0204	TANYA SCOTT	FINANCE	11/04/2022	4,110.30	
VZWRLSS*MY VZ VB P	800-922-0204	TANYA SCOTT	FINANCE	10/25/2022	2,453.19	
VZWRLSS*MY VZ VB P	800-922-0204	TANYA SCOTT	FINANCE	10/25/2022	1,632.68	
VZWRLSS*PRPAY AUTOPAY	888-294-6804	CRAIG DUFFIN	PUBLIC WORKS	11/08/2022	20.00	
WAL-MART #1045	LAFAYETTE	LANA FAUVER	REC CENTER	11/01/2022	23.64	
WAVE - *SCHAEFER ATHLE	303-7756060	AMANDA PERERA	REC CENTER	11/14/2022	307.35	
XEROX BUSINESS SOLUTIO	PAYMYINVOICE@	TANYA SCOTT	FINANCE	10/20/2022	1,492.99	
YBA SHIRTS INC	800-8254625	PAUL BORTH	REC CENTER	11/16/2022	479.70	
ZOE TRAINING & CONSULT	DENVER	MEAGAN BROWN	HUMAN RESOURCES	11/15/2022	850.00	
ZOE TRAINING & CONSULT	DENVER	MEAGAN BROWN	HUMAN RESOURCES	10/26/2022	850.00	
ZOE TRAINING & CONSULT	DENVER	MEAGAN BROWN	HUMAN RESOURCES	10/24/2022	850.00	
ZOOM.US 888-799-9666	SAN JOSE	LINDSEY WITTY	REC CENTER	11/18/2022	14.99	
ZOOM.US 888-799-9666	SAN JOSE	ROBERT ZUCCARO	PLANNING	11/16/2022	54.99	
ZOOM.US 888-799-9666	SAN JOSE	CHRISTOPHER NEVES	IT	11/14/2022	709.80	
ZOOM.US 888-799-9666	SAN JOSE	KATIE BEASLEY	REC CENTER	11/02/2022	14.99	
				Total	**84,152.02**	
				R. Blackney	33.17	

				E. Owen	(126.44)	
				R. Henger	(9.60)	
				J. Mitchell	(33.24)	
				Total Adjustments	**(136.11)**	
				GRAND TOTAL	**$84,015.91**	

CITY OF LOUISVILLE
EXPENDITURE APPROVALS $25,000.00 - $99,999.99
December 2022

DATE	P.O. #	VENDOR	DESCRIPTION	AMOUNT
12/2/2022	***2022252***	***Ideal Fencing***	***Replacement of fencing damaged in the Marshall Fire*** Demolition of the remaining damaged fences at Coal Creek Trail, Damyanovich, Harper Lake, Davidson Mesa and Davidson Mesa Off-Leash area.	***$190,101.45***
12/12/2022	***2022258***	***Sill-Terhar Motors***	***One Ford F-350 Dump Truck*** 2023 Ford F-350 Regular Cab 142" Wheelbase, 6.8L, V8 engine, 10 speed automatic transmission, 3.55 Regular axle, cruise control, 4X4, snow plow prep, OJW dump bed, Whelen JV4 lightbar, heavy service front suspension.	***$71,245.00***
12/12/2022	***2022259***	***Sill-Terhar Motors***	***Three Ford F-350 Regular Cab*** 2022 Ford F-350 Regular Cab 142" Wheelbase, 6.8L, V8 engine, 10 speed automatic transmission, 3.55 Regular Axle, cruise control, heavy service front suspension, tool box across bed, snow plow prep, spray in bedliner, power equipment group, Boss Plow Mount, harness and Handheld control, Whelen JV4 lightbar.	***$160,920.00***
12/12/2022	***2022260***	***Sill-Terhar Motors***	***One Ford F-350 Regular Cab*** 2023 Ford F-250 Regular cab, 142" Wheelbase, 6.8L, V8 *engine, 10 speed automatic transmission, 3.55* regular axle, cruise control, Heavy Service front *suspension, Tool box across bed, snow plow prep,* spray in bedliner, power equipment group, OJW liftgate *Whelen JV4 lightbar*	***$57,340.00***
12/12/2022	***2022262***	***Abbotts Cleanup & Restoration***	***Emergency smoke and ash mitigation*** Emergency smoke and ash mitigation to the Pre-Treatment and Administration building at the South Water Plant. Smoke mitigation of the Admin building and Pipe Room at the South Water Plant. Invoices will be submitted to Travelers for reimbursement.	***$173,434.35***

SUBJECT: **AWARD BID FOR 2022 STORM SYSTEM MAINTENANCE PROJECT**

DATE: **DECEMBER 20, 2022**

PRESENTED BY: **KURT KOWAR, PUBLIC WORKS DEPARTMENT**

SUMMARY:
Staff recommends City Council award the 2022 Storm System Maintenance Project to Western States Reclamation Inc. for $179,650.00, authorize staff to execute change orders up to $50,000.00 for additional work and project contingency, and authorize the Mayor, Public Works Director and City Clerk to sign and execute contract documents on behalf of the City.

On December 7, 2022 staff received and opened bids from contractors for the 2022 Storm System Maintenance project. The bids received are listed below:

Contractor	Base Bid	Alt 1.	Alt 2.	Alt 3.
Western States Reclamation	$ 97,792.00	$ 42,282.00	$ 24,176.00	$ 15,400.00

This year's Storm System Maintenance Project includes work in the following areas:

(BASE BID)

- POND D-3
  Removal of trees, clear storm infrastructure of debris, and replace dilapidated infrastructures.
- POND E-1
  Removal of a tree, and replace dilapidated infrastructures.
- POND D-2
  Removal of a trees.
- POND RR-1
  Removal of a trees / bushes, and clear storm infrastructure of debris.
- POND UU-1
  Regrade existing storm drainage infrastructure to create positive drainage.

ALTERNATE 1.

- POND E-1
  Remove and replace concrete trickle channel.

ALTERNATE 2.

- POND RR-1
  Fill void in existing box culvert.

ALTERNATE 3.

- GOLF COURSE
  Remove and replace 100 feet of damaged pipe from the Marshall Fire.

Staff recommends award of the project to Western States Reclamation Inc. for the Base Bid, Alternate 1, Alternate 2, and Alternate 3.

The contract work will begin in January 2023 and finish in April 2023.

A map of this year's 2022 Storm System Maintenance Project is attached. Detailed plans are available upon request.

City staff determines the yearly project scope by evaluating the recommendations from the storm water and storm water quality master plans. The recommendations are compared to field conditions and the project scope is then developed.

Storm System Maintenance Project Bid Prices

The engineering estimate for the Base Bid, Alternate 1, Alternate 2, and Alternate 3 was $193,320.00. This estimate is based on the Bid prices observed in previous years with an estimated increase accounting for the COVID-19 Pandemic and increases in prices of many materials due to supply shortages.

FISCAL IMPACT

The breakdown of estimated project costs that includes construction, soft costs such as engineering and material testing and contingency are listed below:

503499-630096 Detention Pond Maintenance

2022 Budget	$514,470.00
Engineering, Survey, Material Testing	$5,000.00
2022 Storm System Maintenance Contract (Base, Alt 1, Alt 2)	$164,250.00
Contingency (Base, Alt 1, Alt 2	$45,400.00
Remaining Budget	$299,820.00

520711-522909 Golf Course - Marshall Fire - Supplies

2022 Storm System Maintenance Contract – Alternate 3	$15,400.00
Contingency – Alt 3	$4,600.00
Total Cost *	$20,000.00

*The project costs associated with Alternate 3 consisting of replacing a pipe on the golf course damaged from the Marshall Fire will be covered by insurance from the Marshall Fire.

PROGRAM/SUB-PROGRAM IMPACT: Storm System Maintenance
This project helps meet the program objectives by improving drainage and storm water quality across the city.

RECOMMENDATION:
Staff recommends City Council award the 2022 Storm System Maintenance to Western States Reclamation Inc. for $179,650.00, authorize staff to execute change orders up to $50,000.00 for additional work and project contingency, and authorize the Mayor, Public Works Director and City Clerk to sign and execute contract documents on behalf of the City.

ATTACHMENT(S):
1. Agreement
2. Map of Project Locations

STRATEGIC PLAN IMPACT:

☐	**Financial Stewardship & Asset Management**	☐	**Reliable Core Services**
☐	**Vibrant Economic Climate**	☒	**Quality Programs & Amenities**
☐	**Engaged Community**	☐	**Healthy Workforce**
☐	**Supportive Technology**	☐	**Collaborative Regional Partner**

AGREEMENT

THIS AGREEMENT is made and entered into this 20 day of December in the year 2022 by and between:

CITY OF LOUISVILLE, COLORADO
(hereinafter called OWNER)

and

Western States Reclamation Inc.
(hereinafter called CONTRACTOR)

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows.

ARTICLE 1. WORK

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

PROJECT: 2022 STORM SYSTEM MAINTENACE PROJECT
PROJECT NUMBER: 503499-630096

ARTICLE 2. CONTRACT TIMES

2.1 The CONTRACTOR shall substantially complete all work by April 17, 2023 and within **69 Contract Days** after the date when the Contract Time commences to run. The Work shall be completed and ready for final payment in accordance with paragraph 14.13 of the General Conditions within **79 Contract Days** after the date when the Contract Times commence to run. The Contract Times shall commence to run on the day indicated in the Notice to Proceed.

2.2 LIQUIDATED DAMAGES. The OWNER and the CONTRACTOR agree and recognize that time is of the essence in this contract and that the OWNER will suffer financial loss if the Work is not substantially complete by the date specified in paragraph 2.1 above, plus any extensions thereof allowed in accordance with the Article 12 of the General Conditions. OWNER and CONTRACTOR also agree that such damages are uncertain in amount and difficult to measure accurately. Accordingly, the OWNER and CONTRACTOR agree that as liquidated damages, and not as a penalty, for delay in performance the CONTRACTOR shall pay the OWNER **ONE THOUSAND FOUR HUNDRED DOLLARS ($1,400)** for each and every **Contract Day** and portion thereof that expires after the time specified above for substantial completion of the Work until the same is finally complete and ready for final payment. The liquidated damages herein specified shall only apply to the CONTRACTOR's delay in performance, and shall not include litigation or attorneys' fees incurred by the OWNER, or other incidental or consequential damages suffered by the OWNER due to the CONTRACTOR's performance. If the OWNER charges liquidated damages to the CONTRACTOR, this shall not preclude the OWNER from commencing an action against the CONTRACTOR for other actual harm resulting from the CONTRACTOR's performance, which is not due to the CONTRACTOR's delay in performance.

ARTICLE 3. CONTRACT PRICE

3.1 The OWNER shall pay in current funds, and the CONTRACTOR agrees to accept in full payment for performance of the Work, subject to additions and deductions from extra and/or omitted work and determinations of actual quantities as provided in the Contract Documents, the Contract Price of One Hundred Seventy Nine Thousand and Six Hundred Fifty Dollars ($179,650.00) as set forth in the Bid Form of the CONTRACTOR dated December 7, 2022.

As provided in paragraph 11.9 of the General Conditions estimated quantities are not guaranteed, and determinations of actual quantities and classification are to be made by ENGINEER as provided in paragraph 9.10 of the General Conditions. Unit prices have been computed as provided in paragraph 11.9 of the General Conditions.

ARTICLE 4. PAYMENT PROCEDURES

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by OWNER as provided in the General Conditions.

4.1 PROGRESS PAYMENTS. OWNER shall make progress payments on the basis of CONTRACTOR's Applications for Payment as recommended by ENGINEER, on or about the third Wednesday of each month during construction as provided below. All progress payments will be on the basis of the progress of the Unit Price Work based on the number of units completed as provided in the General Conditions.

4.1.1.1 Prior to final completion and acceptance, progress payments will be made in the amount equal to 95 percent of the calculated value of completed Work, and/or 95 percent of materials and equipment not incorporated in the Work (but delivered, suitably stored and accompanied by documentation satisfactory to OWNER as provided in 14.2 of the General Conditions), but in each case, less the aggregate of payments previously made and such less amounts as ENGINEER shall determine, or OWNER may withhold, in accordance with paragraph 14.7 of the General Conditions.

If OWNER finds that satisfactory progress is being made in any phase of the Work, it may, in its discretion and upon written request by the CONTRACTOR, authorize final payment from the withheld percentage to the CONTRACTOR or subcontractors who have completed their work in a manner finally acceptable to the OWNER. Before any such payment may be made, the OWNER must, in an exercise of its discretion, determine that satisfactory and substantial reasons exist for the payment and there must be provided to the OWNER written approval from any surety furnishing bonds for the Work.

Nothing contained in this provision shall preclude the OWNER and CONTRACTOR from making other arrangements consistent with C.R.S. 24-91-105 prior to contract award.

4.2 FINAL PAYMENT. Upon final completion and acceptance of the Work in accordance with paragraph 14.13 of the General Conditions, OWNER shall pay the remainder of the Contract Price as provided in said paragraph 14.13 of the General Conditions.

ARTICLE 5. CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

5.1 CONTRACTOR has examined and carefully studied the Contract Documents, (including the Addenda listed in paragraph 6.10) and the other related data identified in the Bidding Documents including "technical".

5.2 CONTRACTOR has inspected the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work.

5.3 CONTRACTOR is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress and furnishing of the Work.

5.4 CONTRACTOR has carefully studied all reports of exploration and tests of subsurface conditions at or contiguous to the site and all drawings of physical conditions relating to surface or subsurface structures at or contiguous to the site (Except Underground facilities) which have been identified in the General Conditions as provided in paragraph 4.2.1 of the General Conditions. CONTRACTOR accepts the determination set forth in paragraph 4.2 of the General Conditions. CONTRACTOR acknowledges that such reports and drawings are not Contract Documents and may not be complete for CONTRACTOR's purposes. CONTRACTOR acknowledges that OWNER and ENGINEER do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Contract Documents with respect to such reports, drawings or to Underground Facilities at or contiguous to the site. CONTRACTOR has conducted, obtained and carefully studied (or assume responsibility for having done so) all necessary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto. CONTRACTOR does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the performance and furnishing of the Work at the Contract Price, within the Contract Times and in accordance with the other terms and conditions of the Contract Documents.

5.5 CONTRACTOR has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and assumes responsibility for the accurate location of said Underground Facilities. No additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said Underground Facilities are or will be required by CONTRACTOR in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.3 of the General Conditions.

5.6 CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the site that relates to the Work as indicated in the Contract Documents.

5.7 CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests studies and data with the Contract Documents.

5.8 CONTRACTOR has given ENGINEER written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing the Work.

ARTICLE 6. CONTRACT DOCUMENTS

The Contract Documents, which constitute the entire agreement between OWNER and CONTRACTOR concerning the Work, are all written documents, which define the Work and the obligations of the Contractor in performing the Work and the OWNER in providing compensation for the Work. The Contract Documents include the following:

6.1 Invitation to Bid.

6.2 Instruction to Bidders.

6.3 Bid Form.

6.4 This Agreement.

6.5 General Conditions.

6.6 Supplementary Conditions.

6.7 General Requirements.

6.8 Technical Specifications.

6.9 Drawings with each sheet bearing the title: **2022 Storm System Maintenance Project**

6.10 Change Orders, Addenda and other documents which may be required or specified including:

6.10.1 Addenda No. 0 to 1 exclusive
6.10.2 Documentation submitted by CONTRACTOR prior to Notice of Award.
6.10.3 Schedule of Subcontractors
6.10.4 Anti-Collusion Affidavit
6.10.5 Certification of EEO Compliance
6.10.6 Notice of Award
6.10.7 Performance Bond
6.10.8 Labor and Material Payment Bond
6.10.9 Certificates of Insurance
6.10.10 Notice to Proceed
6.10.11 Contractor's Proposal Request
6.10.12 Contractor's Overtime Request
6.10.13 Field Order
6.10.14 Work Change Directive
6.10.15 Change Order
6.10.16 Application for Payment
6.10.17 Certificate of Substantial Completion
6.10.18 Claim Release
6.10.19 Final Inspection Report
6.10.20 Certificate of Final Completion

6.10.21 Guarantee Period Inspection Report

6.11 The following which may be delivered or issued after the Effective Date of the Agreement and are attached hereto: All Written Amendments and other documents amending, modifying, or supplementing the Contract Documents pursuant to paragraphs 3.5 and 3.6 of the General Conditions.

6.12 In the event of conflict between the above documents, the prevailing document shall be as follows:

1. Permits from other agencies as may be required.

2. Special Provisions and Detail Drawings.

3. Technical Specifications and Drawings. Drawings and Technical Specifications are intended to be complementary. Anything shown or called for in one and omitted in another is binding as if called for or shown by both.

4. Supplementary Conditions.

5. General Conditions.

6. City of Louisville Design and Construction Standards.

7. Reference Specifications.

In case of conflict between prevailing references above, the one having the more stringent requirements shall govern.

There are no Contract Documents other than those listed above in this Article 6. The Contract Documents may only be amended, modified or supplemented as provided in paragraphs 3.5 and 3.6 of the General Conditions.

ARTICLE 7. MISCELLANEOUS

7.1 Terms used in this Agreement, which are defined in Article 1 of the General Conditions, shall have the meanings indicated in the General Conditions.

7.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge that assignor from any duty or responsibility under the Contract Documents.

7.3 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.

ARTICLE 8. OTHER PROVISIONS

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in duplicate. One counterpart each has been delivered to OWNER and CONTRACTOR. All portions of the Contract Documents have been signed, initialed or identified by OWNER and CONTRACTOR.

This Agreement will be effective on _____, 2022.

OWNER: CITY OF LOUISVILLE, COLORADO

By: _____
Ashley Stolzmann, Mayor

(CORPORATE SEAL)

Attest: _____
_____
Meredyth Muth, City Clerk

Address for giving notices:

749 Main Street
Louisville, Colorado
80027

Attention: City Engineer

CONTRACTOR: _____

By: _____

(CORPORATE SEAL)

Attest:

Address for giving notices:

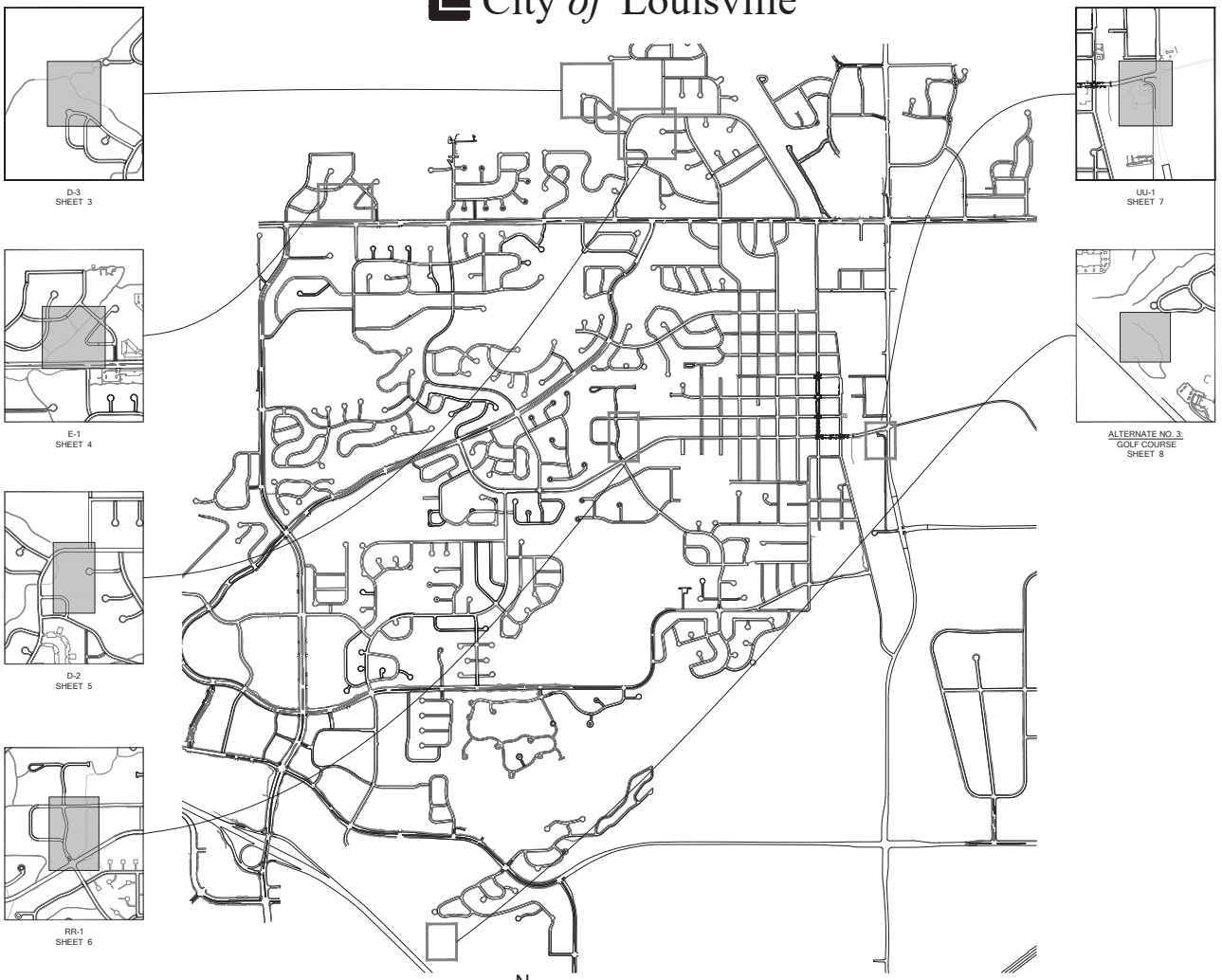
_____

_____

_____

2022 STORM SYSTEM MAINTENANCE PROJECT

City *of* Louisville



LEGEND

EXISTING:

- WALK
- CURB & GUTTER
- ROW
- W — WATER MAIN & VALVE
- FIRE HYDRANT
- SS — SANITARY SEWER & MANHOLE
- INLET
- ST — STORM SEWER & MANHOLE
- DETENTION POND
- G — GAS LINE
- E — ELECTRIC LINE

PROPOSED:

- ST — STORM SEWER
- 6" CONCRETE
- RIP RAP
- CLEAR AND GRUB

SHEET INDEX

SHEET NO.	DESCRIPTION
1	COVER
2	GENERAL NOTES
4	E-1
3	D-3
5	D-2
6	RR-1
7	UU-1
8	ALTERNATE NO. 3: GOLF COURSE
9	DETAILS

N

LOCATION MAP
1":1000'

COLORADO 811
KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

APPROVED BY: CRAIG M. DUFFIN, P.E.
CITY ENGINEER
November 22

SHEET 1 OF 9

G:\CIPS\CIPS_2022\2022 STORM SEWER MAINTENANCE\DRAWINGS\PLANS\COVER.DWG

SUBJECT: **APPROVAL OF USE OF FUNDING FROM DENVER BRONCOS STADIUM SALE**

DATE: **DECEMBER 20, 2022**

PRESENTED BY: **ADAM BLACKMORE, DIRECTOR OF PARKS, RECREATION & OPEN SPACE**

SUMMARY:
On October 10, 2022, the City received $254,627.76 from the Stadium District as Louisville's share of proceeds from the sale of the Denver Broncos per the terms provided by the Metropolitan Football Stadium District. This distribution requirement was outlined in Article 33 of the Lease and Management Agreement dated September 3, 1998 between the Metropolitan Football Stadium District and PDB Sports, LTD. The funds are restricted to support "Youth Activity Programs" and will have an annual reporting requirement.

The Parks, Recreation & Open Space department in coordination with the Cultural Services Department, the City Manager's Office, and the Colorado Recreation & Park Association; and following best practices of local municipalities receiving similar distribution of funds, has drafted an operational plan to utilize these funds in the coming year(s) which will potentially require future budget amendment(s). This plan is wide-reaching across city services funding projects related to "Youth Activity Programs."

FISCAL IMPACT:
This funds were received as grant revenue in 2022 and will plan to be expended in 2023-2024 requiring future amendment(s) to the 2023-2024 budget adopted by City Council on 11/15/2022.

PROGRAM/SUB-PROGRAM IMPACT:
Increased levels of youth programming service and amenities for Parks, Recreation, Open Space & Golf as well as Cultural Services for program participant in and around Louisville.

RECOMMENDATION:
Staff recommends Council approve the operational use(s) for the Denver Broncos Stadium sale distribution funds in the amount of up to $254,627.76. Authorize the Mayor and City Clerk to execute any future contract documents on behalf of the City.

ATTACHMENT(S):
1. Memo & Resolution (22-05) from Metropolitan Football Stadium District

STRATEGIC PLAN IMPACT:

☒	**Financial Stewardship & Asset Management**	☐	**Reliable Core Services**
☐	**Vibrant Economic Climate**	☒	**Quality Programs & Amenities**
☐	**Engaged Community**	☐	**Healthy Workforce**
☐	**Supportive Technology**	☒	**Collaborative Regional Partner**

METROPOLITAN FOOTBALL STADIUM DISTRICT

1701 Bryant Street, Suite 500 | Denver, CO 80204

303.244.1002 | *fax:* 303.244.1003

September 19, 2022

City of Louisville
749 Main St.
Louisville, CO 80027
jlongoria@louisvilleco.gov
Attention: Jeanette Longoria

The Metropolitan Football Stadium District (MFSD) is contacting you regarding the recent sale of the Denver Broncos Football Club.

As you may be aware the franchise has recently transferred to new ownership which triggers components of both the original legislation which created the MFSD and the Lease and Management Agreement which ties the franchise to the taxpayer owned facility, Empower Field at Mile High and subsequently to the counties, cities, and towns within our seven-county metro Denver boundary.

The Metropolitan Football Stadium District Act (the "Act"), and Article 33 of the Lease and Management Agreement between the MFSD and PDB Sports LTD (PDB), Bronco's ownership, entitles the MFSD to a one time "Sharing Amount" in connection with the sale of the franchise.

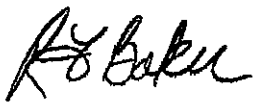
The "Sharing Amount" of the $4.65 billion sale of the Broncos franchise as determined by the MFSD board, is $41,037,951, which has been duly paid to the MFSD. (Exhibit A attached). The MFSD Board has elected to distribute these proceeds proportionately to the counties, cities, and towns in which the tax was collected. Your jurisdiction is one of many which make up the MFSD in which the tax was charged at one tenth of one percent sales tax from implementation in January of 2001 and ending 2011. After consulting with the Colorado Department of Revenue it was determined your proportionate percentage of Sales Tax revenue collected was 0.620469%. Therefore, your portion of the "Sharing Amount" of $41,037,951 is $254,627.76.

Provisions in the Act and the subsequent Lease and Management Agreement require the funds to be used for "YOUTH ACTIVITIY PROGRAMS." It is our intent that approximately one year from the allocation of funds, the MFSD will request an accounting of how the funds have benefitted Youth Activities Programs in your community. We have received numerous media inquiries

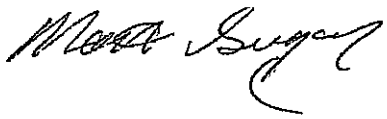
regarding which Youth Activities programs will benefit from these proceeds and we look forward to hearing about all these great opportunities.

Sincerely,

Raymond T. Baker, Chair MFSD



Matt Sugar, Director of Stadium Affairs



Enclosures: Check, Resolution 2205, Exhibit A Sharing Amount

(The MFSD Act and the Lease and Management can be found at www.mfsd.com

METROPOLITAN FOOTBALL STADIUM DISTRICT
RESOLUTION 22-_05__

A. PDB Sports, LTD. ("PDB") and Stadium Management Company, LLC ("Stadium Company") intend to sell their respective partnership interests and limited liability company interests to Belmont Sports, LLC and S. Robson Walton (the "Sale").

B. Under the Metropolitan Football Stadium District Act (the "Act"), and Article 33 of the Lease and Management Agreement dated as of September 3, 1998 between the Metropolitan Football Stadium District (the "District") and PDB, as amended and partially assigned to Stadium Company (the "Lease"), the District is entitled to a "Sharing Amount" in connection with the Sale.

C. Under the Act and Article 33 of the Lease, the Sharing Amount funds are to be used for "youth activity programs".

Therefore, a quorum being present, the following resolution was adopted on a vote of 9 in favor, 0 opposed, with 0 abstentions, on the 5th day of August, 2022.

RESOLVED, the Metropolitan Football Stadium District upon the motion of Jim Harrington, and the second of Rick Sapkin approves:

(a) the Sharing Amount of $41,037,951 under the Act and Article 33 of the Lease and as set forth in Exhibit A attached hereto and incorporated by reference; and

(b) the distribution of the Sharing Amount funds to the municipalities and counties within the District, based upon their proportionate share of sales and use tax paid under the Act; and

the District hereby authorizes the Chairman, any officers, District staff, or their representatives to disburse the Sharing Amount funds pursuant to, and, and to take such further action as may be necessary to effectuate the purpose of, this resolution.

AUTHENTICATED:

Raymond C. Baker, Chairman

Donald Johnson, Secretary-Treasurer

EXHIBIT A

Sharing Amount

SALE OF FRANCHISE MFSD SHARING AMOUNT CALCULATION
Effective August 10, 2022

Sales Price *(Gross Proceeds from Sale)*	$ 4,650,000,000
Franchise Debt	(247,076,305)
Capital Contributions *(with 6% inputed annual return)*	(2,351,026,144)
Net Profit	2,051,897,551
Sharing Rate	2%
Sharing Amount	$ 41,037,951

City of Louisville
COLORADO • SINCE 1878

CITY COUNCIL COMMUNICATION
AGENDA ITEM 4D

SUBJECT: **APPROVAL OF THIRD AMENDMENT WITH LUMIN8 FOR ANNUAL TRAFFIC SIGNAL MAINTENANCE**

DATE: **DECEMBER 20, 2022**

PRESENTED BY: **KURT KOWAR, PUBLIC WORKS DIRECTOR**

SUMMARY:
Attached is the third contract amendment to the Traffic Signal Maintenance Contract between the City and Lumin8 Transportation Technologies, LLC (Formerly W. L. Contractors, Inc.) for Traffic Signal Maintenance for 2023. The initial contract was executed November 27, 2018. The term of the second Amendment ends December 31, 2022. The Original Agreement allows both parties to mutually agree to extend the term by no more than three (3) successive renewal terms of twelve (12) months each. Lumin8 is a regional traffic signal maintenance contractor and has performed this service for the City for many years.

The work included under the Traffic Signal Maintenance Contract includes monthly, quarterly and annual preventative maintenance activities for the City's existing traffic signals along with annual preventative maintenance activities for the City's pedestrian flashers, school zone flashers, and speed radar units. The camera system at the N. Water Treatment Plant is also maintained under this contract. The Traffic Signal Maintenance Contract also includes an agreed upon rate and costs for unscheduled and emergency repairs along with extra work for the traffic signals and traffic related equipment included under the Traffic Signal Maintenance Contract.

Lumin8 will provide traffic signal maintenance services in 2023 at the same labor and equipment rates under the initial 2019-2020 Contract.

FISCAL IMPACT:
The contract will be funded subject to city budget, approved annually, for traffic signal maintenance activities.

PROGRAM/SUB-PROGRAM IMPACT:
The recommended contract supports the Transportation goals of a safe, well maintained, effective and efficient multi-modal transportation system at a reasonable cost.

RECOMMENDATION:
Given Lumin8's performance over the years, Public Works is recommending the mayor be authorized to sign the Second Amendment to the Traffic signal Maintenance Agreement between the City and Lumin8 in order to retain their services for 2023.

ATTACHMENT(S):

1. Second Amendment to the Contract
2. Original Agreement

STRATEGIC PLAN IMPACT:

☒	**Financial Stewardship & Asset Management**	☐	**Reliable Core Services**
☐	**Vibrant Economic Climate**	☒	**Quality Programs & Amenities**
☐	**Engaged Community**	☐	**Healthy Workforce**
☐	**Supportive Technology**	☐	**Collaborative Regional Partner**

THIRD AMENDMENT TO INDEPENDENT CONTRACTOR AGREEMENT FOR TRAFFIC SIGNAL MAINTENANCE SERVICES

This **THIRD AMENDMENT TO INDEPENDENT CONTRACTOR AGREEMENT** ("Third Amendment") is made and entered into this __2nd___ day of December, 2022, by and between the **City of Louisville** (the "City") and **Lumin8 Transportation Technologies, LLC**, d.b.a. W.L. Contractors, LLC ("Contractor") (together, the "Parties").

WHEREAS, the City and Contractor are parties to that certain Independent Contractor Agreement for Traffic Signal Maintenance Services, dated November 27, 2018 (the "Original Agreement"), and that certain First Amendment to Independent Contactor Agreement, dated December 15, 2020, and that certain Second Amendment to Independent Contactor Agreement, dated December 15, 2021 (the "First Amendment", the "Second Amendment", and together with the Original Agreement, the "Agreement"); and

WHEREAS, the Agreement is set to expire by its terms on December 31, 2022; and

WHEREAS, the parties desire by this Third Amendment to extend the term of the Agreement to December 31, 2023; and

NOW THEREFORE, in consideration of the foregoing and the mutual promises contained in the Agreement, the Parties agree as follows:

Section 1. The term Agreement is hereby extended by twelve (12) months to December 31, 2023, subject to sooner termination or extension in accordance with Sections 6.1 and 13 of the Original Agreement. This renewal term shall be considered the Third of three, twelve (12) month renewal terms authorized under Section 6.1 of the Original Agreement.

Section 2. The Original Agreement, as amended by the First Amendment and this Third Amendment, is hereby ratified and confirmed and shall remain in full force and effect and binding upon the Contractor and the City in accordance with its terms.

IN WITNESS WHEREOF the Parties have executed this Third Amendment on the date first above written.

CITY OF LOUISVILLE:

By: _____
Ashley Stolzmann, Mayor

Attest: _____
Meredyth Muth, City Clerk

LUMIN8 TRANSPORTATION TECHNOLOGIES, LLC:

By: Garret Maurer

Name: _GarretMaurer_____

Title: _VP-West__

_____

G:\Asset Management\Traffic\Traffic Signals\23 Traffic\Agreement and PO\2022 12 20 Lumin8 Third Amendment.docx

INDEPENDENT CONTRACTOR AGREEMENT BY AND BETWEEN THE CITY OF LOUISVILLE AND WL CONTRACTORS, INC. FOR TRAFFIC SIGNAL MAINTENANCE SERVICES

1.0 PARTIES

The parties to this Agreement are the **City of Louisville**, a Colorado home rule municipal corporation, hereinafter referred to as the "City", and WL Contractors, Inc., a Corporation, hereinafter referred to as the "Contractor".

2.0 RECITALS AND PURPOSE

2.1 The City desires to engage the Contractor for the purpose of providing traffic signal maintenance services as further set forth in the Contractor's Scope of Services (which services are hereinafter referred to as the "Services").

2.3 The Contractor represents that it has the special expertise, qualifications and background necessary to complete the Services.

3.0 SCOPE OF SERVICES

The Contractor agrees to provide the City with the specific Services and to perform the specific tasks, duties and responsibilities set forth in Scope of Services attached hereto as Exhibit A and incorporated herein by reference. Contractor shall furnish all tools, labor and supplies in such quantities and of the proper quality as are necessary to professionally and timely perform the Services. Contractor acknowledges that this Agreement does not grant any exclusive privilege or right to supply Services to the City.

4.0 COMPENSATION

4.1 The City shall pay the Contractor for Services under this Agreement a total not to exceed the amounts set forth in Exhibit A attached hereto and incorporated herein by this reference. For Services compensated at hourly or per unit rates, or on a per-task basis, such rates or costs per task shall not exceed the amounts set forth in Exhibit A. The City shall pay mileage and other reimbursable expenses (such as meals, parking, travel expenses, necessary memberships, etc.) which are deemed necessary for performance of the Services and which are pre-approved by the City Manager. The foregoing amounts of compensation shall be inclusive of all costs of whatsoever nature associated with the Contractor's efforts, including but not limited to salaries, benefits, overhead, administration, profits, expenses, and outside Contractor fees. The Scope of Services and payment therefor shall only be changed by a properly authorized amendment to this Agreement. No City employee has the authority to bind the City with regard to any payment for any Services which exceeds the amount payable under the terms of this Agreement.

4.2 The Contractor shall submit monthly an invoice to the City for Services rendered and a detailed expense report for pre-approved, reimbursable expenses incurred during the previous month. The invoice shall document the Services provided during the preceding month, identifying by work category and subcategory the work and tasks performed and such other information as may be required by the City. The Contractor shall provide such additional backup documentation as may be required by the City. The City shall pay the invoice within thirty (30) days of receipt unless the Services or the documentation therefor are unsatisfactory. Payments made after thirty (30) days may be assessed an interest charge of one percent (1%) per month unless the delay in payment resulted from unsatisfactory work or documentation therefor.

5.0 PROJECT REPRESENTATION

5.1 The City designates Joliette Woodson as the responsible City staff to provide direction to the Contractor during the conduct of the Services. The Contractor shall comply with the directions given by Joliette Woodson and such person's designees.

5.2 The Contractor designates Tim Leach as its project manager and as the principal in charge who shall be providing the Services under this Agreement. Should any of the representatives be replaced, particularly Tim Leach, and such replacement require the City or the Contractor to undertake additional reevaluations, coordination, orientations, etc., the Contractor shall be fully responsible for all such additional costs and services.

6.0 TERM

6.1 The initial term of this Agreement shall be twenty-four (24) months commencing January 1, 2019 and ending December 31, 2020, subject to the parties rights to sooner terminate this Agreement as set forth in Section 13, below. By mutual written amendment to this Agreement the parties may extend this Agreement for no more than three (3) successive renewal terms of twelve (12) months each. Any such amendment to extend for a renewal term shall be executed prior to the expiration of the then-current term and if not so executed, this Agreement shall terminate on the last day of the then-current term. The Contractor's Services under this Agreement shall commence upon execution of this Agreement by the City and Contractor shall proceed with diligence and promptness so that the Services are completed in a timely fashion consistent with the City's requirements.

6.2 All financial obligations of the City hereunder beyond 2019 are expressly subject to annual budgeting and appropriation by the City Council of the City in its discretion. Nothing in this Agreement is intended or shall be deemed or construed as creating any multiple-fiscal year direct or indirect debt or financial obligation on the part of the City within the meaning of Colorado Constitution Article X, Section 20 or any other constitutional or statutory provision.

7.1 The Contractor agrees to procure and maintain, at its own cost, the policies of insurance set forth in Subsections 7.1.1 through 7.1.4. The Contractor shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to this Agreement by reason of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types. The coverages required below shall be procured and maintained with forms and insurers acceptable to the City. All coverages shall be continuously maintained from the date of commencement of Services hereunder. The required coverages are:

7.1.1 Workers' Compensation insurance as required by the Labor Code of the State of Colorado and Employers Liability Insurance. Evidence of qualified self-insured status may be substituted.

7.1.2 General Liability insurance with minimum combined single limits of ONE MILLION DOLLARS ($1,000,000) each occurrence and TWO MILLION DOLLARS ($2,000,000) aggregate. The policy shall include the City of Louisville, its officers and its employees, as additional insureds, with primary coverage as respects the City of Louisville, its officers and its employees, and shall contain a severability of interests provision.

7.1.3 Comprehensive Automobile Liability insurance with minimum combined single limits for bodily injury and property damage of not less than THREE HUNDRED AND FIFTY THOUSAND DOLLARS ($350,000) per person in any one occurrence and ONE MILLION DOLLARS ($1,000,000) for two or more persons in any one occurrence, and auto property damage insurance of at least FIFTY THOUSAND DOLLARS ($50,000) per occurrence, with respect to each of Contractor's owned, hired or non-owned vehicles assigned to or used in performance of the Services. If the Contractor has no owned automobiles, the requirements of this paragraph shall be met by each officer or employee of the Contractor providing services to the City of Louisville under this contract.

7.1.4 Professional Liability coverage with minimum combined single limits of ONE MILLION DOLLARS ($1,000,000) each occurrence and ONE MILLION DOLLARS ($1,000,000) aggregate.

7.2 The Contractor's general liability insurance and automobile liability and physical damage insurance shall be endorsed to include the City, and its elected and appointed officers and employees, as additional insureds, unless the City in its sole discretion waives such requirement. Every policy required above shall be primary insurance, and any insurance carried by the City, its officers, or its employees, shall be excess and not contributory insurance to that provided by the Contractor. Such policies shall contain a severability of interests provision. The Contractor shall be solely responsible for any deductible losses under each of the policies required above.

7.3 Certificates of insurance shall be provided by the Contractor as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect, and shall be subject to review and approval by the City. No required coverage shall be cancelled, terminated or materially changed until at least 30 days prior written notice has been given to the City. The City reserves the right to request and receive a certified copy of any policy and any endorsement thereto.

7.4 Failure on the part of the Contractor to procure or maintain policies providing the required coverages, conditions, and minimum limits shall constitute a material breach of contract upon which the City may immediately terminate this Agreement, or at its discretion may procure or renew any such policy or any extended reporting period thereto and may pay any and all premiums in connection therewith, and all monies so paid by the City shall be repaid by Contractor to the City upon demand, or the City may offset the cost of the premiums against any monies due to Contractor from the City.

7.5 The parties understand and agree that the City is relying on, and does not waive or intend to waive by any provision of this contract, the monetary limitations (presently $150,000 per person and $600,000 per occurrence) or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, § 24-10-101 et seq., 10 C.R.S., as from time to time amended, or otherwise available to the City, its officers, or its employees.

8.0 INDEMNIFICATION

To the fullest extent permitted by law, the Contractor agrees to indemnify and hold harmless the City, and its elected and appointed officers and its employees, from and against all liability, claims, and demands, on account of any injury, loss, or damage, which arise out of or are connected with the Services hereunder, if such injury, loss, or damage is caused by the negligent act, omission, or other fault of the Contractor or any subcontractor of the Contractor, or any officer, employee, or agent of the Contractor or any subcontractor, or any other person for whom Contractor is responsible. The Contractor shall investigate, handle, respond to, and provide defense for and defend against any such liability, claims, and demands. The Contractor shall further bear all other costs and expenses incurred by the City or Contractor and related to any such liability, claims and demands, including but not limited to court costs, expert witness fees and attorneys' fees if the court determines that these incurred costs and expenses are related to such negligent acts, errors, and omissions or other fault of the Contractor. The City shall be entitled to its costs and attorneys' fees incurred in any action to enforce the provisions of this Section 8.0. The Contractor's indemnification obligation shall not be construed to extend to any injury, loss, or damage which is caused by the act, omission, or other fault of the City.

9.0 QUALITY OF WORK

Contractor's Services shall be performed in accordance with the highest professional workmanship and service standards in the field to the satisfaction of the City.

10.0 INDEPENDENT CONTRACTOR

It is the expressed intent of the parties that the Contractor is an independent contractor and not the agent, employee or servant of the City, and that:

10.1. **CONTRACTOR SHALL SATISFY ALL TAX AND OTHER GOVERNMENTALLY IMPOSED RESPONSIBILITIES INCLUDING, BUT NOT LIMITGED TO, PAYMENT OF STATE, FEDERAL AND SOCIAL SECURITY TAXES, UNEMPLOYMENT TAXES, WORKERS' COMPENSATION AND SELF-EMPLOYMENT TAXES. NO STATE, FEDERAL OR LOCAL TAXES OF ANY KIND SHALL BE WITHHELD OR PAID BY THE CITY.**

10.2. **CONTRACTOR IS NOT ENTITLED TO WORKERS' COMPENSATION BENEFITS EXCEPT AS MAY BE PROVIDED BY THE INDEPENDENT CONTRACTOR NOR TO UNEMPLOYMENT INSURANCE BENEFITS UNLESS UNEMPLOYMENT COMPENSATION COVERAGE IS PROVIDED BY THE INDEPENDENT CONTRACTOR OR SOME ENTITY OTHER THAN THE CITY.**

10.3. Contractor does not have the authority to act for the City, or to bind the City in any respect whatsoever, or to incur any debts or liabilities in the name of or on behalf of the City.

10.4. Contractor has and retains control of and supervision over the performance of Contractor's obligations hereunder and control over any persons employed by Contractor for performing the Services hereunder.

10.5. The City will not provide training or instruction to Contractor or any of its employees regarding the performance of the Services hereunder.

10.6. Neither the Contractor nor any of its officers or employees will receive benefits of any type from the City.

10.7. Contractor represents that it is engaged in providing similar services to other clients and/or the general public and is not required to work exclusively for the City.

10.8. All Services are to be performed solely at the risk of Contractor and Contractor shall take all precautions necessary for the proper and sole performance thereof.

10.9. Contractor will not combine its business operations in any way with the City's business operations and each party shall maintain their operations as separate and distinct.

11.0 ASSIGNMENT

Contractor shall not assign or delegate this Agreement or any portion thereof, or any monies due to or become due hereunder without the City's prior written consent.

12.0 DEFAULT

Each and every term and condition hereof shall be deemed to be a material element of this Agreement. In the event either party should fail or refuse to perform according to the terms of this Agreement, such party may be declared in default.

13.0 TERMINATION

13.1 This Agreement may be terminated by either party for material breach or default of this Agreement by the other party not caused by any action or omission of the other party by giving the other party written notice at least thirty (30) days in advance of the termination date. Termination pursuant to this subsection shall not prevent either party from exercising any other legal remedies which may be available to it.

13.2 In addition to the foregoing, this Agreement may be terminated by the City for its convenience and without cause of any nature by giving written notice at least fifteen (15) days in advance of the termination date. In the event of such termination, the Contractor will be paid for the reasonable value of the Services rendered to the date of termination, not to exceed a pro-rated daily rate, for the Services rendered to the date of termination, and upon such payment, all obligations of the City to the Contractor under this Agreement will cease. Termination pursuant to this Subsection shall not prevent either party from exercising any other legal remedies which may be available to it.

14.0 INSPECTION AND AUDIT

The City and its duly authorized representatives shall have access to any books, documents, papers, and records of the Contractor that are related to this Agreement for the purpose of making audits, examinations, excerpts, and transcriptions.

15.0 DOCUMENTS

All computer input and output, analyses, plans, documents photographic images, tests, maps, surveys, electronic files and written material of any kind generated in the performance of this Agreement or developed for the City in performance of the Services are and shall remain the sole and exclusive property of the City. All such materials shall be promptly provided to the City upon request therefor and at the time of termination of this Agreement, without further charge or expense to the City and in hardcopy or an electronic format acceptable to the City, or both, as the City shall determine. Contractor shall not provide copies of any such material to any other party without the prior written consent of the City. Contractor shall not use or disclose confidential information of the City for purposes unrelated to performance of this Agreement without the City's written consent.

16.0 ENFORCEMENT

16.1 In the event that suit is brought upon this Agreement to enforce its terms, the parties shall each bear and be responsible for their own attorneys' fees and court costs.

16.2 Colorado law shall apply to the construction and enforcement of this Agreement. The parties agree to the jurisdiction and venue of the courts of Boulder County and the federal district court for the District of Colorado in connection with any dispute arising out of or in any matter connected with this Agreement.

17.0 COMPLIANCE WITH LAWS; WORK BY ILLEGAL ALIENS PROHIBITED

17.1 Contractor shall be solely responsible for compliance with all applicable federal, state, and local laws, including the ordinances, resolutions, rules, and regulations of the City; for payment of all applicable taxes; and obtaining and keeping in force all applicable permits and approvals.

17.2 Exhibit B, the "City of Louisville Public Services Contract Addendum-Prohibition Against Employing Illegal Aliens", is attached hereto and incorporated herein by reference. There is also attached hereto a copy of Contractor's Pre-Contract Certification which Contractor has executed and delivered to the City prior to Contractor's execution of this Agreement.

18.0 INTEGRATION AND AMENDMENT

This Agreement represents the entire Agreement between the parties and there are no oral or collateral agreements or understandings. This Agreement may be amended only by an instrument in writing signed by the parties.

19.0 NOTICES

All notices required or permitted under this Agreement shall be in writing and shall be given by hand delivery, by United States first class mail, postage prepaid, registered or certified, return receipt requested, by national overnight carrier, or by facsimile transmission, addressed to the party for whom it is intended at the following address:

If to the City:

City of Louisville
Attn: City Manager
749 Main Street
Louisville, Colorado 80027
Telephone: (303) 335-4533
Fax: (303) 335-4550

If to the Contractor:

WL Contractors, Inc.
5920 Lamar St.
Arvada, CO 80003
Telephone: (303) 422-7985

Any such notice or other communication shall be effective when received as indicated on the delivery receipt, if by hand delivery or overnight carrier; on the United States mail return receipt, if by United States mail; or on facsimile transmission receipt. Either party may by similar notice given, change the address to which future notices or other communications shall be sent.

20.0 EQUAL OPPORTUNITY EMPLOYER

20.1 Contractor will not discriminate against any employee or applicant for employment because of age 40 and over, race, sex, color, religion, national origin, disability, genetic information, sexual orientation, veteran status, or any other applicable status protected by state or local law. Contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to any status set forth in the preceding sentence. Such action shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notice to be provided by an agency of the federal government, setting forth the provisions of the Equal Opportunity Laws.

20.2 Contractor shall be in compliance with the applicable provisions of the American with Disabilities Act as enacted and from time to time amended and any other applicable federal, state, or local laws and regulations. A signed, written certificate stating compliance with the Americans with Disabilities Act may be requested at any time during the life of this Agreement or any renewal thereof.

In witness whereof, the parties have executed this Agreement to be effective as of the day and year of signed by the City.

CITY OF LOUISVILLE,
a Colorado home rule municipal corporation

By: _____ 11/27/18
Robert P. Muckle, Mayor Date

Attest: _____ 11/27/18
Meredyth Muth, City Clerk Date

CONTRACTOR:

By: Tim Leach

Title: Operations Manager 11-9-2018
Date

WORK TO BE PERFORMED:

Signal Maintenance:

TS-1 Annual Preventive Maintenance (APM):
Annual preventive maintenance shall be done on an annual basis and completed at each traffic signal location.

The following shall be completed:

1. ***Documentation:***
   The Contractor shall check for all documentation as defined by the Owner. This documentation shall include, but not be limited to, the cabinet print(s), phasing diagram, intersection plan/as-built, controller data sheet(s), and log book. The Owner shall be notified of all missing, illegible, or damaged documentation.

2. ***Cabinet:***
   The Contractor shall check the general condition of the controller cabinet. Clean cabinet and components thoroughly, replace disposable filters, clean permanent filters, lubricate locks and hinges, check door seals, check condition of cabinet caulking at the cabinet base and re-caulk if necessary. Remove posters, tape, and graffiti from cabinet surface. Check the thermostat, fan, cabinet light, and convenience outlet for proper operation. Verify that the thermostat is set at 85 degrees as defined by the Owner. Verify that anchor bolts and ground rod clamp(s) are tight. Ensure that all field wiring is identified with tags, indicating phase and direction. Tag field wiring that is not identified. Check field wire connections. Tighten field wire connections as needed. Report problems to the Owner.

   In cases of infestation by mice, etc. the Contractor shall notify the Owner, take appropriate safety precautions, and immediately remove nesting material and debris. Required actions to limit the possibility for future infestation, including actions required to seal access points, shall be noted by the Contractor and reported to the Owner. Material and labor used in the removal of nesting material and debris shall be billed to the Owner at contract rates as defined in this agreement.

3. ***Cabinet Switches:***
   The Contractor shall check all switches, in the police door and inside the cabinet, for proper operation. These switches include flash, on/off, stop time, detector test, manual control, etc. Flash transfer relays and associated contacts shall be inspected for wear. Report problems to the Owner.

4. ***Controller:***
   The Contractor shall check all controller settings against what is stated on the controller data sheet(s). Check all indicator lamps, LEDS and LCDS for proper operation. Check all clearance intervals with a stopwatch. Observe dynamic operation, insuring all functions to be operating properly. The Owner shall be notified of all problems, controller data sheet discrepancies, and noted areas of concern.

5. ***Conflict Monitor (CMU)/Malfunction Management Unit (MMU):***
The Contractor shall check voltage monitor operation by turning off, or disconnecting, the controller. Check red fail operation by removing a load switch or flash transfer relay. Check for conflicts and conformance to NEMA specifications. Report problems to the Owner.

Computerized testing using an ATSI approved tester may be performed at the Owner's request and charged as per unit pricing. Computerized test results shall include monitor location, manufacturer, model, serial number, tests completed, and test date. The technician shall review these results and check for conformance with tester standards. Copies of test results shall be left in the cabinet.

6. ***Uninterruptible Power Supply (UPS):***
The Contractor shall check the UPS for proper operation by disconnecting the power source. Where the UPS functions properly, the power source shall remain disconnected for a period of no less than 5 minutes. Where the UPS fails operation, the power source shall be reconnected with the signal restored to normal operation. Additional checks shall be made using a battery load tester. Report problems to the Owner.

7. ***Coordination:***
The Contractor shall check telephone lines, interconnect, and all associated equipment for proper operation. Check for proper controller manipulation by use of holds, force off, max 2, etc. Check all settings per data sheet. Check clock on coordination equipment and reset if necessary. Report problems to the Owner.

8. ***Preempt:***
The Contractor shall test railroad preempt for proper operation with a test switch or by removing or jumping input as required. The Contractor shall test emergency vehicle preemption by use of an emitter from proper distance. Report problems to the Owner.

9. ***Detection:***
The Contractor shall check for proper operation of all vehicle detection.

Inductance Loops – Check vehicle detection for proper operation; re-tune detector amplifiers if necessary. Check loop splices; re-splice inductance loops if necessary and if the water valve boxes and/or pull boxes are readily accessible. Check detector amplifier settings, including extend/delay function settings, and make setting adjustments as necessary to maximize detection operation based on the Owner's specifications. Make cursory checks regarding the general condition of the inductance loops, surrounding pavement, and water valve boxes. Report pavement failures related to existing or imminent loop failures to the Owner. Report damaged, missing, buried, raised and/or sunken water valve boxes, water valve box lids, and/or pull boxes to the Owner. Report problems to the Owner.

Where vehicle detection is failed, the Contractor shall place the vehicle detection's associated vehicle phase on maximum recall and immediately notify the Owner.

Video Detection – Check vehicle detection for proper operation. Conduct a cursory check of the attachment hardware. Check video quality. Check cameras for proper alignment. Clean camera lenses. Report problems to the Owner.

Where vehicle detection is failed, the Contractor shall place the vehicle detection's associated vehicle phase on maximum recall and immediately notify the Owner.

10. ***Signal Heads:***

The Contractor shall check all signal heads for proper height and alignment, check for damaged housings, lenses, reflectors, visors, burned out bulbs, inoperable LEDs, and worn mounting hardware. Report problems to the Owner.

11. ***Poles:***

The Contractor shall visually check the alignment and general condition of poles. Check poles for damage, rust, and need of paint. Check for missing or loose hand-hole covers, nut covers, and nuts. Conduct cursory visual inspection of signal caissons, bolts, welds, and attachment hardware. Tighten bolts where necessary. Document and report any deficiencies in the structure and/or hardware to the Owner.

If the condition of any pole creates a safety hazard and the Contractor in its reasonable professional discretion determines that immediate repair with extraordinary equipment or operations (such as use of a crane) is required, the Contractor shall notify the Owner and then correct the safety hazard as necessary. The Owner shall be responsible for the costs of any extraordinary equipment and operations necessary to correct a bona fide safety hazard.

12. ***Mast arms:***

The Contractor shall visually check the alignment and general condition of mast arms. Check mast arms for damage, rust, and need of paint. Check for missing or loose hand-hole covers, bolts, and nuts. Conduct cursory visual inspection of bolts, welds, and attachment hardware. Tighten bolts where necessary. Document and report any deficiencies in the structure and/or hardware to the Owner.

If the condition of any mast arm creates a safety hazard and the Contractor in its reasonable professional discretion determines that immediate repair with extraordinary equipment or operations (such as use of a crane) is required, the Contractor shall notify the Owner and then correct the safety hazard as necessary. The Owner shall be responsible for the costs of any extraordinary equipment and operations necessary to correct a bona fide safety hazard.

13. ***Span-wire:***

The Contractor shall check all top and bottom span-wires for excessive slack, sag, damage, fraying and proper height. Check all eyebolts, strand vices, hangers, hardware, signs, etc. for damage or excessive wear. Report problems to the Owner.

14. ***Pull-boxes:***

The Contractor shall check all pull-boxes for damage. Check all pull boxes for missing, broken, and/or loose fitting lids. Check for proper height and potential trip hazards. Check condition of wiring including conductor insulation, cable insulation, and splices. Check grounding where present to ensure grounding wires are correctly fastened and tight. Tighten and/or reattach conduit grounds where necessary. Re-splice and/or re-seal connections requiring immediate attention. Report any problems to the Owner.

15. ***Push-buttons:***
The Contractor shall check pedestrian push buttons for proper and secure mounting, proper operation, and general condition. Verify pedestrian push button operation to ensure that the correct pedestrian phase is called. Check the presence and condition of pedestrian push button instructional signs. Report any problems to the Owner.

Where pedestrian detection is failed, place the pedestrian detection's associated pedestrian phase on pedestrian recall and immediately notify the Owner.

16. ***Voltage and Current Readings:***
Check and record the controller +24VDC, total intersection current, and the A. C. line voltage.

17. ***Annual Inventory:***
A written copy of the inventory of each location shall be provided to the Owner. The Contractor shall provide the appropriate information regarding the items listed on the intersection inventory sheet.

18. ***Repair Report:***
All hazardous conditions shall be corrected immediately at additional cost to the Owner. The Contractor shall supply the Owner with a detailed report of work done and work required for each location at which an Annual Preventive Maintenance has been completed.

TS-2 Quarterly Preventive Maintenance (QPM):
Quarterly preventive maintenance shall be done on a quarterly basis and completed at each traffic signal location. A Quarterly Preventive Maintenance shall not be scheduled or performed at locations during the quarter for which an Annual Preventive Maintenance is scheduled.

Payment shall be executed after completion of an operation check of the following:

1. Cabinet Fan
2. Controller/Coord Operation
3. Conflict Monitor Indications
4. Flasher Circuits
5. Signal Timing
6. Time Base Clocks
7. Vehicle Detectors
8. Signal Indications
9. Signal Alignment
10. Pedestrian Push Buttons
11. Remove Graffiti/Tape
12. Remove Unauthorized Signs

Repairs:
All hazardous conditions shall be corrected immediately at additional cost to the Owner. A worksheet documenting all work done and work required for each location shall be submitted.

TS-3 Flashers And Beacons:
Prior to the beginning of each school year or other time designated by the Owner, each location will be reprogrammed for the coming school year and the following checks shall be performed at that time.

1. Check condition of signs, poles, signal heads, and cabinet.
2. Clean lenses, reflectors, signs, and cabinet as necessary.
3. Check operation of clock, flasher, and signals.
4. Check for obstruction by trees, bushes, etc.
5. Check signals and signs for proper alignment, realign and secure as necessary.
6. Replace bulbs as necessary.

TS-4 Pedestrian Crossings:
One time per year, each location will be checked for correct operation and display with the following checks being performed.

1. Check condition of signs, poles, signal heads, and cabinet.
2. Clean lenses, reflectors, signs, and cabinet as necessary.
3. Check operation of clock, flasher, and signals.
4. Check for obstruction by trees, bushes, etc.
5. Check signals and signs for proper alignment, realign and secure as necessary.
6. Replace bulbs as necessary.

TS-5 Speed Radar Signs:
One time per year, each location will be checked for correct operation and display with the following checks being performed.

1. Check display operation.
2. Check accuracy of speed display with the use of the manufacturer supplied tuning fork.
3. Check limit settings based on posted speeds and Owner specifications.

TS-6 Annual Light Bulb Change:
All incandescent signal light bulbs at each traffic signal location will be replaced annually, costs will be charged per "Unit Cost" schedule. All burned out bulbs will be replaced by the Contractor at no cost to the Owner for the duration of the contract year. Reported burned out bulbs will be replaced by the end of the following working day.

EMERGENCY REPAIR:

TS-7 Un-Scheduled And Emergency Repairs:
All malfunctions of a controller and its auxiliary equipment shall be considered an emergency unless otherwise identified by the Owner. Equipment malfunctions, and/or damage, which, in the opinion of the Owner, constitutes a serious hazard or inconvenience to the public shall be considered an emergency. Such malfunctions or damage may include, but not necessarily be limited to, situations where:

(1) All red indications are out including bulbs, lenses or LEDs, for any one traffic movement;

(2) Signal heads give conflicting indications to any intersection approach;

(3) A signal has been knocked down;

W.L. Contractors currently has the maintenance contracts for the majority of the Denver metro areas and has technicians daily in each area performing scheduled maintenance and repairs. Because of this presence W.L. believes we will be able to respond to emergency trouble calls within a one hour period..

Contractor shall be entitled to charge Owner for a minimum of one hour for the labor and equipment actually used to make any such repair in the event that the repair work takes less than one hour to complete. In the event that the repair work exceeds one hour, the additional time shall be charged in one-half hour increments. The minimum of one hour for labor and equipment does not apply to Scheduled Preventive Maintenance. The Owner shall pay Contractor for the materials, parts and/or supplies actually used by Contractor in making any such repair pursuant to this contract.

TS-8 Extra Work:
The term "extra work" shall be understood to mean and to include all work that may be required by the Owner which is not preventive maintenance or unscheduled and emergency repair work. Examples of extra work may include, but not be limited to, the following:

1. Development of Traffic Signal Specifications, as completed for Adams County, Arapahoe County, Commerce City, and Littleton UPS specifications.

2. Modifications to an existing signalized intersection. This would typically describe intersection reconstruction requiring the relocation of all or part of the existing signal equipment. This would also include the installation of signal equipment not presently found at an existing signalized intersection. (Example: The installation of loop detectors on an approach with no existing detection).

3. Installation of equipment and/or materials for a new signal installation location, either complete or partial.

4. Changes in signal timing.

5. Painting of mast-arms, span-wire poles, control cabinets, signal heads and visors.

6. Installation of School Speed Limit Flashers and warning beacons.

7. Installation of pedestrian crossing signs.

8. Acting as City's agent in the review or inspection of signals not constructed as part of this contract.

9. Fiber Optic Splicing and Terminating.

TS-9 Time And Material Proposal:
For any installations or extra work, the Contractor may submit a proposal for acceptance or rejection by the Owner. The proposal shall include estimated time, equipment and materials. If the proposal is accepted by the Owner, the installation or extra work would be performed by the Contractor on a time and materials basis for a price not to exceed that set forth in the proposal. Changes by the Owner, which occur after the proposal has been submitted, will be considered as changes to the proposal.

westm

WARRANTY:

W.L. Contractors, Inc. warrants all work performed and equipment installed for one year from date of acceptance by the City of Louisville.

WL Contractors, Inc.

Traffic Signal Inventory For The City of Louisville

General:

Location: _____ Date: _____

Internal

Config: 8 Phase Quad / Tee / Other _____

Coordinated Phase(s): 2 / 2&6 / 4&8 Dir of Coordinated Phase(s): N&S / E&W

Cabinet:

Mnf: _____ Type: _____ Size: _____

# of Phases: 4, 8, 12

Master Controller

Mnf: _____ Model: _____ Ser #: _____

Software Revision: _____

Local Controller

Mnf: _____ Model: _____ Ser #: _____

Software Revision: _____

Conflict Monitor/MMU

Mnf: _____ Model: _____ Ser #: _____

# of Channels: _____

Filter

# of Filters: _____ Size: _____ Type: Perm / Disposable

Interconnect

Type: None / Radio / Fiber / Copper Twisted Pair Other: _____

Additional Equipment:

UPS	Mnf:	_____	Model:	_____
Radio	Mnf:	_____	Model:	_____
Phone Modem	Mnf:	_____	Model:	_____
Fiber Modem	Mnf:	_____	Model:	_____
ICM/470i	Mnf:	_____	Model:	_____

Other:

_____

_____

_____

Presence Detectors

Type: Inductance / Radar / Video Mnf: _____

Model: _____ Channels: _____ Dir: All / NB / SB / EB / WB

Type: Inductance / Radar / Video Mnf: _____
Model: _____ Channels: _____ Dir: All / NB / SB / EB / WB

Type: Inductance / Radar / Video Mnf: _____
Model: _____ Channels: _____ Dir: All / NB / SB / EB / WB

Type: Inductance / Radar / Video Mnf: _____
Model: _____ Channels: _____ Dir: All / NB / SB / EB / WB

System Detectors

Type: Inductance / Radar / Video Mnf: _____
Model: _____ Channels: _____ Dir: All / NB / SB / EB / WB

Type: Inductance / Radar / Video Mnf: _____
Model: _____ Channels: _____ Dir: All / NB / SB / EB / WB

Type: Inductance / Radar / Video Mnf: _____
Model: _____ Channels: _____ Dir: All / NB / SB / EB / WB

Type: Inductance / Radar / Video Mnf: _____
Model: _____ Channels: _____ Dir: All / NB / SB / EB / WB

Spare Equipment in Cabinet

Load Switches: _____
DC Isolators: _____
Other:

_____

_____

_____

External

Signal Heads

Color: Yellow / Black Type: Poly / Metal OH Backplates: Y / N
LED: Y / N / Some Count Down Pedestrian Heads: Y / N / Some

NB
Count: OH 5 Section: _____ SOP 5 Section: _____
OH 3 Section: _____ SOP 3 Section: _____
Pedestrian Heads: _____

SB
Count: OH 5 Section: _____ SOP 5 Section: _____
OH 3 Section: _____ SOP 3 Section: _____
Pedestrian _____

Heads: _____

EB
Count: OH 5 Section: _____ SOP 5 Section: _____
OH 3 Section: _____ SOP 3 Section: _____
Pedestrian Heads: _____

WB
Count: OH 5 Section: _____ SOP 5 Section: _____
OH 3 Section: _____ SOP 3 Section: _____
Pedestrian Heads: _____

_____ OH 5 Section: _____ SOP 5 Section: _____
OH 3 Section: _____ SOP 3 Section: _____
Pedestrian Heads: _____

Poles/Mastarms

NE Corner: Type: Ped / Mastarm / Span **AND** Traffic Signal / Street Light
Mastarm Length #1: _____ Mastarm Length #2: _____
Luminaire Davit: Y / N Luminaire: Y / N
Bolt Cir/ Diameter: _____ # of Anchor Bolts: _____

NW Corner: Type: Ped / Mastarm / Span **AND** Traffic Signal / Street Light
Mastarm Length #1: _____ Mastarm Length #2: _____
Luminaire Davit: Y / N Luminaire: Y / N
Bolt Cir/ Diameter: _____ # of Anchor Bolts: _____

SE Corner: Type: Ped / Mastarm / Span **AND** Traffic Signal / Street Light
Mastarm Length #1: _____ Mastarm Length #2: _____
Luminaire Davit: Y / N Luminaire: Y / N
Bolt Cir/ Diameter: _____ # of Anchor Bolts: _____

SW Corner: Type: Ped / Mastarm / Span **AND** Traffic Signal / Street Light
Mastarm Length #1: _____ Mastarm Length #2: _____
Luminaire Davit: Y / N Luminaire: Y / N
Bolt Cir/ Diameter: _____ # of Anchor Bolts: _____

_____ Type: Ped / Mastarm / Span **AND** Mastarm Length #1: _____ Traffic Signal / Street Light

Mastarm Length #2: _____

Luminaire Davit: Y / N Luminaire: Y / N

Bolt Cir/ Diameter: _____ # of Anchor Bolts: _____

Pedestrian Push Buttons

Count: _____ ADA: Y / N

Bulb Count

68/69 Watt: _____ 116 Watt: _____ 150 Watt: _____ 3M: _____

Opticom

Count:

2 Ch Phase Selectors (752): _____

4 Ch Phase Selectors (754): _____

711 Detectors: _____

721 Detectors: _____

722 Detectors: _____

Comments/Observations:

_____

_____

_____

_____

_____

WL Contractors, Inc.'s Technician: _____

REPORTING & MONITORING:

A. Daily System Checks:

W.L. Contractors, Inc. understands that a traffic signal system is only beneficial if communications are operational, and if the stored data is accurate. As such, in 1998, W.L. Contractors, Inc. installed the hardware, software, and communications necessary to complete daily system checks of our customer's systems.

In 2004, we realized the need to continue forward with this effort, use automated commands to simplify daily checks, and use maintenance technicians to verify the data received as a result of the automated checks.

The purpose of daily system checks is to better assist the City of Louisville in preparing for emergencies as they arise. Should a signal controller's program be lost or corrupted, it is essential that *correct* signal operation be restored as quickly as possible for the safety of the public. Through daily system checks and reporting, W.L. Contractors, Inc. can help to ensure the viability of signal communications as well as the accuracy of the city's traffic signal system database. As such, controller programs and signal operation can be restored quickly and accurately. Through these efforts, it may be possible for W.L. Contractors, Inc. to assist in reducing the city's liability.

As part of the daily system checks, W.L. Contractors, Inc.:

- Checks communications to ensure signal communications are available.
- Reviews daily reports generated by the system checks to quickly determine the signals at which timing changes had occurred since the last check.
- Assists the city engineer in determining the validity of signal timing changes.
- Creates modified reports to keep the city informed of all observances and situations and emails these reports to the City of Louisville's traffic engineer on a daily basis.

Additionally, as part of the real-time monitoring of the traffic signals, W.L. contractors has programmed the master controllers to send critical alarms back to our TOC. Through automated routines, our system can receive alarms from the master controllers and generate pages to our technician which notify our technician of the traffic signal controller's flash status. With reporting and paging being completed within two minutes of the traffic signal entering into flash, our technicians can quickly and accurately respond when signals enter into a flash condition. Through these efforts, it may be possible for W.L. Contractors, Inc. to assist in reducing the city's liability.

Daily system checks are completed at no additional cost to the City of Louisville. Charges to the city only occur if and when W.L. Contractors, Inc. is required to complete additional or extra work resulting from the daily system checks. In those instances, labor rates are charged as per the hourly rates defined in the "Fee Schedule" included as part of our RFP response.

B. Work Progress Tracking System:

W.L. Contractors, Inc. created WL-Online five years ago. WL-Online is our real-time, paperless work progress tracking system that saves you time, money, and allows you to manage the work we do for you at an unprecedented level. Combined with our daily systems monitoring, W.L. Contractors, Inc. provides the fastest, most effective, and most transparent maintenance in Colorado.

Through WL-Online, W.L. Contractors, Inc. records when a trouble call request and/or extra work requests are issued; date and time. The issuing agency, contact person, and phone number. The trouble call and/or extra work request details. The W.L. Contractors, Inc. technician assigned to complete the repairs and/or extra work.

Once the repairs and/or extra work have been completed, technicians record the time and date that they arrived on site, what they found, the repairs and/or extra work they completed, the materials they used, and the time and date they completed the work.

Features of W.L. Online include:

- An unlimited number of user accounts.
- Security with hidden user defined passwords.
- 24/7 access to database information.
- Personalized user settings which allow for the customer to receive automatic email notifications of trouble calls and extra work as requests are queued in our database, and as repairs and/or extra work are completed.
- Query tools that allow the customer to conduct research and generate reports on their traffic signal histories.
- Query tools that allow our technicians to conduct extended research on traffic signal histories for all customers.

Through the use of WL-Online, the City of Louisville may realize the following benefits:

- ***Time and money savings can be realized by reducing the amount of traditional communication***, like phone calls and city generated emails, to check on the status of trouble calls and extra work requests.

  W.L. Contractor's, Inc. has provided our maintenance technicians with secure, wireless laptops which enable them to view and enter data directly from the job site and keep the status information real-time. Through these services, W.L. Contractors, Inc. provides the fastest, most effective, and most transparent maintenance in Colorado while limiting administrative costs for both the City of Louisville and ourselves.

- ***Improved monitoring of a projects progress***, to determine when a project approaches key points and site visits are required, and to monitor W.L. Contractor's, Inc. response time to trouble reports and ensure that we meet contract requirements.

- ***Use W.L. Contractors', Inc. database as a tool to better control the maintenance budget.*** As our database presently spans more than five years and includes the ability to run electronic queries on database data, queries may assist the City of Louisville's traffic engineer in determining signal fault trends early on. As such, major signal failures may be avoided, and budgetary focus may better be placed on areas requiring additional attention. With the growth of the database through expanded years of service, trend data may be more precise, limiting the City of Louisville's liability.

Through WL-Online, the City of Louisville maintains the greatest control, limits their liability, and improves in the coordination between the city and W.L. Contractors, Inc. Access is secure, proven, and reliable with all system access being provided through the internet. Access has been provided to the city at no cost and shall continue as such while W.L. Contractors, Inc. retains the City of Louisville's maintenance contract.

W.L. Contractors, Inc. employs a full time programmer. We continually strive to expand and add functionality to the system to ensure that our customers are kept up to date with operations. We encourage our customers to provide feedback, both positive and negative, regarding the site. A demonstration of WL-Online is available upon request.

C. Annual System Review & Analysis:

With the use of WL-Online, W.L. Contractors, Inc. has the capability to thoroughly review all trouble call and extra work completion records in relation to the city's traffic signals and traffic system as a whole. When these records span the previous 12 months and are analyzed, W.L. Contractors, Inc. is better able to pinpoint specific historic problem areas, assess existing conditions of the individual signals and system, and define beneficial and/or required signal and system upgrades. This analysis ensures that special attention is paid to upgrades completed during the said 12 month period. A report can be provided to the city which outlines specific areas of concern, defines solution options for repetitive problems, defines relevant upgrade options, and provides recommendations by W.L. Contractors, Inc. Assessment of the apparent effectiveness of upgrades completed during the said 12 month period can also be provided.

When requested, this analysis can help the city to determine where existing funding may best be spent, and determine additional funding requirements for the upcoming fiscal year.

Periodic reports shall only be generated at the city's request with labor costs being charged at the "Hourly Rates" as defined on the "Fee Schedule" included as part of our SOQ response.

Method & Term of Payment:

METHODS OF PAYMENT

MP-1 Payment:
Customer may make payment using either check or Credit Card. Type of payment will be at the customer's convenience. Both check and Credit Card are acceptable methods of payment.

TERMS OF PAYMENT

TP-1 Payment Schedule:
Unit monthly costs, un-scheduled and emergency repair work, extra work, and "Annual Bulb Change" costs shall be invoiced on a monthly basis. Costs associated with the "Annual Bulb Change" shall be invoiced based upon the number of bulbs replaced during the specified month.

TP-2 Invoice Disputes:
Should an invoice dispute arise, the Contractor shall supply and review the associated records with the Owner. Should a mistake be found within the Contractor's records, the Owner shall be adjusted and a new invoice shall be issued. Where no mistake has been made by the Contractor, the invoice shall stand with payment being made pursuant to this Agreement and the original date of invoice.

The Owner shall be responsible for all invoices associated with maintenance and repairs of traffic signals and equipment included as part of this Agreement. Should the Owner deem any maintenance or repair completed by the Contractor, which is in any way associated with traffic signals and equipment included as part of this agreement, to be the responsibility of a different agency or third party, it shall be the Owner's responsibility to contact the responsible party and recoup the fees invoiced by the Contractor. The Owner shall pay the Contractor all costs associated with the disputed invoice pursuant to this Agreement.

TP-3 Payment Schedule:
All payments for invoiced work as part of this Agreement are due Net 30 days. Should payments for invoiced work pass a Net 60 day period, an interest charge of 1.5% per month shall be added to the invoice.

TP-4 Payment Option:
W.L. Contractors is offering an "On Line" Credit Card Payment Option. Customer may make Credit Card payment "On Line". A 3% convenience fee will apply.

Value Added:

Service Maintenance Options:

Throughout this SOQ response, W.L. Contractors, Inc. has noted the fees associated with specific preventive maintenance procedures. In some circumstances, agencies may elect to pay for these procedures at straight hourly rates. W.L. Contractors is available to proceed with the contract in either fashion with the city making final decisions prior to the start of the contract.

W.L. Contractors, Inc has also listed additional maintenance procedures which, at this time, are not included as part of the city's standard maintenance procedures. These services have been listed as a means to present the city with additional options as the city grows and as additional equipment is installed.

Application of Technology Enhancements:

W.L. Contractors, Inc. continues to research, test, and review new products and research new technology to determine how it best fits into today's and tomorrow's traffic system environment. Areas in which these newer technologies have been used include:

Secure Traffic Operations Center (TOC):

W.L. Contractors, Inc. recognizes the need to protect signal system access and the city's data. As such, W.L. Contractors, Inc. has installed electronic security which limits TOC access to only those personnel who require it. Specifications regarding TOC security shall be provided to the city upon request.

As part of our TOC, W.L. Contractors has installed GPS hardware and software. With this technology in place, W.L. Contractors is able to better track and mobilize employees and equipment as needed to best respond to emergencies.

W.L. Contractors has also installed a WWV time sync. Through our TOC's time sync, signal system servers, and signal system software, W.L. Contractors, Inc. is able to sync Master and Local controller's time of day and ensure that coordination is maintained at agency boundaries.

Wireless Laptop Computers:

Wireless laptop computers have been issued to each of our employees within our maintenance department who have been delegated to this contract.

Through these laptops and W.L.-Online, employees can view and complete work request on location, review historic signal and repair information, and gain remote access to the city's traffic signals and traffic signal system. As with the TOC, multi-layer security has been put in place to secure this access, protect the signal system, and protect the city's data.

Benefits realized as a result of the use of wireless laptops include minimizing the chance that unsuccessful repair procedures are duplicated when failures are repetitive in nature, minimizing the time and number of personnel required when dealing with communication failures, the ability to remotely command signal downloads of accurate timing data when controller replacements are required. Cost savings and liability reduction can be realized across the board.

In many cases because our technicians are currently dispatched throughout the Denver Metro area we are able to respond to emergency trouble calls within a one hour period, and often times sooner. Over the course of a year this savings can be significant, reducing hourly charges for mobilization to the trouble call and limiting the City's exposure to liability.

Contract Renewal Incentives:
W.L. Contractors, Inc will allow the city to renew the existing contract per the contracts original terms and conditions.

Training:
While technology, traffic systems, and ITS systems continue to evolve, we understanding the need to keep our technicians trained in the latest technology, and the need to train new employees to ensure we constantly meet and exceed customer's goals and expectations.

Through W.L. Contractors, Inc. and the U.S. Department of Labor's 5 year Traffic Signal Apprenticeship program, we are able to continually train our employees, providing them the knowledge and understanding required to remain current with today's technology, and ensure that required I.M.S.A. certifications are maintained.

Additional Employees and Company Abilities:
W.L. Contractors, Inc. realizes the need for specific licenses and abilities as part of today's traffic signal industry. Although not specifically called for in the city's SOQ, W.L. Contractors, inc. employs the following:

Traffic Engineer:
W.L. Contractors works with Traffic Engineer, Fred Lantz of "Lantz and Associates", to assist as needed on projects as required and requested by the city.

Master Electrician(s):
W.L. Contractors, Inc. employs both Master Electricians and Journeyman Electricians to assist with electrical services and the pulling of electrical permits as required and requested by the city.

Fiber Technicians:
W.L. Contractors, Inc. employs fiber optic technicians to complete new fiber installations and fiber repairs as projects required and as requested by the city.

Safety Manager:
W.L. Contractors, Inc. recognizes the need to ensure that our technicians and crews work safely and meet state and federal safety regulations while working in your area. To this end, we employ a full time safety manager to assist in keeping us up-to-date on new regulations, monitor current operations, define safety standards, train new employees, and complete field spot checks as projects and operations progress.

W.L. Contractors, Inc. has established safety rules and guidelines in compliance with the requirements of the MUTCD, OSHA, and state and federal regulations. Our safety rules and guidelines are defined in W.L. Contractors, Inc. 220 page safety manual. A copy of our safety manual shall be provided for review upon request.

Spare Inventory of Material and Parts:
W.L. Contractors, Inc. stocks materials and parts as may be needed for normal repair of the traffic control equipment. In addition, W.L. Contractors, Inc. stocks the necessary controllers, poles, signals and parts necessary to restore an intersection to an operating condition on an emergency basis.

Mast Arm Inspections.
W.L. Contractors, Inc. has had the opportunity to work with agencies including Colorado Springs, Douglas County, Arapahoe County, The City of Littleton, Boulder County and The City of Arvada to complete detailed inspections of poles and mast-arms to determine structures which showed cracks and damage to the structure and to the associated welds which were not visible with the naked eye. Through established relationships with certified engineering firms, we are able to extend this option to the city on as as-needed and as-requested basis.

W.L. Contractor's, Inc. online database presently spans 5 years. Through WLContractors.com, the city can run database queries, allowing the city to see and respond to signal failure trends. As such, major signal failures may be avoided by addressing fault trends early on and thus limiting the city's liability.

W.L. Contractors has extensive knowledge and experience in the development, installation, and implementation of Intelligent Traffic Systems (ITS) and can assist the city with all of their ITS needs. ITS includes fiber, CCTV, VMS, and wireless applications.

W.L. Contractors, Inc. has extensive experience with the majority of traffic signal systems throughout the Denver Metro area. We can quickly and reliably make repairs to Louisville's traffic signal or systems as needed. Return trips can be limited, saving the City money on maintenance repairs.

Upon request of the City, W.L. Contractors, Inc. will prepare a cost estimate for larger, extra work projects to assist the City with their budget priorities.

W.L. Contractors, Inc. also has a Design engineering agreement with Lantz & Associates enabling us to submit traffic signal design in a timely and economical fashion.

Apprenticeship Program:
W.L. Contractors, Inc. also operates a national accredited apprenticeship program available to all employees. The apprenticeship program is for certification for Traffic Signal Technician with the approval of the United States Department of Labor. This program is the only one of its kind in Colorado. Five years of class room study and on the job training are required to complete the Journeyman Traffic Signal Technician certification.

W.L. Contractors, Inc. also participates in the training and certification of its employees through the International Municipal Signal Association (IMSA). The training for IMSA Levels I, II and III is provided through the apprenticeship program. There are numerous IMSA Level II certified employees at WL.

W.L. Contractors, Inc. will undertake each such emergency repair no later than one hour after Centennial notifies WL of the emergency. WL's main phone number, 303-422-7985, is our 24 hour, 7 days a week emergency number.

EXHIBIT "D"

TRAFFIC SIGNAL MAINTENANCE

ACTIVITY & COST					
Traffic Signals - Vehicular	Monthly Retainer	Quarterly Maintenance	Annual Preventative	Trouble Calls	Extra Work
South Boulder Road and Plaza Drive	$25.00	$75.00	$275.00	1	2
South Boulder Road and State Highway 42	$25.00	$75.00	$275.00	1	2
South Boulder Road and Main St. & Centennial Dr.	$25.00	$75.00	$275.00	1	2
South Boulder Road and Garfield Avenue	$25.00	$75.00	$275.00	1	2
South Boulder Road and Via Appia	$25.00	$75.00	$275.00	1	2
South Boulder Road and Washington Avenue	$25.00	$75.00	$275.00	1	2
South Boulder Road and McCaslin Boulevard	$25.00	$75.00	$275.00	1	2
McCaslin Blvd. and Via Appia / Centennial Pkwy.	$25.00	$75.00	$275.00	1	2
McCaslin Boulevard and Century Drive	$25.00	$75.00	$275.00	1	2
McCaslin Boulevard and Cherry Street	$25.00	$75.00	$275.00	1	2
McCaslin Boulevard and Dillon Road	$25.00	$75.00	$275.00	1	2
Dillon Road and W. Dahlia Street / Coal Creek Circle	$25.00	$75.00	$275.00	1	2
Dillon Road and South 88th Street	$25.00	$75.00	$275.00	1	2
Dillon Road and South 96th Street	$25.00	$75.00	$275.00	1	2
Dillon Road and Pierce Avenue	$25.00	$75.00	$275.00	1	2
Dillon Road and St. Andrews	$25.00	$75.00	$275.00		
S. 88th Street and Campus Drive / Health Park Drive	$25.00	$75.00	$275.00	1	2
West Cherry Street and West Dahlia Street	$25.00	$75.00	$275.00	1	2
Pine St. west of Lincoln (Pedestrian Crossing Signal)	$25.00	$75.00	$275.00	1	2

EXHIBIT "D"

TRAFFIC SIGNAL MAINTENANCE

1 - As per Exhibit C - Technical Specifications, Paragraph TS-10

2 - Paid for per Exhibit C - Technical Specifications Paragraph TS-11

TRAFFIC SIGNAL MAINTENANCE

ACTIVITY & COST	
Quarterly Zone Maintenance	
McCaslin Boulevard	$145.00
South Boulder Road	$145.00
Sub Total	$145.00

ACTIVITY & COST			
Pedestrian Crossings	**Annual PM**	**Trouble Calls**	**Extra Work**
W. Cherry between Orchard Way & Taft Court	$75.00	1	2
Via Appia @ Recreation Center	$75.00	1	2
Via Appia south of South Boulder Road	$75.00	1	2
Sub Total:	$225.00		

ACTIVITY & COST			
School Zone Flashers	**Annual PM**	**Trouble Calls**	**Extra Work**
Coal Creek Elementary @ Washington & Hickory (NB) Washington & Willow (SB)	$55.00	1	2
Fireside Elementary School @ Dahlia & Century (NB) Dahlia & Washington (WB)	$55.00	1	2
Louisville Elementary School @ Pine & Grant (WB) Pine & McKinley (EB)	$55.00	1	2
Louisville Middle School @ Main Street & Lafayette Street (NB) Main Street South of S. Boulder Rd (SB)	$55.00	1	2
St. Louis Catholic School @ Walnut St E. of Garfield (EB) Walnut W. of Jefferson (WB)	$55.00	1	2
Monarch School Campus @ Dillon Road E. of South 88th Street Dillon Road W. of South 88th Street	$55.00	1	2
Sub Total	$330.00		

- Where School Zone Flashers are operated and programmed by City forces, repairs, if necessary, would be done by the Contractor on request and paid for per Exhibit C - Technical Specifications, paragraph TS-11

1 - As per Exhibit C - Technical Specifications, Paragraph TS-10

2 - Paid for per Exhibit C - Technical Specifications Paragraph TS-11

TRAFFIC SIGNAL MAINTENANCE

ACTIVITY & COST			
Speed Radar Signs	**Annual PM**	**Trouble Calls**	**Extra Work**
County Road between Rex St. & Bella Vista Dr. (NB)	$55.00	1	2
West Dahlia Street between West Aspen Way and West Mahogany Circle (WB)	$55.00	1	2
West Dahlia Street between Century Drive and West Mahogany Circle (EB)	$55.00	1	2
McCaslin Blvd (SB)	$55.00	1	2
McCaslin Blvd (NB)	$55.00	1	2
Main Street between S. Boulder Rd. and Griffith St. (SB)	$55.00	1	2
Main Street between Lafayette St. and Griffith St.(NB)	$55.00	1	2
Pine Street between Grant Ave. and Lincoln Ave. (WB)	$55.00	1	2
Pine Street between Johnson Ave. and McKinley Ave. (EB)	$55.00	1	2
Via Appia between W. Harper St. and W. Griffith St. (WB)	$55.00	1	2
Via Appia between Sagebrush Way and Lafayette St. (EB)	$55.00	1	2
Sub Total	$605.00		

ACTIVITY & COST			
Description	**Traffic Signals**	**Unit Cost**	**Amount**
System Report Review and Analysis	18	$70.00	$1260.00

ACTIVITY & COST			
Camera System	**Semi-Annual**	**Trouble**	**Extra**
North Water Treatment Plant	$140.00	1	2

1 - As per Exhibit C - Technical Specifications, Paragraph TS-10
2 - Paid for per Exhibit C - Technical Specifications Paragraph TS-11

TRAFFIC SIGNAL SERVICES FEE SCHEDULE

AUTHORIZED TIME AND MATERIAL COST

MAINTENANCE/EXTRA WORK	HOURLY COST
Equipment: Bucket Truck	$39.00
Dump Truck	$30.00
Trencher	$35.00
Compressor	$25.00
Pickup Truck	$30.00
Maintenance Van	$30.00
Jacked Conduit (directional)	$14.00 lf (for qty's over 500 lf.)

PERSONNEL	HOURLY RATE
Supervisor- Master Electrician	$65.00
IMSA Level III Technician	$60.00
IMSA Level II Technician	$55.00
IMSA Level I Technician	$50.00
Operator	$50.00
Laborer	$40.00

ANNUAL BULB REPLACEMENT	
750 Bulbs at a unit cost of $3.50 for an actual cost of	$2650 Plus T&M Rates.
Detector Loops – 6'x40' Quad Detector Loop	$1400.00 ea
Other Loops (per foot of loop wire)	$5.50 LF

EXHIBIT B

City of Louisville Public Services Contract Addendum
Prohibition Against Employing Illegal Aliens

Prohibition Against Employing Illegal Aliens. Contractor shall not knowingly employ or contract with an illegal alien to perform work under this contract. Contractor shall not enter into a contract with a subcontractor that fails to certify to the Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this Contract.

Contractor will participate in either the E-verify program or the Department program, as defined in C.R.S. § 8-17.5-101(3.3) and 8-17.5-101(3.7), respectively, in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the public contract for services. Contractor is prohibited from using the E-verify program or the Department program procedures to undertake pre-employment screening of job applicants while this contract is being performed.

If Contractor obtains actual knowledge that a subcontractor performing work under this contract for services knowingly employs or contracts with an illegal alien, Contractor shall:

a. Notify the subcontractor and the City within three days that the Contractor has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and

b. Terminate the subcontract with the subcontractor if within three days of receiving the notice required pursuant to this paragraph the subcontractor does not stop employing or contracting with the illegal alien; except that the Contractor shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.

Contractor shall comply with any reasonable request by the Department of Labor and Employment made in the course of an investigation that the Department is undertaking pursuant to the authority established in C.R.S. § 8-17.5-102(5).

If Contractor violates a provision of this Contract required pursuant to C.R.S. § 8-17.5-102, the City may terminate the Contract for breach of contract. If the contract is so terminated, the Contractor shall be liable for actual and consequential damages to the City.

EXHIBIT B CONTINUED

City of Louisville
Contractor's Pre-Contract Amendment Certification
Regarding Employing Illegal Aliens

The undersigned hereby certifies as follows:

That at the time of providing this certification, the undersigned does not knowingly employ or contract with an illegal alien; and that the undersigned will participated in the E-Verify program or the Department program, as defined in C.R.S. § 8-17.5-101(3.3) and 8-17.5-101(3.7), respectively, in order to confirm the employment eligibility of all employees who are newly hired for employment to perform under the public contract for services.

By Tim Leach as Operations Manager of WL Contractors.

Signature

10-24-2018
Date

City of Louisville
COLORADO • SINCE 1878

CITY COUNCIL COMMUNICATION
AGENDA ITEM 4E

SUBJECT: **APPROVAL OF 2023 CITY COUNCIL APPOINTMENTS TO BOARDS AND COMMISSIONS**

DATE: **DECEMBER 20, 2022**

PRESENTED BY: **MEREDYTH MUTH, CITY CLERK**

SUMMARY:
The Clerk's Office began soliciting applications for 2023 board and commission vacancies in October with a November 10 application deadline. On November 29, a City Council committee met to review the applications and recommend which applicants to interview. On December 13, the City Council met to interview six applicants for the Planning Commission position and to determine a complete list of appointments.

From that meeting Council recommends the 2023 positions be filled as shown on the attached spreadsheet. Staff will reopen the application process in January for those boards that still have vacancies.

The complete applications forms for each applicant are available in the November 29 Committee meeting packet.

FISCAL IMPACT:
None

RECOMMENDATION:
Approve list of appointees.

ATTACHMENT(S):
1. Spreadsheet listing 2023 board and commission appointments

STRATEGIC PLAN IMPACT:

☐	**Financial Stewardship & Asset Management**	☒	**Reliable Core Services**
☐	**Vibrant Economic Climate**	☐	**Quality Programs & Amenities**
☒	**Engaged Community**	☐	**Healthy Workforce**
☐	**Supportive Technology**	☐	**Collaborative Regional Partner**

2023 Board and Commission Vacancies

Appointee Names	Length of Term	
Board of Adjustment		**3**
Jim Stuart	3 Years	January 2023 - December 2025
Sherry Sommer	3 Years	January 2023 - December 2025
associate	1 Year	January 2023 - December 2025
Building Code Board of Appeals		**2**
Stephen Knapp	3 Years	January 2023 - December 2025
	3 Years	January 2023 - December 2025
Cultural Council		**5**
Patricial Howard	3 Years	January 2023 - December 2025
JR Ketelsen	3 Years	January 2023 - December 2025
Ron Reeves	3 Years	January 2023 - December 2025
	2 Years	January 2023 - December 2024
	1 Year	January 2023 - December 2023
Historic Preservation Commission		**4**
Lynda Haley	3 Years	January 2023 - December 2025
Josh Anderson	3 Years	January 2023 - December 2025
Marty Beauchamp	2 Years	January 2023 - December 2024
Randy Dahlia	1 Year	January 2023 - December 2023
Historical Commission		**2**
Joe Teasdale	4 Years	January 2023 - December 2026
	4 Years	January 2023 - December 2026
Library Board of Trustees		**2**
Weiyan Chen	4 Years	January 2023 - December 2026
Jaime Dufresne	4 Years	January 2023 - December 2026
Open Space Advisory Board		**4**
Charles Danforth	3 Years	January 2023 - December 2025
Laura Scott Denton	3 Years	January 2023 - December 2025
Michiko Christiansen	3 Years	January 2023 - December 2025
Jojo Follmer	1 Year	January 2023 - December 2023
Parks & Public Landscaping Advisory Board		**2**
Signe Maria Buck	3 Years	January 2023 - December 2025
Cynthia Corne	3 Years	January 2023 - December 2025
Planning Commission		**1**
Cullen Choi	5 Years	January 2023 - December 2027
Recreation Advisory Board		**4**
Angie Layton	3 Years	January 2023 - December 2025
	3 Years	January 2023 - December 2025
	3 Years	January 2023 - December 2025
	2 Years	January 2023 - December 2024

2023 Board and Commission Vacancies		
Revitalization Commission		**2**
Clif Harald	5 Years	January 2023 - December 2027
	4 Years	January 2023 - December 2026
Sustainability Advisory Board		**2**
John Cowley	4 Years	January 2023 - December 2026
Josh Cooperman	4 Years	January 2023 - December 2026

City of Louisville
COLORADO • SINCE 1878

CITY COUNCIL COMMUNICATION
AGENDA ITEM 4F

SUBJECT: **APPROVAL OF BROKER SERVICES CONTRACT**

DATE: **DECEMBER 20, 2022**

PRESENTED BY: **KURT KOWAR, P.E., PUBLIC WORKS DIRECTOR**

SUMMARY:
Staff recommends approval of the attached Broker Services Contract. To accomplish certain Council objectives within a critical timeline it is necessary to use the services of an expert real estate brokerage. Real estate brokerage services can include a variety of services such as: general, residential, commercial, industrial, special uses, rural, water, construction, office, institutional, mixed-use, research and environmental. The recommended service provider has successfully worked with Public Works staff and the commission rates listed within the service agreement are consistent with industry standards. City legal counsel has evaluated this proposal and supports staff's recommendation.

FISCAL IMPACT:
There is no fiscal impact directly related to this approval. Any and all real estate transactions and corresponding fiscal impacts resulting from these services will required future and additional Council approval.

RECOMMENDATION:
Staff recommends approval of the attached Broker Services Contract and authorize the Mayor and City Clerk to sign and execute the Contract on behalf of the City.

ATTACHMENTS:
1. Broker Service Contract

STRATEGIC PLAN IMPACT:

☐	**Financial Stewardship & Asset Management**	☒	**Reliable Core Services**
☐	**Vibrant Economic Climate**	☐	**Quality Programs & Amenities**
☐	**Engaged Community**	☐	**Healthy Workforce**
☐	**Supportive Technology**	☐	**Collaborative Regional Partner**

The printed portions of this form, except differentiated additions, have been approved by the Colorado Real Estate Commission.
(BC60-6-19) (Mandatory 1-20)

THIS IS A BINDING CONTRACT. THIS FORM HAS IMPORTANT LEGAL CONSEQUENCES AND THE PARTIES SHOULD CONSULT LEGAL AND TAX OR OTHER COUNSEL BEFORE SIGNING.

Compensation charged by brokerage firms is not set by law. Such charges are established by each real estate brokerage firm.

DIFFERENT BROKERAGE RELATIONSHIPS ARE AVAILABLE WHICH INCLUDE BUYER AGENCY, SELLER AGENCY, OR TRANSACTION-BROKERAGE.

EXCLUSIVE RIGHT-TO-BUY LISTING CONTRACT

☒ BUYER AGENCY ☐ TRANSACTION-BROKERAGE

Date: December 20, 2022

1. AGREEMENT. Buyer and Brokerage Firm enter into this exclusive, irrevocable contract (Buyer Listing Contract) and agree to its provisions. Broker, on behalf of Brokerage Firm, agrees to provide brokerage services to Buyer. Brokerage Firm will receive compensation as set forth in this Buyer Listing Contract.

2. BROKER AND BROKERAGE FIRM.

☒ **2.1. Multiple-Person Firm.** If this box is checked, "Broker" (as defined below) is the individual designated by Brokerage Firm to serve as the broker of Buyer and to perform the services for Buyer required by this Buyer Listing Contract. If more than one individual is so designated, then references in this Buyer Listing Contract to Broker includes all persons so designated, including substitute or additional brokers. The brokerage relationship exists only with Broker and does not extend to the employing broker, Brokerage Firm or to any other brokers employed or engaged by Brokerage Firm who are not so designated.

☐ **2.2. One-Person Firm.** If this box is checked, Broker (as defined below) is a brokerage firm with only one licensed person. References in this Buyer Listing Contract to Broker or Brokerage Firm mean both the licensed person and brokerage firm, who serve as the Broker of Buyer and perform the services for Buyer required by this Buyer Listing Contract.

3. DEFINED TERMS.

3.1. Buyer: City of Louisville Colorado
and any other person or entity on whose behalf the named party acts, directly or indirectly, to Purchase the Property.

3.2. Brokerage Firm: HydroSource, Inc.

3.3. Broker: Gregg Campbell

3.4. Property. Property means real estate which substantially meets the following requirements or is acceptable to Buyer:

3.4.1. Units of the Colorado - Big Thompson Water Project.
3.4.2. South Boulder Creek irrigation ditch shares and water rights.

3.5. Purchase; Lease.

3.5.1. A "Purchase" of Property means the acquisition of any interest in the Property or the creation of the right to acquire any interest in the Property, including a contract or lease. It also includes an agreement to acquire any ownership interest in an entity that owns the Property.

☐ **3.5.2.** If this box is checked, Buyer authorizes Broker to negotiate a lease of the Property. Lease of the Property or Lease means any agreement between a landlord and the Buyer to create a tenancy or leasehold interest in the Property.

3.6. Listing Period. The Listing Period of this Buyer Listing Contract begins on December 20, 2022, and continues through the earlier of (1) completion of the Purchase of the Property or Lease of the Property or (2) December 19, 2023, and any written extensions (Listing Period). Broker will continue to assist in the completion of any purchase or lease for which compensation is payable to Brokerage Firm under § 7 of this Buyer Listing Contract.

3.7. Applicability of Terms. A check or similar mark in a box means that such provision is applicable. The abbreviation "N/A" or the word "Deleted" means not applicable. The abbreviation "MEC" (mutual execution of this contract) means the date upon which both parties have signed this Buyer Listing Contract.

3.8. Day; Computation of Period of Days, Deadline.

3.8.1. Day. As used in this Buyer Listing Contract, the term "day" means the entire day ending at 11:59 p.m., United States Mountain Time (Standard or Daylight Savings as applicable).

3.8.2. Computation of Period of Days, Deadline. In computing a period of days, when the ending date is not specified, e.g., three days after MEC, the first day is excluded and the last day is included. If any deadline falls on a Saturday, Sunday

or federal or Colorado state holiday (Holiday), such deadline ■ **Will** ☐ **Will Not** be extended to the next day that is not a Saturday, Sunday or Holiday. Should neither box be checked, the deadline will not be extended.

4. BROKERAGE RELATIONSHIP.

4.1. If the Buyer Agency box at the top of page 1 is checked, Broker represents Buyer as Buyer's limited agent (Buyer's Agent). If the Transaction-Brokerage box at the top of page 1 is checked, Broker acts as a Transaction-Broker.

4.2. In-Company Transaction – Different Brokers. When the seller and Buyer in a transaction are working with different brokers within the Brokerage Firm, those brokers continue to conduct themselves consistent with the brokerage relationships they have established. Buyer acknowledges that Brokerage Firm is allowed to offer and pay compensation to brokers within Brokerage Firm working with a seller.

4.3. In-Company Transaction – One Broker. If the seller and Buyer are both working with the same Broker, Broker will function as:

4.3.1. Buyer's Agent. If the Buyer Agency box at the top of page 1 is checked, the parties agree the following applies:

4.3.1.1. Buyer Agency Unless Brokerage Relationship with Both. Broker represents Buyer as Buyer's Agent and must treat the seller as a customer. A customer is a party to a transaction with whom Broker has no brokerage relationship. However, if Broker delivers to Buyer a written Change of Status that Broker has a brokerage relationship with the seller then Broker is working with both Buyer and seller as a Transaction Broker. If the box in § 4.3.1.2 (**Buyer Agency Only**) is checked, § 4.3.1.2 (**Buyer Agency Only**) applies instead.

☐ **4.3.1.2. Buyer Agency Only.** If this box is checked, Broker represents Buyer as Buyer's Agent and must treat the seller as a customer. Broker must disclose to such customer Broker's relationship with Buyer.

4.3.2. Transaction-Broker. If the Transaction-Brokerage box at the top of page 1 is checked, or in the event neither box is checked, Broker must work with Buyer as a Transaction-Broker. A Transaction-Broker must perform the duties described in § 5 and facilitate purchase transactions without being an advocate or agent for either party. If the seller and Buyer are working with the same Broker, Broker must continue to function as a Transaction-Broker.

5. BROKERAGE DUTIES. Brokerage Firm, acting through Broker, as either a Transaction-Broker or a Buyer's Agent, must perform the following **Uniform Duties** when working with Buyer:

5.1. Broker must exercise reasonable skill and care for Buyer, including but not limited to the following:

5.1.1. Performing the terms of any written or oral agreement with Buyer;

5.1.2. Presenting all offers to and from Buyer in a timely manner regardless of whether Buyer is already a party to a contract for the Purchase of Property;

5.1.3. Disclosing to Buyer adverse material facts actually known by Broker;

5.1.4. Advising Buyer regarding the transaction and advising Buyer to obtain expert advice as to material matters about which Broker knows but the specifics of which are beyond the expertise of Broker;

5.1.5. Accounting in a timely manner for all money and property received; and

5.1.6. Keeping Buyer fully informed regarding the transaction.

5.2. Broker must not disclose the following information without the informed consent of Buyer:

5.2.1. That Buyer is willing to pay more than the purchase price offered for the Property;

5.2.2. What Buyer's motivating factors are;

5.2.3. That Buyer will agree to financing terms other than those offered; or

5.2.4. Any material information about Buyer unless disclosure is required by law or failure to disclose such information would constitute fraud or dishonest dealing.

5.3. Buyer consents to Broker's disclosure of Buyer's confidential information to the supervising broker or designee for the purpose of proper supervision, provided such supervising broker or designee does not further disclose such information without consent of Buyer, or use such information to the detriment of Buyer.

5.4. Broker may show properties in which Buyer is interested to other prospective buyers without breaching any duty or obligation to Buyer. Broker is not prohibited from showing competing buyers the same property and from assisting competing buyers in attempting to purchase a particular property.

5.5. Broker is not obligated to seek other properties while Buyer is already a party to a contract for the Purchase of Property.

5.6. Broker has no duty to conduct an independent inspection of the Property for the benefit of Buyer and has no duty to independently verify the accuracy or completeness of statements made by a seller or independent inspectors. Broker has no duty to conduct an independent investigation of Buyer's financial condition or to verify the accuracy or completeness of any statement made by Buyer.

5.7. Broker must disclose to any prospective seller all adverse material facts actually known by Broker, including but not limited to adverse material facts concerning Buyer's financial ability to perform the terms of the transaction and whether Buyer intends to occupy the Property as a principal residence.

5.8. Buyer understands that Buyer is not liable for Broker's acts or omissions that have not been approved, directed, or ratified by Buyer.

6. ADDITIONAL DUTIES OF BUYER'S AGENT. If the Buyer Agency box at the top of page 1 is checked, Broker is Buyer's Agent, with the following additional duties:

6.1. Promoting the interests of Buyer with the utmost good faith, loyalty and fidelity;

6.2. Seeking a price and terms that are acceptable to Buyer; and

6.3. Counseling Buyer as to any material benefits or risks of a transaction that are actually known by Broker.

7. COMPENSATION TO BROKERAGE FIRM. In consideration of the services to be performed by Broker, Brokerage Firm will be paid as set forth in this section, with no discount or allowance for any efforts made by Buyer or any other person. Unless otherwise agreed to in writing, Brokerage Firm is entitled to receive additional compensation, bonuses, and incentives paid by listing brokerage firm or seller. Broker will inform Buyer of the fee to be paid to Brokerage Firm and, if there is a written agreement, Broker will supply a copy to Buyer, upon written request of Buyer.

7.1. Brokerage Firm's Fee – Purchase.

Check Compensation Arrangement:

☒ **7.1.1. Success Fee.** Brokerage Firm will be paid as follows:

7.1.1.1. Amount. A fee equal to 5.0 % of the purchase price, but not less than $ N/A, except as provided in § 7.1.1.2.

7.1.1.2. Adjusted Amount. ☐ **See § 21 (Additional Provisions) or** ☐ **Other** _____

7.1.1.3. When Earned; When Payable – Purchase. The Success Fee is earned by Brokerage Firm upon the Purchase of Property and is payable upon closing of the transaction. If any transaction fails to close as a result of the seller's default, with no fault on the part of Buyer, the Success Fee will be waived. If any transaction fails to close as a result of Buyer's default, in whole or in part, the Success Fee will not be waived; such fee is payable upon Buyer's default, but not later than the date that the closing of the transaction was to have occurred.

☐ **7.1.2. Hourly Fee.** Brokerage Firm will be paid $_____ per hour for time spent by Broker pursuant to this Buyer Listing Contract, up to a maximum total fee of $_____. This hourly fee is payable to Brokerage Firm upon receipt of an invoice from Brokerage Firm.

☐ **7.1.3. Retainer Fee.** Buyer will pay Brokerage Firm a nonrefundable retainer fee of $_____ due and payable upon signing of this Buyer Listing Contract. This amount ☐ **Will** ☐ **Will Not** be credited against other fees payable to Brokerage Firm under this section.

☐ **7.1.4. Other Compensation.** _____.

7.2. Brokerage Firm's Fee – Lease. If the box in § 3.5.2 is checked, Brokerage Firm will be paid a fee as follows, less any amounts paid by the listing brokerage firm or landlord:

7.2.1. Amount. $ _____ per square _____, or _____, except as provided in § 7.2.2.

7.2.2. Adjusted Amount. ☐ **See § 21 (Additional Provisions) or** ☐ **Other** _____.

7.2.3. Other. _____

7.2.4. When Earned; When Payable – Lease. This Lease fee is earned upon the mutual execution of the Lease. One-half of this Lease fee is payable upon mutual execution of the Lease and one-half upon possession of the premises by tenant or as follows: _____. If the Lease, executed after the date of this Buyer Listing Contract, contains an option to extend or renew, or if Buyer expands into additional space within the building or complex where the Property is located, Brokerage Firm ☐ **Will** ☐ **Will Not** be paid a fee upon exercise of such extension or renewal option or expansion. If Brokerage Firm is to be paid a fee for such extension, renewal or expansion, the amount of such fee and its payment are as follows:

_____.

7.3. Who Will Pay Brokerage Firm's Success Fee.

☐ **7.3.1. Listing Brokerage Firm or Seller May Pay. Buyer IS Obligated to Pay.** Broker is authorized and instructed to request payment of Brokerage Firm's Success Fee from the listing brokerage firm or seller. Buyer is obligated to pay any portion of Brokerage Firm's Success Fee which is not paid by the listing brokerage firm or seller.

☒ **7.3.2. Buyer Will Pay.** Buyer is obligated to pay Brokerage Firm's Success Fee. Brokerage Firm is NOT entitled to receive additional compensation, bonuses or incentives from listing brokerage firm, seller or any other source.

☐ **7.3.3. Listing Brokerage Firm or Seller May Pay. Buyer is NOT Obligated to Pay.** Broker is authorized to obtain payment of Brokerage Firm's Success Fee from the listing brokerage firm or seller. Provided Buyer has fulfilled Buyer's obligations in this Buyer Listing Contract, Buyer is not obligated to pay Brokerage Firm's Success Fee.

If no box is checked above, then § 7.3.3 (**Buyer is NOT Obligated to Pay**) will apply.

7.4. Holdover Period. Brokerage Firm's Success Fee applies to Property contracted for (or leased if § 3.5.2 is checked) during the Listing Period of this Buyer Listing Contract or any extensions and also applies to Property contracted for or leased within 90 calendar days after the Listing Period expires (Holdover Period) (1) if the Property is one on which Broker negotiated and (2) if Broker submitted its address or other description in writing to Buyer during the Listing Period (Submitted Property). Provided, however, Buyer ☐ **Will** ■ **Will Not** owe the Brokerage Firm's Success Fee under §§ 7.1, 7.2, 7.3.1 and 7.3.2 as indicated, if a commission is earned by another brokerage firm acting pursuant to an exclusive agreement with Buyer entered into during the

Holdover Period, and a Purchase or Lease of the Submitted Property is consummated. If no box is checked in this § 7.4, then Buyer does not owe the Brokerage Firm's Success Fee to Brokerage Firm.

8. LIMITATION ON THIRD-PARTY COMPENSATION. Neither Broker nor Brokerage Firm, except as set forth in § 7, will accept compensation from any other person or entity in connection with the Property without the written consent of Buyer. Additionally, neither Broker nor Brokerage Firm is permitted to assess and receive mark-ups or other compensation for services performed by any third party or affiliated business entity unless Buyer signs a separate written consent for such services.

9. BUYER'S OBLIGATIONS TO BROKER. Buyer agrees to conduct all negotiations for the Property only through Broker, and to refer to Broker all communications received in any form from brokers, prospective sellers, or any other source during the Term of this Buyer Listing Contract. Buyer represents that Buyer ☐ **Is** ■ **Is Not** currently a party to any agreement with any other broker to represent or assist Buyer in the location or Purchase of Property. Buyer further represents that Buyer ☐ **Has** ■ **Has Not** received a list of any "Submitted Property" pursuant to a previous listing agreement to purchase Property with any other broker.

10. RIGHT OF PARTIES TO CANCEL.

10.1. Right of Buyer to Cancel. In the event Broker defaults under this Buyer Listing Contract, Buyer has the right to cancel this Buyer Listing Contract, including all rights of Brokerage Firm to any compensation if the Buyer Agency box at the top of page 1 is checked. Examples of a Broker breach include, but are not limited to (1) abandonment of Buyer, (2) failure to fulfill all material obligations of Broker and (3) failure to fulfill all material Uniform Duties (§ 5) or, if the Buyer Agency box at the top of page 1 is checked, the failure to fulfill all material Additional Duties of Buyer's Agent (§ 6). Any rights of Buyer that accrued prior to cancellation will survive such cancellation.

10.2. Right of Broker to Cancel. Brokerage Firm may cancel this Buyer Listing Contract upon written notice to Buyer if Buyer fails to reasonably cooperate with Broker or Buyer defaults under this Buyer Listing Contract. Any rights of Brokerage Firm that accrued prior to cancellation will survive such cancellation.

11. COST OF SERVICES OR PRODUCTS OBTAINED FROM OUTSIDE SOURCES. Broker will not obtain or order products or services from outside sources unless Buyer has agreed to pay for them promptly when due (e.g., surveys, radon tests, soil tests, title reports, engineering studies, property inspections). Neither Broker nor Brokerage Firm is obligated to advance funds for Buyer. Buyer must reimburse Brokerage Firm for payments made by Brokerage Firm for such products or services authorized by Buyer.

12. BROKERAGE SERVICES; SHOWING PROPERTIES.

12.1. Brokerage Services. The following additional tasks will be performed by Broker:

As may be agreed between Broker and Buyer.

12.2. Showing Properties. Buyer acknowledges that Broker has explained the possible methods used by listing brokers and sellers to show properties, and the limitations (if any) on Buyer and Broker being able to access properties due to such methods. Broker's limitations on accessing properties are as follows: N/A.
Broker, through Brokerage Firm, has access to the following multiple listing services and property information services:
_____.

13. DISCLOSURE OF BUYER'S IDENTITY. Broker ☒ **Does** ☐ **Does Not** have Buyer's permission to disclose Buyer's identity to third parties without prior written consent of Buyer.

14. DISCLOSURE OF SETTLEMENT SERVICE COSTS. Buyer acknowledges that costs, quality, and extent of service vary between different settlement service providers (e.g., attorneys, lenders, inspectors and title companies).

15. WIRE AND OTHER FRAUDS. Wire and other frauds occur in real estate transactions. Any time Buyer is supplying confidential information such as social security numbers or bank account numbers, Buyer should provide the information in person or in another secure manner.

16. REMOVAL OF MARKETING MATERIAL. Buyer acknowledges that marketing material used by the seller and the seller's broker (e.g.: videos, photos, etc.) may be difficult, if not impossible, to remove from syndicators and the Internet and releases Broker from any liability for Broker's inability to remove the information.

17. NONDISCRIMINATION. The parties agree not to discriminate unlawfully against any prospective seller because of their inclusion in a "protected class" as defined by federal, state or local law. "Protected classes" include, but are not limited to, race,

creed, color, sex, sexual orientation, gender identity, marital status, familial status, physical or mental disability, handicap, religion, national origin, or ancestry of such person.

18. RECOMMENDATION OF LEGAL AND TAX COUNSEL. By signing this document, Buyer acknowledges that Broker has advised that this document has important legal consequences and has recommended consultation with legal and tax or other counsel before signing this Buyer Listing Contract.

19. MEDIATION. If a dispute arises relating to this Buyer Listing Contract, prior to or after closing, and is not resolved, the parties must first proceed in good faith to submit the matter to mediation. Mediation is a process in which the parties meet with an impartial person who helps to resolve the dispute informally and confidentially. Mediators cannot impose binding decisions. The parties to the dispute must agree, in writing, before any settlement is binding. The parties will jointly appoint an acceptable mediator and will share equally in the cost of such mediation. The mediation, unless otherwise agreed, will terminate in the event the entire dispute is not resolved within 30 calendar days of the date written notice requesting mediation is delivered by one party to the other at the other party's last known address.

20. ATTORNEY FEES. In the event of any arbitration or litigation relating to this Buyer Listing Contract, the arbitrator or court must award to the prevailing party all reasonable costs and expenses, including attorney and legal fees.

21. ADDITIONAL PROVISIONS. (The following additional provisions have not been approved by the Colorado Real Estate Commission.)

None

22. ATTACHMENTS. The following are a part of this Buyer Listing Contract:

Colorado Real Estate Commission Form DD25-05-09 (Definitions of Working Relationships)

23. NOTICE, DELIVERY AND CHOICE OF LAW.

23.1. Physical Delivery and Notice. Any document or notice to Brokerage Firm or Buyer must be in writing, except as provided in § 23.2 and is effective when physically received by such party, or any individual named in this Buyer Listing Contract to receive documents or notices for such party.

23.2. Electronic Notice. As an alternative to physical delivery, any notice, may be delivered in electronic form to Brokerage Firm or Buyer, or any individual named in this Buyer Listing Contract to receive documents or notices for such party at the electronic address of the recipient by facsimile, email or N/A.

23.3. Electronic Delivery. Electronic Delivery of documents and notice may be delivered by: (1) email at the email address of the recipient, (2) a link or access to a website or server provided the recipient receives the information necessary to access the documents, or (3) facsimile at the facsimile number (Fax No.) of the recipient.

23.4. Choice of Law. This Buyer Listing Contract and all disputes arising hereunder are governed by and construed in accordance with the laws of the State of Colorado that would be applicable to Colorado residents who sign a contract in Colorado for real property located in Colorado.

24. MODIFICATION OF THIS CONTRACT. No subsequent modification of any of the terms of this Buyer Listing Contract is valid, binding upon the parties, or enforceable unless in writing and signed by the parties.

25. COUNTERPARTS. This Buyer Listing Contract may be executed by each of the parties, separately, and when so executed by all the parties, such copies taken together are deemed to be a full and complete contract between the parties.

26. ENTIRE AGREEMENT. This agreement constitutes the entire contract between the parties and any prior agreements, whether oral or written, have been merged and integrated into this Buyer Listing Contract.

27. COPY OF CONTRACT. Buyer acknowledges receipt of a copy of this Buyer Listing Contract signed by Broker, including all attachments.

28. MEGAN'S LAW. If the presence of a registered sex offender is a matter of concern to Buyer, Buyer understands that Buyer must contact local law enforcement officials regarding obtaining such information.

Brokerage Firm authorizes Broker to execute this Buyer Listing Contract on behalf of Brokerage Firm.

Buyer: City of Louisville, Colorado

_____
Buyer's Signature Date

_____
Street Address

_____
City, State, Zip

_____
Phone No.

_____
Fax No.

_____
Email Address

_____
Buyer's Signature Date

_____
Street Address

_____
City, State, Zip

_____
Phone No.

_____
Fax No.

_____
Email Address

Brokerage Firm: HydroSource, Inc.

Gregg Campbell 12/07/2022
Broker's Signature Date

3570 E. 12th Avenue, Suite 210
Brokerage Firm Street Address

Denver, Colorado 80206
Brokerage Firm City, State, Zip

(303) 995-8897
Broker Phone No.

_____
Broker Fax No.

Gregg@hydrosource.net
Broker Email Address

SUBJECT: **APPROVAL OF MEETING SCHEDULE CHANGES FOR JANUARY 2023**

DATE: **DECEMBER 20, 2022**

PRESENTED BY: **MEREDYTH MUTH, CITY CLERK**

SUMMARY:
Staff recommends the following changes to the January meeting schedule to accommodate special meetings and finalize the work plan while still having to the two requisite regular meetings in January.

- January 10 – Make a Regular Meeting
- January 17 – Make a Special Meeting (Work Plan)
- January 24 – Make a Special Meeting (Parks & Open Space Items)
- January 31 – Make a Special Meeting (Interviews of Ward 3 Applicants)

FISCAL IMPACT:
None

RECOMMENDATION:
Approve meeting schedule.

ATTACHMENT(S):
None

SUBJECT: **APPROVAL FOR PURCHASE OF ADDITIONAL SNOW REMOVAL DEICING MATERIALS**

DATE: **DECEMBER 20, 2022**

PRESENTED BY: **KURT KOWAR, P.E., PUBLIC WORKS DIRECTOR**

SUMMARY:
The Operations Division is recommending an additional $35,000 in funds be added to the 2022 Deicing Materials budget in order to continue providing safe roadways during snowstorm events. The City purchases deicer from various supplier's dependent on material availability.

Deicer is a key component of snow removal operations on major roads, arterial roads, collector roads, and problem spots.

FISCAL IMPACT:
The City's preferred vendor, Compass Mineral, is on a per-ton delivered price basis for $89.25/ton. Other vendors can cost up to $120/ton and may be utilized when material shortages occur from less costly vendors.

The Operations Division requested a change order for an additional $20,000 to our PO for Complex Chloride (Qwiksalt) on April 05, 2022, bringing the 2022 budget to $95,000.

The Operations Division is requesting a budget amendment for an additional $35,000 for deicing materials. The total fiscal impact for 2022 will be $130,000.

Original Budget	$75,000
1st Change Order	$20,000
2nd Change Order	$35,000
Total Fiscal Impact	$130,000

PROGRAM/SUB-PROGRAM IMPACT:
Safe traveling conditions for pedestrians and motorists; cost-effective snow and ice control services; assist Police, Fire, and Emergency Medical Services in fulfilling their duties; safe passable streets, school bus routes, and hard surface trails; safe access to City facilities; and snow cleared within 24 hours from sidewalks that are the City's responsibility.

A safe well-maintained, effective and efficient multi-modal transportation system at a reasonable cost.

RECOMMENDATION:
Approval of a budget amendment in the amount of $35,000 for additional funds for deicing in the 2022 budget.

ATTACHMENTS:
None.

STRATEGIC PLAN IMPACT:

☒	**Financial Stewardship & Asset Management**	☒	**Reliable Core Services**
☒	**Vibrant Economic Climate**	☐	**Quality Programs & Amenities**
☐	**Engaged Community**	☐	**Healthy Workforce**
☐	**Supportive Technology**	☐	**Collaborative Regional Partner**

City of Louisville
COLORADO • SINCE 1878

CITY COUNCIL COMMUNICATION
AGENDA ITEM 7A

SUBJECT: **612 JEFFERSON AVENUE REQUEST FOR LANDMARK AND HISTORIC PRESERVATION GRANT**

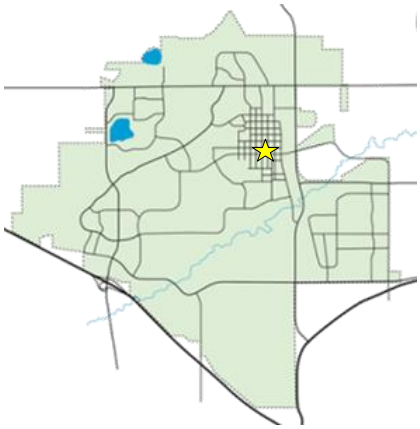
RESOLUTION NO. 51, SERIES 2022– A RESOLUTION APPROVING THE LANDMARK DESIGNATION FOR 612 JEFFERSON AVENUE, THE LECOMTE-HICKS HOUSE

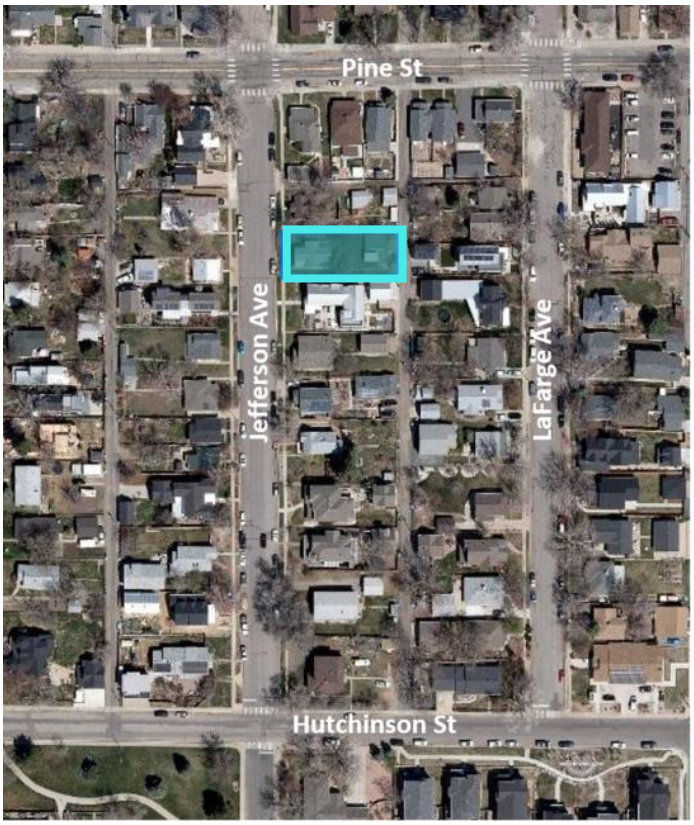
RESOLUTION NO. 52, SERIES 2022 – A RESOLUTION APPROVING A PRESERVATION AND RESTORATION GRANT FOR THE LECOMTE-HICKS HOUSE AT 612 JEFFERSON AVENUE

DATE: **DECEMBER 20, 2022**

PRESENTED BY: **AMELIA BRACKETT HOGSTAD, HISTORIC PRESERVATION PLANNER**

LOCATION:





REQUEST:
The applicant requests the following:
Landmark Designation: Landmark designation for 612 Jefferson Avenue, to be known as the LeComte-Hicks House, and accompanying $5,000 Landmark Bonus.

Grant Request: A Historic Preservation Fund matching grant of $100,875 for preservation, rehabilitation and restoration work on the structure. This the first grant request for the property.

HISTORICAL BACKGROUND:
Information from Bridget Bacon, Louisville Historical Museum

Boulder County gives 1900 as the year of construction for this property. Although the dates given by Boulder County have sometimes been found to be in error with respect to historic buildings in Louisville, for this particular house there was no other evidence found that could help prove or disprove this date.

August LeComte and his family may have purchased the house and started living here before 1905. The family was made up of August LeComte Sr. (1859- 1923) and Louisa Helart LeComte (1859-1912); their children, August Jr., Florence, Leah, Victor; and Louisa's mother. August, Louisa, August Jr., and Louisa's mother had all been born in France and came to the US in 1887 or 1888. August LeComte Jr. was born in 1886 and died in 1951.

According to the 1916 directory, August LeComte Sr. and August LeComte Jr. were both living at this house, which then had the address of 121 Jefferson. Father and son worked as coal miners in Louisville, and August LeComte Sr. also worked as a carpenter. A family history of the LeComte family in the files of the Louisville Historical Museum shows that August LeComte Sr. was conscripted into the French Territorial Army and he served from 1879 to 1886. His hometown was Bethune in the Pas de Calais province in northwestern France. Louisa Helart was his wife; this is just one of several connections between the LeComte and Helart families, which were also closely related to the Warembourg family of Louisville.

In 1920, August LeComte sold the house to Monroe Hicks. The house would be associated with the Hicks family for many decades to come. Monroe Hicks (1882-1952) married Beatrice Thirlaway (1887-1983) of the English Thirlaway family of Louisville in 1904. Beatrice was also related to John and Emma Barker who lived nearby at 801 Pine Street (5BL8023) in Jefferson Place. Their only child, John Hicks (1905-1998), married Bessie Truitt (1904-2000) in 1930.

Monroe Hicks and his son, John, primarily worked as coal miners in the Louisville area, according to their obituaries. Bessie Hicks worked for Remington-Kaiser during World

War II. She also worked as a server at the Blue Parrot Restaurant in Louisville at 640 Main (5BL8037).



1948 Boulder County Assessor's Card



Streetviews of southwest and northwest elevations, 2021 photos

ARCHITECTURAL INTEGRITY:
612 Jefferson Avenue is a simple wood frame cross gable with no definitive style. Changes to the exterior over time have made it appear similar to other examples of a modest minimal ranch, but the subject property was built much earlier than that period. It has asymmetrical massing, a one-story square plan, a low pitched roof, a variety of window types and a shallow front porch at the entrance. It has a concrete stoop and one concrete step up from the sidewalk.

The porch is covered by a shed roof of light green corrugated fiberglass on black wrought iron posts. The entrance door faces west. Windows are non-historic white aluminum sliders with aluminum storm/screen sash, with green fiberglass curved-front awnings on clear aluminum frames. The southeast corner of the house is an enclosed original porch. It has a low-slope roof covered with gray asphalt roll roofing.

The southeast porch was enclosed between 1948 and 1976. Windows were replaced in modified openings in 1965 and the southwest porch roof was constructed and siding was replaced in 1976, according to a 1998 Colorado Cultural Resource Survey.

The property also has three accessory structures to the rear of the property: a garage, a shed, and a carport. The garage was built sometime in 1948-1976 and the carport was built in 1983. The age of the shed is unknown. The accessory structures are not believed to have social or architectural significance.



Primary Changes Occurring Over Time:

Original house (RED):	1900
Northeast porch (BLUE):	Pre-1948
Northeast porch enclosed:	Pre-1948
Southeast porch (GREEN):	Pre-1948
Southeast porch enclosed:	1948 – 1976
Southwest porch constructed (ORANGE):	1948 – 1976
Garage constructed:	1948 – 1976
Windows replaced / modified:	1965
East patio constructed:	1975
East patio demolished	1976 – 1998
Aluminum siding:	1976
Carport constructed:	1983
New asphalt roof	2019
Shed constructed:	Unknown

Figure 1. Excerpt from HSA showing changes over time to the one-story principal structure.

HISTORICAL SIGNIFICANCE ANALYSIS AND CRITERIA FOR LISTING AS LOCAL LANDMARK:

In order to receive a City Landmark designation, landmarks must be at least 50 years old and meet one or more of the criteria for architectural, social or geographic/environmental significance as described in Louisville Municipal Code (LMC) Section 15.36.050(A).

Staff analysis of the criteria is as follows:

Sec. 15.36.050. - Criteria for Designation

Criteria	Meets Criteria?	Evaluation
A. Landmarks must be at least 50 years old and meet one or more of the criteria for architectural, social or geographic/environmental significance as described in this chapter.	**Yes**	The principal structure at 612 Jefferson Avenue was constructed in 1900 making it 121 years old.
1. a. Architectural. ***1) Exemplifies specific elements of an architectural style or period.*** *2) Example of the work of an architect or builder who is recognized for expertise nationally, statewide, regionally, or locally.* *3) Demonstrates superior craftsmanship or high artistic value.* *4) Represents an innovation in construction, materials or design.* *5) Style particularly associated with the Louisville area.* *6) Represents a built environment of a group of people in an era of history that is culturally significant to Louisville.* *7) Pattern or grouping of elements representing at least one of the above criteria.* *8) Significant historic remodel.*	**Yes**	This house is associated with the historic development of Louisville as one of the early homes in Louisville's first residential subdivision, Jefferson Place. Although Jefferson Place was platted in 1880, few homes were actually built there before 1900.
1. b. Social. *1) Site of historic event that had an effect upon society.* ***2) Exemplifies cultural, political, economic or social heritage of the community.***	**Yes**	The property has a long association with two coal mining families, the LeComte and Hicks families.

3) Association with a notable person or the work of a notable person.		
1. c. Geographic/environmental. ***1) Enhances sense of identity of the community.*** *2) An established and familiar natural setting or visual feature that is culturally significant to the history of Louisville.*	**Yes**	The small scale of the house and its historic location help to create a sense of identity.
3. All properties will be evaluated for physical integrity and shall meet one or more of the following criteria: ***a. Shows character, interest or value as part of the development, heritage or cultural characteristics of the community, region, state, or nation.*** ***b. Retains original design features, materials and/or character.*** ***c. Remains in its original location, has the same historic context after having been moved, or was moved more than 50 years ago.*** ***d. Has been accurately reconstructed or restored based on historic documentation.***	**Yes**	The structure remains in its original location and has not been moved. The property has integrity of location, setting, workmanship, feeling and association. Integrity of materials is currently compromised by replacement siding. Integrity of design is compromised by modified window openings. The enclosure of the rear southeast porch also compromises integrity of design, but to a lesser degree since this corner is not visible from the street. If the restoration work in the Alteration Certificate Request were approved and completed, additional architectural elements would be reconstructed based on historical documentation.

GRANT REQUEST:

The applicant is requesting approval of a Preservation and Restoration Grant for rehabilitation and restoration work on the structure at 612 Jefferson Avenue. The total grant request is $100,875 and includes a request for an “extraordinary circumstances” grant above the maximum grant allowance. This grant would be in addition to the $5,000 signing bonus for landmarking the structure and the $4,000 grant for the Historic Structure Assessment previously approved for the property.

A Historic Structure Assessment was previously done for the property, completed by DAJ Design and paid for by the Historic Preservation Fund. The assessment (attached) makes several recommendations including: foundation restoration and replacement; window, door, and trim restoration; front porch demolition; and siding restoration. The proposed total cost for all of the eligible work on the historic structure is $342,450.

COST ESTIMATE OF PROPOSED WORK: $342,450

MATCHING GRANT REQUEST: $100,875
Matching grant maximum under Section 8: $40,000
Additional matching grants available under Section 12.c.

Grants:
Under Resolution No. 17, Series 2019, residential applicants are eligible for a $5,000 unmatched incentive grant as a Landmark bonus. Owners of a landmarked property will be eligible for this grant following the signing of the Landmark and grant agreements. The remaining $40,000 grant shall be conditioned based on the applicant matching one hundred percent of the amount for approved work. Approved work must fall under the categories of preservation, rehabilitation, and restoration.

> **Preservation** *is the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property as they now exist. Approved work focuses upon the repair of exterior historic materials and features rather than extensive replacement and new construction.*
>
> **Rehabilitation** *is the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values. Rehabilitation acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate.*
>
> **Restoration** *is the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time. Approved work focuses on exterior work and includes the removal of features from other periods in its history and reconstruction of missing features from the restoration period.*

In addition, Section 12.c of Resolution No. 17, Series 2019 allows for the exceeding of grant limitations subject to the following criteria:

> *These grant limitations described above may be exceeded upon recommendation of the Commission and approval by City Council upon a showing of extraordinary circumstances relating to building size, condition, architectural details, or other unique condition compared to similar Louisville properties. Any grant exceeding the above limitations shall be conditioned on the applicant matching at least one hundred percent (100%) of the amount of the*

grant with expenditures or an equivalent value of approved in-kind services that are integral to the project that is deemed eligible for a grant from the HPF.

Staff reviewed the grant request by evaluating whether each request qualified for grant funding as either preservation, rehabilitation, or restoration. Staff also reviewed requests above the $40,000 matching grant under the extraordinary circumstances language provided above. Findings are summarized in the following tables.

Table 1. Summary of staff analysis of qualifying expenses under Reso. 17, Series 2019.

Requests	Preservation, Restoration, or Rehabilitation?	Extraordinary circumstances relating to building size, condition, architectural details, or other unique condition?
Asbestos Abatement - Interior	Rehabilitation	Condition
Asbestos Abatement - Exterior	Restoration	Architectural details
Demolition	Restoration	Architectural details
Site grading and drainage	Rehabilitation	-
Foundation	Rehabilitation	Condition
Framing	Rehabilitation	-
Envelope - Exterior Walls	Restoration	Architectural details & condition
Windows & Doors	Restoration	Architectural details & condition
Insulation & Drywall	Rehabilitation	Condition

Table 2. Staff analysis of extraordinary circumstances requests.	
Requests	**Extraordinary circumstances relating to building size, condition, architectural details, or other unique condition?**
Asbestos Abatement - Interior	The poor **condition** of the interior of the structure makes it uninhabitable as it current exists and requires work on all interior surfaces and therefore requires interior asbestos abatement beyond the typical project.
Asbestos Abatement - Exterior	The asbestos abatement of the exterior would allow the exposure of **architectural details** including window and door size, window and door trim, and siding to be observed for the exterior restoration projects and to make the restoration of the windows, doors, and siding possible by removal of the existing stucco.
Demolition	The Alteration Certificate would necessitate demolition of non-historic elements to restore the historic **architectural details** proposed on three out of four sides of the structure.
Foundation	The deteriorated **condition** of the foundation was noted in the HSA and the Structural Repair Report.
Envelope - Exterior Walls	The proposal includes restoration of exterior **architectural details** and the **condition** of the remaining aspects of those details necessitates full replacement, according to the applicant after completing exploratory demolition on parts of the existing house.
Windows & Doors	Replacement of existing windows and doors would allow replacements that match the **architectural details** shown in historic photographs. The **condition** of many of the doors and windows also necessitates replacement according to the HAS.
Insulation & Drywall	Due to the **condition** of the existing house the entire drywall and insulation needs to be repaired and replaced, according to the applicant.

The applicant requests a matching grant amount of $40,000 be considered under Resolution No. 17, Series 2019, Section 8. The Resolution allows for grants up to the amount of $40,000 "*conditioned based on the applicant matching at least one hundred percent (100%) of the amount of the grant*." The applicant also requests an additional matching grant of $60,875 to be considered under Section 12.c of that same resolution. The total grant request is $100, 875.

HISTORIC PRESERVATION COMMISSION ACTION:

The Historic Preservation Commission (HPC) held a public hearing on the application on November 7, 2022. The HPC voted to recommend approval of both the local landmark designation and the Historic Preservation Fund grant request. In addition, the HPC approved an alternation certificate for the restoration work associated with the grant request. The HPC determined the rehabilitation work did not affect the architectural integrity and qualified for matching grant funds.

PUBLIC COMMENT:
Staff has not received any public comments regarding the request.

FISCAL IMPACT:
Approval allows for a total grant of up to $105,875 from the Historic Preservation Fund: a $5,000 landmark incentive grant (unmatched), and a $100,875 matching grant.

PROGRAM/SUB-PROGRAM IMPACT:
The application meets the Community Design program goals and sub-program objectives by providing incentives to preserve the historic character of Old Town and to encourage the promotion and preservation of Louisville's history and cultural heritage.

RECOMMENDATION:
Staff recommends approval of Resolution No. 51, Series 2022 and Resolution No. 52, Series 2022, approval the local landmark designation for 612 Jefferson Avenue and naming the property the LeComte-Hicks House, and approving the Historic Preservation Grant request of $100,875.

ATTACHMENTS:
1. Resolution No. 51, Series 2022
2. Resolution No. 52, Series 2022
3. Application Materials
4. Colorado Cultural Resource Survey Architectural Inventory Form
5. Historic Structure Assessment
6. Historic Preservation Commission Resolution No. 1, Series 2022
7. Historic Preservation Commission Resolution No. 3, Series 2022
8. Historic Preservation Commission Minutes, November 7, 2022
9. Presentation

STRATEGIC PLAN IMPACT:

☐	**Financial Stewardship & Asset Management**	☐	**Reliable Core Services**
☐	**Vibrant Economic Climate**	☒	**Quality Programs & Amenities**
☒	**Engaged Community**	☐	**Healthy Workforce**
☐	**Supportive Technology**	☐	**Collaborative Regional Partner**

RESOLUTION NO. 51
SERIES 2022

A RESOLUTION APPROVING THE LANDMARK DESIGNATION FOR 612 JEFFERSON AVENUE, THE LECOMTE-HICKS HOUSE

WHEREAS, there has been submitted to the City Council an application requesting a landmark eligibility determination for a historical residential property located at 612 Jefferson Avenue, on property legally described as Lots 14-15, Block 7, Jefferson Place, City of Louisville, State of Colorado;

WHEREAS, City staff and the Louisville Historic Preservation Commission have reviewed the application and found it to be in compliance with Chapter 15.36 of the Louisville Municipal Code; and

WHEREAS, the Louisville Historic Preservation Commission held a properly noticed public hearing on the proposed landmark application and has forwarded to the City Council a recommendation of approval; and

WHEREAS, the City Council has duly considered the proposed landmark application and the Commission's recommendation and report, and has held a properly noticed public hearing on the application; and

WHEREAS, the LeComte-Hicks House has social significance because it exemplifies the cultural, political, economic, or social heritage of the community;

WHEREAS, the LeComte-Hicks House has architectural significance due to its physical integrity and association with the historic era in which it was built or altered; and

WHEREAS, the City Council finds that these and other characteristics specific to the individual structure are of both architectural and social significance as described in Section 15.36.050 (A) of the Louisville Municipal Code and justify the approval of the historic landmark application.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

1. The proposed historic landmark application for the LeComte-Hicks House is hereby approved and is hereby designated a historic landmark to be preserved as such and is eligible for a $5,000 landmark incentive grant.

PASSED AND ADOPTED this 20th day of December, 2022.

By: _____
Ashley Stolzmann, Mayor

Attest: _____
Meredyth Muth, City Clerk

RESOLUTION NO. 52
SERIES 2022

A RESOLUTION APPROVING A PRESERVATION AND RESTORATION GRANT FOR THE LECOMTE-HICKS HOUSE AT 612 JEFFERSON AVENUE

WHEREAS, there has been submitted to the Louisville Historic Preservation Commission (HPC) an application requesting a preservation and restoration grant for the historical residential property located at 612 Jefferson Avenue, on property legally described as Lots 14-15, Block 7, Jefferson Place, City of Louisville, State of Colorado;

WHEREAS, City staff and the HPC have reviewed the application and found it to be in compliance with Chapter 15.36.120 of the Louisville Municipal Code; and

WHEREAS, the HPC held a properly noticed public hearing on the proposed grant application and has forwarded to the City Council a recommendation of approval; and

WHEREAS, the City Council has duly considered the proposed grant application and the Commission's recommendation and report, and has held a properly noticed public hearing on the application; and

WHEREAS, the City Council finds that the proposed improvements will assist in the preservation of the LeComte-Hicks House, a local historic landmark.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby approves the Preservation and Restoration Grant for work at the LeComte-Hicks House, subject to the following:

1. Approved preservation items are those in the proposed scope of work to City Council totaling $100,875.
2. There is approved a total grant amount of $100,875.

PASSED AND ADOPTED this 20th day of December, 2022.

By: _____
Ashley Stolzmann, Mayor

Attest: _____
Meredyth Muth, City Clerk

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October 5, 2022

Amelia Brackett-Hogstad
Historic Preservation Planner
City of Louisville
749 Main Street
Louisville, CO 80027

RE: 612 JEFFERSON HISTORIC PRESERVATION APPLICATION

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LOUISVILLE, CO 80027
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Dear Ms. Brackett-Hogstad,

Please find our historic preservation application for 612 Jefferson Ave. Following the Historic Structure Assessment, conducted by DAJ Design, the owners of 612 Jefferson have elected to preserve the home at 612 Jefferson in as close to its known original condition as possible with minor modifications to the rear of the home. Below are the objectives for our application:

Objectives

- Requesting Landmark status for the house.
- Requesting grant funding for historic preservation
- Requesting an alteration certificate
    - New front porch
    - New awning over front door
    - Alterations to the east facing windows and rear entry door at the east side of the house
    - New deck at the rear of the house

In the process of learning more about the home, DAJDesign uncovered photos from the previous owner of the home dating back to the 1940's showing the home in what is believed to be an original condition. The photos exhibited some unique trim and ornamentation details and wood siding type that was new to our investigations. The image included on this page shows triangular shaped head trim over the windows and doors, and shows gable ends with an additional set of transom windows.



This is a unique historic home for Louisville in that the entire footprint of the home shows the original concrete foundation. There are indications from our investigations of the floor framing where certain parts of the home may have been converted from a porch to an enclosed part of the house, but all existing parts of the house are supported by the original foundation.

Also unique is the presence of a double-bevel tongue-and-grove wood siding. Typically Louisville siding materials were a clapboard, lap or Dutch-cove siding type. Unfortunately, the entire home's siding was covered with an asbestos-containing stucco coating, which will need to be removed or covered by new historically accurate siding matching the original. Upon investigation of the existing wood siding in select locations of the house, we plan to replace the historic wood siding throughout, regardless of strategy to deal with the existing stucco.

Below is an outline of the scope of work for the historic preservation portion of the project. Included in this outline are descriptions illustrating the typical conditions found in other Louisville historic preservation projects with budget costs associated with those scopes of work. The average budget costs are derived from our extensive experience in conducting local historic preservation work.

Proposed Work for Grant Application

- Asbestos Abatement - Interior
  - all interior surfaces, including wall cavity material
  - Typically asbestos abatement can be for both interior and exterior materials with partial removal for specific items and is approximately budgeted at $12,000 on average; this project includes entire removal of interior surfaces and wall & attic cavity material which is an unusual
- Asbestos Abatement - Exterior
  - all exterior stucco coating over historic wood siding.
- Demolition
  - removal and disposal of non-historic windows and doors
  - removal and disposal of metal siding & trim
  - removal and disposal of front porch and front porch metal awning
  - Demolition is required on every project and typically includes select areas of material removal, and is approximately budgeted at $5,000 on average.
- Site grading and drainage
  - provide adequate slope away from all sides of the house and provide adequate drainage from gutter & downspout system
  - grading at front of house along Jefferson will require a short retaining wall and landscape elements to provide adequate drainage
  - site grading is typically required on every project and usually involves manipulation of existing grades so that water drains away from the entire perimeter of the house at 6" per 10'-0"; this scope of work is approximately budgeted at $6,000 on average.
- Foundation
  - repair and replace sections of historic foundation
  - Foundation work of various types are typically performed on all historic preservation projects, and is approximately budgeted at $12,000 on average including tuck-pointing of stone or small sections of concrete repair; this home requires ⅓ of the foundation to be replaced in its entirety, and all of the foundation will need to be repaired and have the addition of a sister foundation; in order to replace the foundation sections the home will need to be suspended on a temporary shoring system;.
- Framing
  - providing adequate support to all historic openings in framed walls, roof support, floor repair and support
  - wood framing repairs and additional support work of various types are typically performed on all historic preservation projects, and is approximately budgeted at $8,000 on average
- Envelope - Exterior Walls
  - replace all historic wood siding with new historically accurate siding
  - replace fascia, soffit, and trim and ornamentation with historically accurate items
  - siding, trim, and ornamentation repair, restoration, and replacement are typically performed on historic preservation projects in varying degrees, and is approximately budgeted at $10,000 on average for repairs made to an entire house of equivalent size; due to the existing conditions of the original siding all materials will need to be

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replaced; the proposed replacement siding material matches the historic siding profile but is manufactured from cementitious content greatly increasing the siding material's durability.

- Windows & Doors
  - re-install historically accurate windows and exterior doors in existing wall rough-openings
  - window & door repair or replacement is typically performed on historic preservation projects, and is approximately budgeted at $27,000 on average
- Mechanical, Electrical, Plumbing (MEP)
  - all new mechanical system
  - all new electrical service panel, wiring, and devices
  - all new plumbing including domestic water distribution, waste, and hot water heating.
  - while it is not unusual to replace entire MEP systems on historic preservation home projects, it is unusual to be required to replace all three M, E, & P in one project.
- Insulation & Drywall
  - insulate entire house to current building code; install drywall throughout interior walls
  - it is not typical to remove all interior and wall cavity materials in historic preservation project; the insulation is required to meet current building code approvals; the drywall is required as fire-resistant barrier over blown-in polyurethane insulation and to provide lateral structural support for the structure (structural engineers rely on drywall with specific screw patterns in their structural calculations)

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The below table outlines the 612 Jefferson project costs delineating the cost differences between total budget costs, typical grant fund requests per item, proposed qualifying costs under the "extraordinary circumstances" provision per item, and owner matching funds per item:

Proposed Budgets Qualifying for Grant Funding

Qualifying Items	Total Budget	Fund Request for Typical Items	Qualifying for Extraordinary Circumstances	Match
Asbestos Abatement - Interior	$22,000	$6,000	$5,000	$11,000
Asbestos Abatement - Exterior	$17,000	$0	$8,500	$8,500
Demolition	$10,750	$2,500	$2,875	$5,375
Site grading and drainage	$18,000	$3,000	$0	$15,000
Foundation	$42,000	$6,000	$15,000	$21,000
Framing	$52,200	$4,000		$48,200
Envelope - Exterior Walls	$31,000	$5,000	$10,500	$15,500
Windows & Doors	$35,000	$13,500	$0	$21,500

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Mechanical, Electrical, Plumbing	$76,500	$0	$0	$76,500
Insulation & Drywall	$38,000	$0	$19,000	$19,000
Non-Historic Preservation Items	$150,250	$0	$0	$150,250
Total Proposed Work	$492,700	$40,000	$60,875	$ 391,825

In summary, the requested grant amount is $100,875 between funding for typical items and qualifying extraordinary circumstances. Please contact me if you have any questions.

Warm regards,

Andy Johnson, AIA

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City of Louisville

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Historic Preservation Fund

Grant and Loan Application and Information

(Revised June 2019)

City of Louisville
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Guidelines

The City of Louisville's Historic Preservation Fund (HPF) and is intended to help retain the character of Historic Old Town Louisville by promoting the preservation and rehabilitation of historic resources.

Staff contact

Felicity Selvoski, Historic Preservation Planner
749 Main St.
Louisville, CO 80027
(303) 335-4594
fselvoski@louisvilleco.gov

Deadlines

There are no application deadlines, although the date of application will determine when the public hearing for a case can occur. Please reach out to staff if there is a specific date you are targeting. Applications will be considered as they are received, but are subject to the availability of funds.

Eligible Applicants

Any owner of a historic resource (at least 50 years old) or resource that helps to define the character of Historic Louisville is eligible to apply to the HPF. "Resources" include, but are not limited to, primary structures, accessory structures, outbuildings, fences, existing or historical landscaping, archaeological sites, and architectural elements of structures.

Owners of property in Historic Old Town Louisville which will experience new construction may also be awarded grants to preserve the character of Historic Old Town. The purpose of these incentives it to limit mass, scale, and number of stories, to preserve setbacks, to preserve pedestrian walkways between buildings, and to utilize materials typical of historic buildings, above mandatory requirements. For additional information on the requirements, please reach out to the Historic Preservation Planner.

Historic Structure Assessments

Prior to any structure being declared a landmark, the property will undergo a building assessment to develop a preservation plan and establish priorities for property maintenance. At a regular meeting, the Historic Preservation Commission will review the building history, application, and relevant information to determine whether there is probable cause to believe the building may be eligible for landmarking. If probable cause is found, the owner will be eligible for a building assessment grant in an amount up to $4,000 (residential properties) and $9,000 (commercial properties) to offset the cost of the assessment.

Landmarking Grants

In addition to the pre-landmarking grant for a structural assessment, landmarked residential properties are eligible for a $5,000 incentive grant and up to $40,000 in matching grant funds for preservation projects for a period of 36 months from when a property is declared a landmark. Commercial landmarked properties are eligible for a $50,000 incentive grant and up to $150,000 in matching grant funds for preservation projects for a period of 36 months from when a property is declared a landmark. For properties showing extraordinary circumstances relating to building size, condition, architectural details, or other unique condition compared to similar Louisville properties, the grant limitations may be exceeded. Please reach out to the Historic Preservation Planner for more information on the grant programs.

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Eligible Costs and Improvements:

Eligible costs include hard costs associated with the physical preservation of historic fabric or elements. Labor costs are eligible IF the work is to be done by someone other than the applicant/owner (whose labor can only be used for matching purposes with an acceptable written estimate). Example eligible improvements:

Repair and stabilization of historic materials:

- Siding
- Decorative woodwork and moulding
- Porch stairs and railing
- Cornices
- Masonry (such as chimney tuckpointing)
- Doors and Windows

Removal of non-historic materials, particularly those covering historic materials:

- Siding, trim and casing
- Porch enclosures
- Additions that negatively impact the historic integrity
- Repair/replacement to match historic materials

Energy upgrades:

- Repair and weather sealing of historic windows and doors
- Code required work

Reconstruction of missing elements or features:

(Based on documented evidence such as historic photographs and physical evidence)

- Porches and railings
- Trim and mouldings
- False-fronts

Ineligible Costs and Improvements:

- Redecorating or any purely cosmetic change that is not part of an overall rehabilitation
- Soft costs such as appraisals, interior design fees, legal, accounting and realtor fees, sales and marketing, permits, inspection fees, bids, insurance, project signs and phones, etc.
- Excavation, grading, paving, landscaping or site work such as improvements to paths or fences unless the feature is part of the landmark designation, except for correcting drainage problems that are damaging the historic resource
- Repairs to additions on non-historic portions of the property
- Reimbursement for owner/self labor (which can count only towards the matching costs)
- Interior improvements, unless required to meet current code
- Outbuildings which are not contributing structures to a landmarked site or district

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Application Review Process

Applications will be screened by Historic Preservation Commission (HPC) staff to verify project eligibility. If any additional information is required, staff will contact the applicant directly. The HPC will evaluate the applications in a public meeting at which the applicant will be allowed to make statements. The HPC will make a recommendation to City Council, and City Council will take final action on the application.

Project Review and Completion

Any required design review or building permits must be obtained before beginning work on the project. If a property has already been landmarked, in some circumstances an Alteration Certificate must be approved by the HPC. Any changes made during the building permit approval process may require additional review by the Historic Preservation Commission, depending on the extent of the changes.

Disbursement of Funds

In most cases, grants will take the form of reimbursement after work has been completed, inspected and approved as consistent with the approved grant application. In planning your project, you should arrange to have adequate funds on hand to pay the costs of the project. Incentives may be revoked if the conditions of grant approval are not met. Under some circumstances, incentives, particularly loans, may be paid prior to the beginning of a project or in installments as work progresses.

Grant/Loan Process Outline

1. Applicant meets with Preservation Planner to discuss the scope of work.
2. Applicant meets with contractors and receives quotes.
3. Applicant submits application and documentation to staff.
4. Staff will review the application for completeness and then schedule the meeting with the HPC. Staff will notifiy applicant of hearing date.
5. Public Notice Sign is posted on property by applicant advertising meeting date and neighbors within 500 feet are notified.
6. The HPC reviews the scope of work and quotes and makes a recommendation to City Council. The applicant must be present to answer questions.
7. Staff will schedule the City Council meeting. The applicant must be present to answer questions. City Council will make the final decision.
8. The grant agreement is signed by the applicant(s) and mayor. At this point, the applicant may apply for a building permit to begin the work outlined in grant agreement.
9. Inspections are completed by Building Department as required. Preservation Planner inspects work for sensitivity to historic structure
10. Applicant submits contractor invoices to staff as work is completed.
11. Staff reviews invoices for completeness and compares with invoice approved by HPC.
12. If approved, staff submits pay request to Finance Department. The check is cut to Applicant.
13. If denied, staff works with applicant to identify reasons for denial and methods of resolution.
14. Applicant to repeat steps 11 through 14 until project is complete.

Incentives from the Historic Preservation Fund may be considered taxable income and applicants may wish to consult with a tax professional.

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Historic Preservation Application

The following information must be provided to ensure adequate review of your proposal. Please type or print answers to each question. Please keep your responses brief but thorough. If you have any questions about the application or application process, please reach out to the Historic Preservation Planner.

TYPE(S) OF APPLICATION

- ☐ Probable Cause Hearing/Historic Structure Assessment
- ☑ Landmark Designation
- ☑ Historic Preservation Fund Grant
- ☐ Historic Preservation Fund Loan
- ☑ Landmark Alteration Certificate
- ☐ Demolition Review
- ☐ Other: _____

1. OWNER/APPLICANT INFORMATION

Owner or Organization

Name(s): Joe Jarriel & Trudy Neal

Mailing Address: 609 LaFarge Avenue, Louisville, CO 80027

Telephone: 303-378-3249

Email: trudyneal@me.com

Applicant/Contact Person (if different than owner)

Name: Andy Johnson

Company: DAJ Design

Mailing Address: 922A Main Street, Louisville, CO 80027

Telephone: 303-527-1100

Email: andy@dajdesign.com

2. PROPERTY INFORMATION

Address: 612 Jefferson Avenue

Legal Description: Lots 14-15, Block 7, Jefferson Place

Parcel Number: 157508435008 Year of construction (if known): Circa 1900

Landmark Name and Resolution (if applicable): NA

Primary Use of Property: Single-family Residential

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3. REQUEST SUMMARY

Request for Landmark status with the City of Louisville and request for historic preservation grant funding and approval of an alteration certificate to include a new front porch, a new awning over the front door, alterations to the doors and windows on the east (rear) side of the house, and a new deck at the east (rear) side of the house.

4. PROJECT DESCRIPTION (Please do not exceed space provided below.)

a. Provide a brief description of the proposed scope of work.

1. Requesting landmark status of the house.
2. Requesting Historic Preservation Grant Funding (see detailed breakdown)
3. Requesting Alteration Certificate to include:
   - a new front porch
   - a new awning over the front door
   - alterations to the windows and doors at the east (rear) side of the house
   - a new deck at the east (rear) side of the house

b. Describe how the work will be carried out and by whom. Include a description of elements to be rehabilitated or replaced and describe preservation work techniques that will be used.

The historic preservation work will be carried out by Buck Scarbrough, a general contractor licensed in Louisville. The scope of work performed by the GC will include historic house elements such as: existing foundation stabilization and partial replacement, new beams in the basement and crawlspace to support the existing floor joists, stabilization of the existing wall and roof framing, new siding to match the original siding, new ornamentation/trim/fascia/soffits to match the original, recreation of the original windows and doors in original locations, regrade around the existing house to ensure proper drainage.

c. Explain why the project needs historic preservation funds. Include a description of community support and/or community benefits, if any.

The overall cost to conduct historic preservation efforts is substantially greater than razing the entire house and rebuilding entirely new. Utilizing historic preservation funds allows the project to be financially feasible and allows the preservation work to occur. The overall community benefit is the preservation of our historic architectural heritage in Louisville with the restoration and preservation of an entire house. No additions to the house are proposed and the original footprint and volume of the house will be maintained. Minimal cosmetic alterations are necessary to the function of the house. However, the majority of the proposed changes are not apparent as viewed from the street.

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5. DESCRIPTION OF REHABILITATION *(Attach additional pages as necessary.)*

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
ASBESTOS ABATEMENT - INTERIOR: Non-historic items are present throughout including metal siding, windows & window awnings, and a front porch covering. Interior finishes including wall, floor, and ceiling surfaces, as well as MEP equipment contain asbestos, do not meet code, or are not in a working or liveable condition.	Proposal to remove non-historic items including: metal siding, window awnings, and front porch covering. Remove all interior wall, ceiling, and floor surfaces and abate for asbestos as required.

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
ASBESTOS ABATEMENT - EXTERIOR: The stucco siding is in poor condition and contains asbestos. Areas have been removed revealing the original wood siding beneath. Further removal of the stucco will reveal information on original window sizes and trim and reduce the overall bulk of the house, restoring the massing to resemble that of the original.	Proposal to remove the stucco siding from the entire house which will need to be abated for asbestos as required. The stucco siding could remain and have a new layer of siding applied on top. However, keeping the stucco siding will alter the overall massing of the house that will not match the original character.

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
DEMOLITION: The concrete front porch is not historic and is in poor condition. Additionally, concrete walks abut the foundation creating drainage issues threatening the foundation. Original window sizes are apparent, but have been filled in with new framing.	Proposal to remove the front porch and sidewalk abutting foundation. Proposal to remove the non-historic windows and infill framing to restore historic window sizes and locations. Proposal to remove portions of interior walls to meet code & maintain liveable space. Remove all mechanical, electrical, and plumbing equipment to meet code.

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
SITE GRADING & DRAINAGE: The west side of the site slopes towards the house from Jefferson Avenue. The grading in this location directs water towards the house foundation, compromising the structural integrity of the house. The remaining perimeter of the house is not graded in compliance with code and poses a threat to the integrity of the foundation.	Proposal to create positive drainage away from the house on all sides of the house at the minimum slope required by code. In order to create positive drainage on the west side of the house, a retaining wall with change in grade must be constructed to accommodate the height difference and water must be redirected around the house towards the alley.

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5. DESCRIPTION OF REHABILITATION *(Attach additional pages as necessary.)*

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
FOUNDATION: The existing foundation is poured concrete and is in fair to poor condition. The exterior face of the concrete is crumbling around the entire house. The east foundation wall, and a portion of the south and north foundation walls are in poor condition and are failing structurally.	Proposal to pour a 'sistered' concrete wall, 4-6" thick as prescribed by a structural engineer, on the exterior side of the foundation wall in order to protect and support the original foundation. Proposal to entirely replace the east and a portion of the south and north foundation walls with a new concrete foundation as prescribed by a structural engineer. Proposal to remove and replace the concrete walk adjacent to the foundation for foundation work and proper drainage.

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
FRAMING: The floor, wall, and roof framing are in fair condition but member sizing and spans do not meet current code. Areas of the subfloor have rotted away. The subfloor is in poor condition throughout the entire house.	Proposal to support the existing floor joists with new beams, columns, and pads as prescribed by a structural engineer. Proposal to repair or replace the subfloor. Proposal to support the existing ceiling joists and roof rafters with new beams, columns, and struts as prescribed by a structural engineer.

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
ENVELOPE - EXTERIOR WALLS: The original wood v-groove siding is found on the entire house. Sample areas were exposed and found to be in poor condition. Original trim sizes and locations are apparent in historic images.	Proposal to apply new v-groove siding that matches the original siding over the original house siding with a new weather barrier in order to meet code. Proposal to leave the original siding in place as it provides structural support and it would be labor intensive to remove. Proposal to add new trim to match the original sizes and locations.

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
WINDOWS & DOORS: The existing windows and doors are replacements that do not match the sizes or style from the period of significance. The operation and sealing of the windows and doors are in poor condition.	Proposal to replace all windows and doors with new units that match the styles and locations of the period of significance. Original sizes are apparent with the removal of interior and exterior finishes. Original styles can be determined from historic photographs.

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5. DESCRIPTION OF REHABILITATION *(Attach additional pages as necessary.)*

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
MECHANICAL, ELECTRICAL, PLUMBING: Mechanical, electrical, and plumbing (MEP) equipment is in poor condition and does not meet current code. The house is not habitable without improvements to all of these necessities.	Proposal to install new MEP equipment throughout the entire house in compliance with current codes.

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
INSULATION & DRYWALL: No insulation exists in the house attic, walls, or floors and is therefore in poor condition. No drywall exists on the house walls or ceiling and is therefore in poor condition.	Proposal to insulate the entire house in compliance with current codes. Proposal to add new drywall on all walls and ceilings in compliance with current codes and to satisfy structural wall capacity as prescribed by a structural engineer.

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:

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6. COST ESTIMATE OF PROPOSED WORK

*Please provide a budget that includes accurate estimated costs of your project. Include an **itemized breakdown** of work to be funded by the incentives and the work to be funded by the applicant. Include only eligible work elements. Use additional sheets as necessary.*

Type of Incentive: ■ GRANT ☐ LOAN ☐ BOTH

Feature	Proposed Work to be Funded	Fund Request	Match (M)	Total
A.	ASBESTOS ABATEMENT - INTERIOR	$ 11,000	$ 11,000	$ 22,000
B.	ASBESTOS ABATEMENT - EXTERIOR	$ 8,500	$ 8,500	$ 17,000
C.	DEMOLITION	$ 5,375	$ 5,375	$ 10,750
D.	SITE GRADING & DRAINAGE	$ 3,000	$ 15,000	$ 18,000
E.	FOUNDATION	$ 21,000	$ 21,000	$ 42,000
F.	FRAMING	$ 4,000	$ 48,200	$ 52,200
G.	ENVELOPE - EXTERIOR WALLS	$ 15,500	$ 15,500	$ 31,000
H.	WINDOWS & DOORS	$ 13,500	$ 21,500	$ 35,000
I.	MECHANICAL, ELECTRICAL, & PLUMBING	$ 0	$ 76,500	$ 76,500
J.	INSULATION & DRYWALL	$ 19,000	$ 19,000	$ 38,000
K.	NON-HISTORIC BUDGET ITEMS	$ 0	$ 150,250	$ 150,250
	Total Proposed Work	$ 100,875	$ 391,825	$ 492,700

For loan requests, indicate total loan request here:	$

If partial incentive funding were awarded, would you complete your project? ■ YES ☐ NO

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7. ADDITIONAL MATERIALS REQUIRED

The following items must be submitted along with this application:

- ☐ One set of photographs for each feature as described in Item 4 "Description of Rehabilitation". Digital is preferred.
- ☐ A construction bid if one has been completed for your project (recommended).
- ☐ Working or scaled drawings, spec sheets, or materials of the proposed work, if applicable to your project.

8. ASSURANCES

The Applicant hereby agrees and acknowledges that:

A. Funds received as a result of this application will be expended solely on described projects, and must be completed within established timelines.

B. Awards from the Historic Preservation Fund may differ in type and amount from those requested on an application.

C. Recipients must submit their project for any required design review by the Historic Preservation Commission and acquire any required building permits before work has started.

D. All work approved for grant funding must be completed even if only partially funded through this incentives program.

E. Unless the conditions of approval otherwise provide, disbursement of grant or rebate funds will occur after completion of the project.

F. The incentive funds may be considered taxable income and Applicant should consult a tax professional if he or she has questions.

G. If this has not already occurred, Applicant will submit an application to landmark the property to the Historic Preservation Commission. If landmarking is not possible for whatever reason, Applicant will enter into a preservation easement agreement with the City of Louisville. Any destruction or obscuring of the visibility of projects funded by this grant program may result in the City seeking reimbursement.

H. The Historic Preservation Fund was approved by the voters and City Council of Louisville for the purpose of retaining the city's historic character, so all work completed with these funds should remain visible to the public.

_____	08/26/2022
Signature of Applicant/Owner	Date
_____	_____
Signature of Applicant/Owner	Date

City of Louisville
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APPENDIX A:
HELPFUL TERMS & DEFINITIONS

BASIC PRESERVATION

The Concept of Significance

A building possessing architectural significance is one that represents the work of a noteworthy architect, possesses high artistic value or that well represents a type, period or method of construction. A historically significant property is one associated with significant persons, or with significant events or historical trends. It is generally recognized that a certain amount of time must pass before the historical significance of a property can be evaluated. The National Register, for example, requires that a property be at least 50 years old or have extraordinary importance before it may be considered. A property may be significant for one or more of the following reasons:

- Association with events that contributed to the broad patterns of history, the lives of significant people, or the understanding of Louisville's prehistory or history.
- Construction and design associated with distinctive characteristics of a building type, period, or construction method.
- An example of an architect or master craftsman or an expression of particularly high artistic values.
- Integrity of location, design, setting, materials, workmanship, feeling and association that form a district as defined by the National Register of Historic Places Guidelines.

The Concept of Integrity "Integrity" is the ability of a property to convey its character as it existed during its period of significance. To be considered historic, a property must not only be shown to have historic or architectural significance, but it also must retain a high degree of physical integrity. This is a composite of seven aspects or qualities, which in various combinations define integrity, location, design, setting, materials, workmanship, feeling and association. The more qualities present in a property, the higher its physical integrity. Ultimately the question of physical integrity is answered by whether or not the property retains a high percentage of original structure's identity for which it is significant.

The Period of Significance Each historic town has a *period of significance*, which is the time period during which the properties gained their architectural, historical or geographical importance. Louisville, for example, has a period of significance which spans approximately 75 years (1880- 1955). Throughout this period of significance, the City has been witness to a countless number of buildings and additions which have become an integral part of the district. Conversely, several structures have been built, or alterations have been made, after this period which may be considered for removal or replacement.

BUILDING RATING SYSTEM

Contributing: Those buildings that exist in comparatively "original" condition, or that have been appropriately restored, and clearly contribute to the historic significance of downtown. Preservation of the present condition is the primary goal for such buildings.

Contributing, with Qualifications: Those buildings that have original material which has been covered, or buildings that have experienced some alteration, but that still convey some sense of history. These buildings would more strongly contribute, however, if they were restored.

Supporting category
These are typically buildings that are newer than the period of historic significance and therefore do not contribute to our ability to interpret the history of Louisville. They do, however, express certain design characteristics that are compatible with the architectural character of the historic district. They are "good neighbors" to older buildings in the vicinity and therefore support the visual character of the district.

Non-contributing building category
These are buildings that have features that deviate from the character of the historic district and may impede our ability to interpret the history of the area. They are typically newer structures that introduce stylistic elements foreign to the character of Louisville. Some of these buildings may be fine examples of individual building design, if considered outside the context of the district, but they do not contribute to the historic interpretation of the area or to its visual character. The detracting visual character can negatively affect the nature of the historic area.

Non-contributing, with Qualifications: These are buildings that have had substantial alterations, and in their present conditions do not add to the historic character of the area. However, these buildings could, with substantial restoration effort, contribute to the downtown once more.

PRESERVATION APPROACHES

While every historic project is different, the Secretary of the Interior has outlined four basic approaches to responsible preservation practices. Determining which approach is most appropriate for any project requires considering a number of factors, including the building's historical significance and its existing physical condition. The four treatment approaches are:

- Preservation places a high premium on the retention of all historic fabric through conservation, maintenance and repair. It reflects a building's continuum over time, through successive occupancies, and the respectful changes and alterations that are made.
- Rehabilitation emphasizes the retention and repair of historic materials, but more latitude is provided for replacement because it is assumed the property is more deteriorated prior to work.
- Restoration focuses on the retention of materials from the most significant time in a property's history, while permitting the removal of materials from other periods.
- Reconstruction establishes limited opportunities to re-create a non-surviving site, landscape, building, structure, or object in all new materials.

The Secretary of the Interior's website outlines these approaches and suggests recommended techniques for a variety of common building materials and elements. An example of appropriate and inappropriate techniques for roofs is provided in the sidebars. Additional information is available from preservation staff and the Secretary's website at: www.cr.nps.gov/hps/tps/standguide/index.htm

THE SECRETARY OF THE INTERIOR'S STANDARDS

The Standards are neither technical nor prescriptive, but are intended to promote responsible preservation practices that help protect our Nation's irreplaceable cultural resources. For example, they cannot, in and of themselves, be used to make essential decisions about which features of the historic building should be saved and which can be changed. But once a treatment is selected, the Standards provide philosophical consistency to the work.

Glenn Frank Engineering
Engineering Structures that Endure

Structural Engineering Consultants
P.O. BOX 20708
Boulder, Colorado 80308
303.554.9591

August 17, 2022

Re: Residential Repair
612 Jefferson Ave.
Louisville, CO

DAJ Design and Homeowner:

We visited the address above on multiple occasions. The first occasion was to conduct an Historical Structural Assessment of the building on March 31, 2022. The 2nd and 3rd occasions were in June and August respectively. The 3rd visit was conducted once all finish materials were removed at the inside of the building.

The purpose of the 2nd and 3rd visits were to further assess the structure for damage and code compliance. The purpose of this report is to provide structural recommendations for repairing existing damaged structure and to reinforce existing structure to meet the minimum requirements of the IRC code. See below for a description of the different structural elements that are recommended for repair or replacement. In addition, refer to relined plans and structural sections for further information.

Summary of Recommended Repair:

1. Foundation:
    a. The foundation along most sides of the building is in satisfactory to poor condition. Often the foundation doesn't have proper frost protection and appears to have been damaged at the outside face due to water infiltration. Except where we have recommended a complete removal and replacement, have not proposed addressing the lack of frost protection at the existing foundations. This should be considered and discussed with the owner, prior to placement of new finish materials. Frost heave could result in future foundation movement. Contact our office if further repair is desired to mitigate this risk.
    b. Repair along the outside face of the wall is required to protect the existing foundation from future damage. See the structural section provided.
    c. It is our opinion that several areas of the existing foundation should be removed and replaced. Please see the attached Foundation/Main Floor Plan and Structural Sections for these locations and for construction.
        i. The portion of the foundation below the existing south entrance area/room should be removed and replaced. It is performing poorly, broken and crumbling and continued use will likely result in significant damage to the wood structure above. This includes the south foundation wall and the crawl space wall along the east (southeast portion of the building).

Structural Engineering Consultants
P.O. BOX 20708
Boulder, Colorado 80308
303.554.9591

ii. The crawl space walls at the northeast of the building should also be removed and replaced. The foundations at these locations have sustained significant water damage from the exterior and were further damaged at some point when a new sewer line was installed.
iii. The east basement wall and the interior retaining walls should be replaced due to improper/inadequate construction. Based on our observation, they do not appear to have been properly built to support the loading from above or to retain the crawlspace soil.
iv. New footings have also been specified in the crawl space to properly support new beams and posts from above and the existing floor framing above. The purpose of these footings is to properly support structure to meet minimum IRC code requirements. These footings have been designed with an allowable bearing pressure of the 1500 psf. This bearing pressure matches similar bearing pressures used in the buildings directly to the east and west of this building. It is also a common bearing pressure used for spread-footing buildings in the Louisville area.

2. Main Floor Framing:
    a. The main floor framing was in poor to adequate condition. Floor framing consisted of 2x6 joists @ 24" o.c. spacing spanning approximately 14'-0" between existing beam supports. Existing beam supports were also in poor condition. To reduce floor deflection between existing beams, the previous owner/owners had installed wood supports below most joists at mid-span. These supports were fit tight to existing crawl space grade without proper support below.
    b. In the Foundation/Main Floor Framing Plan, we have proposed installing new beam lines to replace the existing beams and at joist mid-span to reduce joist deflection and meet minimum IRC code requirements for deflection.
    c. The new beams and posts are to be supported by new concrete footings, as shown in the plan and in the structural section.
    d. Where feasible, new beams can be supported by stud packs fastened directly to existing concrete foundation walls, see the attached plan. The contractor is to determine if the existing foundation walls are suitable for this proposed connection/construction. Contact our office for review and evaluation as required.

3. Roof Framing
    a. The existing roof framing consisted of 2x4 rafters and ceiling joists at 24" o.c. The existing framing does not meet minimum IRC code requirements and once new roofing and/or interior finish materials are installed, the owner can expect poor performance and damage to finish materials.
    b. In the Roof Framing Plan and sections, we have recommended new beam lines and supporting posts to properly support the rafters and ceiling joists and meeting minimum IRC code requirements.

Glenn Frank Engineering
Engineering Structures that Endure

Structural Engineering Consultants
P.O. BOX 20708
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c. The new point loads from the new roof recommendations have been coordinated with the main floor and foundation recommendations to be properly supported below by new concrete footings in the crawl space.
d. Where existing shed roofs intersect the main roof, recommendations have been made on the Roof Framing Plan for strengthening existing connections and ledgers.

The goal of this report is to describe the structural recommendations for this building, based on our site visits. The recommendations are intended to promote the building's continued safe use, replace damaged or poor performing structure and meet minimum IRC code requirements and are not intended to eliminate all existing and potential future cosmetic defects.

The information contained in this report is the author's professional opinion based on visual evidence readily available at the site, with the removal of finishing materials at the last site visit, as indicated above. Of course, this means there could be hidden defect which are not discoverable at this time and it is the responsibility of the contractor to contact our office for foundation and framing observations, along with any additional poor performing or non-code compliant structure. That is true for most buildings, and an inherent limitation for this kind of report. Should additional information become available or additional movement is perceived, we recommend that our firm be contacted for further review.

Our observation was conducted only to review structural items and did not include mechanical (heating, cooling, plumbing) and electrical systems, subsoil conditions, nor architectural features.

The issuance of this report does not provide the building's current or future owners with a guarantee, certification or warranty of future performance. Acceptance and use of this report does not transfer financial liability for the building or the property to its author, (Jesse Sholinsky), or any other owners or employees of Glenn Frank Engineering, Inc.

Written by:

Jesse Sholinsky, P.E.



ESTIMATE

CLEAR DEVELOPMENTS

Prepared For

Andy Johnson
612 Jefferson Ave
Louisville, CO 80027
(720) 891-2608

Clear Developments

12055 E. 49th Ave, Unit C
Denver, Co 80239
Phone: (303) 317-7981
Email: admin@cleardevelop.net
Web: Cleardevelopments.net

Estimate #	275
Date	07/02/2022
Business / Tax #	47-1774242

Description	Rate	Quantity	Total
Asbestos Abatement and Demolition	$17,000.00	1	$17,000.00

Clear developments (CD) is estimating for removal of ACM (<1% asbestos containing materials) on the exterior of the home.

The Scope of work (SOW) consists of removing:

White stucco(lath and plaster material) on the exterior of the home(approximately 1300 sq ft) under standard outdoor abatement practices for the safety of the crew on site.

This estimate Includes labor cost and any waste generated transported to an EPA approved landfill.

SOW verification with PM upon commencement of demo work.

Subtotal	$17,000.00
Total	**$17,000.00**

125

Notes:

This estimate is NOT including a final visual and air clearance that may be required per CDPHE Reg 8. Must be performed by a third party air monitoring specialist independent from the GAC. Clear developments requires all wok areas be free of any content prior to start date.

CD is estimating for this to be a 4-7 business day job, once work begins.



Exterior of property











Owner either owns, leases, or controls the above property
(Property) and/or has the right to enter this Work
Authorization Contract (Contract) with Clear Developments. Owner authorizes Clear Developments, LLC to provide all labor,
Equipment, and materials to work in the property.
Developments, LLC will provide Emergency Services for Asbestos Abatement.
AFTER HOURS EMERGENCY SERVICES WILL REQUIRE A NONREFUNDABLE $300 FEE.
THERE ARE NO EXPRESSED OR IMPLIED WARRANTIES FOR EMERGENCY SERVICES
2. PRICING
(a) All work shall be charged at Clear Developments current rates in effect of the time the work is performed or if insurance requires, calculated by Xactimate and agreed to by Clear Developments
4. CLEAR DEVELOPMENTS
REPRESENTATIONS
(a) Clear Developments will maintain policies of insurance enough to cover the scope of work. (b)Provide all labor, equipment, and materials to repair the Property. Perform the work in a workmanlike manner and comply with local safety standards, local building codes, building permits and zoning ordinances. (c) Provide Owner with a non-transferable, one-year limited warranty upon receipt of payment in full for the work performed.
5. START AND END DATES
(a) The start date may be delayed if the work requires Clear Developments to obtain additional permits and/or delay beyond its control.
6. ASSIGNMENT AND AUTHORIZATION
(a) Owner authorizes its insurance carrier to name Clear Developments as sole payee on all insurance checks (including endorsement) or drafts for all insurance work and materials furnished by Clear Developments (b) Owner agrees that the work and its price will be negotiated between Clear Developments and the owner's insurance company. (c) Owner will not enter into agreements with other contractors or Subcontractors to perform Clear Developments work until Clear Developments is complete and permit is closed. (d)Owner is responsible for all work and materials not paid by the Owner’s insurance company within ten (10) days of the date of the invoice.
8. RELEASES: Owner releases Clear Developments from:
(a) Work limitations or policy defenses imposed by the Owner's insurer and for work not performed due to the refusal of the Owner's insurance company to pay for it, (b) Claims caused by any person after “clearance” is obtained from an environmental consultant or due to un-remediated pre-existing conditions. (c) Performing any other remediation not specifically described and included in an approved scope of work.
9.VALUABLE PERSONAL PROPERTY.
(a) Owner is responsible for removing and declaring, in writing, the owner's or tenants personal property from the premises (e.g., money, valuables, antiques, jewelry, firearms, pets, fine art) before Clear Developments begins any work at the property. Owner waives any content damage or theft claims against Clear Developments for any property not removed by the owner.
10. OWNERSHIP OF DOCUMENTS
(a) Clear Developments is the author and owner of all drawings, estimates, photos and other paperwork prepared by Clear Developments relating to the work (the “Documents”).
12. CHOICE OF LAW; JURISDICTION AND VENUE

(a) Any dispute which arises regarding this agreement may, at Clear Developments option, be resolved by submitting such Matter or matters to binding arbitration in Denver, Colorado in accordance with the Rules, then in effect, of the American Arbitration Association. A decision in any such Arbitration shall be binding and be enforced in accordance with Colorado Law should Clear Developments not elect to resolve the dispute through arbitration.
Owner has the right to cancel this transaction at any time BEFORE
midnight of the third (3rd) day after the date of this transaction.

Andy Johnson

ESTIMATE

CLEAR DEVELOPMENTS

Prepared For

Andy Johnson
612 Jefferson Ave
Louisville, CO 80027
(720) 891-2608

Clear Developments

12055 E. 49th Ave, Unit C
Denver, Co 80239
Phone: (303) 317-7981
Email: admin@cleardevelop.net
Web: Cleardevelopments.net

Estimate #	237
Date	05/02/2022
Business / Tax #	47-1774242

Description	Rate	Quantity	Total
Asbestos Abatement and Demolition	$22,000.00	1	$22,000.00

Clear developments (CD) is estimating for removal of ACM (asbestos containing materials) throughout select areas of the interior of the property as well as the demolition of all other walls and ceilings throughout the property, including the removal of insulation.

Also included is the removal of metal siding on the exterior of the home. The front porch covering is included to be taken down as well.

The Scope of work (SOW) consists of removing:

Removal of attic insulation first, then:

(Phase 1; ABATEMENT)

* ACM drywall walls and ceiling in the bedrooms/living room.
* ACM vinyl flooring in the bathroom under a secondary containment.

(Phase 2; Clean Demo)

* Removal of exterior siding(to be recycled), front porch demo, brick in kitchen, all plumbing, and remainder of interior walls and ceilings per job walk.

This estimate Includes labor cost and any waste generated transported to an EPA approved landfill.

132

SOW verification with PM upon commencement of demo work.

Subtotal	$22,000.00
Total	**$22,000.00**

Notes:

This estimate is NOT including a final visual and air clearance that may be required per CDPHE Reg 8. Must be performed by a third party air monitoring specialist independent from the GAC. Clear developments requires all wok areas be free of any content prior to start date.

CD is estimating for this to be a 7-10 business day job, once work begins.



Exterior of property

Owner either owns, leases, or controls the above property
(Property) and/or has the right to enter this Work
Authorization Contract (Contract) with Clear Developments. Owner authorizes Clear Developments, LLC to provide all labor,
Equipment, and materials to work in the property.
Developments, LLC will provide Emergency Services for Asbestos Abatement.
AFTER HOURS EMERGENCY SERVICES WILL REQUIRE A NONREFUNDABLE $300 FEE.
THERE ARE NO EXPRESSED OR IMPLIED WARRANTIES FOR EMERGENCY SERVICES
2. PRICING
(a) All work shall be charged at Clear Developments current rates in effect of the time the work is performed or if insurance requires, calculated by Xactimate and agreed to by Clear Developments
4. CLEAR DEVELOPMENTS
REPRESENTATIONS
(a) Clear Developments will maintain policies of insurance enough to cover the scope of work. (b)Provide all labor, equipment, and materials to repair the Property. Perform the work in a workmanlike manner and comply with local safety standards, local building codes, building permits and zoning ordinances. (c) Provide Owner with a non-transferable, one-year limited warranty upon receipt of payment in full for the work performed.
5. START AND END DATES
(a) The start date may be delayed if the work requires Clear Developments to obtain additional permits and/or delay beyond its control.
6. ASSIGNMENT AND AUTHORIZATION
(a) Owner authorizes its insurance carrier to name Clear Developments as sole payee on all insurance checks (including endorsement) or drafts for all insurance work and materials furnished by Clear Developments (b) Owner agrees that the work and its price will be negotiated between Clear Developments and the owner's insurance company. (c) Owner will not enter into agreements with other contractors or Subcontractors to perform Clear Developments work until Clear Developments is complete and permit is closed. (d)Owner is responsible for all work and materials not paid by the Owner’s insurance company within ten (10) days of the date of the invoice.
8. RELEASES: Owner releases Clear Developments from:
(a) Work limitations or policy defenses imposed by the Owner's insurer and for work not performed due to the refusal of the Owner's insurance company to pay for it, (b) Claims caused by any person after “clearance” is obtained from an environmental consultant or due to un-remediated pre-existing conditions. (c) Performing any other remediation not specifically described and included in an approved scope of work.
9.VALUABLE PERSONAL PROPERTY.
(a) Owner is responsible for removing and declaring, in writing, the owner's or tenants personal property from the premises (e.g., money, valuables, antiques, jewelry, firearms, pets, fine art) before Clear Developments begins any work at the property. Owner waives any content damage or theft claims against Clear Developments for any property not removed by the owner.
10. OWNERSHIP OF DOCUMENTS
(a) Clear Developments is the author and owner of all drawings, estimates, photos and other paperwork prepared by Clear Developments relating to the work (the “Documents”).
12. CHOICE OF LAW; JURISDICTION AND VENUE

(a) Any dispute which arises regarding this agreement may, at Clear Developments option, be resolved by submitting such Matter or matters to binding arbitration in Denver, Colorado in accordance with the Rules, then in effect, of the American Arbitration Association. A decision in any such Arbitration shall be binding and be enforced in accordance with Colorado Law should Clear Developments not elect to resolve the dispute through arbitration.
Owner has the right to cancel this transaction at any time BEFORE
midnight of the third (3rd) day after the date of this transaction.



Signed on: 05/09/2022

Andy Johnson

SCARBROUGH CONTRACTING
DREAM · DESIGN · BUILD

Joe Jarriel & Trudy Neal
612 Jefferson Ave
Louisville, CO 80027

DAJ Plan date 07/22/2022

Plans/Permit/Submittal/Engineering/Tests by DAJ: $0

DEMOLITION: $10,750

Demo: $10,750
-Remove interior walls when highlighted on plan
-Remove windows
-Pull all plumbing necessary
-Remove exterior walls
-Front porch, walk & steps
-Dispose of all debris

SITE: $18,000

Grading: $18,000
-Grade site for proper drainage
-Install retaining wall

FOUNDATION: $42,000

Concrete: $42,000
-Excavation
-Sister wall
-Walkway
-New concrete piers/caissons
-Foundation walls
-Include inspections required by engineer
-All rebar per design

ENGINEERED FRAMING: $52,200

Framing: $32,000
-Interior walls and floor system

-New door and window openings
-Exterior walls
-Installation of new exterior doors and windows

Structural framing: $15,000
-Install beams, headers, columns, joists, and rafters per Glen Frank

Roofing: $5,200
-New roof jacks as needed
-Patch roof where new mechanical penetrations are located

ENVELOPE – EXTERIOR WALLS: $31,000

Siding: $31,000
-Provide and install siding
-Install window/door flashings and trim
-Caulk and prep for paint

WINDOWS & DOORS: $35,000

Windows & Doors: $35,000
12 JeldWen Sightline clad windows/doors
Lead time 17 weeks

MECHANICAL, ELECTRICAL, & PLUMBING:

HVAC: $20,000
-Helio Home all electric

Electrical: $17,000
-Verify and relocate wiring for new lighting and power
-LED recessed lights
-Receptacles & wall lighting
-Dedicated circuits necessary
-Hang light fixtures

Plumbing: $39,500
-Install waste to bathroom, kitchen, mudroom, & laundry
-Run PEX to bathroom, kitchen, mudroom, & laundry
-Vent through roof
-Install, connect, test, caulk fixtures

INSULATION & DRYWALL: $38,000

Insulation: $22,000
-Closed cell foam to all exterior walls
-Attic retro blow cellulose R-49
-Crawl space R-19
-Air seal

Drywall: $16,000
-Hang, tape, and texture new drywall
Level 5 smooth finish option add $3,500

NON-HISTORIC BUDGET ITEMS: $150,250

Coordination allowance: $2,750
-Pre-build site visits, material ordering, & plan budget/pricing

Site work: $9,000
-Management
-Clean up, repair, trash service, and restroom

Plumbing fixture estimate: $6,000

Light fixture allowance: $3500

Trim Carpentry: $34,000
-Install interior doors
-Install cabinets, toe kick, filler, and pulls
-Install baseboard, casing, and shelfs in new remodel area
-Install all hardware

Cabinet and bathroom hardware allowance: $1000

Cabinets: $17,000
-Ikea cabinets
-Assembly not included

Tile: $8,500
-Install tile floor in bathroom
-Shower walls
-Tile baseboard

Tile allowance $3,500

Glass: $3,000
-Frameless shower door

Painting: $30,000
-Prime and paint interior walls, ceiling, trim, windows and doors
-Exterior paint for the entire house

Countertop allowance $9,000
-Provide and install solid surface in kitchen with splash
-Install block top in pantry

Flooring: $23,000
-New LVP

Total $453,700

All material is guaranteed to be as specified. All work is to be completed in a workman like manner according to standard practices. **This is a budgetary estimate only.** Final pricing will be set after final plan set, site visits by subcontractors, finish selections, and field verifications.

Signature _____ Date _____

Resource Number: 5BL 11288
Temporary Resource Number: 157508435008

OAHP1403
Rev. 9/98

COLORADO CULTURAL RESOURCE SURVEY

Architectural Inventory Form

Official eligibility determination
(OAHP use only)
Date _____ Initials _____
_____ Determined Eligible- NR
_____ Determined Not Eligible- NR
_____ Determined Eligible- SR
_____ Determined Not Eligible- SR
_____ Need Data
_____ Contributes to eligible NR District
_____ Noncontributing to eligible NR District

I. IDENTIFICATION

1. Resource number: 5BL 11288
2. Temporary resource number: 157508435008
3. County: Boulder
4. City: Louisville
5. Historic building name: LeComte House, Hicks House.
6. Current building name: Delforge House.
7. Building address: 612 Jefferson Avenue, Louisville, CO 80027. Before 1939 this address was listed as 121 Jefferson Avenue.
8. Owner name and address: Roger Delforge, 612 Jefferson Ave Louisville, CO 80027



II. GEOGRAPHIC INFORMATION

9. P.M. 6 Township 1S Range 69W
SW ¼ of SE ¼ of NW ¼ of SE ¼ of section 8
10. UTM reference NAD 83
Zone 13; 488528 mE 4425126 mN
11. USGS quad name: Louisville, Colorado
Year: 1965 revised 1994 Map scale: 7.5' X 15'___ Attach photo copy of appropriate map section.
12. Lot(s): 14, 15 Block: 7
Addition: Jefferson Place Year of Addition: 1880
13. Boundary Description and Justification: The surveyed property is bounded on the west by Jefferson Avenue, an alley on the east, and by property lines on the north and south sides.

III. Architectural Description

14. Building plan (footprint, shape): T-shaped plan
15. Dimensions in feet: Length 40 x Width 30
16. Number of stories: One
17. Primary external wall material(s): Synthetics: vinyl
18. Roof configuration: Cross gabled

19. Primary external roof material: Asphalt

20. Special features: Porch, fence, garage, car port

21. General architectural description: 612 Jefferson is a small wood-framed house that faces west to Jefferson Avenue. The roof is cross-gabled with light gray-green asphalt shingles and boxed eaves. Exterior siding is white textured vinyl in a horizontal lap profile. The lower courses of siding are tan. The foundation is not visible, but it is indicated on the County Assessor card as being concrete. The main house is nearly square in plan, with a projecting bay centered on the front façade. The main entrance is within a porch at southwest corner, south of the projecting bay. It has a concrete stoop and one concrete step up from the sidewalk, with a low-height tan brick wall on the south and west sides. The porch is covered by a shed roof of light green corrugated fiberglass on black wrought iron posts. The entrance door faces west. It is a natural-finish glass-in-wood door with an aluminum storm/screen door. Windows are non-historic white aluminum sliders with white aluminum storm/screen sash, with green fiberglass curved-front awnings on clear aluminum frames. The southeast corner of the house is an enclosed original porch. It has a low-slope roof covered with gray asphalt roll roofing.

22. Architectural style/building type: Other style: wood frame cross gable

23. Landscaping or special setting features: Landscape or special setting description: Jefferson Place Subdivision is a historic residential neighborhood adjacent to downtown Louisville. The subdivision is laid out on a standard urban grid of narrow, deep lots with rear alleys. Houses are built to a fairly consistent setback line along the streets with small front lawns, deep rear yards and mature landscaping. Small, carefully maintained single-family residences predominate. Most of the houses are wood framed, one or one and one-half stories in height, featuring white or light-colored horizontal wood or steel siding, gabled or hipped asphalt shingled roofs and front porches. While many of the houses have been modified over the years, most of the historic character-defining features have been preserved. 612 Jefferson Avenue is consistent with these patterns and blends well with the scale and character of the neighborhood. The grassy front yard is open to the street. The rear yard, also grassy, is enclosed with a combination of chain link fence and wire fencing. There is a concrete walk south of the house leading to the back yard. Adjacent to the alley, there is a concrete-paved service yard with a garage, car port and a shed.

24. Associated buildings, features, or objects: Along the alley there is a service yard with a garage at the north end, a carport in the middle and a storage shed at the south end. The garage is constructed of painted concrete masonry with a flat roof that slopes down to the west, with stepped parapet walls on the north and south. A painted wood panel overhead garage door opens east to the alley. On the south side there is a wood panel man-door with one light, and two 3/2 wood sash hopper windows. In the middle of the service yard is a carport that opens to the east. It has a flat roof with fiberglass walls on the south and north, and horizontal vinyl siding on the west wall. The storage shed is at the south end of the service yard. It is constructed of painted concrete masonry, with a flat roof sloping down to the east and stepped parapet walls on the north and south. Roofing is gray asphalt roll. On the west elevation are two doors: a wooden overhead door and a man-door constructed of wooden boards. On the east side is a metal hatch, possibly an old coal hatch.

IV. Architectural History

25. Date of Construction: Estimate:_____ Actual: 1900

    Source of information: Boulder County

26. Architect: Unknown

    Source of information: NA

27. Builder/Contractor: Unknown. August LeComte was a carpenter and may have built the house himself.

    Source of information: NA

28. Original owner: August LeComte

    Source of information: Property deed

29. Construction history (include description and dates of major additions, alterations, or demolitions):

The house was built in ca. 1900 and has not been extensively modified since then. The southeast porch was enclosed between 1948 and 1976. Windows were replaced in modified openings in 1965. In 1976, the southwest porch roof was constructed and siding was replaced. The carport was built in 1983.

30. Original location __X__ Moved ____ Date of move(s):

V. Historical Associations

31. Original use(s): Domestic, Single Dwelling
32. Intermediate use(s): N/A
33. Current use(s): Domestic, Single Dwelling
34. Site type(s): Urban residence
35. Historical background:

This building is part of Jefferson Place, the first residential subdivision in Louisville.

612 Jefferson was the home of members of the LeComte family from France for many years, and has also been associated with the Hicks family of Louisville for over 91 years. 612 Jefferson and 620 Jefferson (5BL11292) next door had shared ownership for a period.

In 1898, Jefferson Place developer Charles Welch conveyed twenty-nine different lots in Jefferson Place to a Denver lawyer, Harper Orahood, apparently for Orahood to resell. The lots for this parcel were among these properties. Orahood conveyed 612 Jefferson to August LeComte by a deed that was recorded in 1905. Orahood also conveyed 620 Jefferson to August LeComte by a deed that was recorded on the same day.

Boulder County gives 1900 as the year of construction for this property. Although the dates given by Boulder County have sometimes been found to be in error with respect to historic buildings in Louisville, for this particular house there was no other evidence found that could help prove or disprove this date. The property in question is outside of the boundaries of the Sanborn Maps that were done for Louisville in 1893, 1900, and 1908 (they focused on the downtown business district and La Farge Avenue only). The house does appear in the correct location on the 1909 Drumm's Wall Map of Louisville.

August LeComte and his family may have purchased the house and started living here even earlier than 1905, as their address in the 1904 directory is listed as being on Jefferson between Pine and Hutchinson (which is a description of the location of 612 Jefferson). The 1910 census shows the family as living in this location next to the De Santo family next door at 600 Jefferson (5BL11287). The family was made up of August LeComte Sr. (1859-1923) and Louisa Helart LeComte (1859-1912); their children, August Jr., Florence, Leah, Victor; and Louisa's mother. August, Louisa, August Jr., and Louisa's mother had all been born in France and came to the US in 1887 or 1888. August LeComte Jr. was born in 1886 and died in 1951.

According to the 1916 directory, August LeComte Sr. and August LeComte Jr. were both living at this house, which then had the address of 121 Jefferson. Father and son worked as coal miners in Louisville, and August LeComte Sr. also worked as a carpenter.

A family history of the LeComte family in the files of the Louisville Historical Museum shows that August LeComte Sr. was conscripted into the French Territorial Army and he served from 1879 to 1886. His hometown was Bethune in the Pas de Calais province in northwestern France. Louisa Helart was his wife; this is just one of several connections between the LeComte and Helart families, which were also closely related to the Warembourg family of Louisville.

In 1920, August LeComte sold the house to Monroe Hicks. The house would be associated with the Hicks family for many decades to come. Monroe Hicks (1882-1952) married Beatrice Thirlaway (1887-1983) of the English Thirlaway family of Louisville in 1904. Beatrice was also related to John and Emma Barker who lived nearby at 801 Pine Street (5BL8023) in Jefferson Place. Their only child, John Hicks (1905-1998), married Bessie Truitt (1904-2000) in 1930.

John and Bessie's adopted son, Roger Delforge, who was identified as being Bessie's adopted son in her obituary, continues to be the current owner of 612 Jefferson.

The 1920 census records show Monroe and Beatrice Hicks and their son John living at the 612 Jefferson location.

Directories show the Hicks family as living at this address, which was then 121 Jefferson, beginning in the early 1920s. In the late 1920s, Monroe and Beatrice Hicks had a grocery store on Front Street, and their son, John Hicks, was a clerk at Celeste Romano's establishment located at what is now 809 Main (5BL8041). There was a period in the 1920s when the family was listed as living at their store location on Front Street, and it is not known who was living in the house at 612 Jefferson during that period. It was in 1930 that John and Bessie Hicks married, and the 1930 census shows them to be living at 612 Jefferson. Directories also show them to have lived at 612 Jefferson consistently after that. In the late 1930s when Louisville addresses changed, the address of their house was altered from 121 Jefferson to 612 Jefferson.

Monroe Hicks and his son, John, primarily worked as coal miners in the Louisville area, according to their obituaries.

Bessie Hicks worked for Remington-Kaiser during World War II. She also worked as a waitress at the Blue Parrot Restaurant in Louisville at 640 Main (5BL8037).

Following the death of Bessie Hicks in 2000, her adopted son, Roger Delforge, took ownership of the house, and he continues to be the current owner.

36. Sources of information:

Boulder County "Real Estate Appraisal Card – Urban Master," on file at the Carnegie Branch Library for Local History in Boulder, Colorado.

Boulder County Clerk & Recorder's Office and Assessor's Office public records, accessed through http://recorder.bouldercounty.org.

Directories of Louisville residents and businesses on file at the Louisville Historical Museum.

Census records and other records accessed through www.ancestry.com (including the photos for this report).

Drumm's Wall Map of Louisville, Colorado, 1909.

Sanborn Insurance Maps for Louisville, Colorado, 1893, 1900, and 1908.

Archival materials on file at the Louisville Historical Museum, including a family history of the Warembourg and LeComte family written by Ron Buffo.

VI. SIGNIFICANCE

37. Local landmark designation: Yes ____ No __X__ Date of designation: NA

Designating authority: NA

37A. Applicable Local Landmark Criteria for Historic Landmarks:

___ A. Architectural.

(1) Exemplifies specific elements of an architectural style or period.

(2) Example of the work of an architect or builder who is recognized for expertise nationally, statewide, regionally, or locally.

(3) Demonstrates superior craftsmanship or high artistic value.

(4) Represents an innovation in construction, materials or design

(5) Style particularly associated with the Louisville area.

(6) Represents a built environment of a group of people in an era of history that is culturally significant to Louisville.

(7) Pattern or grouping of elements representing at least one of the above criteria.

(8) Significant historic remodel.

__X__ B. Social.

(1) Site of historic event that had an effect upon society.
(2) Exemplifies cultural, political, economic or social heritage of the community.
(3) Association with a notable person or the work of a notable person.

___ C. Geographic/environmental

(1) Enhances sense of identity of the community.
(2) An established and familiar natural setting or visual feature that is culturally significant to the history of Louisville.

____ Does not meet any of the above local criteria.

Local Field Eligibility Assessment: The property is worthy of nomination as a local landmark. Although it does not have the integrity or significance to be eligible to the National or State Historic Registers, its long association with the French immigrant coal mining LeComte family is locally significant. The long (90+ year) association with the Hicks family is significant. Members of the Hicks family were coal miners as well as local business people. Descendants of the same family own and occupy the house today.

37B. Applicable State Register of Historic Properties Criteria:

___ A. The property is associated with events that have made a significant contribution to history.

___ B. The property is connected with persons significant in history.

___ C. The property has distinctive characteristics of a type, period, method of construction or artisan.

___ D. The property has geographic importance.

___ E. The property contains the possibility of important discoveries related to prehistory or history.

__X__ Does not meet any of the above State Register criteria.

State Register Field Eligibility Assessment: Not eligible

38. Applicable National Register Criteria:

____ A. Associated with events that have made a significant contribution to the broad pattern of our history;

____ B. Associated with the lives of persons significant in our past;

____ C. Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or that possess high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; or

____ D. Has yielded, or may be likely to yield, information important in history or prehistory.

____ Qualifies under Criteria Considerations A through G (see Manual)

__X__ Does not meet any of the above National Register criteria

39. Area(s) of significance (National Register): NA

40. Period of significance: NA

41. Level of significance: NA National ____ State ____ Local ____

42. Statement of significance: This house is associated with the historic development of Louisville as one of the early homes in Louisville's first residential subdivision, Jefferson Place. Although Jefferson Place was platted in 1880, few homes were actually built there before 1900. The property has a long association with two coal mining families, the LeComte and Hicks families. Its long association with the French immigrant coal mining LeComte family is locally significant. The long (90+ year) association with the Hicks family is significant. Members of the Hicks family were coal miners as well as local business people. Descendants of the same family own and occupy the house today.

43. Assessment of historic physical integrity related to significance: The property has integrity of location, setting, workmanship, feeling and association. Integrity of materials is compromised by replacement siding. Integrity of design is compromised by modified window openings. The enclosure of the rear southeast porch also compromises integrity of design, but to a lesser degree since this corner is not visible from the street.

VII. National Register Eligibility Assessment

44. National Register eligibility field assessment:

Eligible ____ Not Eligible __X__ Need Data ___

45. Is there National Register district potential? Yes __X__ No _____

Historic District Potential: Jefferson Place is eligible as a State Register and local historic district. There is potential for a National Register historic district. The house would be a contributing structure to a State Register and local historic district. The specifics of the 1965 window replacements are not known, so the property's contributing status to a potential National Register historic district is "Needs Data."

Discuss: This building is being recorded as part of a 2010-2011 intensive-level historical and architectural survey of Jefferson Place, Louisville's first residential subdivision, platted in 1880. The purpose of the survey is to determine if there is potential for National Register, State Register or local historic districts. Jefferson Place is eligible as a State Register historic district under Criterion A, Ethnic Heritage, European, for its association with European immigrants who first lived here and whose descendants continued to live here for over fifty years. The period of significance for the State Register historic district is 1881 – 1980. Jefferson Place is potentially eligible as a National Register historic district under Criterion A, Ethnic Heritage, European. However it needs data to determine dates of some modifications, and to more definitely establish the significant impacts of various European ethnic groups on the local culture of Louisville. The period of significance of a National Register district is 1881 – 1963. Jefferson Place is eligible as a local Louisville historic district under local Criterion B, Social, as it exemplifies the cultural and social heritage of the community.

European immigrant families flocked to Colorado coal mining communities, including Louisville, in the late nineteenth and early twentieth centuries in search of economic opportunities they could not find in their own countries. Louisville's Welch Coal Mine, along with other mines in the area, recruited skilled workers from western Europe. In the early years before 1900, most of the miners who lived in Jefferson Place came from English-speaking countries.

Immigrants from England brought a strong tradition and expertise in coal mining. The English are widely credited with developing the techniques of coal mining that were used locally, and they taught these techniques to other miners. The British mining culture was instilled in the early Colorado coal mines. English immigrants also brought expertise in other necessary skills such as blacksmithing and chain forging.

Later Jefferson Place residents arrived from Italy, France, Austria, Germany, Hungary, Slovakia, and Slovenia, among other places. The Italians eventually became the largest single ethnic group in Jefferson Place and in Louisville as a whole. About one-third of the houses in Jefferson Place were owned and occupied by Italian

immigrants. Italian immigrants left their mark on Louisville in the food and beverage industries. To the present day, downtown Louisville is known throughout the Front Range for its tradition of Italian restaurants. The impacts of the heritage and customs of the other European ethnic groups could be significant, but are not well documented and need further investigation.

If there is National Register district potential, is this building: Needs Data__X Contributing __Noncontributing_

46. If the building is in existing National Register district, is it: Contributing ___ Noncontributing _____

The property is not within an existing National Register district.

VIII. RECORDING INFORMATION

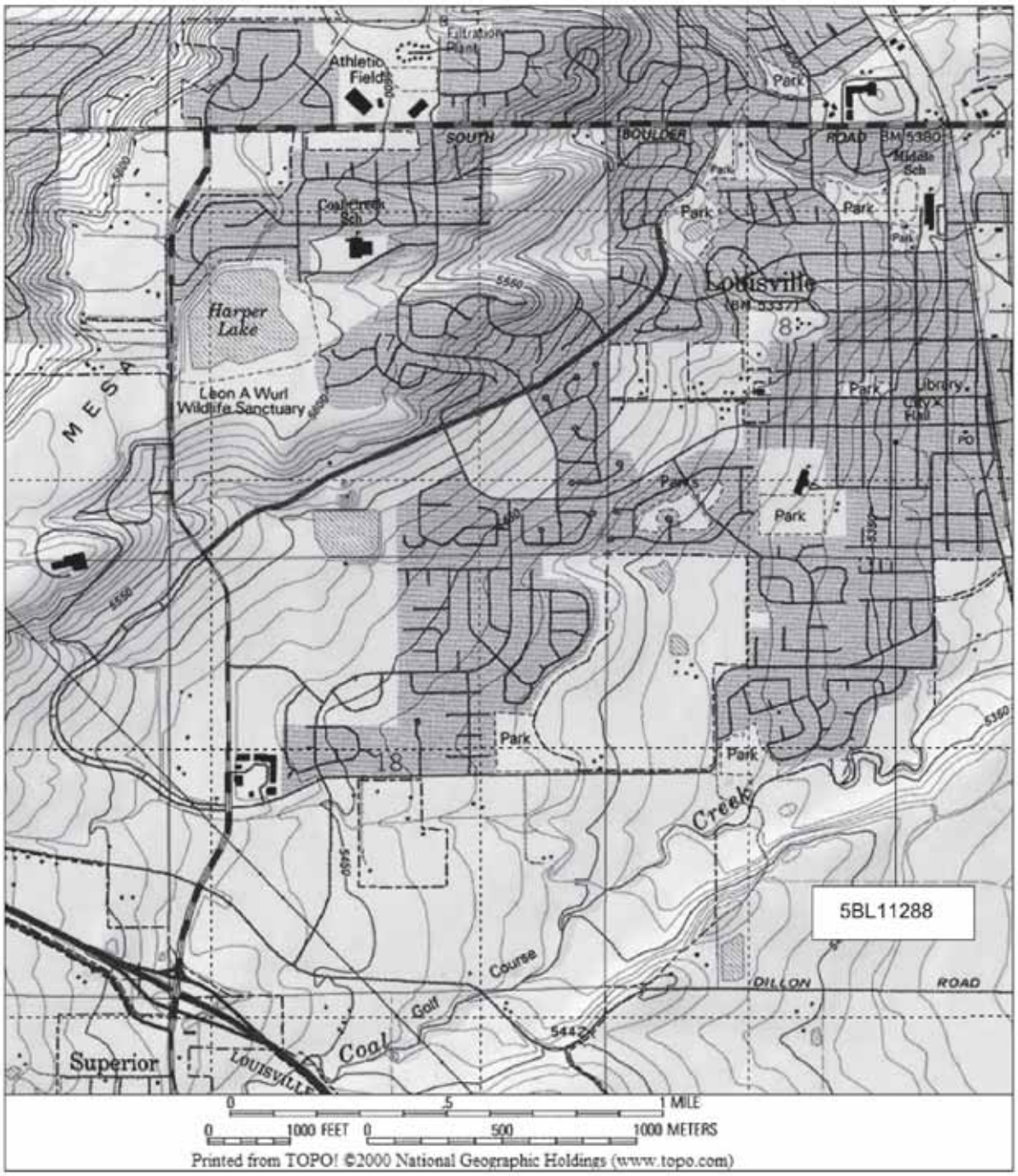
47. Photograph numbers: 5BL11288_612Jefferson_01 through 5BL11288_612Jefferson_06.

Digital images filed at: City of Louisville, Planning Department

48. Report title: Historical and Architectural Survey of Jefferson Place Subdivision, Louisville, Colorado
49. Date(s): 2013
50. Recorder(s): Kathy and Leonard Lingo, Avenue L Architects, and Bridget Bacon, City of Louisville
51. Organization: Avenue L Architects
52. Address: 3457 Ringsby Court Suite 317, Denver, CO 80216
53. Phone number(s): (303) 290-9930

NOTE: Please include a sketch map, a photocopy of the USGS quad map indicating resource location, and photographs.

Colorado Historical Society - Office of Archaeology & Historic Preservation
1200 Broadway, Denver, CO 80203 (303) 866-3395

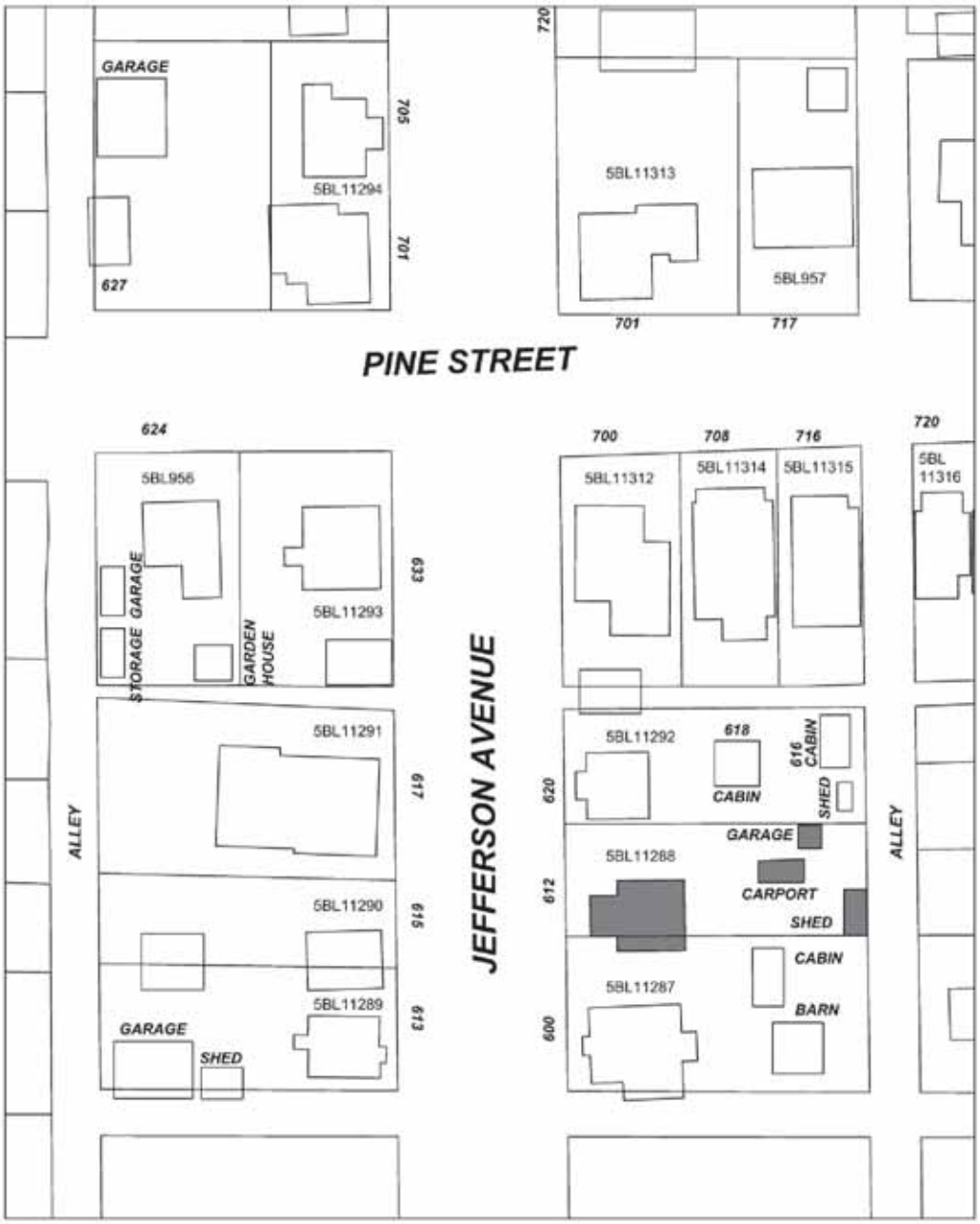


612 Jefferson Avenue, Louisville, Colorado

SOURCE: Extract of Louisville, Colorado
USGS map, 1994.

Resource Number: 5BL11288

Architectural Inventory Form
Site Location Map



612 Jefferson Avenue, Louisville, Colorado

SOURCE: City of Louisville, Colorado
GIS Files.



5BL11288_612Jefferson_01 west



5BL11288_612Jefferson_02 southwest



5BL11288_612Jefferson_03 northwest



5BL11288_612Jefferson_04 east



5BL11288_612Jefferson_05 shed, carport, garage



5BL11288_612Jefferson_06 garage east



612 Jefferson. Boulder county Real Estate appraisal card, 0612_1948



612 Jefferson. Boulder county Real Estate Appraisal card, 0612_1976.

DAJDESIGN
ARCHITECTURE+INTERIORS

HISTORIC STRUCTURAL ASSESSMENT

612 JEFFERSON AVE., LOUISVILLE, COLORADO

April 1, 2022

922A MAIN STREET
LOUISVILLE, CO 80027
T (303) 527-1100
INFO@DAJDESIGN.COM
WWW.DAJDESIGN.COM



Evaluated by:

Andy Johnson, AIA
DAJ Design
922A Main Street, Louisville, CO 80027
303-527-1100; andy@dajdesign.com

This Project was paid for by the Louisville Preservation Fund grant.
State Survey Number 5BL.11288

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922A MAIN STREET
LOUISVILLE, CO 80027
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INFO@DAJDESIGN.COM
WWW.DAJDESIGN.COM

1.0 INTRODUCTION

1.1 RESEARCH BACKGROUND / PROJECT PARTICIPANTS

DAJ Design conducted an Historic Structural Assessment for the structure located at 612 Jefferson Avenue, Louisville, CO to determine its feasibility as a candidate for historic landmark designation as defined under the Historic Preservation program of the City of Louisville. The structure is a residential property. The City of Louisville Historic Preservation Commission found probable cause that the building may be eligible for landmarking under criteria in section 15.36.050 of the Louisville Municipal Code. Therefore, the Commission approved the Historic Structural Assessment to be paid for by the Louisville Preservation Fund grant.

922A MAIN STREET
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WWW.DAJDESIGN.COM

The primary purpose of this HSA is to evaluate the property's current condition and to identify preservation priorities for the best use of rehabilitation funds. DAJ Design inspected 612 Jefferson visually to identify areas of necessary maintenance and repair. It is possible that complications exist that were not visible and therefore it is recommended that the property owner includes contingency funding in any repair budget.

DAJ Design inspected 612 Jefferson on March 4th, 2022, and returned with Glenn Frank Engineering on March 31st, 2022, for a follow-up structural visit. The weather for the initial visit was cool and sunny with snow covering the ground from a recent storm. The weather for the follow-up visit was warm and sunny. Adequate access to the basement and crawlspace was available, though not all areas were entirely visible. Attic access was available to observe the attic condition, though not all attic spaces were accessible. Additionally, there are three detached structures on the property including a garage, a carport, and a shed. These structures were not inspected beyond taking note of the exterior condition.

LIST OF CONSULTANTS AND SOURCES:

STRUCTURAL ENGINEER
JESSE SHOLINSKY, PE
GLENN FRANK ENGINEERING, INC.
PO BOX 20708
BOULDER, CO 80308
303.554.9591

SOURCES
"Louisville Historic Preservation Commission Staff Report," December 20, 2021.
"612 Jefferson Ave. Architectural Inventory Form," September 1998, Louisville Historical Museum.

1.2 BUILDING LOCATION

VICINITY MAP

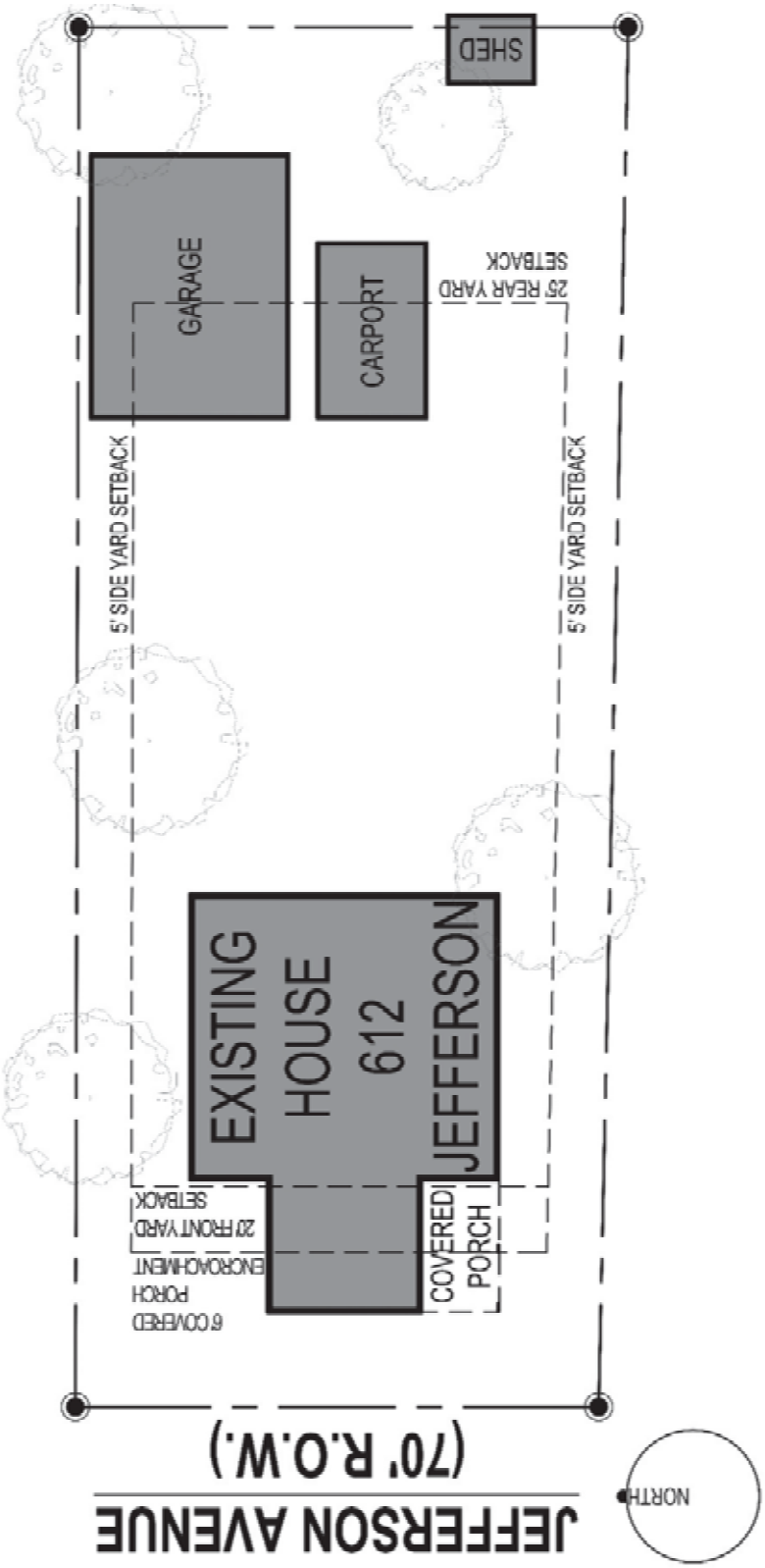


LEGAL DESCRIPTION

Lots 14-15, Block 7, Jefferson Place

922A MAIN STREET
LOUISVILLE, CO 80027
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SITE PLAN



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WWW.DAJDESIGN.COM

2.0 HISTORY AND USE

The following social history was written and included as part of the *Architectural Inventory Form* for 612 Jefferson Avenue:

Louisville Historical Museum
Department of Library & Museum Services
City of Louisville, Colorado
2013

922A MAIN STREET
LOUISVILLE, CO 80027
T (303) 527-1100
INFO@DAJDESIGN.COM
WWW.DAJDESIGN.COM

Year of Construction: 1900

Builder / Contractor: Unknown. August LeComte was a carpenter and may have built the house himself.

Historical Background

This building is part of Jefferson Place, the first residential subdivision in Louisville.

612 Jefferson was the home of members of the LeComte family from France for many years and has also been associated with the Hicks family of Louisville for over 91 years. 612 Jefferson and 620 Jefferson (5BL11292) next door had shared ownership for a period.

In 1898, Jefferson Place developer Charles Welch conveyed twenty-nine different lots in Jefferson Place to a Denver lawyer, Harper Orahood, apparently for Orahood to resell. The lots for this parcel were among these properties. Orahood conveyed 612 Jefferson to August LeComte by a deed that was recorded in 1905. Orahood also conveyed 620 Jefferson to August LeComte by a deed that was recorded on the same day.

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August LeComte and his family may have purchased the house and started living here even earlier than 1905, as their address in the 1904 directory is listed as being on Jefferson between Pine and Hutchinson (which is a description of the location of 612 Jefferson). The 1910 census shows the family as living in this location next to the De Santo family next door at 600 Jefferson (5BL11287). The family was made up of August LeComte Sr. (1859-1923) and Louisa Helart LeComte (1859-1912); their children August Jr., Florence, Leah, Victor; and Louisa's mother. August, Louisa, August Jr., and Louisa's mother had all been born in France and came to the US in 1887 or 1888. August LeComte Jr. was born in 1886 and died in 1951.

According to the 1916 directory, August LeComte Sr. and August LeComte Jr. were both living at this house, which then had the address of 121 Jefferson. Father and son worked as coal miners in Louisville, and August LeComte Sr. also worked as a carpenter.

A family history of the LeComte family in the files of the Louisville Historical Museum shows that August LeComte Sr. was conscripted into the French Territorial Army, and he served from 1879 to 1886. His hometown was Bethune in the Pas de Calais province in northwestern France. Louisa Helart was his wife; this is just one of several connections between the LeComte and Helart families, which were also closely related to the Warembourg family of Louisville.

In 1920, August LeComte sold the house to Monroe Hicks. The house would be associated with the Hicks family for many decades to come. Monroe Hicks (1882-1952) married Beatrice Thirlaway (1887-1983) of the English Thirlaway family of Louisville in 1904. Beatrice was also related to John and Emma Barker who lived nearby at 801 Pine Street (5BL8023) in Jefferson Place. Their only child, John Hicks (1905-1998), married Bessie Truitt (1904-2000) in 1930.

John and Bessie's adopted son, Roger Delforge, who was identified as being Bessie's adopted son in her obituary, continues to be the current owner of 612 Jefferson. [1998]

The 1929 census records show Monroe and Beatrice Hicks and their son John living at the 612 Jefferson location.

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Directories show the Hicks family as living at this address, which was then 121 Jefferson, beginning in the early 1920s. In the late 1920s, Monroe and Beatrice Hicks had a grocery store on Front Street, and their son, John Hicks, was a clerk at Celeste Romano's establishment located at what is now 809 Main (5BL8041). There was a period in the 1920s when the family was listed as living at their store location on Front Street, and it is not known who was living in the house at 612 Jefferson during that period. It was in 1930 that John and Bessie Hicks married, and the 1930 census shows them to be living at 612 Jefferson. Directories also show them to have lived at 612 Jefferson consistently after that. In the late 1930s when Louisville addresses changed, the address of their house was altered from 121 Jefferson to 612 Jefferson.

Monroe Hicks and his son, John, primarily worked as coal miners in the Louisville area, according to their obituaries. Bessie Hicks worked for Remington-Kaiser during World War II. She also worked as a waitress at the Blue Parrot Restaurant in Louisville at 640 Main (5BL8037).

Following the death of Bessie Hicks in 2000, her adopted son, Roger Delforge, took ownership of the house, and he continues to bet the current owner. [1998]

Sources of Information

Boulder County "Real Estate Appraisal Card – Urban Master," on file a the Carnegie Branch Library for Local History in Boulder, Colorado.

Boulder County Clerk & Recorder's Office and Assessor's Office public records, accessed through http://recorder.bouldercounty.org.

Directories of Louisville residents and businesses on file at the Louisville Historical Museum.

Census records and other records accessed through www.ancestry.com (including the photos for this report).

Drumm's Wall Map of Louisville, Colorado, 1909.

Sanborn Insurance Maps for Louisville, Colorado, 1893, 1900, and 1908.

Archival materials on file at the Louisville Historical Museum, including a family history of the Warembourg and LeComte family written by Ron Buffo.

2.1 ARCHITECTURAL SIGNIFICANCE & CONSTRUCTION HISTORY

The residential property at 612 Lincoln Avenue was constructed around 1900 and is a typical early-1900's wood frame vernacular house of the Louisville area. In 2022 the structure is sided in aluminum lap siding, though evidence remains of the original painted wood siding possibly existing beneath. At some point in time the foundation was replaced or reinforced with a concrete foundation. The northeast corner of the house was originally a deck that was enclosed by 1948. A deck in the southeast corner of the house was enclosed between 1948 and 1976 and is enclosed as a side entry in 2022. A covered front porch was constructed between 1948 and 1976 and exists in 2022 as it did in 1976.

The primary façade faces west to Jefferson Avenue and the original form of the house is apparent when viewed from Jefferson Avenue. The overall mass of the house has increased slightly to the east with the enclosure of the northeast and southeast decks. Due to the one-story nature of the construction, the additions are not easily detected from the primary street façade. The covered front porch in the southwest corner of the house partially obscures the overall form of the original house as was seen prior to 1976.

612 Jefferson Avenue has the potential to be restored to a high degree of architectural integrity when compared to historic photos dated 1948. Overall, the home is well maintained but has a few items that require prioritization, as outlined in the analysis of this report. Based on site measurements and observations, it is believed that the original wood siding and any other original features like trim work and original window sizes still exist beneath the current aluminum siding. Further investigative deconstruction has the potential to reveal a larger extent of original materials.

612 Jefferson Avenue is not listed on the National, State, or Local Register.

Primary Changes Occurring Over Time:

- Original house (RED): : 1900
- Northeast porch (BLUE): Pre-1948
  - Northeast porch enclosed: Pre-1948
- Southeast porch (GREEN): Pre-1948
  - Southeast porch enclosed: 1948 – 1976
- Southwest porch constructed (ORANGE): 1948 – 1976
- Garage constructed: 1948 – 1976
- Windows replaced / modified: 1965
- East patio constructed: 1975
  - East patio demolished 1976 – 1998
- Aluminum siding: 1976
- Carport constructed: 1983
- New asphalt roof 2019
- Shed constructed: Unknown

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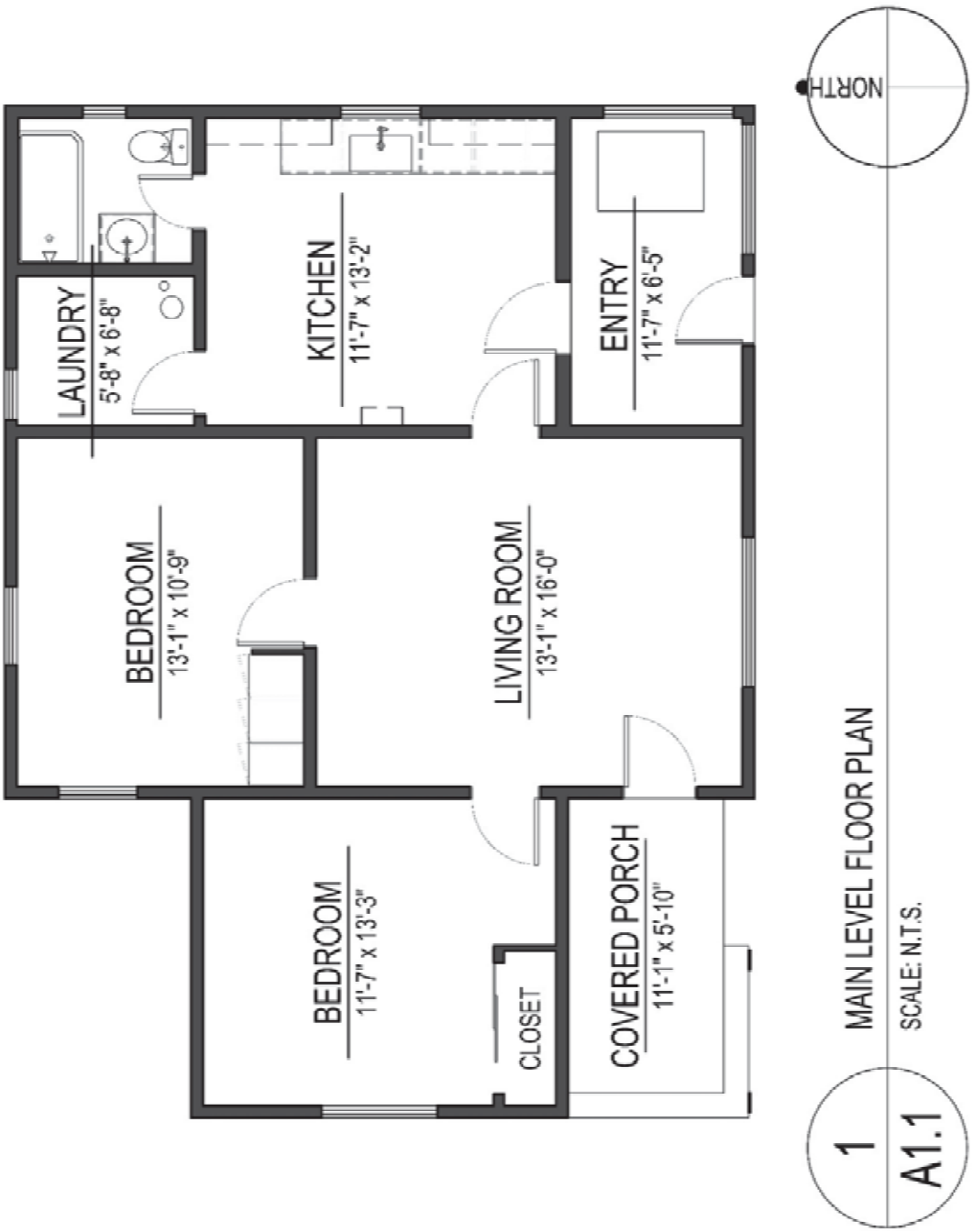
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MAIN LEVEL FLOOR PLAN

SCALE: N.T.S.

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2.2 FLOOR PLAN



2.3 PROPOSED USE

There is no proposed change of use at this time.

3.0 STRUCTURE CONDITION ASSESSMENT

3.1 SITE

ASSOCIATED LANDSCAPE FEATURES

Description:

612 Jefferson Avenue is set on a typical downtown Louisville lot approximately 50 feet wide by 125 feet deep, running lengthwise in the east-west direction and totaling approximately 6,065 sf. The property is bordered on the west by Jefferson Avenue, to the north and south by residential properties, and on the east by an alley. The house sits on the west side of the lot, approximately 8 ½ feet from the west property line. A chain link fence encloses the west side of the lot, set back towards the rear of the house. Fences of various materials and heights run the length of the property on the north and south sides, and partially enclose the east side of the lot from the alley.

Approximately 1/5 of the lot is covered by the building footprint, located in the western 1/3 of the site. The building is set back approximately 10 feet from both the north and south property lines. Also found on the site is a garage, carport, and shed. The total lot coverage of all buildings is approximately 1/4 of the site. Additionally, there are several concrete slabs between the outbuildings and the alley, as well as concrete walks running the length of the south side of the property and intermittently between the outbuildings.

The front yard and the yard between the house and garage are primarily sod, with a few mature trees scattered throughout, primarily along the north and south sides of the lot.



Looking northeast. The house sits on the west end of the lot, close to the ROW without any planting on the west side of the lot.

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Condition Evaluation:

Overall, the landscape features are in fair condition with the primary issues being overgrown mature trees and concrete flatwork that has heaved in several areas. None of the listed features meet historic requirements, nor were any historic features discovered, and therefore assessment was minimal.

Recommendations:

No recommendations at this time.

GRADING

Description:

Overall, the site is relatively flat. The site slopes downwards from west to east with the alley being lower than Jefferson Avenue. Grading on the west drains significantly towards the house while grade on the east part of the property drains to the alley. Drainage around the building footprint is minimal but does drain towards the building in several areas, primarily on the west facing aspects of the house. The top of grade relative to the top of foundation throughout could not be determined due to finish materials running to grade or adjacent flatwork.



Grading around the building footprint is apparent in how the siding is tapered where it meets grade.

Condition Evaluation:

The overall site grading is in poor condition, though no signs of damage caused by poor or negative drainage was observed. However, no observations could be made because the existing aluminum siding runs to grade obscuring the top of foundation relative to the top of grade. Ideally, the grading around the house should be a minimum of 6 inches below the top of the foundation and slope away from the foundation for at least the first 5 feet. Due to the nature of the lot, it is unrealistic that these requirements may be achieved.

Recommendations:

1. Continue to monitor the drainage around the perimeter of the house. The perimeter should be observed after snow and significant rain events to assess for any areas of pooling water.
2. The top of the foundation relative to the top of grade should be determined around the perimeter of the house. If the top of the foundation is determined to be at or below the existing grade, new grading should occur to bring the grade down below the top of the foundation, as prescribed by a licensed structural engineer.
3. The wood floor framing members including the sill plate, rim board, floor joists, and floor sheathing should be inspected for rot caused by poor drainage. If rot is found in any of these members, the affected flooring should be replaced as prescribed by a licensed structural engineer.
4. All areas where grade slopes towards the house, particularly on the west side of the house, should be regraded to direct water away from the house foundation.

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PARKING

Description:

A detached, single car + garage faces east towards the alley. This garage appears on the 1976 Boulder County Assessor's card ground plan sketch, but it is unclear when the garage was built. The garage is constructed of painted concrete masonry unit walls with a framed roof. The roof rafters are 2x4 lumber sloping west with exposed rafter tails on the west end. The garage has stepped parapet walls on the north and south sides. The garage door is a painted wood overhead door facing east. On the south side of the garage is a painted wood man-door with a ½ lite and two wood hopper style windows.



Garage and carport facing the east alley

South of the garage is a 10' x 16' carport with three enclosed sides and open to the east. The carport is set back several feet from the east face of the garage and there is a concrete slab poured up to and inside of the carport. According to building records, the carport was added in 1983 and was built on caissons. The carport is a mix of wood and steel wall framing with mixed corrugated fiberglass and steel siding attached directly to the wall studs.

The garage and carport each accommodate one parking space for a total of two on the site.



3.2 STRUCTURAL SYSTEM

GENERAL STRUCTURAL SYSTEM DESCRIPTION

FOUNDATION SYSTEMS

Description:

The house foundation was observed from a basement beneath the east portion of the original house structure. Access to the basement is through a floor hatch in the southeast corner of the house. The house appears to have been originally built entirely over crawlspace with a small portion later dug out to basement depth to accommodate mechanical equipment. Most of the house still sits over a crawlspace approximately two feet in depth.



CMU walls in basement. The east wall runs to the bottom of floor joists and is capped with a 2x sill plate.

The basement walls are constructed of concrete masonry blocks, approximately 4 ½ feet tall on the north, west, and south sides. These walls retain the soil in the crawlspace areas. The CMU wall on the east side is full basement height running to the bottom of the floor joists with a 2x sill plate. The basement has a concrete slab floor. It could not be determined if the CMU walls were constructed on top of the slab or if they have any footing.



Concrete foundation in northeast corner of crawlspace.

The perimeter foundation walls are not visible from the exterior as finish materials run to grade. However, most of the foundation was observed from the basement looking into the crawlspace areas. The entire house perimeter appears to have a poured concrete foundation of unknown depth (minimum of two feet deep) and it is unknown if any footing exists. The concrete foundation walls are constructed with a concrete mixture that used a large aggregate. Due to the year of construction, it is possible that the concrete walls observed were added at a later date than original construction. Based on our knowledge of construction techniques used for similar structures built around the same time in the Louisville area, it is possible that the concrete is either applied on top of the existing foundation, or that the original foundation was removed in stages and replaced with a new concrete foundation.

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Condition Evaluation:

The north, west, and south CMU foundation walls only have a couple of point loads supporting the house structure while their primary purpose is to retain the crawlspace soils. The point loads may have been added later to stiffen the floor structure, but the overall load applied at these locations is minimal. Complete analysis of these walls was not possible as the presence of a footing and its construction could not be determined. Additionally, these walls are not constructed as proper cantilevered retaining walls, though they are performing as such. No signs of failure were observed, and the walls appear level and straight with no signs of weakness. For this reason, these three walls are in fair condition.



CMU walls between basement and crawlspace.

The east CMU wall is in fair condition. This wall supports the east end of the main floor and walls in conjunction with the original east foundation wall that is still present. Similar to the other CMU walls, a footing could not be observed and there do not appear to be any anchor bolts connecting the wall to the sill plate and floor framing. Therefore, this foundation wall is determined to be in fair condition.

The poured concrete perimeter foundation walls are in fair to poor condition. The foundation walls supporting the west side of the house could not be fully analyzed as access was limited. Most of the perimeter foundation walls appear to be in fair condition as they are still fully intact with little to no cracking observed. There are several areas where the concrete has cracked showing signs of failure. The primary area of failure is in the southeast corner of the house where the concrete foundation is severely cracked and deteriorating.

Recommendations:

1. The basement and crawlspace walls should be observed by a licensed engineer and repaired as needed. The walls are not suitable for additional load resulting from a remodel or addition and should be replaced for new loading.
2. Continually monitor the main floor walls for signs of foundation distress such as cracking or improper door operation. Wall cracks were observed within the gypsum wall board on the main level. However, it is unclear if these cracks were caused by the foundation or because the wall board appears to have been applied directly over the original plaster walls. If further signs of cracking are detected, these areas should be evaluated by a licensed engineer and repaired as needed.



Failing foundation wall in southeast corner of house.

3. The foundation wall in the southeast corner of the house, as well as any other areas where cracking or deterioration has occurred, should be replaced as prescribed by a licensed engineer.

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FLOOR & CEILING SYSTEMS

Description:

The floor framing throughout is constructed of rough-sawn 2x6 floor joists at 24 inches on-center, running east to west. The floor joists bear on a 2x sill plate on the original foundation at all perimeter areas except in the southeast corner where no sill plate is present. The framing of the southeast corner suggests that it was originally framed as a deck. This assumption is consistent with the available historical information of the house where this part is shown as a deck on the 1948 Boulder County Assessor's card. The northeast corner of the house also appears to have been originally framed as a deck but with materials and techniques matching that of the original house structure.

The floor joists are supported by wood beams running north-south at the cruciform intersections that appear to be original. There are wood beams where the original house meets the southeast deck as well as various wood posts throughout the middle floor sections that appear to have been added to brace sagging or bouncy floor areas. All of the wood beams are constructed of 2x or 4x lumber, both rough and dimensional, and in some areas are built-up beams of multiple and sometimes non-identical members.



Floor framing, sheathing, & supports

The beams and joists are supported with various built-up columns throughout. Some of the materials used for these columns include dimensional lumber of various sizes, non-dimensional lumber of various sizes, wood logs, concrete masonry blocks, clay bricks, and wood shims. Most of these columns are built up of several different materials and bear on concrete or masonry on undisturbed soil. Some of the wood columns are notched and a few bear on the concrete masonry wall. The built-up columns are dispersed throughout the crawlspace areas and appear to have been added at different points in time based on the materials used. The floor joists are supported at the mid-span line in a similar manner with notched wood posts bearing on various footings. These mid-span floor joist supports appear to be either original or added early on.

Sheathing and flooring is constructed of 1x3 tongue-and-groove hardwood. Linoleum flooring is applied on top of the original flooring in the kitchen, bath, and southeast entry.



Various flooring structure support-beams & built-up columns

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Condition Evaluation:

The 2x6 floor joists are in good condition and the size of the joists are typical for houses built around the same time in the Louisville area. The joists spanning the long dimension of the house is a-typical for similar houses built around the same time in the Louisville area, though the methods used to brace the floor framing is very common. The joist sizing and spacing do not meet minimum IRC code requirements for today's standards but appear to be performing adequately. The floor on the main level felt sturdy and no floor deflection was observed, indicating that the floor framing is adequate for the current loading.

The beams supporting the floor joists are in fair to poor condition. The spacing and sizing of the beams appear adequate for the current loads that they are supporting. However, several of the beams are built up of various materials in several locations and none of the beams are properly attached to their supports. The beam sizing, spacing, and spans do not meet minimum IRC code requirements for today's standards but appear to be performing adequately.

The beam joist supports are in fair to poor condition as well. The supports are built of various stacked materials and in several cases the materials used are not appropriate for the supported loads. In most cases, each support bears on concrete or brick instead of soil which is appropriate, but the bricks and concrete units used are various and their capacity to withstand further loading is unknown. The materials, sizing, and construction methods of the beam supports do not meet minimum IRC code requirements for today's standards but appear to be performing adequately.

The floor sheathing that also performs as the finish flooring in most of the house is in fair condition. The flooring appears to be performing adequately, but there are several areas on the main floor that are bulging (likely from excessive supporting from below) and there are a few areas of water damage as observed on the main floor, likely from water being trapped beneath areas where carpet was formerly present. The floor sheathing does not meet minimum IRC code requirements for today's standards but appears to be performing adequately.

Recommendations:

1. The floor framing should be observed by a licensed engineer and repaired as needed. Special attention should be given to the connections between the foundation walls, floor joists, beams, and beam supports. The floors are not suitable for additional load resulting from a remodel or addition and should be replaced for new loading.
2. The beams and beam supports should be replaced or reinforced as prescribed by a structural engineer. The best method is to construct new beams and beam supports that support the existing floor joists and remove the existing beams and beam supports as prescribed by a licensed structural engineer. These new supports should bear on footings as prescribed by a licensed structural engineer and located at a depth as specified by a licensed geotechnical engineer.
3. If floor deflection is inadequate, consult a licensed structural engineer for additional support design options.
4. It is recommended to remove the linoleum flooring wherever it occurs throughout the house to properly assess the floor sheathing in these areas.
5. Refinish or replace the flooring where signs of water damage have occurred.

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ROOF FRAMING SYSTEMS

Description:

The roof framing over the original house forms a symmetric cross gable. Shed roofs cover the northeast and southeast corners of the house shedding to the north and to the south respectively. A shed roof sloping down to the south also covers the front porch in the southwest corner of the house.

The cross-gable roof structure appears to be entirely original and is accessed through an exterior attic hatch in the east facing gable end. The main house roof framing is built of 2x4 rafters at 24 inches on-center. There is a 1x6 joining ridge member and there are no collar ties. The ceiling joists are 2x4 that are also 24 inches on-center and are not spliced as is sometimes seen in similar houses. Original roof sheathing is present and is constructed of 1x12 decking with one inch spacing between each member. There is a layer of OSB sheathing applied on top of the original sheathing that was likely added when the original roof was removed and replaced with new asphalt composite shingles. The gable ends are framed with 2x4 studs, balloon-framed from the main level exterior wall below.

The west facing gable roof was not accessible for evaluation. This roof appears to be framed in a similar manner to the other gable roofs and is likely over-framed on the gable that runs in the north-south direction. An exposed 2x4 barge rafter on the west gable supports these assumptions.

The roof framing for the northeast and southeast shed roofs was not accessible for evaluation. These roofs are likely framed with 2x4 rafters based on the eave sizing and the ends of these rafters were observed in the main roof attic. The ceilings in these portions of the house are pitched.

The covered front porch is constructed of steel framing members supported by two steel columns and forming a shed roof. The steel is attached and supported by the house walls and the roof steps down from the house roof on the south side.



Roof framing as observed from east gable end access.

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Condition Evaluation:

The roof is in fair condition and is constructed of typical materials and methods for houses built around the same time in the Louisville area. There is no evidence of water damage where the roof was able to be observed. There is no evidence of damaged or poor performing rafter or ceiling joists. The covered front porch was observed to be sagging minimally and is in fair condition.

There are no intermediate walls to help support ceiling joists and roof members as needed. As a result, ceiling finish material damage is likely and was observed where the dropped ceiling had been removed. See recommendation below for options to reduce future finish material damage.



East facing gable roof structure with north-south gable structure beyond. Chimney remnants found in attic space are not present on the main floor nor protruding through the roof.

Recommendations:

The roof and ceiling structure are not to current code standards. However, they have performed adequately and if not revised will likely perform in a similar manner. Some of the following items should be considered to further solidify roof structure performance.

1. Add 2x4 collar ties at 48 inches on-center.
2. Consult with a licensed structural engineer to provide deeper ceiling members and rafters to meet minimum IRC prescriptive roof framing.
3. It is not recommended to add additional roofing materials such as an additional layer of shingles (code allows for up to two layers), or solar panels without the additional structural support mentioned above. Additionally, any energy upgrades, such as increased insulation in the attic, could result in prolonged snow retention on the roof and could ultimately affect roof performance without first completing structural reinforcement.
4. The roof framing over the rear additions and the west facing gable should be investigated to determine if they need additional support.
5. Any repairs to the roof should be coordinated with a licensed structural engineer.



Covered front porch steel structure.

3.3 ENVELOPE – EXTERIOR WALLS

EXTERIOR WALL CONSTRUCTION

Description:

The main level wall framing was not exposed for review. The wall framing is likely a 2x4 stud wall with studs on regular spacing (site measurements support this assumed wall thickness). The original wood siding appears to be attached directly to the wall framing, as seen in the attic. No visible sheathing is present.

Condition Evaluation:

Since the wall structure was not exposed for observation, we are unable to evaluate the condition or determine if there is any structural damage. The wall heights are approximately 8 ½ feet tall which is an acceptable height for 2x4 wood stud construction. Wall finish cracks were observed on several of the interior wall surfaces. The cause of this cracking could be from foundation movement or from improper installation of the gypsum wall board over the original plaster.

Recommendations:

Without the opportunity to observe the exterior wall structure, we do not have any recommendations currently. If the opportunity presents itself, the exterior walls should be assessed by a licensed structural engineer. The owner is to note that the walls will need to be evaluated if any remodels or additional load is to be added. It is likely that additional studs may need to be added for the increased loads above in combination with the wind load on the building.

EXTERIOR FINISHES

Description:

The entirety of the house is clad in painted aluminum siding. Building records indicate that the aluminum siding was added in 1976. The aluminum siding wraps the original house as well as the east additions. The aluminum siding runs from grade all the way up through the gable ends. No areas were available to observe what siding is beneath the aluminum siding, but it was common practice to apply steel siding over the existing siding around the time that this steel siding was added. The edges of what is likely the original wood siding was observed in the basement and at the attic access hatch. It is unclear if this wood siding is still present on the entire house or if other layers of siding are between the wood siding and aluminum siding.

The 1948 Boulder County Assessor card image appears to show wood siding wrapping the front of the house (and likely the entire house), but it is difficult to determine what type of siding was used from the photo. Additionally, the assessor card lists wood siding as the type of siding used.

The 1976 Boulder County Assessor card image appears to show stucco siding wrapping the front and south sides of the house (and likely the entire house). Additionally, the assessor card lists stucco as the type of siding used.

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Condition Evaluation:

The aluminum siding is in fair condition. There are a few bent or chipped panels and damage was done to the panels around several of the window openings when awnings were attached and then later removed.



Aluminum siding. One panel is bent near grade on the north side and the siding has been damaged around the west facing window where an awning was removed.

Recommendations:

Investigative deconstruction is recommended in an inconspicuous area to determine what siding exists beneath the aluminum siding. It is likely that the aluminum siding was applied directly over the stucco siding which in turn was likely applied directly over the original wood siding as was common practice in the Louisville area. It is recommended that the aluminum and stucco siding be removed from the entire house. With the removal of this siding, it is likely that the original siding will be exposed. Repair, refinish, or replace the original wood siding.

EXTERIOR MASONRY

Description:

An approximately two-foot tall by one-foot-thick brick wall surrounds the west and part of the south side of the covered front porch. The brick wall is capped in a thin layer of concrete. This wall was likely added at the same time as the covered front porch (between 1948 & 1976) and appears on the 1976 Boulder County Assessor's card image. No other masonry was observed on the house.



Condition Evaluation:

The brick knee-wall is in poor condition as it is crumbling throughout.

Recommendations:

The brick wall should be removed and not replaced. Though the wall likely meets the 50-year minimum to be historic, this wall was not original (it does not appear on the 1948 Boulder County Assessor's card image), it is not structural, and does not fall under the period of significance. Removing the brick wall would further improve the front façade's historic integrity as it is not original.

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EXTERIOR APPENDAGES

Description:

A covered front porch is attached to the southwest corner of the house. The front porch is not original and first appears on the photo in the 1976 Boulder County Assessor's card. The front porch is approximately 7 feet wide and 11 feet deep. The front porch is one step above grade and is slightly lower than the finished floor. The porch floor is a concrete slab. The entire porch is covered with a shed roof supported by two decorative steel columns and a brick knee-wall wraps the porch on the west and south sides, as described above. The steel columns, steel roof structure, brick wall, and concrete slab are likely original to the porch and can be seen in the 1976 photo.

A patio attached to the east side of the house appears on the floor plan of the 1976 Boulder County Assessor's card. This patio appears to have been constructed of concrete in 1975 and removed by 1998, according to building records. It is unclear if this patio was ever covered.

Condition Evaluation:

The covered front porch is in poor condition as the concrete slab and brick wall are deteriorating and the steel columns have a few areas where rust has started to appear, primarily where the columns are attached to the brick wall.



Covered front porch

Recommendations:

Remove the entire covered front porch including the shed roof, steel roof structure and columns, brick wall, and concrete slab. The front porch is not original to the house nor does its construction match any period of significance. Removing the covered front porch would further improve the front façade's historic integrity.

3.4 ENVELOPE – ROOFING & WATERPROOFING

ROOFING SYSTEMS

Description:

The entire house roof is covered with an asphalt composite shingle roof that was added in 2019, according to building records. This roof was likely replaced due to hail damage, as was common in the Louisville area at this time. The new roof replaced an existing asphalt composite shingle roof that had been installed in 2005. The 1948 Boulder County Assessor's card shows that in 1948 the roof material was wood shingles.

There are two mushroom style roof vents located near the roof ridge for attic venting. Low venting at the eaves was not observed.

The covered front porch roof is a corrugated metal roof that is likely original to the front porch.



Asphalt composite shingle roof on main house, corrugated metal roof at the covered front porch.

Condition Evaluation:

The asphalt composition shingle roof, roof vents, and corrugated metal roof are in good condition.

Recommendations:

Consider adding more ridge venting to supplement the two existing vents as well as adding low roof venting in the roof eaves to provide for adequate air circulation and attic venting.

SHEET METAL FLASHING

Description:

Metal flashing is present where the shed roofs meet the original house exterior walls. This flashing is applied over the aluminum siding and was likely added when the new asphalt shingle roof was installed in 2019.

Condition Evaluation:

The metal flashing is in good condition.

Recommendations:

No recommendations at this time.



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PERIMETER FOUNDATION DRAINAGE

Description:

A perimeter foundation drain was not observed during the inspection. Due to the construction time period and construction methods used, it is unlikely that a perimeter foundation drain exists.

DRAINAGE SYSTEM, GUTTERS & DOWNSPOUTS

Description:

Painted white, k-style gutters are found throughout the entire house and front porch. The gutters are located at the end of all eaves in the appropriate locations and of appropriate lengths for adequate water collection.



Upper roof gutters discharge water directly onto covered porch roof.

2x3 downspouts are located throughout and appear to be of an adequate amount for proper drainage where located. There are a few areas where downspouts are not present. The main roof gutters above the covered front porch discharge water directly onto the corrugated metal roof of the covered porch. The main roof gutter above the southeast corner shed roof does not have a downspout and therefore water is released over the edge of the gutter once collected.

Where the downspouts meet grade, downspout extensions are attached in all locations, though one location was found to be propped up and appears to have been so for an extended period of time.

Condition Evaluation:

The gutters are in good condition. The downspouts are in fair condition as they appear to be of an adequate amount and in proper locations but are missing in a few locations. Additionally, all downspout extensions should be maintained to discharge water away from the perimeter of the house and therefore limiting the amount of water near the foundation.

Recommendations:

1. Add a downspout in the southwest corner of the original house so that water from the upper roof is not discharged onto the covered porch roof.
2. Add a downspout from the upper roof to the lower roof gutter in the southeast corner of the original house so that water is not discharged over the edge of the existing gutter.
3. Ensure that all gutter extensions are maintained to discharge water away from the building foundation and are kept clear of debris.

SKYLIGHTS / CUPOLAS

Description:
There are no skylights or cupolas.

3.5 WINDOWS & DOORS

DOORS

Description:

The front door is a stained wood door with a three quarter-lite and wood simulated divided lites. Additionally, the front door has an aluminum, three quarter-lite storm door with missing glass or screens. It could not be determined when the front door was replaced, but it is not the same door as is visible in the 1948 Boulder County Assessor's card photograph. The front door visible in that photograph is likely a wood door and appears to have a three quarter-lite with 2 over 4 divided lites. It is unclear if that door is original, but it would match the style for the period of significance.

On the south side of the house there is an aluminum full-lite storm door that is the entrance to a foyer that was originally a deck and later enclosed between 1948 and 1976. Between the southeast entry room and the kitchen there is a stained wood door with a half-lite, recessed panels, and a dog-door that appears to have been an addition to the door. This wood door was likely an exterior door prior to the southeast porch being enclosed.

Condition Evaluation:

The two wood doors are in fair condition. Both wood doors work properly and appear to create acceptable seals. The aluminum storm doors are in poor condition as both are missing glass or screen panels and neither door appears to close properly.

Recommendations:

1. Remove the aluminum storm door and wood door at the front entry. Replace the door with a new wood door that matches the 1948 Boulder County Assessor's card image.
2. Remove the aluminum storm door on the south side of the house. Replace this door with a new door. Since this enclosure was not part of the original house and was originally a deck without a door, the new door should not match the historic nature of the house.



Front door



South side door



Door from southeast entry to kitchen

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WINDOWS

Description:

According to building records, all the windows were replaced in 1965 and most of the windows present on the house in 2022, appear to be those replacement windows. Some of the replacement windows can be seen on the 1976 Boulder County Assessor's card image. The replacement windows are primarily aluminum, single-pane slider windows. Three windows, including one in the kitchen, the laundry room, and the bathroom, are all vinyl single-hung windows that may have been replaced after 1965, based on their construction style.

An original window can be seen on the west side of the house in the 1948 Boulder County Assessor's card image. This window is taller than what is there in 2022 and may be two side-by-side windows. The original window openings likely exist in the original wall framing.

Additionally, there are two wood awning style, but not operable, windows located at garden height in the east wall of the basement. These windows appear to be original to when the basement was dug out.

Condition Evaluation:

All of the windows are in poor condition. Operation was tested on some, but not all, of the windows with variable results. The aluminum and vinyl windows are beyond the expected lifespan of such windows and do not perform well thermally in Louisville's climate.

Recommendations:

1. Remove existing aluminum and vinyl windows in all locations.
2. Determine the original window opening sizes when the framing or original siding is revealed with the removal of the aluminum and stucco siding.
3. Windows should be replaced with new window units that match the appearance of those in the historic photo from 1948. Typical tall and narrow, single-hung windows can be found on several houses in the Louisville area built at a similar time.
4. The two aluminum windows in the southeast corner of the house are not in historic locations. If this area remains enclosed, these windows should be replaced with new window units that do not match the historic style.



Typical aluminum slider window



Typical vinyl single-hung window

3.6 EXTERIOR DETAILS

SOFFIT & FASCIA

Description:

Soffits are painted corrugated aluminum panels and fascia is painted aluminum channel at all roof overhangs. According to building records, the aluminum soffits and fascia were added in 1977, around the same time that the aluminum siding was added. The fascia is square-cut, with gutters attached using standoffs.

Condition Evaluation:

The soffits and fascia are in fair condition. The aluminum fascia on the west gable end is missing, exposing the original barge rafter, and the soffit in this area is sagging.



Missing fascia & sagging soffit at west gable end. Original barge rafter exposed.

Recommendations:

Remove the aluminum soffits and fascia throughout the entire house. Replace the soffits and fascia with painted flat board soffits & fascia that are similar to what was commonly used in the Louisville area on houses built around the same time. Numerous examples can be found throughout the Louisville area.

TRIM

Description:

All of the corner trim is standard painted aluminum siding trim, 2 ½" wide. Standard painted aluminum j-trim wraps all of the windows and doors as well as the gable end attic access on the east side of the original house. The trim was likely added at the same time as the aluminum siding in 1976.

It is unclear what the original corner and window trim was based on the Boulder County Assessor card images. However, it is likely that the original trim exists, at least in some locations, beneath the aluminum and stucco siding.

Condition Evaluation:

All of the trim is in good condition.

Recommendations:

Remove the aluminum trim with the aluminum siding exposing the original trim below. Repair, refinish, or replace the original trim.

ORNAMENTATION

Description:

Ornamentation does not exist on the house, nor does it appear to have existed in historical photographs.

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3.7 MECHANICAL SYSTEMS

HEATING & AIR-CONDITIONING

Description:

Heating is provided to the entire house through a gas-fired boiler located in the basement. The boiler is atmospherically vented through the roof. Copper supply lines run throughout the floor plenum to baseboard registers on the main floor.

A window air conditioning unit is located at the east facing window in the kitchen. This unit is precariously supported on a makeshift stand on the exterior of the house. It is unclear when any of the heating or cooling equipment was installed, but all units appear to be significantly dated as of 2022.



Gas-fired boiler located in basement.

Condition Evaluation:

The boiler and air conditioning unit appear to be in working condition but were not tested during the site visit. The copper supply and return lines for the boiler appear to be in good condition, though a minor leak was observed at the boiler location.

The boiler and baseboard registers are in poor condition. Several of the register covers were removed or missing revealing deformed register fins which limits optimal performance. The boiler, while not tested, appears to be beyond the expected lifespan of such a unit and it was unclear if the leak at the boiler location was from the boiler unit or one of the supply or return connections.

The window air conditioning unit appears to be in poor condition, though not tested. The unit is not properly supported and is supported in a dangerous manner posing a fall hazard. The air conditioning unit appears to be beyond the expected lifespan and the unit does not appear to have received proper maintenance for being exposed to the elements.



Window mounted air conditioning unit and makeshift support structure located at east facing kitchen window.

Recommendations:

1. The boiler should be replaced with a high-efficiency unit with a sealed combustion intake/exhaust system. Once replaced, the existing supply and return lines should be evaluated for any leaks.
2. Consider replacing the baseboard registers with newer, more efficient units.
3. The window mounted air conditioning unit and support structure should be removed for safety concerns.

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WATER SERVICE, PLUMBING, & SEWER UTILITIES

Description:

A standard 40-gallon, gas-fired water heater is located in the basement and is atmospherically vented through the roof. The water delivery system is copper piping, and the waste lines are cast-iron. The waste line exits the house as cast-iron piping on the east side of the house, in the northern corner. No sewer cleanouts were found in the yard, though it is likely that the sewer line runs to the alley. Additionally, there is no fire sprinkler system in the house.

Condition Evaluation:

The water heater, supply and waste lines, and sewer appear to be in good condition, but were not tested.

Recommendations:

Consider replacing the water heater with a high-efficiency unit with a sealed combustion intake/exhaust system.



Copper water supply and cast-iron waste lines.



40-gallon gas-fired water heater.

3.8 ELECTRICAL SYSTEMS

ELECTRICAL SERVICE & PANELS

Description:

Electrical service to the house is brought in overhead from the alley to the east side of the house. The electrical meter and disconnect are located on the east exterior of the house with the original main breaker panel located on the east wall in the kitchen, located within one of the kitchen cabinets. A newer, secondary breaker panel is located on the east wall in the basement which serves the water heater and boiler. Access to the electrical panels was difficult and the size could not be determined.

Condition Evaluation:

The electrical service was not tested during the site visit but appear to be in working condition. The locations of the electrical panels present difficulties in servicing and they are not properly protected. Additionally, the main breaker panel in the kitchen appeared to be scarred and dirty presenting a safety hazard.

Recommendations:

The electrical service panels should be replaced by a licensed electrical engineer with a single 200-amp panel located in a safe area where it can be serviced and meets all current adopted electrical codes.

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ELECTRICAL DISTRIBUTION SYSTEM

Description:

Electrical distribution throughout the house is Romex, upgraded at an unknown date with parts of the original knob and tube wiring still visible in the basement, though abandoned.

Condition Evaluation:

The electrical distribution was not tested during the site visit but appears to be in good condition.

Recommendations:

No recommendations at this time.



New romex wiring with abandoned knob-and-tube.

LIGHTING

Description:

A wall sconce is installed next to the front door though the bulb and sconce cover were removed.

Condition Evaluation:

The light fixture was not tested but if replaced, appear to be in working condition.

Recommendations:

Consider replacing the exterior light fixture with a full cutoff, high-efficiency unit and adding a fixture next to the back entrance door.

4.0 ANALYSIS AND COMPLIANCE

4.1 HAZARDOUS MATERIALS

Due to the age of the building, the finish coatings may contain lead-based paint and asbestos may be present in the plaster topcoat. A professional evaluation should be conducted to determine the presence of any hazardous materials.

4.2 MATERIALS ANALYSIS

Does not apply.

4.3 ZONING CODE COMPLIANCE

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Notes:

- It is recommended that the owner have a survey of the property conducted to verify the *Lot Size*. All *Lot Coverage* and *Floor Area Ratio* percentages are based on the actual property size and are subject to change from what is specified in this report.
- Building area square footages are taken from:
  - Boulder County Property Records (R)
  - As-built measurements as measured from the interior face of wall, by DAJ Design (M)
- Some areas are taken from the Boulder County Property Records. These records are found to be inaccurate at times. All areas are subject to change based on actual measurements.
- Only the main floor of the house was measured by DAJ Design as this is the only historic structure located on the specified property.

Legal Description:	Lots 14-15, Block 7, Jefferson Place, City of Louisville, County of Boulder, State of Colorado
Year Built (Main House):	Circa 1900
Lot Dimensions:	Approx. 47.5'' x 125' (Improvement Survey Plat)
Lot Size:	6,065 sf (Improvement Survey Plat)
Zoning:	RL (one residential unit per 7,000sf) Property is subject to the Old Town Overlay Zoning District Regs

Areas of levels in square feet (sf):

First (above ground) finished area:	858 sf (M)
Front porch area:	82 sf (M)
Detached garage area:	360 sf (R)
Detached carport area:	160 sf (R)
Detached shed area:	33 sf (R)

Allowable Building Height (from existing grade):

Primary Structure:	27'
Accessory Structure:	20'

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Lot Coverage:			
Existing:	1,548 sf	25.5%	First floor, porch, garage, shed, & carport
Allowable:	2,250 sf	Min.	702 sf remain
Preservation:	2,425 sf	40%	877 sf remain
Landmark:	2,729 sf	45%	1,181 sf remain
Floor Area Ratio:			
Existing:	1,218 sf	20%	First floor & garage
Allowable:	2,699 sf	Min.	1,481 sf remain
Preservation:	2,729 sf	45%	1,511 sf remain
Landmark:	3,032 sf	50%	1,814 sf remain

Setbacks:		
Front:	20’	(could be different depending on the front of neighboring house locations)
Front Porch:	14’	(6’ encroachment into front yard & street side yard setback)
Rear:	25’	
Side (interior lot line):	5’	
Accessory Rear:	3’	
Accessory Side:	3’	

5.0 PRESERVATION PLAN

5.1 PRIORITIZED WORK

CRITICAL DEFICIENCY

- The top of the foundation relative to the top of grade should be determined around the perimeter of the house. If the top of the foundation is determined to be at or below the existing grade, new grading should occur to bring the grade down below the top of the foundation, as prescribed by a licensed structural engineer.
- The wood floor framing members including the sill plate, rim board, floor joists, and floor sheathing should be inspected for rot caused by poor drainage. If rot is found in any of these members, the affected flooring should be replaced as prescribed by a licensed structural engineer.
- All areas where grade slopes towards the house, particularly on the west side of the house, should be regraded to direct water away from the house foundation.
- The foundation wall in the southeast corner of the house, as well as any other areas where cracking or deterioration has occurred, should be replaced as prescribed by a licensed engineer.
- The beams and beam supports should be replaced or reinforced as prescribed by a structural engineer. The best method is to construct new beams and beam supports that support the existing floor joists and remove the existing beams and beam supports as prescribed by a licensed structural engineer. These new supports should bear on footings as prescribed by a licensed structural engineer and located at a depth as specified by a licensed geotechnical engineer.
- Investigative deconstruction is recommended in an inconspicuous area to determine what siding exists beneath the aluminum siding. It is likely that the aluminum siding was applied directly over the stucco siding which in turn was likely applied directly over the original wood siding as was common practice in the Louisville area. It is recommended that the aluminum and stucco siding be removed from the entire house. With the removal of this siding, it is likely that the original siding will be exposed. Repair, refinish, or replace the original wood siding.
- Remove the aluminum trim with the aluminum siding exposing the original trim below. Repair, refinish, or replace the original trim.
- Remove the entire covered front porch including the shed roof, steel roof structure and columns, brick wall, and concrete slab. The front porch is not original to the house nor does its construction match any period of significance.
- Remove the aluminum storm door and wood door at the front entry. Replace the door with a new wood door that matches the 1948 Boulder County Assessor's card image.
- Remove the aluminum storm door on the south side of the house. Replace this door with a new door. Since this enclosure was not part of the original house and was originally a deck without a door, the new door should not match the historic nature of the house.
- Remove existing aluminum and vinyl windows in all locations.
- Determine the original window opening sizes when the framing or original siding is revealed with the removal of the aluminum and stucco siding.
- Windows should be replaced with new window units that match the appearance of those in the historic photo from 1948. Typical tall and narrow, single-hung windows can be found on several houses in the Louisville area built at a similar time.
- The two aluminum windows in the southeast corner of the house are not in historic locations. If this area remains enclosed, these windows should be replaced with new window units that do not match the historic style.

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SERIOUS DEFICIENCY

- The basement and crawlspace walls should be observed by a licensed engineer and repaired as needed. The walls are not suitable for additional load resulting from a remodel or addition and should be replaced for new loading.
- Continually monitor the main floor walls for signs of foundation distress such as cracking or improper door operation. If such signs are detected, these areas should be evaluated by a licensed engineer and repaired as needed.
- The floor framing should be observed by a licensed engineer and repaired as needed. Special attention should be given to the connections between the foundation walls, floor joists, beams, and beam supports. The floors are not suitable for additional load resulting from a remodel or addition and should be replaced for new loading.
- It is recommended to remove the linoleum flooring wherever it occurs throughout the house to properly assess the floor sheathing in these areas.
- Refinish or replace the flooring where signs of water damage have occurred.
- Add a downspout in the southwest corner of the original house so that water from the upper roof is not discharged onto the covered porch roof.
- Add a downspout from the upper roof to the lower roof gutter in the southeast corner of the original house so that water is not discharged over the edge of the existing gutter.
- Ensure that all gutter extensions are maintained to discharge water away from the building foundation and are kept clear of debris.
- The boiler should be replaced with a high-efficiency unit with a sealed combustion intake/exhaust system. Once replaced, the existing supply and return lines should be evaluated for any leaks.
- Consider replacing the baseboard registers with newer, more efficient units.
- The window mounted air conditioning unit and support structure should be removed for safety concerns.

MINOR DEFICIENCY

- Continue to monitor the drainage around the perimeter of the house. The perimeter should be observed after snow and significant rain events to assess for any areas of pooling water.
- If floor deflection is inadequate, consult a licensed structural engineer for additional support design options.
- If the opportunity presents itself, the exterior walls should be assessed by a licensed structural engineer. The owner is to note that the walls will need to be evaluated if any remodels or additional load is to be added. It is likely that additional studs may need to be added for the increased loads above in combination with the wind load on the building.
- Consider adding more ridge venting to supplement the two existing vents as well as adding low roof venting in the roof eaves to provide for adequate air circulation and attic venting.
- Consider replacing the water heater with a high-efficiency unit with a sealed combustion intake/exhaust system.
- Consider replacing the exterior light fixture with a full cutoff, high-efficiency unit and adding a fixture next to the back entrance door.

5.2 PHASING PLAN

A phasing plan is not available at this time.

5.3 ESTIMATE OF PROBABLE COST OF CONSTRUCTION

A probable cost of construction is not available at this time.

6.0 PHOTOGRAPHS AND ILLUSTRATIONS



1948 Boulder County Assessor's Card Image



2022 West Elevation

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1976 Boulder County Assessor's Card Image



2022 Southwest Corner

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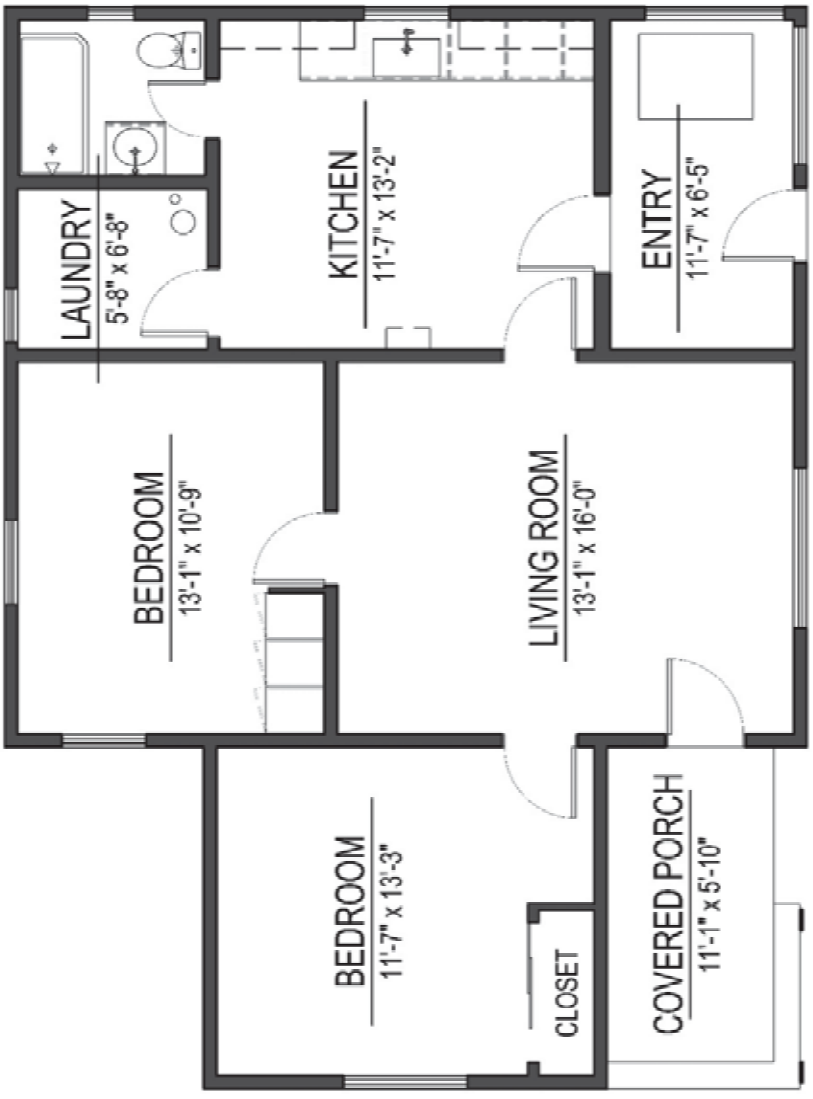
2022 Northwest Corner



2022 Southeast Corner

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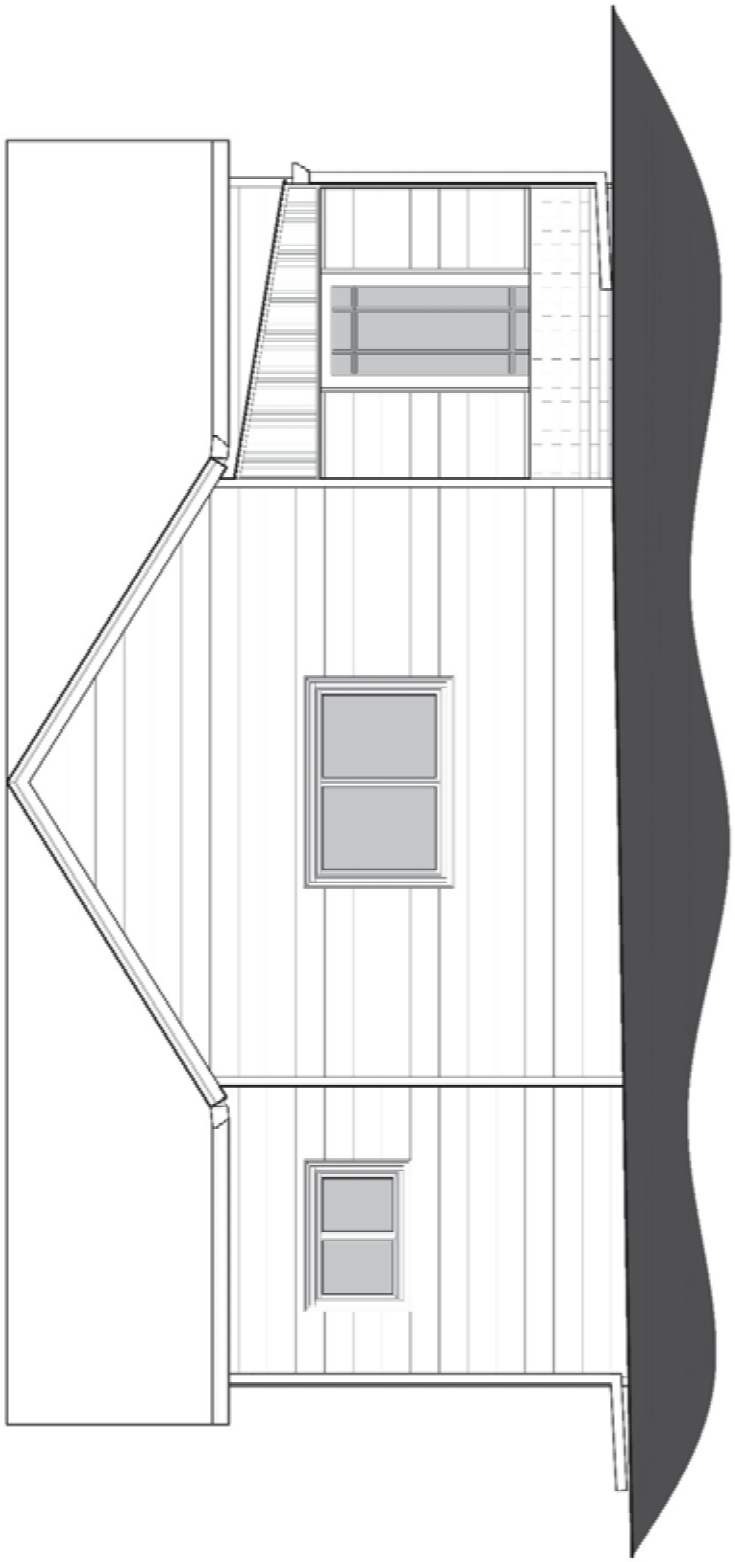
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MAIN LEVEL FLOOR PLAN

SCALE: N.T.S.

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WEST ELEVATION

SCALE: N.T.S.

1 A2.1

Glenn Frank Engineering
Engineering Structures that Endure

Structural Engineering Consultants
P.O. BOX 20708
Boulder, Colorado 80308
303.554.9591

April 1, 2022

Attn: Andy Johnson
DAJ Design
Louisville, CO

Dear Andy,

We visited the residence at 612 Jefferson Ave, Louisville, CO on March 31, 2022 to review the existing building for the purpose of documenting and evaluating the existing structure. It was at this time that we reviewed the building with DAJ Design and coordinated our findings with the report created by DAJ Design.

On April 1, 2022 we reviewed the final report and made any necessary modifications to the structural sections. All findings, evaluations and recommendations are in the report. Below, in this letter, are our structural conclusions and a summary of our scope of work. Please feel free to contact us for any further information.

Structural Conclusions:

A. In our professional opinion, the building's structure is adequate for its continued safe use. The construction does not meet all modern code standards; however, it has performed adequately up to this point. We recommend that a licensed Structural Engineer be retained to further evaluate the structure, provide the repairs recommended in each of the sections of this report and assist in any modifications to the structure proposed by the owner and an architect.

Please see the recommendations sections of the report for any required or recommended structural recommendations, to be completed by a licensed structural engineer and contractor.

It is also important to note that a significant portion of the building's structure was not exposed for our review. There may be damaged structure that we were not able to observe due to finish materials. Also, additional cosmetic imperfections could arise, which is normal for an old structure.

B. An extreme event occurring at the site, such as a tornado, a serious (rare) earthquake or other unforeseen event could significantly damage the structure. But this is also true for most old structures in Louisville (and probably for some modern structures) and is only mentioned for completeness of this report.

C. The drainage around the home should be addressed to allow for water to flow away from the building. Poor drainage could result in water infiltration or excessive movement and damage to the foundation and wood framing.

Glenn Frank Engineering
Engineering Structures that Endure

Structural Engineering Consultants
P.O. BOX 20708
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Summary and Limitations:

A. Summary:

1. The goal of our site observation and the structural portion of the report is to provide an overview of the building's structure and foundation and identify areas where remedial work in the near future is prudent.

2. The recommended remedial measures are intended to promote the building's continued safe use and are not intended to eliminate all existing and potential future cosmetic defects.

B. Limitations:

1. The information contained in the report is the author's professional opinion based on visual evidence readily available at the site, without the removal of existing finish materials. Of course, this means there could be hidden defects which are not discoverable at this time, without demolition of finish materials. That is true for most buildings, and an inherent limitation for this kind of report. Should additional information become available or additional movement is perceived, we recommend that our firm be contacted for further review.

2. The issuance of the report does not provide the building's current or future owners with a guarantee, certification, or warranty of future performance. Acceptance and use of this report do not transfer financial liability for the building or the property to the author or this engineering firm.

3. The report is also only preliminary to make note of areas that need to be addressed. A licensed Structural Engineer should be retained to provide a more thorough investigation and provide appropriate repair details for all necessary repairs.

Sincerely,

Jesse Sholinsky, P.E.



RESOLUTION NO. 1
SERIES 2022

A RESOLUTION MAKING FINDINGS AND RECOMMENDATIONS REGARDING THE LANDMARK DESIGNATION FOR A HISTORICAL RESIDENTIAL PROPERTY LOCATED AT 612 JEFFERSON AVENUE

WHEREAS, there has been submitted to the Louisville Historic Preservation Commission (HPC) an application requesting a landmark eligibility determination for a historical property located at 612 Jefferson Avenue, legally described as Lots 14-15, Block 7, Jefferson Place; and

WHEREAS, the HPC have reviewed the application and found it to be in compliance with Chapter 15.36 of the Louisville Municipal Code, including Section 15.36.050.A, establishing criteria for landmark designation; and

WHEREAS, the HPC has held a properly noticed public hearing on the proposed landmark application; and

WHEREAS, 612 Jefferson Avenue (the LeComte-Hicks House) has social significance because it exemplifies the cultural, political, economic, or social heritage of the community considering its association with various Louisville families and Louisville's cultural heritage; and

WHEREAS, the LeComte-Hicks House has architectural significance because it has architectural integrity that is representative of the built environment in early 20th century Louisville; and

WHEREAS, the HPC finds that these and other characteristics specific to the LeComte-Hicks House have social and architectural significance as described in Section 15.36.050.A of the Louisville Municipal Code; and

NOW, THEREFORE, BE IT RESOLVED BY THE HISTORIC PRESERVATION COMMISSION OF THE CITY OF LOUISVILLE, COLORADO:

1. The application to landmark the property at 612 Jefferson Avenue be approved for the following reasons:
    a. Architectural integrity has been largely maintained over time.
    b. Association with Louisville's heritage.
2. The Historic Preservation Commission recommends the City Council approve the landmark incentive grant in the amount of $5,000.
3. With the amendment that the structure be named the LeComte-Hicks House.

PASSED AND ADOPTED this 7th day of November, 2022.

Lynda Haley, Chairperson

RESOLUTION NO. 3
SERIES 2022

A RESOLUTION MAKING FINDINGS AND RECOMMENDATIONS REGARDING A PRESERVATION AND RESTORATION GRANT FOR THE LECOMTE-HICKS HOUSE LOCATED AT 612 JEFFERSON AVENUE

WHEREAS, there has been submitted to the Louisville Historic Preservation Commission (HPC) an application requesting a preservation and restoration grant for the LeComte-Hicks House, a historic residential structure located at 612 Jefferson Avenue, on property legally described as Lot 14-15, Block 7, Jefferson Place, Town of Louisville, City of Louisville, State of Colorado; and

WHEREAS, the City Staff and the HPC have reviewed the application and found it to be in compliance with Section 3.20.605.D and Section 15.36.120 of the Louisville Municipal Code; and

WHEREAS, the HPC has held a properly noticed public hearing on the preservation and restoration grant; and

WHEREAS, the preservation and restoration work being requested for the LeComte-Hicks House includes making repairs to the existing structure; and

WHEREAS, the Historic Preservation Commission finds these proposed improvements will assist in the preservation of the LeComte-Hicks House, which is to be landmarked by the City;

NOW, THEREFORE, BE IT RESOLVED BY THE HISTORIC PRESERVATION COMMISSION OF THE CITY OF LOUISVILLE, COLORADO:

1. The Historic Preservation Commission recommends the City Council approve the proposed Preservation and Restoration Grant application for the Mossoni House, in the amount of **$100,875** for work as described in the attached Exhibit A.

PASSED AND ADOPTED this 7th day of November 2022.

Lynda Haley, Chairperson

City of Louisville
COLORADO • SINCE 1882

6. COST ESTIMATE OF PROPOSED WORK

*Please provide a budget that includes accurate estimated costs of your project. Include an **itemized breakdown** of work to be funded by the incentives and the work to be funded by the applicant. Include only eligible work elements. Use additional sheets as necessary.*

Type of Incentive: ■ GRANT ☐ LOAN ☐ BOTH

Feature	Proposed Work to be Funded	Fund Request	Match (M)	Total
A.	ASBESTOS ABATEMENT - INTERIOR	$11,000	$11,000	$22,000
B.	ASBESTOS ABATEMENT - EXTERIOR	$8,500	$8,500	$17,000
C.	DEMOLITION	$5,375	$5,375	$10,750
D.	SITE GRADING & DRAINAGE	$3,000	$15,000	$18,000
E.	FOUNDATION	$21,000	$21,000	$42,000
F.	FRAMING	$4,000	$48,200	$52,200
G.	ENVELOPE - EXTERIOR WALLS	$15,500	$15,500	$31,000
H.	WINDOWS & DOORS	$13,500	$21,500	$35,000
I.	MECHANICAL, ELECTRICAL, & PLUMBING	$0	$76,500	$76,500
J.	INSULATION & DRYWALL	$19,000	$19,000	$38,000
K.	NON-HISTORIC BUDGET ITEMS	$0	$150,250	$150,250
	Total Proposed Work	$ 100,875	$ 391,825	$ 492,700

For loan requests, indicate total loan request here:	$

If partial incentive funding were awarded, would you complete your project? ■ YES ☐ NO

City of Louisville
COLORADO • SINCE 1878

Historic Preservation Commission

Meeting Minutes – Excerpt

November 07, 2022
City Hall, Spruce Room
749 Main Street
6:30 PM

Call to Order – Chairperson **Haley** calls the meeting to order at 6:30 PM.

Roll Call was taken and the following members were present:

Commission Members Present:	Lynda Haley, Chair Christine Burg, Vice Chair Gary Dunlap
Commission Members Absent:	Keith Keller
Staff Members Present:	Amelia Brackett Hogstad, HPC Planner Lisa Ritchie, Fire Recovery and Planning Manager Rob Zuccaro, Dir. of Community Development

Public Hearing Items

A. 612 Jefferson Ave: Landmark, Alteration Certificate, and Grant Request – A request to Landmark and approve an Alteration Certificate and Grant request for the property at 612 Jefferson Avenue.

Staff Presentation (Landmark):
Brackett Hogstad begins her presentation by reviewing the property location. She reviews the historic conditions and displays what the current condition of the property is.

She mentions the landmark criteria and reviews each one.

Criteria 1: Landmarks must be at least 50 years old. *Staff finds this criterion is met.*

- The principal structure at 612 Jefferson was constructed in 1900, making it 122 years old.

Criteria 2: Landmarks must meet one or more of the criteria for architectural, social or geographic/environmental significance. *Staff finds this criterion is met.*

- Architectural Significance – Represents a built environment of a group of people in an era of history that is culturally significant to Louisville.
    - This house is associated with the historic development of Louisville and the Jefferson Place subdivision.
- Social Significance – Exemplifies cultural, political, economic or social heritage of the community.
    - Long association with two coal-mining families, LeComte and Hicks.
        - French and English immigration to Louisville.
        - Coal mining and Blue Parrot economic connections.
        - Large family connection to Jefferson Place neighborhood.

Criteria 3: Landmarks should meet one or more criteria for physical integrity. *Staff finds this criterion is met.*

- Physical Integrity – Shows character, interest or value as part of the development, heritage or cultural characteristics of the community, region, state, or nation.
    - This house is in its original location. The 1948 size and form has been retained.
- Retains original design features, materials and/or character.
    - Compromised siding, window and door placement and trim. Proposed restoration work serves physical integrity.

Staff Recommendations (Landmark):
Staff recommends approval of Resolution 1, Series 2022, recommending approval of 612 Jefferson as a Historic Landmark.

Staff recommends that the house be named for the LeComte and Hicks families.

Staff Presentation (Alteration Certificate):
Section 15.36.120 of the LMC gives the criteria for evaluating alteration certificates. Staff finds that the proposed design meets all relevant criteria. She then reviews that the applicant will be doing the following restorations:

- Window size and trim
- Door location and trim
- Siding
- Three facades

She then discusses the new front porch and the changes to the rear.

Staff Recommendations (Alteration Certificate):

Staff recommends approval of Resolution No. 2, Series 2022, approving the Alteration Certificate.

Staff Presentation (Grant):
The applicant is requesting approval of a Preservation and Restoration Grant. The total grant request is $100,875. The grant would be matching. Staff finds that the grant request meets all criteria.

Under Resolution No. 17, Series 2019, approved work must fall under relevant categories.

Resolution No. 17, Series 2019 allows for the exceeding of grant limitations: "These grant limitations may be exceeded upon a showing of extraordinary circumstances relating to building size, condition, architectural details, or other unique condition compared to similar Louisville properties."

Staff Recommendations (Grant):
Staff recommends approval of Resolution No. 3, Series 2022, recommending approval of the grant request in the amount of $100,875.

Commissioner Questions of Staff:
None is heard.

Applicant Presentation:
Andy Johnson, DAJ Design, 922 Main St
Johnson begins his presentation by showing photos of the house based on the assessor's records and personal older photos of the outside and inside of the house. The home had original siding but overtime, the siding got asbestos so some of the interior had to be replaced. He shows an as-built drawing of the west elevation facing Jefferson Ave. The entire footprint and structure is original. There have been no additions.

He shows photos of the existing conditions and the pre and post demolition. They unveiled stucco when they demoed the siding. He also shows photos of the interior house. There was no insulation installed. The framing techniques were very unique. The studs went through the floor structure. The foundation is a concrete foundation that is deteriorating due to water.

He shows an image of what the new design would look like from the front street facing location. The applicant's design will include a back patio. Johnson shows a budget breakdown displaying construction costs.

Commissioner Questions of Applicant:
Dunlap asks where the asbestos from the inside result from.
Johnson says it was in the topcoat layer from the plaster.
Dunlap asks if there was plaster over the beam board.

Johnson says that is right.
Dunlap mentions that he appreciates the overall design. He asks about the front porch's roof.
Johnson says they are going to do a steel beam and a column that will be the primary support for the roof.
Haley asks for clarification
Johnson says we did the asbestos testing and the interior showed up as the primary source of it. We did not know about the stucco at this point. When it was discovered that there was so much of it, we had to do something about it.
The commissioners discuss removing the stucco and whether or not it relates to building code or just preservation. Staff discusses how it deals with both.
Haley asks if there could be another situation where there is asbestos inside the house and we would conclude that they cannot do that. At what point is there that we always cover interior asbestos.
Brackett Hogstad says if it was interior only work, then we would not cover it. In this case, because it so strongly affects the exterior as well, this was a unique circumstance. Staff is factoring in the usability of the structure.
Johnson mentions that there was nothing in the walls and this asbestos affects the entire building.
Haley asks if there had not been interior testing, could you have done the exterior work without removing all the interior walls.
Johnson says no, because we were also going to be changing windows throughout the entire house.
Haley says the siding will be wood and that would be an upgrade. Does preservation just pay for the wood and then any upgrade beyond that, the applicant would pay themselves?
Brackett Hogstad says that an upgrade could still qualify for preservation because it is creating more structural integrity, which affects the longevity of the preservation.
Haley, staff, and Johnson go into further detail of what the budget allowance would look like and what items would be delegated.
Johnson mentions about the possibility of rehabilitating the existing siding.

Public Comment:
None is heard.

Closing Statement by Applicant:
None is heard.

Discussion by Commissioners:
Haley mentions that the interior seems tied together with the exterior preservation.
Burg agrees with Haley.
Dunlap asks about insulation and the requirement to upgrade it to current code.
Ritchie mentions that the new insulation would have to adhere to our adopted energy code.

Dunlap asks if by approving this, we are setting a precedent that other applications can also get their insulation and drywall covered.
Ritchie says every application is unique but she does not believe the commission would be setting any kind of precedent for future applications.
Burg reiterates that this interior work directly affects the exterior. This truly is unique.
Dunlap asks the commission if they would feel more comfortable with a smaller grant amount because of the upgrade in siding, reducing it from $10,000 to $5,000.
Haley says she is not sure if it is a large enough amount to nickel and dime.
Burg reminds the commission that the amount is so large because this is for the entire home. The home will look nearly identical to what it looks like now.
Haley says that it seems that they have done above and beyond what they need to do in order to landmark. She goes through the landmarking criteria and believes it meets each one.

Dunlap moves and **Burg** seconds a motion to approve Resolution 1, Series 2022, approving 612 Jefferson Ave as a Historic Landmark. Motion passes unanimously by a roll call vote.

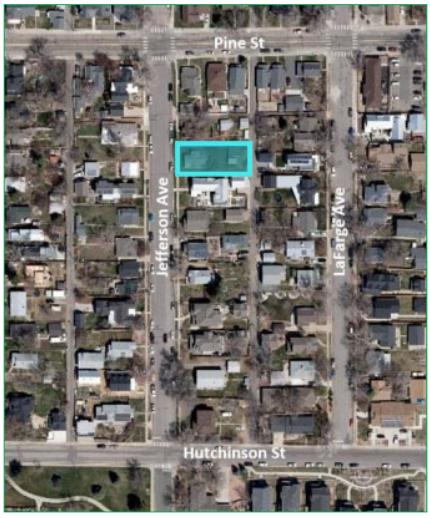
Burg moves and **Dunlap** seconds a motion to approve Resolution No. 2, Series 2022, approving 612 Jefferson Ave's Alteration Certificate. Motion passes unanimously by a roll call vote.

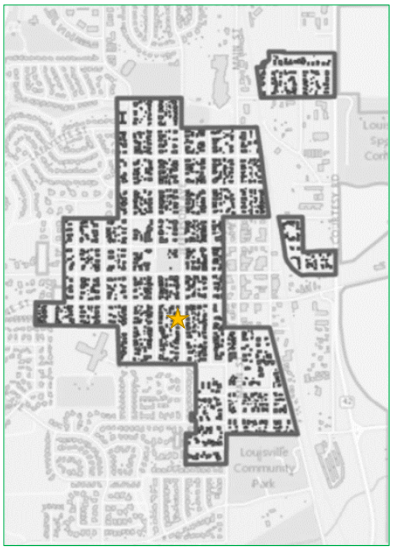
Dunlap moves and **Burg** seconds a motion to approve Resolution No. 3, Series 2022, approving 612 Jefferson Ave the grant request in the amount of $100,875. Motion passes unanimously by a roll call vote.

612 Jefferson Avenue

- Resolution No. 51, Series 2022 (Landmark)
- Resolution No. 52, Series 2022 (Grant)

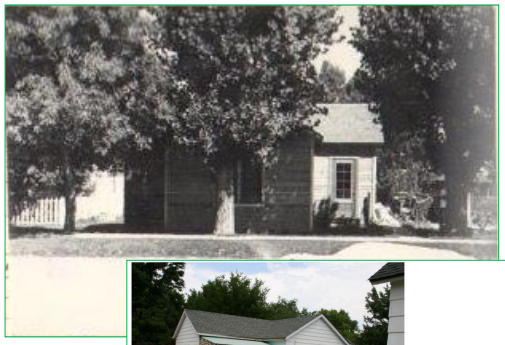
A request to Landmark and approve a Grant for the property at 612 Jefferson Avenue.

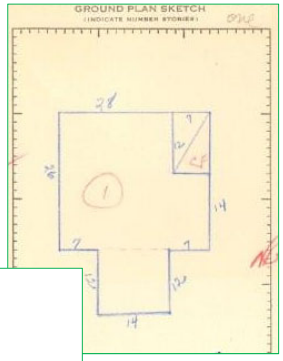




Location

2









Streetviews of southwest and northwest elevations, 2021 photos

Conditions Over Time

3

612 Jefferson Avenue

Resolution No. 51, Series 2022 (Landmark)

4

- ***Landmarks must be at least 50 years old.***
  - The principal structure at 612 Jefferson was constructed in 1900, making it 122 years old.
- ***Landmarks must meet one or more of the criteria for architectural, social or geographic/environmental significance.***
  - Long association with two coal-mining families, LeComte and Hicks.
    - French and English immigration to Louisville.
    - Coal-mining and Blue Parrot economic connections.
    - Large family connection to Jefferson Place neighborhood.
- ***Landmarks should meet one or more criteria for physical integrity.***
  - Original location.
  - 1948 size and form retained.
  - Compromised siding, window and door placement and trim.
  - Proposed restoration work serves physical integrity.
- **HPC recommended approval.**

Landmark

5

Historic Preservation Commission

612 Jefferson Avenue

Resolution No. 52, Series 2022 (Grant)

6

Grant Request

- The applicant is requesting approval of a Preservation and Restoration Grant.
- The total grant request is $100,875.
  - $40,000 maximum
  - $60,875 extraordinary circumstances
  - $100,875 total
- The grant would be matching.
- Staff finds that the grant request meets all criteria.
- The HPC recommended approval.

All requests are related to rehabilitation or restoration.

Feature	Proposed Work to be Funded	Fund Request	Match (M)	Total
A.	ASBESTOS ABATEMENT - INTERIOR	$11,000	$11,000	$22,000
B.	ASBESTOS ABATEMENT - EXTERIOR	$8,500	$8,500	$17,000
C.	DEMOLITION	$5,375	$5,375	$10,750
D.	SITE GRADING & DRAINAGE	$3,000	$15,000	$18,000
E.	FOUNDATION	$21,000	$21,000	$42,000
F.	FRAMING	$4,000	$48,200	$52,200
G.	ENVELOPE - EXTERIOR WALLS	$15,500	$15,500	$31,000
H.	WINDOWS & DOORS	$13,500	$21,500	$35,000
I.	MECHANICAL, ELECTRICAL, & PLUMBING	$0	$76,500	$76,500
J.	INSULATION & DRYWALL	$19,000	$19,000	$38,000
K.	NON-HISTORIC BUDGET ITEMS	$0	$150,250	$150,250
	Total Proposed Work	$ 100,875	$ 391,825	$ 492,700

Grant

7

Extraordinary circumstances

Resolution No. 17, Series 2019 allows for the exceeding of grant limitations:

These grant limitations may be exceeded upon a showing of extraordinary circumstances relating to building size, condition, architectural details, or other unique condition compared to similar Louisville properties.

Table 1. Summary of staff analysis of qualifying expenses under Reso. 17, Series 2019.

Requests	Preservation, Restoration, or Rehabilitation?	Extraordinary circumstances relating to building size, condition, architectural details, or other unique condition?
Asbestos Abatement - Interior	Rehabilitation	Condition
Asbestos Abatement - Exterior	Restoration	Architectural details
Demolition	Restoration	Architectural details
Site grading and drainage	Rehabilitation	-
Foundation	Rehabilitation	Condition
Framing	Rehabilitation	-
Envelope - Exterior Walls	Restoration	Architectural details & condition
Windows & Doors	Restoration	Architectural details & condition
Insulation & Drywall	Rehabilitation	Condition

Grant

8

Table 1. Summary of staff analysis of qualifying expenses under Reso. 17, Series 2019.

Requests	Preservation, Restoration, or Rehabilitation?	Extraordinary circumstances relating to building size, condition, architectural details, or other unique condition?
Asbestos Abatement - Interior	Rehabilitation	Condition
Asbestos Abatement - Exterior	Restoration	Architectural details
Demolition	Restoration	Architectural details
Site grading and drainage	Rehabilitation	-
Foundation	Rehabilitation	Condition
Framing	Rehabilitation	-
Envelope - Exterior Walls	Restoration	Architectural details & condition
Windows & Doors	Restoration	Architectural details & condition
Insulation & Drywall	Rehabilitation	Condition

Needs repair, missing key structural/habitable elements

Related to restoration described in Alteration Certificate Request

Grant

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Landmark

- Staff recommends approval of Res. No. 51, Series 2022.

Grant

- Staff recommends approval of Res. No. 52, Series 2022.

Recommendations

10

City of Louisville
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CITY COUNCIL COMMUNICATION
AGENDA ITEM 7B

SUBJECT: **600 LINCOLN AVENUE REQUEST FOR A LANDMARK AND HISTORIC PRESERVATION GRANT**

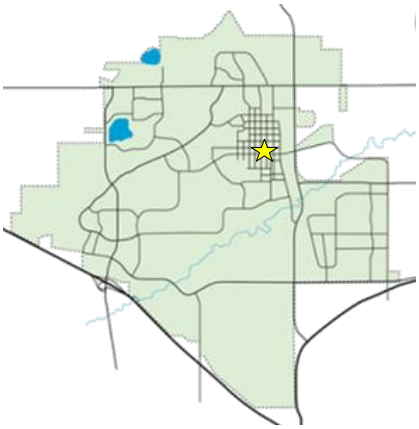
RESOLUTION NO. 53, SERIES 2022– A RESOLUTION APPROVING THE LANDMARK DESIGNATION FOR 600 LINCOLN AVENUE, THE PETRUN HOUSE

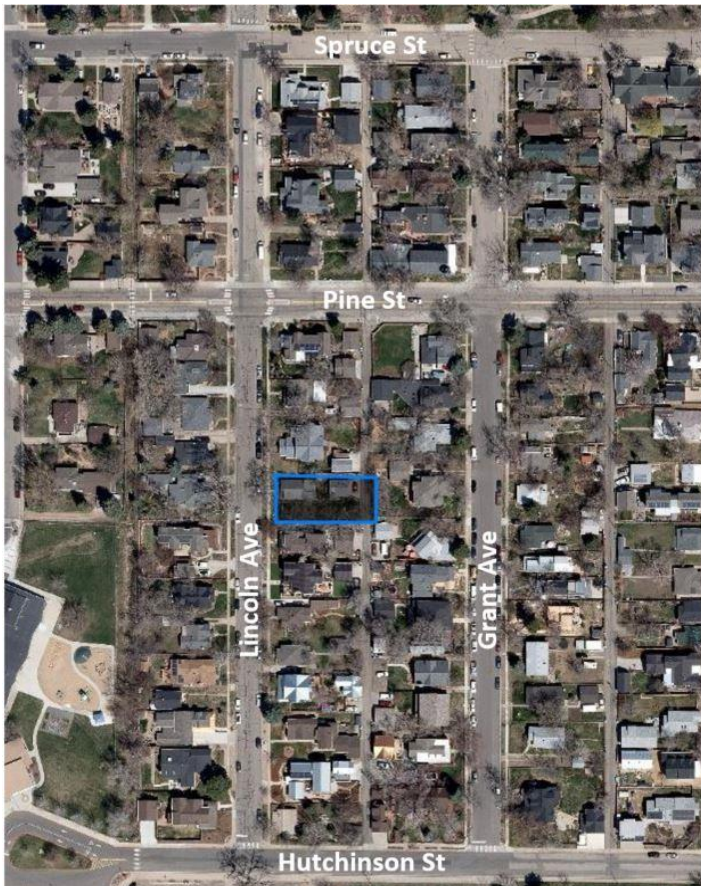
RESOLUTION NO. 54, SERIES 2022 – A RESOLUTION APPROVING A PRESERVATION AND RESTORATION GRANT FOR THE PETRUN HOUSE AT 600 LINCOLN AVENUE

DATE: **DECEMBER 20, 2022**

PRESENTED BY: **AMELIA BRACKETT HOGSTAD, HISTORIC PRESERVATION PLANNER**

LOCATION:





REQUEST:

The applicant requests the following:
Landmark Designation: Landmark designation for 600 Lincoln Avenue, to be known as the Petrun House, and accompanying $5,000 Landmark Bonus.

Grant Request: A Historic Preservation Fund matching grant of $40,000 for preservation, rehabilitation and restoration work on the structure. This the first grant request for the property.

HISTORICAL BACKGROUND:
Information from Bridget Bacon, Louisville Historical Museum

The building is part of the Pleasant Hill Addition, platted in 1894. The subject property is primarily associated with the Petrun family, who built the structure and owned the property for 65 years, from 1904 to 1969.

Paul and Mary Petrun (née Sirokman) married in Slovakia and moved to Louisville in the 1890s, where Paul worked as a coal miner until 1937. Paul and Mary Petrun had five children who grew up at 600 Lincoln starting in 1904: John (1891- 1947), Mary (Dudash) (1894-1972), Michael (1896-1955), Paul (1904-1975), and Rose (Stritchko) (1907-2006). Several Slovak families besides the Petrun family also owned or lived in homes in the 500 and 600 block of Lincoln, south of Pine Street. More Slovak families lived on the 500 and 600 block of Grant, one street to the east.

The Petrun siblings inherited the house after their mother's death in 1968 and sold it in 1969. Between 1969 and 2012, the house changed hands six times, with the longest owners being the Murphys (17 years), Mark Stephen Herman and Sarah Pendleton (14 years), and the Ward-Mitchell family (19 years). Lisa Tenenbaum owned the property from 2012-2021, when the current owners bought it.



600 Lincoln Avenue, Boulder County Assessor's Card, 1948



600 Lincoln Avenue, northwest elevation, 2021

ARCHITECTURAL INTEGRITY:

600 Lincoln is a two-story wood framed, front gabled, vernacular Folk Victorian. It exhibits a number of character defining features including the decorative shingles, decorative vergeboard in the gable peak, gable returns, and architrave surrounds on a number of the windows. The structure has horizontal wood siding and a sandstone foundation. The house has a moderately-pitched front gable roof with a red brick chimney. A large, non-historic, shed-roofed dormer is located on the south elevation. Windows on the original house appear to be 1-over-1 double-hung sash with decorative surrounds on the exterior. An enclosed hipped-roof porch extends the full length of the façade.

A garage and guest space is located near the alley east of the house. It is 1 and ½ stories tall. It exhibits a concrete foundation and horizontal wood siding. The roof is also a front gable with eave returns. The garage was built in the 1980s according to building permit records and is not considered historic.

Boulder County Assessor records indicate that this house was constructed circa 1904. It is located within the Pleasant Hill Addition. An addition to the east (rear) dates to the 1940s, with two porches to the north and south that were later enclosed in the 1940s and 1970s, respectively. An upper two-story addition in the rear dates to the 1970s. It exhibits a rectangular floor plan and the building faces Lincoln Avenue to the west.

Primary Changes Occurring Over Time:

• Original house (RED)	1904
• Front porch (YELLOW)	1904
○ Enclosed	Post-1948
• South deck (ORANGE)	Pre-1948
○ Enclosed	1940's
• North deck (BLUE)	Pre-1948
○ Enclosed	1970's
• 2nd Floor addition (GREEN)	1970's
• Detached garage	1980
• Rear wood deck	Post-2000
• New asphalt roof	2018



Figure 1. Excerpt from HSA showing changes over time to the first floor of the structure.

HISTORICAL SIGNIFICANCE ANALYSIS AND CRITERIA FOR LISTING AS LOCAL LANDMARK:

In order to receive a City landmark designation, landmarks must be at least 50 years old and meet one or more of the criteria for architectural, social or geographic/environmental significance as described in Louisville Municipal Code (LMC) Section 15.36.050(A).

Staff finds that this application complies with the above criterion by the following:

Sec. 15.36.050. - Criteria for Designation

Criteria	Meets Criteria?	Evaluation
A. Landmarks must be at least 50 years old and meet one or more of the criteria for architectural, social or geographic/environmental significance as described in this chapter.	**Yes**	600 Lincoln Avenue was constructed 1904, making it 117 years old.
1. a. Architectural. ***1) Exemplifies specific elements of an architectural style or period.*** *2) Example of the work of an architect or builder who is recognized for expertise nationally, statewide, regionally, or locally.* *3) Demonstrates superior craftsmanship or high artistic value.* *4) Represents an innovation in construction, materials or design.* *5) Style particularly associated with the Louisville area.* ***6) Represents a built environment of a group of people in an era of history that is culturally significant to Louisville.*** *7) Pattern or grouping of elements representing at least one of the above criteria.* *8) Significant historic remodel.*	**Yes**	600 Lincoln is a good example of the vernacular Folk Victorian style that is common in Louisville. It retains a number of character defining features and ornamentation that some other Folk Victorian examples have lost over time. The decorative shingling detailed in the gable and the vergeboard detailing is distinctive and were an important character defining feature to many 1900s-era homes. The structure and surrounding neighborhood are associated with the Slovak community in Louisville. While not associated one of the largest or most prominent ethnic group in Louisville's history, this small neighborhood helps to represent the ethnic diversity of Louisville's turn-of-the-century mining era.
1. b. Social. *1) Site of historic event that had an effect upon society.* ***2) Exemplifies cultural, political, economic or social heritage of the community.*** *3) Association with a notable person or the work of a notable person.*	**Yes**	The Petrun family is one of many of Louisville's families from Slovakia, particularly in this neighborhood of the City. The Petrun family also has lineage and ownership that carried for 65 years total at this house and because of that, staff finds this exemplifies the cultural and social heritage of the community. Paul Petrun was a coal miner and his son worked as a meatcutter for Thirlaway's Meat Market on Main Street. The Petrun family ties to different economic drivers of Louisville's cultural heritage meet the criterion set forth for social significance.
1. c. Geographic/environmental.	**Yes**	The Folk Victorian stylistic elements were a defining feature of the early

1) Enhances sense of identity of the community. *2) An established and familiar natural setting or visual feature that is culturally significant to the history of Louisville.*		twentieth century period. Elements of this style are found elsewhere in the surrounding neighborhood, creating a sense of common identity and tying the structures to a period of social significance for the neighborhood.
3. All properties will be evaluated for physical integrity and shall meet one or more of the following criteria: ***a. Shows character, interest or value as part of the development, heritage or cultural characteristics of the community, region, state, or nation.*** ***b. Retains original design features, materials and/or character.*** ***c. Remains in its original location, has the same historic context after having been moved, or was moved more than 50 years ago.*** ***d. Has been accurately reconstructed or restored based on historic documentation.***	**Yes**	The house is located in the Pleasant Hill Subdivision which was first platted by the founder of the Louisville area's first mine, Charles Welch. It retains four of the seven aspects of integrity: location, setting, materials, and association. It also has historical ties to Louisville's coal-mining industry. The structure retains some of its original Folk Victorian ornamentation. The structure at 600 Lincoln Avenue is found in its original location. If the restoration work in the Alteration Certificate Request were approved and completed, additional architectural elements would be accurately reconstructed based on historical documentation.

GRANT REQUEST:
The applicant is requesting approval of a Preservation and Restoration Grant credit for rehabilitation and restoration work on the structure at 600 Lincoln Avenue. The total grant request is $40,000. This grant would be in addition to the $5,000 signing bonus for landmarking the structure and the $4,000 grant for the Historic Structure Assessment previously approved for the property.

A Historic Structure Assessment for the property, was completed by DAJ Design and paid for by the HPF. The assessment makes several recommendations including reinforcing the original foundation, removing the southwest dormer, and restoring the front porch. The proposed total cost for all eligible work is $80,004.68.

COST ESTIMATE OF PROPOSED WORK: $80,004.68

MATCHING GRANT CREDIT REQUEST: $40,000 (matching grant maximum $40,000)

Grants:
Under Resolution No. 17, Series 2019, residential applicants are eligible for a $5,000 unmatched incentive grant as a landmark bonus. Owners of a landmarked property will be eligible for this grant following the signing of the landmark and grant agreements. The remaining $40,000 grant shall be conditioned based on the applicant matching one hundred percent of the amount for approved work. Approved work must fall under the categories of preservation, rehabilitation, and restoration.

> **Preservation** *is the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property as they now exist. Approved work focuses upon the repair of exterior historic materials and features rather than extensive replacement and new construction.*
>
> **Rehabilitation** *is the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values. Rehabilitation acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate.*
>
> - Reinforcement of original foundation
>
> **Restoration** *is the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time. Approved work focuses on exterior work and includes the removal of features from other periods in its history and reconstruction of missing features from the restoration period.*
>
> - Removal of dormer
> - Restoration of front porch

The applicant is requesting a matching grant amount of $40,000 be considered under Resolution No. 17, Series 2019. The Resolution allows for grants up to the amount of $40,000 "*conditioned based on the applicant matching at least one hundred percent (100%) of the amount of the grant*."

HISTORIC PRESERVATION COMMISSION ACTION:
The Historic Preservation Commission (HPC) held a public hearing on the application on November 7, 2022. The HPC voted to recommend approval of both the local landmark designation and the Historic Preservation Fund grant request. In addition, the HPC approved an alternation certificate for the restoration work associated with the grant request. The HPC determined the restoration and rehabilitation work did not affect the architectural integrity and qualified for matching grant funds.

PUBLIC COMMENT:
Staff has not received any public comments regarding the request.

FISCAL IMPACT:
Approval of this request for a total grant of up to $45,000 from the Historic Preservation Fund: a $5,000 landmark incentive grant (unmatched), and a $40,000 matching grant.

PROGRAM/SUB-PROGRAM IMPACT:
The application meets the Community Design program goals and sub-program objectives by providing incentives to preserve the historic character of Old Town and to encourage the promotion and preservation of Louisville's history and cultural heritage.

RECOMMENDATION:
Staff recommends approval of Resolution No. 53, Series 2022 and Resolution No. 54, Series 2022, approval the local landmark designation for 600 Lincoln Avenue and approving the Historic Preservation Grant request of $40,000.

ATTACHMENTS:
1. Resolution No. 53, Series 2022
2. Resolution No. 54, Series 2022
3. Application Materials
4. Social History Report
5. Historic Structure Assessment
6. Historic Preservation Commission Resolution No. 4, Series 2022
7. Historic Preservation Commission Resolution No. 6, Series 2022
8. Historic Preservation Commission Minutes, November 7, 2022
9. Presentation

STRATEGIC PLAN IMPACT:

☐	**Financial Stewardship & Asset Management**	☐	**Reliable Core Services**
☐	**Vibrant Economic Climate**	☒	**Quality Programs & Amenities**
☒	**Engaged Community**	☐	**Healthy Workforce**
☐	**Supportive Technology**	☐	**Collaborative Regional Partner**

RESOLUTION NO. 53
SERIES 2022

A RESOLUTION APPROVING THE LANDMARK DESIGNATION FOR AT 600 LINCOLN AVENUE, THE PETRUN HOUSE

WHEREAS, there has been submitted to the City Council an application requesting a landmark eligibility determination for a historical residential property located at 600 Lincoln, on property legally described as Lots 11 & 12, Block 11, Pleasant Hill Addition, City of Louisville, State of Colorado;

WHEREAS, City staff and the Louisville Historic Preservation Commission have reviewed the application and found it to be in compliance with Chapter 15.36 of the Louisville Municipal Code; and

WHEREAS, the Louisville Historic Preservation Commission held a properly noticed public hearing on the proposed landmark application and has forwarded to the City Council a recommendation of approval; and

WHEREAS, the City Council has duly considered the proposed landmark application and the Commission's recommendation and report, and has held a properly noticed public hearing on the application; and

WHEREAS, the Petrun House has social significance because it exemplifies the cultural, political, economic, or social heritage of the community;

WHEREAS, the Petrun House has architectural significance due to its physical integrity and association with the historic era in which it was built or altered; and

WHEREAS, the City Council finds that these and other characteristics specific to the individual structure are of both architectural and social significance as described in Section 15.36.050 (A) of the Louisville Municipal Code and justify the approval of the historic landmark application.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

1. The proposed historic landmark application for the Petrun House is hereby approved and is hereby designated a historic landmark to be preserved as such and is eligible for a $5,000 landmark incentive grant.

PASSED AND ADOPTED this 20th day of December, 2022.

By: _____
Ashley Stolzmann, Mayor

Attest: _____
Meredyth Muth, City Clerk

RESOLUTION NO. 54
SERIES 2022

A RESOLUTION APPROVING A PRESERVATION AND RESTORATION GRANT FOR THE PETRUN HOUSE AT 600 LINCOLN AVENUE

WHEREAS, there has been submitted to the Louisville Historic Preservation Commission (HPC) an application requesting a Preservation and Restoration Grant for the historical residential property located at 600 Lincoln, on property legally described as Lots 11 & 12, Block 11, Pleasant Hill Addition, City of Louisville, State of Colorado;

WHEREAS, City staff and the HPC have reviewed the application and found it to be in compliance with Chapter 15.36.120 of the Louisville Municipal Code; and

WHEREAS, the HPC held a properly noticed public hearing on the proposed grant application and has forwarded to the City Council a recommendation of approval; and

WHEREAS, the City Council has duly considered the proposed grant application and the Commission's recommendation and report, and has held a properly noticed public hearing on the application; and

WHEREAS, the City Council finds that the proposed improvements will assist in the preservation of the Petrun House, a local historic landmark.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby approves the Preservation and Restoration Grant for work at the Petrun House, subject to the following:

1. Approved preservation items are those in the proposed scope of work to City Council totaling $$40,000.
2. There is approved a total grant amount of $40,000.

PASSED AND ADOPTED this 20th day of December, 2022.

By: _____
Ashley Stolzmann, Mayor

Attest: _____
Meredyth Muth, City Clerk

City of Louisville

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Historic Preservation Fund

Grant and Loan Application and Information

(Revised June 2019)

City of Louisville
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Guidelines

The City of Louisville's Historic Preservation Fund (HPF) and is intended to help retain the character of Historic Old Town Louisville by promoting the preservation and rehabilitation of historic resources.

Staff contact

Felicity Selvoski, Historic Preservation Planner
749 Main St.
Louisville, CO 80027
(303) 335-4594
fselvoski@louisvilleco.gov

Deadlines

There are no application deadlines, although the date of application will determine when the public hearing for a case can occur. Please reach out to staff if there is a specific date you are targeting. Applications will be considered as they are received, but are subject to the availability of funds.

Eligible Applicants

Any owner of a historic resource (at least 50 years old) or resource that helps to define the character of Historic Louisville is eligible to apply to the HPF. "Resources" include, but are not limited to, primary structures, accessory structures, outbuildings, fences, existing or historical landscaping, archaeological sites, and architectural elements of structures.

Owners of property in Historic Old Town Louisville which will experience new construction may also be awarded grants to preserve the character of Historic Old Town. The purpose of these incentives it to limit mass, scale, and number of stories, to preserve setbacks, to preserve pedestrian walkways between buildings, and to utilize materials typical of historic buildings, above mandatory requirements. For additional information on the requirements, please reach out to the Historic Preservation Planner.

Historic Structure Assessments

Prior to any structure being declared a landmark, the property will undergo a building assessment to develop a preservation plan and establish priorities for property maintenance. At a regular meeting, the Historic Preservation Commission will review the building history, application, and relevant information to determine whether there is probable cause to believe the building may be eligible for landmarking. If probable cause is found, the owner will be eligible for a building assessment grant in an amount up to $4,000 (residential properties) and $9,000 (commercial properties) to offset the cost of the assessment.

Landmarking Grants

In addition to the pre-landmarking grant for a structural assessment, landmarked residential properties are eligible for a $5,000 incentive grant and up to $40,000 in matching grant funds for preservation projects for a period of 36 months from when a property is declared a landmark. Commercial landmarked properties are eligible for a $50,000 incentive grant and up to $150,000 in matching grant funds for preservation projects for a period of 36 months from when a property is declared a landmark. For properties showing extraordinary circumstances relating to building size, condition, architectural details, or other unique condition compared to similar Louisville properties, the grant limitations may be exceeded. Please reach out to the Historic Preservation Planner for more information on the grant programs.

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Eligible Costs and Improvements:

Eligible costs include hard costs associated with the physical preservation of historic fabric or elements. Labor costs are eligible IF the work is to be done by someone other than the applicant/owner (whose labor can only be used for matching purposes with an acceptable written estimate). Example eligible work *may* include the following improvements:

Repair and stabilization of historic materials:

- Siding
- Decorative woodwork and moulding
- Porch stairs and railing
- Cornices
- Masonry (such as chimney tuckpointing)
- Doors and Windows

Removal of non-historic materials, particularly those covering historic materials:

- Siding, trim and casing
- Porch enclosures
- Additions that negatively impact the historic integrity
- Repair/replacement to match historic materials

Energy upgrades:

- Repair and weather sealing of historic windows and doors
- Code required work

Reconstruction of missing elements or features:

(Based on documented evidence such as historic photographs and physical evidence)

- Porches and railings
- Trim and mouldings
- False-fronts

Ineligible Costs and Improvements:

- Redecorating or any purely cosmetic change that is not part of an overall rehabilitation
- Soft costs such as appraisals, interior design fees, legal, accounting and realtor fees, sales and marketing, permits, inspection fees, bids, insurance, project signs and phones, etc.
- Excavation, grading, paving, landscaping or site work such as improvements to paths or fences unless the feature is part of the landmark designation, except for correcting drainage problems that are damaging the historic resource
- Repairs to additions on non-historic portions of the property
- Reimbursement for owner/self labor (which can count only towards the matching costs)
- Interior improvements, unless required to meet current code
- Outbuildings which are not contributing structures to a landmarked site or district

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Application Review Process

Applications will be screened by Historic Preservation Commission (HPC) staff to verify project eligibility. If any additional information is required, staff will contact the applicant directly. The HPC will evaluate the applications in a public meeting at which the applicant will be allowed to make statements. The HPC will make a recommendation to City Council, and City Council will take final action on the application.

Project Review and Completion

Any required design review or building permits must be obtained before beginning work on the project. If a property has already been landmarked, in some circumstances an Alteration Certificate must be approved by the HPC. Any changes made during the building permit approval process may require additional review by the Historic Preservation Commission, depending on the extent of the changes.

Disbursement of Funds

In most cases, grants will take the form of reimbursement after work has been completed, inspected and approved as consistent with the approved grant application. In planning your project, you should arrange to have adequate funds on hand to pay the costs of the project. Incentives may be revoked if the conditions of grant approval are not met. Under some circumstances, incentives, particularly loans, may be paid prior to the beginning of a project or in installments as work progresses.

Grant/Loan Process Outline

1. Applicant meets with Preservation Planner to discuss the scope of work.
2. Applicant meets with contractors and receives quotes.
3. Applicant submits application and documentation to staff.
4. Staff will review the application for completeness and then schedule the meeting with the HPC. Staff will notifiy applicant of hearing date.
5. Public Notice Sign is posted on property by applicant advertising meeting date and neighbors within 500 feet are notified.
6. The HPC reviews the scope of work and quotes and makes a recommendation to City Council. The applicant must be present to answer questions.
7. Staff will schedule the City Council meeting. The applicant must be present to answer questions. City Council will make the final decision.
8. The grant agreement is signed by the applicant(s) and mayor. At this point, the applicant may apply for a building permit to begin the work outlined in grant agreement.
9. Inspections are completed by Building Department as required. Preservation Planner inspects work for sensitivity to historic structure
10. Applicant submits contractor invoices to staff as work is completed.
11. Staff reviews invoices for completeness and compares with invoice approved by HPC.
12. If approved, staff submits pay request to Finance Department. The check is cut to Applicant.
13. If denied, staff works with applicant to identify reasons for denial and methods of resolution.
14. Applicant to repeat steps 11 through 14 until project is complete.

Incentives from the Historic Preservation Fund may be considered taxable income and applicants may wish to consult with a tax professional.

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Historic Preservation Application

The following information must be provided to ensure adequate review of your proposal. Please type or print answers to each question. Please keep your responses brief but thorough. If you have any questions about the application or application process, please reach out to the Historic Preservation Planner.

TYPE(S) OF APPLICATION

- ☐ Probable Cause Hearing/Historic Structure Assessment
- ☑ Landmark Designation
- ☑ Historic Preservation Fund Grant
- ☐ Historic Preservation Fund Loan
- ☑ Landmark Alteration Certificate
- ☐ Demolition Review
- ☐ Other: _____

1. OWNER/APPLICANT INFORMATION

Owner or Organization

Name(s): Kyle and Jessica Thompson

Mailing Address: 2729 Meadow Mountain Trail, Lafayette CO 80026

Telephone: 720-352-2135

Email: thompson.w.kyle@gmail.com ; jkt428@gmail.com

Applicant/Contact Person (if different than owner)

Name: same

Company: _____

Mailing Address: _____

Telephone: _____

Email: _____

2. PROPERTY INFORMATION

Address: 600 Lincoln Avenue, Louisville CO 80027

Legal Description: Lots 11 & 12, Block 11, Pleasant Hill Addition, Louisville, Colorado

Parcel Number: 157508432007 Year of construction (if known): 1904

Landmark Name and Resolution (if applicable): none yet

Primary Use of Property: residence

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3. REQUEST SUMMARY

Preserving the original structure which has historical significance, restoring certain historic features, and completing an addition.

4. PROJECT DESCRIPTION (Please do not exceed space provided below.)

a. Provide a brief description of the proposed scope of work.

- Requesting Historic Preservation Grant Funding
- Requesting Alteration Certificate to include a two story addition (drawings attached).

b. Describe how the work will be carried out and by whom. Include a description of elements to be rehabilitated or replaced and describe preservation work techniques that will be used.

Petra Custom Builders will be performing all rehabilitation work as well as all work related to the new addition. Scope of work on the original structure includes:
-transition the covered porch back to the original, open porch.
-remove the 2nd floor dormer to match the original front profile of the home. The 2nd story of the original structure will be returned to attic space.
- original foundation will require some reinforcement as detailed elsewhere.

c. Explain why the project needs historic preservation funds. Include a description of community support and/or community benefits, if any.

600 Lincoln Avenue is a well preserved, historic property for the most part. Over time, several modifications have been made that have changed the profile of the home. Preservation funds will be used to restore the front facing profile to more closely match the original structure as well as to reinforce the structural integrity.

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5. DESCRIPTION OF REHABILITATION *(Attach additional pages as necessary.)*

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
The original porch remains but it was enclosed in 1980 to create a sun room.	The porch will be returned to an open style porch as pictured in historic photos.

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
A 2nd floor addition was completed in the 1970's which added a dormer on one side of the home.	Dormer will be removed to restore the historic profile of the home. 2nd floor of the original structure will once again become attic space with the removal.

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
Original foundation remains with few reinforcments made over the years.	Foundation for the original structure needs to be reinforced.

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:

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Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:

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Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:

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6. COST ESTIMATE OF PROPOSED WORK

*Provide a budget that includes accurate estimated costs of your project. Include an **itemized breakdown** of work to be funded by the incentives and the work to be funded by the applicant. Include only eligible work elements. Use additional sheets as necessary. When possible, include quotes for the proposed work.*

Type of Incentive: ■ GRANT ☐ LOAN ☐ BOTH

Feature	Proposed Work to be Funded	Fund Request	Match (M)	Total
A.	Restore front porch	$ 15,406.87	$ 15,406.86	$ 30,813.73
B.	Remove dormer, restore attic	$ 9,775.19	$ 9,775.20	$ 19,550.39
C.	Reinforce original foundation	$ 14,822.62	$ 14,817.94	$ 29,640.56
D.	Related costs detailed on bid not being requested	$ 0.00	$ 0.00	$ 0.00
E.		$	$	$
F.		$	$	$
G.		$	$	$
H.		$	$	$
I.		$	$	$
J.		$	$	$
K.		$	$	$
	Total Proposed Work	$ 40,004.68	$ 40,000.00	$ 80,004.68

For loan requests, indicate total loan request here:	$ 0

If partial incentive funding were awarded, would you complete your project? ■ YES ☐ NO

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7. ADDITIONAL MATERIALS REQUIRED

The following items must be submitted along with this application:

- ☐ One set of photographs for each feature as described in Item 4 "Description of Rehabilitation". Digital is preferred.
- ☐ A construction bid if one has been completed for your project (recommended).
- ☐ Working or scaled drawings, spec sheets, or materials of the proposed work, if applicable to your project.

8. ASSURANCES

The Applicant hereby agrees and acknowledges that:

A. Funds received as a result of this application will be expended solely on described projects, and must be completed within established timelines.

B. Awards from the Historic Preservation Fund may differ in type and amount from those requested on an application.

C. Recipients must submit their project for any required design review by the Historic Preservation Commission and acquire any required building permits before work has started.

D. All work approved for grant funding must be completed even if only partially funded through this incentives program.

E. Unless the conditions of approval otherwise provide, disbursement of grant or rebate funds will occur after completion of the project.

F. The incentive funds may be considered taxable income and Applicant should consult a tax professional if he or she has questions.

G. If this has not already occurred, Applicant will submit an application to landmark the property to the Historic Preservation Commission. If landmarking is not possible for whatever reason, Applicant will enter into a preservation easement agreement with the City of Louisville. Any destruction or obscuring of the visibility of projects funded by this grant program may result in the City seeking reimbursement.

H. The Historic Preservation Fund was approved by the voters and City Council of Louisville for the purpose of retaining the city's historic character, so all work completed with these funds should remain visible to the public.

_____	9/8/2022 _____
Signature of Applicant/Owner	Date
_____	_____
Signature of Applicant/Owner	Date

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APPENDIX A:
HELPFUL TERMS & DEFINITIONS

BASIC PRESERVATION

The Concept of Significance

A building possessing architectural significance is one that represents the work of a noteworthy architect, possesses high artistic value or that well represents a type, period or method of construction. A historically significant property is one associated with significant persons, or with significant events or historical trends. It is generally recognized that a certain amount of time must pass before the historical significance of a property can be evaluated. The National Register, for example, requires that a property be at least 50 years old or have extraordinary importance before it may be considered. A property may be significant for one or more of the following reasons:

- Association with events that contributed to the broad patterns of history, the lives of significant people, or the understanding of Louisville's prehistory or history.
- Construction and design associated with distinctive characteristics of a building type, period, or construction method.
- An example of an architect or master craftsman or an expression of particularly high artistic values.
- Integrity of location, design, setting, materials, workmanship, feeling and association that form a district as defined by the National Register of Historic Places Guidelines.

The Concept of Integrity "Integrity" is the ability of a property to convey its character as it existed during its period of significance. To be considered historic, a property must not only be shown to have historic or architectural significance, but it also must retain a high degree of physical integrity. This is a composite of seven aspects or qualities, which in various combinations define integrity, location, design, setting, materials, workmanship, feeling and association. The more qualities present in a property, the higher its physical integrity. Ultimately the question of physical integrity is answered by whether or not the property retains a high percentage of original structure's identity for which it is significant.

The Period of Significance Each historic town has a *period of significance*, which is the time period during which the properties gained their architectural, historical or geographical importance. Louisville, for example, has a period of significance which spans approximately 75 years (1880- 1955). Throughout this period of significance, the City has been witness to a countless number of buildings and additions which have become an integral part of the district. Conversely, several structures have been built, or alterations have been made, after this period which may be considered for removal or replacement.

BUILDING RATING SYSTEM

Contributing: Those buildings that exist in comparatively "original" condition, or that have been appropriately restored, and clearly contribute to the historic significance of downtown. Preservation of the present condition is the primary goal for such buildings.

Contributing, with Qualifications: Those buildings that have original material which has been covered, or buildings that have experienced some alteration, but that still convey some sense of history. These buildings would more strongly contribute, however, if they were restored.

Supporting category
These are typically buildings that are newer than the period of historic significance and therefore do not contribute to our ability to interpret the history of Louisville. They do, however, express certain design characteristics that are compatible with the architectural character of the historic district. They are "good neighbors" to older buildings in the vicinity and therefore support the visual character of the district.

Non-contributing building category
These are buildings that have features that deviate from the character of the historic district and may impede our ability to interpret the history of the area. They are typically newer structures that introduce stylistic elements foreign to the character of Louisville. Some of these buildings may be fine examples of individual building design, if considered outside the context of the district, but they do not contribute to the historic interpretation of the area or to its visual character. The detracting visual character can negatively affect the nature of the historic area.

Non-contributing, with Qualifications: These are buildings that have had substantial alterations, and in their present conditions do not add to the historic character of the area. However, these buildings could, with substantial restoration effort, contribute to the downtown once more.

PRESERVATION APPROACHES

While every historic project is different, the Secretary of the Interior has outlined four basic approaches to responsible preservation practices. Determining which approach is most appropriate for any project requires considering a number of factors, including the building's historical significance and its existing physical condition. The four treatment approaches are:

- Preservation places a high premium on the retention of all historic fabric through conservation, maintenance and repair. It reflects a building's continuum over time, through successive occupancies, and the respectful changes and alterations that are made.
- Rehabilitation emphasizes the retention and repair of historic materials, but more latitude is provided for replacement because it is assumed the property is more deteriorated prior to work.
- Restoration focuses on the retention of materials from the most significant time in a property's history, while permitting the removal of materials from other periods.
- Reconstruction establishes limited opportunities to re-create a non-surviving site, landscape, building, structure, or object in all new materials.

The Secretary of the Interior's website outlines these approaches and suggests recommended techniques for a variety of common building materials and elements. An example of appropriate and inappropriate techniques for roofs is provided in the sidebars. Additional information is available from preservation staff and the Secretary's website at: www.cr.nps.gov/hps/tps/standguide/index.htm

THE SECRETARY OF THE INTERIOR'S STANDARDS

The Standards are neither technical nor prescriptive, but are intended to promote responsible preservation practices that help protect our Nation's irreplaceable cultural resources. For example, they cannot, in and of themselves, be used to make essential decisions about which features of the historic building should be saved and which can be changed. But once a treatment is selected, the Standards provide philosophical consistency to the work.

PETRA CUSTOM BUILDERS

Date: 09/14/2022

Historic Update Cost Summary

Prepared By	Client
Bill Moore Petra Custom Builders 5303 Spine Road, Suite 203 Boulder, CO, 80301	Thompson Residence 600 Lincoln Ave. Louisville, CO 80027

Dear Jessie & Kyle,

This estimate has been prepared based on recommendations from the Historic Structural Assessment report prepared by DAJ Design and Glenn Frank Engineering dated December 10th, 2021.

Thank you for the opportunity to be a part of the project, we look forward to taking the next steps.

Price Breakdown

Description	Notes
Front Porch Total	**$30,813.73**
Demolition Material & Labor	- Remove the windows, knee wall, door, and 4x4 posts from the porch - Build tempory structure to support the covered porch roof during demo - Remove the gutters and downsputs at the porch, salvage for reinstallation - Demo the concrete slab
Roofing Material & Labor	Reinstall salvaged gutters and downspouts at the porch roof
Exterior Siding Material & Labor	Supply and install new siding and trim where the porch walls intersected with the house
Exterior Painting Material & Labor	- Stain and seal the new wood deck, columns and trim - Paint the new siding
Deck Framing Material & Labor	- Rebuild a wood deck at the porch in lieu of the existing concrete slab - Add attached columns to the house in the northeast and southeast corners of the front porch - Supply and install colonial style turned wood columns in lieu of the 4x4 posts - Supply and install decorative column brackets
Exterior Trim Material & Labor	Supply and install new decorative porch column brackets and trim
Framing Material & Labor	Supply and install new colonial turned porch columns to support the covered porch roof
Concrete Material & Labor	New footings to support the front porch columns and roof
Attic Total	**$19,550.39**
Demolition Material & Labor	- Remove the dormer on the southwest section of the existing roof - Demo all finishes in the existing Upper Level Bedroom
Framing Material & Labor	- Frame a new knee wall on the south side of the new attic space - Frame a new wall on the east end of the new attic to enclose the space - Frame and sheath a new roof flush with the front gable to replace the dormer
Insulation Material & Labor	Insulate the new attic roof and attic floor as required
Roofing Material & Labor	Supply and install asphalt shingle roofing at the new roof as well as prefinished K-style gutters and downspouts
Foundation Total	**$29,640.56**

Description	Notes
Demolition Material & Labor	- Remove finish materials and insulation at the northeast and southeast corners of the foundation walls - Destructive exploration of the floor framing that was originally the north side deck - Destructive exploration of finish materials to evaluate the existing second floor framing - Demo the floor framing at the original south side deck for replacement
Concrete Material & Labor	- Repair basement and foundation walls - New foundation to support what was originally the south side deck - New footings to support new columns for the flat beam replacement in the basement
Framing Material & Labor	- Repair/reinforce the center beam in the crawlspace. - Replace the floor framing at the original south side deck area - Replace the floor framing supports in the basement - Replace the flat beam in the basement and install new columns - Reinforce the bearing of the 6x12 beam - Repair the second floor framing as needed - Reinforce the main floor framing to address existing curvature in the floor
Other Total	**$15,280.00**
Debris Box Rental	Dumpster containers and service throughout the duration of the project
Project Management & Site Supervision	Your designated Superintendent will lead by example, following and promoting our policies while building and maintaining relationships by encouraging integrity and collaboration, creating an environment of trust through open communication. He takes on managing project risk and mitigating issues while overseeing and ensuring each part of the project is complete and all involved remain safe and efficient. He will focus on both the macro and micro level details with a sharp mind, priority management, and experience. He is always seeking opportunities to improve both your experience and the final product by engaging you, our Pack, and trade partners for valuable input.
Total Estimate	**$95,284.68**

Bridget Bacon
Louisville Historical Museum
Department of Library & Museum Services
City of Louisville, Colorado
October 2021

600 Lincoln Avenue History

Legal Description: Lots 11 & 12, Block 11, Pleasant Hill Addition, Louisville, Colorado

Year of Construction: 1904

Summary: This was the home of Paul Petrun and Mary Sirokman Petrun of Slovakia, and their family, for 65 years.

Development of the Pleasant Hill Addition

The subdivision in which this house is located, the Pleasant Hill Addition, was platted in 1894. The subdivision was developed in the name of Orrin Welch, the half-brother of Charles C. Welch. Charles Welch was the person most responsible for the establishment of Louisville in 1878 after he established the first coal mine in this area in 1877. Orrin Welch is not known to have ever lived in Colorado, and it is Charles C. Welch who is thought to have been the de facto developer.

Petrun Family Ownership, 1904-1969; Date of Construction

Paul Petrun (1866-1959) purchased these lots from Orrin Welch in 1904 and appears to have built the house the same year.

Paul Petrun and Mary Sirokman (1870-1968) married in Zaluzice, Slovakia in 1890. Their first child, John, was born in Zaluzice in 1891. Paul Petrun came to Louisville that year, also, according to his 1959 obituary as well as a news item in the *Louisville Times* in 1950 regarding their 59th wedding anniversary. In the following year, 1892, Mary and their son joined Paul by coming to Louisville accompanied by Mary's brother, George Sirokman. (The Sirokman family came to have a strong presence in Louisville, as two other of their siblings also came to live in the town.)

The 1948 Boulder County Assessor card for this property and the Boulder County Assessor's Office website both give 1904 as the date of construction of this house. Boulder County is sometimes in error with respect to the date of construction of Louisville buildings, so it is important to look at all of the evidence with respect to ascertaining the date of construction.

In this case, the evidence supplied by the property deeds that were recorded with Boulder County suggests that the house was constructed in 1904. No other relevant information that might shed light on the construction date could be found, except that the house appears on the 1909 Drumm's Wall Map of Louisville, so it was definitely built by 1909. For these reasons, the date of construction is assumed to be 1904.

The following photo from an Ancestry.com public family tree shows Mary Sirokman Petrun:



Paul Petrun worked as a coal miner until he retired in 1937.

Several Slovak families besides the Petrun family also owned or lived in homes in the 500 and 600 block of Lincoln, south of Pine Street. They included families with the surnames of Sirokman, Stritchko, and Waschak. More Slovak families lived on the 500 and 600 block of Grant, one street to the east, including those with the names Kasenga, Hibler, Harney, Poydock, Mudrock, Haszier, Nortnik, Bodnar, and Kakalecik.

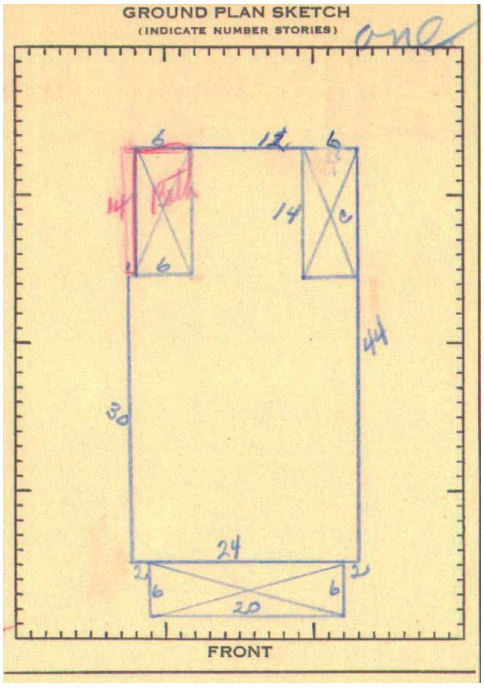
Paul and Mary Petrun had five children who grew up in this house starting in 1904: John (1891-1947), Mary (Dudash) (1894-1972), Michael (1896-1955), Paul (1904-1975), and Rose (Stritchko) (1907-2006).

Their son Paul Petrun, Jr. lived with them at 600 Lincoln until he married in 1935. He worked as a meatcutter for Thirlaway's Meat Market on Main Street.

A Petrun grandson, John (1915-1992), wrote his memories of Louisville in a 1989 letter on file at the Louisville Historical Museum. John grew up in Denver and would visit his grandparents Paul and Mary Petrun during the summers. He wrote of his uncle, Paul, Jr.: “Uncle Paul would come home for lunch from the store and he would take me with him while he made his deliveries. That was quite a thrill riding in that Model T truck. Sometimes, he would let me steer it, sitting on his lap. Then of course, one night a week Grandma and I would go to the Rex Theatre and watch a Western movie and eat popcorn. Grandpa would meet us after the show and walk home with us.”

The following is a photo of the house taken by the Boulder County Assessor in 1948 along with a ground layout of the house.





Paul Petrun died in 1959, and Mary Petrun continued to live at 600 Lincoln until her death in 1968. Daughter Rose Petrun Stritchko was conveyed the property interests in the house from her surviving siblings who inherited the property with her. She sold the house in 1969 to Linda Lee Williams.

Later Owners

Linda Lee Williams, who purchased 600 Lincoln in 1969, sold it in 1974 to Carl A. Rolander, III. In 1975, he sold it to Richard Phillip Kilzer and Mary Marcon Kilzer. The following year, they sold to Robert and Marlene Murphy.

Next, Mark Stephen Herman and Sarah Pendleton were the owners for 14 years, from 1979 until 1993. They sold 600 Lincoln to Robert E. Ward, Alexandra Mitchell, and Robert Allan Mitchell. The owners then changed to just Robert E. Ward and Alexandra Mitchell.

In 2012, they sold 600 Lincoln to Lisa Tenenbaum. She was the owner until 2021, when she sold the property to Jessica and Kyle Thompson.

Historical & Architectural Surveys

In 2000, Carl McWilliams surveyed 600 Lincoln and completed an Architectural Inventory Form. It stated that a rear addition was added in the 1940s and that an upper half-story addition was added in the 1970s.

Throughout that form, the name “Petrun” was misspelled as “Petrum.” Also, the form stated that the Petrun family owned the house from 1916 until the mid-1960s, but the date range was longer, from 1904 to 1969.

In 2013, Phillip Barlow completed a form on 600 Lincoln for Historical and Architectural Reconnaissance.

The preceding research is based on a review of relevant and available online County property records, census records, oral history interviews, Louisville directories, and Louisville Historical Museum maps, files, obituary records, and historical photographs from the collection of the Louisville Historical Museum.

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HISTORIC STRUCTURAL ASSESSMENT

600 LINCOLN AVE., LOUISVILLE, COLORADO

DECEMBER 10, 2021

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Evaluated by:

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This Project was paid for by the Louisville Preservation Fund grant.
State Survey Number 5BL8003

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1.0 INTRODUCTION

1.1 RESEARCH BACKGROUND / PROJECT PARTICIPANTS

DAJ Design conducted an Historic Structural Assessment for the structure located at 600 Lincoln Avenue, Louisville, CO to determine its feasibility as a candidate for historic landmark designation as defined under the Historic Preservation program of the City of Louisville. The structure is a residential property. The City of Louisville Historic Preservation Commission found probable cause that the building may be eligible for landmarking under criteria in section 15.36.050 of the Louisville Municipal Code. Therefore, the Commission approved the Historic Structural Assessment to be paid for by the Louisville Preservation Fund grant.

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The primary purpose of this HSA is to evaluate the property's current condition and to identify preservation priorities for the best use of rehabilitation funds. DAJ Design inspected 600 Lincoln visually to identify areas of necessary maintenance and repair. It is possible that complications exist that were not visible and therefore it is recommended that the property owner includes contingency funding in any repair budget.

DAJ Design inspected 600 Lincoln on September 16th, 2021, and returned with Glenn Frank Engineering on October 19th, 2021 for a follow-up structural visit. The weather for both visits was warm and sunny. Adequate access to the crawlspace was available. In addition to the main structure that was inspected, there is a detached garage that has been converted to living space, located on the east end of the property. The garage structure was not inspected beyond taking note of the exterior condition as it was constructed in 1980 and is therefore not historic.

LIST OF CONSULTANTS AND SOURCES:

STRUCTURAL ENGINEER
JESSE SHOLINSKY, PE
GLENN FRANK ENGINEERING, INC.
PO BOX 20708
BOULDER, CO 80308
303.554.9591

SOURCES
"Louisville Historic Preservation Commission Staff Report," October, 2021.
"600 Lincoln Ave. History," October 2021, Louisville Historical Museum.

1.2 BUILDING LOCATION

VICINITY MAP

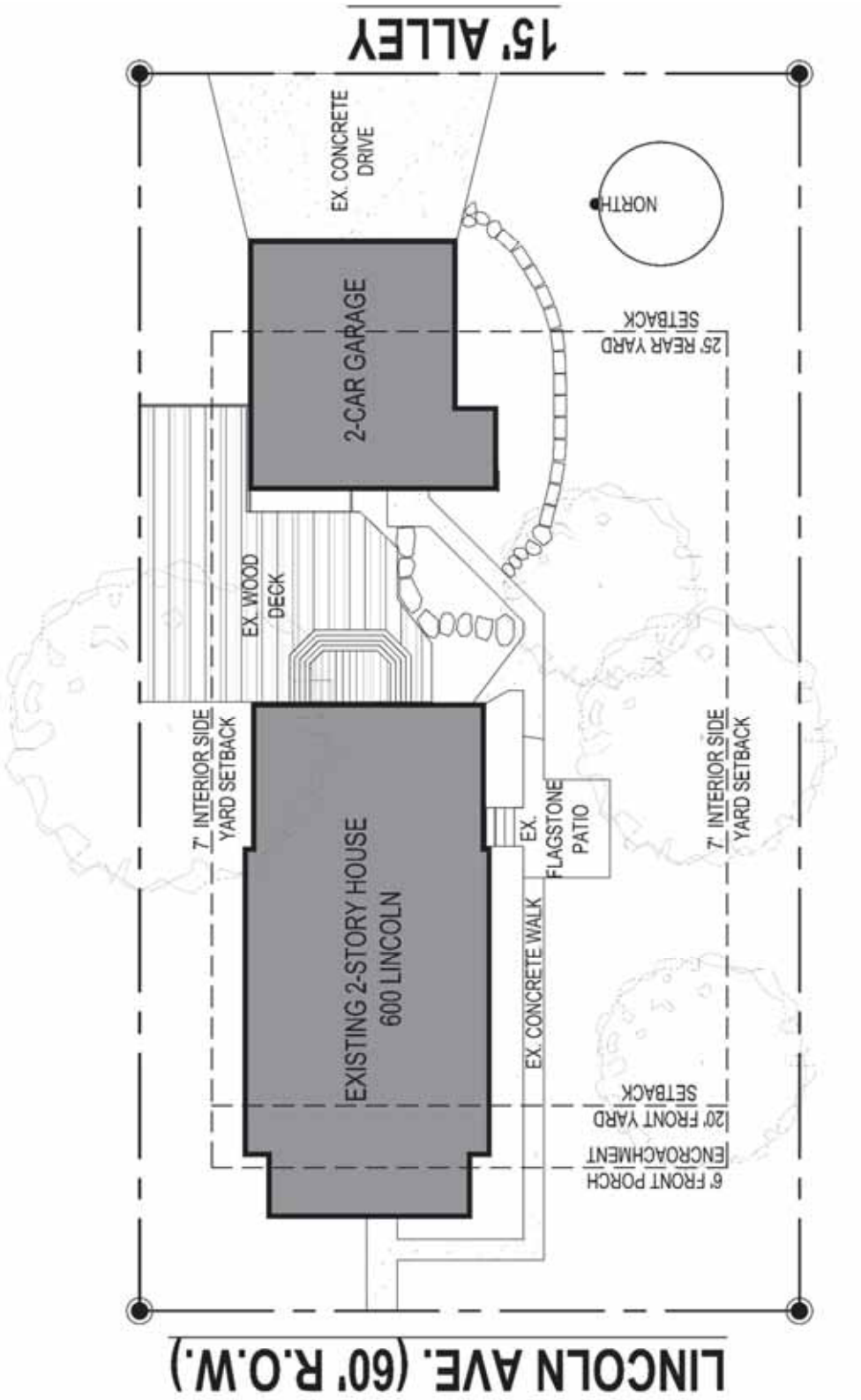


LEGAL DESCRIPTION

Lots 11 & 12, Block 11, Pleasant Hill Addition, Louisville, Colorado

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SITE PLAN:



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2.0 HISTORY AND USE

As part of the landmarking application for 600 Lincoln Avenue, Bridget Bacon, the Louisville Historical Museum's Museum Coordinator, wrote the following history:

Louisville Historical Museum
Department of Library & Museum Services
City of Louisville, Colorado
October 2021

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Year of Construction: 1904

Summary: This was the home of Paul Petrun and Mary Sirokman Petrun of Slovakia, and their family, for 65 years.

Development of the Pleasant Hill Addition

The subdivision in which this house is located, the Pleasant Hill Addition, was platted in 1894. The subdivision was developed in the name of Orrin Welch, the half-brother of Charles C. Welch. Charles Welch was the person most responsible for the establishment of Louisville in 1878 after he established the first coal mine in this area in 1877. Orrin Welch is not known to have ever lived in Colorado, and it is Charles C. Welch who is thought to have been the de facto developer.

Petrun Family Ownership, 1904-1969; Date of Construction

Paul Petrun (1866-1959) purchased these lots from Orrin Welch in 1904 and appears to have built the house the same year. Paul Petrun and Mary Sirokman (1870-1968) married in Zaluzice, Slovakia in 1890. Their first child, John, was born in Zaluzice in 1891. Paul Petrun came to Louisville that year, also, according to his 1959 obituary as well as a news item in the Louisville Times in 1950 regarding their 59th wedding anniversary. In the following year, 1892, Mary and their son joined Paul by coming to Louisville accompanied by Mary's brother, George Sirokman. (The Sirokman family came to have a strong presence in Louisville, as two other of their siblings also came to live in the town.)

The 1948 Boulder County Assessor card for this property and the Boulder County Assessor's Office website both give 1904 as the date of construction of this house. Boulder County is sometimes in error with respect to the date of construction of Louisville buildings, so it is important to look at all of the evidence with respect to ascertaining the date of construction.

In this case, the evidence supplied by the property deeds that were recorded with Boulder County suggests that the house was constructed in 1904. No other relevant information that might shed light on the construction date could be found, except that the house appears on the 1909 Drumm's Wall Map of Louisville, so it was definitely built by 1909. For these reasons, the date of construction is assumed to be 1904.

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The following photo from an Ancestry.com public family tree shows Mary Sirokman Petrun:



Paul Petrun worked as a coal miner until he retired in 1937.

Several Slovak families besides the Petrun family also owned or lived in homes in the 500 and 600 block of Lincoln, south of Pine Street. They included families with the surnames of Sirokman, Stritchko, and Waschak. More Slovak families lived on the 500 and 600 block of Grant, one street to the east, including those with the names Kasenga, Hibler, Harney, Poydock, Mudrock, Haszier, Nortnik, Bodnar, and Kakalecik.

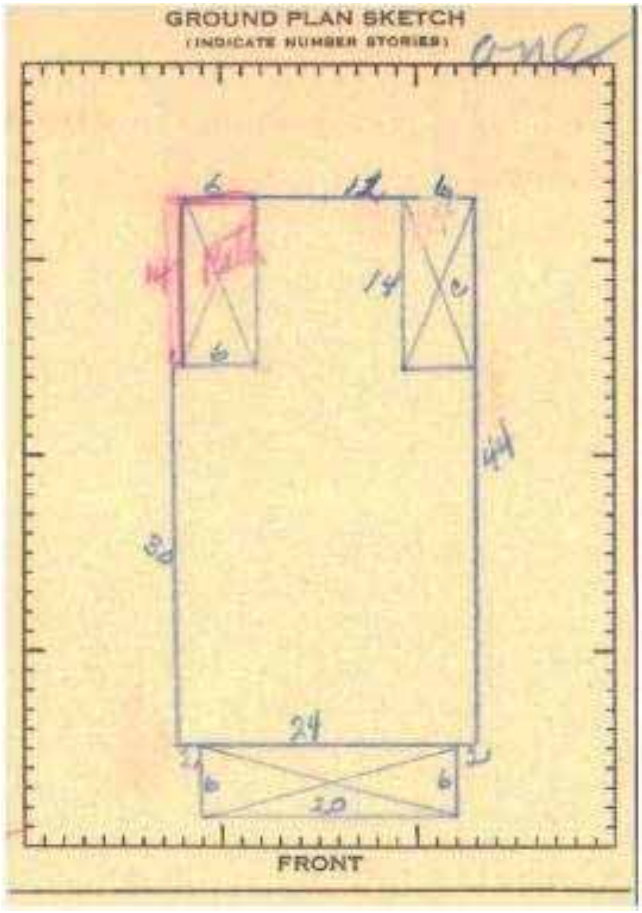
Paul and Mary Petrun had five children who grew up in this house starting in 1904: John (1891- 1947), Mary (Dudash) (1894-1972), Michael (1896-1955), Paul (1904-1975), and Rose (Stritchko) (1907-2006).

Their son Paul Petrun, Jr. lived with them at 600 Lincoln until he married in 1935. He worked as a meatcutter for Thirlaway's Meat Market on Main Street.

A Petrun grandson, John (1915-1992), wrote his memories of Louisville in a 1989 letter on file at the Louisville Historical Museum. John grew up in Denver and would visit his grandparents Paul and Mary Petrun during the summers. He wrote of his uncle, Paul, Jr.: "Uncle Paul would come home for lunch from the store, and he would take me with him while he made his deliveries. That was quite a thrill riding in that Model T truck. Sometimes, he would let me steer it, sitting on his lap. Then of course, one night a week Grandma and I would go to the Rex Theatre and watch a Western movie and eat popcorn. Grandpa would meet us after the show and walk home with us."

The following is a photo of the house taken by the Boulder County Assessor in 1948 along with a ground layout of the house.





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Paul Petrun died in 1959, and Mary Petrun continued to live at 600 Lincoln until her death in 1968. Daughter Rose Petrun Stritchko was conveyed the property interests in the house from her surviving siblings who inherited the property with her. She sold the house in 1969 to Linda Lee Williams.

Later Owners

Linda Lee Williams, who purchased 600 Lincoln in 1969, sold it in 1974 to Carl A. Rolander, III. In 1975, he sold it to Richard Phillip Kilzer and Mary Marcon Kilzer. The following year, they sold to Robert and Marlene Murphy.

Next, Mark Stephen Herman and Sarah Pendleton were the owners for 14 years, from 1979 until 1993. They sold 600 Lincoln to Robert E. Ward, Alexandra Mitchell, and Robert Allan Mitchell. The owners then changed to just Robert E. Ward and Alexandra Mitchell.

In 2012, they sold 600 Lincoln to Lisa Tenenbaum. She was the owner until 2021, when she sold the property to Jessica and Kyle Thompson.

Historical & Architectural Surveys

In 2000, Carl McWilliams surveyed 600 Lincoln and completed an Architectural Inventory Form. It stated that a rear addition was added in the 1940s and that an upper half-story addition was added in the 1970s.

Throughout that form, the name “Petrun” was misspelled as “Petrum.” Also, the form stated that the Petrun family owned the house from 1916 until the mid-1960s, but the date range was longer, from 1904 to 1969.

In 2013, Phillip Barlow completed a form on 600 Lincoln for Historical and Architectural Reconnaissance.

Sources

The preceding research is based on a review of relevant and available online County property records, census records, oral history interviews, Louisville directories, and Louisville Historical Museum maps, files, obituary records, and historical photographs from the collection of the Louisville Historical Museum.

Current Owners

In 2021, Kyle and Jessica Thompson purchased 600 Lincoln and they are the current owners.

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2.1 ARCHITECTURAL SIGNIFICANCE & CONSTRUCTION HISTORY

The residential property at 600 Lincoln Avenue was constructed in 1904. The site and house have undergone several architectural changes over its lifespan. Two rear decks were added to the east side of the house that were both later enclosed at different times. The first deck, in the southeast corner of the house, was enclosed in the 1940's, and an access hatch to the basement was created in this space. The second deck, in the northeast corner of the house, was enclosed in the 1970's when a second story addition was added to the original house.

The original foundations and framing for the house and the decks can be seen in the small basement space at the rear of the house. The second story addition removed a large portion of the original roof structure, but the original gable framing is still apparent when viewed from the front, street facing façade. The front porch is original to the house, though this area was enclosed at some point creating a front entrance sunroom. The original framing is still present in this area.

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The wood frame construction style of the original house is typical of early 20th century construction techniques found in the Louisville area. Many of the original materials remain and are consistent with other building materials and details used on other houses built around the same time in the Louisville area.

The primary façade faces west to Lincoln Avenue and the original form of the house is apparent when viewed from Lincoln Avenue. The overall mass of the house has increased with the second story addition, and is apparent when viewed from the southwest along Lincoln Avenue.

600 Lincoln Avenue has the potential to be restored to a high degree of architectural integrity when compared to historic photos dated to 1948. Overall, the house is well maintained but has a few items that require prioritization, as outlined in the analysis of this report.

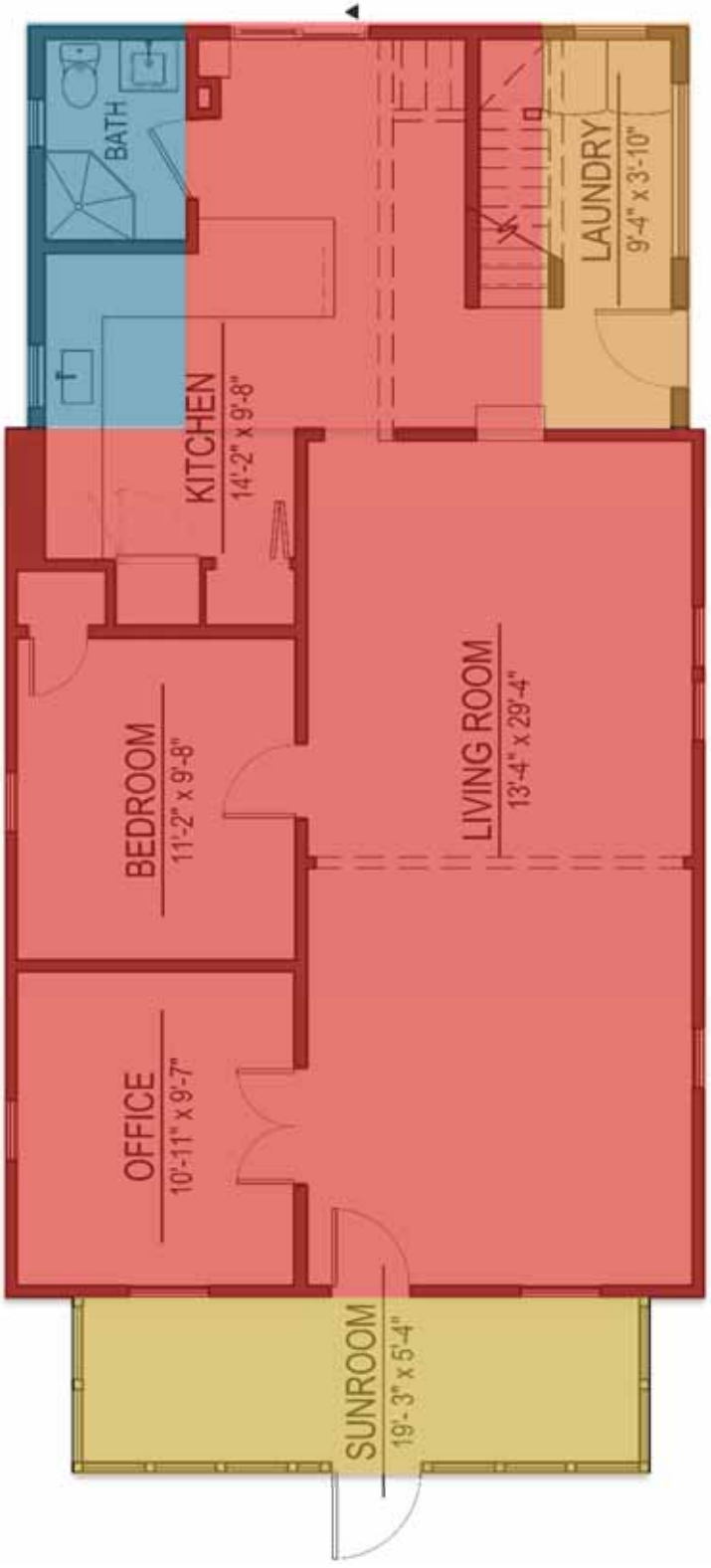
600 Lincoln Avenue is not listed on the National, State, or Local Register.

Primary Changes Occurring Over Time:

• Original house (RED)	1904
• Front porch (YELLOW)	1904
o Enclosed	Post-1948
• South deck (ORANGE)	Pre-1948
o Enclosed	1940's
• North deck (BLUE)	Pre-1948
o Enclosed	1970's
• 2nd Floor addition (GREEN)	1970's
• Detached garage	1980
• Rear wood deck	Post-2000
• New asphalt roof	2018

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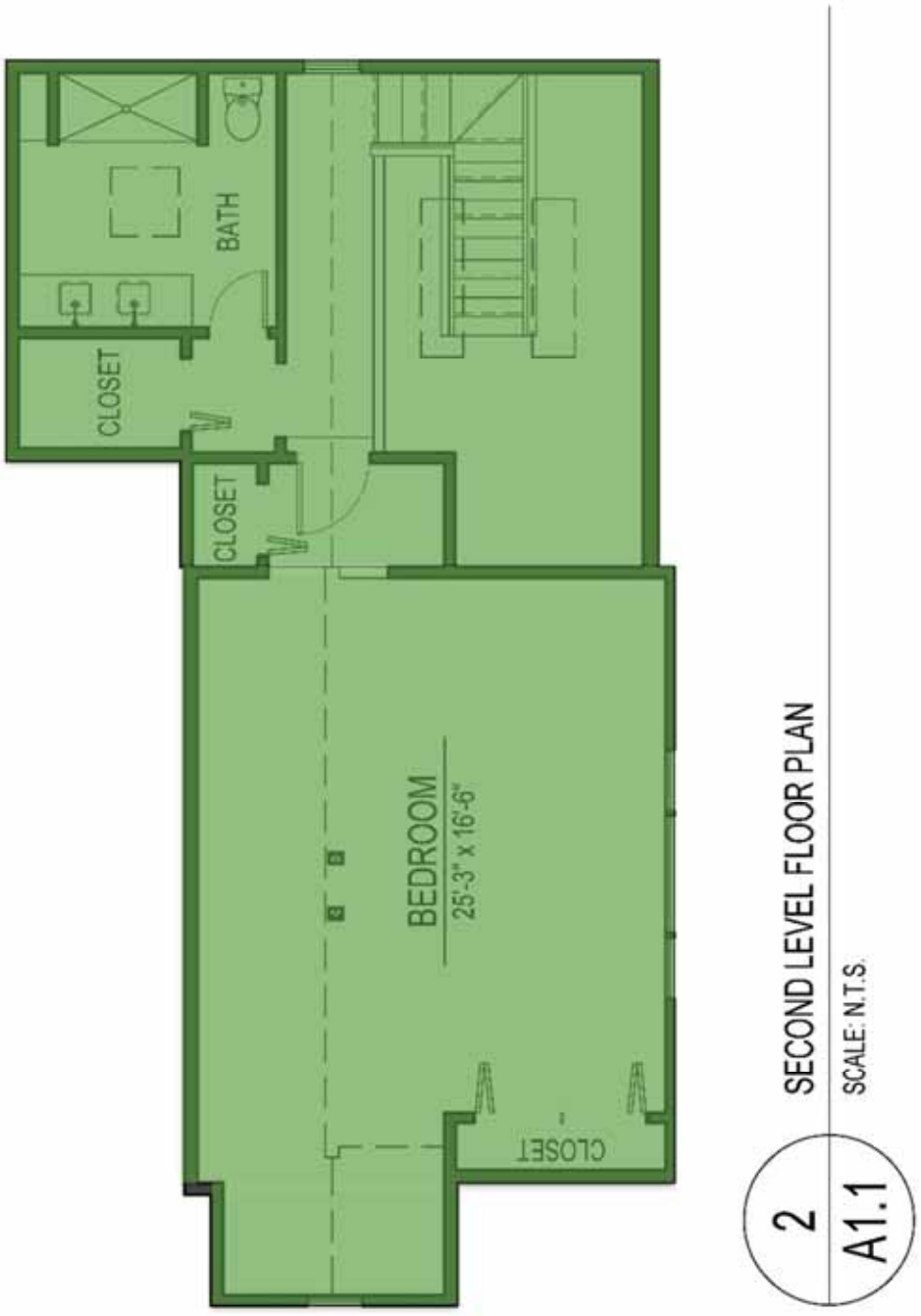
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MAIN LEVEL FLOOR PLAN
SCALE: N.T.S.

1
A1.1

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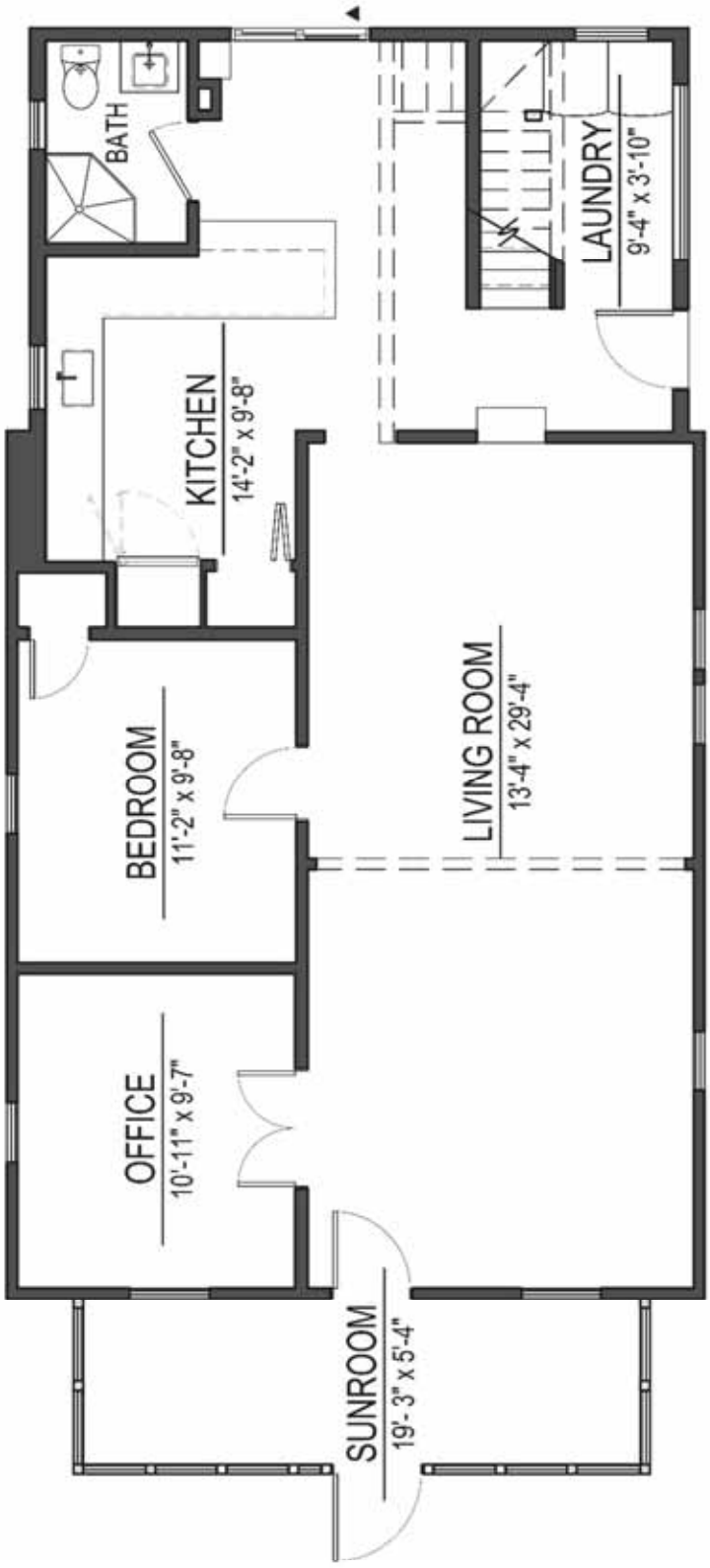


2.3 PROPOSED USE

There is no proposed change of use at this time.

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2.2 FLOOR PLAN

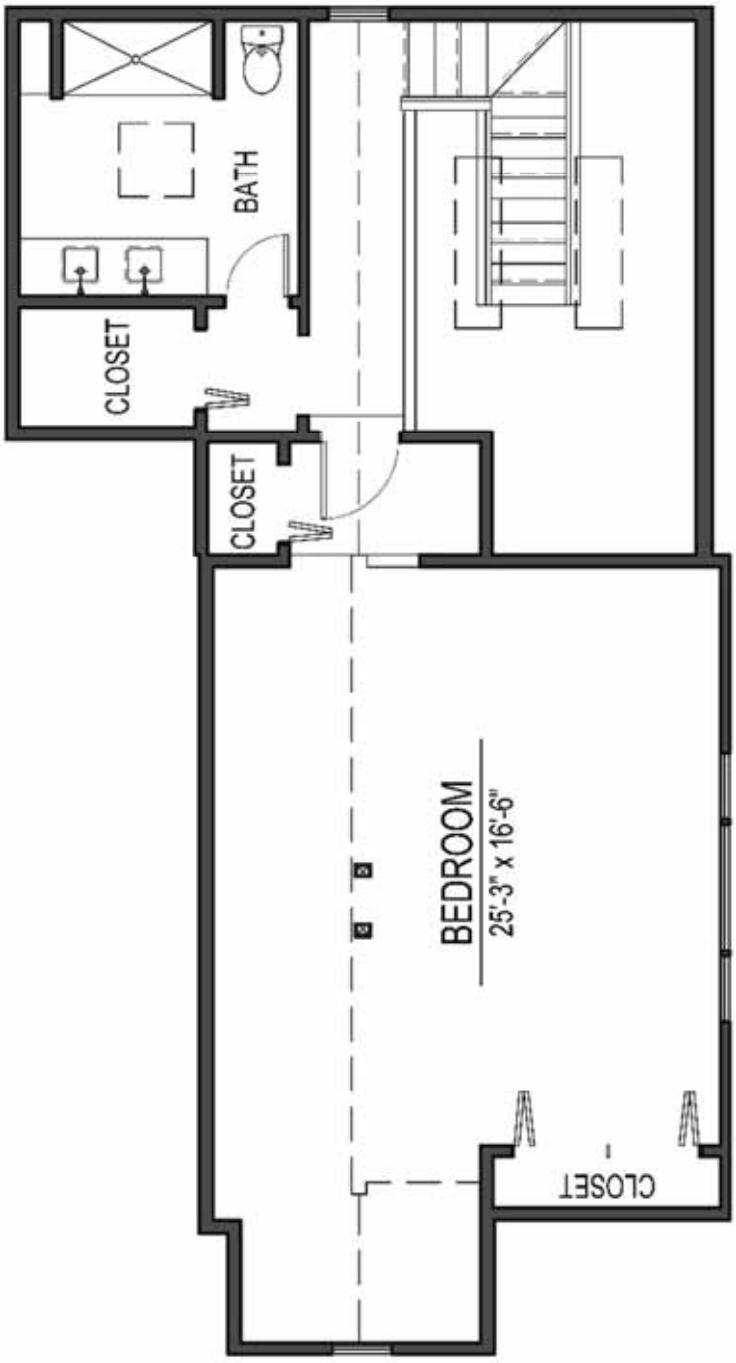


1 A1.1 MAIN LEVEL FLOOR PLAN
SCALE: N.T.S.

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SECOND LEVEL FLOOR PLAN

SCALE: N.T.S.

2 A1.1

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3.0 STRUCTURE CONDITION ASSESSMENT

3.1 SITE

ASSOCIATED LANDSCAPE FEATURES

Description:

600 Lincoln Avenue is set on a typical downtown Louisville lot approximately 64 feet wide by 120 feet deep, running lengthwise in the east-west direction and totaling approximately 7,680 sf. The property is bordered on the west by Lincoln Avenue, to the north and south by residential properties, and on the east by an alley. The property is enclosed on all sides by wood fencing of various heights and styles. The fence on the west side is set back from the front of the house.



Looking from the northwest with landscaping north of the house and set back fence

Approximately 20% of the lot is covered by the footprints of the main house and the converted garage. Both structures are in the northern half of the site, with large yard space on the south side of the lot. The house and garage are approximately 10 feet from the north property line with the garage set back 16 feet from the east property line and the house set back 15 feet from the west property line, with the enclosed patio extending six feet further west.

Also found on the site is a concrete driveway to the alley, immediately east of the garage, and a deck between the house and the garage that extends to the north property line.

The remainder of the site is primarily sod, with small shrubs and ground cover to the north of the house and around the garage, and a garden bed in the southeast corner of the lot. There are several mature deciduous trees located throughout the site.



Looking from the southeast towards the house with the south yard and mature trees

Condition Evaluation:

Overall, the landscape features are in good condition. None of the listed features meet historic requirements, nor were any historic features discovered, and therefore assessment was minimal.

Recommendations:
No recommendations at this time.

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GRADING

Description:

Overall, the site is relatively flat. There is a slight drop in grade from west to east with the low point of the site being the east property line at the alley. Drainage around the building footprint, where observed, is minimal to non-existent, though no areas of negative drainage appear to be present. The grading around parts of the north and east sides of the house could not be observed due to the deck and groundcover vines obscuring the grade. The top of grade relative to the top of foundation is minimal (less than one inch in some areas) at the west end of the house. Moving east, the difference between the top of the foundation and the top of grade increases with the change in grade and therefore more of the foundation is exposed. In the northeast and southeast corners of the house, where decks were converted to living space, finish materials are in contact with grade.



Minimal difference between top of grade and top of foundation at west side of house

Condition Evaluation:

The overall site grading is in fair condition. No signs of damage caused by poor or negative drainage was observed. Ideally, the grading around the house should be a minimum of six inches below the top of the foundation and slope away from the foundation for at least the first five feet. Due to the nature of the lot, it is unrealistic that these requirements may be achieved around the entire house. It may be possible for this condition to be met with significant grade alterations towards the rear of the house, but this is not possible around the western portion of the house due to the relatively flat grade near the top of the foundation. With no drainage issues or damage observed during the site visit, the existing drainage appears to be performing adequately.

Recommendations:

Continue to monitor the drainage around the perimeter of the house. The perimeter should be observed after snow and significant rain events to assess for any areas of pooling water. Additionally, it is recommended that the northeast corner of the house be observed beneath the decking and ground cover to assess the drainage in this area. Temporary removal of deck planks and trimming back of the ground cover may be required for this assessment.



Exposed foundation increases moving east, but finish materials are in contact with grade in the southeast corner, around the now-enclosed deck

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PARKING

Description:

A detached, 2-car garage is located in the east portion of the site, facing the alley, with a concrete drive providing alley access. According to building records, the garage was constructed in 1980 and is therefore not considered historic. It appears that the western portion of the garage was originally designed as a studio space and at some point in time the entire garage was converted to habitable space. The garage is currently used as a rental unit. The concrete apron provides space for two parked vehicles, this being the only current parking spaces available on site.



Garage view from the alley

Condition Evaluation:

The garage was determined to not be an historic structure and therefore was not evaluated. The concrete slab parking on the east side is also not historic and appears to be in good condition.

Recommendations:

No recommendations at this time.

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3.2 STRUCTURAL SYSTEM

GENERAL STRUCTURAL SYSTEM DESCRIPTION

FOUNDATION SYSTEMS

Description:

The original house foundation was observed from the basement beneath the original house structure, at the easternmost end of the house. A floor access hatch in the southeast corner provides access to a small basement, the primary use of which is as a mechanical room. The majority of the house is constructed over a shallow crawlspace that can be viewed from the basement. However, mechanical equipment runs throughout the crawlspace that obscures viewing towards the front of the house. For this reason, our analysis of the foundation towards the front of the house was limited.



Access hatch & stairs to basement with boards retaining soil on either side of the stairs. This area is in the crawlspace to the south.

The original house foundation, where observed, is constructed of stacked stone of an unknown depth. This stone foundation is visible on the exterior of the house as well and extends around the entire perimeter of the original house. Little to no mortar exists between the stacked stones when viewed from the basement but there is adequate mortar present when viewed from the exterior. This observation indicates that the stone foundation was tuck pointed at some point in time.

The basement area appears to have been dug out after the original construction, likely to accommodate new heating equipment. Where dug out, the basement foundation walls are constructed of concrete and stacked concrete masonry units (CMU) of various heights. These walls appear to be constructed on top of concrete footings of unknown depths. There is also a concrete foundation wall between the basement and the crawlspace, retaining the soil beneath the crawlspace. On the north and east sides of the basement, the newer basement walls are stepped in from the original stone foundation. However, on the south side and a portion of the east side, the concrete and CMU walls were constructed directly beneath the original stone foundation.



Stone, concrete, and CMU foundations with exposed footing & wood basement floor

The basement floor is constructed of wood boards that sit directly on soil and soil is exposed in the crawlspace areas and beneath the basement access hatch and stairs. Additionally, wood boards are used to retain the soil on either side of the access stairs.

The foundations beneath the northeast and southeast corners of the house, in the areas that were originally decks and later enclosed, were difficult to observe. The area on the north side was obscured by the stone foundation of the original house as well as mechanical and plumbing equipment. The area on the south side of the house was covered by fiberglass batt insulation, wood boards, sheet metal, and other various objects. Where observed, it appears that these areas are constructed on wood foundations either sitting directly on grade or with sunken posts. This would be consistent with deck framing methods common around the time of construction as well as the presence of the finish wood boards in contact with grade as seen on the exterior of the house.

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Condition Evaluation:



Concrete foundation added beneath original stone foundation. Concrete retaining wall between the basement and crawlspace is seen on the right.

The evaluation of the foundation under the original house structure was limited due to the small basement space and limited visibility into the crawlspace areas. Where observed, the stone foundation was in fair to poor condition. There were no signs of distress apparent on the main or second floors, which suggests that the foundation under the original house is performing adequately. However, the lack of mortar between the stacked stones is cause for concern as it renders the foundation more susceptible to movement and water infiltration. Additionally, when the basement was dug out, the new concrete and CMU walls were placed adjacent or below original walls and were likely not properly designed for lateral earth pressures. It is also unclear how the concrete foundation wall directly beneath the stone foundation on the south side of the basement was constructed without undermining the integrity of the original foundation. Finally, the foundation walls were not built with the intent of adding a second floor to the structure. It does not appear that any additionally foundations were created or that the original foundations were braced in order to accommodate the second floor that was added in the 1970's.

The foundations beneath the northeast and southeast corners of the house are in poor condition. Though minimally observed due to lack of access, it is clear that these areas are bearing on wood in contact with grade. This method of construction is susceptible to rot, which has likely already started though not observed, and this is not an appropriate foundation for the loads added by the main level and second level exterior walls. Similarly, the wood in contact with soil acting as the basement floor and as the retaining walls next to the basement stairs is in poor condition for similarly being susceptible to rotting.

Recommendations:

1. The basement and crawlspace walls should be observed by a licensed engineer and repaired as needed.
2. The walls are not suitable for additional load resulting from a remodel or addition and should be replaced for new loading. Similarly, the walls are likely under added stress from the second floor addition and should be replaced to accommodate the increased load.
3. The foundations in the northeast and southeast corners of the house should be observed by a licensed engineer. Removal of finish materials and insulation is necessary for this to occur. These foundations should be replaced as specified by a licensed engineer.
4. If the opportunity presents itself under such circumstances as a remodel, the crawlspace foundation walls and retaining walls beneath the front of the original house should be evaluated by a licensed engineer and repaired as needed.
5. Continually monitor the main floor walls for signs of foundation distress such as cracking or improper door operation. If such signs are detected, these areas should be evaluated by a licensed engineer and repaired as needed.
6. New concrete and CMU retaining walls adjacent and directly below existing stone foundation walls should be further evaluated by a licensed structural engineer for proper earth retainage and support of the load above.

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FLOOR & CEILING SYSTEMS

Description:

The floor framing of the original house is constructed of 2x6 floor joists at 24 inches on-center, running north to south. The floor joists bear on a 2x sill plate on top of the original stone foundation. The floor joists are also supported and spliced along a center-line built-up beam. The floor joists over the crawlspace portion of the original house span approximately 12 ½ feet. In the dug-out basement portion of the house, the center beam is a 2x6 lying flat and is supported on the east end by a 2x4 post bearing on the concrete foundation, supported in the center by a round wood log column (with the bark still attached), and supported on the west side of the basement by a 6x6 post. The wood log post bears directly on the wood basement flooring while the 6x6 wood post bears on a stone that appears to bear on grade. The center beam in the crawlspace was mostly concealed from view by mechanical equipment. However, where visible, the beam appears to be constructed of built-up 2x lumber that bears on stacked stone footings. The original house floor framing is also supported by intermittent 2x4 posts that bear either on the concrete foundation, stacked stones, or directly on grade. These 2x4 posts were likely added at various times to brace sagging floor areas.



Original floor framing, sheathing, sill plate, and floor bracing



Flat 2x6 beam & 2x4 column

The floor sheathing of the original house is 1x3 tongue & groove flooring that is also the finish floor in the front rooms of the house. This flooring still exists in the kitchen but has since been covered with new finish flooring materials.

The floor framing of what was originally the south side deck is constructed of 2x6 floor joists at 24 inches on-center running east to west. These floor joists bear on a 2x sill plate and the stacked stone foundation of the original house to the west. It is unclear how these floor joists are supported at the east end. The basement access hatch is blocked out of these joists and the original framing can be seen next to newer framing members that were added when this area was enclosed. A small step down on the main level occurs at the transition between the original house and deck framing.



South deck (now enclosed) floor framing & support

The floor framing of what was originally the north side deck was mostly obscured from view by the original house foundation as well as mechanical and plumbing equipment. This deck appears to be framed in a similar manner to the deck on the south side.

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The second-floor framing was not exposed for evaluation as it is covered by finish flooring and ceiling materials. A partially exposed 6x12 rough-sawn beam runs east to west above the kitchen. There appears to be a point load in the basement supporting the west end of this beam. This beam was added during the second-floor addition to support the south end of the floor joists above the kitchen. Two steps up occur moving from the east portion of the second floor to the western part of the second floor. These steps likely accommodate different floor member depths and suggests that the bedroom floor framing may be the original roof joists.

Condition Evaluation:

In general, the floor framing is in fair to poor condition. The floor joists and beams do not meet minimum IRC code requirements but were likely built to construction standards at the time. There are no signs of interior finish material damage due to possible excessive deflection.

The floor joists and sheathing of the original house are in fair condition as 12+ foot spans and 24 inches on-center is at the maximum limits of 2x6 construction. This is likely why intermittent bracing of the floor system has occurred over time and there is a noticeable curvature to the floor in the living room. The center beam and supports in the basement are in poor condition. The beam is lying flat which does not provide resistance against deflection and the columns do not bear on proper footings. The condition of the center beam in the crawlspace could not be determined as analysis was limited due to access.

The floor framing of what used to be the south deck is in fair condition as the members are also at the maximum limits of 2x6 construction. The floor framing of what used to be the north deck could not be determined as analysis was limited due to access.

The floor framing of the second floor appears to be in fair condition. However, analysis was limited due to the framing members not being exposed. The 6x12 beam is likely sized accordingly, but it is unclear how this beam is supported. What appears to be the support of this beam in the basement is in poor condition as it does not have a proper foundation support.

Recommendations:

1. The floor framing should be observed by a licensed engineer and repaired as needed. Special attention should be given to the connections between the foundation walls, floor joists, beams, and beam supports. The floors are not suitable for additional load resulting from a remodel or addition and should be replaced for new loading.
2. The center beam in the crawlspace should be further evaluated by a licensed engineer and repaired as needed.
3. The floor framing of what was originally the north side deck should be further evaluated by a licensed engineer and repaired as needed. This will likely require some destructive exploration.
4. The floor framing of what was originally the south side deck should be replaced and supported on a proper foundation as prescribed by a licensed engineer. This floor should be made flush with the remainder of the main floor.
5. The floor framing supports in the basement should be replaced as prescribed by a licensed engineer. The flat beam is not adequate and should be replaced and supported with proper columns supported by new footings.
6. The bearing of the 6x12 beam should be determined and replaced as prescribed by a licensed engineer. The support of this beam in the basement is not adequate for the second-floor support and it is unclear how the beam is supported on either end.
7. The second-floor framing should be observed by a licensed engineer and repaired as needed. This will require destructive exploration of finish materials to determine the framing member sizing, spacing, and support.
8. If floor deflection in the original house is inadequate, consult a licensed structural engineer to evaluate and design a floor support system in the crawlspace that properly supports and addresses the existing floor curvature.

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ROOF FRAMING SYSTEMS

Description:

None of the roof framing of the original house, nor the second-floor addition was exposed for evaluation. However, some analysis can be made based on site measurements and the overall roof forms as viewed from both the interior and exterior of the house.

The house has a nearly continuous gable running east to west and can be seen when viewing the house from the west. This gable runs the length of the original house on the north side until it reaches the second-floor addition where it stops at the second-floor exterior wall. On the south side, the gable is broken by the south facing second floor dormer and then picks up again east of the dormer and carries to the back of the house. A slight but noticeable dip in the finished roof can be seen where the original house meets what was originally the south side deck. This change in elevation is likely due to the house gable having a layer of new sheathing applied on top of the original skip sheathing while the roof over the back of the house likely has only one layer of newer sheathing. The gable rafters west of the kitchen are likely original but their sizing and spacing could not be determined. The rafters are likely 2x members on regular spacing as is common with similar houses built in the Louisville area around this time. The gable rafters over the old south side deck were likely replaced with the second-floor addition in the 1970's and are likely 2x members on regular spacing.



The gable roof form carries from front to back on the south side with the south dormer projecting out. There is a slight change in roof plane aligned with the main floor transition.



The gable on the north stops at the second floor addition. The second floor has a low sloped shed roof.

The second-floor addition at the rear of the house, over the bathroom, has a low sloped roof likely framed with 2x members on regular spacing and constructed in the 1970's. It is unclear how these rafters are support at the ridge and on the north wall.

The south facing dormer also has a low sloped roof likely framed with 2x members on regular spacing and was also constructed in the 1970's. These rafters appear to bear on the exterior south wall which is then supported by the original house south wall below. From the inside of the second-floor bedroom, some observations and assumptions could be made about the ridge support of these rafters. There appears to be a ridge beam of unknown size and material that supports the newer (1970's) rafters to the south and the original roof rafters to the north. This beam appears to span the length of the south dormer, but it is unclear how the beam is supported at either end and does not appear to be properly supported in these locations. Near the center of this beam there are two 4x4 columns, approximately two feet apart, that appear to support the ridge beam. It is possible that the ridge beam is spliced at this location. These two columns appear to be supported by a wrapped beam visible in the living room below but the details of this connection and support system could not be observed due to finish materials.

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The roof rafters on the north and west sides of the original house are likely original and constructed of 2x members on regular spacing. The north side rafters appear to be supported, approximately mid-span, by the knee-wall in the second-floor bedroom, but this could not be confirmed.

The roof framing over the front sunroom was not exposed for observation. This roof is a hipped roof, appears in the 1948 photograph, and is likely original. This roof is likely constructed of 2x joists and rafters on regular spacing as was common for similar houses constructed around the same time in the Louisville area.



The ridge beam is not directly supported on either end. The two columns support the center of the ridge beam with the original gable form beyond.

Condition Evaluation:

Since none of the roof framing members were exposed for review, it is difficult to fully analyze their condition. However, there are several areas of concern based on observations that were made. With this limited analysis, the roof appears to be in poor condition. At nearly every roof transition there are significant cracks in the finish materials indicating movement of the framing members. Additionally, the ridge beam does not appear to be supported properly at either end and it is unclear how the center columns are supported below, but they likely are supported in some part by the original house framing and foundation which was not designed for a second-floor load. Similarly, the original house walls that are supporting the second-floor structure were not designed for the added load.

The original roof framing on the west side of the house appears to be in good condition. This roof does not appear to have been significantly disturbed during the second-floor addition. However, the original roof rafters on the north side of the house, in line with the south side dormer, may have been compromised when attached (if attached) to the new ridge beam.

Recommendations:

1. Destructive exploration of the roof framing should be made and analyzed by a licensed engineer. Special attention should be given to the following:
    a. The size and material of the ridge beam and how the ridge beam is supported at either end.
    b. The connections and support system of the two columns that support the center of the ridge beam.
    c. The size and spacing of the rafters of the south facing dormer and their connections to the ridge beam and the exterior wall framing.
    d. The size and spacing of the original roof rafters on the west end of the house and the original rafters on the north side of the house and their connection to the ridge beam.
    e. The size and spacing of the roof framing members of the second-floor addition over the kitchen and their connections.
    f. The size and spacing of the roof framing members over the old south deck portion of the house.
2. It is likely that the roof framing of the south facing dormer is inadequate. If this is determined to be the case, consideration should be given to removing the dormer altogether.

3.3 ENVELOPE – EXTERIOR WALLS

EXTERIOR WALL CONSTRUCTION

Description:

The wall framing for the entire house was not exposed for review. However, the wall framing of the original house appears to be 2x4 stud walls with studs likely on regular spacing (site measurements support this assumed wall thickness). The walls of the second floor also appear to be 2x4 studs on regular spacing. The first-floor original walls are approximately 9 ½ feet tall while the walls in the kitchen are approximately 7 ½ feet tall. Due to the siding materials as discussed below, it appears that none of the first-floor walls were removed or rebuilt during the second floor addition.

Condition Evaluation:

Since the wall structure was not exposed for observation, we are unable to evaluate the condition or determine if there is any structural damage. The wall heights of the original house are at the upper limits of 2x4 wood stud construction, mainly due to the high wind loads of Louisville. No signs of interior finish material damage were observed.

Recommendations:

At this time, we do not have any recommendations for repairs to the walls at the main level. The owner is to note that the walls will need to be further evaluated if any remodels or additional loads are to be added. It is likely that additional studs may need to be added for the increased loads above in combination with the wind load on the building. Additional, if the opportunity presents itself, the south wall of the original house and the center interior wall should be analyzed by a licensed engineer for their capacity to support the existing second floor above.

EXTERIOR FINISHES

Description:

The siding on the original house is painted wood clap board siding that appears to be original. This siding is what appears to be present on the 1948 Boulder County Assessor's card and was commonly used on similar houses constructed during the same timeframe in the Louisville area. Similar clapboard siding is also found on the part of the house that was originally the south facing deck, indicating that this portion of the house was likely enclosed early in the lifetime of the house. The siding in the west facing gable end is painted wood Victorian-style shingles, also found on several similar houses in the Louisville area, including 601 Lincoln Avenue, directly across the street.

The siding found on the sunroom and the second floor north and south dormers is painted wood lap siding with approximately a six-inch exposure. This siding is likely original to this construction and clearly defines these masses as differing in time and construction from the original house.

The siding around what was originally the north deck and later enclosed is a composite panel siding that was commonly applied to houses in the Louisville area in the 1960's and 1970's and likely contains asbestos. The difference in siding material between this area of the house, the original house structure, and the second floor lap siding indicates that this area was enclosed after the original house construction and before the second floor addition. Similarly, the presence of this siding indicates that the framed walls were not replaced to accommodate the load of the second floor above.

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Condition Evaluation:

Overall, the siding throughout the house is in good condition. The historic clapboard siding and shingle siding appears to have been well maintained throughout its lifespan but as is expected with siding of this age, there are a few areas where the siding has begun to decay. This can be seen at the base of the siding, near the foundation as is common for wood siding in contact with foundations or near grade. For this reason, the clapboard siding is in fair condition.

The wood lap siding of the second floor is in good condition and no areas of concern were detected. The composite siding in the northeast corner is also in good condition and although it likely contains asbestos, there is no concern unless it is disturbed.



Clapboard siding, lap siding, and composite siding on north side of the house

Recommendations:

Scrape, repair, refinish, or replace any areas of the clapboard and shingle siding that are showing signs of decay or failure.

EXTERIOR MASONRY

Description:

There is no exterior masonry or any signs of exterior masonry existing in the past.

The stone foundation of the original house is exposed on the north, east, and south sides of the house and is discussed in the *Foundation Systems* section of this report.

A brick chimney can be seen in the 1948 photograph, but this chimney no longer exists.

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EXTERIOR APPENDAGES

Description:

An approximately 20-foot wide by 6-feet deep covered front porch exists centered on the west façade of the house facing Lincoln Avenue. This porch appears in the 1948 photograph and is likely original to the house. In the 1948 photograph, the porch has four turned wood columns and two attached columns on the west elevation. These wood columns are supporting a hipped roof that is present in 2021. At the top of the columns, in the photograph, are decorative brackets.



The original front porch has been converted to a sunroom entry

According to building records, the front porch was enclosed in 1980, creating a sunroom type front porch. The enclosure created a new knee wall around the perimeter of the porch with a centered storm door facing west and windows above the knee wall. The original wood columns appear to have been removed and replaced with new 4x4 posts between each window. This porch has a concrete slab on grade that is slightly lower than the finished floor of the house. The covered porch would have originally been constructed of wood, as was common with similar houses in the Louisville area.

Additionally, there is a wood framed deck that was added after 2000 that extends between the house and the detached garage. This deck also has several wood privacy fences.

Condition Evaluation:

Due to finish materials, the condition evaluation of the front porch was limited. The framing and concrete slab appear to be in good condition and were likely constructed to local building codes during 1980.

Recommendations:

1. Since the original front porch roof structure remains, the current sunroom could be restored to the open-air deck as seen in the 1948 photograph. This would include:
    a. Removal of the windows, the door, and the knee wall;
    b. Removal of the 4x4 posts to be replaced with turned wood columns. Several similar turned wood columns can be found on historic houses in the Louisville area;
    c. Add attached columns at the house in the northeast and southeast corners of the front porch;
    d. Add decorative column brackets. Several similar brackets can be found on historic houses in the Louisville area;
    e. Remove the concrete slab and rebuild a wood deck using wood materials that are suited to be in contact with grade.

3.4 ENVELOPE – ROOFING & WATERPROOFING

ROOFING SYSTEMS

Description:

The entire house and covered porch roof have an asphalt composite shingle roof that was added in 2018, according to building records. This roof was likely replaced due to hail damage, as was common in the Louisville area at this time. It is unclear what type of roof systems pre-dated the current roof.

Mushroom style roof vents are located on the south side ridge over the rear addition and on the north side ridge above the main room of the original house. These were likely added during the roof replacement in 2018. These provide ridge venting for the enclosed attic spaces that are not accessible, but there are no low vents present.

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Condition Evaluation:

The asphalt composition shingle roof and mushroom vents are in good condition.

Recommendations:

Consider adding soffit vents to provide adequate attic air circulation with low and high roof venting.



North side asphalt composite shingle roof and mushroom vents near the ridge

SHEET METAL FLASHING

Description:

Sheet metal flashing exists around the skylights at the rear of the house. Due to the replacement of the roof in 2018, according to local building code, it can be assumed that flashing was included in this construction around roof to wall connections.

Condition Evaluation:

The exposed metal flashing is in good condition.

Recommendations:

No recommendations at this time.

PERIMETER FOUNDATION DRAINAGE

Description:

A perimeter foundation drain was not observed during the inspection. Due to the construction time period and construction methods used, it is unlikely that a perimeter foundation drain exists.

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DRAINAGE SYSTEM, GUTTERS & DOWNSPOUTS

Description:

Painted brown, k-style gutters are found throughout the original house, second floor addition, and the front sunroom porch. The gutters are located at the end of all eaves in appropriate locations and of appropriate lengths for adequate water collection.

2x3 downspouts are located throughout and appear to be of an adequate amount for proper drainage. Where the downspouts discharge at grade, concrete gutter blocks have been located and sloped appropriately to direct water away from the foundation.



Gutters, downspouts, & splash blocks

Condition Evaluation:

The gutters, downspouts, and concrete splash blocks are in good condition.

Recommendations:

A round downspout can be seen in the 1948 photograph, on the northeast corner of the covered front porch but it is unclear the style of gutters that were used. Consider replacing the gutters with half-round gutters and the downspouts with round downspouts that are more consistent with historic buildings in the Louisville area.

SKYLIGHTS / CUPOLAS

Description:

Three skylights are located on the eastern portion of the house with two on the south side above the laundry area and one located on the north side above the second-floor bathroom. These skylights were likely added during the 1970's addition. All three skylights are plastic dome-shaped skylights mounted on raised curbs. The plastic has yellowed over time, common for this style skylight of this age.



Curb mounted skylights on south side

Condition Evaluation:

The skylights are in fair condition as they appear to be properly sealed and no cracks exist, but discoloration has occurred due to age.

Recommendations:

Consider replacing all three skylights with new curb mounted skylights that meet current energy code standards.

3.5 WINDOWS & DOORS

DOORS

Description:

The front door is a painted wood door with a full-lite frosted glass panel. The front door is a replacement of the original front door which is difficult to see in the 1948 photograph but would likely have been a solid wood door without full-lite glass. The door into the front sunroom is an aluminum storm door with a full-lite clear glass panel.

On the south elevation, near the rear of the house, there is a side access door with three composite steps to grade. This door is also a full-lite wood door with a clear glass panel and there is an exterior aluminum storm door with a clear glass full-lite. This door location was likely added when this part of the house was enclosed, but the door appears to have been replaced at the same time that the front door was replaced as the two doors are the same style.

On the east side of the house there is a clad wood sliding glass door accessing the deck from the kitchen.



Front door



Storm door to sunroom



South side door

Condition Evaluation:

All of the doors are in good condition.

Recommendations:

Replace the front door with a stained wood door similar to the original style of the house. There are several examples of front doors throughout the Louisville area that should be used as guidance.



East side sliding door

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WINDOWS

Description:

The sunroom windows are stopped-in glass windows above a framed knee-wall between structural wood posts. A few of the windows on all sides of the sunroom are removable panes with screens fastened to the wall framing so that the sunroom can be converted to a semi-screened porch. These windows are not historic and were likely built at the time that the front porch was enclosed with the knee-wall.



Historic window location in sunroom

Centered in the gable end facing west towards Lincoln Avenue is a single-hung vinyl window. It is unclear if this window location is original and the vinyl window construction suggests that if the window location is original, the window itself is not. If this window location is original, it would have been in attic space, which makes determining the window's originality difficult.

On the main level, there are seven window locations that appear to be original and of original size. The windows in all of these locations were replaced in 2008 with wood single-hung units. All of these windows are located in the original house with two each on the north, west, and south elevations. The original windows in these locations were likely wood double-hung units as was commonly found in the Louisville area for houses built around the same timeframe.

On the south elevation there is a wide vinyl window with a fixed center panel and operable sliding panels on either side. This window appears to be in a location that would have been original to this part of the structure, but the window is a replacement. Also on the south elevation, centered in the second floor dormer, are three wood windows. The center window is a direct-set with casement windows on either side. These windows appear to be original to this part of the 1970's addition.



Variety of windows on the south side

On the east elevation, centered on the second floor, is a clad wood single-hung window. This window appears to also be original to the second floor 1970's addition. On the main floor of the east elevation, in the area that was originally the south deck, there is a window opening that has since been sealed shut. These windows appear to be original to when this part of the house was enclosed. The windows are wood construction with divided lites, casements that originally opened to the interior, and the exterior has been painted over including the glazing.

On the north side of the house, in the kitchen and bath area of the main floor, there are two single-hung wood windows. These windows appear to be original to this part of the structure. The window in the bathroom contains frosted glass.



North side windows in kitchen and bath

Condition Evaluation:

The existing windows range from good to fair condition as they appear to be operable, sealed, and no visible signs of condensation. However, with the exception of the window replaced in 2008, the remaining windows are showing signs of deterioration as expected with windows around 50 or more years old and do not meet today's standards for energy efficiency.

The seven windows in historic locations were replaced in 2008 and are in good condition. It is unclear if the windows that were removed at this time were the original windows or not. Additionally, it can not be determined what the original style of windows were when referencing the 1948 photograph, only their sizes and locations are apparent. The current windows are in the historic window openings and are of the same historic sizes.

Recommendations

1. Further destructive investigation should occur to determine if the second-floor window in the west gable end is original. Finish materials on the interior of the house should be removed to determine if the window framing is original and therefore the historic presence or absence of this window.
2. Consider replacing windows that are not in the seven historic locations with new units that meet current energy code requirements.
3. Though the operation of the seven windows replaced in 2008 may differ from the original windows, they do not have an impact on the overall appearance. For these reasons, the existing windows from 2008 should remain.

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3.6 EXTERIOR DETAILS

SOFFIT & FASCIA

Description:

The soffits on all the eaves of the original house as well as the additions are painted 1x board soffits. The soffits on the second-floor addition are likely original to this structure while those on the main floor may be replacements. It is not possible to determine if the original structure was built with soffits or if they were added at a later time. However, with all of the trim and detail work around the roof eaves, it is likely that soffits existed early on in the lifetime of the house.



Varieties of soffits & fascia on southwest corner of house

The soffit in the sunroom is painted bead-board panels that appears to be original to the covered front porch.

1x painted fascia boards are found throughout the entire house. Those on the original house may be original or possibly replaced at some point but to match the original as can be seen in the 1948 photograph. The fascia on the second floor is wider than that on the original roof structure, to accommodate deeper roof members, and is likely original to those portions of the structure.

The roof eaves are all plumb-cut with boxed-eave gable-end returns on the west side gable and a boxed eave transition to the rake soffit at the east gable end.



Soffit transition at southeast corner of house

Condition Evaluation:

The majority of the soffits and fascia are in good condition. Some areas are showing signs of sagging on the main floor eave soffits.

The sunroom soffit is in poor condition as the beadboard is cracked, detached, and sagging in numerous locations.

Recommendations:

1. Replace the soffit in the sunroom with new painted beadboard to match the existing.
2. Repair or replace any soffits and fascia on the original house that have detached or cracked.

TRIM

Description:

The house has 1x4 painted wood corner trim throughout on the original house as well as the subsequent additions. At the rear of the house, there is a 1x12 painted wood belly band between the first-floor and second-floor addition. This belly band runs the entire length of the east elevation and extends around to the north side where it stops in line with the end of the second floor. Additionally, there are painted wood 1x4 frieze boards on the second-floor additions. Finally, on the east elevations there are 1x4 painted wood trim pieces at the connections between the original house structure and the enclosed decks. At the base of the south enclosed deck are various 1x painted wood boards that conceal the original deck framing.

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The window trim on the seven original window locations, as well as the two windows in the laundry room (southeast corner), are painted wood 5-piece trim. The window sills are 2x6 with 1x4 jamb and head trim and a decorative header. This window trim is also what is found on the front door and appears to be original throughout.

The windows on the north side, at the rear of the house, have similar trim that appears to have been built to match the original trim and is likely original to these two window locations. The window in the kitchen has one piece of jamb trim that is extra wide and indicates that this window may have originally been larger than what is currently in place. This could have been replaced with a narrower window during a kitchen remodel to center the window on the sink and allow for more upper cabinet space on the interior.

The remainder of the windows are trimmed in 4-piece picture frame style with 1x painted wood of various widths.



Historic window trim at rear of house; newer window trim around second floor window; corner trim at historic locations and additions; belly band trim between first and second floors; frieze boards at second floor roof; vertical trim boards at wall connections of additions and original house; trim boards at base of original south deck.

Condition Evaluation:

All of the trim is in good condition.

Recommendations:

No recommendations at this time.

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ORNAMENTATION

Description:

The east elevation contains several ornamentation details that all appear to be original and several elements are seen throughout the original house. All of the additions to the house are unadorned.

In the west gable end is a painted wood bargeboard that can be seen in the 1958 photograph and is similar to others found in the Louisville area, including the house across the street at 601 Lincoln Avenue. Also in the west gable end, the window head is decorative with pitched trim and a diamond insert. It is unclear if this trim is original as the window's originality is in question (see *Windows & Doors* section).

The west gable has decorative boxed-eave gable-end returns that are also found on several houses in the Louisville area. These returns have a decorative projecting corona and an ogee profile basemold over a 1x6 frieze. The freize and basemold run the length of the house and sit atop decorative capitols above the corner trim of the original house.

Above the storm door entrance to the sunroom sits a painted wood dentil acting as the door header. The use of this dentil as a header is unclear as it is not in keeping with the construction style of the sunroom enclosure. The dentil may have been repurposed from the original front door or elsewhere in the house.

The original front porch was supported by turned wood columns (see *Exterior Appendages* section). These columns had decorative brackets in the the corners where the columns met the roof.



Decorative bracket and window head



Decorative gable-end return

Condition Evaluation:

All of the ornamentation is in good condition.

Recommendations:

No recommendations at this time.

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3.7 MECHANICAL SYSTEMS

HEATING & AIR-CONDITIONING

Description:

Heating is provided to the entire house through an 80,000 btu, gas-fired furnace, located in the basement. The furnace is atmospherically vented through the roof. Supply lines run throughout the first floor and second floor plenums and are standard round galvanized steel. According to building records, the furnace was replaced in 2005. A brick chimney can be seen in the 1948 photograph. Additionally, the basement was likely dug out to accommodate a coal furnace.

A window air conditioning unit is located on the south side of the main floor in the living room and another unit penetrates the east wall of the second floor in the bedroom.


Furnace located in basement

Condition Evaluation:

The furnace and ducting appear to be in good condition but were not tested during the site visit.

Recommendations:

Consider replacing the furnace with a high-efficiency unit with a sealed combustion intake / exhaust system.

WATER SERVICE, PLUMBING, & SEWER UTILITIES

Description:

A standard 40-gallon, gas-fired water heater is in a closet in the kitchen and is atmospherically vented through the roof. The water delivery system is copper piping throughout, and the waste lines are ABS plastic. The sewer line exits the house on the north side and likely runs to main street, though this could not be verified.

Condition Evaluation:

The water heater, supply and waste lines, and sewer appear to be in good condition, but were not tested.

Recommendations:

Consider replacing the water heater with a high-efficiency unit with a sealed combustion intake/exhaust system.


Water supply & waste lines in crawlspace


Water heater in kitchen

3.8 ELECTRICAL SYSTEMS

ELECTRICAL SERVICE & PANELS



Overhead electric service & meter

Description:

Electrical service to the house is brought in overhead from the alley to the east side of the house. The electrical meter is located on the east side of the house, just north of the original south deck. According to building records, the electric panel was moved in 1982 and is currently located inside the house, beneath the stairs with access from the laundry area.

Condition Evaluation:

The electrical service and panel are in good condition.

Recommendations:

No recommendations at this time.

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ELECTRICAL DISTRIBUTION SYSTEM

Description:

According to building records, the entire house was re-wired in 1975 using copper wiring in accordance with Louisville building codes at that time. The existing house wiring appears to be Romex throughout and was likely added when the electric panel was moved in 1982.

Condition Evaluation:

The electrical distribution is in good condition.

Recommendations:

No recommendations at this time.

LIGHTING

Description:



Wall sconce at sunroom door

A wall sconce is installed over the sunroom door and is likely original to when the front porch was enclosed. Motion sensor flood lights are present at the side access door on the south elevation and there is a wall sconce to the north side of the rear sliding door.

Condition Evaluation:

The light fixtures were not tested but appear to be in good condition.

Recommendations:

Consider replacing all exterior light fixtures with full cutoff, high-efficiency units.

4.0 ANALYSIS AND COMPLIANCE

4.1 HAZARDOUS MATERIALS

Due to the age of the building, the finish coatings may contain lead-based paint and asbestos may be present in the plaster topcoat. A professional evaluation should be conducted to determine the presence of any hazardous materials.

4.2 MATERIALS ANALYSIS

Does not apply.

4.3 ZONING CODE COMPLIANCE

Notes:

- It is recommended that the owner have a survey of the property conducted to verify the *Lot Size*. All *Lot Coverage* and *Floor Area Ratio* percentages are based on the actual property size and are subject to change from what is specified in this report.
- An Improvement Location Certificate (ILC) was prepared by Flatirons, Inc. for this property on July 7, 2021. The ILC was used to determine many of the areas and existing property setbacks.
- Building area square footages are taken from:
  - Improvement Location Certificate
  - As-built measurements as measured from the interior face of wall, by DAJ Design
- Only the main house was measured by DAJ Design as this is the only historic structure located on the specified property.

Legal Description:	Lots 11 & 12, Block 11, Pleasant Hill Addition, Louisville, Colorado
Year Built (Main House):	1904
Lot Dimensions:	64' x 120'(ILC)
Lot Size:	7,680 sf (ILC)
Zoning:	RL (one residential unit per 7,000sf) Property is subject to the Old Town Overlay Zoning District Regs

Areas of levels in square feet (sf):

First floor finished area:	1,101 sf
Second floor finished area	587 sf
Detached garage:	473 sf

Allowable Building Height (from existing grade):

Primary Structure:	27'
Accessory Structure:	20'

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Lot Coverage:			
Existing:	1,696 sf	22%	House & garage footprint
Allowable:	2,304 sf	30%	608 sf remain
Preservation:	2,688 sf	35%	992 sf remain
Landmark:	3,072 sf	40%	1,376 sf remain
Floor Area Ratio:			
Existing:	2,161 sf	28%	First floor, second floor, & garage
Allowable:	2,688 sf	35%	527 sf remain
Preservation:	3,072 sf	40%	911 sf remain
Landmark:	3,456 sf	45%	1,295 sf remain

Setbacks:		
Front:	20’	(could be different depending on the front of neighboring house locations)
Front Porch:	14’	(6’ encroachment into front yard & street side yard setback)
Rear:	25’	
Side (interior lot line):	7’	(5’ with Preservation or Landmark Designation)
Accessory Rear:	3’	
Accessory Side:	3’	

5.0 PRESERVATION PLAN

5.1 PRIORITIZED WORK

CRITICAL DEFICIENCY

- The basement and crawlspace walls should be observed by a licensed engineer and repaired as needed.
- The original main floor walls are likely under added stress from the second-floor addition and should be replaced to accommodate the increased load.
- The foundations in the northeast and southeast corners of the house should be observed by a licensed engineer. Removal of finish materials and insulation is necessary for this to occur. These foundations should be replaced as specified by a licensed engineer.
- The crawlspace foundation walls and retaining walls beneath the front of the original house should be evaluated by a licensed engineer and repaired as needed.
- New concrete and CMU retaining walls adjacent and directly below existing stone foundation walls should be further evaluated by a licensed structural engineer for proper earth retainage and support of the load above.
- The floor framing should be observed by a licensed engineer and repaired as needed. Special attention should be given to the connections between the foundation walls, floor joists, beams, and beam supports. The floors are not suitable for additional load resulting from a remodel or addition and should be replaced for new loading.
- The center beam in the crawlspace should be further evaluated by a licensed engineer and repaired as needed.
- The floor framing of what was originally the north side deck should be further evaluated by a licensed engineer and repaired as needed. This will likely require some destructive exploration.
- The floor framing of what was originally the south side deck should be replaced and supported on a proper foundation as prescribed by a licensed engineer. This floor should be made flush with the remainder of the main floor.
- The floor framing supports in the basement should be replaced as prescribed by a licensed engineer. The flat beam is not adequate and should be replaced and supported with proper columns supported by new footings.
- The bearing of the 6x12 beam should be determined and replaced as prescribed by a licensed engineer. The support of this beam in the basement is not adequate for the second-floor support and it is unclear how the beam is supported on either end.
- The second-floor framing should be observed by a licensed engineer and repaired as needed. This will require destructive exploration of finish materials to determine the framing member sizing, spacing, and support.
- Destructive exploration of the roof framing should be made and analyzed by a licensed engineer. Special attention should be given to the following:
    - The size and material of the ridge beam and how the ridge beam is supported at either end.
    - The connections and support system of the two columns that support the center of the ridge beam.
    - The size and spacing of the rafters of the south facing dormer and their connections to the ridge beam and the exterior wall framing.
    - The size and spacing of the original roof rafters on the west end of the house and the original rafters on the north side of the house and their connection to the ridge beam.
    - The size and spacing of the roof framing members of the second-floor addition over the kitchen and their connections.
    - The size and spacing of the roof framing members over the old south deck portion of the house.

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- Since the original front porch roof structure remains, the current sunroom should be restored to the open-air deck as seen in the 1948 photograph. This should include:
    - Removal of the windows, the door, and the knee wall;
    - Removal of the 4x4 posts to be replaced with turned wood columns. Several similar turned wood columns can be found on historic houses in the Louisville area;
    - Add attached columns at the house in the northeast and southeast corners of the front porch;
    - Add decorative column brackets. Several similar brackets can be found on historic houses in the Louisville area;
    - Remove the concrete slab and rebuild a wood deck using wood materials that are suited to be in contact with grade.
- Replace the front door with a stained wood door similar to the original style of the house. There are several examples of front doors throughout the Louisville area that should be used as guidance.
- Further destructive investigation should occur to determine if the second-floor window in the west gable end is original. Finish materials on the interior of the house should be removed to determine if the window framing is original and therefore the historic presence or absence of this window.

SERIOUS DEFICIENCY

- It is likely that the roof framing of the south facing dormer is inadequate. If this is determined to be the case, consideration should be given to removing the dormer altogether.
- Scrape, repair, refinish, or replace any areas of the clapboard and shingle siding that are showing signs of decay or failure.
- A round downspout can be seen in the 1948 photograph, on the northeast corner of the covered front porch but it is unclear the style of gutters that were used. Consider replacing the gutters with half-round gutters and the downspouts with round downspouts that are more consistent with historic buildings in the Louisville area.
- Consider replacing the remainder of the windows with new units that meet current energy code requirements.
- Replace the soffit in the sunroom with new painted beadboard to match the existing.
- Repair or replace any soffits and fascia on the original house that have detached or cracked.

MINOR DEFICIENCY

- Consider adding soffit vents to provide adequate attic air circulation with low and high roof venting.
- Consider replacing all three skylights with new curb mounted skylights that meet current energy code standards.
- Replace the furnace and water heater with high-efficiency units with a sealed combustion intake/exhaust system.
- Replace all exterior light fixtures with full cutoff, high-efficiency units

5.2 PHASING PLAN

A phasing plan is not available at this time.

5.3 ESTIMATE OF PROBABLE COST OF CONSTRUCTION

A probable cost of construction is not available at this time.

6.0 PHOTOGRAPHS AND ILLUSTRATIONS

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1948 Boulder County Assessor's Card Image



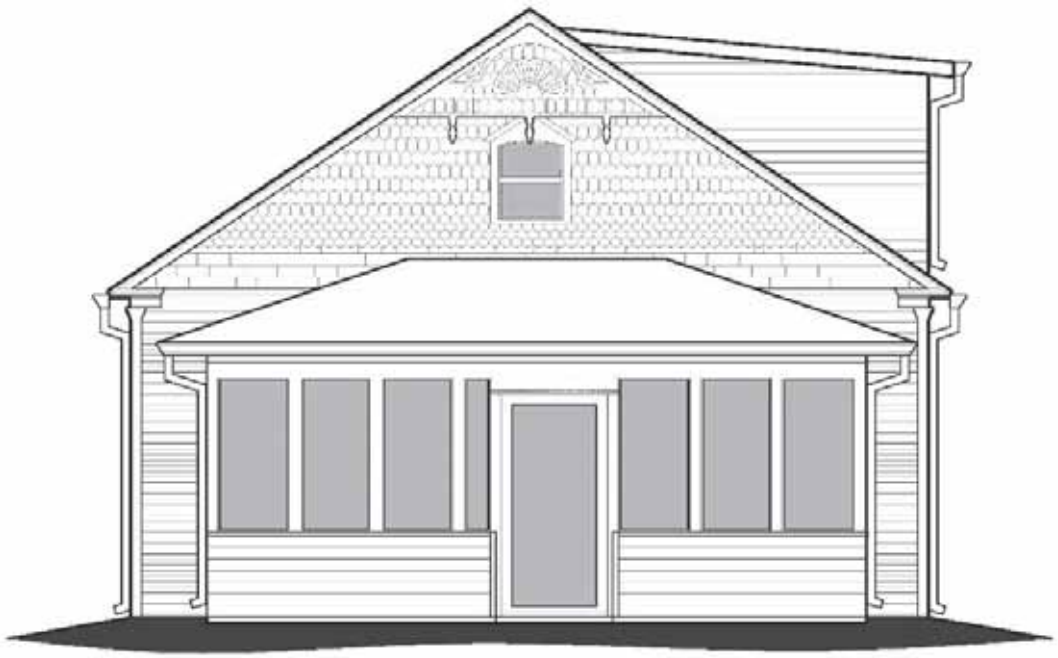
2021 photograph from the northwest

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2021 West Elevation



2021 West Elevation Drawing

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2021 photograph from the northwest



2021 photograph from the northeast



2021 photograph from the southeast

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Glenn Frank Engineering
Engineering Structures that Endure

Structural Engineering Consultants
P.O. BOX 20708
Boulder, Colorado 80308
303.554.9591

December 10, 2021

Attn: Andy Johnson
DAJ Design
Louisville, CO

Dear Andy,

We visited the residence at 600 Lincoln, Louisville, CO on October 19, 2021 to review the existing building for the purpose of documenting and evaluating the existing structure. It was at this time that we reviewed the building with DAJ Design and coordinated our findings with the report created by DAJ Design.

On December 10, 2021 we reviewed the final report and made any necessary modifications to the structural sections. All findings, evaluations and recommendations are in the report. Below, in this letter, are our structural conclusions and a summary of our scope of work. Please feel free to contact us for any further information.

Structural Conclusions:

A. In our professional opinion, the building's structure is adequate for its continued safe use. The construction does not meet all modern code standards; however, it has performed adequately up to this point. We recommend that a licensed Structural Engineer be retained to further evaluate the structure, provide the repairs recommended in each of the sections of this report and assist in any modifications to the structure proposed by the owner and an architect.

Please see the recommendations sections of the report for any required or recommended structural recommendations, to be completed by a licensed structural engineer and contractor.

It is also important to note that a significant portion of the building's structure was not exposed for our review. There may be damaged structure that we were not able to observe due to finish materials. Also, additional cosmetic imperfections could arise, which is normal for an old structure.

B. An extreme event occurring at the site, such as a tornado, a serious (rare) earthquake or other unforeseen event could significantly damage the structure. But this is also true for most old structures in Louisville (and probably for some modern structures) and is only mentioned for completeness of this report.

C. The drainage around the home should be addressed to allow for water to flow away from the building. Poor drainage could result in water infiltration or excessive movement and damage to the foundation.

Glenn Frank Engineering
Engineering Structures that Endure

Structural Engineering Consultants
P.O. BOX 20708
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Summary and Limitations:

A. Summary:

1. The goal of our site observation and the structural portion of the report is to provide an overview of the building's structure and foundation and identify areas where remedial work in the near future is prudent.

2. The recommended remedial measures are intended to promote the building's continued safe use and are not intended to eliminate all existing and potential future cosmetic defects.

B. Limitations:

1. The information contained in the report is the author's professional opinion based on visual evidence readily available at the site, without the removal of existing finish materials. Of course, this means there could be hidden defects which are not discoverable at this time, without demolition of finish materials. That is true for most buildings, and an inherent limitation for this kind of report. Should additional information become available or additional movement is perceived, we recommend that our firm be contacted for further review.

2. The issuance of the report does not provide the building's current or future owners with a guarantee, certification, or warranty of future performance. Acceptance and use of this report do not transfer financial liability for the building or the property to the author or this engineering firm.

3. The report is also only preliminary to make note of areas that need to be addressed. A licensed Structural Engineer should be retained to provide a more thorough investigation and provide appropriate repair details for all necessary repairs.

Sincerely,

Jesse Sholinsky, P.E.



RESOLUTION NO. 4
SERIES 2022

A RESOLUTION MAKING FINDINGS AND RECOMMENDATIONS REGARDING THE LANDMARK DESIGNATION FOR A HISTORICAL RESIDENTIAL PROPERTY LOCATED AT 600 LINCOLN AVENUE

WHEREAS, there has been submitted to the Louisville Historic Preservation Commission (HPC) an application requesting a landmark eligibility determination for a historical property located at 600 Lincoln Avenue, legally described as Lots 11 & 12, Block 11, Pleasant Hill Addition; and

WHEREAS, the HPC have reviewed the application and found it to be in compliance with Chapter 15.36 of the Louisville Municipal Code, including Section 15.36.050.A, establishing criteria for landmark designation; and

WHEREAS, the HPC has held a properly noticed public hearing on the proposed landmark application; and

WHEREAS, 600 Lincoln Avenue (the Petrun House) has social significance because it exemplifies the cultural, political, economic, or social heritage of the community considering its association with various Louisville families and Louisville's cultural heritage; and

WHEREAS, the Petrun House has architectural significance because it has architectural integrity that is representative of the built environment in early 20th century Louisville; and

WHEREAS, the HPC finds that these and other characteristics specific to the Petrun House have social and architectural significance as described in Section 15.36.050.A of the Louisville Municipal Code; and

NOW, THEREFORE, BE IT RESOLVED BY THE HISTORIC PRESERVATION COMMISSION OF THE CITY OF LOUISVILLE, COLORADO:

1. The application to landmark the property at 600 Lincoln Avenue be approved for the following reasons:
    a. Architectural integrity has been largely maintained over time.
    b. Association with Louisville's heritage.
2. The Historic Preservation Commission recommends the City Council approve the landmark incentive grant in the amount of $5,000.
3. With the amendment that the structure be named the Petrun House.

PASSED AND ADOPTED this 7th day of November, 2022.

_____
Lynda Haley, Chairperson

RESOLUTION NO. 6
SERIES 2022

A RESOLUTION MAKING FINDINGS AND RECOMMENDATIONS REGARDING A PRESERVATION AND RESTORATION GRANT FOR THE PETRUN HOUSE LOCATED AT 600 LINCOLN AVENUE

WHEREAS, there has been submitted to the Louisville Historic Preservation Commission (HPC) an application requesting a preservation and restoration grant for the Petrun House, a historic residential structure located at 600 Lincoln Avenue, on property legally described as Lot s 11 & 12, Block 11, Pleasant Hill Addition, Town of Louisville, City of Louisville, State of Colorado; and

WHEREAS, the City Staff and the HPC have reviewed the application and found it to be in compliance with Section 3.20.605.D and Section 15.36.120 of the Louisville Municipal Code; and

WHEREAS, the HPC has held a properly noticed public hearing on the preservation and restoration grant; and

WHEREAS, the preservation and restoration work being requested for the Petrun House includes making repairs to the existing structure; and

WHEREAS, the Historic Preservation Commission finds these proposed improvements will assist in the preservation of the Petrun House, which is to be landmarked by the City;

NOW, THEREFORE, BE IT RESOLVED BY THE HISTORIC PRESERVATION COMMISSION OF THE CITY OF LOUISVILLE, COLORADO:

1. The Historic Preservation Commission recommends the City Council approve the proposed Preservation and Restoration Grant application for the Petrun, in the amount of **$40,000** for work as described in the attached Exhibit A:

PASSED AND ADOPTED this 7th day of November 2022.

L Haley

_____
Lynda Haley, Chairperson

Exhibit A

City of Louisville
COLORADO • SINCE 1882

6. COST ESTIMATE OF PROPOSED WORK

*Provide a budget that includes accurate estimated costs of your project. Include an **itemized breakdown** of work to be funded by the incentives and the work to be funded by the applicant. Include only eligible work elements. Use additional sheets as necessary. When possible, include quotes for the proposed work.*

Type of Incentive: ☒ GRANT ☐ LOAN ☐ BOTH

Feature	Proposed Work to be Funded	Fund Request	Match (M)	Total
A.	ASBESTOS ABATEMENT - INTERIOR	$ 11,000	$ 11,000	$ 22,000
B.	ASBESTOS ABATEMENT - EXTERIOR	$ 8,500	$ 8,500	$ 17,000
C.	DEMOLITION	$ 5,375	$ 5,375	$ 10,750
D.	SITE GRADING & DRAINAGE	$ 3,000	$ 15,000	$ 18,000
E.	FOUNDATION	$ 21,000	$ 21,000	$ 42,000
F.	FRAMING	$ 4,000	$ 48,200	$ 52,200
G.	ENVELOPE - EXTERIOR WALLS	$ 15,500	$ 15,500	$ 31,000
H.	WINDOWS & DOORS	$ 13,500	$ 21,500	$ 35,000
I.	MECHANICAL, ELECTRICAL, & PLUMBING	$ 0	$ 76,500	$ 76,500
J.	INSULATION & DRYWALL	$ 19,000	$ 19,000	$ 38,000
K.	NON-HISTORIC BUDGET ITEMS	$ 0	$ 150,250	$ 150,250
	Total Proposed Work	$ 100,875	$ 391,825	$ 492,700

For loan requests, indicate total loan request here:	$

If partial incentive funding were awarded, would you complete your project? ☐ YES ☐ NO

City of Louisville
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Historic Preservation Commission

Meeting Minutes – Excerpt

November 07, 2022
City Hall, Spruce Room
749 Main Street
6:30 PM

Call to Order – Chairperson **Haley** calls the meeting to order at 6:30 PM.

Roll Call was taken and the following members were present:

Commission Members Present:	Lynda Haley, Chair Christine Burg, Vice Chair Gary Dunlap
Commission Members Absent:	Keith Keller
Staff Members Present:	Amelia Brackett Hogstad, HPC Planner Lisa Ritchie, Fire Recovery and Planning Manager Rob Zuccaro, Dir. of Community Development

Public Hearing Items

A. 600 Lincoln Ave: Landmark, Alteration Certificate, and Grant Request – A request to Landmark and approve an Alteration Certificate and Grant request for the property at 600 Lincoln Avenue.

Staff Presentation (Landmark):
Brackett Hogstad begins her presentation by reviewing the property location. She reviews the historic conditions and displays what the current condition of the property is.

She mentions the landmark criteria and reviews each one.

Criteria 1: Landmarks must be at least 50 years old. *Staff finds this criterion is met.*

- The principal structure at 600 Lincoln Ave was constructed in 1904, making it 118 years old.

Criteria 2: Landmarks must meet one or more of the criteria for architectural, social or geographic/environmental significance. *Staff finds this criterion is met.*

- Architectural Significance – Represents a built environment of a group of people in an era of history that is culturally significant to Louisville.
    - This house is associated with the Folk Victorian era and the Slovak community neighborhood.
- Social Significance – Exemplifies cultural, political, economic or social heritage of the community.
    - The owners are a part of the Slovak community as well as the coal mining and local service economy.

Criteria 3: Landmarks should meet one or more criteria for physical integrity. *Staff finds this criterion is met.*

- Physical Integrity – Shows character, interest or value as part of the development, heritage or cultural characteristics of the community, region, state, or nation.
    - This house is in its original location. The 1948 size and form has been retained.
- Retains original design features, materials and/or character.
    - Some of the Folk Victorian ornamentation has remained maintained.
    - Alteration certificate restoration work

Staff Recommendations:
Staff recommends approval of Resolution 4, Series 2022, recommending approval of 600 Lincoln as a Historic Landmark.

Staff recommends that the house be named for the Petrun family.

Staff Presentation (Alteration Certificate):
Section 15.36.120 of the LMC gives the criteria for evaluating alteration certificates. Staff finds that the proposed design meets all relevant criteria. She then reviews that the applicant will be doing the following restorations:

- Front porch
- Removal of southwest dormer

She then discusses the new garage, new addition, and the demolition of the two.

Staff Recommendations (Alteration Certificate):
Staff recommends denial of Resolution No. 5, Series 2022, approving the Alteration Certificate.

Staff has also provided a version for approval in the staff packet.

Staff Presentation (Grant):
The applicant is requesting approval of a Preservation and Restoration Grant. The total grant request is $40,000. The grant would be matching. Staff finds that the grant request meets all criteria.

Under Resolution No. 17, Series 2019, approved work must fall under relevant categories.

Staff Recommendations (Grant):
Staff recommends approval of Resolution No. 6, Series 2022, recommending approval of the grant request in the amount of $40,000.

Commissioner Questions of Staff:
None is heard.

Applicant Presentation:
Jessica Thompson, 2729 Meadow Mountain Trail, Lafayette, CO 80026
Thompson explains what all is being removed and what the vision is for their re-design.

Leilani Loepp, 5303 Spine Rd, Boulder, CO 80301
Loepp mentions that it is very important to the property owners to keep the structure as it is. They are maintaining the same material such as the trim work and siding. The house is not centered on the lot so in order to get the square footage they needed, we needed to make it wider than the existing home. she asks the commission to not have a full denial but allow them to re-design some portions of the design such as the area that will be encroaching on that setback.

Commissioner Questions of Applicant:
Burg says it is 24 feet from north to south. What is it from east to west?
Thompson says it is approximately 29 feet.
Burg asks how much space there would be from the back of the house to the front of the garage.
Loepp says it is approximately 19 feet.
Dunlap asks if there is an alternative proposal from the applicant.
Brackett Hogstad says we do not have an alternative proposal. That would have to be a continuance.
Haley says she is not concerned with the setback but is concerned about the new taking away from the original. She is concerned about the scaling and mass.
Thompson points out that the original square footage is only around 800 so anything is going to look much bigger. Any way you look at it, you will be looking at either the addition or the garage.

Public Comment:
None is heard.

Closing Statement by Applicant:
None is heard.

Discussion by Commissioners:
Burg says that she appreciates that the Victorian style will remain and that the existing structure will be existing.
Dunlap says it is clear what is new versus old. He is concerned about the mass of it.
Burg says there is a question of whether or not the garage could be placed on the south side. If people are coming and going on Lincoln, the garage would not look historic.
The commissioners and the applicants discuss a possible re-design so not so much of the living quarters are on the south side. The applicants are concerned with them being too close to their neighbor because it would be 9 feet between **them** and the neighbor.
Johnson reiterates how much she wants to keep the original structure but she also wants to have the square footage work for their family.
Brackett Hogstad shows a photo of the existing structure and what the street facing view is.
Haley discusses the materials on the addition.
Loepp says it will be board and batten as well as horizontal siding.
Dunlap says he is inclined to support the application.
Burg says there have been ones like this before that have been approved. Every case is different though. She is inclined to approve it as well.
Haley says our struggle is balancing the give and take of the existing structure. She appreciates that the existing structure is staying. She is inclined to approve the alteration certificate.

Dunlap moves and **Burg** seconds a motion to approve Resolution 4, Series 2022, approving 600 Lincoln Ave as a Historic Landmark. Motion passes unanimously by a roll call vote.

Burg moves and **Dunlap** seconds a motion to approve Resolution No. 5, Series 2022, approving 600 Lincoln Ave's Alteration Certificate. Motion passes unanimously by a roll call vote.

Dunlap moves and **Burg** seconds a motion to approve Resolution No. 6, Series 2022, approving 600 Lincoln Ave the grant request in the amount of $40,000. Motion passes unanimously by a roll call vote.

Historic Preservation Commission

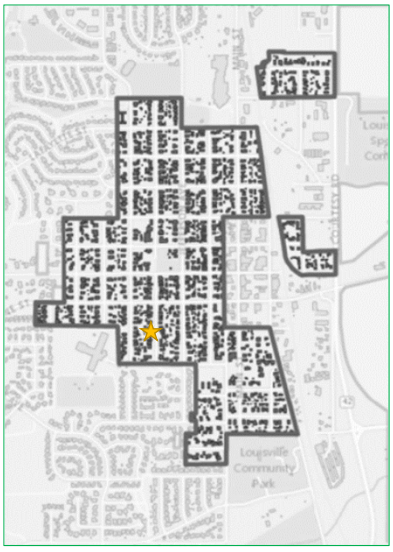
600 Lincoln Avenue

Resolution No. 53, Series 2022 (Landmark)

Resolution No. 54, Series 2022 (Grant)

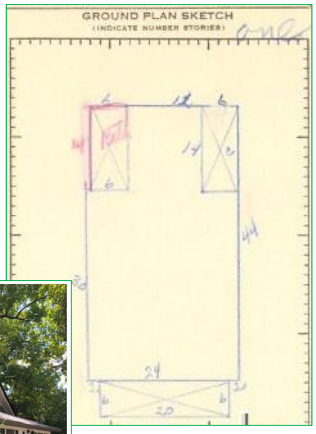
A request to Landmark and approve a Grant request for the property at 600 Lincoln Avenue.





Location






600 Lincoln Avenue, northwest elevation, 2021

Conditions Over Time

- ***Landmarks must be at least 50 years old.***
  - The principal structure at 600 Lincoln was constructed in 1904, making it 118 years old.
- ***Landmarks must meet one or more of the criteria for architectural, social or geographic/environmental significance.***
  - Folk Victorian
  - Slovak community neighborhood
  - Coal-mining and local service economy
- ***Landmarks should meet one or more criteria for physical integrity.***
  - Original location.
  - 1948 size and form retained.
  - Some Folk Victorian ornamentation maintained.
  - Alteration Certificate restoration work.

Landmark

Grant

Grant Request

- The applicant is requesting approval of a Preservation and Restoration Grant.
- The total grant request is $40,000.
- The grant would be matching.
- Staff finds that the grant request meets all criteria.

All requests are related to preservation or restoration.

Feature	Proposed Work to be Funded
A.	Restore front porch
B.	Remove dormer, restore attic
C.	Reinforce original foundation

Recommendations



Landmark

- Staff recommends approval of Res. 53, Series 2022.

Grant

- Staff recommends approval of Res. 54, Series 2022.

SUBJECT: **ORDINANCE NO. 1845 SERIES 2022 – AN ORDINANCE AMENDING CHAPTER 15.18.030 OF THE LOUISVILLE MUNICIPAL CODE CONCERNING AMENDMENTS AND DELETIONS TO THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE TO INCLUDE REQUIREMENTS FOR ENERGY USE INTENSITY PERFORMANCE TARGETS AND RESTRICTIONS OF FOSSIL FUEL SPACE AND WATER HEATING EQUIPMENT – 2nd READING (advertised *Daily Camera* 12/2/22) *continued from 12/6/22***

DATE: **DECEMBER 20, 2022**

PRESENTED BY: **ROB ZUCCARO, PLANNING AND BUILDING SAFETY DIRECTOR**
CHAD ROOT, CHIEF BUILDING OFFICIAL
KAYLA BETZOLD, SUSTAINABILITY COORDINATOR

SUMMARY:
Presented for consideration on second reading is an amendment to the commercial building provisions of the 2021 International Energy Conservation Code (IECC) (see Attachment No. 1). The proposed code would require that certain types of new commercial development meet an Energy Use Intensity (EUI) performance standard, which is a performance rating of energy use per sq. ft. within the building. The EUI standard also allows for production of on-site renewable energy to offset energy use. In addition, the proposed code restricts fossil fuel and electric resistance space and water heating systems for new commercial construction, with exceptions for various types of equipment and building systems that would have feasibility issues with implementation.

On September 27, 2022 City Council was presented a final report and recommendations on commercial building energy code options (see Attachment No. 2 for Lotus/Group 14 Report). The options presented required additional energy efficiency and/or renewable energy offsets for new commercial construction projects beyond the 2021 IECC, which the City adopted last year. Development of the final report included public and advisory board engagement, policy research and analysis, and modeling of cost and greenhouse gas impacts for several different commercial and multi-family scenarios. Council provided staff direction to draft a code with EUI targets for new commercial construction and requirements for all-electric (non-fossil fuel) space and water heating.

Changes Following First Reading:
Following first reading on November 15, 2022, staff has made edits to the ordinance with deleted text in ~~**Bold Strikethrough**~~ and new text in **Bold Double Underline**. The changes are also summarized below:

- Section C401.2.2 Core and Shell and Section C401.2.3 Tenant Finish. References were added to core and shell and tenant finish requirements to clarify that the space and water hearing requirements in Sections C403.2.4 and C404.10 were required with a core and shell permit and also at tenant finish permit.

  C401.2.2 Core and shell. *Core and shell buildings shall comply with the provisions of Section C402.1.3 through C402.5. When mechanical systems are installed, core and shell buildings shall also meet the provisions in* ***C403.2.4, C404.10, and*** *Section C408.*

  C401.2.3 Tenant finish. *Tenant finishes included in the scope of Appendix PT shall comply with Appendix PT* ***and C403.2.4 and C404.10****. All other tenant finishes shall comply with the Prescriptive Compliance option, which requires compliance with Sections C401.3, C401.4, C402 through C406, and C408.*

- Section C403.2.4 Space Heating Equipment. This section restricts fossil-fuel and electric resistance space hearing appliances in new commercial construction. The language was changed to note that all space hearing appliances are subject to the requirement and not just "warm air furnaces." The Exceptions section was amended to add titles to each subsection, add clarifications, and add new provisions for temporary systems, freeze protection and the ability for the Building Official to provide exceptions for research, heath care, and other building types when the code cannot practicably be met.

  C403.2.4 Space heating equipment. *Fossil-fuel* ~~***warm air furnaces***~~ ***appliances*** *and electric resistance space heating equipment shall not be permitted for space heating.*

  Exceptions:

  1. ***Emergency backup.*** *Where it is required by an applicable law or regulation to provide space heating with an emergency power system or a standby power system.*
  2. ~~***Where cfm/sq. ft. ventilation requirements result in conditions where the Building Official determines that space heating requirements cannot reasonably be met without combustion space heating systems.***~~
  2. ~~***3.***~~ ***Certain make-up air systems.*** *Electric resistance in make-up air systems where energy recovery ventilation is prohibited by the International Mechanical Code.*
  3. ~~***4.***~~ ***Supplementary heat.*** *Electric resistance heat used for supplementary heat in accordance with Section C403.4.1.1*
  4. ~~***5.***~~ ***Electric resistance budget. In addition to any exceptions in this section,*** ~~***Up***~~ ***up*** *to 5 W of electric resistance space heating per square foot of conditioned floor area in the building, not including supplementary heat.*

Electric resistance heating elements integrated into heat pump equipment.

5. ~~6.~~ ***Integrated units.*** *Electric resistance heating elements integrated into heat pump equipment.*
6. ~~7.~~ ***Heated plenums.*** *Electric resistance in heated plenums.*
7. ***Temporary systems. Temporary electric resistance heating systems are permitted where serving future tenant spaces that are unfinished and unoccupied, provided that the heating equipment is sized and controlled to achieve interior space temperatures no higher than 40°F (4°C).***
8. ***Freeze protection.*** ~~***Electric resistance for freeze protection elements.***~~ ***Electric resistance in heating systems sized for spaces with indoor design conditions of 45°F (7°C) and intended for freeze protection.***
9. ***Outdoor systems.*** *Equipment used for outdoor heating.*
10. ***Specific conditions. Portions of buildings that require fossil fuel or electric resistance space heating for specific conditions approved by the Building Official for research, health care, process or other specific needs that cannot practicably be served by heat pump or other space heating systems. This does not constitute a blanket exception for any occupancy type.***
11. ~~10.~~ ***Replacements.*** *Replacement fuel-fired* ~~***furnace equipment***~~ ***appliances.***

- Section C404.10 Water Heating Equipment. This section restricts fossil-fuel and electric resistance water heaters in new commercial construction. The Exceptions section was amended to add titles to each subsection, add clarifications, and add new provisions for emergency backup systems, a maximum budget for electric resistance systems, and commercial kitchen process equipment.

C404.10 Water heating equipment. *Fossil fuel and electric resistance instantaneous and storage water heaters shall not be used to provide hot water.*

Exceptions:

1. ***Emergency backup. Where it is required by an applicable law or regulation to provide water heating with an emergency power system or a standby power system.***
2. ~~1.~~ ***Integrated units.*** *Resistance heating elements integrated into heat pump water heating equipment.*
3. ~~2.~~ ***Recirculation loops.*** *Electric resistance elements used for recirculation loop temperature maintenance.*
4. ~~3.~~ ***Small systems.*** *Electric storage water heaters with a rated water storage volume no greater than 20 gallons.*
5. ~~4.~~ ***Point-of-use systems.*** *Instantaneous electric water heaters located within 10 feet of the point of use.*

6. ~~5.~~ ***Renewable electricity.*** *Electric resistance equipment where not less than 100 percent of the annual service water-heating requirement is provided by an on-site renewable energy system not used to meet any other provision of this code.*
7. ~~6.~~ ***Renewable or waste thermal energy.*** *Electric resistance storage water heating equipment in buildings where not less than 75% of the annual service water heating requirement is met by a solar thermal system or other renewable thermal system.*
8. ~~7.~~ ***High-temperature requirements.*** *Water heating systems that serve end-uses or have a storage requirement that necessitates a water temperature of 141°F (55°C) or hotter.*
9. ***Electric resistance budget. In addition to any exceptions in this section, a budget of 24 kW plus 0.1 watts per square foot of building area of electric resistance service water heating capacity per building.***
10. ***Commercial kitchens. Electric booster-heaters serving commercial dishwashers, commercial food service equipment, and other approved process equipment that require supply water temperatures of 120°F (49°C) or higher.***
11. ~~8.~~ ***Replacements.*** *Replacement of gas-fired storage water heaters or instantaneous water heaters.*

CODE OVERVIEW:
The attached ordinance amends section 15.18.030 of the Louisville municipal code to require minimum EUI performance standards for various building types. Meeting the EUI standard can be achieved through building efficiency and electrification upgrades alone, or a combination of building efficiency, electrification and on-site renewable energy production.

In researching regional EUI performance standards, staff along with representatives from the Southwest Energy Efficiency Project (SWEEP) and Shums Coda Associates, determined that seven commercial building types be included in the EUI performance standards. The performance standards are reflective of the adopted City of Boulder EUI performance standards and proposed City and County of Denver EUI performance standards, which are currently in a code adoption process. Building types that do not fit within the seven EUI building types will be required to meet the prescriptive requirements of Louisville's adopted energy code adopted last year.

The ordinance also includes requirements for non-fossil fuel space and water heating in new commercial construction. The requirement of "non-fossil fuel" rather than requiring all electric systems, allows for other technologies, such as hydrogen fuel systems, to be used that do not use fossil fuel for combustion. The proposal includes categories of exceptions for both space and water heating systems and is discussed in more detail below.

Cost Comparison

As outlined in the Lotus/Group 14 Report, the City's consultants modeled predicted site EUI, upfront costs, an annual energy costs for three building types. This was based on EUI targets published by the New Building Institute. Although these EUI targets differ from the EUI targets proposed in the current draft ordinance (they are more stringent than the proposed EUI standards), the table provides insight on what level of EUI could be achieved with both mixed-fuel and all-electric systems, the cost differential between mixed-fuel and all-electric systems, and how on-site renewable energy can be used to offset energy use and reach the EUI performance standard.

Building Type	HVAC Fuel Type	EUI targets modeled	Estimated Upfront Cost of HVAC without PV	EUI earned without PV	PV size required to reach EUI Target (kW)	Estimated Upfront Costs with PV	Annual Energy Cost Savings after PV
Multifamily	Mixed-Fuel	23	$206,661	36	111kW	$484,161	$12,432
	All-Electric		$182,500	23	4kW	$192,500	$448
Office	Mixed-Fuel	21	$4,180,608	29	185kW	$4,643,108	$20,720
	All-Electric		$4,353,828	29	177kW	$4,796,328	$19,824
Retail	Mixed-Fuel	34	$1,123,500	103	310kW	$1,898,500	$34,720
	All-Electric		$1,232,200	63	223kW	$1,789,700	$24,976

For a multifamily building type, the all-electric HVAC system was 11.7% less expensive than the mixed-fuel system. For an office building type, the all-electric HVAC system was 4.1% more expensive than the mixed-fuel system. For the retail building type, the all-electric HVAC system was 9.7% more expensive than the mixed-fuel system.

As the table above shows, the all-electric buildings result in lower EUI scores without PV, resulting in lower costs associated with an on-site PV system to lower the EUI scores to the performance standards.

In regards to building types that are outside of the proposed EUI performance standards, the Lotus/Group 14 Report modeled the cost for mechanical systems in code compliant buildings, with both mixed-fuel and all-electric options. Upfront costs for the modeled HVAC systems varied based on the equipment specifications in each model (for details of mechanical systems in each option, see Attachment No. 2). The tables below show the complete cost breakdown for code compliant buildings in the Group 14 modeled building types.

Multifamily HVAC System Options	Cost for Code Compliant Building	
	Upfront Cost of HVAC System	Total Annual Energy Bills
Mixed Fuel Option 1	$157,321	$40,785
Mixed Fuel Option 2	$278,321	$25,230
Mixed Fuel Option 3	$267,321	$38,038
Mixed Fuel Option 4	$459,821	$27,071
All-Electric Option 1	$135,000	$40,383
All-Electric Option 2	$245,000	$40,601
All-Electric Option 3	$437,500	$28,431

Office HVAC System Options	Cost for Code Compliant Building	
	Upfront Cost of HVAC System	Total Annual Energy Bills
Mixed Fuel Option 1	$2,327,633	$104,604
Mixed Fuel Option 2	$1,786,323	$135,278
Mixed Fuel Option 3	$4,492,873	$95,077
All-Electric Option 1	$1,948,716	$131,993
All-Electric Option 2	$3,789,170	$90,551
All-Electric Option 3	$3,464,384	$94,324
All-Electric Option 4	$4,005,694	$103,660

Retail HVAC System Options	Cost for Code Compliant Building	
	Upfront Cost of HVAC System	Total Annual Energy Bills
Mixed Fuel Option 1	$570,500	$164,492
Mixed Fuel Option 2	$456,000	$182,683
Mixed Fuel Option 3	$630,500	$158,096
All-Electric Option 1	$660,000	$193,161
All-Electric Option 2	$708,000	$185,053
All-Electric Option 3	$3,167,500	$156,491

The following cost differentials were calculated based on the least expensive option for both the mixed-fuel and all-electric system in each building type. For a multifamily building type, the all-electric HVAC system was 14.2% less expensive than the mixed-fuel HVAC system. The office all-electric HVAC system was 9.1% more expensive than the mixed-fuel HVAC system. The retail building type, which included two modeled restaurants, was 44.7% more expensive for an all-electric HVAC system over a mixed-fuel system.

Code Exceptions

The exceptions to the non-fossil fuel space and water heating systems included in the ordinance were designed so that the majority of commercial heating and water heating applications would need to comply, while leaving flexibility for niche applications where heat pumps are not the right technical fit. Most of these exceptions are to allow electric resistance heating elements in very small applications, or to allow a limited amount of electric resistance as supplementary heat. Several of the exceptions are included to be cautious and prudent about safety, ventilation, and sanitation requirements, as state and federal code requirements may prevent all-electric space and water heating in certain instances.

The exceptions – other than the items discussed below – were developed through Washington State's extensive code adoption process, which instituted the country's first all-electric requirement for commercial space and water heating. Denver then further

refined these exceptions in its own extensive code adoption process involving a working group of commercial building energy experts and a vote through the whole committee.

The last exception under both space and water heating is based on policy direction from city council to not trigger electrification requirements for replacements of gas systems. The other policy item is exception #8 under space heating, which allows outdoor heating equipment. This would be used, for instance, in situations such as the city's ice rink or at restaurants with outdoor seating.

Regional Energy Code Adoption

Staff researched regional and state code adoption and found that 13 jurisdictions have adopted the 2021 International Energy Conservation code and 52 jurisdictions are considering adoption of the 2021 code. Of those 65 jurisdictions, 21 have either adopted or are considering strengthening requirements.

Energy Code Cohort

The City is continuing to coordinate with the regional code cohort. The code cohort has been exploring its options for a roadmap to net zero new construction by 2030, and similar to this code proposal, is considering an EUI Performance Target approach for commercial buildings in 2024, along with electrification requirements for space and water heating. In the future, the code cohort communities may consider seeking modeling assistance and other technical assistance to establish the EUI targets. Louisville could re-align with neighboring communities on common EUIs and requirements in the next code adoption cycle.

PUBLIC COMMENT:

Public Comments are included as Attachment No. 3. These comments include both those receive during the development of the Lotus/Group 14 report and any comments received following the September 27, 2022 Council presentation on the final report. Appendix B of the Lotus Group 14 report also includes a public input summary (starting on p. 49 of Attachment No. 2).

FISCAL IMPACT:

Staff does not anticipate a significant fiscal impact from the code option.

PROGRAM/SUB-PROGRAM IMPACT:

Consideration of a commercial energy code update relates to the Community Design, Development Review Sub-Program objective to promote public health, safety, comfort, convenience, prosperity and general welfare, and the Economic Prosperity objective to maintain positive business relationships and attract and retain a diverse mix of businesses that provide good employment opportunities for Louisville residents.

RECOMMENDATION:

Staff recommends approval of Ordinance 1845, Series 2022.

ATTACHMENT(S):

1. Ordinance No. 1845, Series 2022
2. Lotus/Group 14 Report
3. Public Comments
4. Staff Presentation

STRATEGIC PLAN IMPACT:

☐	**Financial Stewardship & Asset Management**	☒	**Reliable Core Services**
☒	**Vibrant Economic Climate**	☒	**Quality Programs & Amenities**
☒	**Engaged Community**	☐	**Healthy Workforce**
☐	**Supportive Technology**	☒	**Collaborative Regional Partner**

ORDINANCE NO. 1845
SERIES 2022

(Second reading amendments shown with deleted text in ~~**Bold Strikethrough**~~ and new text in **Bold Double Underline**.)

AN ORDINANCE AMENDING CHAPTER 15.18.030 OF THE LOUISVILLE MUNICIPAL CODE CONCERNING AMENDMENTS AND DELETIONS TO THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE TO INCLUDE REQUIREMENTS FOR COMMERCIAL ENERGY USE INTENSITY PERFORMANCE TARGETS AND RESTRICTIONS OF FOSSIL FUEL SPACE AND WATER HEATING EQUIPMENT

WHEREAS, the City Council has adopted from time to time certain building and construction standards; and

WHEREAS, it is deemed to be in the interest of the public health, safety and general welfare to adopt by reference thereto the 2021 edition of the International Energy Conservation Code; and

WHEREAS, the City of Louisville remains committed to its adopted goals to reduce energy consumption, increase clean energy sources, and support the transition to a low-carbon community as outlined in the Sustainability Action Plan and Resolution 25, Series 2019, "A Resolution Setting Clean Energy and Carbon Reduction Goals"; and

WHEREAS, reducing building energy consumption is an effective strategy to reduce community-wide energy consumption and increase long-term cost savings for businesses; and

WHEREAS, the City Council desires to add requirements for energy use intensity performance standards and building electrification to build a more resilient building stock and support future building electrification efforts pursued and businesses; and

WHEREAS, the City Council, after proper notice as required by law, has held a public hearing on this ordinance providing for the adoption of said codes; and

WHEREAS, the 2021 edition of the International Energy Conservation Code, with amendments, has been submitted to the City Council in writing and the City Council has determined that such codes should be adopted as herein set forth.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Chapter, 15.18.030 of the Louisville Municipal Code, concerning amendments and deletions to the 2021 International Energy Conservation Code, is hereby amended to read as follows, with new text in underline:

1. Section C202 GENERAL DEFINITIONS is amended to add the following definitions in alphabetical order:

   EMERGENCY POWER SYSTEM. A source of automatic electric power of a required capacity and duration to operate required life safety, fire alarm, detection, and ventilation systems in the event of a failure of the primary power. Emergency power systems are those required for electrical loads where interruption of the primary power could result in loss of human life or serious injuries.

   ENERGY USE INTENSITY (EUI). The annual building site energy use per square foot of gross floor area in units of kBTU/sq ft.

   STANDBY POWER SYSTEM. A source of automatic electric power of a required capacity and duration to operate required building, hazardous materials or ventilation systems in the event of a failure of the primary power. Standby power systems are those required for electrical loads where interruption of the primary power could create hazards or hamper rescue or fire-fighting operations.

2. Section C401.2 Application is deleted in its entirely and replaced as follows:

   C401.2. Commercial *buildings* and their building site shall comply with one of the following, as applicable:

   C401.2.1 Performance targets. New commercial *building* types included in the scope of Appendix PT shall comply with Appendix PT and Sections C403.2.4 and C404.10.

   C401.2.2 Core and shell. Core and shell buildings shall comply with the provisions of Section C402.1.3 through C402.5. When mechanical systems are installed, core and shell buildings shall also meet the provisions in **C403.2.4, C404.10, and** Section C408.

   C401.2.2.1 Core and shell buildings shall submit a letter of agreement to the City stating the tenant spaces included in the scope of Appendix PT shall meet the EUI target established in Table PT103, and shall include these requirements in their lease or purchase agreements.

   C401.2.3 Tenant finish. Tenant finishes included in the scope of Appendix PT shall comply with Appendix PT **and C403.2.4 and C404.10**. All other tenant finishes shall comply with the Prescriptive Compliance option, which requires compliance with Sections C401.3, C401.4, C402 through C406, and C408.

C401.2.4 Other commercial building types. Commercial *building* types not included above shall comply with the Prescriptive Compliance option, which requires compliance with Sections C401.3, C401.4, C402 through C406, and C408.

Exception: Additions, alterations, repairs, and changes of occupancy to existing buildings complying with Chapter 5.

3. Section C403.2 System design is modified as follows:

C403.2 System design. Mechanical systems shall be designed to comply with Sections C403.2.1 through ~~C403.2.3~~ C403.2.4. Where elements of a building's mechanical systems are addressed in Sections C403 through C403.14, such elements shall comply with the applicable provisions of those sections.

4. Section C403.2.4 Space heating equipment is added as follows:

C403.2.4 Space heating equipment. Fossil-fuel ~~**warm air furnaces**~~ **appliances** and electric resistance space heating equipment shall not be permitted for space heating.

Exceptions:

1. **Emergency backup.** Where it is required by an applicable law or regulation to provide space heating with an emergency power system or a standby power system.
2. ~~**Where cfm/sq. ft. ventilation requirements result in conditions where the Building Official determines that space heating requirements cannot reasonably be met without combustion space heating systems.**~~
2. ~~3.~~ **Certain make-up air systems.** Electric resistance in make-up air systems where energy recovery ventilation is prohibited by the International Mechanical Code.
3. ~~4.~~ **Supplementary heat.** Electric resistance heat used for supplementary heat in accordance with Section C403.4.1.1
4. ~~5.~~ **Electric resistance budget. In addition to any exceptions in this section, ~~Up~~ up** to 5 W of electric resistance space heating per square foot of *conditioned floor area* in the *building*, not including supplementary heat.
   Electric resistance heating elements integrated into heat pump equipment.
5. ~~6.~~ **Integrated units.** Electric resistance heating elements integrated into heat pump equipment.
6. ~~7.~~ **Heated plenums.** Electric resistance in heated plenums.
7. **Temporary systems. Temporary electric resistance heating systems are permitted where serving future tenant spaces that are unfinished and unoccupied, provided that the heating equipment is sized and controlled to**

achieve interior space temperatures no higher than needed to prevent freezing.

8. **Freeze protection.** ~~**Electric resistance for freeze protection elements.**~~ **Electric resistance in heating systems intended for freeze protection.**
9. **Outdoor systems.** Equipment used for outdoor heating.
10. **Specific conditions. Portions of buildings that require fossil fuel or electric resistance space heating for specific conditions approved by the Building Official for research, health care, process or other specific needs that cannot practicably be served by heat pump or other space heating systems. This does not constitute a blanket exception for any occupancy type.**
11. ~~**10.**~~ **Replacements.** Replacement fuel-fired ~~**furnace equipment**~~ **appliances**.

5. Section C404.10 Water heating equipment is added as follows:

C404.10 Water heating equipment. Fossil fuel and electric resistance instantaneous and storage water heaters shall not be used to provide hot water.

Exceptions:

1. **Emergency backup. Where it is required by an applicable law or regulation to provide water heating with an emergency power system or a standby power system.**
2. ~~**1.**~~ **Integrated units.** Resistance heating elements integrated into heat pump water heating equipment.
3. ~~**2.**~~ **Recirculation loops.** Electric resistance elements used for recirculation loop temperature maintenance.
4. ~~**3.**~~ **Small systems.** Electric storage water heaters with a rated water storage volume no greater than 20 gallons.
5. ~~**4.**~~ **Point-of-use systems.** Instantaneous electric water heaters located within 10 feet of the point of use.
6. ~~**5.**~~ **Renewable electricity.** Electric resistance equipment where not less than 100 percent of the annual service water-heating requirement is provided by an *on-site renewable energy system* not used to meet any other provision of this code.
7. ~~**6.**~~ **Renewable or waste thermal energy.** Electric resistance storage water heating equipment in *buildings* where not less than 75% of the annual service water heating requirement is met by a solar thermal system or other renewable thermal system.
8. ~~**7.**~~ **High-temperature requirements.** Water heating systems that serve end-uses or have a storage requirement that necessitates a water temperature of 141°F (55°C) or hotter.
9. **Electric resistance budget. In addition to any exceptions in this section, a budget of 24 kW plus 0.1 watts per square foot of building area of electric resistance service water heating capacity per building.**
10. **Commercial kitchens. Electric booster-heaters serving commercial dishwashers, commercial food service equipment, and other approved**

process equipment that require supply water temperatures of 120°F (49°C) or higher.

11. ~~**8.**~~ **Replacements.** Replacement of gas-fired storage water heaters or instantaneous water heaters.

APPENDIX PT
MODELING TO A PERFORMANCE TARGET

PT101 Scope. This section establishes criteria for demonstrating compliance with a performance target, and is required for new multifamily (occupancy R-2), offices greater than 5,000 ft^2, primary and secondary schools, parking garages, and warehouses. All end use load components within and associated with the building and their building sites shall be modeled.

PT102 Mandatory requirements. The requirements in this section are mandatory requirements and shall be required in addition to the provisions of ASHRAE 90.1 Appendix G.

PT103 Performance target. Projects of the types listed in Table PT103 shall demonstrate that the proposed design reaches a fixed energy use intensity (EUI) less than or equal to the values in Table PT103, calculated utilizing the energy modeling procedures of Appendix G of ASHRAE 90.1. For *buildings* with multiple occupancy types, the modeled performance target shall be a weighted average of the floor area of each occupancy type.

> **Exception:** Energy used for electric vehicle charging, data centers, and process loads shall be excluded from compliance modeling.

TABLE PT103
PERFORMANCE TARGETS

BUILDING TYPE	PERFORMANCE TARGET (kBTU/ft2)
Multifamily (Occupancy R-2)	32
Office, small (>5,000 ft2)	19
Office, medium (5,000 – 50,000 ft2)	23
Office, large (>50,000 ft2)	28
School, primary	34
School, secondary	31
Warehouse	11

PT104 Renewable Energy. On-site renewable energy generated by a system installed as part of this project that is used by the building shall be subtracted from the proposed design energy consumption prior to calculating the proposed building performance.

PT105 Performance documentation. Documentation to verify compliance with this section shall be provided to the code official.

PT105.1 Projected compliance report. Permit submittals shall include a report documenting the proposed design is projected to meet the EUI target. The compliance report shall include the following specific information beyond the information required in ASHRAE 90.1 Appendix G:

1. Address of the building.
2. An inspection checklist documenting the building component characteristics of the proposed design.
3. Name of individual completing the report.
4. Name and version of compliance software tool.
5. Documentation of the reduction in energy use associated with on-site energy.

PT105.2 Construction plan requirements. Construction plans shall depict all component characteristics of the proposed design utilized for the EUI in accordance with ASHRAE 90.1 Appendix G.

PT105.3 Measured performance report. Projects shall demonstrate compliance with this code by documenting that the building has achieved the EUI performance calculated based on 12 months of metered energy use after occupancy.

PT105.3.1 Demonstration of operating energy use. Metered energy data demonstrating compliance with the EUI target shall be reported to the building official using Energy Star Portfolio Manager and adjusted for the percentage of floor area occupied. While at least 75 percent occupied, the building shall operate at or below its assigned energy use target established in Section PT103 for any recording period of 12 consecutive months that is completed within three years of the date of the Certificate of Occupancy. The owner shall notify the building official when this 12-month period has been successfully completed.

PT106 Energy metering and monitoring. All projects must install submetering or monitoring capabilities to support building energy performance analysis. The project must include capabilities to store and access a 24-month continuous data set on an ongoing basis.

PT106.1 End-use monitoring. Measurement devices shall be installed in new *buildings* to monitor the electric energy use of each of the following separately:

1. Total electric energy.
2. HVAC systems energy use.
3. Interior lighting.
4. Exterior lighting.
5. Receptacle circuits.
6. Data centers representing over 10 percent of total building load or 5 percent of building floor area.
7. Other process loads that represent 10 percent or more of total building energy use based on building energy use modeling.

PT106.2 Independent metering. The following items shall be independently metered. Individual meters used to comply with this section may not serve multiple *buildings*.

1. All fuel sources serving the building.
2. Energy production from on-site renewable energy systems.
3. Electric vehicle (EV) supply equipment.
4. Data centers representing over 10 percent of total building load or 5 percent of building floor area.
5. Other process loads that represent 10 percent or more of total building energy use based on building energy use modeling.
6. Individual tenant energy loads.

6. Section R202 GENERAL DEFINITIONS is amended as follows:

RESIDENTIAL BUILDING. For this code, includes detached one- and two-family dwellings and townhouses, as well as Group R-2 other than for *multifamily*, R-3, and R-4 buildings three stories or less in height above grade plane with separate means of egress.

MULTIFAMILY. Apartments, condominiums, and other similar-type buildings regardless of the number of stories.

INTRODUCED, READ, PASSED ON FIRST READING, AND ORDERED PUBLISHED this _____ day of _____, 2022.

_____
Ashley Stolzmann, Mayor

ATTEST:

_____
Meredyth Muth, City Clerk

APPROVED AS TO FORM:

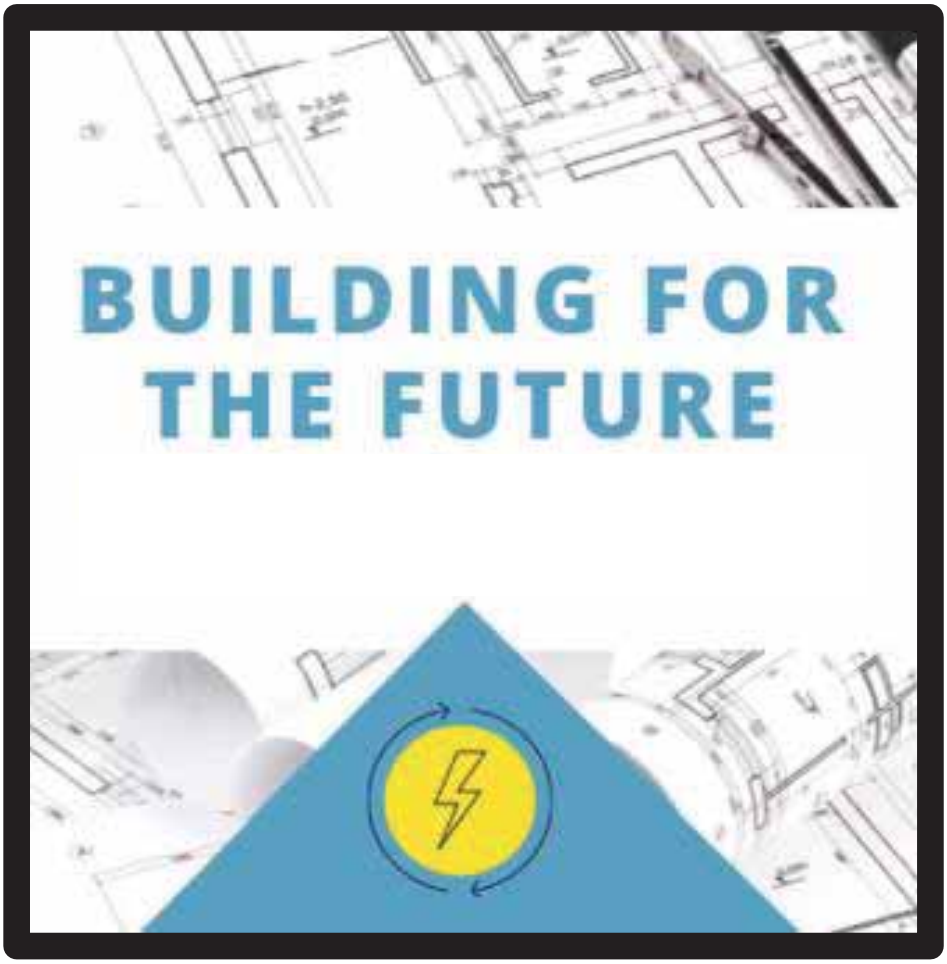
_____
Kelly PC, City Attorney

PASSED AND ADOPTED ON SECOND AND FINAL READING, this _____ day of _____, 2022.

_____
Ashley Stolzmann, Mayor

ATTEST:

_____
Meredyth Muth, City Clerk



Energy Code Update Recommandation Report

AUGUST 2022

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Appendix A: Louisville IECC Energy Modeling and Policy Report, Group14

Appendix B: City of Louisville Energy Code Update Public Engagement Report, Lotus

Appendix C: Regional Code Cohort Amendment Fact Sheets, SWEEP

Executive Summary

The City of Louisville (the City) contracted with Group14 Engineering, PBC (Group14) and Lotus Engineering and Sustainability, LLC (Lotus) to explore updates to the City's current commercial energy code that would help the City reach their energy efficiency and greenhouse gas reduction goals. The City and consultant team examined commercial energy code policy options including higher efficiency requirements, all electric requirements, and net zero requirements. The scope of work included:

- Energy modeling of current code compliant heating, ventilation, and air conditioning systems in commercial and industrial building types to evaluate upfront cost, operational cost, and greenhouse gas (GHG) emissions. The energy modeling also included an analysis on the total solar PV required to make code compliant buildings (both mixed-fuel and all-electric) net zero. Finally, energy modeling was conducted to analyze the upfront cost, operational cost, and GHG emissions savings of buildings built to a higher efficiency performance standard.
- Research on existing commercial energy code policies from around the country.
- A public engagement process that solicited feedback on commercial code policy options via two City board meetings, two open-house style community meetings, and an online public engagement survey.

Three main policy options resulted from the project process:

- **Regional Code Cohort Alignment:** Aligning with a regional cohort of communities in and around Boulder County striving for consistent building code updates. Communities are adopting the 2021 International Energy Conservation Code (IECC) as the base code along with several supporting amendments to promote electrification and efficiency. Even though Louisville has already adopted the 2021 IECC, some of the anticipated cohort amendments would strengthen the Louisville code.
- **Policy Option 1:** Setting a minimum energy performance standard (through Energy Use Intensity (EUI) modeling at time of building permit) for commercial buildings. The energy performance standard would vary based on building type. A building owner could utilize onsite renewable energy to help reach the energy performance standard. This policy could include incentives for all building electrification.

- **Policy Option 2A & 2b:** Requiring net zero new commercial construction by adoption of Appendix CC of the 2021 IECC [2A]. The appendix does not require increased building efficiency above the 2021 IECC base code but does require renewable energy offsets to achieve net zero. Amendments to the appendix related to purchase of off-site renewable offsets would be needed to make implementation feasible. The City could also opt to add an all-electric new construction requirement to Appendix CC [2B].

Based on information and insight gleaned from the energy modeling and community input, the project team recommends the City adopt Policy Option 1, to set energy performance goals for commercial and industrial new construction. This option strikes a balance between Louisville's sustainability goals, economic considerations, and community needs.

1. Introduction

Climate change is impacting Colorado and the City of Louisville (the City / Louisville) today. This is evidenced by extreme weather events such as the Marshall Fire, an unusual and out-of-season wildfire exacerbated by a warming climate, long term drought, and statewide average temperature increases.

A press release published in April of 2022 by the Intergovernmental Panel on Climate Change begins with a sentence written in bold text: **"The evidence is clear: the time for action is now. We can halve emissions by 2030."**[i] It is short and demanding, yet hopeful. The press release emphasizes the weight held by choices made in this decade and the power held by decision makers to "secure a livable future" for their communities.

1.1 The City of Louisville's Sustainability Goals

The City of Louisville has recognized the need for climate action, and has made a strong commitment to public health and safety by way of the City's clean energy and carbon emissions reduction goals which are outlined in Resolution 25, Series 2019,[ii]:

1. Meet all of Louisville's municipal electric needs with 100% carbon-free sources by 2025.
2. Reduce core municipal GHG emissions[iii] annually below the 2016 baseline through 2025.
3. Generate 75% of Louisville's residential and commercial/industrial electric needs from carbon-free sources by 2030.
4. Reduce core community GHG emissions[iv] annually below the 2016 baseline through 2030.

As reported in Louisville's Sustainability Action Plan, electricity and natural gas are the City's largest sources of emissions.[v] Therefore, a crucial path forward for achieving these goals involves transforming energy use in the City's residential and commercial building stock. Reducing the energy consumption of buildings and transitioning away from fossil-fuel combustion equipment are effective strategies to decrease emissions and support meeting electricity needs with carbon-free sources. This report focuses on code options for new buildings, but future efforts should address existing build stock to help meet carbon emission reduction goals.

1.2 Current Commercial and Residential Code Standards for New Construction

The lifetime of buildings constructed today ranges from 30 to 130 years.[vi] If not built to a more stringent energy code, new construction can contribute to carbon pollution from less efficient buildings for generations, creating increasingly difficult conditions for climate change

mitigation. Model building codes for new construction present an opportunity for innovation, employing the built environment as a climate action tool, rather than an obstacle, that can support City goals. Building energy codes are an effective policy mechanism local government can utilize to decarbonize new construction, future-proof their building stock, and accelerate clean energy use.

The City of Louisville has already shown a commitment to climate action by adopting the 2021 International Energy Conservation Code (IECC) with amendments outlined in Table 1.

Commercial Buildings	Residential Buildings*
• Increased insulation levels.	• Increased insulation levels.
• Increased doors and windows efficiency requirements.	• Increased ductwork and piping insulation requirements.
• Increased HVAC efficiency.	• Mandatory heat recovery.
• Electric vehicle charging and infrastructure.**	• Electric vehicle charging and infrastructure.**
• Electric-ready wherever gas appliances are installed.	• Electric-ready wherever gas appliances are installed.
• Solar-ready zone required (Appendix CB).	• Solar-ready provisions required (Appendix RB).
	• Net zero Appendix RC required.

*Marshall Fire rebuilds are exempt.

**Amendment to Municipal Code Chapter 17.20, Off-street Parking and Loading

Table 1: Overview of City of Louisville's current adopted code amendments.

2. Building for The Future: Energy Code Update

2.1 Project Overview

The current adopted code and accompanying amendments encourage energy efficiency and the implementation of future-proofing strategies into new construction. However, these efforts alone will not be enough to fully achieve the City's energy and emissions reduction goals.

In their 2022 Work Plan,[vii] Louisville City Council outlined Phase 2 of the 'Building for the Future' project, directing City Staff to "consider additional measures to code adopted in 2021, which could include the IECC Net Zero Commercial Appendix, other net zero goals and strategic implementation and all-electric construction requirements" specifically for new construction of single-family homes, multifamily buildings, and commercial buildings.

The City contracted with Group14 Engineering, PBC (Group14) and Lotus Engineering and Sustainability, LLC (Lotus) to identify policy options that would encourage higher efficiency, net zero development, and/or all electric development. The scope of work consisted of energy modeling of different building code scenarios, development of policy options based on research and the modeling results, and public engagement on the policy options developed.

A common framework used to create more effective sustainability strategies is consideration of the three pillars of sustainability: economy, environment, and equity. Creating a more sustainable Louisville requires consideration of the whole community, not just environmental impacts of the action being done. Recognizing this, the project team used the three pillars as guiding principles throughout this work.

2.1.1 Energy Modeling

For the first iteration of modeling, Group14 modeled four building types—multifamily, office, retail, and single-family home—with different heating, ventilation, and air conditioning (HVAC) designs that meet current Louisville energy codes. Each building type model consisted of mixed-fuel options that utilize natural gas and electricity, and all-electric options. All other variables such as insulation and lighting were modeled to meet the current code adopted by Louisville and remained constant for each system within each building type. The modeling examined upfront costs and annual costs of each HVAC system per building type, the amount of photovoltaics (PV) required for a building to be net zero with each HVAC system per building type, PV payback periods, and greenhouse gas (GHG) emissions at base code.

Additional modeling was conducted later in the project to investigate the upfront cost, operational cost, and GHG emissions from buildings complying with the finalized policy options.

2.1.2 Policy Research

Group14 examined existing frameworks for all-electric and net zero energy codes from the City of Boulder, several jurisdictions in California, City of Boston, and New York City. This policy landscape review aimed to complement the energy modeling conducted, and the consulting team utilized both resources to best inform the commercial energy code policies recommended to the City of Louisville. For more detail on the on the policy research and initial energy modeling results, see Group14's report in Appendix A.

2.3 Community Outreach

Public input is crucial to building community trust and ensuring feasibility when developing policies. Recognizing this, the consultant teams and City staff presented the project and energy code considerations to the public through multiple engagement opportunities:

1. Two open-house style community meetings.
2. An online survey that was open from June 27, 2022 to August 5, 2022.
3. Presentations to the Louisville Sustainability Advisory Board and the Building Code Board of Appeals.

Feedback from each engagement method was collected, data was cleaned and analyzed, and engagement results were incorporated into the final policy recommendation. For a full description of community outreach conducted and a summary of results, see Appendix B.

3. Project Results and Discussion

3.1 Refining the Project Scope

As the 'Building for the Future' project progressed, the consultant team and City Staff continuously refined the energy modeling and the policy options, carefully considering efficacy and relevance to City Council intent. One result of this iterative process was shifting the focus of the analysis away from single-family home policy, due to the City having already adopted Appendix RC of the 2021 IECC. Consequently, the subsequent sections address policy options for commercial and industrial building types only.

Based on public feedback, improved analyses, and internal conversations, the project team finalized three policy options for the City Council's review, each of which are discussed below.

3.2 Final Policy Options

Note: *All policy options presented are in addition to the current Louisville energy code which includes the following provisions: 2021 IECC base code; Louisville-specific energy efficiency amendments; electric vehicle (EV) ready requirements; the solar-ready Appendix for residential and commercial; and electric-ready requirements for residential and commercial new construction.*

3.2.1 Alignment with Regional Cohort

Policy Description

The City of Louisville could align with an existing regional cohort consisting of communities in and around Boulder County, working in a coordinated effort to adopt a regionally consistent building code (see Box 2). Louisville is a participant in the code cohort, but City Council direction led to an independent pursuit of community-specific options. Based on the City's current code, the primary changes Louisville would need to make are updating the City's current electric preferred standard to align with the cohort, updating the solar-ready appendix language to cover all buildings under the solar-ready requirements, and including additional code language to require cool roofs and high-efficiency horticulture lighting. Group14 did not conduct energy, cost, or greenhouse gas modeling for this code option, but the project team decided to include it due to expressed public interest in regional alignment. Additional detail on the amendments being considered by the Code Cohort are included in Appendix C.

Colorado Department of Local Affairs Code Cohort

Phase 1: Regional adoption of the 2021 IECC and supporting amendments including solar-ready requirements, EV-ready requirements, electric-preferred requirements, and additional efficiency requirements such as cool roofs and horticulture lighting. These amendments are applicable to residential and commercial buildings.

Phase 2: Beginning in August 2022, communities will work together to develop a roadmap to net zero new construction code for the region by 2030.

Participating communities include:

- City of Louisville
- Town of Superior
- Boulder County
- Town of Erie
- City of Lafayette
- City of Northglenn
- City and County of Broomfield
- City of Longmont

The City of Boulder, City of Westminster, and Town of Berthoud did not participate in Phase 1 but will participate in Phase 2.

Box 1: Code cohort overview.

DISCUSSION

Alignment with the regional code cohort's current IECC 2021 supporting amendments, and the future roadmap to net zero new construction would begin a code update process that increases stringency over time, allowing Council to take a stepped approach toward net zero code adoption by 2030. This approach would align Louisville with its neighboring communities and would provide Louisville an opportunity to co-develop a regional plan to get to net zero new construction. It's important to note that while a regional roadmap will be developed with the goal of consistency across the region, compliance, enforcement, and timelines for net zero code adoption may look unique to each community within the Cohort. Alignment with the Phase 1 code recommendations for the Cohort would increase efficiency requirements for mixed-fuel buildings but not all-electric buildings and does not require all-electric or net zero. This option represents the smallest step forward for above code policy options the City could consider and adopt.

3.2.2 POLICY OPTION 1: ENERGY PERFORMANCE STANDARDS FOR BUILDING TYPES

POLICY DESCRIPTION

New construction projects would be required to meet an energy performance standard that would be dictated by building type. The standards would be set using a metric called energy use intensity (EUI), which models the total energy consumption of a building for one year divided by the total square footage of the building. On-site PV could contribute to a building meeting the EUI target. Builders following a performance pathway for code compliance would need to meet their respective EUI targets and provide a modeling report as part of the building permit submittal.

If the builder were to pursue a prescriptive-based code compliance pathway, additional efficiency measures such as increased insulation levels and reduced lighting power densities would be required to deliver an equivalent level of efficiency as the energy performance standard.

PREDICTED ENERGY PERFORMANCE GOALS

The City of Boulder's building code[viii] and the New Buildings Institute (NBI)[ix] each have example energy performance standards, using site EUI as a metric, for various building types that the City of Louisville could look to (See Table 2). The City of Boulder standards were developed in 2018 off the previous code cycle. The City of Boulder is lowering these EUI targets ever few years to eventually achieve net zero. NBI's Zero Energy Performance Standards are based on the energy performance of best-in-class buildings for each building type. The NBI standards for Zero Energy Performance were developed with an 'efficiency only' lens, and do not consider the cost effectiveness of achieving the efficiency levels for all building types.

Building Type	City of Boulder Performance Standard (kBtu / sqft.)	NBI Zero Energy Performance Standard (kBtu / sqft.)
Medium office (5,000 – 50,000 sf)	23	21
Mid-rise apartment (Type R2)	32	23
Primary school	34	25
Small office (<5,000 sf)	19	17
Secondary school	31	29
Warehouse	11	9
Retail	NA	34

Table 2: Example energy performance goals for specific building types.

Group14 modeled predicted site EUI, upfront costs, and annual energy costs for each building type to achieve the NBI EUI targets (see Table 3) under this policy option. The Group14 model investigated the most cost-effective means of achieving the NBI standards using both efficiency and onsite PV to reach each standard. Note, this differs from the NBI methodology, which only incorporated energy efficiency measures to meet each target.

Building Type	HVAC Fuel Type	EUI targets modeled	Estimated Upfront Cost of HVAC without PV	EUI earned without PV	PV size required to reach EUI Target (kW)	Estimated Upfront Costs with PV	Annual Energy Cost Savings after PV
Multifamily	Mixed-Fuel	23	$206,661	36	111kW	$484,161	$12,432
	All-Electric		$182,500	23	4kW	$192,500	$448
Office	Mixed-Fuel	21	$4,180,608	29	185kW	$4,643,108	$20,720
	All-Electric		$4,353,828	29	177kW	$4,796,328	$19,824
Retail	Mixed-Fuel	34	$1,123,500	103	310kW	$1,898,500	$34,720
	All-Electric		$1,232,200	63	223kW	$1,789,700	$24,976

Table 3: EUI target modeling and associated costs for buildings compliant with Policy Option 1: Energy performance standards.

GREENHOUSE GAS EMISSIONS

To assess how this option might contribute to Louisville's emissions reduction goals, Group14 also modeled GHG emissions resulting from a building achieving its energy performance standard, based on the building type. Energy performance standards help to drive up energy efficiency and drive down building emissions, as illustrated in Figures 1 and 2. In each building type, for mixed fuel and all-electric systems, a building that has achieved its energy performance standard creates less GHG emissions than the same building compliant with current code.

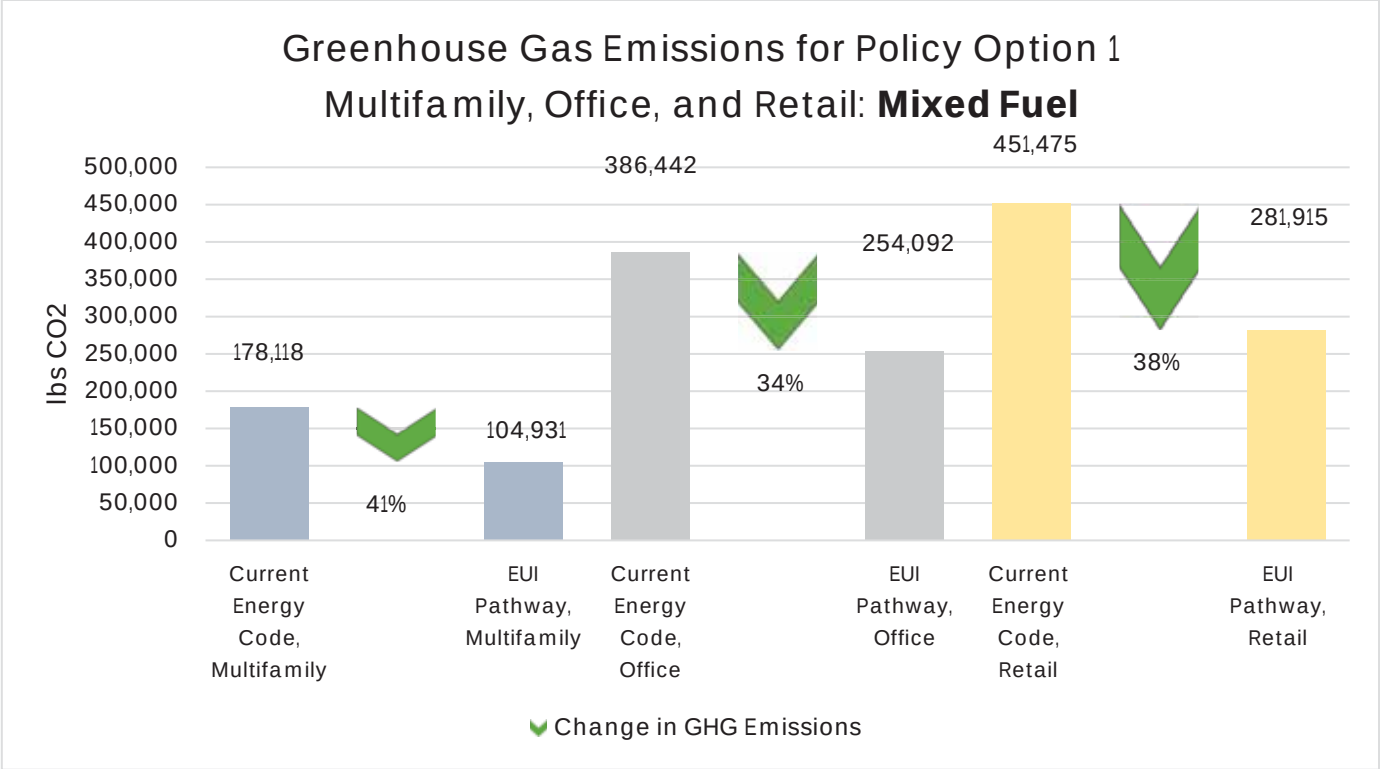


*Figure 1: Annual GHG emissions for **mixed fuel** buildings compliant with current code, compared to GHG emissions for buildings compliant with Policy Option 1: Energy performance standards for building types.*

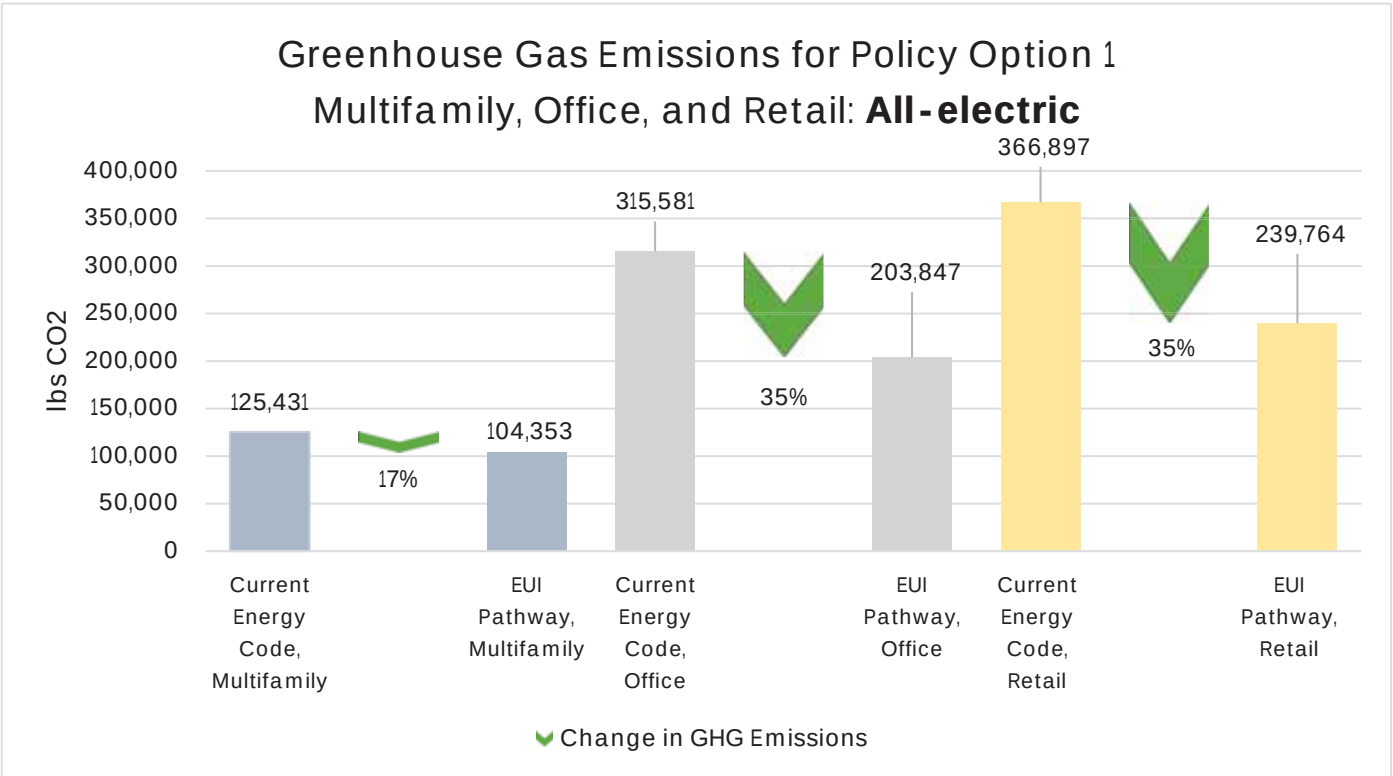


*Figure 2: Annual GHG emissions for **all-electric** buildings compliant with current code, compared to GHG emissions for buildings compliant with Policy Option 1: Energy performance standards for building types.*

DISCUSSION

Policy Option 1 is the most flexible of the code options. Buildings must reach an energy performance standard specific to that property type, but a building owner has options for how they chose to reach their energy performance standard. Onsite renewable energy can also contribute to the building's predicted EUI, adding another option in addition to efficiency to reach the target. This code results in more energy efficient, lower emitting buildings than the code package from the regional cohort and Appendix CC of the 2021 IECC.

All-electric buildings can reach much lower predicted EUIs because electricity has a lower energy density[x] than natural gas. Therefore, lower energy performance goals will naturally lead builders to all-electric options, which will result in lower GHG emissions over time as the electric grid becomes cleaner. This policy option allows the City to limit exemptions from the building code because energy performance standards can be applied to all building types, including those with high energy needs, such as a hospital. Finally, this option does not mandate building owners to invest in on or offsite PV to comply with code but provides building owners the option to use onsite PV to their own financial benefit if they so choose.

The NBI Standards modeled for this project are higher than both the City of Denver and the City of Boulder's standards for building types, making them more aggressive than local large cities surrounding Louisville. If the City chooses to pursue this policy option, additional analysis will be required to determine which targets are the most appropriate for the City of Louisville to adopt. Alignment with the City of Boulder's soon to be updated standards, could be advantageous to Louisville and would promote regional consistency.

Policy option 1 is the consultant and staff recommendation for the City's energy code. See Section 4 for further discussion.

3.2.3 POLICY OPTION 2A AND 2B: APPENDIX CC AND/OR ALL-ELECTRIC REQUIREMENT

POLICY DESCRIPTION

Policy Option 2A mandates compliance with Appendix CC of the 2021 IECC, zero energy commercial building provisions. Policy Option 2B builds upon 2A, adding a requirement that HVAC and plumbing systems must be all-electric. Appendix CC does not require commercial buildings to meet a higher level of efficiency above the base requirements in the IECC 2021. It does, however, require that commercial buildings must, in theory, offset 100% of the energy consumed onsite over a 15-year period using renewable energy. Note, it is likely that every commercial building will require both on and offsite renewable energy to reach the 100% offset requirement of Appendix CC. Procurement of offsite renewable energy to meet the 100% offset requirement is more complicated in practice. Appendix CC penalizes buildings

for procuring offsite renewables as opposed to generating 100% of their energy offset onsite, requiring buildings to procure more offsite renewables than a direct offset would require. These complications are discussed in more detail in the Offsite Procurement Discussion section below.

MODELED COST AND RENEWABLE ENERGY REQUIREMENTS

As noted previously, Group14 examined upfront cost and the annual energy bill costs for HVAC systems in each modeled building type (Office, Retail, Multifamily) that are compliant with current code. Further analysis for this policy option provided the amount of PV a building would be required to invest in, to achieve net zero and earn compliance with Appendix CC, as well as related cost data. It is important to note that in all cases, for commercial buildings that meet 2021 base code efficiency, covering the available roof area with PV did not result in a net zero building. Therefore, it is anticipated that all commercial buildings will need to invest in offsite PV to fulfill the requirements of Appendix CC. The cost of offsite PV procured via 15-year contracts for green retail tariffs and Renewable Energy Certificates (RECs) was also modeled. Results are outlined in Tables 4, 5, and 6. Though results vary by HVAC system, on average, all-electric systems with PV had a quicker payback period due to needing less renewable energy to offset their building energy use than natural gas systems.

Multifamily HVAC System Options	Cost for Code Compliant Building		Costs for Onsite PV					Net Zero Offsite PV – REC Pricing		
	Upfront Cost of HVAC System	Total Annual Energy Bills	PV (kW) required for Net Zero	PV that can fit onsite (kW)	Cost of Onsite PV	Annual Energy Bill with Onsite PV	Total Annual Energy Cost Savings with PV	kW Remaining to Offset	Green Tariff Cost (15 years, purchased in kWhs)[xi]	Unbundled RECs Cost (15 years, purchased in MWhs)[xii]
Mixed Fuel Option 1	$157,321	$40,785	338 kW	98 kW	$245,000	$28,809	$10,976	240 kW	$137,303	$70,482
Mixed Fuel Option 2	$278,321	$25,230	365 kW			$14,254		267 kW	$152,838	$78,457
Mixed Fuel Option 3	$267,321	$38,038	303 kW			$27,062		205 kW	$117,259	$60,193
Mixed Fuel Option 4	$459,821	$27,071	357 kW			$16,095		259 kW	$148,328	$76,142
All-Electric Option 1	$135,000	$40,383	236 kW			$29,407		138 kW	$79,174	$40,643
All-Electric Option 2	$245,000	$40,601	232 kW			$29,625		134 kW	$76,493	$39,266
All-Electric Option 3	$437,500	$28,431	201 kW			$17,455		103 kW	$59,226	$30,402

Table 4: Data detailing costs and PV amounts for a multifamily building under Policy Option 2A and 2B.

Office HVAC System Options	Cost for Code Compliant Building		Net Zero Requirements and Costs for Onsite PV					Net Zero Offsite PV – REC Pricing		
	Upfront Cost of HVAC System	Total Annual Energy Bills	PV (kW) required for Net Zero	PV that can fit onsite (kW)	Cost of Onsite PV	Annual Energy Bill with Onsite PV	Total Annual Energy Cost Savings with PV	kW Remaining to Offset	Green Tariff Cost (15 years, purchased in kWhs)[xi]	Unbundled RECs Cost (15 years, purchased in MWhs)[xii]
Mixed Fuel Option 1	$2,327,633	$104,604	722 kW	250 kW	$625,000	$76,604	$28,000	472 kW	$285,152	$146,378
Mixed Fuel Option 2	$1,786,323	$135,278	777 kW			$107,278		527 kW	$317,602	$163,036
Mixed Fuel Option 3	$4,492,873	$95,077	772 kW			$67,077		522 kW	$315,006	$161,703
All-Electric Option 1	$1,948,716	$131,993	755 kW			$103,393		505 kW	$304,622	$156,373
All-Electric Option 2	$3,789,170	$90,551	544 kW			$62,551		294 kW	$179,548	$92,168
All-Electric Option 3	$3,464,384	$94,324	567 kW			$66,324		317 kW	$192,996	$99,071
All-Electric Option 4	$4,005,694	$103,660	578 kW			$75,660		328 kW	$199,485	$102,403

Table 5: Data detailing costs and PV amounts for an office building under Policy Option 2A and 2B.

Retail	Cost for Code Compliant Building		Net Zero Requirements and Costs for Onsite PV					Net Zero Offsite PV – REC Pricing		
HVAC System Options	Upfront Cost of HVAC System	Total Annual Energy Bills	PV (kW) required for Net Zero	PV that can fit onsite (kW)	Cost of Onsite PV	Total Annual Energy Bill with Onsite PV	Total Annual Energy Cost Savings with PV	kW Remaining to Offset	Green Tariff Cost (15 years, purchased in kWhs)[xi]	Unbundled RECs Cost (15 years, purchased in MWhs)[xii]
Mixed Fuel Option 1	$570,500	$164,492	1741 kW	600 kW	$1,500,000	$97,292	$67,200	1,141 kW	$689,194	$353,786
Mixed Fuel Option 2	$456,000	$182,683	1564 kW			$115,483		964 kW	$584,178	$299,878
Mixed Fuel Option 3	$630,500	$158,096	1566 kW			$90,896		966 kW	$585,261	$300,434
All-Electric Option 1	$660,000	$193,161	1449 kW			$125,961		849 kW	$515,973	$264,866
All-Electric Option 2	$708,000	$185,053	1369 kW			$117,853		769 kW	$468,337	$240,413
All-Electric Option 3	$3,167,500	$156,491	1157 kW			$89,291		557 kW	$342,752	$175,946

Table 6: Data detailing costs and PV amounts for a retail building under Policy Option 2A and 2B.

OFFSITE PROCUREMENT DISCUSSION

To achieve the net zero requirement for both Policy Options 2A and 2B, a typical commercial or industrial building would not be able to fit the necessary PV on the building's available roof space and must supplement by procuring offsite renewable energy. Appendix CC does not require a building to pursue onsite renewable energy before they purchase offsite offsets. To ensure building maximize onsite renewable energy, the City could consider amending Appendix CC to require building to max out their onsite PV potential before pursuing offsite offsets.

Options for offsite procurement include community solar gardens, REC purchases, green retail tariffs, and virtual power purchase agreements (VPPAs). In Appendix CC, offsite renewable energy procurement is penalized based on the type of offsite a building pursues. For any remaining energy that must be offset offsite, a procurement factor must be applied which will increase the offsite renewables a building must procure. The procurement factor is a penalty for opting for offsite purchasing instead of onsite renewable energy generation and is required per the energy offset calculations in Appendix CC.

Appendix CC lists specific offsite offset requirements which mandate that renewable energy must be generated within the utility service territory and the contract must be 15 years in length, among others. As a result, there is a feasibility challenge with this policy option including insufficient onsite roof space to completely offset energy use, limited availability of local offsite renewable resources like community solar gardens, and constraints on open-market REC procurements that meet the requirements of Appendix CC.

Green retail tariffs, which are RECs purchased directly from the electric utility, pose a challenge for Appendix CC compliance. Green retail tariffs cannot be procured on a 15-year contract basis, and they only cover building electricity consumption, not overall building energy consumption.

Community solar gardens are local and can be procured on a 15-year contract basis, however, according to discussions with Xcel Energy, there is limited availability and high demand for these gardens, making it unlikely that a building owner would be able to procure the necessary offsite PV to comply with code.

RECs tend to be low cost and an easy procurement method, making them a popular option for offsetting energy use. However, they likely do not represent local renewable energy generation and there is no 15-year contract option available, thus violating the Appendix CC requirements.

Virtual PPAs can have 15-year contracts, however, like RECs, the renewable energy generation might not be local, making this option potentially invalid according to Appendix CC.

For Policy Options 2A and 2B to be feasible, City staff would need to amend the Appendix CC language to accommodate for the challenges in offsite procurement and to require onsite PV be required ahead of offsite procurement.

Offsite Renewable Energy Procurement

Unbundled Renewable Energy Certificate (REC): a market-based instrument that represents the property rights to the environmental, social, and other non-power attributes of renewable energy generation. A REC is one megawatt-hour of electricity generated and delivered to the grid.

Community solar: an offsite solar installation that a customer can contribute funds to and receive the benefits of via bill credit.

Green retail tariff: a program offered by utilities in which a customer can buy renewable energy credits at an additional charge to cover monthly electric use.

Virtual Power Purchase Agreement (PPA): a method for large commercial entities to purchase offsite renewable energy at a fixed rate for a fixed amount of time.

GREENHOUSE GAS EMISSIONS

The GHG impact of Policy Options 2A and 2B must be viewed through two lenses: GHG reductions from onsite renewable energy and GHG reductions from offsite renewable energy.

If a building utilizes onsite PV to achieve the net zero requirement, that onsite renewable energy generation will create a direct reduction of GHG emissions. This is the same emissions reduction mechanism that occurs from PV installed to comply with the requirements of Policy Option 1.

GHG emission reductions from offsite renewable energy vary due to several factors such as procurement method and location of the renewable energy that was purchased. In addition, Appendix CC penalizes buildings for purchasing offsite energy in the form of RECs, via the procurement factor. For example, purchasing enough RECs in theory could offset all emissions created by the building. However, when a property owner purchases a REC, they are buying the right to a unit of energy from a solar garden or a wind farm that already exists, and would have existed if the building owner did not purchase the REC. Thus, the building owner's purchase is not generating any new renewable energy resources that would offset the emissions produced by the building. This would not be the case for a local community solar garden since the purchase would contribute to the development of new renewable energy resources.

Furthermore, the emissions intensity of the grid (how clean or dirty the power source for the grid is) where the renewable energy is being purchased from impacts GHG reduction. If the grid the building is drawing power from is cleaner than the grid the building owner is buying RECs from, the REC purchase has a larger GHG reduction impact but if the situation were reversed, the REC purchase has a smaller GHG reduction impact.

GHG emission reductions from Policy Options 2A and 2B are outlined below (Figures 3, 4 and 5). Net zero emissions represent a scenario in which the building has installed the maximum amount of PV they can fit on their available roof space. Figure 6 shows the emissions savings resulting from the remaining energy use being offset by RECs, with a procurement factor applied. Code compliant HVAC systems, both mixed fuel and all-electric, were modeled for each building type. Policy Options 2A and 2B have much larger GHG emissions reductions than Policy Option 1, as expected due to the nature of a net zero and/or all-electric building.

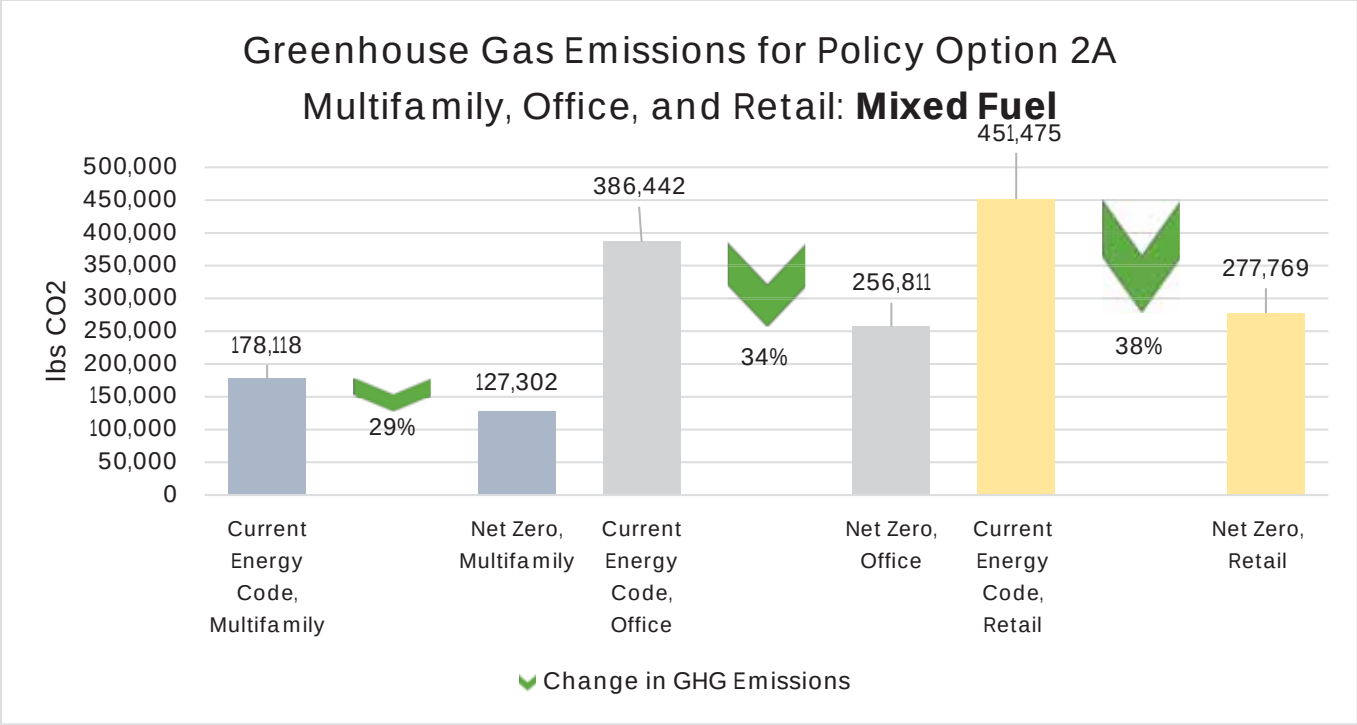


*Figure 3: Annual GHG emissions for **mixed fuel** buildings compliant with current code, compared to GHG emissions for **mixed fuel** buildings compliant with Policy Option 2A: Appendix CC, Net Zero.*

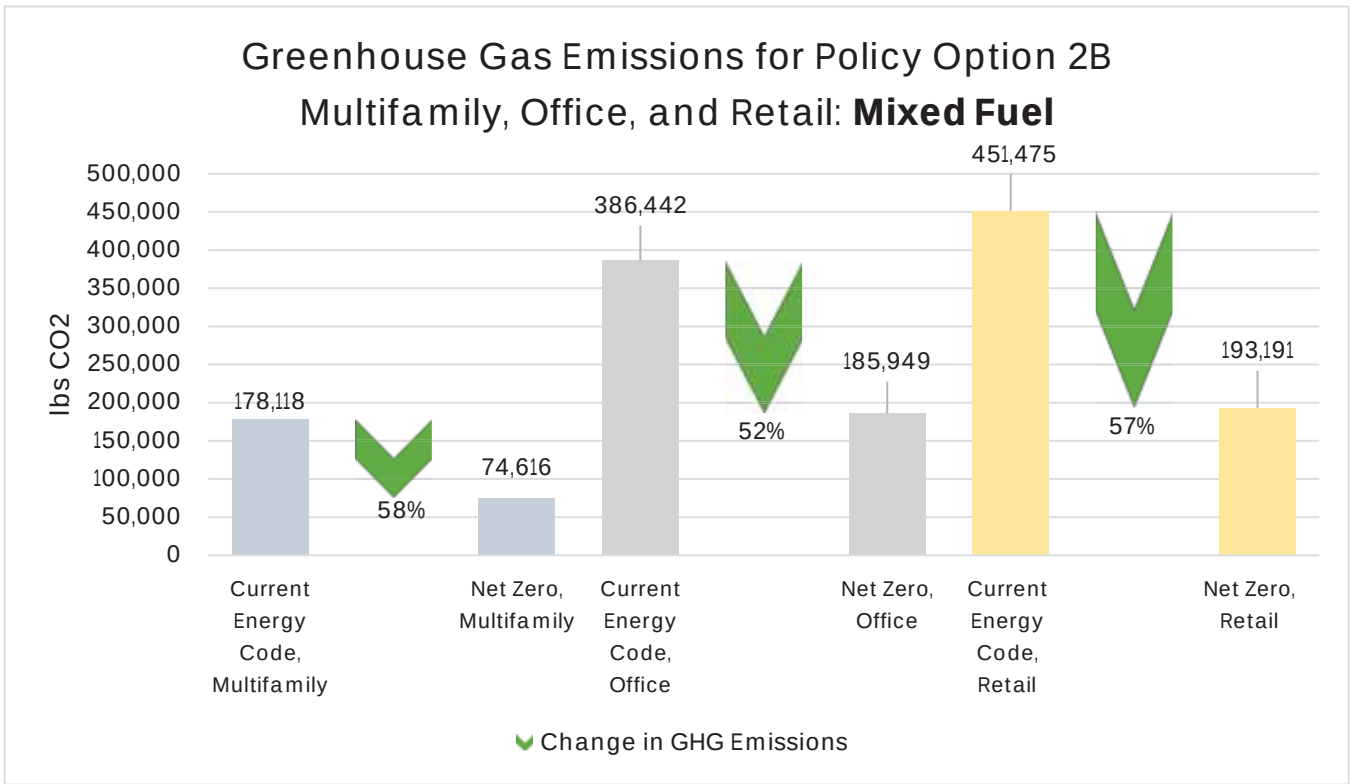


*Figure 4: Annual GHG emissions for **mixed fuel** buildings compliant with current code, compared to GHG emissions for **all-electric** buildings compliant with Policy Option 2B: Appendix CC, Net Zero + all-electric.*

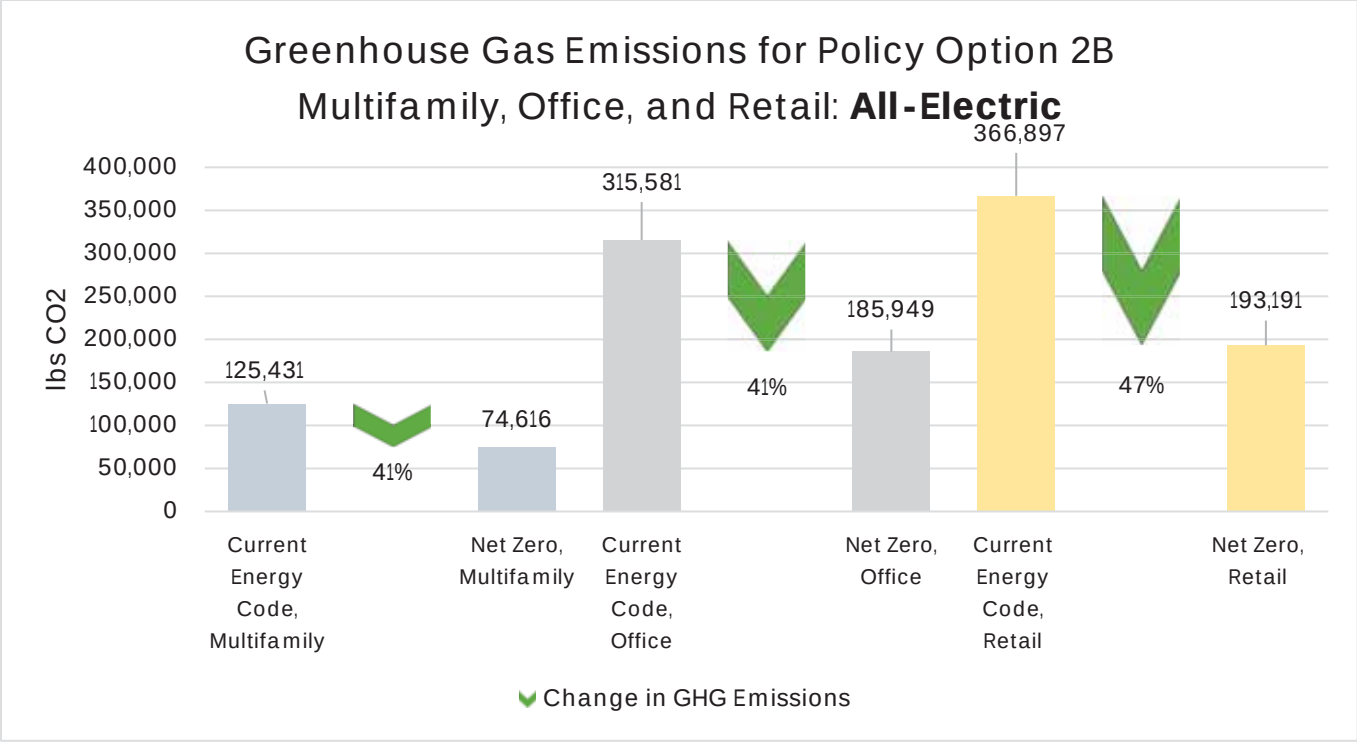


*Figure 4: GHG emissions for **all-electric** buildings compliant with current code, compared to GHG emissions for **all-electric** buildings compliant with Policy Option 2B: Appendix CC, Net Zero + all-electric.*

The GHG emissions modeling for unbundled REC purchasing used the nationwide average electricity emissions intensity, 0.85 lbs/kWh, as reported by the Energy Information Administration. The GHG calculations also included a mandatory application of a procurement factor which requires buildings who offset with RECs to purchase five times the total RECs required for a full offset.

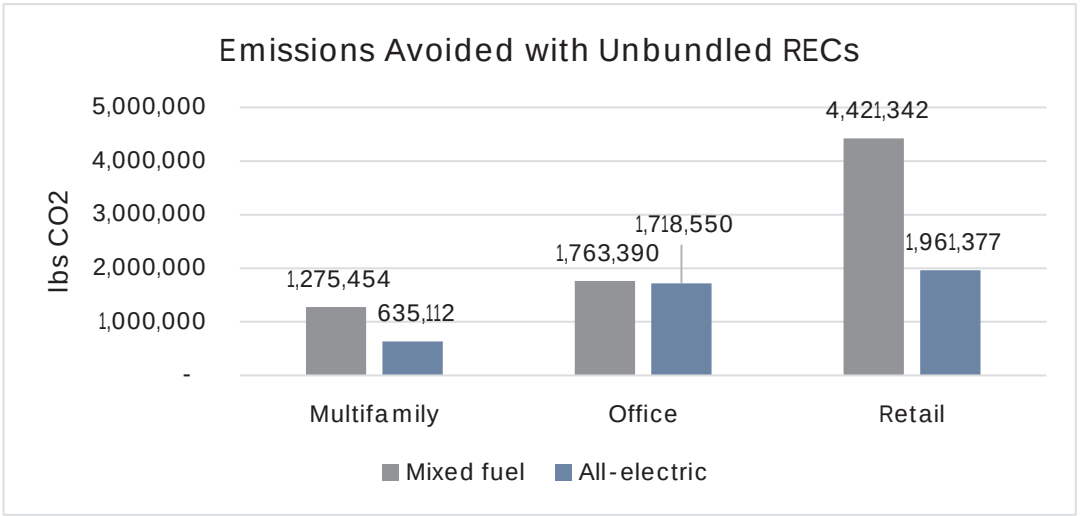


Figure 5: Emissions avoided with unbundled RECs purchased to offset any energy consumption remaining after installing the maximum amount of onsite PV.

DISCUSSION

Policy Options 2A and 2B are most aggressive options in reducing GHG emissions through onsite PV, but do not increase the energy efficiency of the building over base code. Policy Options 2A and 2B require net zero with onsite and offsite PV, and 2B is the only option that also mandates all-electric, disallowing fuel choice. Exemptions for both Policy Options 2A and 2B could be considered for certain building types that contain processes that cannot be net zero or all-electric due to unfeasible cost or lack of technology. These process load exemptions may impact buildings such as laboratories, manufacturing facilities, industrial processing, restaurants, and/or hospitals. If exempted, these process loads, under Policy Options 2A and 2B would be exempt from the net zero or all-electric requirement.

These policy options do come with complications, including the need to amend Appendix CC for offsite procurement and the variability of the potential GHG impacts. Additionally, post hoc modeling revealed that the payback period for PV installation is no less than 22 years for any HVAC system in any of the building types modeled. The upfront investment building owners would need to make in onsite PV will payback overtime, but it's important to note that investments in offsite PV will always be an additional cost and will never represent revenue or financial benefit.

3.3 OVERALL PUBLIC FEEDBACK SUMMARY

The public engagement process was conducted with recognition that an energy code update will impact community members from all sectors. An in-depth review and analysis of the input received can be found in Appendix B.

General feedback from all public outreach methods indicated that the Louisville community does not feel ready for an aggressive approach to energy code updates. This is indicated by levels of support for each of the recommendations (Figures 7, 8, 9, and 10) and by both written and oral comments (Appendix B). While some were supportive of the desire to achieve sustainability goals, many showed concern about the upfront and ongoing costs that the code updates would impose on the community, the capability of the grid to handle electrification pushes, and the very limited access to offsite renewable energy.

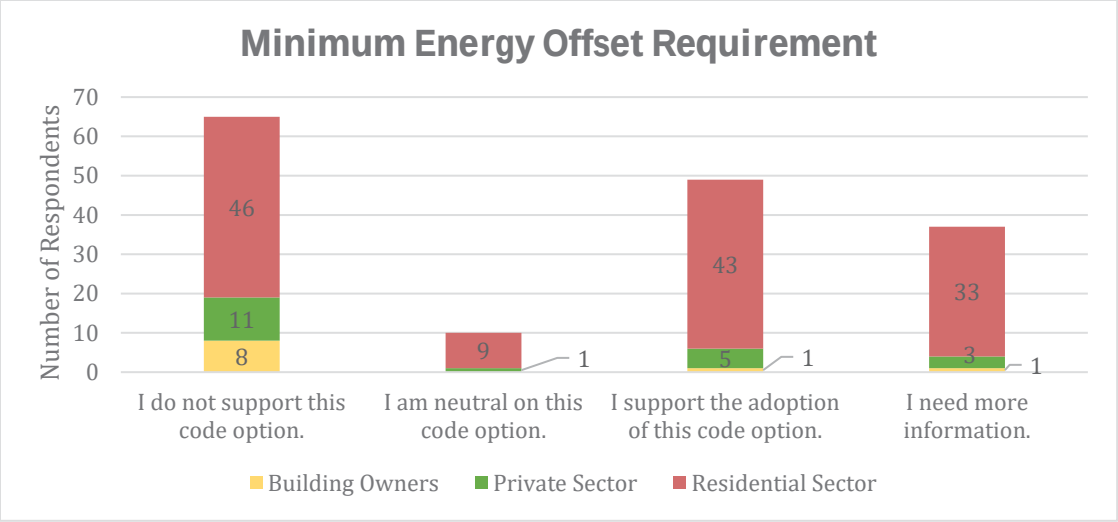


Figure 7: All sector levels of support for Minimum Energy Offset code option. ***How supportive would you be of including a minimum energy offset requirement in addition to the 2021 code, which would require on-site or off-site solar?***

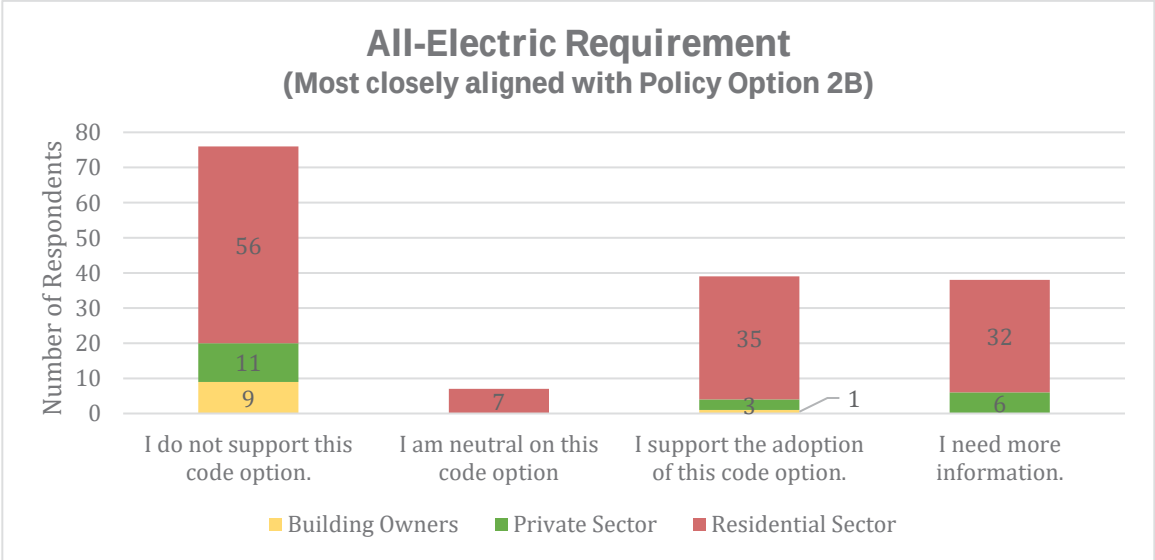


Figure 8: All sector levels of support for All-Electric Requirement code option. ***How supportive would you be if the City were to consider an all-electric requirement for new commercial construction code if industrial processes were exempt?***

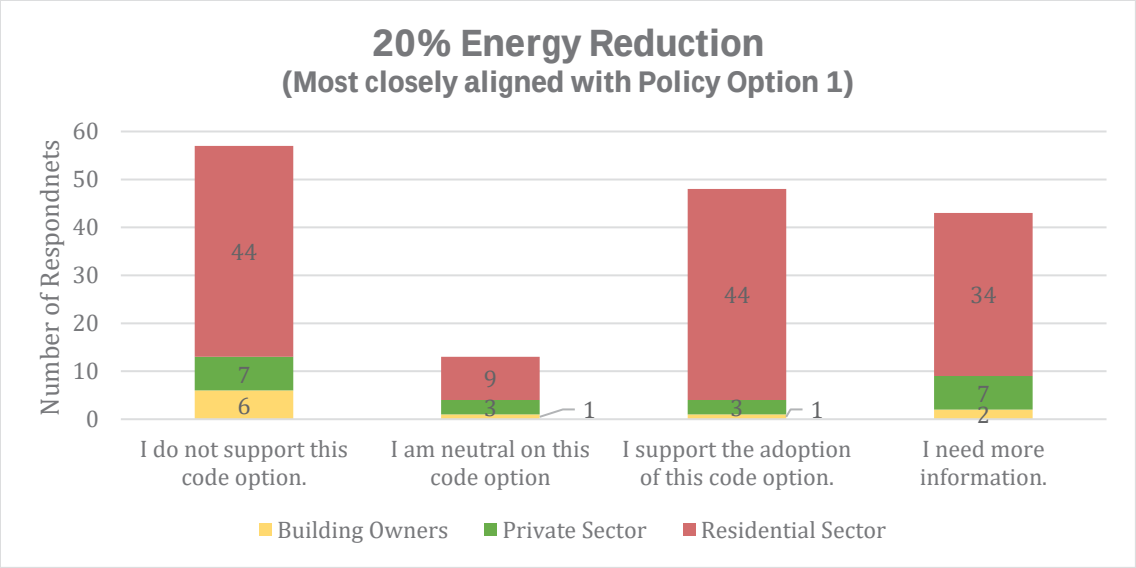


Figure 9: All sector levels of support for 20% Energy Reduction code option. ***How supportive would you be if the City were to consider an energy code that required a 20% reduction in energy use from the 2021 energy code for commercial construction?***

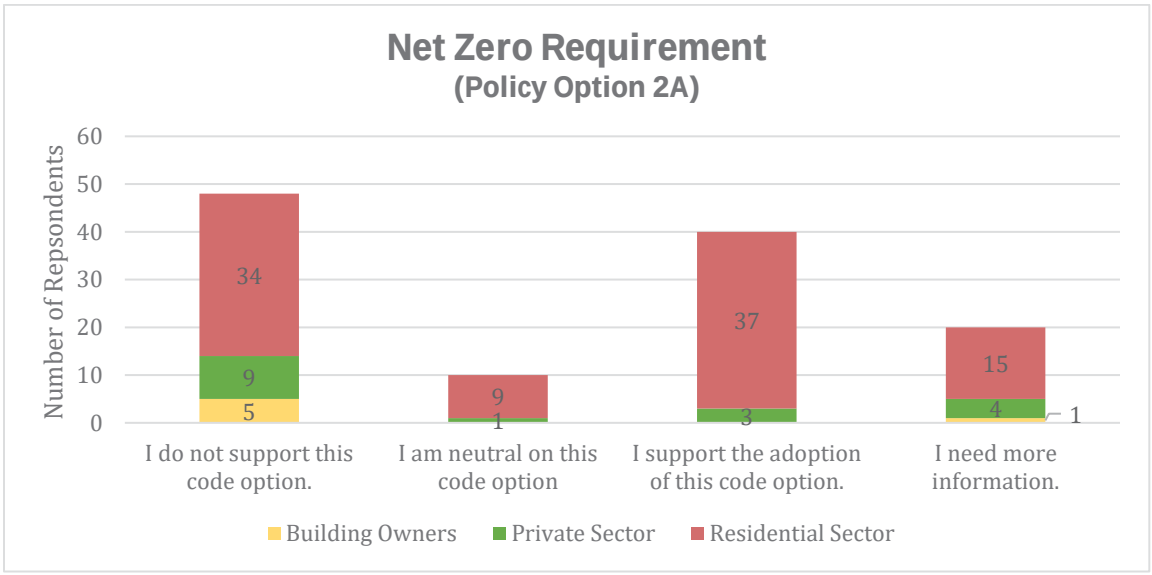


Figure 10: All sector levels of support for Net Zero code option. ***How supportive would you be if the City were to consider a commercial energy code that required net zero energy through efficiency and onsite/off-site renewable energy?***

In the online public engagement survey, the project team asked business and building owners what payback period they would tolerate for the additional upfront costs of installing solar for net zero and all-electric buildings. It is important to note that most respondents indicated that they would not tolerate any increased upfront cost, despite the payback period. Three out of ten building owners selected a payback period of zero-to-5-years, and

only one building owner was comfortable with a 10-20-year timeframe. Six out of 22 business owners would be comfortable with a zero-to-5-year payback timeframe, only two selected payback periods of 10 years or more, and six others were not interested in solar at all. In sum, according to the survey, the tolerance threshold for increasing upfront costs for onsite solar, all-electric construction, and net zero construction is low.

The project team also wanted to use the survey to assess where community values fall as they relate to adopting stricter energy codes. The survey asked, "What's the most important consideration for the City in adopting stricter energy codes for residential and commercial construction?". The results of this question emphasized the need for balance (Figure 11) and reinforced sentiments heard from the other public engagement sessions and shown by the support assessment questions. Overall, the community wants council to carefully consider this ordinance and focus on understanding its potential impacts, rather than rushing to be a leader in the energy code space.

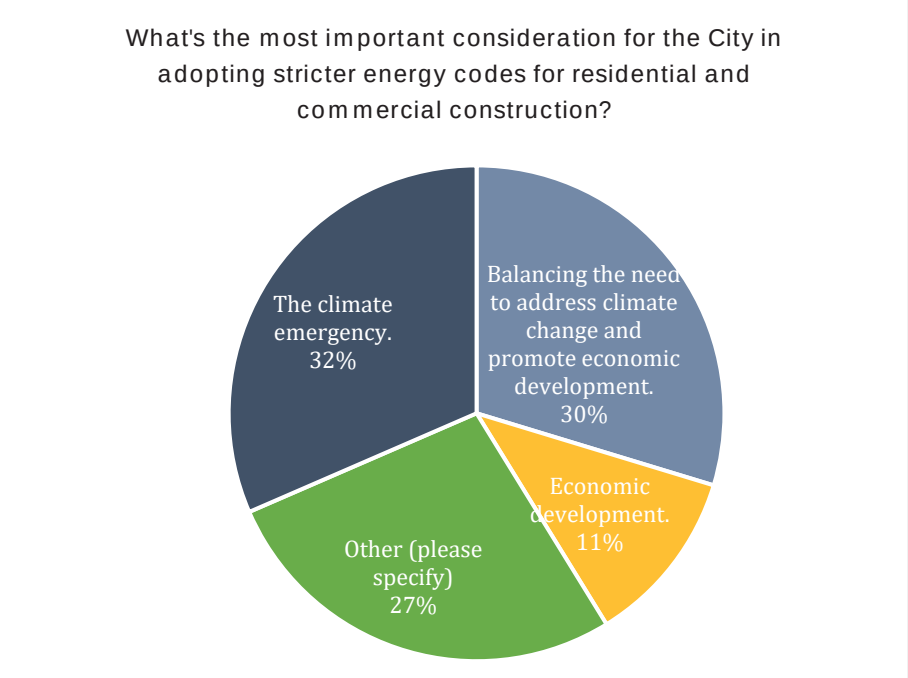


Figure 11: Percentage breakdown of answers for important considerations for stricter energy code.

4. Conclusion

4.1 Final Policy Recommendation

The project team diligently considered the City of Louisville's sustainability goals, the energy modeling and policy research, public feedback, and the estimated GHG impacts of the policies when deliberating a final recommendation for Louisville's energy code. ***Based on a need for balance and feasibility, the project team recommends City Council pursue Policy Option 1: Energy Performance Standards for Building Types.***

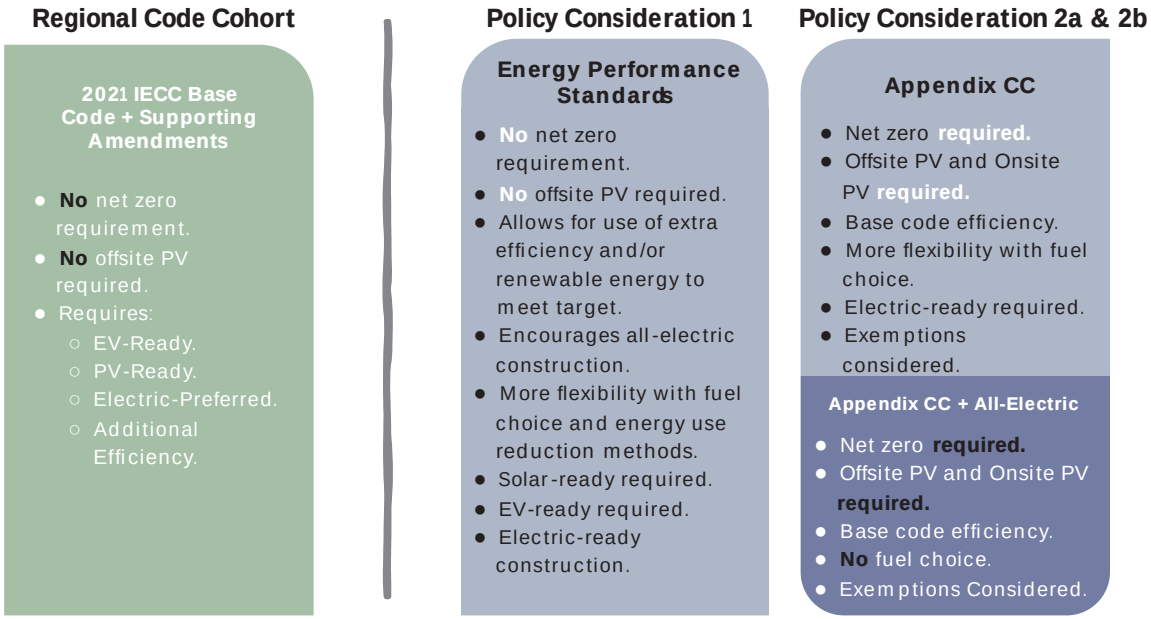


Figure 12: Summary graphic detailing the features of each policy option.

Energy performance standards emphasize energy efficiency and result in lower emitting buildings, thus contributing to Louisville's sustainability goals. There is also no net zero or all-electric requirement, which increases feasibility for building owners, and significantly reduces the upfront cost impacts. While all-electric systems are not mandated in this policy option, energy performance goals, via EUI targets, are more easily achieved with all-electric HVAC and plumbing systems than mixed-fuel systems. Therefore, this code option encourages all-electric new construction while still giving developers and owners choice. Additionally, the code option encourages local renewable energy generation because onsite renewable energy installation can help a building owner achieve the energy performance goal. The last advantage to this code option is that exemptions are not necessary. Buildings with heavy energy loads can still pursue energy use reduction via other efficiency measures.

Policy Option 1 does not create as large of a GHG reduction as Policy Options 2A and 2B, since it is a less aggressive code package. However, the annual energy costs of this policy option were generally lower than those in a building compliant with current code, depending on the building type and system installed. Annual energy costs of Policy Options 2A and 2B are generally lower than both current code compliant buildings and buildings modeled with Policy Option 1 requirements, but PV and offsite renewable energy add significant costs. Under Policy Option 1, a building owner could opt to utilize PV, onsite or offsite, if they would like it to contribute to the building's energy performance standard, but only if they deem it financially beneficial. Thus, Policy Option 1 provides more flexibility with the cost burden a building owner is willing to take on.

4.2 Future Considerations

The project team and the City recognize that stricter building energy codes alone will not achieve the City of Louisville's energy and climate goals. This section captures ideas that were brought forward throughout the project that the City could consider to further support achieving these goals.

First, public engagement brought many questions about how the code updates will impact existing buildings. Current code language says that an addition, alteration, repair, or renovation must be completed to the most up-to-date code for the scope of work intended (if the scope of the project triggers requirements in the code). Any building components not in the intended scope of work do not need to be brought up to code. The project team recommends that council carefully consider how existing buildings will be impacted by the new commercial construction code, including the cost impacts of the code update they choose to enact on these types of existing building projects. Making additions, alterations, repairs and/or renovations too expensive may encourage a property owner to scrape and rebuild rather than renovate. This would create more embodied carbon and obstruct the City's sustainability efforts. Existing buildings can be used as a climate action strategy if additions, alterations, repairs and/or renovations are allowed to pursue a prescriptive pathway to incremental efficiency improvements. The 2021 building code is more efficient than any previous code cycle and consequently, incremental changes to the existing building stock will still be impactful.

Other policy mechanisms also exist to address the existing building stock, that may be more appropriate than new construction code triggers. Benchmarking and building performance standards stand out as the most pursued policy mechanism to address existing building energy use and GHG emissions. The City of Louisville can look to City of Denver[xiii] or City of Boulder's[xiv] benchmarking programs for examples.

For a more holistic approach to increasing the positive environmental impact of new construction, the City can also look into green building codes and certifications. The International Green Construction Code (IgCC)[xv] and LEED[xvi] certifications are two examples of options that address building sustainability more comprehensively, including requirements topic areas like waste, materials management, water use, land use, and connectivity.

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[i] https://www.ipcc.ch/report/ar6/wg3/resources/press/press-release/

[ii] https://www.louisvilleco.gov/home/showpublisheddocument/25430/637114996226870000

[iii] "Core Municipal GHG Emissions" refers to the total GHG emissions from all municipal activity.

[iv] "Core Community GHG Emissions" refers to the total GHG emissions from the entire City of Louisville including all residential, commercial, and industrial energy consumption.

[v] https://www.louisvilleco.gov/home/showpublisheddocument/28886/637376646025230000

[vi]https://www.mckinsey.com/industries/engineering-construction-and-building-materials/our-insights/call-for-action-seizing-the-decarbonization-opportunity-in-construction

[vii]https://www.google.com/url?q=https://www.louisvilleco.gov/home/showpublisheddocument?id%3D22360&sa=D&source=docs&ust=1660286628507708&usg=AOvVaw1EUGqL2jm5HmMJ3ZUliJzc

[viii] https://bouldercolorado.gov/services/building-performance-ordinance

[ix] https://newbuildings.org/wp-content/uploads/2019/09/ZeroEnergyCommercialBuildingTargets.pdf

[x] https://energyeducation.ca/encyclopedia/Energy_density

[xi] Note, 15-year contracts are not available for Green Retail Tariffs. Green Retail Tariffs can also only be purchased to offset electricity use. Pricing shown here is meant for informative purposes only.

[xii] Note, 15-year contracts are not available for unbundled RECs. Pricing in table reflects REC pricing today.

[xiii]https://www.denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Climate-Action-Sustainability-Resiliency/Goals-and-Policies/Energize-Denver-Benchmarking

[xiv] https://bouldercolorado.gov/services/building-performance-ordinance

[xv]https://codes.iccsafe.org/content/IGCC2021P1/preface#:~:text=The%20IgCC%20is%20a%20model,on%20the%20natural%20environment%20and

[xvi] https://www.usgbc.org/leed

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ENERGY CODE ANALYSIS – ENERGY MODELING AND POLICY CONSIDERATIONS

6/24/2022

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LIST OF ABBREVIATIONS

Abbreviation	Definition
ACH	Air Changes per Hour
BTU	British Thermal Unit
CO2	Carbon Dioxide
CSG	Community Solar Garden
DHW	Domestic Hot Water
DOAS	Dedicated Outdoor Air System
ECO	Energy Conservation Opportunity
ECM	Energy Conservation Measure (synonymous to ECO)
EUI	Energy Utilization Index
ERI	Energy Rating Index
ERV	Energy Recovery Ventilator
EV	Electric Vehicle
F	Fahrenheit
FCU	Fan Coil Unit
FY	Fiscal Year
HERS	Home Energy Rating System
HSPF	Heating Seasonal Performance Factor
HVAC	Heating, Ventilation, and Air-Conditioning
HW	Hot Water
IECC	International Energy Conservation Code
IWG	Inches of Water Gauge
kBtu	Thousand British Thermal Units
kW	Kilowatt/Thousand Watts
kWh	Kilowatt Hour
PNNL	Pacific Northwest National Laboratory
PV	Photovoltaic
SEER	Seasonal Energy Efficiency Ratio
SCC	Social Cost of Carbon
Sq. Ft., SF	Square Foot
TBD	To Be Determined
UEF	Uniform Energy Factor

1 INTRODUCTION

1.1 Executive Summary

Group14's scope for this report is to evaluate the current energy codes established in the City of Louisville and to provide recommendations for future all-electric and net zero codes to meet the City's carbon reduction goals. To produce this report, Group14 has modeled four different building types:

1. Multifamily building – 42,000 SF
2. Office building – 110,000 SF
3. Commercial development – 90,000 SF
4. Single family home – 2,820 SF

These energy models were created with feedback from the City's planning department as well as average CBECS data for the mountain west region. Each building type is modeled with different HVAC designs which meet the current Louisville energy codes (both Mixed-Fuel and all-electric). Greenhouse gas emissions and net present value analysis is also provided.

In the policy section of this report, all-electric and net zero energy codes from around the country are analyzed. Recommendations are made to push Louisville's energy codes towards all-electric, net zero new construction, while also considering the upcoming IECC code cycles and codes in surrounding counties.

Out energy modeling results show that the all-electric buildings have much lower carbon emissions than mixed fuel buildings but typically have slightly higher annual energy costs. First costs between both the mixed fuel and all-electric designs are similar, due to the current Louisville requirement for all-electric ready new construction. The cost to install the electric infrastructure drives up the cost of the mixed fuel buildings.

2 ENERGY MODELING RESULTS

2.1 Multifamily Building

The multifamily building modeled is typical of multifamily new construction in the City of Louisville. This design is three stories tall, 42,000 SF, with wood framed walls. The different HVAC system options modeled are:

- Mixed-Fuel options:
  - 1: Packaged terminal heat pumps (9.5 EER and 2.9 COP)
    - Ventilation provided through the unit
    - 95% efficient natural gas water heaters
    - C406 pathway: Efficient fossil fuel water heater, Reduced lighting power
  - 2: Split DX fan coil units (SEER 14) with combined heating and domestic water heating
    - Ventilation provided by exhaust fans running continuously
    - 95% efficient natural gas water heaters
    - C406 pathway: Efficient fossil fuel water heater, Reduced lighting power
  - 3: Split heat pumps (SEER 14, 9.2 HSPF)
    - Ventilation provided by exhaust fans running continuously
    - 95% efficient natural gas water heaters
    - C406 pathway: Efficient fossil fuel water heater, Reduced lighting power
  - 4: Water source heat pumps (13 EER, 4.3 COP)
    - Supplemental 80% efficient boiler
    - Variable speed cooling tower
    - Ventilation provided by exhaust fans running continuously
    - 95% efficient natural gas water heaters
    - C406 pathway: Efficient fossil fuel water heater, Reduced lighting power
- All-Electric Options:
  - 1: Packaged terminal heat pumps (10.0 EER, 3.2 COP)
    - Ventilation provided by exhaust fans running continuously
    - Heat pump domestic water heater with supplementary electric heat (3.0 UEF)
    - C406 pathway: 5% cooling improvement, 10% heating improvement, reduced lighting power, heat pump water heater
  - 2: Split heat pumps (SEER 14.7, 9.0 HSPF)
    - Ventilation provided by exhaust fans running continuously
    - Heat pump domestic water heater with supplementary electric heat (3.0 UEF)
    - C406 pathway: 5% cooling improvement, 10% heating improvement, reduced lighting power, heat pump water heater
  - 3: Water source heat pumps (13.6 EER, 4.3 COP)
    - Supplemental electric boiler
    - Ventilation provided by exhaust fans running continuously
    - Heat pump domestic water heater with supplementary electric heat (3.0 UEF) with condenser water heat recovery
    - C406 pathway: 5% cooling improvement, 10% heating improvement, reduced lighting power, heat pump water heater

All other inputs to the energy models meet the existing Louisville energy code (2021 IECC with amendments), including insulation and glazing values. The options comply with the code via the prescriptive path, which includes compliance with Section C406. Each design reflects the most cost-effective compliance pathway. All energy

modeling for the multifamily building assumer commercial utility rates – the building is on a master electrical utility meter with submeters serving each unit.

Multifamily - System Type	*Annual Energy Cost*	*First Cost*	*Annual Energy Cost with PV Required for Net Zero Energy*	*First Cost with PV Required for Net Zero Energy*
Mixed Fuel Option1	$40,785	$157,321	$4,329	$1,001,660
Mixed Fuel Option 2	$25,230	$278,321	$8,461	$1,190,470
Mixed Fuel Option 3	$38,038	$267,321	$4,131	$1,024,164
Mixed Fuel Option 4	$27,071	$459,821	$7,578	$1,352,283
All-Electric Option1	$40,383	$135,000	$13,924	$725,600
All-Electric Option 2	$40,601	$245,000	$14,667	$823,897
All-Electric Option 3	$28,431	$437,500	$5,873	$941,024

The first cost analysis for the multifamily building show that the mixed fuel options are similar first costs to the all-electric option due to the electric-ready infrastructure required under the current Louisville energy code.

Our energy modeling results show that the multifamily buildings with gas heating have lower annual energy costs than those that are all-electric. When photovoltaics are considered to make the buildings net zero, however, we found that the all-electric options require less PV and have a positive net present value. This positive net present value is calculated over a period of 20 years, with a 3% energy escalation rate. Each net present value option is evaluated against Mixed Fuel Option 1. A positive net present value means that the investment in the estimated initial construction investment is paid off before the end of the 20-year period.

Multifamily	*PV Size Required for Net Zero Energy (kW)*
Mixed Fuel Option1	338
Mixed Fuel Option 2	365
Mixed Fuel Option 3	303
Mixed Fuel Option 4	357
All-Electric Option1	236
All-Electric Option 2	232

All-Electric Option 3	201

Multifamily	Payback, No PV Included (years)	Payback, Net Zero (years)
Mixed Fuel Option1		
Mixed Fuel Option 2	9	>50
Mixed Fuel Option 3	>50	>50
Mixed Fuel Option 4	37	>50
All-Electric Option1	1	1
All-Electric Option 2	>50	1
All-Electric Option 3	39	1

Another important note is the greenhouse gas emissions created by each system type. Using NREL's Cambium tool, Group14 calculated the hourly greenhouse gas emissions throughout the year based on the average emissions expected in the entire State of Colorado. With Xcel Energy's goal to be 79% carbon neutral by 2035, we expect that the greenhouse gas emissions of these design options will be much lower in 2035, rather than the values shown in our analysis.

Without PV, the mixed fuel options have average emissions of 170,000 lbs CO2 in 2022 as compared to 110,000 lbs CO2 for the all-electric options. In 2035, the average carbon emissions drop to 95,000 lbs CO2 for the mixed fuel options and 67,000 lbs CO2 for the all-electric options.

2.2 Office Building

The office building is a 110,000 SF, 3-story building with metal-framed walls and is 40% glazed. To select the size of this building, we used information from the 2018 CBECS data for the average size of an office building in the mountain west region. The different HVAC options modeled are as follows:

- Mixed-Fuel options:
    - 1: Packaged VAV with hot water reheat (10.3 EER)
        - Condensing boilers (94% efficient)
        - 80% efficient natural gas water heaters
        - C406 pathway: 5% cooling efficiency improvement, reduced lighting power
    - 2: Packaged VAV with gas heat and electric reheat (10.3 EER)
        - 80% efficient natural gas water heater
        - C406 pathway: 5% cooling efficiency improvement, reduced lighting power

    - 3: Four pipe fan coil units
        - Ventilation is provided by a DOAS with gas heat and DX cooling (80% efficient and 9.8 EER, 3.3 COP)
        - Chilled water is provided by air cooled chiller (9.7 FL | 16.1 IPLV)
        - Heating water is provided by 94% efficient central boilers
        - 80% efficient natural gas water heater
        - C406 pathway: Dedicated outdoor air system, reduced lighting power

- All Electric Options:

    - 1: Packaged VAV with heat pump and electric reheat (10.3 EER)
        - Energy recovery ventilation (0.5 effectiveness)
        - Electric water heating
        - C406 pathway: 5% cooling efficiency improvement, reduced lighting power

    - 2: Water source heat pumps (13 EER, 4.3 COP)
        - Condenser water loop is served by variable speed cooling tower and electric boiler
        - Ventilation is provided by a heat pump DOAS (9.8 EER, 3.3 COP)
        - Energy recovery ventilation (0.5 effectiveness)
        - Electric water heating
        - C406 pathway: Dedicated outdoor air system, reduced lighting power

    - 3: Variable refrigerant flow (SEER 13, 7.7 HSPF)
        - Ventilation is provided by a heat pump DOAS (9.8 EER, 3.3 COP)
        - Energy recovery ventilation (0.5 effectiveness)
        - Electric water heating
        - C406 pathway: Dedicated outdoor air system, reduced lighting power

    - 4: Two pipe fan coil units with chilled water cooling and electric heating coils
        - Ventilation is provided by a DOAS with gas heat and DX cooling (80% efficient and 9.8 EER, 3.3 COP) with energy recovery ventilation (0.5 effectiveness)
        - Chilled water is provided by air cooled chiller (9.7 FL | 16.1 IPLV)
        - Electric water heating
        - C406 pathway: Dedicated outdoor air system, reduced lighting power

Our analysis of the different office buildings shows that the annual energy costs of an all-electric office building are comparative to that of a Mixed-Fuel building. Heating energy use in offices is relatively small and is primarily for heating outdoor air for ventilation.

Office - System Type	*Annual Energy Cost*	*First Cost*	*Annual Energy Cost with PV Required for Net Zero Energy*	*First Cost with PV Required for Net Zero Energy*
Mixed Fuel Option 1	$104,604	$2,327,633	$23,730	$4,132,873
Mixed Fuel Option 2	$135,278	$1,786,323	$48,276	$3,728,323
Mixed Fuel Option 3	$95,077	$4,492,873	$8,835	$6,423,932
All-Electric Option 1	$131,993	$1,948,716	$47,442	$3,836,012
All-Electric Option 2	$90,551	$3,789,170	$29,616	$5,149,336
All-Electric Option 3	$94,324	$3,464,384	$30,850	$4,881,224
All-Electric Option 4	$103,660	$4,005,694	$38,960	$5,449,886

The predicted energy use of the modeled office buildings is lower than actual building performance due to how office buildings are operated. Often, building owners will increase the operational hours of their building for cleaning crews or early/late workers, and even operate them 24/7 to maintain a single zone at a prescribed temperature. The analysis assumes a standard 7 AM – 6 PM, Monday through Friday, occupancy schedule. In addition, control settings are often overridden to limit economizer operation and hold the supply air temperature at 50-55 F rather than allowing the supply temperature to reset upwards when the outside air is cooler.

To meet net zero, the photovoltaic systems sizes predicted are too large to fit on the roof of the example building. The buildings would be required to purchase off-site PV to fully offset the building's energy use.

Office	*PV Size Required for Net Zero Energy (kW)*	*Estimated PV Area (SF)*
Mixed Fuel Option 1	722	103,157
Mixed Fuel Option 2	777	110,971
Mixed Fuel Option 3	772	110,346
All-Electric Option 1	755	107,845
All-Electric Option 2	544	77,724
All-Electric Option 3	567	80,962
All-Electric Option 4	578	82,525

The net present value analysis for the office buildings shows that the buildings will not pay back within the expected life of the equipment for most of the options. Each net present value option is evaluated against Mixed Fuel Option 1. The two most cost-effective options, Mixed-Fuel options 1 and 2 without PV, are the cheapest first cost options that were analyzed, as expected. With PV, Mixed Fuel Option 2 and All-Electric Option 1 are more cost-effective than Mixed Fuel Option 1.

Office	Payback, No PV Included (years)	Payback, Net Zero (years)
Mixed Fuel Option 1		
Mixed Fuel Option 2	1	1
Mixed Fuel Option 3	>50	>50
All-Electric Option 1	1	1
All-Electric Option 2	>50	>50
All-Electric Option 3	>50	>50
All-Electric Option 4	>50	>50

The carbon emissions analysis shows that the all-electric designs show much lower emissions than the Mixed-Fuel options. In 2022, the mixed-fuel buildings have an average carbon emissions of 380,000 lbs CO2. In 2035, they have a predicted emissions of 215,000 lbs CO2. The all-electric buildings have an average carbon emissions of 315,000 lbs CO2 in 2022 and 170,000 lbs CO2 in 2035.

2.3 Commercial Development

The commercial development is assumed to be a strip mall with two food service anchors – a café and a quick-service restaurant. The building is 90.000 SF with concrete block walls and is one story. The building size was determined via the 2018 CBECS data for the mountain west region. The different HVAC options modeled are as follows:

- Mixed-Fuel options:
    - 1: Packaged single-zone rooftop units with DX cooling (SEER 14) and gas heat (80% efficient)
        - Café and food service: 80% efficient natural gas water heaters
        - Retail: electric water heating
        - C406 pathway: Reduced lighting power
    - 2: Packaged single-zone rooftop units with heat pump and back-up electric heat (SEER 14, 8.0 HSPF)
        - Café and food service: 80% efficient natural gas water heaters
        - Retail: electric water heating
        - C406 pathway: Reduced lighting power

  - 3: Packaged variable volume single-zone rooftop units with DX cooling (SEER 14) and gas heat (80% efficient)
    - Café and food service: 80% efficient natural gas water heaters
    - Retail: electric water heating
    - C406 pathway: Reduced lighting power

- All-Electric Options:
  - 1: Packaged single-zone rooftop units with heat pump and back-up electric heat (SEER 14, 8.0 HSPF)
    - Energy recovery ventilation (0.5 effectiveness)
    - Electric water heating
    - C406 pathway: Reduced lighting power
  - 2: Packaged single zone rooftop units with heat pump and back-up electric heat (SEER 14, 8.0 HSPF)
    - Energy recovery ventilation (0.5 effectiveness)
    - Electric water heating
    - C406 pathway: Reduced lighting power
  - 3: Water source heat pumps (13 EER, 4.3 COP)
    - Loop is served by electric boiler and variable speed cooling tower
    - Ventilation is provided by a heat pump DOAS (9.8 EER, 3.3 COP) with energy recovery ventilation (0.5 effectiveness)
    - Café and food service: Electric water heating
    - Retail: electric water heating
    - C406 pathway: Reduced lighting power

In the commercial development models, due to the high service water heating and plug load requirements, the annual energy costs of the mixed fuel buildings are, on average, slightly lower than the all-electric energy costs.

Commercial Development - System Type	*Annual Energy Cost*	*First Cost*	*Annual Energy Cost with PV Required for Net Zero Energy*	*First Cost with PV Required for Net Zero Energy*
Mixed Fuel Option 1	$164,492	$570,500	$23,730	$4,923,423
Mixed Fuel Option 2	$182,683	$456,000	$48,276	$4,366,330
Mixed Fuel Option 3	$158,096	$630,500	$8,835	$4,545,393
All-Electric Option 1	$193,161	$660,000	$47,442	$4,282,873
All-Electric Option 2	$185,053	$708,000	$29,616	$4,130,109
All-Electric Option 3	$156,491	$3,167,500	$30,850	$6,060,323

The high internal loads drive up the amount of PV energy required to make the building net zero energy. The predicted size of the PV systems will not fit on the roof of the building off-site PV would need to be purchased to achieve net zero energy.

Commercial Development	*PV Size Required for Net Zero Energy (kW)*	*Estimated PV Area (SF)*
Mixed Fuel Option 1	1741	248,738
Mixed Fuel Option 2	1564	223,447
Mixed Fuel Option 3	1566	223,708
All-Electric Option 1	1449	207,021
All-Electric Option 2	1369	195,549
All-Electric Option 3	1157	165,304

While the net present value of the options without renewables is mostly negative, the net present value of the designs including renewables is mostly positive. Each net present value option is evaluated against Mixed Fuel Option 1. This assumes that the building will be paid for all of the electricity generated by the PV. However, as noted, the buildings do not have space for all of the onsite solar. Systems of this size are not often available in community solar gardens. With Xcel Energy's goal of net zero energy production by 2035, the requirement for photovoltaics to offset energy use would be greatly reduced in the coming years, as the electricity provided to these buildings moves closer to meeting the net zero carbon emissions goal.

Commercial Development	Payback, No PV Included (years)	Payback, Net Zero (years)
Mixed Fuel Option 1		
Mixed Fuel Option 2	1	1
Mixed Fuel Option 3	12	1
All-Electric Option 1	>50	1
All-Electric Option 2	>50	1
All-Electric Option 3	>50	>50

The carbon emissions analysis, like those above, show that carbon emissions for the all-electric buildings are much lower than those of the mixed fuel buildings. This is due to the high amount of service water required by the food service tenants. The average emissions for a mixed-fuel retail building in 2022 is 850,000 lbs C02. In 2035,

the mixed-fuel buildings are expected to have an average emissions of 470,000 lbs CO2. The all-electric design options have an expected average emissions of 680,000 lbs CO2 in 2022 and 380,000 lbs C02 in 2035.

2.4 Single-Family Home

The single-family home is a 2,820 SF 2-story home with a finished basement. The different HVAC options modeled are as follows:

- Mixed-Fuel options:
  - 1: 96% efficient gas furnace with SEER 16 split DX cooling
    - 0.92 UEF water heater
  - 2: Split heat pump with back-up gas heat (SEER 16, HSPF 10, 96% efficient gas back-up)
    - 0.92 UEF water heater
- All Electric Options:
  - 1: Split heat pump with back-up gas heat (SEER 16, HSPF 10, 96% efficient gas back-up)
    - 3.0 UEF heat pump water heater with supplementary electric resistance heat
  - 2: Ground source heat pump (18 EER, 3.7 COP)
    - 3.0 UEF heat pump water heater with supplementary electric resistance heat
- Appendix RC Options
  - Mixed Fuel Option: 96% efficient furnace with SEER 21 cooling
    - 0.94 UEF water heater
  - All-Electric Option: Cold climate heat pump
    - 3.48 UEF heat pump water heater

In our analysis of the single-family home options, we found that the annual energy costs of the all-electric homes are only slightly higher than the lowest cost option. This is due to the highly efficient and cost-effective all-electric design options available to residential consumers. The design options compliant with Appendix RC have the lowest annual energy costs.

Single-Family Home - System Type	*Annual Energy Cost*	*First Cost*	*Annual Energy Cost with PV Required for Net Zero Energy*	*First Cost with PV Required for Net Zero Energy*
Mixed Fuel Option 1	$2,375	$4,040	$386	$51,775
Mixed Fuel Option 2	$2,388	$4,540	$371	$51,135
All-Electric Option 1	$2,511	$3,255	$966	$37,738
All-Electric Option 2	$2,026	$22,405	$807	$49,621

Mixed Fuel Option - Appendix RC	$1,946	19805	$302	$61,128
All-Electric Option - Appendix RC	$1,795	21750	$519	$50,249

The PV system sizes required for each option are shown below. The all-electric options require the smallest PV sizes to reach net zero energy. The mixed-fuel system options and the Appendix RC compliant mixed-fuel system option require a much larger PV size when compared to the all-electric system options.

Single-Family Home	*PV Size Required for Net Zero Energy (kW)*
Mixed Fuel Option 1	19
Mixed Fuel Option 2	19
All-Electric Option 1	14
All-Electric Option 2	11
Mixed Fuel Option - Appendix RC	17
All-Electric Option - Appendix RC	11

To achieve net zero energy, the PV will only fit on a home that has optimal sun exposure and a large enough roof to fit the PV. This will not be feasible on most homes, which will require enrollment in a community solar program to meet the net zero requirement. COSSA has stated that there will be enough community solar available for homeowners in the City of Louisville. The cost of community solar will not increase utility bills or have an enrollment cost.

Single-Family Home	Payback, No PV Included (years)	Payback, Net Zero (years)
Mixed Fuel Option 1		
Mixed Fuel Option 2	>50	1
All-Electric Option 1	1	1
All-Electric Option 2	>50	1
Mixed Fuel Option - Appendix RC	>50	>50

All-Electric Option - Appendix RC	>50	1

The net present value analysis shows that most of the options have a negative net present value without on-site PV. Each net present value option is evaluated against Mixed Fuel Option 1. This means that the systems will not pay back within the system life span, mainly due to the high cost of electricity in comparison to the mixed fuel baseline. When on-site PV is added, however, the net present values become positive, meaning they will pay back before the end of the 20-year analysis period.

Consistent with the analysis above, the carbon emissions of the all-electric options have much lower greenhouse gas emissions than the Mixed-Fuel options. The design option compliant with Appendix RC that has natural gas use has more carbon emissions than the all-electric new construction options that do not comply with Appendix RC. The average carbon emissions of the mixed-fuel options is 9,000 lbs CO_2 in 2022 and 5,000 lbs CO_2 in 2035. The all-electric options have an estimated average carbon emissions of 6,000 lbs CO_2 in 2022 and 3,500 lbs in 2035.

3 POLICY CONSIDERATIONS

Across the country, from Seattle to Boston, cities are establishing building energy codes to reduce carbon emissions for new construction. The City of Louisville has a goal to create a new construction energy code that will set them on a path towards net zero energy buildings. Louisville's current amendments to the 2021 IECC require some additional energy savings and all-electric ready construction items:

Commercial New Construction

- Increased insulation levels
- Increased fenestration efficiency requirements
- Increased HVAC efficiency
- Electric vehicle charging and infrastructure
- Electric-ready wherever gas appliances are installed
- Solar-ready zone required

Residential New Construction

- Increased insulation levels
- Increased ductwork and piping insulation requirements
- Mandatory heat recovery
- Electric vehicle charging and infrastructure
- Electric-ready wherever gas appliances are installed
- Net zero Appendix RC required

To further increase the energy savings and carbon reduction potential of Louisville's energy code, this report discusses different advanced energy codes across the country and makes recommendations on the future cycles of Louisville's energy code development.

Background

Throughout California, multiple cities require all-electric new construction. In colder climate zones, such as Boston and New York City, jurisdictions have adopted their states' optional stretch codes. These codes require additional energy savings such as mandatory energy recovery, electric vehicle charging, or in some cases a net zero new construction provision that requires electric-ready new construction.

In Colorado, a new bill (HB 22-1362) recently passed that requires jurisdictions to update their energy code to the 2021 version of the IECC when one or more of their building codes are updated. Beginning in July 2023, jurisdictions will also be required to adopt electric and solar-ready requirements and begin enforcing a low energy and carbon code when one or more of their building codes are updated. This sets a great precedent for increasing the energy efficiency requirements of Louisville's energy code.

In the 2021 IECC, there are two appendices, Appendix CC and RC which require net zero commercial and residential new construction, respectively. Appendix CC gives two options for net zero new construction: 1- for buildings complying with the prescriptive pathway energy use intensities are established for each building type and must be offset by either on-site or off-site renewables, or 2- for buildings complying with the performance pathway, they must offset their predicted energy use shown by an energy model with on-site or off-site renewables. Appendix RC, which is currently adopted by the City of Louisville, requires that new construction homes have an ERI rating of 47 or less and the predicted energy use must be offset by on-site or off-site renewables.

Another code to consider in this discussion is Boulder's energy code. In this code, buildings with an estimated construction cost of $500,000 or greater are required to comply with the performance path. This path prescribes maximum Energy Use Intensities (EUIs) that the building design must meet, shown through an energy model. After construction, building owners must reserve funds in escrow to cover the cost to reduce the building's energy use if the building does not meet the maximum allowed EUI.

In addition to these existing codes, there are amendments to the 2024 IECC that have passed preliminary committee approval which will further increase the energy savings of the base code. The all-electric-ready new construction amendment requires that anytime a natural gas appliance will be installed that appropriately sized electric infrastructure will be installed to accommodate a future electrical appliance. The on-site renewable energy amendment will require 0.75 W/sf gross floor area, not to exceed the combined gross conditioned floor area of the three largest floors on all new-construction commercial buildings. These addendums to the 2024 IECC will reduce the carbon emissions of new construction buildings and will encourage all-electric new construction. The IECC will continue to push towards net zero new construction with each code cycle, which will provide a framework for jurisdictions also hoping to require net zero new construction.

There are hurdles to providing all-electric new construction for commercial buildings. In comparison to all-electric space heating and domestic water heating, annual heating costs with natural gas are lower. In Louisville's climate specifically, we find that heat pump systems will have to utilize electric resistance heating during very cold times, further driving up annual energy costs. Additionally, demand response controls for reducing peak energy use and costs are not yet widely supported by Xcel Energy in large commercial buildings. We expect that this hurdle will be overcome in the coming years.

In addition to these climate and utility hurdles, we have found that industrial, laboratory, and manufacturing buildings all have systems that currently cannot be electrified. In Louisville there are major food, machinery, and plastics manufacturers, with specialized processes that use natural gas and cannot currently be replicated with electricity. In the energy codes discussed above, these processes are exempt from the electrification requirement, including the all-electric ready new construction requirement.

Resiliency is another factor to consider in this decision-making process. The Marshall Fire has highlighted concerns on how to make sure Louisville is a safe, resilient place to live and work. Through the energy codes, resiliency can be increased by requiring on-site solar and peak shifting controls to reduce demand and therefore peak loads on the grid.

Considerations

For the City of Louisville, we are recommending three different pathways for commercial energy code adoption:

- Option 1: Require all-electric-ready new construction as an addendum to the 2021 IECC, with on-site or off-site PV required to match the 2024 IECC on-site renewable amendment.
- Option 2: Require projects above a certain construction cost (or size) to meet a maximum-allowed EUI that is low enough that an all-electric design will comply more easily than a Mixed-Fuel building. Provide a prescriptive pathway that requires an equivalent amount of energy efficiency as the performance pathway. All new construction will be required to be electric-ready.
- Option 3: Require all-electric ready, net-zero new construction for all buildings and utilize Appendix CC from the 2021 IECC for buildings that do not pursue the performance path for compliance.
- Option 3B: Require all-electric net zero new construction for all buildings and utilize Appendix CC from the 2021 IECC for buildings that do not pursue the performance path for compliance.

For residential energy code adoption, Louisville has already adopted Appendix RC as a mandatory measure for all new construction buildings. Our recommendation is to amend Appendix RC to allow HERS ratings in lieu of ERI scores. This appendix maintains that buildings can comply with the code with or without natural gas; however, the appendix greatly incentivizes all-electric new construction to meet the energy scores calculated during design. Appendix RC also requires homes to offset their energy use with on-site or off-site renewables.

Discussion

Option 1

This option, seen as the least stringent of the three policies listed above, also requires the least number of amendments for the City of Louisville. This simple code can easily be automatically updated as each new version of the IECC is released.

This code would have the following main items:

- 2021 IECC adopted as the base code (currently adopted in Louisville)
- Electric vehicle charging and electric vehicle ready spaces amended (currently adopted in Louisville)
- All-electric or all-electric ready construction required (currently adopted in Louisville)
- On-site or off-site PV required to match the amendment to the 2024 IECC, alternatively, PV could be provided as required to offset any carbon emissions by natural gas systems used on site.
- Automatic update to the newest version of the IECC upon release

There are many benefits to this code pathway – primarily that the energy code for Louisville will continue to be updated as the code is updated. This also allows for engineers, architects, and building owners to navigate code updates and expectations.

Option 2

In this option, Louisville would use the City of Boulder's Energy Code as a framework for their efficiency code. Boulder's code has additional energy efficiency requirements above the 2018 IECC base code and is estimated to provide 20% additional energy efficiency. The additional energy savings are through mandatory and prescriptive compliance items such as:

- Air barrier testing
- Additional insulation levels
- Additional HVAC controls
- Reduced lighting power densities and additional lighting controls
- Electric vehicle charging
- Solar-ready zone
- Site energy Use Intensity (EUI) targets for the performance pathway

There are many benefits to aligning Louisville's energy code with the City of Boulder. Firstly, creating a unified energy code throughout the area would be beneficial for potential building owners and developers. A consistent energy code will set expectations and establish cost estimates and investments for new construction in the region. In addition, the EUI approach simplifies performance modeling by eliminating a baseline model to compare to.

If Louisville wishes to create a similar code based on the 2021 IECC, analysis could be performed to customize a set of EUIs for performance compliance. City of Boulder mandatory measures could be adopted along with additional mandatory measures, including:

Electric vehicle charging and electric vehicle ready spaces amended (currently adopted in Louisville)

All-electric or all-electric ready construction required (currently adopted in Louisville)

Along with this approach, all-electric buildings could be provided with a simpler path to code compliance and mixed-fuel buildings could require additional energy savings to above the base code to show compliance. For example, an all-electric building would solely have to meet the mandatory requirements in the base code,

however a mixed-fuel building would have to show 10% additional energy savings above the base code. This encourages designers and owners to build all-electric buildings without requiring all-electric new construction for all buildings.

The code maximum EUIs would be difficult to achieve via a Mixed-Fuel building and easier to meet for an all-electric building. As seen in our energy modeling results, the all-electric buildings that comply with Louisville's current energy code have lower energy use intensities than their mixed-use equivalents.

In this pathway, industrial and laboratory occupancies would use a traditional performance modeling compliance pathway and show energy savings. This allows industrial and laboratory occupancies to exclude process energy use from the energy savings calculation, including those processes that utilize natural gas. This results in energy-efficient envelope, lighting and HVAC systems having to offset increased heating and cooling loads from the process equipment.

In addition to this pathway, we recommend that on-site PV is incentivized by Louisville for buildings where PV is best suited, for example buildings with large, open roof spaces and sites that are optimized for solar production. Xcel Energy is targeting 2035 for zero carbon electricity production. There are benefits to buildings with on-site photovoltaics; however, utility-scale photovoltaics are generally better maintained than smaller systems.

Option 3

Under this option, Appendix CC of the 2021 IECC would be made mandatory for new construction commercial buildings. This appendix requires that buildings complying prescriptively provide a set amount of photovoltaics to offset their building's energy use based on their occupancy type. Performance compliance pathways are required to offset their building's estimated energy use shown through an energy model. This net zero requirement can be met through on-site or off-site photovoltaics.

The benefit to this pathway is that the Appendix will continue to be updated to be more effective at each iteration of code amendments at the national level until, hopefully, it is codified in the energy code. While this pathway is the most energy efficient and effective at reducing operational carbon, net zero construction has the highest first cost of all three pathways. The pathway also needs a post-construction performance assessment, such as benchmarking, to confirm net-zero achievement.

Option 3B

Under this option, Appendix CC of the 2021 IECC would be mandatory, with an additional requirement for all-electric new construction. No combustion systems would be allowed, except for the following occupancy types:

- Industrial
- Laboratories
- Manufacturing

In these building types, HVAC and plumbing systems would be required to be all-electric, however processes requiring natural gas would not be. For example, a steam industrial process that requires a large amount of steam would not be required to be electrified.

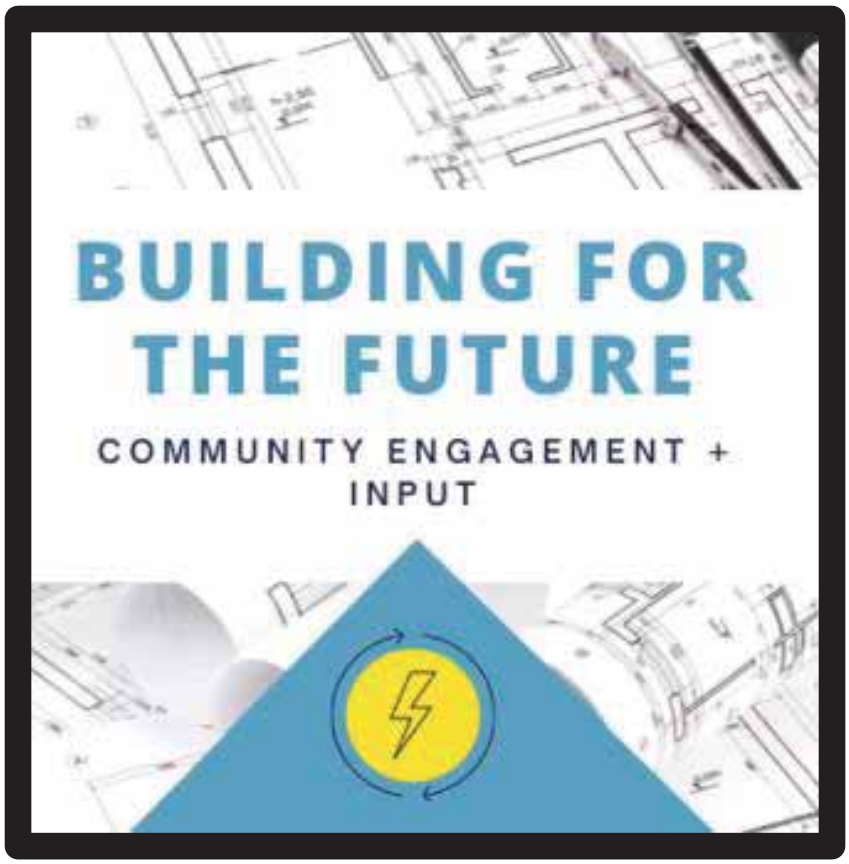
Future Work

Based on the desired pathway that City Council selects for their energy code, future work will include development of a set of mandatory, prescriptive, and performance measures to ensure that each pathway provides equivalent levels of energy efficiency requirements. Additional work is needed to ensure that resiliency considerations are made for renewable energy systems required, including battery back-up for both peak shifting and emergency power when possible. Any prescriptive pathway set by the city should encourage all-electric new construction and reduce use of natural gas.

4 CONCLUSION

The City of Louisville goals to reduce energy use and greenhouse gas emissions are important steps in addressing our climate crisis. Louisville relies on Xcel Energy for their electricity. Xcel Energy's goal to deliver carbon-free electricity by 2035 is realistic and results in Louisville having access to much cleaner power than the power provided to the rest of the state. Our recommendation is to leverage Xcel Energy's goal to deliver carbon-free electricity by 2035, and focus the energy code on energy efficiency, all-electric buildings, and renewables to offset gas use.

Louisville is surrounded by other counties that also have goals to reduce emissions and increase the efficiency required by the energy code. Creating an energy code that is similar and consistent across the region lets business developers and homeowners know what to expect when looking for a place to build, and helps contractors and engineers find the most cost-effective and energy efficient ways to meet the code. This will improve the efficiency of commercial and residential buildings across the region and encourage designers to find the most cost-effective solutions to the code.



City of Louisville Energy Code Update

Public Engagement Summary

August 2022

LOTUS Engineering & Sustainability

City of Louisville

Background

In 2021, the City of Louisville adopted the 2021 International Energy Conservation Code (IECC) with specific amendments that included more stringent efficiency requirements, and a requirement for electric-readiness and EV-readiness for all new construction. The City also adopted the Zero Energy Appendix (Appendix RC) that requires net zero energy construction for all new single-family homes in the City.

Now, the City is considering additional code options that would encourage higher efficiency, net zero, and/or all electric for multi-family and commercial new construction. Energy modeling was conducted to evaluate the City's current energy codes and other code development options. The modeling also investigated the up-front cost, annual cost, and lifetime cost of building to the new potential standards.

Public input is critical to the investigation and development of these new multi-family and commercial code options. Code changes impact multiple sectors of the community, from building developers to businesses to tenants and homeowners. City staff engaged the broader public through an online survey and two community meetings. In addition, the City staff engaged with two of the City's boards, the Louisville Sustainability Advisory Board, and the Building Code Board of Appeals, to present code options for feedback. The feedback received from this outreach will support City staff in identifying unforeseen barriers or challenges with new building code policy and will help inform where the opportunity is to drive more efficiency and climate protection in the building code.

City of Louisville Energy Code Update Public Engagement Survey

Survey Methodology

The survey questions were designed with the goal of capturing feedback and assessing support levels for potential code options for the Louisville community, as well as to gain an understanding of the perceived impacts of the code update. This was gathered through a combination of multiple choice and open-ended response questions. The open-ended questions were included to give respondents sufficient opportunity to provide comments. Demographics information was collected to understand what sectors and communities responded to the survey, and which might require additional outreach. Choice logic was used to tailor questions to three main groups: Group 1, Building Owners/Developers, Group 2, Business and Tradespersons, and Group 3, Residential. The survey was designed using SurveyMonkey software and was distributed via publication on the EngageLouisville

website, email listservs, and advertised during the two community meetings. The survey was open from June 27, 2022 to August 5, 2022.

Results of the survey were analyzed to find and remove duplicate responses and to determine whether incomplete responses should be included. Multiple choice question results were summarized and converted into sector-specific charts. Open-ended responses were categorized and summarized.

SURVEY RESULTS

Key Takeaways	
The survey had a total of 206 responses. *Note: the total number of answers per question may vary from the total number of respondents due to incomplete surveys.*	
Nearly ¾ of survey takers were homeowners, with the remaining ¼ representing building owners and industry professionals.	
Generally, survey takers tended to lean toward opposing each of the code policy considerations. However, the number of survey takers who supported each of the code policy considerations was still significant.	
Survey takers perceived the largest barriers to energy code updates to be additional cost burdens and creating a hostile environment for businesses.	
Survey takers saw the largest benefits to energy code updates to be greenhouse gas reductions and public health improvements (i.e., air quality).	
Survey takers expressed themselves in a wide variety of open responses. Some expressed staunch support for code updates, others expressed staunch opposition. A few of these comments are highlighted below.	
Example responses from those opposing the energy code updates:	Example responses from those supporting the energy code updates:
"Louisville is already not attracting new businesses like surrounding communities are. I want a vibrant economy here and I want to help businesses, not create barriers."	"If we work together (industry and government) to GREATLY reduce the GHG emissions of homes and buildings in the Denver metropolitan area, then we have addressed one of the largest sectors of emissions in CO. This would give upcoming generations a foothold to fight the omnipresent climate crisis. We must invest NOW to help future generations, it's not about us."

"Cost. I am supportive of #'s 21-24, but I think the considerations need a very careful approach with financial implications well laid out in either case studies or similar programs in the U.S. Its tough to for a smaller town, like Louisville, to be on the bleeding edge of the change without a City like Denver helping to lead the way."	"Commercial buildings consume large quantities of power - often 24/7. Since they consume large amounts of power, addressing their electricity consumption should have a real benefit from a climate change perspective."
"1) Addressing climate change while promoting economic development is a prime concern. 2) However, many people will not be able to afford the upgrades!"	"While the impacts to the environment are obvious, I think what these codes can represent is the start of a workforce that is trained in building to higher standards. Codes like these are the future of buildings and it has to start somewhere, so let's start that here!"

DEMOGRAPHICS

The survey asked for race/ethnicity, sector represented, and whether the respondent lives and/or works in the City of Louisville.

RACE/ETHNICITY

- White (83%)
- Hispanic or Latino (3%)
- Multiracial or Biracial (2%)
- Native American or Alaskan Native (1%)
- Asian or Pacific Islander (1%).
- The remaining were write-in responses with many failing to specify.

90% of survey respondents live in Louisville and 42% of respondents work in Louisville.

Most survey respondents were homeowners (74%). The breakdown of the remaining sectors is illustrated in Figure 1. Sector selection determined which questions the respondent would receive. Building Owner and Building Developer selectors were placed in the Building Owner/Developer Group. Business Owner / Manager, Energy Efficiency Expert, Engineer, Architect, or Designer, General Contractor, and Other business were placed in the Business and Tradespersons Group. Those who selected Home Owner,

Affordable Housing Representative, or Residential Tenant or Occupant were placed in the Residential Group.

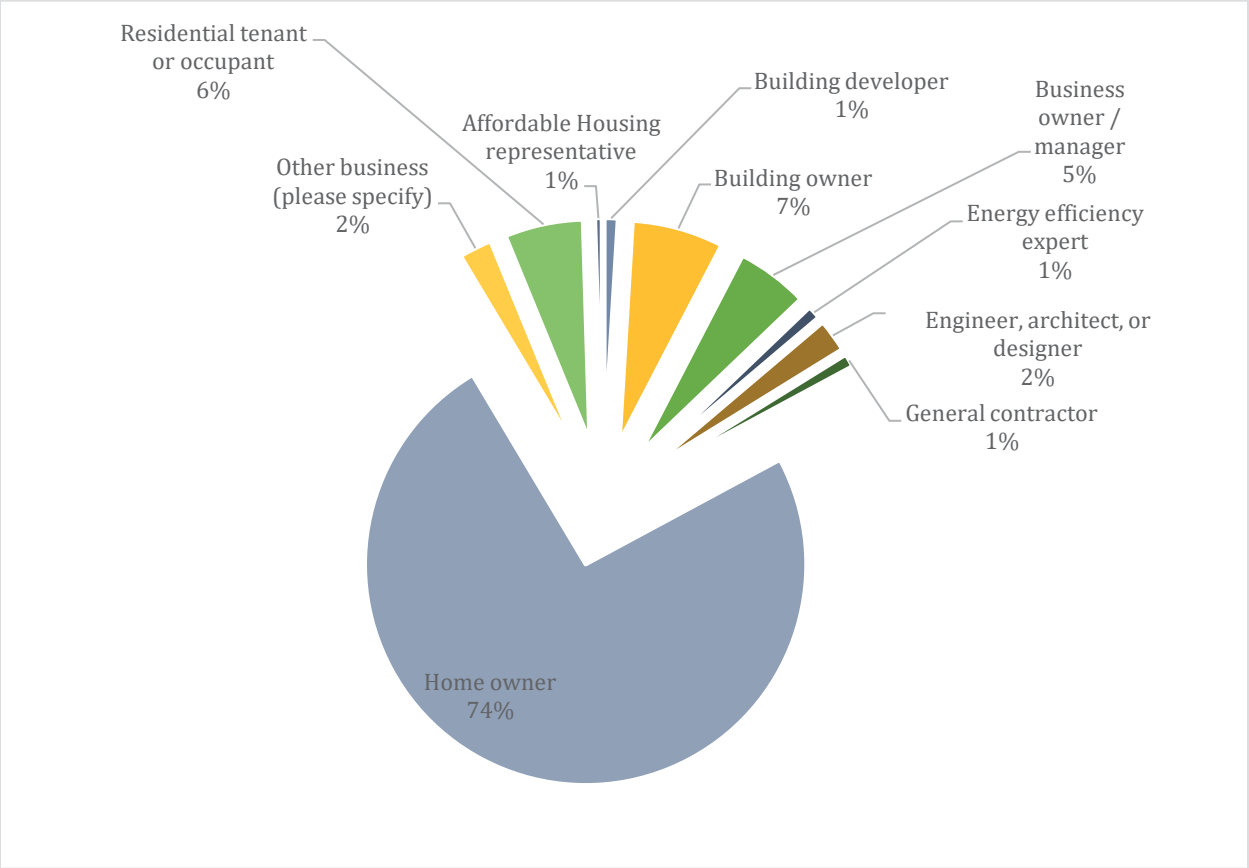


Figure 1: Breakdown of sectors represented in online survey.

Summary of Survey Results from All Groups

Important Considerations for Adopting Code Updates

What's the most important consideration for the City in adopting stricter energy codes for residential and commercial construction?

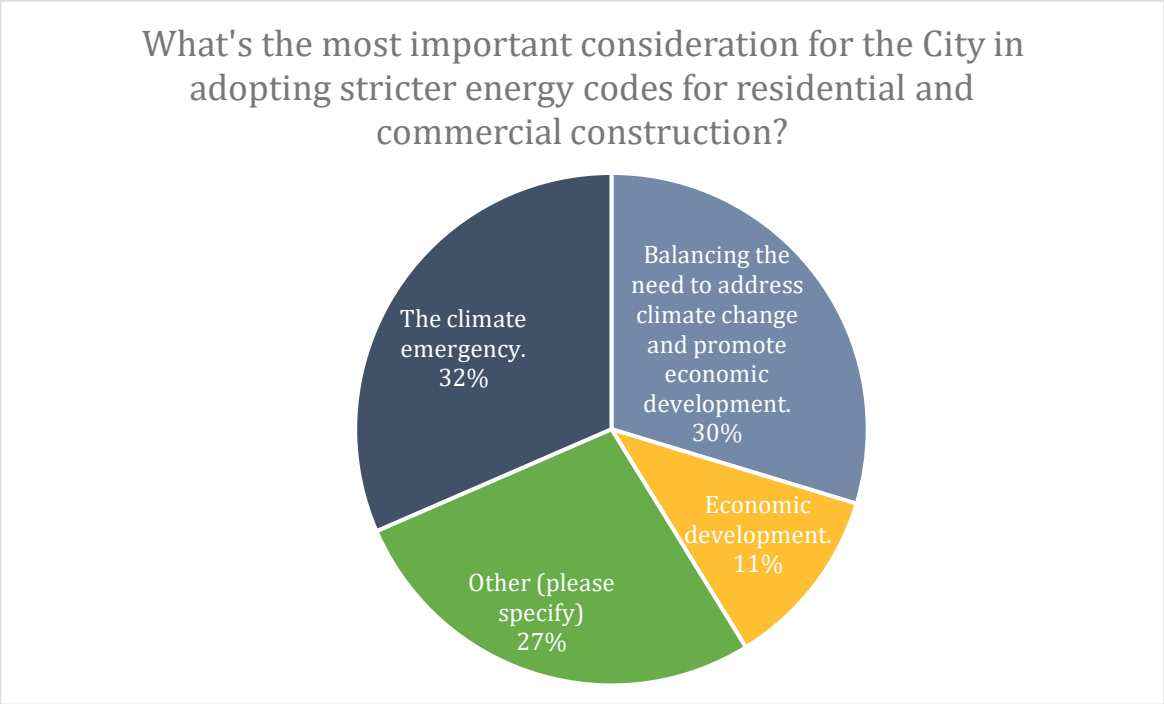


Figure 2: Percentage breakdown of answers for important considerations for stricter energy code.

To evaluate how survey respondents' values may influence their support of code updates or other sustainability measures, the survey asked respondents "What's the most important consideration for the City in adopting stricter energy codes for residential and commercial construction?" See Figure 2 for a breakdown of the results.

'Other' answers included responses expressing the need for cost/benefit analyses, desires for less government interference, and cost concerns. (See Appendix A for open-ended responses.)

Support for Code Considerations

Survey takers were given questions describing potential City code considerations and asked to indicate their level of support via a 3-point Likert scale ranging from opposition to full support, with a fourth answer choice allowing respondents to indicate if they need more information to decide. Results are illustrated in Figures 3-6.

HOW SUPPORTIVE WOULD YOU BE OF INCLUDING A MINIMUM ENERGY OFFSET REQUIREMENT IN ADDITION TO THE 2021 CODE, WHICH WOULD REQUIRE ON-SITE OR OFF-SITE SOLAR?

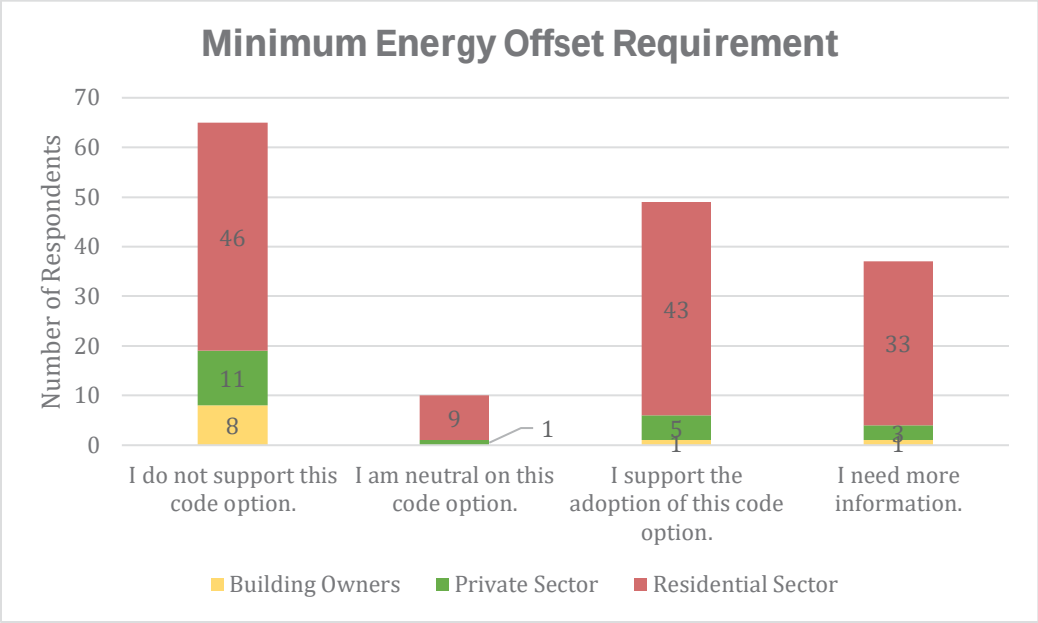


Figure 3: All sector levels of support for Minimum Energy Offset code option.

HOW SUPPORTIVE WOULD YOU BE IF THE CITY WERE TO CONSIDER AN ALL-ELECTRIC REQUIREMENT FOR NEW COMMERCIAL CONSTRUCTION CODE IF INDUSTRIAL PROCESSES WERE EXEMPT?

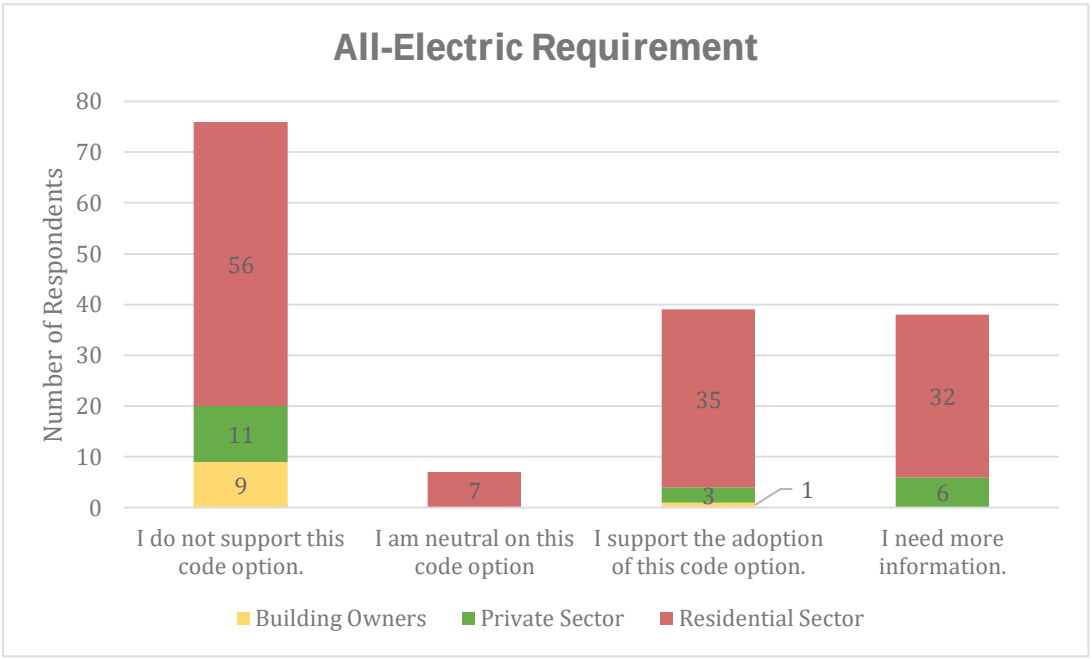


Figure 4: All sector levels of support for All-Electric Requirement code option.

HOW SUPPORTIVE WOULD YOU BE IF THE CITY WERE TO CONSIDER AN ENERGY CODE THAT REQUIRED A 20% REDUCTION IN ENERGY USE FROM THE 2021 ENERGY CODE FOR COMMERCIAL CONSTRUCTION?

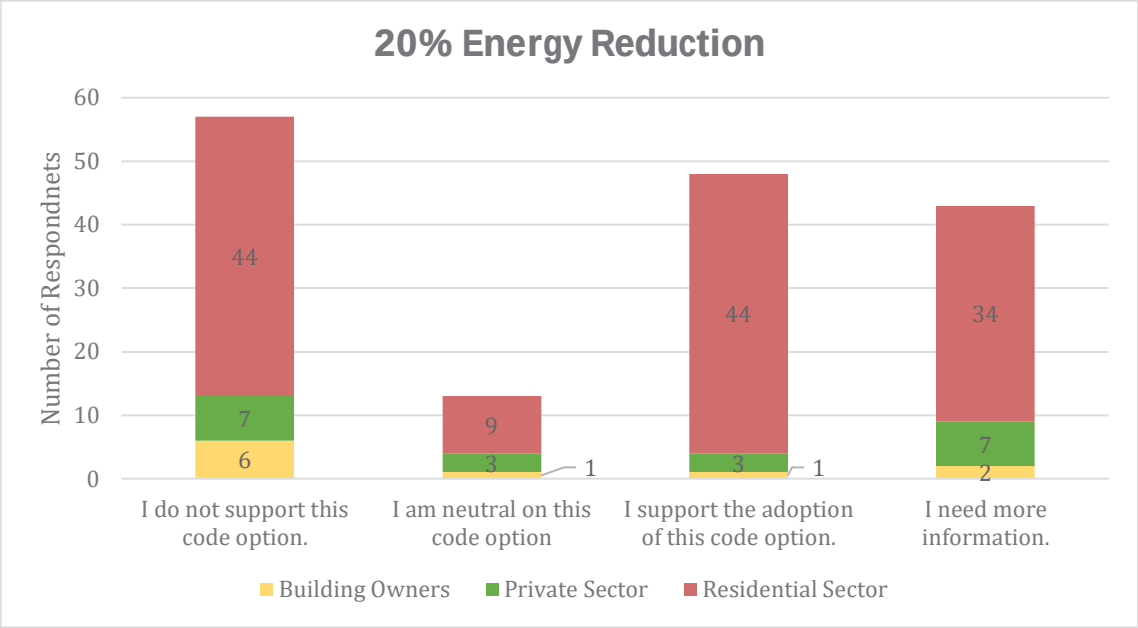


Figure 5: All sector levels of support for 20% Energy Reduction code option.

HOW SUPPORTIVE WOULD YOU BE IF THE CITY WERE TO CONSIDER A COMMERCIAL ENERGY CODE THAT REQUIRED NET ZERO ENERGY THROUGH EFFICIENCY AND ONSITE/OFF-SITE RENEWABLE ENERGY?

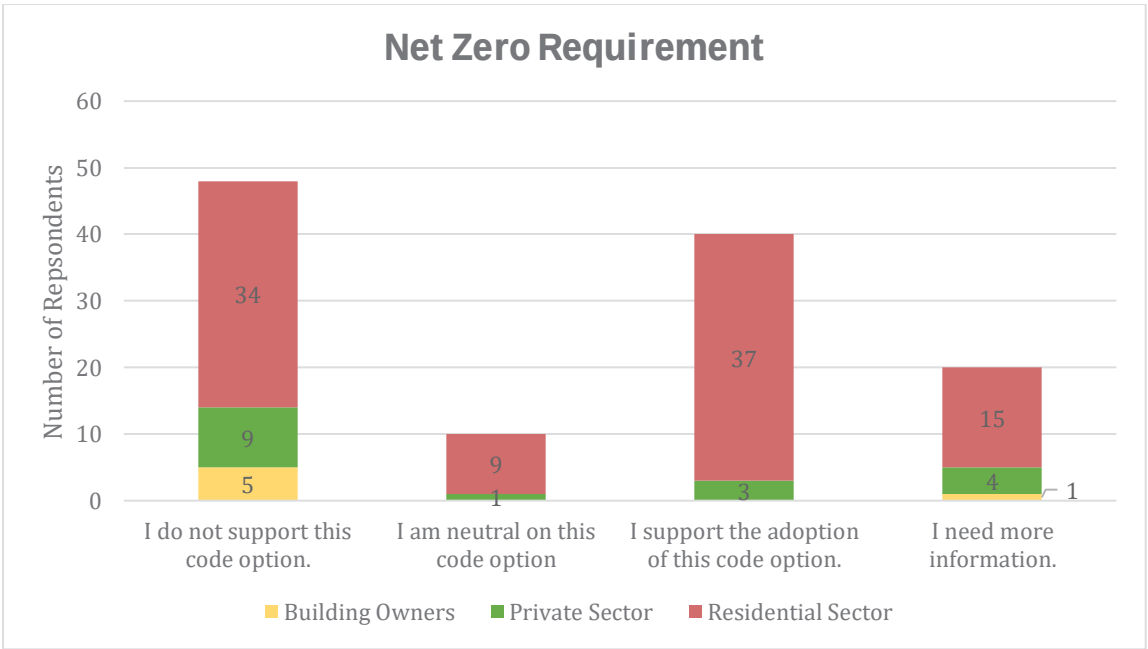


Figure 6: All sector levels of support for Net Zero code option.

Barriers and Benefits

The survey asked open-ended questions to assess what respondents' perceived barriers and benefits were to the code considerations presented to them. The following provides a summary of the open-response comments received in the survey.

Summarized Barriers:

- Cost burdens for builders and tenants alike.
- The code considerations will make the City of Louisville a hostile environment for businesses.
- Residents and builders have a lack of knowledge and education regarding the benefits of code upgrades.

Summarized Benefits:

- Cleaner air.
- Clean energy use and greenhouse gas reductions.
- Increased energy efficiency in buildings.

See Appendix A for a complete list of responses.

Equity Considerations

All participants were asked the open-ended question: "Are there any considerations to address equity for low-income residents or disproportionately impacted communities that the City of Louisville should consider for any of the three commercial code scenarios considered above?"

Common themes resulting from survey responses included:

- Ensuring affordable/inclusionary housing is not unduly burdened by cost because of implementing these energy codes.
- Suggestions that the City provide grants and financial mechanisms for those who qualify.

See Appendix A for a complete list of responses.

Building Owners & Developer Group Responses

The Building Owner / Developer Group had 16 total responses, however, not everyone answered each question.

One survey taker expressed great enthusiasm and support for energy code upgrades. The rest were at the opposite end of the spectrum, showing opposition to all code considerations.

Does your company have sustainability or climate related goals?

5 respondents have started or are fully implementing sustainability/climate goals at their company, while 6 do not have any goals.

Would you prefer energy code requirements that:

- (Performance approach). Set an energy consumption performance target and allow for flexibility in how a building meets that requirement which can include onsite PV if needed to meet the performance target.
- (Performance + prescriptive approach). Set an energy consumption performance target that specifies an efficiency standards for equipment that must be met and requires mandatory PV on all new buildings.

7 building owners selected the performance approach and 3 selected the performance + prescriptive approach.

Support for Code Considerations

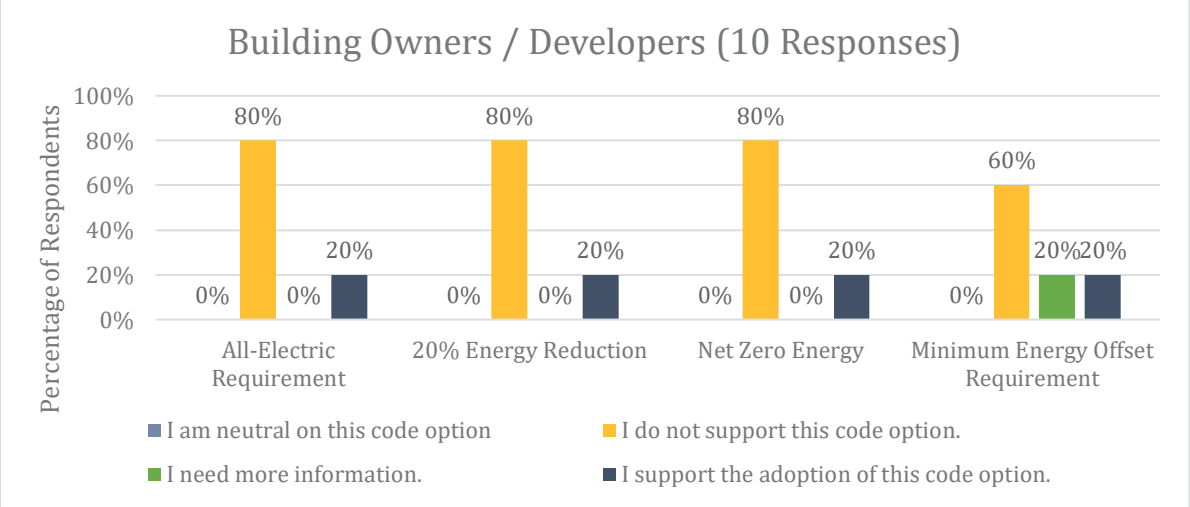


Figure 7: Building Owners / Developers sector levels of support for code options.

Business + Tradespersons Group Responses

The Business + Tradespersons Group had 25 total responses, however, not everyone answered each question.

The survey asked about location of their workspaces.

- 5 own their office/workspace in the City of Louisville.
- 7 rent their office/workspace in the City of Louisville.
- 10 do not have an office/workspace in the City of Louisville.

Does your company have sustainability or climate related goals?

9 respondents do not have sustainability goals, plans, or programs in place. 13 have either begun efforts or have established sustainability plans and/or programs and goals at their company.

Support for Code Considerations

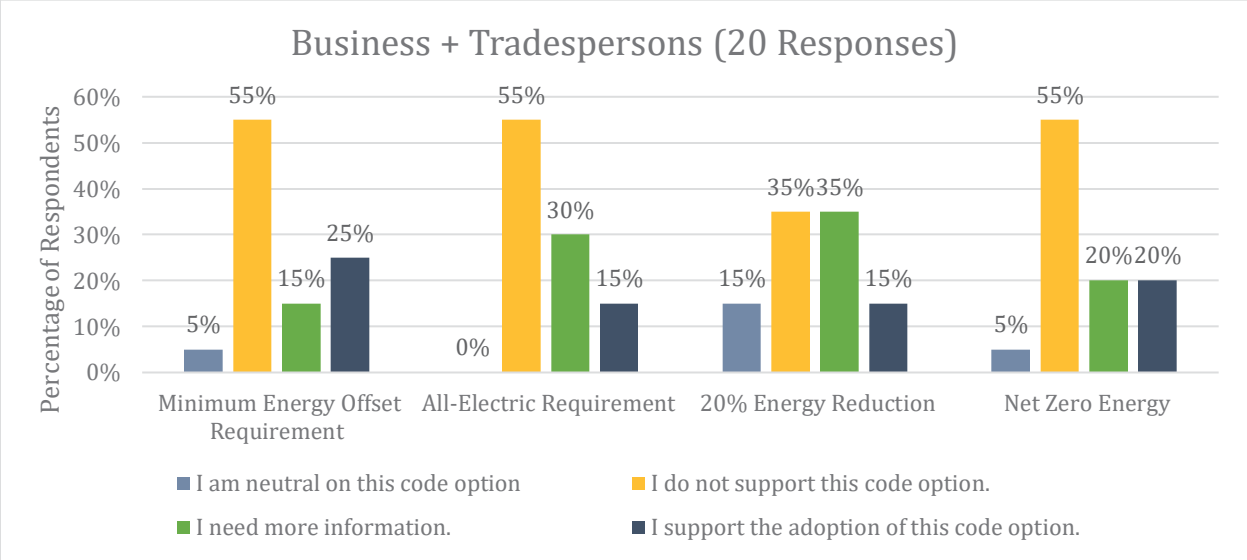


Figure 8: Business + Tradespersons sector levels of support for code options.

Residential Group Responses

The Residential Group had 169 total responses, however, not everyone answered each question.

Outside of the Marshall Fire rebuild efforts, do you plan to build a new home or undergo a major retrofit on your home in the next 1-3 years?

- 31 respondents' homes are part of the Marshall Fire rebuild effort.

- 19 are planning a major retrofit in the next 1-3 years.
- 81 are not planning any major retrofits.

DO YOU CURRENTLY LIVE IN AN ALL-ELECTRIC AND/OR NET ZERO HOME OR HAVE YOU TAKEN STEPS TO START TO ELECTRIFY YOUR HOME?

- 22 respondents are working on electrifying their home.
- 21 are working on making their home net zero.
- 88 are not doing either.

SUPPORT FOR CODE CONSIDERATIONS

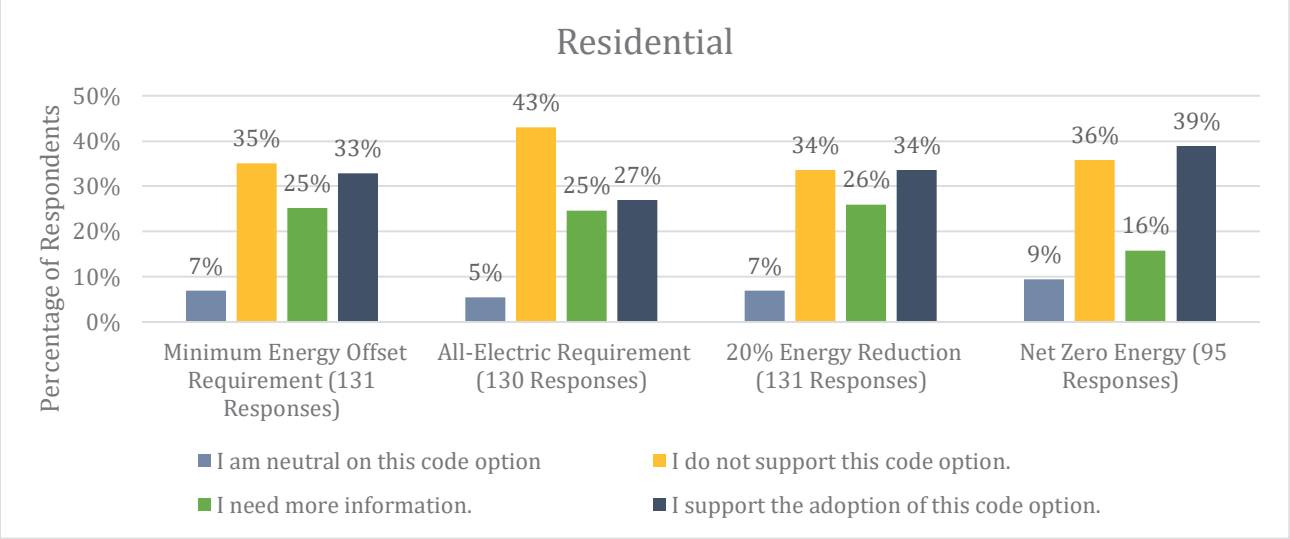


Figure 9: Residential sector levels of support for code options.

Community Meetings

The City of Louisville held two community meetings. The first was June 29th, 2022 from 6:00pm to 8:00pm. The second was July 28th, 2022 from 11:30am to 1:30pm. The meetings were held in open-house format, with a presentation outlining the code modeling and policy considerations, followed by time for participants to ask questions and make comments.

In both meetings, similar concerns to those brought up in the online survey were expressed. Questions and comments included (summarized, not direct quotes):

- Concern that businesses are leaving Louisville.
- Concern about costs imposed by these policy considerations.
- Concern of the electric grid not being able to handle energy code update impacts and Xcel not delivering on their stated renewable energy goals.
- Emphasis on building types that would qualify for exemptions.

- Curiosity and questions about alignment with regional code update efforts.
- A desire for the City to look closely at code for existing buildings.
- Emphasis on pushing energy efficiency before pushing electrification of building systems.
- The City should take its time developing the ordinance, rather than rushing to be a leader in this space. Careful consideration of impacts needs to be made.

Board Meetings

Louisville Sustainability Advisory Board

The energy code update modeling, policy considerations, and preliminary survey results were presented to the Louisville Sustainability Advisory Board (LSAB) Meeting on July 20th, 2022. This was an information session. Throughout the presentation, opportunity was given for board members to comment, as well as the public to give comment during designated public comment periods. Summarized comments and questions included:

- There is a need to push Xcel to implement resiliency measures and redundancy if we are going to electrify our systems.
- How does this project relate to existing buildings?
- Expressed need to emphasize greenhouse gas emissions benefits of the code updates.
- Concern about procuring offsite solar: lack of information available, lack of available offsite solar, and lack of funding to create more offsite solar.
- Exemptions for certain building types from code updates could create a loophole and could hinder Louisville's progress toward sustainability goals.
- How will small businesses be impacted by the code updates?
- There needs to be a scale of options ranging from a code update that is easy, a code update that is balanced, and a code update that is high impact but difficult to implement.

Building Code Board of Appeals

A similar presentation to the one given to LSAB was given to the Louisville Building Code Board of Appeals on July 21st, 2022, also as an information and feedback collection session. Summarized comments and questions included:

- Louisville has limited access to offsite renewable energy.
- Several questions related to the feasibility of limiting commercial energy consumption via Site Energy Use Intensity targets, and how successful City of Boulder's efforts were with energy performance targets.

- Board members sought confirmation that the modeling would apply to building types that exist in the City of Louisville.
- Concern regarding the capability of the electric grid to handle buildings built to stricter commercial energy codes and/or built to be all-electric, and the reliability of Xcel's renewable energy goals.
- Curiosity about other regional code efforts and whether the 2021 IECC has been implemented elsewhere.

Appendix A: Open-ended Responses from Online Survey

**Click the page number in the Table of Contents above to navigate to the open-ended responses for the following questions.*

What is your biggest concern or perceived barrier to the commercial code considerations presented? 15In your opinion, what is the biggest benefit to the commercial code considerations presented? 23Are there any considerations to address equity for low-income residents or disproportionately impacted communities that the City of Louisville should consider for any of the three commercial code scenarios considered above? 33What's the most important consideration for the City in adopting stricter energy codes for residential and commercial construction? 39

WHAT IS YOUR BIGGEST CONCERN OR PERCEIVED BARRIER TO THE COMMERCIAL CODE CONSIDERATIONS PRESENTED?

The impact to current businesses in the market and attracting new businesses as costs to implement such an aggressive code would unfairly impact business - need to be implemented slowly over a long time.
Perception that we cannot afford efficiency improvements and businesses will locate elsewhere.
There needs to be a clear presentation of the cost to builders and potential tenants. Each measure needs a cost and how long it will take to see a return on their investment. In addition what are the incentives for their participation in the plan.
Cost. You put the burden on these companies and they won't build here. That impacts locals who then don't have opportunity to work there. Let the free market do its thing. Companies have to have a good reason to take all the economic risks they do to build. Putting restrictions just makes them go elsewhere.
I think there is a very big loophole for industrial buildings. We need to look more closely at what we could require of industrial builds. I would support natural gas for emergency backup but not for processes.
Cost. We also have quite a few unoccupied buildings
Violation of owners rights to their own property.
The market needs time to process this type of change
Unreasonable cost with no clear benefit Business owners will gk elsewhere
Economic hardships for new businesses
Discouraging busisness development in Louisville.

It may be difficult to guarantee clean-energy sources when weather reduces solar and when commercial operations continue after dark. (Battery storage systems may not be ready to scale up, or may cost too mucy.)
COST vs payback / benefit
I would like to first read comments from the existing commercial business and building owners. We don't want to drive away business. We want to retain and attract business.
We need more businesses in the area. The city will be relying only on homeowners taxes for funding at the rate we are losing businesses.
We need to make the City attractive to potential investors and not become too expensive. That said, Redtail Ridge, because it's an entirely new development at this point, should be held to the highest standards. In addition, I would like to see large parking lots replaced by garages to reduce the amount of pavement and increase natural landscape. Commercial properties need to include charging stations for EVs
Cost and the effect of not considering any balance toward economic development of our city - it's lifeblood.
I am all for lowering emissions and energy efficiency but I believe the cities "net zero" approach is ill advised, expensive and another elitist move that will increase the cost of housing for a minimal real world benefit.
Businesses and developers will fight this tooth and nail
Pushing cost to business owners
Will it keep business away being cost prohibitive?
Cost, added lead time on construction.
Cost
Business leaving and not choosing Louisville to build
Some commercial occupants might have specialized needs that could necessitate gas/ fossil fuels. We will need fossil fuels for decades.
This will increase cost for businesses in Louisville. We have already lost most of our cornerstone businesses to neighboring communities l. This will continue to occur until there are no businesses left if we continue to make it more expensive for them to operate here.
Overreach by the city Government and costs. There is already a huge vacancy of commercial space in Louisville and this would prohibit businesses from moving to Louisville.
Companies will not consider Louisville as viable option for building their business.
Not enough valid, non political info

You are very focused on the wrong thing. There are so many empty buildings in the city... all this will do is raise the construction cost which will raise the rent which means that that we have more buildings to this new code with no value other than sitting empty. There should not be a mandate that should be an option if a developer wants to do it.
Louisville is already driving businesses out.
Fear of costs, fear of regualtions
Ability of small local businesses to absorb costs
Ignorant people
The City already is perceived as business unfriendly.
That it will turn away business from louisville. But we already have so much vacant buildings I am not concerned. They can use those first
Causing businesses to move. Money is the driver for all businesses. Tax incentives, subsidies, or loans may reduce this risk.
Louisville is already not attracting new businesses like surrounding communities are. I want a vibrant economy here and I want to help businesses, not create barriers.
It will make Louisville even less desirable as a place for new commercial buildings.
Inability to recoup costs.
I would be forced out of business
Louisville has already driven large businesses from here, I can't imagine that they will like the new requirement. Why do you think businesses (especially in the building industry) do not want to be in Boulder County and specifically Boulder.
Developers might be entrenched in traditional construction designs and methods
costs, impractical, no impact on climate change
You drive business out of Louisville when you create building requirements that drive the cost of commercial build out so much higher than surrounding cities. We are loosing commerical along the McCaslin corridor left and right. We should be focusing on how to bring companies here rather than giving them another reason to go to Lafayette or Superior.
Think the city needs to focus on sustaining homes and businesses. Not sustainability.
silly government hand outs to companies to reduce their risk to almost negligible for the promise that they'll follow the rules
We believe that it will hurt the economy of Louisville. Costs in construction are at an all time high with the limited supply chain. Adding code that will increase cost will only deter business and residents from moving into Louisville. I also fear that if

businesses need to expand they will look to our neighboring cities that offer lower rent, tax breaks, and less restrictions (lower cost) in construction.
Loss of potential and existing businesses
Potential upfront costs and how that might affect tenants
Increased costs will drive away business
The elimination of businesses using natural gas. This would severely impact many small businesses in Louisville - restaurants, for example.
The city already has an anti-business climate. By issuing more mandates that raise costs it will just drive potential businesses to neighboring communities.
question whether what is considered sustainable today will be supported by facts in the future
Louisville is already seen as being anti-business. Why would we make it harder to attract new businesses?
Cost
A lack of real financial analysis of current cost of future certainty of costs.
Lead times for equipment
Unjustified and will not bring interest to Louisville. These actions will chase more business out.
That the costs will drive businesses away from the city and prevent new businesses from opening.
Driving businesses away. Need to balance the energy requirements with other incentives
Companies wanting to maximize profit.
They are greedy and wanted to do their own way. They will try to bypass this code by saying oh we cannot do this due to lack of technology higher cost or infeasible with current energy needs. Do not give them any incentives because if you do, we the city of Louisville will be on the hook.
Efficiency is great. Will this draw or discourage small businesses? We already have lost many businesses to neighboring communities. Where will the off-sight collectors be placed? What will that do to Open Space? Have long-term health effects been studied? Will more staff need to be hired to regulate and oversee this change? Has research been done to see the actual energy savings?
Business choosing to locate elsewhere
Cost. I am supportive of #'s 21-24, but I think the considerations need a very careful approach with financial implications well laid out in either case studies or similar programs in the U.S. Its tough to for a smaller town, like Louisville, to be on the bleeding edge of the change without a City like Denver helping to lead the way.
Lack of understanding is probably the biggest barrier.

I'd want to know more about upfront costs and whether this was being done in concert with nearby municipalities. I like the requirement to reduce energy use/become more efficient better than any specific code requirement.
N/A, I am unfamiliar with commercial building codes.
I am ignorant of the processes used in commercial buildings that are sufficiently energy intensive to require using gas. That said, I think ASHP or GSHP is the only way to go for both commercial and residential, going forward. If we cannot eliminate gas entirely, we should strive to significantly reduce it where ever possible. Heat Pump technology is sufficiently advanced that heating and cooling can use it effectively. Same for Water heating. In Commercial environments, the time horizons are longer (then some residential), so ROI should be easily achievable.
The fact that there is a lot of commercial tenants moving out of Louisville recently - Kohls, Lowes, Sams Club, etc
If the building envelope is not enhanced even beyond what is proposed. The biggest energy losses in buildings is through a lack of air tightness, then lack of glazing performance and then thermal performance. All three of these areas should be addressed before electrification. By reducing energy loads HVAC and ventilation equipment can be properly sized to meet the lower energy demand and offset costs would be much smaller and easier to manage financially.
Louisville is already business hostile. Look at all the stores leaving town of all sizes. The last thing we need is another barrier.
Just electric requirements aren't enough, we need to be sure that all energy in from renewable sources
Same as residential - lack of contractors with experience
Until the industry knows how to do this, it would likely leave us stuck with old, inefficient buildings for a long time.
Louisville continues do drive businesses out of town. This will accelerate the trend.
Reduction in number of companies wanting to build in Louisville, which means higher costs for new home owners.N/
General opinion: Corporations will always resist increased financial of their operations, regardless of the impact on the environment.
cost
Reduces business opportunities in the city. Drives businesses to surrounding cities.
Top down approach is not good.
I wonder what the specific downsides to this would be.
Too restrictive

Big concern is if higher construction costs will make Louisville less desirable for future commercial growth.
Cost, heavy-handed mandate
Disproportionate impact on small local businesses, who already have a hard time getting off the ground relative to national chains.
businesses moving out elsewhere…
Expense and reduced demand for businesses to locate in Louisville due to cost (energy and rent)
Cost to businesses that could deter them from investment in Louisville.
I need to understand the cost impacts and the impact on businesses deciding to reside in Louisville. What is the balance 'goal' to increase businesses in Louisville especially since our town hasn't had any noticeable growth in years. Especially in the McCaslin corridor. We are falling behind our neighboring towns. If it is now or in the future a result of too many regulations or cost similar to Boulder then it is an economic issue for the town and its tax paying residents that have to pick up the revenue shortage.
Massive extra cost, making the business uncompetitive. Better to operate outside Louisville
I worry that the same thing that happened with the residential code will happen with the commercial code: builders convincing people/companies that it can't be done, or can't be done affordably. Perhaps incentives for builders to get training for building to new standards could help with that (I believe EMU Systems is doing something like this).
Cost
It is none of government's business. You have enough trouble doing what you ARE supposed to do.
State wide adoption and regional cooperation.
People don't want to have to pay more, despite the climate crisis.
Incentivizing companies to go down this path
Added cost for no benefit.
Cost and efficiency for the company
Need more info
Companies will relocate to a cheaper city.
If it's too expensive to operate a business here they will go elsewhere.
It might deter new businesses coming into the city.
Cost
Businesses in Louisville cannot afford to convert to electric. It's best for restaurants to remain on gas. That's how good is made.

Ability for our tenants to operate their businesses.
They would hamstring an already suffering business community and will drive potential new businesses to surrounding communities.
Louisville has already become a more business-hostile environment, and we have a lot of empty commercial space that needs to be addressed. I'd hope the city would pay more attention to fixing this issue instead of possibly making it even more difficult to do business in Louisville.
Businesses will look elsewhere to build. City Council of Louisville would appear to be anti-business.
This will backfire by encouraging businesses to claim false exemptions and go outside the permitting process in order to get their projects completed and online. This will result in a less efficient product then leaving the current code as-is. (Again I'm not even going into the bigger economic risks of being so far ahead of the pack, energy wise)
companies would elect not to be in Louisville
Upfront costs, willingness of commercial businesses to adopt
cost
Cost
Cost of doing business becomes too high; the code is implemented without staging and/or enough advance warning.
No!
Lots of technical details in these code questions. Is the technology realistically available to be aggressive in the commercial code? Much of the commercial buildings are already built. How will these buildings be included in the commercial code? This needs to be considered now. If the new code requirements only apply to new commercial construction, it will be a "feel good" action that doesn't accomplish much except make new commercial impractical.
I think there are others with legitimate needs for gas during the transition to 100% electric . For example, a hospital needs a way to generate power for patients hooked up to oxygen and other life saving equipment. Similarly, people with certain medical conditions may have the legitimate needs. I don't know.
No flexiblity.
Louisville has a lot of empty commercial buildings today. Why would a company whose goal is to make money and stay in business want to pay extra to build or pay extra for monthly bills. Maybe put more effort into water conservation and bringing businesses back to our community

That commercial interests will find a way to get less stringent codes than the residents are required to meet, resulting in the smallest burden being placed on those with the most amount of money.
The cost that will be past down to the buy of goods. There is no free, taxes and fees must be passed on. Everyone is living pay check to pay check, City needs to figure out how to reduce fees and taxes so business come in and pay property tax.
cost to the business; property taxes are already too high
I'm sure they are also concerned about the upfront costs and payback period
May drive business away
Businesses not wanting to do business in Louisville
I have lived in Louisville for 37 years. I have watched Superior, Broomfield, Lafayette and even Erie grow their commercial presence while Louisville continues to lose both retail and non-retail (with the exception fo the Colorado Tech Center). Adding cost burdens that make building -- and operating a business, since those costs have to be passed on to the tenants -- in Louisville even less competitive does not seem like a smart thing to do right now.
Cost, short term
It may drive some wharehouse and pot greenghouse operations outside of the code affected areas (boo-hoo to that) and it may require increases in electrical generation capabilities that would require additional peaker natural gas turbines until alternative electric supplie comes online. In other words it could be short term disruptive to lectrical energy capacity if a large amount of natural gas heating capacity were suddenly required to be all electric resitive heaters. Best to pay outside consultants to model these complex issues before adopting potentially disruptive new codes.
The significant increase in cost to businesses who would move to a more energy friendly city. Louisville could lose a lot of business by these plans.
That the wrong actions are being mandated to really improve our community environment. We have bad air all too often. Minimize commuting. Maximize use of public transportation to enter and leave our business community corridors. Not allowing large commuting populations nor businesses utilizing such into our community. Not allowing any more green spaces to be covered with concrete and asphalt. Having rigidly strict emission standards and elimination of diesel vehicles in our community. Having a zero tolerance and high penalties and fines for idling diesel trucks and vehicles unnecessarily in our community. Encouraging all existing businesses to develop solar panels on their large roof expenses as well as encouraging the same for residents. Creating for provisions that replace solar panels after hail events without having the residents have to pay out of pocket

removal and reinstallation fees. Do not let Xcel energy limit the amount of solar production per resident or per business we should be able to produce all that we want and contribute it to the grid without penalties from Excel energy.
Uncertain; need more information
net zero energy should be mandatory
It could discourage commercial development
None because I believe it will help keep out some of the worst area developers
Additional cost and pollution required by current means of production, which means dirty fuels to produce the amount of electricity you propose.
Driving business away from Louisville
availability of contractors with sufficient expertise
commercial buildings have too many complications. unlike residential, the users are often not the owners. sometimes there are multiple users within on energy meter.

IN YOUR OPINION, WHAT IS THE BIGGEST BENEFIT TO THE COMMERCIAL CODE CONSIDERATIONS PRESENTED?

none, based on the current requirement - it is not feasible with today's technology and can't be afforded.
Climate change action.
If done with attention to detail, it will reduce green house gas emissions. But we need to pay attention to the bottom line. We need to find ways to attract and promote those businesses that are climate change conscious. Offer them ongoing incentives and showcase them as leaders meeting the stated goals.
none. if and when it becomes feasible to build in this way, then companies will naturally do so when the technology is available at affordable costs.
It will be a great foundation for the future--let's not work incrementally on these codes, it's important to get this done.
Way less emissions
Not sure I see a benefit
This could lead to a large drop in carbon-based energy use in the energy-intensive commercial sector.
The 2021 codes continues to improve the energy usage of commercial buildings and is broadly understood and interpreted.
More efficient use of power
Cleaner air
Addressing climate change

Making some individual's in the city management feel like they are saving the world. Unfortunately they are shifting the financial impact to residents.
Reducing Louisville's carbon footprint
Environmental impacts, forward thinking community
I don't see a benefit for businesses.
Energy efficiency
Meeting the agenda of the city is all it's benefiting
Smaller footprint
There are none you are breaking our community.
Climate change impacts
I see no benefit at all
Future of the planet
Environmental impact
The environment, not worrying about the environment being able to support my future possible children
sustainability
Clean energy use. Lower carbon emissions
Be responsible beyond an individual's $.
None
Climate
We have to make these changes but it must provide resilient solutions, particularly in the face of climate change, I am particularly interested in subsidies for on-site or community solar solutions. If the grid has challenges, our proposals should provide resilient solutions.
Investing in the community where your business resides
Virtue signaling.
Commercial buildings likely have a much larger environmental footprint than residential buildings
I think it is a detractor and one of the reasons I sold my business in town.
encouraging companies to blend in with the culture of energy independence
It has the potential to save energy.
Non. I guess the council and mayor can feel like they have made a difference.. when in fact the city is becoming blighted (business). Maybe more efforts should be placed on business retention and promotion for new businesses
Savings in the long-run, plus client support due to the energy saving practices
No benefit, companies will select options that meet their needs at a reasonable cost.

While I'm all for doing all we can to lessen the impact buildings have on the environment, the main cause of global warming is vehicle exhaust. Why is the city not addressing this, rather than considering a code that might severely impact small businesses while failing to address the major causes of global warming.
Marginal impacts on overall climate
energy savings, but the savings must offset actual cost in a reasonable amount of time (5 years)
Don't see one
Incremental improvements are good if done in a more thoughtful way in cooperation with businesses and property owners. Louisville is no longer friendly to homeowers or businesses. This proposal makes that worse.
We have to get to decarbonized buildings & policy is the only way it will happen.
There are none that would justify these actions.
Better energy efficiency for new structures.
It is necessary.
The energy saving being cost effective in both short and long terms.
Saving our planet
Building better buildings.
These proposals sound good in theory. Educating Louisville residents and businesses about what these all mean and how you decided on them would be great. For example, I'm wondering why a 20% reduction? Why not more?
Reduction in overall emissions of GHGs.
N/A, I am unfamiliar with commercial building codes.
N/A for this question. However, perhaps a consideration for luring commercial customers - if they perceive the cost of building too high, they may take a pass on Louisville. They would need to be shown when the ROI is realized.
Stringency. You presented the proposals at a high level (20% reduction, net zero) but there is a lot of information still needed to make any kind of decision on the proposal at this time. How compliance is shown and differences based on building types and end-use.
Creating the conversation around what it means to be energy efficient.
Using renewable energy sources!
A livable planet
Until the industry knows how to do this, it would likely leave us stuck with old, inefficient buildings for a long time.
Should free up parking with lots of empty parking lots.
Need more information
pretty questionable as to any benefit

Makes city leadership appear effective
Let businesses decide for themselves.
lower energy costs and help towards reducing the effects of climate change
Too restrictive
This will reduce the carbon footprint for new-construction commercial properties.
Reducing reliance on fossil fuels and their emissions.
none at this moment
Insulation improvement is ok.
Impact on climate change
I'm all for residential and commercial to build to the latest standards but need to balance against cost and the ability to meet those requirements as they are a moving target (trained installers, rebates, etc)
While the impacts to the environment are obvious, I think what these codes can represent is the start of a workforce that is trained in building to higher standards. Codes like these are the future of buildings and it has to start somewhere, so let's start that here!
If we work together (industry and government) to GREATLY reduce the GHG emissions of homes and buildings in the Denver metropolitan area, then we have addressed one of the largest sectors of emissions in CO. This would give upcoming generations a foothold to fight the omnipresent climate crisis. We must invest NOW to help future generations, it's not about us.
They will help combat global warming and benefit the environment.
Less energy usage, more sustainability
There are none. Again, add incentives for different areas you want to increase.
Unsure, one community is a start but unless the world changes, not sure there is a benefit to justify forcing the cost on business since there are empty buildings here already
Need more info
Greatly reducing or eliminating direct fossil fuel consumption.
Benefit to the climate and setting an example to other communities of what is possible.
Some energy savings
Better for the environment
Zero
The general idea of being more energy efficient.
There would be a marginal benefit to the environment but without wide geographic support, it would be drop in the bucket at the expense of the local business community.

Increased energy efficiency is a really good thing, but it cannot be so expensive that it makes Louisville too expensive a place to do business.
none
Please don't lump me into the "Non-Environmentalist" category, but the answer is none. I think the current IECC without the additional code considerations will make more of an impact than adding additional modifications because you will have greater compliance.
There is no benefit
Environmental impact / Sustainability
Long term benefits
environmental
Climate
Climate change
If they actually have a positive environmental effect, that's good. But I'm concerned that this is just greenwashing.
Nothing!
Addresses climate change. But there are many options to accomplish this including better site design and addressing urban heat island effects. Why were mature trees removed from former Sam's Club parking lot? Actions like these also affect the energy use of existing buildings.
It will make surrounding cities more attractive for commercial investment. That's a benefit, right?
Commercial building consume large quantities of power - often 24/7. Since they consume large amounts of power, addressing their electricity consumption should have a real benefit from a climate change perspective.
Some kind of offset.
Solar is a good option for everyone to help offset carbon at least in the summer with a/c running via electricity. Won't help alot in the winter.
It'll save our planet and keep our home livable.
Business will just go to other places to setup business.
environment
I wonder if there could be a way to requiring commercial entities greater than a certain size to adopt stricter codes. Offer incentives for smaller sized businesses?
Image/marketing
A cleaner environment and help to balance who has to follow the codes
Same as residential... climate friendly, and -- not including the amortized cost of building to the new codes -- potentially less expensive to operate.

Even more important for longer term commercial buildings - should invest the money upfront for longer term payback.
Adopting new all electric codes would potentailly drive out low ccost industry and help a more expensive office and high tech client driven workspace. It would force developers to seek a higher paying end user rather than low cost warehouse space tenants that would likely site their operations along the I25 corridor.
We need to make sure businesses are not causing further environmental harm to our community or our world.
None
You are missing the point when you allow large expanses of concrete and asphalt to be installed, when you allow thousands of cars to enter and leave and traverse the community, when you are not limiting the types of emissions a vehicle such as diesel vehicles and not encouraging more electric vehicles, when you allow Xcel energy to limit the amount of solar production and not reimburse anyone who super produces power, when you don't even consider developing a solar farm in our community but rather have thousands of vehicles bringing in pollution and covering up green space with heat producing buildings in parking lots.
Uncertain; need more information
net zero energy should be mandatory
Climate impact reduction
Louisville will finally be taking real steps to address the global climate emergency
Not at this time. Look into the future with your crystal ball and see when we can have "clean electricity production".
Making sure that the upgrades can be achieved through cost savings that the city can bring.
reduction in greenhouse gas emissions
Louisville would feel good when meeting with other local communities.

What HVAC systems, process loads, other appliances, or specific building types do you think would need to be exempted from the commercial code options presented? (The rationale for exemptions could be prohibitively higher cost to operate, infeasible with current energy needs, technology does not exist, etc.)

all retail and industrial uses need to be exempt - maybe office building is a place to start with it occurring over a long timeframe.
Backup storage and generation where technology is emerging.
Where ever there is a trade off in the profit margin that can not be justified by incentives or tax breaks.

All
I think we need to be careful about making exemptions--with the rate that technology is progressing, it is extremely likely that more accessible paths toward a more stringent commercial code. I don't agree with exempting industrial from the commercial codes in a blanket fashion. Also there needs to be a way to update the requirements as new technology becomes available.
The policy should not be enacted.
Not sure at this point
I don't support the requirement for full electrification for businesses.
Industry specific would be things related to food production. I am sure their are many more industry specific needs for the use of gas.
Tax subsidies, perhaps at the Federal level, to encourage self-sufficiency with solar and newer technologies
This is way too technical a question to pose to residents. Come on.
There should not be exemptions, the law should not have prohibitively higher costs for any resident or business and absolutely should not be based on technology that does not exist.
Heat for industrial processes - no electrical options for some, excessive cost, lower reliability.
I don't know enough about this to offer any informed comment.
We should not adopt this code!
All of them. Let the owner decide.
All should be exempted. Costs in reality are always prohibited. Costs in your studies are always lower than actual. You need to present a realistic costs not just from advocates for net zero.
Backup heat sources for very low temp and emergency backup to electrical heat.
Don't know
Manufacturing, R&D, small business in non-tech sectors
Cooking, industrial uses, backup power.
coffee roasters
ALL of them - this needs to be optional
I don't feel qualified to respond
For new commercial spaces, there should be NO exemptions. All new commercial businesses should adhere to a net zero energy code.
there should be no exemptions based solely on the code affecting the company's profit. that is, if being all electric means their profits are 50% less than if they used gas, that is not a good enough reason for the exemption. i.e., if they are profitable,

but will be more profitable with the exemption, then that would not realize the benefit the code is trying to achieve
Without gas it would be impossible for a restaurant to operate. Electric equipment is nearly double the cost of gas.
the commercial codes are burdensome
Gas fired cooking equipment (restaurants), gas fired boil kettles (breweries), etc. Disallowing the use of natural gas would be infeasible and prohibitively costly to achieve for many small businesses in Louisville.
system requirements that are more stringent than the prevailing local codes in the State of Colorado
I do not support the proposed requirements in any form
Acute healthcare (like new Avista Buildings)
All
Older and historic structures, restaurants and breweries (all use gas appliances).
None, they can afford the requirement changes and should follow the commercial code to the "T". it is not fair to give them exemptions and while we the residents have to suffer.
Are there enough choices in all electric HVAC systems to make this reasonable?
All of the above
Hot water heating, which is currently more difficult through an air-source heat pump due to the larger scale of hot water use in Commercial buildings. Historic Preservation projects should be exempt on some level.
Again, I'd rather see a requirement to build to reduce energy use and emissions to a defined lower level than a requirement to use/not use any particular appliance or technology.
N/A, I am unfamiliar with commercial building codes.
HVAC and water: I think all electric should be used here. Stove: induction has been shown to be a good alternative by chefs, though it takes some getting used to. N/A for other areas. If you leave it to the builder or client to figure out how to be successful, it may not happen. I suggest having some strategies already worked out and available for builders/clients to review/modify.
Not my expertise so cannot say with any kind of knowledge base. I imagine cooking equipment would be one type of equipment. As for HVAC, that can easily be electrified with cold climate heat pump technology.
Frankly, I don't think any building type or industry should be exempt. There are examples all over the world of rec centers, Hostipal, manufacturing buildings, restaurants, etc. already using significantly less energy
None

The city should allow enough gas heat to keep vacant buildings from freezing up in the winter.
All of the above.
Need more information
Business that use natural gas as part of their product or services delivered
I don't recommend adopting the codes in the first place.
I don't know how to answer this question.
As with residential, make these code changes optional vs. mandatory
all of them; make it a choice
RTUs, water heaters, stove.
I don't have enough background to make an informed opinion on this.
ALL
I'm not sure I know enough about commercial building sciences to answer this question at the moment.
technology does not exist
all should be exempt
Let's obtain grants to help industry have the MOST efficient and low GHG emission options available to them! This is essential!
I'm not familiar enough with these to comment.
depends on the type of building
Commercial HVAC
Need more info
Restaurants
not sure
New builds and restaurants
Warehouse heaters, processing/production equipment, water heaters.
I think it is premature to adopt this code so exemptions become irrelevant.
High costs.
It is already clear that restaurants can't operate. Any electric heat pump systems are too high of a risk. I have not had any projects that were striving to be close to net zero have their mechanical systems in place for very long because they are such un-tested technology. The waste in removing and disposing those systems when the next generation comes along simply negates any perceived benefit.
Not sure
don't know
Non profits, depends on type of business.
Let us build what we want! Stop controlling us!

All of them. This is all pointless and stupid.
Hospitals would need flexibility.
Furnace
Heating. There is not enough electrical power nor the infrastructure to support the load. It will take 50 years to provide the power and infrastructure to support all electric. Batteries and not here yet so extra solar energy can't be stored for night usage. City should be listening to electrical engineers that understand the real physics of going all electric. I had a hybrid and the batteries were almost gone in 7 years.
ones that make cost prohibitive
Higher operating costs
Don't know enough to weigh in on this.
None - there are biofuel based fireplaces in lieu of gas and with homes becoming substantially more efficient who needs to burn a precious resource for ambience
Obvious potential exemptions for many existing businesses who have insufficient insulatinion to afford an all electric forced air heating system. Natural gas direct vent heaters are also extremely efficient as 100 percent of the heat from natural gas combustion is forced into the building airspace but at the expense of air qaulity and worker pulmonary health. Buildigs that use DV forced air heaters often run with open rollup doors in wintertime and have almost no insulation in a metal framed and sided warehouse structure.
All electric will significantly increase the cost for doing business in Louisville. Even if all lights are LED, higher insulation requirements, etc.
Do not allow Excel energy to limit solar panel production on any warehouse or building. You're missing the problem you're using the wrong solutions and so many of your standards that you're trying to adopt. You are destroying the community by allowing a super large development for business and commuting. You are making solar intolerable with Exel energy limits and standards. A lot of these standards seem to be a smoke screen for bigger problems and that is what is so upsetting to this business oriented person. Why do you let the big guy destroy our environment and expect all of us small guys to do some minuscule and expensive compensation. The big climate change pollution elephant in the corner is your big Red Tail ridge Project.
Uncertain; need more information
no exemptions, please
None
See above.
None, Exempt them all!

retail, restaurant, industrial, and office. easier to implement on hospitality, event space, big box retail,

ARE THERE ANY CONSIDERATIONS TO ADDRESS EQUITY FOR LOW-INCOME RESIDENTS OR DISPROPORTIONATELY IMPACTED COMMUNITIES THAT THE CITY OF LOUISVILLE SHOULD CONSIDER FOR ANY OF THE THREE COMMERCIAL CODE SCENARIOS CONSIDERED ABOVE?

don't understand the question
Low income housing when residents are faced with rent increases.
Address the issues through small business loans and grants. Provide consulting services to assist with application of the best solution for their business need.
Yeah…don't increase cost and make it even harder to live here or hav a business here
There's a tradeoff between higher building costs now and lower energy costs over time. I don't think we should modify the code to help with affordability. we need to require 30% affordable housing in new builds. that's a better way to take care of this.
Construction prices will increase and low income families will be less likely to live in Louisville.
There needs to be an option in this area
I don't support the requirement for full electrification for businesses.
Apply tiered rates that are low for low-income residents--these would be offset by higher rates for heavier users of energy (e.g., large homes).
No additional subsidies of politically chosen groups should not be increased due to the additional requirements placed by the City, the City should first exempt them.
Affordable housing needs to include standards for energy efficiency to reduce the level of HVAC needs, plus subsidies, as appropriate
Certainly - when I hear city council talk about affordable housing, but then consider cliff legislation on net zero, the former comes off purely as a political, hollow gesture a la the CAC.
Yes, stop with the elitist environmental laws that hurt low income residents and place unnecessary burden on higher income families by covering those costs through additional fees and taxes.
I imagine there would be
You shouldn't force this on anyone
Providing grants/scholarships for businesses of low-income residents in order for them to comply with new standards and allow them to remain valuable productive members of our community.

Again I don't know.
If we lose all of our businesses the entire tax burden for our community will need to be supported by the remaking residents including the low income residents
No, you should not even be considering this change.
Low income is relative! It's very expensive to live here even if you are middle class
We are being pushed out of our community by all these extra mandates that end up costing me a lot more money. My family is a fourth generation in this community and it's sad to see mandates pushing us out
Yes, allowing for rebates and incentives. Both UPFRONT and post building
City/county needs to build affordable housing following all these environment code
Care for them with full explanation of their long term work and needs. They need to meet our new codes.
Absolutely! Please make decisions that don't hurt people financially.
Yes, lower income demographic always bears the brunt. Subsidies and grants may be an option.
grants, incentives, financing
What low-income residents? The City has long since driven them out of town with prohibitive costs and burdensome regulations.
All of this makes it harder to provide low-income housing. Allow increased density.
If you force me out of business I expect to be compensated. You approved this equipment in 2019
Construction incentives, and awareness of any exemptions that disproportionately impact certain communities
louisville appears fairly uniform with respect to race/economics except for artificial affordable housing occupants
Yes, especially for low to middle income families rebuilding after the fire.
government assistance for people not for companies. not sure if that makes sense, but the government is of the people, by the people, and for the people. any code should more greatly affect / benefit the people before _any_ company's profits. Not saying revenue … profits.
Equity for low income. What a joke of a question. What low income resident can come to or even live in Louisville at this time?
This may be too off-topic to this code, but make sure that all low-income housing is required to to provide recycling AND composting for all residents.
Consideration should be made for any person living, working, or doing business in Louisville as to the feasibility and reality of requiring something that could both cost and impact these people in a very negative way. Consideration should also

be given for the economic impact of these codes and how the city could lessen that impact. Making a code requirement like this may be noble and desirous, but there needs to be a balance.
No - if the city recognizes there is an impact then it should waive that impact for everyone.
No. If you adopt them, everyone should have to pay the cost.
Yes. Provide support for non-profit groups and low-income renters.
A fund to provide onsite/ offsite solar.
Yes, these groups should be considered for all scenarios or it will significantly reduce diversity in an already minimally diverse area.
How to lower the cost of entry for low income residents.
It is in the Xcel rebates for leap, Xcel should provide more options for those who are living low income/impacted communities.
Are you creating a system that automatically needs to be subsidized? How difficult is it to apply and receive subsidies? Will this eliminate or reduce businesses owned by those for whom English is a second language? Are you willing to burden your citizens even more than the current rates?
No. Upfront costs will be paid for in energy savings
Incentivize inclusionary housing projects to reach certain levels of energy efficiency or energy independence with their projects.
I don't know.
Yes, criteria for considering equity and providing the subsidies or exemptions to achieve equity should be built into any ordinance.
N/A, I am unfamiliar with commercial building codes.
Absolutely - I think the only way to address this is through grants or some kind of funding from the city
Again, it is actually easier to make multi family homes more energy efficient than stand along buildings. If anything affordable housing should be held to a higher standard. It has greater long term benefits for the occupants than typical code built structures.
Set and meet these code requirements for everyone. Be sure to confer with these communities for the best solutions to meet their needs. Low-income residents and disproportionately impacted communities should be eligible for city grants to meet this code, we must invest in these communities.
Louisville is virtually uniformly white, so not really relevant
There should be free community solar and subsidized retrofits available for low incomes

The city should hire staff to pretend to care about low income residents. Boulder has used this scam for decades.
Low income residents would have a difficult time living in Louisville because the cost of living here is becoming prohibitive for lower and middle class residents.
Need more information
Don’t raise costs for any residents or businesses
I don't recommend adopting the codes in the first place.
Yes, I wonder how all of these changes affect the poor. Are these changes that only the wealthy can handle? Does this make this area even less affordable? How does this affect diversity and equality?
Yes, there should be income-based subsidies rather than exemptions. Poorer communities of color are disproportionately affected by dirty air, water, and other environmental issues, yet we are all part of their cause. We should prioritize community-wide change toward electrification, and support those who cannot afford it with subsidies.
for all residents!
Energy costs will be higher.
Just concerns about cost impacts.
DO NOT negatively impact any of the residents
Yeah, they shouldn't have to pay a dime of it. Tax the rich. :)
Yes, white people need to pay a privileged levy that pays the difference for all new buildings to meet the new codes and not the business themselves.
Only if they are not paying for it.
Yes, low income residents should get the most support. Education, funding, and follow through from local government and industry should center those most impacted. Grants should be centered on supporting these communities FIRST!
Perhaps give them subsidies.
I'm not familiar with good solutions. I recently learned of bonds like https://nlihc.org/resource/field-atlanta-passes-homeless-opportunity-bond and https://ballotpedia.org/California_Proposition_84,_Housing_and_Homeless_Bond_Measure_(1988)
We need to build low-income housing and subsidize energy bill costs for low-income residents.
There should be.
No.
Yes.
The city already doesn't have a balanced budget so to damage the business community - a major revenue source for the city - and then try to come up with

the money to make up for the damage is a downward spiral. The correct approach is to build the business community up first and then look at code updates when the community can absorb them.
No. The CC needs to help the Marshall Fire rebuild victims first before addressing "equity" of commercial builds for low-income residents or disproportionately impacted communities.
You cannot have this conversation and have a conversation about equity and low income at the same time. The only businesses that would choose to move forward under the proposed codes would be doing so by spending extra funds to make a statement. They will not simply absorb those costs. They will be passed along further creating a divide.
Businesses that help people/families shouldn't be scared away by all of these codes
Control control control
How about treating all residents equally instead of trying to foment class warfare?
There should be incentives or grants for low income citizens and public facilities primarily servicing low income citizens.
Low income can't afford to build in Louisville so no it is not needed
Generally low income residents are exposed to more pollution because they live in lower income areas, closer to higher commercial pollutants. Requiring new commercial construction to do better and be better, should arguably improve the health and quality of life for those living in low income areas. In fact, it'll eventually be better for all of us.
Why have anyone paying the high costs?
No specifics, but I do think there should be considerations for these type of residents.
Would like incentives for prior home owners/businesses especially if new construction is getting
I do not understand the question
Yes. We need to make some accommodations to allow for affordable housing. One of the key attributes Louisville had going for it was its focus on community (for lack of a better word). I wonder how much this counts any more as I look at some of the decisions/rules/requirements coming out of the Louisville City Council.
Build government sponsored low income housing
How many low income qualifying businesses operate within Louisville City limits. Can the be expempted if their numbers are very low?
Equity should be top of mind. Ideally, grants would be available rather than exceptions to the code.

Low income would be impacted the most by the increased costs for all electric homes.
Exchanging homes into LED lights is a significant savings at minimal cost. No diesel vehicles be allowed in the community. You must allow natural gas options for heating. Electric heating and clothes drying can be exorbitantly more expensive. Quit preserving historic outmoded homes as if they are some kind of sacred cow. We must stop having to preserve old miners shacks and kit homes for some kind of aesthetic. Allow new and more efficient structures to replace them. Encourage all warehouse structures and residences to produce all the solar power that they want to contribute without penalties and without limits into our grid. If you don't limit what larger building surfaces can produce you'll have plenty of extra energy to help out with programs to contribute to disadvantaged or low income homes. Community Solar Farm. Whether affluent or financially struggling it is horrible to mandate more appliances such as heat pumps and electric furnaces and electric heating elements in a home where Xcel energy also has the ability to limit how much solar is produced per unit of residential and commercial space. Shame on you for your plans and financial obligations to buy these electric utilities for our homes and businesses when you allow the electricity company to maintain high prices and not reward those who can super produce more electricity. You are allowing Xcel energy to torture us and some of us are not dumb enough to fall for it.
Uncertain; need more information
all people benefit from all-renewable, net zero codes
Some short term break should be given up front.
Yes. I don't have enough info to comment in specifics, but the City should always consider low-income/disproportionately impacted communities in everything it does. That's part of being an inclusive and equitable community.
Don't impose any more silly restrictions upon any of us at this time. It makes no sense. Encourage a 10-20% reduction and incentives but don't impoverish anyone for a silly goal of all-electric before everyone can afford it. Remember that you're trying to be inclusive. On the other hand I do not entirely approve of incentives-which is only another word for taking tax dollars from some to give to others. That has to be done carefully for deserving people who can prove they need help which I do support.
Dont adopt them and low income residents will be able to live in Louisville.
The effects of climate change already impact such communities more severely, providing further motivation for the adoption of stronger building codes.

If you make residential and commercial properties more expensive to build, you are going to continue to push lower income residents and business' out of Louisville.

WHAT'S THE MOST IMPORTANT CONSIDERATION FOR THE CITY IN ADOPTING STRICTER ENERGY CODES FOR RESIDENTIAL AND COMMERCIAL CONSTRUCTION? ('OTHER' ANSWERS)

Be aware of the cost and burden this places on residents and the assumption that these costly requirements and rules have no proof to help alter any human impact on the environment
Energy codes for construction are a violation the property rights of residential and commercial property owners. Regulations take away the ability of the property owner to use their property as they see fit and decrease the value. Each individual is in the best position to decide how to best built their property to suit their needs.
City cannot be unreasonable with building code demands. Turning into Boulder will drive away residents like me.
We almost had to move our 42 year old business out of Louisville because of costs. With Boulder, Broomfield and now Erie pulling the larger businesses away from Louisville we should be a safe haven for small businesses and need to be careful policies do not price them/us out of 80027.
The city should not adopt stricter energy requirements we are already losing businesses and can not afford to lose more
Affordability impact on culture, making it affordable for mid-class and fixed income households
This isn't important at all
I disagree with stricter energy codes
HONESTLY balancing the need to address energy efficiency and promote economic development.
how about making this optional!
should not be mandated if has no meaningful impact on climate and is impractical for multiple reasons
I don't think they should
Stricter codes well hurt economic development
reasonable cost benefit analysis
I don't believe the city should make stricter codes at this time
Cost to residents and building owners
You ignore residential costs. Balance climate change with reasonable costs to business and residential owners and renters.
Don't enforce any of these.

all of above. also City of Louisville should provide electric bike rebates Denver is beating us to the punch and they are effective and ahead of us. we need to step up our game
Research from various sources, don't just go with the trend. What are the long-term costs from creation to post-use of materials? What is the true gain of efficiency? The difference between the 2018 and 2021 codes are not gigantic, yet the cost differences are huge.
Cost/benefit analysis
Priceing out people who are not "true believers."
Stop making it astronomically impossible for our children to live here!!!!!
none of the above; sensible and based on citizens' afordability and needs
NOT imposing extra costs on the homeownwers
COST
Less government interference with construction.
Impact on economic development and growth
1) Addressing climate change while promoting economic development is a prime concerns. 2) However, many people will not be able to afford the upgrades!!!! While my husband and I are able to afford them, the installation of solar panels, for instance, is tricky given the amount of hail storms we have here in Louisville wherein the solar panels break. It takes an extremely long time to get them replaced. The hail storm of 2018 was a prime example wherein pretty much everyone in Louisville had to replace their roofs. Those with solar panels waited as long as a year to have them replaced. How much product will be available given the decrease of a plethora of products due to the Covid-19 pandemic?
Businesses and residences need to recover from a massive fire and a possible redesign. We do not need to spend money on unsustainable programs. Louisville residents need to recover and rebuild before we go green unnecessarily.
The city council implemented building codes to conform to their political agenda. They "thought they would have time to figure it out".
Does it actually support your goals
Codes should not be stricter. The city will be making it more difficult to afford updating homes or building new
Diversity of residents, can't price some people out with this
There is no climate emergency, it's all about control! I should be able to have what I want in my house, not what the government says I should have! Are you going to pay my bills?
Why don't you stop imposing stupid regulations that make the city a less affordable and less desirable place to live?

I do not support all electric. Doesn't it still require coal or some other gas emitting resources to create electricity? Xcel will only allow so electricity for solar panels. Electric heat is not as warm or affordable as gas.
The economic development and climate change issues *do* need to be balanced in order for fixes to the climate emergency to work, which means that both the climate emergency and economic development must be number 1 priorities.
High cost of electricity and infrastructure to provided power, unlike CA with rolling blackouts.
Traffic congestion and smog. Bad air quality days.
I'm all for all-electric but it is not feasible at this time. We can barely produce or afford it. The grid is not adequate for the additional load and the price is going to increase, not decrease - am I correct?
costs are ultimately passed onto users of the building. if its too difficult/expensive in louisville, they will go to erie, longmont, lafayette, etc. it will only hurt Louisville is they do not maintain competitiveness with the nearby communities.

Appendix B: Survey Questions

Demographic Questions:

1) Name & email

2) Would you like to be updated by email on the energy code development process?

   a) Yes

   b) No

3) Which of the following best describes you (check all that apply)? (*optional*)

   a) Asian or Pacific Islander

   b) Black or African American

   c) Hispanic or Latino

   d) Native American or Alaskan Native

   e) Native Hawaiian or Other Pacific Islander

   f) White

   g) Multiracial or Biracial

   h) A race/ethnicity not listed here (write-in)

4) What sector do you primarily represent (select one):

   a) Building owner

   b) Building Developer

   c) Business owner/manager

   d) Tradesperson (electrician, plumber, etc.)

   e) Energy efficiency expert

   f) Energy or facility manager

   g) Engineer, Architect or Designer

   h) General Contractor

i) Affordable Housing representative

j) Residential tenant or occupant

k) Home owner

l) Other Business (Write-in)

5) Are you currently operating a business or considering owning/operating a business within the City of Louisville?

a) Already owns or operates in a business located in Louisville.

b) Already owns or operates in a business that conducts business in Louisville but is not located in the City.

c) Considering starting or expanding a business in Louisville.

d) No I am not.

6) Do you work within the City of Louisville?

a) Yes

b) No

7) Do you live within the City of Louisville?

a) Yes

b) No

8) How would you rate your knowledge/understanding of the City of Louisville's current energy code?
a) (Scale 1-10)

Group 1: Building Owner / Building Developer

Note: For all open-response questions, if you don't know or do not have feedback, please write-in NA.

Page 1 Group 1

9) Does your company have sustainability or climate related goals?

a) Yes, we have a sustainability plan/program and goals.

b) Yes, we have started small efforts to be more sustainable but no official plan/program or goals.

c) No, we've discussed internally but don't have climate or sustainability goals, plans, or programs.

d) No, we don't have climate or sustainability goals, plans or programs.

10) If so, please provide a high-level overview of your sustainability/climate related goals, plans, or programs.

a) [open-ended / optional]

11) Are you planning any major building or tenant space retrofits within the next 1-3 years?

a) Yes.

b) Yes after 3+ years.

c) No.

12) Do you have plans to build or acquire new property(ies) within the City of Louisville in the next 1-3 years?

a) Yes.

b) Yes after 3+ years.

c) No.

13) What are your main considerations when operating and/or working in Louisville? (check all that apply)

a) Cost of doing business

b) Comfort

c) Environmental impact / Sustainability

d) Culture/community

e) Rules/regulations

f) Other (write-in)

14) How would you rate your experience installing/maintaining heat-pumps and other efficient all-electric HVAC systems?

a) [scale 1-10]

15) Do any of your current buildings or tenant spaces utilize heat-pumps or other efficient all-electric HVAC systems?

a) Yes, more than one.

b) Yes, just one.

c) No.

16) How often do you currently design/build/install all-electric HVAC systems in new construction projects?

a) Never.

b) Minority of projects.

c) Approximately half of all projects.

d) Majority of the projects.

17) What's the most important consideration for the City in adopting stricter energy codes for residential and commercial construction?

a) The climate emergency.

b) Economic development.

c) Balancing the need to address climate change and promote economic development.

d) Other [write-in].

Group 1 Page 2

Intro:

Current Energy Code:

The City of Louisville has adopted the 2021 IECC, as well as additional amendments requiring further energy savings and all-electric construction items:

Commercial New Construction

- Increased insulation levels
- Increased fenestration efficiency requirements
- Increased HVAC efficiency
- Electric vehicle charging and infrastructure
- Electric-ready wherever gas appliances are installed
- Solar-ready zone required

Residential New Construction

- Increased insulation levels
- Increased ductwork and piping insulation requirements
- Mandatory heat recovery
- Electric vehicle charging and infrastructure
- Electric-ready wherever gas appliances are installed
- Net zero Appendix RC required

Commercial Code Scenarios for Consideration:

The City of Louisville is considering updates to the commercial energy code to improve the environmental and operational performance of new commercial buildings. These updates could include, but are not limited to, all-electric new construction, stricter efficiency requirements, energy offset requirements using solar, or net zero requirements, such as those found in Appendix CC of the current IECC 2021 code.

Residential Code Scenarios for Consideration:

For residential energy code adoption, Louisville has already adopted Appendix RC as a mandatory measure for all new construction buildings. The Appendix RC requires new single-family residential homes to meet a specific energy efficiency criteria and offset their energy use with onsite or offsite solar. Future residential code scenarios could include all-electric construction requirements.

Note, for all open response questions, if you don't know or do not have feedback, please write in NA.

Questions Page 2 Group 1

18) How do you perceive the new considerations for energy code would impact your ability to develop/design/build housing affordably in the City of Louisville?

a) [open ended]

19) How do you perceive the new considerations for energy code would impact your ability to develop/design/build commercial buildings in the City of Louisville?

a) [open ended]

20) Do you need/want training on the current energy code?

a) Yes

b) No

21) Would you need/want training on the proposed codes/policies if enacted?

a) Yes

b) No

22) What data or information do you need to better understand the potential impacts of energy code options on your business and operations?

a) [open-ended]

23) Would you prefer energy code requirements that:

a) Set an energy consumption performance target and allow for flexibility in how a building meets that requirement which can include onsite PV if needed to meet the performance target. (Performance approach).

b) Set an energy consumption performance target that specifies an efficiency standards for equipment that must be met and requires mandatory solar on all new buildings. (Performance + prescriptive approach).

24) How much flexibility in building design would you prefer to achieve code/policy requirements?

a) The more flexibility the better.

b) Some flexibility but some clear expectations/rules.

c) Set prescriptive standards (equipment efficiency, envelope requirements, mandatory solar, etc).

25) Would you be willing to pay more upfront for all-electric new construction with onsite solar if the payback was longer in order to reduce the carbon/environmental impact of the building?

a) Not willing

b) Somewhat not willing

c) Undecided

d) Somewhat willing

e) Willing

26) What is the payback time frame that you would be comfortable with, for additional upfront costs that support carbon reduction, all-electric, or net zero construction?

a) 0-5 years

b) 5-10 years

c) 10-20 years

d) 20-30 years

e) 30+ years

f) I am not interested in increasing upfront construction costs for carbon reduction.

27) What payback period would be your minimum threshold to consider solar onsite for a mixed-fuel building if it represented a higher up-front cost?

a) 0-5 years

b) 5-10 years

c) 10-20 years

d) 20-30 years

e) 30+ years

f) I am not interested in increasing upfront construction costs for solar.

28) What payback period would be your minimum threshold to consider solar onsite for an all-electric building if it represented a higher up-front cost?

a) 0-5 years

b) 5-10 years

c) 10-20 years

d) 20-30 years

e) 30+ years

f) I am not interested in increasing upfront construction costs for solar.

29) The City has in place the IECC 2021 code along with some efficiency strengthening amendments. How supportive would you be of including a minimum energy offset requirement in addition to the 2021 code, which would require on-site or off-site solar?

a) I do not support this code option.

b) I am neutral on this code option.

c) I support the adoption of this code option.

d) I need more information.

30) How supportive would you be if the City were to consider an all-electric requirement for new commercial construction code if industrial processes were exempt?

a) I do not support this code option.

b) I am neutral on this code option.

c) I support the adoption of this code option.

d) I need more information.

31) How supportive would you be if the City were to consider an energy code that required a 20% reduction in energy use from the 2021 energy code for commercial construction?

a) I do not support this code option.

b) I am neutral on this code option.

c) I support the adoption of this code option.

d) I need more information.

32) How supportive would you be if the City were to consider a commercial energy code that required net zero energy through efficiency and onsite/off-site renewable energy?

a) I do not support this code option.

b) I am neutral on this code option.

c) I support the adoption of this code option.

d) I need more information.

33) What is your biggest concern or perceived barrier to the commercial code considerations presented?

a) [open-ended question]

34) In your opinion, what is the biggest benefit to the commercial code considerations presented?

a) [open-ended question / optional]

35) What HVAC systems, process loads, other appliances, or specific building types do you think would need to be exempted from the commercial code options presented? (The rationale for exemptions could be prohibitively higher cost to operate, infeasible with current energy needs, technology does not exist, etc.)

a) [open-ended question / optional]

36) Are there any considerations to address equity for low-income residents or disproportionately impacted communities that the City of Louisville should consider for any of the three commercial code scenarios considered above?

a) [open-ended question / optional]

37) If the City provides incentives for energy efficiency or electrification upgrades, would you be more likely to support this code adoption?

a) I already support this code option.

b) Not likely to change my support.

c) Somewhat likely to change my support.

d) Yes, it would change my support.

Group 2: Business Owner, Tradesperson (electrician, plumber, etc), Energy Efficiency Expert, Energy or Facility Manager, Engineer, Architect, Designer, General Contractor and Other Business.

Group 2 Page 1

Note, for all open response questions, if you don't know or do not have feedback, please write in NA.

38) Does your business rent or own your office/workplace in the City of Louisville?

a) Rent.

b) Own.

c) Don't have an office/workplace in the City of Louisville.

39) Does your company have sustainability or climate related goals?

a) Yes, we have a sustainability plan/program and goals.

b) Yes, we have started small efforts to be more sustainable but no official plan/program or goals.

c) No, we've discussed internally but don't have climate or sustainability goals, plans, or programs.

d) No, we don't have climate or sustainability goals, plans or programs.

40) If so, please provide a high-level overview of your sustainability/climate related goals, plans, or programs.

a) [open-ended]

41) Do you have plans to build new or retrofit existing office space within the City of Louisville in the next 1-3 years?

a) Yes

b) Yes after 3+ years

c) No

42) What payback period would be your minimum threshold to consider solar onsite for your business?

a) 0-5 years

b) 5-10 years

c) 10-20 years

d) 20-30 years

e) 30+ years

f) I am not interested in solar for my business.

g) I already have solar onsite for my business.

43) What are your main considerations when operating and/or working in Louisville? (check all that apply)

a) Cost

b) Comfort

c) Environmental impact / Sustainability

d) Culture/community

e) Rules/regulations

f) Other (write-in)

44) How would you rate your experience designing/building/installing heat-pumps and other efficient all-electric HVAC systems?

a) [scale 1-10 or Not Applicable]

45) What's the most important consideration for the City in adopting stricter energy codes for residential and commercial construction?

a) The climate emergency.

b) Economic development.

c) Balancing the need to address climate change and promote economic development.

d) Other [write-in].

Group 2 Page 2

Intro:

Current Energy Code:

The City of Louisville has adopted the 2021 IECC, as well as additional amendments requiring further energy savings and all-electric construction items:

Commercial New Construction

- Increased insulation levels
- Increased fenestration efficiency requirements
- Increased HVAC efficiency
- Electric vehicle charging and infrastructure
- Electric-ready wherever gas appliances are installed
- Solar-ready zone required

Residential New Construction

- Increased insulation levels
- Increased ductwork and piping insulation requirements
- Mandatory heat recovery
- Electric vehicle charging and infrastructure
- Electric-ready wherever gas appliances are installed
- Net zero Appendix RC required

Commercial Code Scenarios for Consideration:

The City of Louisville is considering updates to the commercial energy code to improve the environmental and operational performance of new commercial buildings. These updates could include, but are not limited to, all-electric new construction, stricter efficiency requirements, energy offset requirements using solar, or net zero requirements, such as those found in Appendix CC of the current IECC 2021 code.

Residential Code Scenarios for Consideration:

For residential energy code adoption, Louisville has already adopted Appendix RC as a mandatory measure for all new construction buildings. The Appendix RC requires new single-family residential homes to meet a specific energy efficiency criteria and offset their energy use with onsite or offsite solar. Future residential code scenarios could include all-electric construction requirements.

Note, for all open response questions, if you don't know or do not have feedback, please write in NA.

Questions Page 2 Group 2:

46) How do you perceive the new considerations for energy code would impact your ability to maintain or expand your current business in the City of Louisville?

a) [open ended]

47) Do you need/want training on the current energy code?

a) Yes

b) No

48) Would you need/want training on the proposed codes/policies if enacted?

a) Yes

b) No

49) What data or information do you need to better understand the potential impacts of energy code options on your business and operations?

a) [open-ended]

50) The City has in place the IECC 2021 code along with some efficiency strengthening amendments. How supportive would you be of including a minimum energy offset requirement in addition to the 2021 code, which would require on-site or off-site solar?

a) I do not support this code option.

b) I am neutral on this code option.

c) I support the adoption of this code option.

d) I need more information.

51) How supportive would you be if the City were to consider an all-electric requirement for new commercial construction code if industrial processes were exempt?

a) I do not support this code option.

b) I am neutral on this code option.

c) I support the adoption of this code option.

d) I need more information.

52) How supportive would you be if the City were to consider an energy code that required a 20% reduction in energy use from the 2021 energy code for commercial construction?

a) I do not support this code option.

b) I am neutral on this code option.

c) I support the adoption of this code option.

d) I need more information.

53) How supportive would you be if the City were to consider a commercial energy code that required net zero energy through efficiency and onsite/off-site renewable energy?

a) I do not support this code option.

b) I am neutral on this code option.

c) I support the adoption of this code option.

d) I need more information.

54) What is your biggest concern or perceived barrier to the commercial code considerations presented?

a) [open-ended question]

55) In your opinion, what is the biggest benefit to the commercial code considerations presented?

a) [open-ended question / optional]

56) What HVAC systems, process loads, other appliances, or specific building types do you think would need to be exempted from the commercial code options presented? (The rationale for exemptions could be prohibitively higher

cost to operate, infeasible with current energy needs, technology does not exist, etc.)

a) [open-ended question / optional]

57) Are there any considerations to address equity for low-income residents or disproportionately impacted communities that the City of Louisville should consider for any of the three commercial code scenarios considered above?

a) [open-ended question / optional]

58) If the City provides incentives for energy efficiency or electrification upgrades, would you be more likely to support this code adoption?

a) I already support this code option.

b) Not likely to change my support.

c) Somewhat likely to change my support.

d) Yes, it would change my support.

Group 3: Residential Section

Group 3, Page 1

Intro:

Current Energy Code:

The City of Louisville has adopted the 2021 IECC, as well as additional amendments requiring further energy savings and all-electric construction items:

Commercial New Construction

- Increased insulation levels
- Increased fenestration efficiency requirements
- Increased HVAC efficiency
- Electric vehicle charging and infrastructure

Residential New Construction

- Increased insulation levels
- Increased ductwork and piping insulation requirements
- Mandatory heat recovery
- Electric vehicle charging and infrastructure

- Electric-ready wherever gas appliances are installed
- Solar-ready zone required

- Electric-ready wherever gas appliances are installed
- Net zero Appendix RC required

Commercial Code Scenarios for Consideration:

The City of Louisville is considering updates to the commercial energy code to improve the environmental and operational performance of new commercial buildings. These updates could include, but are not limited to, all-electric new construction, stricter efficiency requirements, energy offset requirements using solar, or net zero requirements, such as those found in Appendix CC of the current IECC 2021 code.

Residential Code Scenarios for Consideration:

For residential energy code adoption, Louisville has already adopted Appendix RC as a mandatory measure for all new construction buildings. The Appendix RC requires new single-family residential homes to meet a specific energy efficiency criteria and offset their energy use with onsite or offsite solar. Future residential code scenarios could include all-electric construction requirements.

Note, for all open response questions, if you don't know or do not have feedback, please write in NA.

Page 1 Group 3 Questions:

59) What are your main considerations for choosing to live in Louisville? (check all that apply)

a) Cost

b) Comfort

c) Environmental impact / Sustainability

d) Culture/community

e) Rules/regulations

f) Other (write-in)

60) Outside the Marshall Fire rebuild efforts, do you plan to build a new home or undergo a major retrofit on your home in the next 1-3 years

a) Yes

b) No

c) My home is part of the Marshall Fire rebuild effort.

61) Do you currently live in an all-electric and/or net zero home OR have you taken steps to start to electrify your home?

a) Yes, I live in an all-electric home.

b) Yes, I live in a net-zero home.

c) Yes, I am working on electrifying my home.

d) Yes, I am working on making my home net zero energy.

e) No.

62) Do you currently have solar installed on your home?

a) Yes.

b) No.

63) What's the most important consideration for the City in adopting stricter energy codes for residential and commercial construction?

a) The climate emergency.

b) Economic development.

c) Balancing the need to address climate change and promote economic development.

d) Other [write-in].

The City has adopted the Zero Energy Appendix (Appendix RC) for all new single-family home construction:

64) Do you have a clear understanding of the City of Louisville's current residential new construction code requirements?

a) [Sliding scale 1-5]

65) How do you perceive that Louisville's residential building code standards impact affordability of housing in the City?

a) Positively impact housing by reducing energy costs for residents and tenants.

b) Negatively impact housing by increasing upfront costs.

c) I don't see there being an impact.

d) Other [write-in].

66) What is your biggest concern or perceived barrier to building new homes to the Zero Energy Appendix?

a) [open-ended question]

67) In your opinion, what is the biggest benefit to building new homes to the Zero Energy Appendix?

a) [open-ended question / optional]

68) If the City were to consider an all-electric requirement for new single-family home construction:

69) What is your biggest concern or perceived barrier to building all-electric new homes?

a) [open-ended question]

70) In your opinion, what is the biggest benefit to building all-electric new homes?

a) [open-ended question / optional]

71) Should there be an exemption or flexibility granted for certain community members to allow them to build with natural gas?

a) [open-ended question / optional]

72) If the City provides incentives for electrification, would you be more likely to support an all-electric code requirement for new single-family home construction?

a) I already support this code option.

b) Not likely to change my support.

c) Somewhat likely to change my support.

d) Yes, it would change my support.

Optional Commercial Code Questions for Group 3:

The City of Louisville is considering updates to the commercial energy code to improve the environmental and operational performance of new commercial buildings. These updates could include, but are not limited to, all-electric new construction, stricter efficiency requirements, energy offset requirements using solar, or net zero requirements, such as those found in Appendix CC of the current IECC 2021 code.

73) The City has in place the IECC 2021 code along with some efficiency strengthening amendments. How supportive would you be of including a minimum energy offset requirement in addition to the 2021 code, which would require on-site or off-site solar?

a) I do not support this code option.

b) I am neutral on this code option.

c) I support the adoption of this code option.

d) I need more information.

74) How supportive would you be if the City were to consider an all-electric requirement for new commercial construction code if industrial processes were exempt?

a) I do not support this code option.

b) I am neutral on this code option.

c) I support the adoption of this code option.

d) I need more information.

75) How supportive would you be if the City were to consider an energy code that required a 20% reduction in energy use from the 2021 energy code for commercial construction?

a) I do not support this code option.

b) I am neutral on this code option.

c) I support the adoption of this code option.

d) I need more information.

76) How supportive would you be if the City were to consider a commercial energy code that required net zero energy through efficiency and onsite/off-site renewable energy?

a) I do not support this code option.

b) I am neutral on this code option.

c) I support the adoption of this code option.

d) I need more information.

77) What is your biggest concern or perceived barrier to the commercial code considerations presented?

a) [open-ended question]

78) In your opinion, what is the biggest benefit to the commercial code considerations presented?

a) [open-ended question / optional]

79) What HVAC systems, process loads, other appliances, or specific building types do you think would need to be exempted from the commercial code options presented? (The rationale for exemptions could be prohibitively higher cost to operate, infeasible with current energy needs, technology does not exist, etc.)

a) [open-ended question / optional]

80) Are there any considerations to address equity for low-income residents or disproportionately impacted communities that the City of Louisville should consider for any of the three commercial code scenarios considered above?

a) [open-ended question / optional]

81) If the City provides incentives for energy efficiency or electrification upgrades, would you be more likely to support this code adoption?

a) I already support this code option.

b) Not likely to change my support.

c) Somewhat likely to change my support.

d) Yes, it would change my support.

Appendix C

2021 International Energy Conservation Code



About I-Codes: Building codes improve the quality of construction of the built environment and thereby promote the health, safety, resiliency, affordability, sustainability, and general welfare of our communities. Building codes set a bare minimum construction quality that local officials deem necessary and that consumers expect. Most jurisdictions across the country adopt model building codes published by the International Code Council, and these are updated every three years in an extensive process involving builders, trades, architects, manufacturers and suppliers, low-income advocates, and, crucially, local building officials who are ultimately responsible for enforcing the codes. These codes are then adopted at local level. The 2021 codes are the most recent edition.

About the 2021 International Energy Conservation Code (IECC): After two previous cycles of stagnant efficiency, building officials voted overwhelmingly in favor of provisions in the latest IECC to strengthen energy efficiency. Overall, the 2021 IECC reduces energy by 8-9% (and reduces energy bills by 8-9%) compared to the previous 2018 IECC. The 2021 also includes language clean-up and clarifications, and an expanded focus on flexibility and options. Most of the changes "tighten up" provisions already in the code. Key changes for residential new construction include a better "thermal envelope" (e.g. walls, insulation, windows, doors, etc.), windows that take into account "solar heat gain" in climate zone 5B (the climate zone for the front range of Colorado), changes to duct testing, and increased use of lighting controls. On the commercial side, key changes include air barrier commissioning (i.e. testing and verification of the layer in walls that keeps outside air out and clean, conditioned inside air in), more efficient mechanical systems, technology for energy monitoring in larger buildings so that building operators can better measure and track their building's energy use, and increased options for additional energy efficiency "points."

Jurisdictions with the 2021 IECC: Arapahoe County, Aurora, Fort Collins, Larimer County, Longmont, Louisville, Parker, Superior, and Vail. At least 39 other jurisdictions covering 49% of Colorado's population have announced plans to adopt the 2021 IECC within the next year.

New Colorado Law (2022): The Colorado legislature passed a new bipartisan law that updates minimum energy code requirements. Jurisdictions must adopt at least the 2021 IECC, along with EV-ready, PV-ready, and electric-ready, when updating any other building codes between July 1, 2023 and July 1, 2026. After that date, jurisdictions must adopt at least a low-energy and carbon code. A new Energy Code Board will identify code language for the EV-ready, PV-ready, electric-ready, and low energy and carbon code, and jurisdictions can choose to adopt that code language, something equivalent, or something stronger.

Cost Discussion: An extensive analysis from the Pacific Northwest National Labs (PNNL, the entity charged by the U.S. Congress to perform energy code cost-effectiveness studies) calculates that the increased first cost per household is $3,376 for the 2021 IECC versus the 2015 IECC in Climate Zone 5B (as of Dec. 2021). PNNL's analysis is considered the most credible compared to other estimates because of PNNL's long-standing peer-reviewed methodology, and its absence of profit motive or conflict of interest. The majority of the first cost increase compared to the 2015 IECC is an increase in insulation levels. (Cost data is roughly similar between the 2015 and 2018 IECC, since the efficiency levels were similar.)

- Note: Applying a 19% inflation/supply chain adder as recommended by the National Association of Home Builders, and slightly increasing the size of the average house to better represent our region, yields an increased first cost of $5,118, per PNNL. Also, natural gas prices for residential customers in Colorado have nearly doubled since the study, which would improve the energy cost savings as compared to the original report.

Increased First Cost (vs 2015)	Mortgage Increase	Annual Energy Savings	Net Savings	Years to Positive Savings	Lifecycle Cost Savings
$3,376	$122	$161	$20/yr	9	$1,247

Mild/Medium/Aggressive Rating: Mild. The 2021 IECC is the minimum energy code required by the state of Colorado and even before the state law, jurisdictions covering half of Colorado's population had already announced plans to adopt it. As such, "mild" also includes EV-ready, PV-ready, and electric-ready as required by Colorado law. A "medium" rating would include a higher degree of electric transition – for instance, allowing a choice of either all-electric or mixed fuel new construction but requiring mixed fuel homes and buildings to pursue additional energy efficiency to make up for the extra emissions from fossil gas use onsite. An "aggressive" rating would include either all-electric requirements, the zero energy appendices, or both.

Notes on Cost Studies:

- In a memo to Marshall fire households, the Home Builders Association. of Metro Denver estimated $100,000 in additional upfront costs for 2021 IECC, then scaled back to $11,000 at the state legislature in April 2022 based on a study from Home Innovation Research Labs for National Association of Home Builders.
- Another study from ICF International showed HIRL/NAHB's $11,000 estimate used incorrect economic assumptions, and determined that the estimates in PNNL's study are more accurate.
- A City of Louisville survey of two builders estimated $6,450 in additional first cost for the 2021 IECC vs Louisville's amended 2018 IECC (for a slightly larger house size).
- Natural gas prices were $6.06/thousand cubic feet in PNNL's analysis, versus $11.93 as of April 2022, per EIA.

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Date Updated: July 19, 2022

SWEEP
SOUTHWEST ENERGY EFFICIENCY PROJECT

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Solar-Ready



About: Solar-Ready appendices (RB for residential and CB for commercial) are officially prepared by the International Code Council as "add-on" to the IECC. They prepare homes and buildings for the future installation of solar by requiring conduit, space on the electrical panel, space reserved on the roof free from obstructions and shady objects, adequate roof structural capacity, notation on construction documentation, and a permanent certificate. Shady roofs are exempted. The current appendices only include multifamily buildings 4-5 stories tall, so an amendment is needed to include all multifamily buildings – a provision we call "expanded solar-ready".

Cost Discussion: Upfront costs are minimal (<$200). Cost savings include avoiding the need to tear up walls, redo wiring, and potentially upgrade an electrical panel. They also avoid the situation where roof penetrations for attic vents, etc. are poorly placed in a way that prevents future solar.

Jurisdictions with Solar-Ready: Avon, Boulder, Boulder County, Breckenridge,* Craig, Denver, Fort Collins, Frisco,* Golden, Lafayette, Louisville, Superior, Vail, and Wheat Ridge. Others considering or in the process of adopting it, besides Code Cohort communities, include Eagle County (*via Summit County sustainability program). Note: a new 2022 Colorado law requires all upcoming IECC adoptions to include solar-ready provisions equivalent to or better than a version to be identified by the state's Energy Code Board. We highly anticipate Appendices RB and CB with the multifamily fix will meet the law.

Mild/Medium/Aggressive Rating: Mild. A "medium" rating would require solar to actually be installed on some buildings for part of the energy load, plus a residential solar access law. An "aggressive" rating would require solar installed on all buildings for all of the energy load, a residential solar access law, and a retrofit policy.

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EV-Ready



About: Electric Vehicle Ready (EV-Ready) appendices prepare homes and buildings for the current transition to electric vehicles. These appendices recognize that the vast majority of all electric vehicle charging will occur at home, with some charging infrastructure needed at work or around town. New single family homes will require one EV-ready space, and new multifamily and commercial buildings will require a percentage of EV-capable, EV-ready, and EV-installed spaces depending on the building type and use.

- Note: EV-ready is especially important for multifamily buildings, for equity reasons, since renters can't retrofit their parking lot or garage to install a 240-volt outlet on their own.

These percentages align with levels recently approved by Denver's code committee, and are less than the percentages adopted in some other jurisdictions (Superior, for instance). Multifamily percentages were reduced to ease the cost impact to new housing, and commercial building percentages were reduced to account for charging behavior based on building type.



Building Type	Minimum EV Installed Spaces	Minimum EV Ready Spaces	Minimum EV Capable Spaces
Single-family Duplex, Townhome	N/A	1 Space	N/A
Group A, B, E, M	10%	5%	10%
Group F, I, R-3, R-4	2%	0%	5%
Group R-1 and R-2[a]	15%	5%	40%
Group S-2 Parking Garages	10%	5%	0%

a. Where all (100%) parking serving R-2 occupancies are EV ready spaces, requirements for EVSE spaces for R-2 occupancies shall not apply.

(In I-code terminology, Group A is Assembly, B is Business, E is Education, F is Factory & Industrial, I is Institutional, M is Mercantile, R-1 is transient residential, R-2 is apartments and other non-transient residential, R-3 and R-4 are small group homes including halfway houses, rehab centers, care facilities, etc., and S is Storage.)

Market Discussion: EVs comprised 9% of new vehicle sales in Colorado in Q1 2022, and dealers continue to have long waitlists, especially with the recent rises in gas prices. All major auto brands have announced plans to shift the majority of their fleets to EVs by the mid-2030s or sooner. Newer models have ranges of well over 300 miles. Besides the reduced environmental impact, buyers like the faster acceleration, the low maintenance, the safety ratings, and the convenience of avoiding trips to the gas station.

Cost Discussion: One EV-ready space for a single-family home averages about $325-$400 at the time of construction. Federal and Xcel Energy rebates are available. Retrofitting even just the wiring later can run $481-$1,493 per space (depending on the distance from the panel to the garage) plus potential costs to upgrade the electrical panel. For commercial and multifamily, costs can run $300 for EV-capable, $1,300 for EV-ready, and $2,500 for EV-Installed per space. Federal, Colorado, and Xcel Energy rebates are available. Retrofits done later can cost several times more, and may include the need to tear up and rebuild walls (and in the case of commercial and multifamily, parking lots and landscaping), redo wiring, and upgrade the electrical panel.

Jurisdictions with EV-Ready: Aspen, Avon, Boulder, Boulder County, Breckenridge, Denver, Dillon, Durango, Eagle County, Fort Collins, Frisco, Golden, Lafayette, Lakewood, Larimer County, Louisville, Pueblo County, Steamboat, Summit County, Superior, Westminster, and Vail, Others in the Code Cohort communities are also planning to adopt it. Note: a new 2022 Colorado law requires all upcoming IECC adoptions to include EV-ready provisions equivalent to or better than a version to be identified by the state's Energy Code Board. We highly anticipate these amendments will meet the new law.

Mild/Medium/Aggressive Rating: Medium. A “mild” rating would have lower percentages for commercial and multifamily. An "aggressive" rating would require every space in multifamily to have some level of infrastructure, plus a policy for renovations.



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Electric-Ready and Electric Preferred



About: Electric-ready amendments prepare homes and buildings for the choice between electric and gas equipment and appliances by ensuring they have the wiring and panel capacity available for future electric equipment (and enough physical space, in the case of water heaters). Electric-transition amendments, the next step, still allow new construction to be either all-electric or "mixed fuel" (e.g. natural gas) but mixed fuel homes and buildings require extra efficiency to make up for extra emissions.

In particular, the residential amendments in the prescriptive path require mixed fuel homes to select three "additional efficiency packages" instead of one. Mixed fuel homes choosing the "Energy Rating Index" (ERI) pathway would seek a score of 50 instead of 55.* For commercial buildings, mixed fuel buildings would choose extra efficiency options totaling an extra 10 points. The amendment also fixes two places in the commercial code where gas equipment was given more points than electric.

Market Developments: Air source heat pumps have been commonplace in other parts of the country, and are now making inroads in Colorado thanks to rapid technological developments that allow "cold climate" heat pumps to supply heat even when outdoor temps fall to -22F. Other configurations are possible as well, such as a non-cold-climate heat pump plus extra "strip heat" that can kick in for extra cold times. (This configuration is cheaper upfront but more expensive to run in extra cold temperatures when the heat strips are on.) For water heating, heat pump water heaters are an easy replacement for a typical gas or electric hot water storage tank. Finally, on the cooking side, some homeowners may express a preference for gas, but induction stoves are proving their mettle with twice-as-fast boil times, more finely-tunable controls, safety protections (e.g. the ability to touch the burner and not get burned) and the near-elimination of harmful air pollutants that lead to increased asthma rates and other respiratory distress.

Cost Discussion: Upfront costs depend highly on the configuration selected by the builder. All-electric homes, depending on supply chain availability and builder/contractor familiarity, can be built at no additional cost compared to mixed fuel [1]. Although the upfront costs of an air source heat pump and heat pump water heater are typically more than gas equivalents, the big savings come from avoiding the gas connection and gas piping costs to and within the home or building, and state and utility rebates offset the cost as well. For mixed fuel homes, electric-ready infrastructure is estimated at $300 for a water heater and the same for a stove (or possibly increased to $400 each with inflation and a tight labor market). No additional costs are incurred for electric readiness for a furnace, because central air conditioning or other space cooling would be provided anyway.

* Before 5% efficiency required in R401

(Cost Discussion Cont'd) A high-efficiency gas furnace (95-96% AFUE vs 92-93% AFUE), one of the most likely options for the required "additional efficiency package," is a difference of $200-$500 plus labor [2]. Data from the forthcoming Colorado Residential Field Study shows half of new homes are installing high-efficiency gas furnaces already. For water heaters, the difference between meeting the federal minimum efficiency standards of 0.63 UEF and an 0.92 UEF on-demand water heater is $500 plus labor [3] [4]. After heating and water heating, mixed fuel homes would then need to select one more "additional efficiency package" from the list provided in the 2021 IECC.

- Note: separate market transformation efforts are underway to train builders and contractors for the transition to all-electric equipment, and the familiarity and economies of scale are expected to bring total costs down as well.

Jurisdictions with Electric-Ready and/or Electric Transition: Boulder, Boulder County, Denver (in progress), Fort Collins, Longmont, Louisville, Superior, other Code Cohort communities (in progress). Note: a new 2022 Colorado law requires all upcoming IECC adoptions to include electric-ready provisions equivalent to or better than a version to be identified by the state's Energy Code Board. We highly anticipate these amendments will be in compliance with the law.

Mild/Medium/Aggressive Rating: Medium. A “mild” rating would be just electric ready – i.e. just the wiring and panel capacity. An “aggressive” rating would require all-electric heating and water heating for most residential, multifamily, and commercial buildings, or, even further, no gas connections at all.

[1] Despite a few recent studies, a couple local home builders report challenges getting the costs to "pencil out." State policies passed since then, like the 10% tax credit for heat pumps, heat pump water heaters, and panels, plus regulatory dockets underway at the Public Utilities Commission, may improve the cost calculations.
[2] Manufacturer model database review from electrification expert David Petroy, January 23, 2022. Note: Mr. Petroy notes that some comparisons may show wider differences because more efficient models are more likely to have higher-end “bells and whistles” that don’t affect performance.
[3] Home Depot website comparison of in-stock 0.64 UEF gas storage water heater ($800) and 0.93 gas tankless water heater ($1,300), Feb 9, 2022.
[4] Another full study on the economics of all-electric homes in CO is available at https://swenergy.org/pubs/heat-pump-study-2022

Efficiency Amendments





About: One amendment improves the lighting efficiency in horticulture facilities, and another amendment addresses the heat island effect, as explained below.

These two were selected from a wide array of other strengthening amendments, including a review of other nearby jurisdictions' codes, decarbonization model codes, and the 2024 IECC proposals. These two were selected based on a balance of technical and practical implementability, simple code language, and sustainability impact.

No additional efficiency-strengthening amendments are proposed for residential buildings (beyond those in the electric preferred proposals). This is recognition of the already-decent efficiency improvements in the 2021 IECC, the current challenges with the cost of construction, and the general preferences for simplicity and focused impact.

Horticulture lighting. Energy consumption from lighting in marijuana grow facilities, as well as other indoor agricultural facilities, is staggering, and is projected to continue increasing. Lighting can account for 50% to 80% of an indoor facility's energy use and 30% of a greenhouse's energy use. Traditionally, grow facilities hadn't invested in efficient lighting because of uncertainty in their market and shifting legal policies. This proposal is cost-neutral for greenhouses and has a 3-year payback for indoor facilities. This proposal has been approved by the 2024 IECC Commercial Consensus Committee.

Cool roofs. Cool roofs are made of materials that reflect more sunlight and absorb less heat. They are usually, though not always, made of lighter-color materials. Cool roofs still allow the installation of solar panels, skylights, mechanical equipment, rooftop amenities, and/or vegetative roofs at the building owner's discretion. This only affects low-sloped (i.e. flat or nearly flat) roofs, and it doesn't apply to roof repairs or replacements. Cool roofs are already in the IECC, but this brings them into our climate zone (5B) in recognition of increased summer temperatures and the growing problem of the heat island effect. Higher urban temperatures also speed the formation of ground-level ozone, the primary component of smog. Costs for a cool roof are equivalent to costs for a black roof, and most suppliers and contractors supply both types. Energy costs are not notably impacted, because more recent energy codes have high amounts of insulation in the attic that limit the roof's impact on inside temperatures. Instead, as noted, the significant benefits here are for reducing heat island and improving air quality.

Jurisdictions with Efficiency Amendments: Denver requires a cool roof and has improved horticulture lighting. Other jurisdictions in the area have selected various other amendments to increase the efficiency of their homes and buildings, including Boulder, Boulder County, Breckenridge, Denver, Fort Collins, Frisco, Golden, Louisville, Summit County, and Superior.

Mild/Medium/Aggressive Rating: Medium. A "mild" rating would be just the 2021 IECC unamended. An "aggressive" rating would have prescriptive table updates, stricter performance path requirements (e.g. 10% more efficient), and/or more amendments approved for the 2024 IECC.

centura

Centura Health
9100 E. Mineral Circle
Centennial, CO 80112

November 4, 2022

Mr. Rob Zuccaro, AICP
Director of Community Development
City of Louisville

VIA EMAIL – rzuccaro@louisvilleco.gov

Mr. Zuccaro,

Thank you for the continued dialogue with you and your team regarding the proposed energy code changes. We appreciate the open communication and collaboration.

I have attached a letter from our consultant, WSP, which discusses many of our takeaways from our discussions. We respectfully ask you to take these requests into consideration as you're finalizing a draft of the proposed energy code, and we look forward to reviewing the draft code when it is available.

For over 125 years, it has been our focus to provide exceptional and accessible healthcare for the residents of Louisville and Boulder County, and we remain committed to being a good partner. Through our continued collaboration with Louisville, Avista Adventist Hospital and Centura are excited to bring a state of the art hospital to the area and continue our whole-person care for all over the next century.

I am available at 303.673.7317, or WilliamMartin@Centura.org, and I would be happy to discuss further at your convenience.

Sincerely,

W. H. Martin

William (Bill) H. Martin

Vice President of Real Estate, Construction & Security

Centura Health

cc: Isaac Sendros, CEO, Avista Adventist Hospital
Michelle Brokaw, Fleisher Smyth Brokaw
Mark Montgomery, WSP

CITY OF LOUISVILLE IECC 2021 ADMENDMENT REQUESTS

November 4, 2022

William (Bill) H. Martin
Vice President of Real Estate, Construction & Security
Centura Health
9100 E. Mineral Circle
Centennial, CO 80012

Dear Bill,

WSP is writing this letter on behalf of Centura Health regarding discussions around the code amendment adoption by the City of Louisville to the 2021 IECC code, which was adopted by the City in 2021. The intent of the 2021 codes, amendments being considered, and subsequent code revisions moving toward 2030 is net zero energy operation in buildings through energy efficiency measures, electrification, and renewable energy application. Being the largest healthcare engineering firm in the United States, with offices locally dedicated and healthcare expertise nationally as well as in dozens of countries around the globe, we are excited to provide the following expertise to Centura Health.

We recommend the following be considered as part of the 2021 IECC Amendments by the City of Louisville:

1. Provisions Centura Health requests for building a new healthcare facility in the City of Louisville:
    a. An alternate performance-based compliance path (% energy consumption reduction) that is not tied to a specific EUI target for all healthcare facilities is required. Building programmatic elements and process loads create a wide variability in energy consumption, therefore a fixed target is not an appropriate metric for this type of building.
    b. Emergency System Exemptions shall include natural gas or diesel for backup generators or emergency boilers to provide backup power and backup heating sources. A high level of system resiliency is required in healthcare facilities for preserving human life and must remain uninterrupted during all conditions including utility power loss. Due to these very large emergency power loads, electrification of backup systems would inadvertently and greatly impact utility services and emergency generator systems. These alternate backup or emergency heating plants shall also be allowed to serve building needs during cold ambient conditions where electrified heating technology has operational performance limitations. Alternate fuel sources also provide additional resiliency to a building that becomes the center of a community during a response to a mass event.
2. Centura Health Requests the following exemptions:
    a. Exemption is requested from the space and water heating requirement to be all electric system. Healthcare facilities are required to utilize air systems as an infection prevention tool, which drives up heating system usage well beyond building heating loads. Similarly, domestic water usage is required to be many factors higher than

other types of buildings due to code required handwashing protocols that drive the quantity of hot water fixtures. Performance based compliance should allow for flexibility in system selections most appropriate for optimum efficiency.

b. Process load exemption for the following systems

   i. Sterilization, humidification (including operating room humidity control systems), medical imaging and associated cooling systems, data processing and associated cooling systems

   ii. Electric Vehicle charging

   iii. Snowmelt systems needed for public safety, first responders, and helipad operations

   iv. Purified water and capture hood systems used for lab, pharmacy, chemotherapy, and dialysis

   v. Medical air systems, medical vacuum systems, and surgical instrument air systems

c. Allow exemplary performance in some systems to offset underperformance in others to maximize attainable efficiencies.

3. Centura Commitments

   a. Design shall include all-electric ready provisions with the aim to align with the City's goals toward decarbonization. These commitments recognize that as the electric utility becomes more renewable sourced, and the utility costs become more operationally viable, the facilities can adapt to the ever-changing environment.

   b. There is not an all-electric hospital solution in this climate zone that can be used as precedent. Recognizing this, Centura commits to providing an electrification feasibility report that addresses the electrification of the building energy users.

   c. Heat pump technology will be deployed where feasible to maximize efficiency, electrification, and minimize carbon footprint.

   d. All forms of energy recovery will be explored and deployed where feasible.

   e. Renewable ready infrastructure shall be provided and may be deployed where feasible.

We appreciate the opportunity to provide our expertise in hospital design and built ecology to help shape the future of energy code in partnership with clients and jurisdictions not only within the City of Louisville, but the entire Colorado region.

Sincerely,

Mark A. Montgomery, P.E., LEED-AP
Senior Vice President
Southwest Mountain Business Leader – Property & Buildings
WSP

Mayor, Council, Concerned Staff, and Consultants:

Previously, the DBA submitted 36 main questions and many follow up questions concerning the energy code proposals. Most of those questions remain unanswered in a substantive way.

The City should not adopt the code before the regional cohort does so, and in particular, not before the BELLS take action (that's Broomfield, Erie, Lafayette, Longmont, Superior). As shown in many of the overwhelmingly negative comments submitted by residents and businesses found in pages 68 to 94 of the agenda packet, there is serious concern over the high risk that more businesses will migrate out of Louisville.

While the staff and consultant recommendation of Policy Option 1 is the best of a bad lot, the rush to pass the code is not appropriate under the circumstances.

The analysis of energy savings and GHG impacts is, at best, incomplete. The City has an astonishing number of buildings that are currently vacant. Would the new code provisions apply to them or not? The DBA's previous questions submitted to the City listed several of the current vacancies. However, there appears to have been no study of the impact of the code's added costs for existing vacant buildings or a report on whether these Louisville buildings will be occupied any time soon, or whether they can be retrofitted to meet the code requirements. Of great concern is the lack of research on the potential minor energy savings and GHG reductions from application of the Code when compared to the substantial embedded energy that would be lost lost due to delayed reuse of empty buildings and razing of existing buildings in Louisville where code compliance exceeds the cost to build a new building in a non-code jurisdiction.

Reuse of a building for multiple tenants needs more explanation than the one sentence devoted to it on page 189. For example, the Ascent Church, in the former Sam's Club building, may be considering a restaurant use in a portion of the building. Would this addition trigger application of the code only to the new use? Or would the code be applied to the entire building? If it is only applied to the new use, will there have to be high levels of insulation in the interior walls? If the code is applied to the whole building, will the church be able to afford it? What's the embedded energy and GHG produced in making and installing the additional materials in those interior walls and new mechanical equipment as compared to the theoretical energy savings and GHG emissions? What GHG emissions are produced in the creation of the extra fiberglass insulation or foam insulation? More research is needed.

Does the city have research into the availability of the high efficiency commercial appliances and HVAC systems that would be needed to meet the EUI targets?

When will the EUI targets be inserted into the draft (table, p. 189), if the selected code option includes the use of EUIs? An EUI category for "business" is overbroad. The DBA's concerns about coffee roasters and breweries are not clearly addressed. If these are 'industrial processes,' where is that stated? If "coffee shops" are a distinct category, why aren't breweries, coffee roasters, laundries, and non-cannabis greenhouses clearly separate, too?

It is unclear whether the new code provisions will or will not apply to an addition to an existing building. Hopefully, the new provisions are strictly limited to all new buildings (and an addition is clearly stated to not be considered a new building). However, if the provisions do apply to an addition, then the use of a 25% (or any percentage) threshold to trigger the application of the code to an addition to an existing building is an unnecessary hindrance to small business expansion. Why was 25% chosen? (See page 165, no reason given)? If the code is to cover additions, the number should be much larger, possibly for example, 27,500 square feet, to mirror 25% of the 110,000 square foot office building modeled by the consultants.

As previously discussed, a prohibition of natural gas would be a disaster, putting a number of businesses out of business or forcing their relocation. No Appendix CC.

To amplify the first point of this submittal, Louisville City Council should not adopt the new code provisions at this time, but should direct the staff to monitor and participate in the regional cohort, and the Council should consider action only after the questions have been answered, the cohort has taken action, and the residents and businesses are satisfied that adoption of the code is in the best interests of the City.

Sincerely,

Downtown Business Association of Louisville, Inc.
By: Rick Kron as President

And individually by:
Mark Oberholzer, Jenni Hlawatsch, Eric Reed, Tom Horst, and
by Rick Kron as a City resident since 1987 of 746 W. Fir Ct., Louisville, CO. 80027

Rob Zuccaro

Subject: FW: Marshall Fire Lots for sale/2021 Energy Codes

Rob Zuccaro, AICP
Planning and Building Safety Director
303-335-4590 (D)
303-335-4592 (O)

City of Louisville
COLORADO • SINCE 1878

From: Planning <planning@Louisvilleco.gov>
Sent: Thursday, September 15, 2022 9:58 AM
To: Rob Zuccaro <rzuccaro@louisvilleco.gov>; Lisa Ritchie <lritchie@louisvilleco.gov>
Cc: Chad Root <croot@louisvilleco.gov>
Subject: FW: Marshall Fire Lots for sale/2021 Energy Codes

FYI public comment came in about the 2021 Energy Code requirement for buyers of Marshall Fire lots.

Eliana "Ellie" Hassan
Planner II – Planning & Building Safety
City of Louisville
ehassan@louisvilleco.gov
Mon-Thurs - City Hall, Office Phone: *303-335-4591*
Fri - Home Office, Remote Phone: *303-349-6977 (cannot accept texts)*

From: Celeste O'Neill
Sent: Thursday, September 15, 2022 9:16 AM
To: City Council <Council@louisvilleco.gov>; Planning <planning@Louisvilleco.gov> **Cc:** Brian O'Neill <>
Subject: Marshall Fire Lots for sale/2021 Energy Codes

Dear City Council and Planning Council,
We are writing to you today to ask that you allow buyers of lots where homes were destroyed by the Marshall Fire to also have the choice to build to the 2018 building codes. After nearly 5 months of little interest in our lot for sale at 110 Vista Lane, Louisville, we are worried that we will not be able to sell it at a price that would allow us to purchase another home where we now live. Our home was completely destroyed by the Marshall Fire and like so many others, we were unknowingly seriously underinsured. Due to employment reasons, we had to move out of the area in June. For that reason, we had planned to put our house up for sale in April. Instead, we could only put our vacant lot up for sale. Despite already lowering our asking price substantially, we have had little interest. Potential buyers that we did have changed their minds when they discovered that they would be held to the 2021 code, with the extra cost that would entail.

Selling our lot to a builder is possible, but only at a steeply discounted price that we can't afford to offer. If we can not sell our lot at close to our current asking price, we would be forced to rebuild (to the 2018 codes) and then sell. We imagine a lot of Louisville residents will be faced with the same choice and, given the cost of meeting the 2021 codes, will also have to rebuild as affordably as possible to the 2018 codes and then sell.

Please reconsider your code requirement for new owners of burned lots as we believe that allowing them to also rebuild to the 2018 code would generate a lot more interest in purchasing these lots and in the end produce a total new housing stock that is as energy efficient as it would be under the current rules. This would not only help the Marshall Fire victims who have decided not to rebuild but it would also help speed up the rebuilding of all homes lost in the fire.

Sincerely,
Celeste and Brian O'Neill

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Rob Zuccaro

Subject: FW: Commercial energy code

From: Sally Blair
Sent: Thursday, September 8, 2022 4:47 PM
To: City Council <Council@louisvilleco.gov>; Rob Zuccaro <rzuccaro@louisvilleco.gov>; Lisa Ritchie <lritchie@louisvilleco.gov>
Subject: Commercial energy code

Hello City Council,

You outlasted me on Tuesday night, I can't stay awake past 10pm. ;)

I wanted to express my support for Staff's recommendation to advance Option 1 in the meeting packet. I thank the City and Staff for working with local experts to conduct outreach and analysis to recommend several options that meet Louisville's climate goals and consider local and regional building codes. This code option moves Louisville towards meeting our climate goals, but does not fully meet those goals. We have a long way to go yet. We have very recently and acutely experienced a climate disaster and these climate hardships will continue if we as a community do not take bold and aggressive action. Boulder has had one of the most stringent energy codes in the region for many years and it has not economically devastated the City. It is an easy thing to say building energy upgrades will cost too much, but we are living the devastation and cost of climate change. I encourage you to consider the near and long-term future of the City and our residents while making this decision. Thank you.

Sally Blair
401 County Rd

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From:	Susan Loo
To:	City Council
Cc:	Jeff Durbin; Megan Davis; Rob Zuccaro; Kayla Betzold; Austin Brown
Subject:	The Business of America is Business
Date:	Friday, July 1, 2022 1:06:48 AM

I only recently became aware council has resurrected the 2021 IECC with Net Zero Appendix for commercial properties.

The public notice on this topic has been non-existent, I doubt anyone but a select few know you are reconsidering it. For instance, for yesterday's public hearing, it was not listed anywhere on the City's website that was easily accessible. An issue of this importance should be prominently featured on the city's Home page; surely it is as important as "Summer Storywalk" or "Totally Toddler". How about a press release?

I question the timing of implementing this radically untested, costly code in our town at this time. One, inflation is unsettling everyone. Two, you recently surveyed our business community, the results were dismal <https://www.louisvilleco.gov/home/showpublisheddocument/35276/637907050751930000>. Business thinks you don't care about or understand their needs.

The Louisville economy is suffering. It was suffering before Marshall Fire; the fire has accelerated the process. If you open your eyes as you travel through town, it's turned into a shabby shadow of the best small town in the U.S. Dying, ill-maintained public landscaping. We've had dead, untrimmed tree limbs on McCaslin for over two years. Weeds everywhere, flowers nowhere. Tally the businesses that have recently left or are leaving. Kohl's, Alfalfa's, Lowe's, Carrabba's, Outback, Chase Bank, Medtronic, Walgreen's. Check out the peeling paint on Cinebarre or the Grain Elevator.

City presentations say net zero only applies to "new construction". It's disingenuous to give people the impression that existing structures are not included in the proposed new code. We have thousands of square feet in currently unoccupied buildings that this code will apply to if someone is ambitious enough to redevelop. Why would anyone in their right mind want to build or redevelop in Louisville when they can do so in Erie, Broomfield, or Lafayette for a lot less cost and hassle?

City officials have indicated state legislation to apply net zero to the entire state is coming. Legislation like that would level the playing field. Why not wait for it and the entire economic environment to improve?

Then a question still exists on XCEL's capacity to meet all-electric net zero needs—and on the folly of not having natural gas back-up in an emergency.

In this discussion, the key piece of data missing is what the adoption of commercial net zero does to the economic vitality of our town. Your consultants need to quantify that before anything else moves forward.

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Rob Zuccaro

Subject: FW: Overextended: It's Time to Rethink Subsidized Gas Line Extensions (RMI Report)

From: Susan N
Sent: Tuesday, December 14, 2021 10:17 AM
To: Maxine Most <cmaxmost@icloud.com>; Deborah Fahey <faheydeb@gmail.com>; hley Stolzmann <ashleys@louisvilleco.gov>
Cc: RJ Harrington <>
Subject: Overextended: It's Time to Rethink Subsidized Gas Line Extensions (RMI Report)

Hello to you all!

This article be helpful as you develop Louisville policy to require all new construction to be **all electric**:

Overextended: It's Time to Rethink Subsidized Gas Line Extensions

Best,

Susan

439

RMI

Overextended

It's Time to Rethink Subsidized Gas Line Extensions



December 2021

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Authors

Authors

Abigail Lalakea Alter
Sherri Billimoria
Mike Henchen

Authors listed alphabetically. All authors from RMI unless otherwise noted.

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Abigail Lalakea Alter, Sherri Billimoria, and Mike Henchen,
Overextended: It's Time to Rethink Subsidized Gas Line Extensions, RMI, 2021,
https://rmi.org/insight/its-time-to-rethink-subsidized-gas-line-extensions/.

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All images used are from iStock.com unless otherwise noted.

About RMI

RMI is an independent nonprofit founded in 1982 that transforms global energy systems through market-driven solutions to align with a 1.5°C future and secure a clean, prosperous, zero-carbon future for all. We work in the world's most critical geographies and engage businesses, policymakers, communities, and NGOs to identify and scale energy system interventions that will cut greenhouse gas emissions at least 50 percent by 2030. RMI has offices in Basalt and Boulder, Colorado; New York City; Oakland, California; Washington, D.C.; and Beijing.

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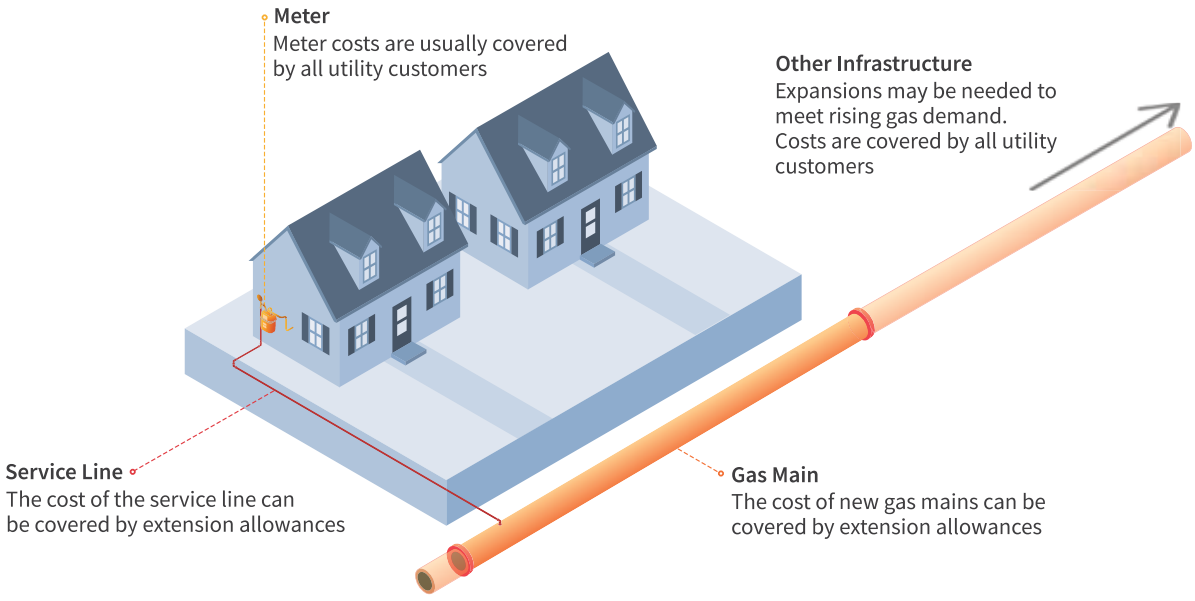
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Highlights

- Utilities typically subsidize the cost of extending service to new customers, in a practice known as line extension allowances. Subsidized extensions of natural gas service pass hundreds of millions of dollars in costs to existing customers while expanding the fossil fuel system.
- While these policies made sense in the past, their climate and economic rationale is increasingly challenged by expected reductions in future gas use, the growing costs of maintaining the existing distribution system, and the imperative to phase out fossil fuels.
- Utility regulators should reform line extension allowances to eliminate subsidies for gas, support state climate policies, and reduce the financial burden on existing gas customers.

Exhibit 1

Infrastructure associated with extension allowances



Background

America's local gas distribution systems serve 77 million homes and businesses, delivering 8 trillion cubic feet of natural gas each year, and with it more than 400 million tons of carbon dioxide emissions, plus further climate-warming emissions from methane leakage.[1] These systems are growing—with more than 600,000 new customers added each year—but that trend is completely at odds with state and federal decarbonization goals that require a shift away from gas. Thus, the operational lifetime of new gas infrastructure is increasingly uncertain.[2]

For decades, new customers who want the gas system extended to their building have enjoyed a policy by which their utility covers some or all of the construction costs associated with this gas infrastructure. These policies, generally known as line extension allowances, are common for both electric and gas utilities. They effectively result in existing and future utility customers paying for new customers to join the system, based partly on the expectation that there will be network benefits to adding customers to the system.[i] Utilities do not typically provide clear reports on the total amount spent on gas line extension allowances, making it extremely difficult to track and quantify these costs. Absent central reporting, best-guess estimates by advocates have found numbers in the range of $100 million annually in California and $200 million annually in New York.[3]

The underlying rationale for this practice varies and is described in greater detail later in this report. Typically, it relies on an economic argument either that (a) the new customer will eventually contribute net positive revenue for the utility through their future bills, or (b) individual customers' share of total system costs should remain constant, and accordingly, the allowance amount is set to ensure this fairness. In some cases, other considerations factor in—the presumption that expanded use of gas continues to provide a broader public benefit, for instance.

Several states are actively reconsidering gas line allowances through open proceedings—Washington State recently adjusted its allowances, and Public Utilities Commission staff in California have proposed eliminating gas line allowances entirely. Yet on the whole, these allowance policies have remained despite a series of changes that challenge the wisdom of expanding the gas system and increasing gas usage.

First, as the existing gas distribution system has gotten older, and as high-profile gas leaks and explosions have called attention to safety risks, gas utilities have dramatically ramped up spending on the system, driving up customer costs. This trend can be seen in Exhibit 2.

i. For a given project, the amount funded by the utility (that is, by all customers) is called the "line extension allowance" or "construction allowance," and the amount funded by the new customers is called the "customer contribution" or sometimes "contribution in aid of construction" (CIAC).

Second, even as the impacts of climate change have become clearer and more severe, the expansion of the US gas system means that greenhouse gas emissions from the buildings sector have remained flat or increased. That is, while buildings have become more efficient, the growing number of buildings burning gas—due to oil-to-gas conversions as well as population growth—counteracts these benefits.[4]

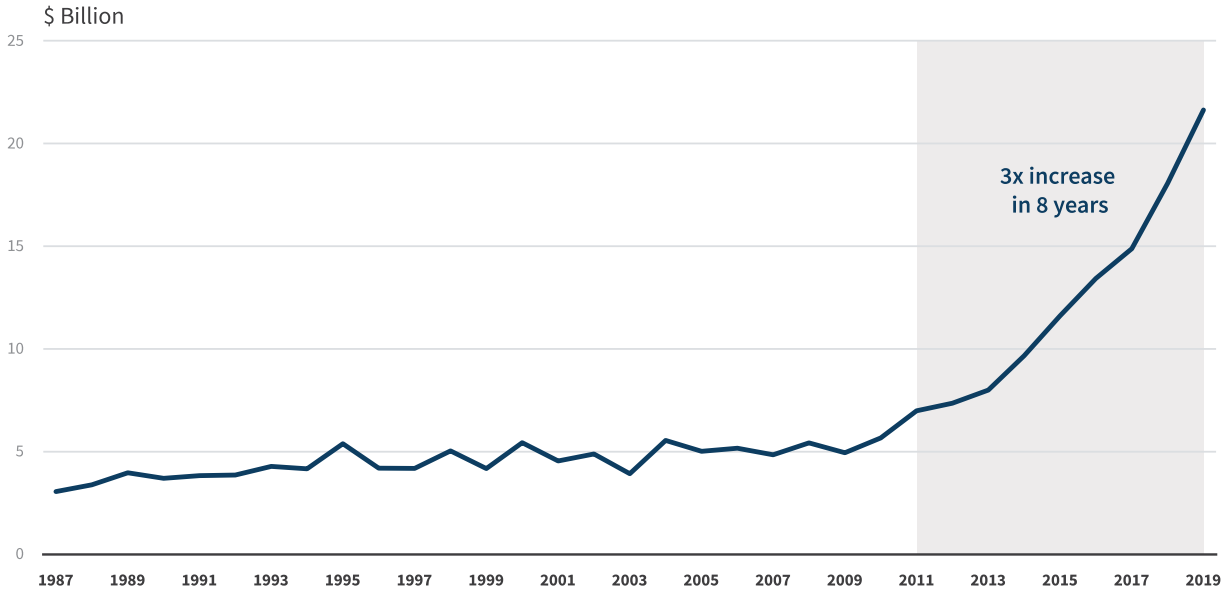
And third, new policies have emerged to cut these emissions and encourage fuel switching away from gas to the electricity system for residential and commercial buildings, leading to projections of dramatically reduced gas use in the future. This trend could make it more difficult for utilities to cover the fixed costs of the gas system, especially if those costs are rising and the system is expanding while the customer base shrinks.[5]

Taken together, this shifting context upends the rationale for the widespread practice of utilities bearing the costs of constructing gas lines to new buildings and new customers, and then passing these costs on to ratepayers for decades to come. Gas line extensions, as they exist today, are no longer supported by a sound economic justification and are ripe for reform, both to protect customers from financial risk and to support climate and public health goals. In the remainder of this report, we will expand on the typical rationale for gas line extension allowances, describe how a changing context undermines this rationale, and offer recommendations for reform.

Exhibit 2

Utility spending on the gas distribution system has grown rapidly in recent years

US gas utility distribution system construction expenditures, 1987-2019



Source: American Gas Association, **https://www.aga.org/research/data/construction-expenditures/**

Why Gas Line Extension Allowances Exist

Gas line extension allowances have historically been justified by economic arguments that sharing system-expansion costs between existing and new customers is fair, along with the presumption that expanded gas service provides a public benefit. There is no single standard for determining fair cost sharing between existing and new customers, but we highlight two examples below. Detailed examples of how these policies work in practice can be found in the Appendix.

Economic Rationale: Revenue-Based

Construction allowances are often calculated via a revenue-based rationale, based on the expectation that new customers' bill payments will eventually cover and then exceed the cost of the line extension that brings them onto the system. The formulas determining these allowance amounts can incorporate the expected volume of gas the new customer will use over many years, and therefore the expected revenue via the customer's bills. Part of the logic is that the revenues collected by new customers will put downward pressure on the rates for all customers. That is, the fixed costs of maintaining the system will be spread across more customers, thereby lowering rates. Utilities that have used a revenue-based approach include Avista Utilities in Washington State and Pacific Gas and Electric in California.[6]

Determining an allowance based on expected revenue involves some combination of variables tied to the expected gas consumption of the new building, such as:

- **Years of expected life:** once gas service is established, the customer is expected to use gas at the same volume for decades. In some cases, the customer is expected to use gas in perpetuity.
- **Square footage:** the size of the building will dictate the heating load.
- **Number and type of appliances:** some utilities allocate a specific allowance for each appliance, with different amounts based on the expected usage of a furnace, water heater, clothes dryer, and stove.
- **Adjustment factors:** these factors are designed to reflect the portion of revenues that supports infrastructure investment, as opposed to gas commodity costs, utility administration, maintenance costs, etc.

Economic Rationale: Embedded Cost

In some cases, the primary objective of a line extension allowance is to ensure fairness, such that no customer subsidizes another customer. As a proxy metric for fairness, some utilities seek to hold constant the existing infrastructure investment on behalf of each customer, such that no new customer subsidizes an existing customer. In practice, this can mean calculating the average amount of existing investment in the rate base per customer and providing that same amount to the new customer. Although not

explicitly based on future revenue calculations, these allowances commonly still rely on the expectation of permanent gas service, in which the new customer will contribute to the costs of the gas system through their bills. Examples of utilities taking this approach include Xcel Energy Colorado and gas utilities in Wisconsin, where embedded cost is detailed in statute.[7]

Public Benefits Rationale

Gas line allowances make it easier to expand access to gas, with the implicit and often explicit belief that gas use itself serves a public good. Historically, line extension allowances, combined with the obligation to serve customers, have supported universal access to gas and ensured that gas utilities do not restrict service to more profitable customers or those in White or upper-class neighborhoods. Over the past decade, state governments and utilities have frequently justified generous line extension policies on the basis that gas has lower emissions and/or lower cost than the alternatives. These assumptions no longer hold, given the emergence of lower-emissions electric heating solutions, greater awareness of methane leakage, and recent volatility in gas prices.[8]

Yet many states have clearly stated their goal to expand gas, often through oil-to-gas conversions. In 2013, Connecticut's Public Utilities Regulatory Authority approved a gas expansion program for nearly 300,000 new customers,[9] in accordance with the state's Energy Strategy, noting "the emerging opportunity provided by shale gas for a lower-cost, less-polluting, and domestically available (and thus more reliable) foundation for society's energy needs."[10] In 2012, the New York Public Service Commission (PSC) opened a proceeding focused on gas expansion, asserting benefits of natural gas in terms of price, emissions, low-income household access, economic development, and reliability. In that proceeding, National Grid stated that it is "good public policy to provide entitlements even though some of the costs may be socialized because all customers benefit from the expansion of gas."[11] In August 2021, Illinois Governor JB Pritzker signed a bill intended to extend gas service to a rural community by allowing the gas utility to provide up to 250% of its normal gas line extension allowance.[12]

At a nationwide level, in 2017, the National Association of Regulatory Utility Commissions convened a task force focused on education to "bring the benefits of natural gas as an energy source to more consumers," detailing the many gas expansion programs in states across the country.[13] Over the past decade, dozens of states have approved gas expansion plans for utilities, sometimes even offering incentives to utilities for system expansion or approving incentives to customers switching to gas service. The American Gas Association (AGA) boasts that a new gas customer is added every minute of every day.[14]

Other Approaches

Another method, though less common, provides a set number of feet of gas pipeline, regardless of the expected usage of that building. For example, New York's statute provides a "100-foot rule," requiring utilities to pay for 100 feet of pipeline per new customer. This approach can result in under-recovery of costs, as the cost of construction may—and often does—outweigh the expected revenue from that customer.[15] Additionally, this kind of policy often requires the utility to pay for the footage no matter the per-foot installed cost; some installations may be vastly more expensive and less economic than others.

In all cases, when the cost of constructing the main and service extensions exceeds the allowance (or the length of extension exceeds the utility's obligation to provide free footage), customers are required to

pay the difference. Depending on the utility, this amount might be paid up front or applied as a monthly surcharge on the new customer's bill. Some utilities also allow for some or all of a customer's contribution to the cost of the main extension to be refunded if additional customers hook up to the extension within a given period of time (typically between 5 and 10 years).[ii] Other costs that new customers may cause, such as the cost of their gas meters or new pipelines and capacity infrastructure built to match rising demand, are usually covered by the utility and excluded from these calculations.[16]

Water Utility Extension Policies

While both gas and electric utilities tend to apply a similar rationale to their line extension allowance policies, water utilities have quite different approaches to allocating extension costs, offering an informative comparison of alternate philosophies for cost allocation.

As regulated monopoly utilities, water and gas systems have some economic similarities. Both utilities share principles of fair rate design and have high fixed capital costs for infrastructure with variable operating costs. Both water and gas have generally been considered public goods and necessities. However, unlike water or electricity, gas exclusively serves uses in buildings that could be met through other technologies or resources. Still, gas utilities incentivize system expansion by lowering the up-front costs of gas service to new customers (via line extension allowances, utility advance programs, and refund structures), whereas water utilities typically place much of the capital burden of system expansion on new customers.

Water utilities do not typically provide construction allowances, and many also charge system development charges (SDCs, also known as system development fees, or SDFs) for new hookups. For many water utilities, the economic rationale for new customer fees is a goal of keeping rates constant across new and old customers (i.e., using these fees to keep certain capital expenditures out of the rate base), and this parity across existing and new customers is valued more highly than lowering the up-front costs to new customers. These charges are meant to account for the benefits new customers receive from the capital investment that has already occurred in the water system. While this helps keep rates stable, it creates a positive feedback loop for smaller utilities with small rate bases that must therefore continue to charge SDCs in order to keep rates flat.

Both approaches to allocating the costs of system expansion—construction allowances and SDCs—involve trade-offs in what regulators and utilities consider to be fair and in the public interest.

ii. For example, Xcel's refund policy for gas main extensions in Colorado allows for refunds up to the full amount of the customer's contribution based on the number of additional customers that connect to that main extension within 10 years of its construction. Specifically, the tariff sheet states: "For each additional Permanent Service customer connected directly to a gas Distribution Main Extension under an Extension Agreement upon which there is unrefunded Construction Payment remaining, Company will recalculate the extension considering the costs of any additional facilities and considering the Construction Allowance provided by such additional customer or customers, as well as appropriate sharing of Construction Payment requirements among all customers to be served by the gas Distribution Main Extension."
(See p. 191 at **https://www.xcelenergy.com/staticfiles/xe/PDF/Regulatory/psco_gas_entire_tariff.pdf**.)

Changing Context Challenges the Rationale

Both the economic and public benefits rationales for gas line extension allowances assume permanent gas use at today's volumes—but this is at odds with climate policies, improved electric heating technologies, and shifting market trends. Furthermore, gas construction allowances pose a direct barrier to electrification, which is a critical climate strategy. Additionally, there is growing recognition that widespread gas combustion poses major risks to the global climate and to public health.[iii]

Context and Expectations for Future Gas Use Have Changed

Gas line extension policies are based on outdated and risky assumptions of a future with consistent or growing gas usage. Climate plans in states across the country clearly demonstrate that a shift away from gas use in buildings is a key component of the most cost-effective decarbonization pathways. Several states have already enacted policies that call for a substantial decline in gas consumption, such as:

- Colorado's Greenhouse Gas Roadmap shows a 94% reduction in gas usage in residential and commercial sectors by 2050.[17]
- Massachusetts states that "electrification of space and water heating is a low-risk, cost-effective strategy for decarbonizing the majority of buildings," and "the use of gas for building heat must start to decline in the near term."[18]
- Maryland's Greenhouse Gas Reduction Act Plan shows the residential building sector dominated by electric heat pumps by 2050.[19]
- New Jersey's Energy Master Plan requires a transition plan for a fully electrified building sector.[20]
- New York's Climate Action Council found that all mitigation scenarios that meet the requirements of the Community Protection and Climate Leadership Act rely on "more rapid and widespread end-use electrification and efficiency."[21]

These policies and plans, and others like them across the country, make clear that meeting climate goals will require vast changes to the way gas is used in buildings today.

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iii. For more on the air quality and health impacts of gas use, see the report ***Gas Stoves: Health and Air Quality Impacts and Solutions***.

While hydrogen and other alternative fuels may be used in specific applications, overall gas use is likely to decline dramatically through both expanded energy efficiency and electrification. The supply of alternative fuels such as renewable natural gas (RNG), or methane-rich gas captured from decomposing organic matter, simply cannot meet the needs of the end uses currently served by gas at anywhere near today's volumes. The optimistic scenario from the American Gas Foundation (AGF) and ICF International finds that potential RNG supply would meet only 12% of current US gas demand by 2040. This limited supply would come with high costs of $7–$20 per MMBtu for RNG, compared with $2–$4 for fossil gas in 2020 and $5–$6 during the late 2021 gas price spike at the time of this report's writing.[22]

Natural Resources Defense Council's assessment of the ecologically sound supply of RNG is about half the AGF's estimate, just 3%–7% of current US gas demand.[23] Given these constraints—in addition to questions about life-cycle carbon emissions from alternative fuels—it is clear that a decarbonized future will require major declines in gas consumption, through both efficiency and electrification.

Instead of reflecting this declining trajectory of gas consumption, line extension calculations implicitly assume new buildings will use gas far into the future. For most of its gas utilities, Washington State has used a "perpetual net present value" calculation, assuming new gas customers will provide revenue forever.[iv] Xcel Energy in Colorado requires "permanent service … where sufficient revenue to support the necessary investment is assured."[24]

In addition to a decline in the number of gas customers, the average customer's annual gas consumption is also likely to decrease over time, but extension policy assumes consumption will remain constant. In fact, gas use per household is already declining due to higher-efficiency gas appliances, better envelope sealing and insulation, and other efficiency measures.[25] Some gas utilities are initiating strategies for partial electrification,[26] in which customers would maintain gas service but consume much less gas. These strategies would undermine many of the calculations of future revenues from new gas customers.

Existing gas line extension policies across the country result in significant expenditure to expand the system. Yet given the expected changes in gas demand, utilities may not recover this expense through new revenues, which would require additional rate increases and pose financial risk to utility customers. Basing capital expenditures on the flawed assumption that households will continue to use a constant amount of gas every year, for decades to come, is a risky fantasy.

Line Extension Allowances Distort the True Costs of the System

By shifting costs onto existing ratepayers, developers of new buildings are not responsible for the true cost of construction. If developers were faced with the full cost of gas service—including several thousand dollars that are usually subsidized—they would be more likely to build all-electric. Line extension allowances create a situation in which developers do not have incentive to guard against the risks that gas customers may face down the line. That is, the decision makers in building design (e.g., developers, builders, and engineers) choose the option cheapest for them, while other gas system customers bear the up-front costs and the risk of escalating future costs on a transitioning gas system.

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iv. On October 29, 2021, the Washington Utilities and Transportation Commission issued a decision in Proceeding No. UG-210729 directing Avista, Cascade, and Puget Sound Energy to file revised line extension allowances. The new allowances will be calculated using a modified perpetual net present value calculation with an updated discount timeframe of seven years.

Current line extension policies create an uneven playing field for end-use technologies that don't use gas, such as ground-source and air-source heat pumps and induction stoves. The money currently spent on gas lines could instead be spent on cleaner alternatives that do not run the risk of burdening future customers with the cost of underutilized assets.

Line extension allowances can also encourage developers to make inefficient decisions. Consider a new commercial building, where all-electric construction would require additional infrastructure, such as a larger transformer. Currently, that additional cost, especially compared to a gas line offered for free or at low cost, could incent a developer to instead build with both gas and electricity. An expanded electric allowance that covered more costly electric service infrastructure, or otherwise offset the cost of all-electric buildings, would put the technologies on more even footing.

Expanding Gas Service No Longer Provides Public Benefit

Fundamentally, gas usage must decline to meet targets for zero or net-zero emissions across the US economy. Continuing to burn gas in homes and businesses is in direct opposition to this goal, because of its contribution to greenhouse gas emissions and the viability of electrification as an alternative.

Expanded gas use also contributes to direct emissions of methane via leaks. Given the extremely high global warming potential of methane, the UN Environment Programme clearly states that "reducing human-caused methane emissions is one of the most cost-effective strategies to rapidly reduce the rate of warming and contribute significantly to global efforts to limit temperature rise to 1.5°C."[27] Additionally, the alternatives to gas equipment, from heat pumps to electric and induction cooking, reduce human health harms caused by indoor air pollution from gas combustion.[28]

As discussed in the previous section, many states have highlighted that gas demand will need to fall dramatically in coming years to meet climate goals. Some utilities are beginning to clearly state that gas use will decline. In New York, Rochester Gas & Electric and National Grid's upstate business have agreed in joint proposals to stop further increases in gas sales, and to stop promoting oil-to-gas conversions.[29] Central Hudson has committed to reducing its gas sales.[30] ConEdison recently released a request for proposals for non-pipe alternatives to replacing leak-prone pipes. Alternatives to continued gas infrastructure investment (for example, electrification and demand flexibility) would allow for strategic pipe abandonment.[31]

Further, expanding gas service poses several important equity risks. As electrification becomes more prominent, there is a real risk of a utility "death spiral" where wealthier customers leave the gas system, leaving lower-income and renting populations responsible for paying for existing gas infrastructure.

Recommendations

Given the changing economic landscape and shifting societal priorities, the rationale for utility gas line extension allowances is no longer justified. In response, we offer three key recommendations:

1. **End or reform gas line extension allowances:** Given the economic risks that declining gas consumption will undermine new customer revenues over time, states have a strong basis for reforming line extension allowances. Additionally, the increased risk of stranded costs associated with expanding gas infrastructure and the growing recognition of the climate and health hazards posed by expanded gas use provide further reason to move away from these policies. At minimum, this necessitates a recalculation of allowance values with a diminished view of future gas sales and revenues. A stronger and more straightforward solution would be to eliminate the practice altogether. Leading states may also consider a model inspired by water utilities, in which new customers pay a system access fee that directly supports energy affordability for existing customers during gas system decarbonization.

2. **Expand electric line extension allowances for carbon-free buildings:** While the changing context challenges the rationale for gas line extension allowances, electricity service continues to be a necessity for all customers. A shift from new construction with gas to all-electric buildings is emerging as both a necessary climate strategy and an opportunity to eliminate the human health impacts of indoor fossil fuel combustion.[32] All-electric buildings will consume more electricity than their mixed-fuel counterparts and deliver greater revenue to electric utilities over time, but they are usually not eligible for any greater electric line extension allowances. Regulators can reform electric line extension policies to offer a higher allowance for all-electric buildings, in recognition both of their greater revenue contribution and their role in supporting climate policies. Such a policy was recently introduced for Portland General Electric when the Oregon Public Utility Commission approved a higher allowance for all-electric customers.[33]

   Notably, solely eliminating gas allowances creates the specific risk of increasing costs of construction for new affordable housing or other socially desirable construction and reducing the number of new units built. Expanding electric allowances and other all-electric incentives can support affordability and level the playing field. Pilot data suggests that there is minimal to no additional cost for all-electric multifamily buildings for affordable housing.[34]

3. **Evaluate the potential for line extension allowances to support new carbon-free energy services:** In some contexts, gas utilities might build and operate shared geothermal heating loops. This strategy is being piloted in Massachusetts by Eversource Energy and HEET, through the GeoMicroDistrict model, where utilities' district geothermal infrastructure delivers heating and cooling to multiple customers.[35] If regulators find it in the public interest to expand this model, it will need its own category of line extension policy and enabling regulation.

The Path Forward

The changes needed to align line extension policies with climate goals and customer interests could be initiated through different channels, and the best path forward will likely vary by state. Avenues for reform may be led by legislatures or regulators. Lawmakers may pass new laws to alter gas line extension policy or direct their state utility commissions to take action. In states like New York or Wisconsin, where gas line extension is written into statute, legislative change will be required. Or public utility commissions (PUCs)—who are tasked with ensuring safe, reliable, and affordable energy services—can amend their rules or instruct utilities to change their line extension policies. Because state utility commissions are increasingly tasked with addressing climate issues as part of their decision-making, eliminating or changing gas line extension allowances often fits within the existing mandate of PUCs.

Changing gas line extension policies represents a clear near-term action; while the transition to a clean, affordable building sector will require funding as well as many other policy and program changes, utilities and PUCs can act now. Gas line policies as they stand today pose significant financial risk to utility customers and exacerbate the challenge of decarbonizing the built environment. In practice, they act as an obscure fossil fuel subsidy and perpetuate a system that contributes significantly to climate change. Both climate urgency and financial prudence require reform of this niche but important policy.

Additional strategies for building decarbonization can be found in our 2020 report, ***Regulatory Solutions for Building Decarbonization: Tools for Commissions and Other Government Agencies,*** as well as our 2021 report, ***Decarbonizing Homes: Improving Health in Low-Income Communities through Beneficial Electrification***.[36]

Appendix: Case Studies

Line extension policies vary broadly from state to state. Some states, like New York, have specific and broad statutory requirements that determine how gas line extension policy is implemented. Other states, like California, require utilities to use a specific equation when calculating their allowances. Still others, like Colorado, have a universal framework that requires utilities to balance cost allocation between new and existing customers, but each utility applies to the Public Utilities Commission (PUC) for approval of its own method of calculation. In order to demonstrate a variety of approaches, we examine gas line extension policies in four states.

California

Current structure/practice: Revenue-based rationale

- Utilities are required by statute to provide access to service at reasonable cost.
- The California Public Utilities Commissions (CPUC) requires gas line extension allowances to be calculated based on the additional revenue the utility expects to receive as a result of each gas appliance installed by the new customer.
- Under current policies, allowances range from $1,700 to $2,700 for residential customers.
- For nonresidential customers, utilities calculate allowances on a case-by-case basis, using the same formula used to derive the standardized residential allowances.
- A recent staff proposal in the CPUC's Building Decarbonization Rulemaking docket (R.19-01-011) recommended eliminating allowances and other incentives for gas line extensions to encourage all-electric new construction.[37]

What can key actors do to modify current practice?

Legislature: State lawmakers could pass a bill requiring the CPUC to act (e.g., via a rulemaking) to align gas line extension policies with California's climate goals.

Public Utilities Commission: The CPUC could act in line with the staff proposal to eliminate gas line allowances and reform electric line extension policies to lower the up-front costs of building electrification. In addition to docket R.19-01-011, the ongoing gas planning proceeding (R.20-01-007) focuses on gas policy and planning and also implicates gas line extensions.

Utilities: In the absence of state action, utilities could propose eliminating gas line allowances of their own accord based on an argument that providing line extension allowances is no longer a reasonable use of ratepayer dollars.

Washington State

Current structure/practice: Revenue-based rationale

- Until recently, the Washington Utilities and Transportation Commission (UTC) has allowed three out of four gas utilities to calculate line extension allowances using a method that assumes new customers will remain on the gas system indefinitely, called the perpetual net present value (PNPV) method. (The other gas utility uses a formula based on expected usage.)

- Under existing policies, allowances for these three utilities range from $3,500 to $4,600 for new residential customers.

- Allowances for nonresidential rate classes vary from utility to utility; some calculate allowances on a dollars-per-therm (estimated annual usage) basis, whereas others use a simple cost cap.[v]

- The UTC issued a decision in October 2021 directing gas utilities to file revised line extension allowances based on a modified PNPV with an updated discount timeframe of seven years, which will result in allowances of roughly $2,000. [38, vi]

What can key actors do to modify current practice?

Legislature: State lawmakers could pass a bill to eliminate gas line extension allowances.

Utilities and Transportation Commission: The UTC could unilaterally eliminate gas line extension allowances by determining, among other things, that facilitating expansion of the gas system is no longer a reasonable use of ratepayer dollars. In September 2021, the UTC chair opened a docket to "consider whether natural gas utilities should continue to use the perpetual net present value methodology to calculate natural gas line extension allowances" (UTC Docket UG-210729). While commissioners have thus far declined to completely eliminate allowances for gas line extensions, they indicated that this issue would likely be discussed at greater length in the UTC's broader decarbonization docket, U-210553.

Utilities: Gas utilities could apply to the UTC for approval to reduce or eliminate their gas line extension allowances.

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v. Cascade's tariff has a $14,746 cost cap for commercial allowances: **https://www.cngc.com/wp-content/uploads/PDFs/Rates-Tariffs/Washington/2021_tariffs/8-Extension-of-Distribution-Facilities-Rule.pdf**.

vi. $2,000 is approximately how high allowances were prior to the implementation of the original PNPV method in the 2010s.

New York

Current structure/practice: Revenue-based rationale

- Utilities are statutorily required by Public Service Law, Section 31, to provide at least 100 feet of pipeline to new residential customers, free of charge.[vii]
- The New York Public Service Commission (PSC) has allowed utilities to expand this entitlement to provide new gas heating customers up to 100 feet of main plus 100 feet of service line extension for free.
- Utilities have testified in prior proceedings that these extensions are typically not revenue-justified.
- Policies for nonresidential customers vary but generally provide up to 100 feet of pipeline for free (some utilities do not provide free footage for dual-fuel nonresidential customers).[viii]

What can key actors do to modify current practice?

Legislature: Lawmakers would need to modify Public Service Law. Both the obligation to serve and the requirement to provide up to 100 feet of pipe for free require legislative amendment in order for other actors to align line extension policies with the state's climate laws.

Public Service Commission: Absent legislative action, the PSC could roll back its expansion of Public Service Law language to allow at most 100 feet of free pipeline. The PSC could also increase electric allowances to incentivize (and increase universal access to) efficient electric heating.

Utilities: Gas utilities can limit their gas line extension policies to the exact statutory language (i.e., providing exactly 100 feet for free). Utilities could also report the costs of the line extensions to support their assertions that these extensions are not revenue-justified, and they could argue for the modification of both gas and electric allowances to support electrification.

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vii. New York's Public Service Law, Section 31, specifically states: "In the case of any application for service to a building which is not supplied with electricity or gas, a utility corporation or municipality shall be obligated to provide service to such a building, provided however, that the commission may require applicants for service to buildings located in excess of one hundred feet from gas or electric transmission lines to pay or agree in writing to pay material and installation costs relating to the applicant's proportion of the pipe, conduit, duct or wire, or other facilities to be installed."
See **https://codes.findlaw.com/ny/public-service-law/pbs-sect-31.html**.

viii. For example, Brooklyn Union Gas (d/b/a National Grid) does not have an explicit policy for dual-fuel nonresidential customers. Note that "dual-fuel" in this context refers to customers whose gas end uses (typically generators) can be operated using a fuel other than gas (such as fuel oil).

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Colorado

Current structure/practice: Embedded-cost rationale[ix]

- Utilities are required by statute to publish their line extension policies, including "provisions addressing steps to ameliorate the rate and service impact upon existing customers."[39]
- Utilities' allowances are based on an "average embedded cost" formula that approximates a new customer's contribution to sharing the fixed costs of the existing gas system.
- Allowances for new residential customers typically range from $550 to $1,400.[x]
- Policies for new commercial customers vary, but utilities tend to provide roughly $1,500 allowances for service lines and calculate allowances for main extensions on a case-by-case basis.[xi]

What can key actors do to modify current practice?

Legislature: Lawmakers could either eliminate gas line extension allowances outright or direct the PUC to modify its rules.

Public Utilities Commission: The Colorado PUC could eliminate gas line extension allowances or amend its rules governing line extension policies. Of note, the PUC recently listed gas line extension policies among the gas rules that may need to be modified in alignment with recent legislation and Colorado's climate goals.[xii]

Utilities: Modifications to utilities' methods of calculating line extension allowances are subject to PUC approval, which is based on the Commission's assessment of whether the allowances allocate costs fairly between existing and new customers. Utilities could apply to eliminate line extension allowances based on an argument that any amount of allowance does not allocate costs fairly among existing and new customers.

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ix. Colorado's largest gas utility (Public Service Company of Colorado, d/b/a Xcel Energy) uses an embedded-cost rationale; other gas utilities in the state use different methods of calculating line extension allowances.

x. The Mountain Division of Colorado Natural Gas provides allowances of up to $7,335.

xi. Xcel's policy can be found on page 236 (Tariff Sheet No. R87) of its tariff sheets: https://www.xcelenergy.com/staticfiles/xe/PDF/Regulatory/psco_gas_entire_tariff.pdf.

xii. See Decision No. C21-0516 in Proceeding No. 21M-0395G and Decision No. C21-0610 in Proceeding No. 21R-0449G. Decision C21-0610 proposes to amend Colorado's gas rules for line extensions by requiring that line extension policies adhere to the "principle that the full incremental cost associated with new development and growth shall be borne generally by the customers that cause those incremental costs" and that such policies must align with the state's greenhouse gas emissions reduction goals.

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30. "Central Hudson Gas & Electric Corporation Cases 20-E-0428, 20-G-0429 and 20-M-0134 Summary of Electric and Gas Rates Joint Proposal," August 24, 2021, **https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={9FC14EA7-7B82-457B-8BC2-B0915E4E6F07}**.

31. "Request for Proposal: Non-Pipeline Alternatives to Provide Whole Building Electrification Services", ConEdison, July 12, 2021, **https://www.coned.com/en/business-partners/business-opportunities/-/media/23db06efb6e145379d6fc8d420743736.ashx**.

32. Seals, *Gas Stoves*, 2020.

33. "Re: UE 394 – Portland General Electric Company's Request for a General Rate Revision PGE Advice No. 21," Portland General Electric, July 9, 2021, **https://assets.ctfassets.net/416ywc1laqmd/5GaCEqKCuqprwTV0Zr5roq/fc0e89fd20255443f270403df63cfd7f/2022-Rate-Case-Letter___Revised_Tariff_Sheets.pdf**.

34. "Public Webinars Day 2, Carbon Neutral Buildings Roadmap," NYSERDA, June 16, 2021, **https://www.nyserda.ny.gov/-/media/Files/Programs/Carbon-Neutral-Buildings/Day-2-Carbon-Neutral-Roadmap-Presentation.pdf**.

35. "GeoMicroDistrict Feasibility Study," HEET, accessed November 9, 2021, **https://heet.org/energy-shift/geomicrodistrict-feasibility-study/**.

36. Sherri Billimoria and Mike Henchen, *Regulatory Solutions for Building Decarbonization: Tools for Commissions and Other Government Agencies*, RMI, 2020, **https://rmi.org/insight/regulatory-solutions-for-building-decarbonization**.

37. CPUC Energy Division Staff, "R.19-01-011 Phase III Staff Proposal," November 16, 2021, **https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M423/K516/423516230.PDF**.

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Rob Zuccaro

From: Richard Simpson
Sent: Thursday, November 18, 2021 11:23 AM
To: Ashley Stolzmann; City Council
Subject: 2021 IECC Code

In reference to your adoption of the 2021 International Energy Conservation Code I would like to point out a few facts.

While I appreciate your effort to have new construction in Louisville contribute to environmentally sound standards, unless your electricity is being produced by a non-carbon fossil fueled source there is still a carbon footprint.

60% of the electricity generated in the U.S. last year came from fossil fuel combustion. Therefor unless your electricity is generated by water, wind, solar or nuclear fission you are still making a carbon footprint.

There is no question Electric vehicles (EVs) are a good thing and potentially cleaner and greener than internal combustion engines BUT they are not a silver bullet that will save the planet overnight. Building an EV produces 30-40% more emissions than a conventional car. Most of the increase is from the battery production; minerals such as lithium and cobalt currently require energy intensive mining and thus today's battery factories have a very high carbon footprint. Not to mention the issue of recycling of the used batteries.

Your adoption of the IECC will certainly raise the cost of new construction in a city that already has soaring housing costs.

I am not in favor of your proposal to require buildings to run solely on electric energy which at this time is far more expensive.

Richard Simpson
1560 Ridgeview Dr
Louisville, CO

Rob Zuccaro

From: Casey Schneebeck
Sent: Wednesday, December 1, 2021 12:10 PM
To: City Council
Subject: Measures for Greater Energy Efficiency

Hello Council Members,

I just read the Measures for Greater Energy Efficiency article in the Winter 21-22 edition of the Community Update. I fully support requiring all new construction to have EV charging infrastructure and to be built with all electric systems. I oppose allowing natural gas in buildings with the ability to convert at a later date. If the natural gas loophole is allowed to go through, I propose including an end date where they are forced to switch to electric.

I signed up for updates on the Energy Code Update page and look forward to participating in this process.

Thank you for your time,

Casey Schneebeck
415-722-9768
218 Hoover Ave
Louisville, CO

Twenty questions for the City concerning energy-related commercial building code changes

Introductory comments: One of the more difficult aspects of writing these questions is that there is evidently no current draft of the Code that is readily available and that the Code itself is extremely long, detailed, and difficult even for experts in the field to plow through. Hopefully, these questions will help a more focused picture come to light.

Further, it is clear that climate change is real and that the use and abuse of energy are factors in that climate change. It is also clear that responses to climate change have to be practical and should take a regional, statewide, national, or international approach. Changes in Louisville regulations that simply move the problem to Broomfield, Lafayette, Erie, or elsewhere 'further out' are less than no help, even exacerbating the problems.

That said, here are the questions. Numbering is for convenience of reference, and do not reflect the importance of the questions or potential answers. The importance will vary depending upon the interests of the questioners and responders.

1. Will the Code ban the use of natural gas, either now or in the future in commercial buildings? Please note that many small businesses, including restaurants, breweries, coffee roasters, bakeries, and others cannot convert to all-electric appliances due to the lack of adequate equipment, lack of affordable equipment, inability to change processes (BBQ, bakers, wood fired pizza, and roasters), inability to maintain product quality, inability to serve customers quickly, lack of training, and very likely other reasons. Even if conversion were possible, small business lacks the access to capital to meet the costs and to weather the delays in obtaining the equipment. Production kitchens do not share the simple 'put in a new range' alternative that is possible in residential homes.
2. The health of Avista hospital is of vital importance to Downtown and all of Louisville. Will there be a 'hospital exemption' from the Code, and specifically including an exception to a ban on natural gas? Will there be a medical research, laboratory, urgent care, and medical office building exception to encourage those highly desired businesses to locate here?
3. Will there be an exception for a "change in use" of a structure that is vacant? Without an exception, the cost of replacing HVAC equipment and installing very high levels of insulation in buildings that were not designed for it could, and likely will, discourage the creative reuse of our currently vacant buildings. These include, but are not limited to, (a) the Historic Downtown Grain Elevator, (b) the Downtown Chase Bank, (c) Empty Kohls, (d) empty Lowes, (e) vacant Carrara's, (f) vacant former auto parts-scrapbooking store next door, (g) empty Alfalfa's, and (h) empty spaces in CTC and elsewhere listed on several real estate listing websites. Possible other sites may include (i) the Walgreens on SBR, (j) Ascent Church (by the way, a fine reuse of that building that possibly could not have happened if the insulation requirements of the code applied), and other buildings in town. While the majority of these sites are not in Downtown, the reuse of these buildings could represent a 'rising tide that lifts all boats,' with their occupancy contributing to the vibrancy of the City, including the health of Downtown.
4. How will 'change in use' be defined? For example, if a change in use changes a more energy intensive activity into a less energy intensive one, will that less energy intensive use be discouraged by having to comply with the Code? Will the Code include a provision for a waiver in this situation? Has the City researched the cost of new construction in the surrounding communities (such as Broomfield and Erie) as compared to the cost of retrofitting comparable buildings in Louisville? Has the City consulted with builders or developers concerning their preferences about trying to reconstruct existing buildings with a changed use as compared with starting new ones with longer commute times?

5. What will be the estimated additional time, expertise and cost needed for an applicant to prepare an application arising from new regulations (especially additional architect, legal, and engineer time)? What will be the additional time for the City to process a building permit application? Will there be additional inspections during construction? Will the City provide a screened or approved list of knowledgeable architects, engineers, designers, contractors, and other professionals who are acceptable to the City and appropriately licensed (Will additional City licenses be needed for professionals to work here on Code matters)? What additional City staff and consultants will be needed—and given the current scarcity of labor—are the needed personnel and consultants available at a price the City is willing to pay? Would the City consider a waiver of use tax, sales tax, and/or permit fees for the costs of compliance? How long will it take City staff to get up to speed? Have new submitted forms been drafted for applicants? Do compliant examples exist?
6. Has the HPC been consulted on the potential impacts of the Code on historic structures, including impacts on new construction added to historic structures? Will HPC funds (grants, loans) be available to help pay for the upgrades, and when will those programs be in place? Aside from the HPC, what grant and loan programs will be available to businesses, including from the City and the LRC? Reimbursement programs are often 'not good enough' for small businesses that can't obtain the money in the first place to be reimbursed later: funds 'up front' without excessive application requirements would be essential for small businesses.
7. Will there be Code exceptions for building plans that have already been approved, but not yet built, such as the Moxie expansion and the Main Street offices of Boulder Creek Builders?
8. What exceptions will be available for minor alterations to existing structures (whether historic or not)? What will be considered minor?
9. Is foundation insulation feasible on historic buildings, including those with no setbacks? This may not be an issue if historic structures and zero lot line buildings are exempt, however, it raises the question of whether City staff be given the flexibility to quickly approve simple waivers in situations where waivers make sense, without having to return to City Council.
10. How will the likely decrease in 'air changes per hour' affect indoor air quality, particularly as it relates to Covid transmission? Has the City prepared a study, risk assessment, or list of potential unintended health and other consequences to share with the public?
11. HasLouisville been working with the state—which is possibly considering a statewide approach in the next legislative session—and nearby municipalities to take a regional approach to Code implementation to avoid having businesses (especially restaurants) moving to other communities rather than locate or expand here when their leases expire? Should Louisville coordinate the timing of its Code approval efforts to avoid incomparable regulations that conflict with the state or unintentionally lead important businesses to locate or relocate elsewhere? Loss of Downtown restaurants, especially award-winning ones, due to Code compliance issues would be a disaster for Downtown and the City. What's the rush—shouldn't the questions be answered and the City receive more business buy-in prior to adoption of the new Code? What have been the experiences of other U.S. cities that have adopted the Code?
12. Will the electric grid, especially in the older neighborhoods and Downtown be able to support the additional electric power requirements? Is new line construction needed? Will line improvements be underground? Will their construction result in significant traffic disruptions? There have also been concerns about the shift in fuels from natural gas to electric power plants that are fired by coal, gas, and nuclear. What impacts will this have? Are solar panels, wind, storage, and other equipment currently available or are supply chain disruptions an issue? If there are supply chain problems, will waivers from immediate Code compliance be available to allow a project (in either a new,

change in use, or existing building) to proceed, with later compliance when equipment is available? The question of waivers or delayed compliance not only applies to solar and wind production equipment, but also to in-building HVAC and process equipment (such as stoves, boilers, and specialized equipment like roasters). Some residents and at least one local appliance retailer have reported months-long delays for getting relatively simple residential appliances: has the City determined whether the same holds true for commercial equipment? At meeting held at the Library, there was a mention of an 'industrial process' exception, what exactly is an 'industrial process' and what will be exempt? Would an industrial process have to be located in an industrial zoned building, such as in CTC, or can it be also include a small use in any commercial building, such as brewing equipment located in a non-industrial zone?

13. Has the Fire District been consulted? Does it have a position on the Code? How does the Code affect the Fire District's desire for a southern station?
14. Can trees be planted to offset any of the requirements? Would the City make City land available for planting?
15. The City is currently working on its decarbonization plan, what will be the City's schedule for compliance?
16. Has the City received a report on the energy consumed in building materials, particularly for increased insulation, compared with the energy savings to be achieved by that insulation?
17. Does the City have calculations of estimated payback periods—or the length of time that it takes for the energy cost savings from an improvement to pay the up-front costs of the improvement plus its financing costs—to share with the community? Relatively short payback periods, especially if they allow for amortization of up-front costs during the term of a business lease, could help lessen concerns about new requirements.
18. Have the EVC, LRC, and Planning Commission held hearings or meetings on the proposed changes and/or provided input to staff and City Council? If not, when will that occur? Has the City considered staff attendance at a meeting of the CTC Metro District Board of Directors and/or Property Owners Association to solicit comments? The Main Street Louisville BID Board should also be informed.
19. Will the cost of retrofits encourage demolition of historic structures in order for the owner or tenant to 'start over' rather than taking on the uncertainty and cost of Code compliance in an old structure that may need major upgrades or changes in use?

Oh my, only 19.

Thank you,

Rick Kron
Resident, since 1987, of
746 West Fir Court
Louisville, CO 80027

Questions for the City concerning energy-related building code changes from the Board of Directors of the Downtown Business Association of Louisville, Inc.

Last week's Energy Code meeting at the Recreation Center triggered a number of additional questions and suggested some edits for the 20 questions (actually 19) that were previously submitted by Mr. Kron. The revised 19 questions are included below, with the most substantial changes coming in items 9, 12, and 16.

The Board of Directors of the Downtown Business Association of Louisville has reviewed the prior questions, has added additional questions, and discussed others. Earlier today (8/4/22), the Board voted to submit all of the questions to the City with the backing of the Board.

Timely answers are needed.

The additional questions are:

20. Will the required EV charging stations make those spaces unavailable for non-EV vehicles? If the EV charging spaces will not be available to others, has there been a study of the effects of the loss of those spaces on fuel use resulting from increased searching for conventional spaces? If the EV charging spaces are not to be used by others, will private parking space owners be expected to enforce the restricted use of the privately owned EV charging spaces or will the police do that? Will the City be providing EV charging spaces in its lots? If so, will those be exclusive?

21. Installing a standby 220v electric line in an existing commercial kitchen (in the event of a renovation, change in use, or replacement of an existing gas stove for a new one) might require running the electric line behind cabinets, through historic walls, at odd angles or curves, and/or dropped through ceilings. Is the current Louisville commercial electrical code compatible with the requirement for these new electric lines if they are in retrofit locations where they were not previously anticipated?

22. The Regional Code Cohort is working together to decide on its preferred collective action. Is the City's accelerated schedule risking the solidarity of that cooperative effort? If the City gets out ahead of the rest of the cohort, the City risks the possibility of the loss of businesses to surrounding communities. If losses happen, there is a substantial risk that other communities will see the bad experience and choose not to follow the City's example. A failed experiment in a City with Louisville's prominence could be a real setback to the adoption of the Code in other communities. Is that possibility worth the risk when a regional or state approach might, and likely would, avoid it?

23. At last week's meeting, an architect related some of his experience with new efficient HVAC systems in Boulder, in particular noting that trained installers and maintenance technicians for new HVAC systems are unavailable or in short supply. Will the City be assisting with training programs through our high schools, community colleges, or our appliance businesses to help fill this gap? Will the City offer incentives for businesses and workers in the installation and maintenance fields to locate here?

24. At last week's Code meeting, there was a rather confusing presentation concerning the use of off-site solar, RECs, and other alternatives. It seems that three of the four alternatives would not be usable due to a requirement for 15 year supply contracts. Why is there a 15 year requirement as opposed to another number or no number at all? If a requirement exists, it would seem that simply putting the requirement in place and having the building owner decide how to meet it could be a better approach. A related question is why penalize off-site solar

options? What is the HPC's position on the addition of solar panels or windmills on historic buildings?

25. How will the life cycle of a building enter into the Code requirements in a change in use situation? Will buildings with short remaining useful lives simply be demolished rather than comply with the Code? How will this impact entrepreneurship and start-ups when older buildings are not available at lower rents? Artists also tend to use older, cheaper, buildings; how will their ability to acquire studio and display spaces be affected?

26. Are home offices subject to the Code requirements?

27. A commercial building owner at the meeting noted that the building owner would most likely pay the costs to bring a building up to the Code, but the 'payback' benefits, if any, would accrue to the tenant. Has the City or the Regional Code Cohort made estimates of rent increases that would come from Code compliance?

28. Some of the City's currently vacant buildings are unlikely to be filled by a single tenant (as has been the case for the former Hobby Lobby space). In the event a formerly single-user building, such as Kohls or Lowes, is split into several occupancies, will the Code require compliance for the entire building or for each separate user space?

29. Has there been a study of potential electric rate increases arising from increased demand due to increased electrification demand and/or electrical demand increases due to the elimination of natural gas? What would be the effects of increases on local businesses, particularly existing businesses with existing equipment?

30. What would the penalties be for non-compliance? Will new procedures be needed for appeals, and what would they be? Will the people handling appeals receive training on Code provisions?

31. Will the proposed specific 'triggers' be explained to, and vetted with, the business community prior to their adoption? There is a concern that there will not be sufficient time or opportunity for review and comment.

32. The DBA Board questioned: Does a conversion to all-electric use makes sense, especially in the short term, while XCEL generates over 50% of its electricity from coal and natural gas, and projects continued use of those fuels for decades in the future? Will the generation of carbon emissions increase in the short term, especially there are supply shortages slowing the construction of solar and wind alternatives?

33. The multifamily housing sector and developers were conspicuously absent from the two City public engagement meetings: has the City engaged with them in some other way? The sample multifamily building showed at the meetings is a five story design. Will the City allow five story apartment buildings? How will the Code affect the affordability of multifamily units, both in rent and in operating costs? In turn, how will the implementation of the Code in multifamily construction affect the City's achievement of its diversity and inclusion goals, especially as they relate to young families, if the Code increases housing costs?

34. Is it in the best interests of Louisville to proceed with the Code, without coordination with the state or the Regional Code Cohort, at this time in the wake of: COVID, pandemic related temporary closures of businesses, the Marshall Fire and loss of New Year's business, the displacement of people from the Fire and widespread under-insurance, inflation increasing the costs of doing business and costs for residents, potential recession, global and local supply shortages of material and equipment (especially appliances) due to pandemic and war,

increased interest rates that impact construction and other costs, labor shortages, permanent retail business closures that are cutting City tax revenues and likely forcing budget cuts, Medtronic's departure, and active recruitment of Louisville businesses by nearby communities seeking their relocation?

It is highly likely that this last item, active recruitment, will increase if the Code is unilaterally adopted by Louisville without at least the Regional Code Cohort simultaneously adopting it, or if the Code that is adopted includes a current or future prohibition on the use of natural gas for restaurants and other gas-dependent activities mentioned in Question 1 below.

The Board may find that there are more questions to be asked, and may bring them up in the future, but the questions above plus the questions below are enough for now.

Sincerely,

The Board of Directors
Downtown Business Association of Louisville, Inc.
August 5, 2022

The prior questions, with some editing, follow:

Twenty questions for the City concerning energy-related commercial building code changes (Revised 8/4/2022)

Introductory comments: One of the more difficult aspects of writing these questions is that there is evidently no current draft of the Code that is readily available and that the Code itself is extremely long, detailed, and difficult even for experts in the field to plow through. Hopefully, these questions will help a more focused picture come to light.

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5. What will be the estimated additional time, expertise and cost needed for an applicant to prepare an application arising from new regulations (especially additional architect, attorney, and engineer time)? What will be the additional time for the City to process a building permit application? Will there be additional inspections during construction? Will the City provide a screened or approved list of knowledgeable architects, engineers, designers, contractors, and other professionals who are acceptable to the City and appropriately licensed? Will additional City licenses be needed for professionals to work here on Code matters? What additional City staff and consultants will be needed—and given the current scarcity of labor—are the needed personnel and consultants available at a price the City is willing to pay? Would the City consider a waiver of use tax, sales tax, and/or permit fees for the costs of compliance? How long will it take City staff to get up to speed? Have new blank submittal forms been drafted for applicants? Do compliant examples of completed forms exist?
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8. What exceptions will be available for minor alterations to existing structures (whether historic or not)? What will be considered minor?

9. Is foundation insulation feasible on historic buildings, including those with no setbacks? In particular, will there be exemptions from additional exterior foundation insulation requirements on Main Street where additional exterior insulation would further narrow the already narrow sidewalks? This may not be an issue if historic structures and zero lot line buildings are exempt, however, it raises the question of whether City staff will be given the flexibility to quickly approve simple waivers in situations where waivers make sense, without having to return to City Council.
10. How will the likely decrease in 'air changes per hour' affect indoor air quality, particularly as it relates to Covid transmission? Has the City prepared a study, risk assessment, or list of potential unintended health and other consequences to share with the public?
11. Has Louisville been working with the state—which is possibly considering a statewide approach in the next legislative session—and nearby municipalities, including the City and County of Broomfield, to take a regional approach to Code content and implementation to avoid having businesses (especially restaurants) moving to other communities rather than locate or expand here when their leases expire? Should Louisville coordinate the timing of its Code approval efforts to avoid incompatible regulations that conflict with the state or other local regulations or that unintentionally lead important businesses to locate or relocate elsewhere? Loss of Downtown restaurants, especially award-winning ones, due to Code compliance issues would be a disaster for Downtown and the City. What's the rush—shouldn't the questions be answered and the City receive more business buy-in prior to adoption of the new Code? What have been the experiences of other U.S. cities that have adopted the Code?
12. Will the electric grid, especially in the older neighborhoods and Downtown be able to support the additional electric power requirements? Is new line construction needed? Will line improvements be underground? Will their construction result in significant traffic disruptions? Has XCEL provided a definitive conclusion on what, if anything, needs to be done to the grid and who will pay for it? There have also been concerns about the shift in fuels from natural gas to electric power plants that are fired by coal, gas, and nuclear. What impacts will this have? Are solar panels, wind, storage, and other equipment currently available or are supply chain disruptions an issue? If there are supply chain problems, will waivers from immediate Code compliance be available to allow a project (in either a new, change in use, or existing building) to proceed, with later compliance when equipment is available? The question of waivers or delayed compliance not only applies to solar and wind production equipment, but also to in-building HVAC and process equipment (such as stoves, boilers, and specialized equipment like roasters). Some residents and at least one local appliance retailer have reported months-long delays for getting relatively simple residential appliances: has the City determined whether the same holds true for commercial equipment? At the City's public input meeting held at the Library, there was a mention of an 'industrial process' exception, what exactly is an 'industrial process' and what will be exempt? Would an industrial process have to be located in an industrial zoned building, such as in CTC, or can an industrial process be also include a small use in any commercial building, such as brewing equipment located in a non-industrial zone?
13. Has the Fire District been consulted? Does it have a position on the Code? How does the Code affect the Fire District's desire for a southern station?
14. Can trees be planted to offset any of the requirements? Would the City make City land available for planting? The City Arboretum could use more trees.
15. The City is currently working on its decarbonization plan, what will be the City's schedule for compliance?
16. Has the City received a report on the energy consumed in building materials, particularly for increased insulation, compared with the energy savings to be achieved by that insulation? Has the City studied the amount of imbedded energy in existing

buildings that would be lost if Code compliance precludes their reuse? For example, it took a lot of energy to produce and install the materials that are currently in the former Kohl's building—if that building is torn down because the cost of compliance with the Code is higher than 'starting over,' what is the energy cost of the lost materials, lost installation, and new demolition and how do they compare with the potential savings that would have come from application of the Code to the existing building?

17. Does the City have calculations of estimated payback periods—or the length of time that it takes for the energy cost savings from an improvement to pay the up-front costs of the improvement plus its financing costs—to share with the community? Relatively short payback periods, especially if they allow for amortization of up-front costs during the term of a business lease, could help lessen concerns about new requirements.
18. Have the EVC, LRC, and Planning Commission held hearings or meetings on the proposed changes and/or provided input to staff and City Council? If not, when will that occur? Has the City considered staff attendance at a meeting of the CTC Metro District Board of Directors and/or Property Owners Association to solicit comments? The Main Street Louisville BID Board should also be informed.
19. Will the cost of retrofits encourage demolition of historic structures in order for the owner or tenant to 'start over' rather than taking on the uncertainty and cost of Code compliance in an old structure that may need major upgrades or changes in use?

Sincerely,

The Board of Directors
Downtown Business Association of Louisville, Inc.

Rob Zuccaro

From: Elizabeth Otto <
Sent: Wednesday, November 17, 2021 1:24 PM
To: City Council
Subject: New building standards

Dear Louisville City Council,

I just read in the local paper about the legislation you recently passed that would adopt new sustainable building codes for future construction in the City.

Thank you so much!! I full heartedly agree with this decision and do hope the Planning Commission adopts them. (I have written to Robert Zuccaro under separate cover.)

Thanks,

Sincerely,

Elizabeth Otto

p.s. I still see City vehicles standing still and idling their engines. But good to see we have at least one electric vehicle in the fleet.

e

Meredyth Muth

From:	Larry Donner
Sent:	Thursday, June 30, 2022 9:13 PM
To:	City Council
Cc:	Jeff Durbin; Rob Zuccaro; Kayla Betzold
Subject:	Net-Zero Survey
Attachments:	Biased Energy Survey.pdf

In my 73 years, I have seen some egregious push polls but this “survey” from the City of Louisville is one of the worst examples I ever have seen. No matter what a respondent believes with regard to the proposed net-zero codes, the results will be used to show “overwhelming” support for the new codes.

The whole premise of the survey is that net-zero is "God’s Word" and that any dissenters are stupid and destined for “Hell" or even worse agents of the Devil themselves.

It appears that whoever assembled this survey is so biased, they see it as an honest survey. It definitely is not.

The City of Louisville should be embarrassed to be associated with such a defective product.

Larry Donner
1020 Willow Pl.

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From:	Mike Kranzdorf
To:	Rob Zuccaro; Chad Root; Kayla Betzold
Subject:	Energy Code Update Materials
Date:	Wednesday, July 20, 2022 1:14:08 PM

Hello Energy Code Update "Who's Listening" team,

Can you answer some questions in advance of the next Energy Code Update meeting?

What is in "Cost for Code Compliant Building" and "Net Zero Requirements and Costs"? Are they just the mechanical systems or does they include all of the various installation, distribution and metering systems required for different scenarios?

Why are all of the Photo Voltaic requirements higher for mixed-fuel scenarios than for all-electric ones? If a building uses gas for part of its power source, one would think it uses less electricity, not more.

For the retail and multi-family buildings, is there one electric meter for the entire premises? This is not typical for these types of buildings. Does the model include costs for a building owner to distribute, measure and bill for electricity? Would Xcel allow such a building to be built, with no electric meters on individual suites? If there are multiple meters, how does a developer allocate panels to units without knowing tenant demand at construction?

Retail tenants' energy use varies widely across users, such as a 3,000 SF brewery and a 3,000 SF karate studio. Is the single retail model an average of some kind? Where was the model obtained from?

For single family buildings and for-sale multi-family units, the cost of Net Zero construction will be passed directly to buyers. For multi-family rentals and office and retail buildings, in order for the PV payback to work, all leases must include the requirement for tenants to pay full retail price for electricity to the landlord for the estimated 20-30 years. Is this considered to be a reasonable assumption among those constructing these models?

Why is there no industrial model? This is probably the hardest to model across tenant and use types. It also represents more square footage built or in planning than any other type in Louisville. Will models be completed before this goes to City Council?

Thank you,

Mike Kranzdorf
Amterre Property Group LLC
720-304-3200

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Rob Zuccaro

Subject: FW: Proposed commercial building code,

-----Original Message-----
From: Rick Kron <>
Sent: Monday, June 27, 2022 1:32 PM
To: Mark Oberholzer <; Jenni Hlawatsch <>; Tom Horst <t>; Eric Reed <i>; Greg Reedy <

; Heather Bingaman <> Cc: Austin Brown <abrown@louisvilleco.gov>
Subject: Proposed commercial building code,

Good afternoon (maybe not so good after you've seen this email):

As has been mentioned, the City is looking into adopting a new energy-related building code for commercial structures. A very brief summery is on the City's website…look under 'news' and click on "Building for the future, Energy code update."

THERE IS an 'open house' scheduled for This Wednesday from 6-8 p.m. at the Library first floor meeting room. The city website has a link to the sign-up page for the open house.

Downtown needs to have a presence there. I've signed up. I believe that more are needed.

I'm hoping the open house can shed some light on a number of questions:

The new energy code could be a huge issue for most of the buildings downtown depending on the "triggers" that would mandate the use of the new code. While new building construction is likely to have to comply with all or part of the new code (which could include banishing the use of natural gas for any purpose), will renovations of existing structures be required to comply? How major of a renovation would trigger the use of the new code? Would a sign or fence permit trigger it? What about Building Renovations that do not add additional square footage, such as a bathroom renovation or update? If building square feet are added, how many new feet would have to be added before the new code applies? Does the new code only apply to the new space or would the entire building have to comply (possibly requiring major increases in wall and ceiling insulation along with the possible replacement of natural gas appliances and/or furnaces in historic downtown buildings)? Will historic structures be exempt, and if so, how will 'historic' be defined? Although Avista is not in downtown, it's continued presence in Louisville is of vital interest to downtown, how is it affected and has its management been consulted?

What would compliance cost in dollars? What are the projected payback periods for the items in the new code due to energy savings?

Will permits and inspections be impacted (especially given limited staff and the projected increased workload due to the Marshall Fire rebuilding)?

Will the new code result in owners and tenants foregoing needed renovations? Will it result in our growing businesses choosing to grow outside of Louisville rather than expanding here?

Tom, I think the presence of someone from the Chamber would be especially good.

Rick

Sent from my iPad

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From:	John Cowley
To:	Kayla Betzold
Subject:	Follow-up information regarding Advisory Board meeting of Wed., July 20, 2022
Date:	Saturday, July 23, 2022 3:06:19 PM

To: Louisville Sustainability Advisory Board
From: John Cowley, Louisville resident, 303 Fairfield Ln.
jrcowley@idcomm.com
Date: July 23, 2022

Subject: Follow-up information regarding Advisory Board meeting of Wednesday, July 20, 2022

Thank you for your informative meeting on Wednesday. There seem to be too many relevant issues to be covered in a single meeting. Following are expansions on my comments offered via Zoom, including too much (but hopefully useful) detail:

1. OVERRIDING GOAL: Often unmentioned, efforts at "sustainability" have the overriding purpose of countering climate change. The most important thing we can do locally is everything possible to meet our 2030 goal of 75% carbon-free energy for all of Louisville (while limiting financial impacts).

To support this goal, Louisville could create a frequently-updated web dashboard, such as this one set up by an oversight group which reports on Boulder's progress:
https://empowerourfuture.org/xcel-city-of-boulder-oversight/

2. EMPHASIZING CO2 SAVINGS: Foremost, the purpose of raising sustainability standards is to reduce the community's carbon footprint. The community needs to be educated to appreciate that this goal will usually incur some costs, to reduce much-larger costs down the road.

Perhaps the "cost" of the various options for new standards could use a metric, such as "annual pounds CO2 prevented per $100 cost incurred" – the higher this ratio, the more cost-effective a new standard would be. Then, standards could be evaluated against each other.

Here are some relations to convert electrical "kWh" and natural-gas "therms" to "pounds CO2":

A. "1.0 therm" of natural gas burnt produces "11.7 lbs. of CO2 emissions"
(from U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2004)

B. Electrical equivalence of CO2 cost of natural gas: 10.9 kWh per therm (*see Xcel, below)

C. 0.000477 metric tons* (2,200 lbs) of CO2 per kWh (at Xcel's current carbon & clean mix)

D. To convert solar panel "kW" power sizing to "kWh" annual energy produced, multiply:
Annual energy in kilowatt-hours (kWh) = power x 4.2 hrs/day* x 365 days/year

*(B. through D. are based on relations in "City-of-Louisville-2021.xls" downloaded from
https://www.xcelenergy.com/community_energy_reports)

EXAMPLE: Evaluate the first entry in meeting's Chart: Policy Consideration [1]:

Multifamily Building PV system of 31.5 kW power; cost: $78,750:

Approx. annual energy produced, kWh = 31.5 x 4.2 x 365 = 48,300 kWh

Annual savings in Pounds CO2 = 48,290 kWh x 0.000477 T/kWh x 2,200 lbs/T = 50,700 lbs

For this PV array: ANNUAL CO2 SAVINGS RATIO = 50,700/($78,750/100) = 64 lbs/$100

PLUS, at an effective $0.15 per kWh, FINANCIAL SAVINGS = 48,300 kWh x 0.15 = $7,200 per year

3. CONFERRING WITH BOULDER ON THEIR "FREE" CITY SOLAR INSTALLATIONS:

Generation Solar – Project Overview
https://bouldercolorado.gov/projects/generation-solar
"The Climate Initiatives department created Generation Solar to bring an innovative, collaborative approach to solar procurement across multiple city departments and properties. The city is paying no upfront capital investment costs for the solar and will realize savings in operating costs throughout the life of the new systems."

This might sound "too good to be true", but it seems to be real:
"Fourteen city facilities are included in this project, totaling 2.1 MW of renewably generated power".

A recent webinar concluded with a recommendation that "solar installations are best located where the energy is directly used during daylight hours." (July 21, 2022 Empower Hour: Geof Syphers of Sonoma Clean Power) That suggests that solar could primarily be promoted for industrial rooftops, or adjacent parcels, such as in CTC.

Boulder's financial partner's website lists several capabilities that may be useful in meeting Louisville's needs such as this. (website: https://unicosolar.com/solutions/) The projects' builder was Namaste Solar.

4. INFORMING PUBLIC HOW TO FIND AND JOIN SOLAR FARMS

My roof has a poor orientation relative to the southerly ideal for solar panels. There is also tree shading. But brief research into local-area solar farms left me confused about organizational trust, billing, cost savings if any, commitments, etc.

The City of Louisville could motivate and speed up residents' use of solar by providing an informative overview (printed or web-based) of what solar farms are available and how to subscribe. Make it as easy as "one click" to subscribe, once the user's choice is made.

Here is an example of an explanatory website you could direct residents to – saving them the frustrations and dead ends in doing their own searches. (I stumbled on this today):
https://blog.namastesolar.com/solar-farms-in-colorado

For city planners, the above website might offer some enticing ideas:
"Namaste Solar is always looking for new land for community solar development. If you have more than 10 acres of relatively flat, unshaded

land that you want to put to work for your community and for the environment, you may be able to earn passive income from a long-term community solar lease agreement. You can reach out to us by filling out this short form."

(Disclaimer: I have no business relationship with Namaste Solar or other organizations mentioned here.)

5. INSTALLING EV CHARGERS

The arrival of many brands and models of Electric Vehicles will accelerate in the next year or two. "Cities with many EV chargers will draw the most visitors!" Louisville could get "ahead of the curve" by:

A. Incentivizing apartment property owners to install chargers. This will attract renters, since many new EV owners will not be homeowners. (GM's goals are to mass-produce lower-cost EVs.) This appears to be part of the sustainability codes under discussion.

B. Installing many more chargers on City properties, such as at the golf course, Rec Center, downtown parking. (Some could be perks for city employees...)

C. Seeking out U.S. and Colorado subsidies for EV chargers, such as from the recent Infrastructure bills.

D. Keeping in mind that "EV charging is best done in the daytime, when solar-array output can be excessive". This was an idea also from the Empower Hour webinar mentioned in 3. above.

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Questions for the City concerning energy-related building code changes from the Board of Directors of the Downtown Business Association of Louisville, Inc.

Last week's Energy Code meeting at the Recreation Center triggered a number of additional questions and suggested some edits for the 20 questions (actually 19) that were previously submitted by Mr. Kron. The revised 19 questions are included below, with the most substantial changes coming in items 9, 12, and 16.

The Board of Directors of the Downtown Business Association of Louisville has reviewed the prior questions, has added additional questions, and discussed others. Earlier today (8/4/22), the Board voted to submit all of the questions to the City with the backing of the Board.

Timely answers are needed.

The additional questions are:

20. Will the required EV charging stations make those spaces unavailable for non-EV vehicles? If the EV charging spaces will not be available to others, has there been a study of the effects of the loss of those spaces on fuel use resulting from increased searching for conventional spaces? If the EV charging spaces are not to be used by others, will private parking space owners be expected to enforce the restricted use of the privately owned EV charging spaces or will the police do that? Will the City be providing EV charging spaces in its lots? If so, will those be exclusive?

21. Installing a standby 220v electric line in an existing commercial kitchen (in the event of a renovation, change in use, or replacement of an existing gas stove for a new one) might require running the electric line behind cabinets, through historic walls, at odd angles or curves, and/or dropped through ceilings. Is the current Louisville commercial electrical code compatible with the requirement for these new electric lines if they are in retrofit locations where they were not previously anticipated?

22. The Regional Code Cohort is working together to decide on its preferred collective action. Is the City's accelerated schedule risking the solidarity of that cooperative effort? If the City gets out ahead of the rest of the cohort, the City risks the possibility of the loss of businesses to surrounding communities. If losses happen, there is a substantial risk that other communities will see the bad experience and choose not to follow the City's example. A failed experiment in a City with Louisville's prominence could be a real setback to the adoption of the Code in other communities. Is that possibility worth the risk when a regional or state approach might, and likely would, avoid it?

23. At last week's meeting, an architect related some of his experience with new efficient HVAC systems in Boulder, in particular noting that trained installers and maintenance technicians for new HVAC systems are unavailable or in short supply. Will the City be assisting with training programs through our high schools, community colleges, or our appliance businesses to help fill this gap? Will the City offer incentives for businesses and workers in the installation and maintenance fields to locate here?

24. At last week's Code meeting, there was a rather confusing presentation concerning the use of off-site solar, RECs, and other alternatives. It seems that three of the four alternatives would not be usable due to a requirement for 15 year supply contracts. Why is there a 15 year requirement as opposed to another number or no number at all? If a requirement exists, it would seem that simply putting the requirement in place and having the building owner decide how to meet it could be a better approach. A related question is why penalize off-site solar

options? What is the HPC's position on the addition of solar panels or windmills on historic buildings?

25. How will the life cycle of a building enter into the Code requirements in a change in use situation? Will buildings with short remaining useful lives simply be demolished rather than comply with the Code? How will this impact entrepreneurship and start-ups when older buildings are not available at lower rents? Artists also tend to use older, cheaper, buildings; how will their ability to acquire studio and display spaces be affected?

26. Are home offices subject to the Code requirements?

27. A commercial building owner at the meeting noted that the building owner would most likely pay the costs to bring a building up to the Code, but the 'payback' benefits, if any, would accrue to the tenant. Has the City or the Regional Code Cohort made estimates of rent increases that would come from Code compliance?

28. Some of the City's currently vacant buildings are unlikely to be filled by a single tenant (as has been the case for the former Hobby Lobby space). In the event a formerly single-user building, such as Kohls or Lowes, is split into several occupancies, will the Code require compliance for the entire building or for each separate user space?

29. Has there been a study of potential electric rate increases arising from increased demand due to increased electrification demand and/or electrical demand increases due to the elimination of natural gas? What would be the effects of increases on local businesses, particularly existing businesses with existing equipment?

30. What would the penalties be for non-compliance? Will new procedures be needed for appeals, and what would they be? Will the people handling appeals receive training on Code provisions?

31. Will the proposed specific 'triggers' be explained to, and vetted with, the business community prior to their adoption? There is a concern that there will not be sufficient time or opportunity for review and comment.

32. The DBA Board questioned: Does a conversion to all-electric use makes sense, especially in the short term, while XCEL generates over 50% of its electricity from coal and natural gas, and projects continued use of those fuels for decades in the future? Will the generation of carbon emissions increase in the short term, especially there are supply shortages slowing the construction of solar and wind alternatives?

33. The multifamily housing sector and developers were conspicuously absent from the two City public engagement meetings: has the City engaged with them in some other way? The sample multifamily building showed at the meetings is a five story design. Will the City allow five story apartment buildings? How will the Code affect the affordability of multifamily units, both in rent and in operating costs? In turn, how will the implementation of the Code in multifamily construction affect the City's achievement of its diversity and inclusion goals, especially as they relate to young families, if the Code increases housing costs?

34. Is it in the best interests of Louisville to proceed with the Code, without coordination with the state or the Regional Code Cohort, at this time in the wake of: COVID, pandemic related temporary closures of businesses, the Marshall Fire and loss of New Year's business, the displacement of people from the Fire and widespread under-insurance, inflation increasing the costs of doing business and costs for residents, potential recession, global and local supply shortages of material and equipment (especially appliances) due to pandemic and war,

increased interest rates that impact construction and other costs, labor shortages, permanent retail business closures that are cutting City tax revenues and likely forcing budget cuts, Medtronic's departure, and active recruitment of Louisville businesses by nearby communities seeking their relocation?

It is highly likely that this last item, active recruitment, will increase if the Code is unilaterally adopted by Louisville without at least the Regional Code Cohort simultaneously adopting it, or if the Code that is adopted includes a current or future prohibition on the use of natural gas for restaurants and other gas-dependent activities mentioned in Question 1 below.

The Board may find that there are more questions to be asked, and may bring them up in the future, but the questions above plus the questions below are enough for now.

Sincerely,

The Board of Directors
Downtown Business Association of Louisville, Inc.
August 5, 2022

The prior questions, with some editing, follow:

Twenty questions for the City concerning energy-related commercial building code changes (Revised 8/4/2022)

Introductory comments: One of the more difficult aspects of writing these questions is that there is evidently no current draft of the Code that is readily available and that the Code itself is extremely long, detailed, and difficult even for experts in the field to plow through. Hopefully, these questions will help a more focused picture come to light.

Further, it is clear that climate change is real and that the use and abuse of energy are factors in that climate change. It is also clear that responses to climate change have to be practical and should take a regional, statewide, national, or international approach. Changes in Louisville regulations that simply move the problem to Broomfield, Lafayette, Erie, or elsewhere 'further out' are less than no help, even exacerbating the problems.

That said, here are the questions. Numbering is for convenience of reference, and does not reflect the importance of the questions or potential answers. The importance of each question may vary depending upon the interests of the questioners and responders.

1. Will the Code ban the use of natural gas, either now or in the future in commercial buildings? Please note that many small businesses, including restaurants, breweries, coffee roasters, bakeries, and others cannot convert to all-electric appliances due to the lack of adequate equipment, lack of affordable equipment, inability to change processes (BBQ, bakers, wood fired pizza, and roasters), inability to maintain product quality, inability to serve customers quickly, lack of training, and very likely other reasons. Even if conversion were possible, small business lacks the access to capital to meet the costs and to weather the delays in obtaining the equipment. Production kitchens do not share the simple 'put in a new range' alternative that is possible in residential homes.

2. The health of Avista Hospital is of vital importance to Downtown and all of Louisville. Will there be a 'hospital exemption' from the Code, and specifically including an exception to a ban on natural gas? Will there be a medical research, laboratory, urgent care, and medical office building exception to encourage those highly desired businesses to locate here?
3. Will there be an exception for a "change in use" of a structure that is vacant? Without an exception, the cost of replacing HVAC equipment and installing very high levels of insulation in buildings that were not designed for them could, and likely will, discourage the creative reuse of our currently vacant buildings. These buildings include, but are not limited to, (a) the Historic Downtown Grain Elevator, (b) Downtown Chase Bank, (c) empty Kohls, (d) empty Lowes, (e) vacant Carrabba's Italian Grill, (f) vacant former auto parts-scrapbooking store next door to Carrabba's, (g) empty Alfalfa's, and (h) empty spaces in CTC and elsewhere listed on several real estate listing websites. Possible future sites may include (i) the Walgreens on SBR, (j) Ascent Church (by the way, currently a fine existing reuse of that building that possibly could not have happened if the insulation requirements of the Code applied at the time of that reuse), and other buildings in the City. While the majority of these sites are not in Downtown, the future reuse of these buildings could represent a 'rising tide that lifts all boats,' with their occupancy contributing to the vibrancy of the City, including the health of Downtown.
4. How will 'change in use' be defined? For example, if a change in use changes a more energy intensive activity into a less energy intensive one, will that less energy intensive use be discouraged by having to comply with the Code? Will the Code include a provision for a waiver in this situation? Has the City researched the cost of new construction in the surrounding communities (such as Broomfield and Erie) as compared to the cost of retrofitting comparable buildings in Louisville? Has the City consulted with builders or developers concerning their preferences about trying to reconstruct existing buildings with a changed use as compared with starting new ones with longer commute times?
5. What will be the estimated additional time, expertise and cost needed for an applicant to prepare an application arising from new regulations (especially additional architect, attorney, and engineer time)? What will be the additional time for the City to process a building permit application? Will there be additional inspections during construction? Will the City provide a screened or approved list of knowledgeable architects, engineers, designers, contractors, and other professionals who are acceptable to the City and appropriately licensed? Will additional City licenses be needed for professionals to work here on Code matters? What additional City staff and consultants will be needed—and given the current scarcity of labor—are the needed personnel and consultants available at a price the City is willing to pay? Would the City consider a waiver of use tax, sales tax, and/or permit fees for the costs of compliance? How long will it take City staff to get up to speed? Have new blank submittal forms been drafted for applicants? Do compliant examples of completed forms exist?
6. Has the HPC been consulted on the potential impacts of the Code on historic structures, including impacts on new construction added to historic structures? Will HPC funds (grants, loans) be available to help pay for the upgrades, and when will those programs be in place? Aside from the HPC, what grant and loan programs will be available to businesses, including from the City and the LRC? Reimbursement programs are often 'not good enough' for small businesses that can't obtain the money in the first place to be reimbursed later: funds 'up front' without excessive application requirements would be essential for small businesses.
7. Will there be Code exceptions for building plans that have already been approved, but not yet built, such as the Moxie expansion and the Main Street offices of Boulder Creek Builders?
8. What exceptions will be available for minor alterations to existing structures (whether historic or not)? What will be considered minor?

9. Is foundation insulation feasible on historic buildings, including those with no setbacks? In particular, will there be exemptions from additional exterior foundation insulation requirements on Main Street where additional exterior insulation would further narrow the already narrow sidewalks? This may not be an issue if historic structures and zero lot line buildings are exempt, however, it raises the question of whether City staff will be given the flexibility to quickly approve simple waivers in situations where waivers make sense, without having to return to City Council.
10. How will the likely decrease in 'air changes per hour' affect indoor air quality, particularly as it relates to Covid transmission? Has the City prepared a study, risk assessment, or list of potential unintended health and other consequences to share with the public?
11. Has Louisville been working with the state—which is possibly considering a statewide approach in the next legislative session—and nearby municipalities, including the City and County of Broomfield, to take a regional approach to Code content and implementation to avoid having businesses (especially restaurants) moving to other communities rather than locate or expand here when their leases expire? Should Louisville coordinate the timing of its Code approval efforts to avoid incompatible regulations that conflict with the state or other local regulations or that unintentionally lead important businesses to locate or relocate elsewhere? Loss of Downtown restaurants, especially award-winning ones, due to Code compliance issues would be a disaster for Downtown and the City. What's the rush—shouldn't the questions be answered and the City receive more business buy-in prior to adoption of the new Code? What have been the experiences of other U.S. cities that have adopted the Code?
12. Will the electric grid, especially in the older neighborhoods and Downtown be able to support the additional electric power requirements? Is new line construction needed? Will line improvements be underground? Will their construction result in significant traffic disruptions? Has XCEL provided a definitive conclusion on what, if anything, needs to be done to the grid and who will pay for it? There have also been concerns about the shift in fuels from natural gas to electric power plants that are fired by coal, gas, and nuclear. What impacts will this have? Are solar panels, wind, storage, and other equipment currently available or are supply chain disruptions an issue? If there are supply chain problems, will waivers from immediate Code compliance be available to allow a project (in either a new, change in use, or existing building) to proceed, with later compliance when equipment is available? The question of waivers or delayed compliance not only applies to solar and wind production equipment, but also to in-building HVAC and process equipment (such as stoves, boilers, and specialized equipment like roasters). Some residents and at least one local appliance retailer have reported months-long delays for getting relatively simple residential appliances: has the City determined whether the same holds true for commercial equipment? At the City's public input meeting held at the Library, there was a mention of an 'industrial process' exception, what exactly is an 'industrial process' and what will be exempt? Would an industrial process have to be located in an industrial zoned building, such as in CTC, or can an industrial process be also include a small use in any commercial building, such as brewing equipment located in a non-industrial zone?
13. Has the Fire District been consulted? Does it have a position on the Code? How does the Code affect the Fire District's desire for a southern station?
14. Can trees be planted to offset any of the requirements? Would the City make City land available for planting? The City Arboretum could use more trees.
15. The City is currently working on its decarbonization plan, what will be the City's schedule for compliance?
16. Has the City received a report on the energy consumed in building materials, particularly for increased insulation, compared with the energy savings to be achieved by that insulation? Has the City studied the amount of imbedded energy in existing

buildings that would be lost if Code compliance precludes their reuse? For example, it took a lot of energy to produce and install the materials that are currently in the former Kohl's building—if that building is torn down because the cost of compliance with the Code is higher than 'starting over,' what is the energy cost of the lost materials, lost installation, and new demolition and how do they compare with the potential savings that would have come from application of the Code to the existing building?

17. Does the City have calculations of estimated payback periods—or the length of time that it takes for the energy cost savings from an improvement to pay the up-front costs of the improvement plus its financing costs—to share with the community? Relatively short payback periods, especially if they allow for amortization of up-front costs during the term of a business lease, could help lessen concerns about new requirements.
18. Have the EVC, LRC, and Planning Commission held hearings or meetings on the proposed changes and/or provided input to staff and City Council? If not, when will that occur? Has the City considered staff attendance at a meeting of the CTC Metro District Board of Directors and/or Property Owners Association to solicit comments? The Main Street Louisville BID Board should also be informed.
19. Will the cost of retrofits encourage demolition of historic structures in order for the owner or tenant to 'start over' rather than taking on the uncertainty and cost of Code compliance in an old structure that may need major upgrades or changes in use?

Sincerely,

The Board of Directors
Downtown Business Association of Louisville, Inc.

Meredyth Muth

From: Mike Kranzdorf
Sent: Thursday, December 8, 2022 4:56 PM
To: City Council; Rob Zuccaro; Jeff Durbin; Kayla Betzold; Emily Hogan
Subject: ORDINANCE NO. 1845, SERIES 2022 (2021 COMMERCIAL IECC)
Attachments: 20october2022bcboa.pdf

Hello City Council and staff,

The July 21, 2022 meeting minutes of the Louisville Building Code Board of Appeals contain a presentation and board member comments regarding the 2021 IECC commercial code. It is not clear if these have been made available to city council, so the minutes are attached for inclusion in the record and for council review prior to the December 20, 2022 city council meeting.

The members of the BCBOA are chosen by city council to provide expertise regarding the municipal code. They have experience working with Xcel and have serious concerns regarding the capacity of Xcel's electricity grid and its ability and willingness to work cooperatively with the city to provide the necessary infrastructure. As a body, they would have recommended against adoption of the 2021 IECC commercial code and against the amendments to the residential code. Thank you for taking the time to review this material.

Mike Kranzdorf

Selected BCBOA member comments:

Geise commented that the electric grid and that looking at the main commercial area of Louisville, the CTC, that Xcel has not updated their electrical lines coming into that area. Geise also gave an example of how eight people in residential Trail Ridge Dr had Teslas and maxxed out the grid.

Dino commented that Xcel is using the same infrastructure in the Marshall Fire burn area in the Trail Ridge/Arapahoe area of Louisville and that Xcel is installing infrastructure that does not support the residential energy code that Louisville has already adopted.

Geise commented that if Xcel cannot deliver the electrical grid necessary to support the proposed changes, the changes cannot be implemented.

…

Dino stated that since Xcel is already implementing old infrastructure in the Marshall Fire burn area where they know we have passed the 2021 IECC for residential and are still choosing to implement old infrastructure.

…

Dino expressed that he has trying to get Xcel Energy to provide temporary power on site for the rebuild and the contractors working for Xcel have told him that Xcel has already issued purchase orders for transformers that do not meet the requirements that Betshold said they will provide. Dino further expressed that he does not believe that Xcel will provide the infrastructure until it fails.

Betshold said she would work with City staff on the issue.

Dino expressed concern over the residential implementation and disagreed with the choice to implement it as it was decided. Dino further explained that the document that was presented to City Council in 2021 as a collaboration between

the BCBOA and City staff did not represent their ideas. He explained that he does not support this code adoption because the infrastructure is not there, Louisville has already lost some businesses to adjacent communities.

Dino suggested the group take a straw vote as whether or not they would approve of the general adoption of the 2021 IECC for Commercial and that if the City adopts the code it is against the recommendation of the BCBOA. Knapp seconded.

Berry asked if there were any votes for recommending the 2021 IECC Commercial code. Gatto voted yes with recommendations. Berry asked which members vote to not adopt any of it. Berry and Dino voted no. Giese would like to see the rest of the slides.

Lane interrupted to clarify that the purpose of the meeting wasn't to have any official vote but just to present information to the Board.

Berry clarified that it was just a straw poll to understand which members agree with the overall adoption of any portion of the IECC commercial code. Berry added that with reference to the 2021 IECC residential code adoption in October of 2021 that Appendix RC was never given to the Board for consideration and was a major change but was presented as if the BCBOA had agreed with it so their trust for the process is damaged and that their comments are accurately presented to City Council.

Dino added that when City Council adopted Appendix RC that it created a moratorium on new building permits for over a month and if the BCBOA had been asked in their an advisory role they could have advised as to how to adopt it without issues.

Berry noted that he has several projects that are waiting on Xcel equipment. Giese also added he has a project where he has been waiting on Xcel for six months on a meter set for a commercial building.

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Building Code Board of Appeals

Meeting Minutes

July 21, 2022

Zoom Meeting Online

6:30 PM

Call to Order: **Berry** called the meeting to order at 6:40 PM.

Roll Call was taken and the following members were present:

Board Members Present:	Matt Berry
	Christian Dino
	Steve Knapp
Board Members Absent:	Mason Gatto (joined later)
	Peter Geise (joined later)
Staff Members Present:	Elizabeth Schettler, Senior Administrative Assistant
	Jenny Lane, Permit Technician
	Randy Dewitz, Inspector
	Kayla Betzold, Sustainability Coordinator
Third Party Presenters:	Claire Kantor, Lotus Engineering and Sustainability
	Kim Schlaepfer, Lotus Engineering and Sustainability

Anna McCollough, Group 14

Approval of Agenda:

Berry moved and **Dino** seconded a motion to approve the agenda as prepared by staff. Voice vote. Motion passed 3-0.

Berry suggested moving the election of officers to the end of the meeting.

Berry moved and **Dino** seconded a motion to move the election vote to the end of the meeting. Voice vote. Motion passed 3-0.

Peter Geise joined the meeting.

Approval of Posting Locations and Open Government Pamphlet

***Establish the following locations for posting of agendas**:*

City Hall

Library

Recreation/Senior Center

Police Department/Municipal Court

Web site: www.LouisvilleCO.gov

Berry moved and **Dino** seconded a motion to approve the Approval of Posting Locations and Open Government Pamphlet. Voice vote. Motion passed 4-0.

Public Comments on Items not on the Agenda:

None heard.

Discussion Items:

2022 Commercial Energy Code Discussion

Betzold explained the discussion of incorporating the Commercial Energy Code (Phase 2) has been under discussion with Lotus, Group 14 and Rob Zuccaro, Director of Planning and Building Safety, since March or April of 2022. The presentation will include energy modeling and types of policy to be considered. A Public Engagement Survey has been open since June, 2022 and is open through August 5, 2022. There was aslo a community meeting at the end of June and the results were brought to the Sustainability Advisory Board on July 20, 2022. Comments from the Sustainability Advisory Board and the Buidling Code Board of Appeals will be compiled and presented to City Council at the beginning of September and will receive direction from City Council at that meeting. **Geise** is having trouble connecting. **Betzold** indicated that the beginning of the presentation is an overview and if he missed the first few minutes he would not miss anything critical.

Schlaepfer introduced herself, **Kantor**, and **McCollough**. **Schlaepfer** explained the outline for the presentation: high-level overview, modeling, and policy considerations and asking for discussion and feedback from the board based on the options to be presented.

Schlaepfer shared her screen to show the Power Point presentation as printed in the meeting packet. **Schlaepfer** explained the agenda:

Sustainability Goals

Current Adopted Code Review and Next Code Phase

Policy Options

Public Feedback

Discussion

Q & A

Results from Public and Board feedback will be used to draft an ordinance to City Council to be presented in September. Once the final ordinance is ready, it will be shared with the BCBOA for a final consensus vote.

Betzold added that this is on City Council's work plan for 2022, under the area of Community Design and specifically references Phase 2 of the Commercial Building Energy Code.

Schlaepfer presented the slides as noted in the meeting packet.

City of Louisville Clean Energy Goals:

City of Louisville Council Adopted Clean Energy

and Carbon Emission Reduction Goals*

❖ *Meet all of Louisville's municipal electric needs with 100% carbon-free sources by 2025.*

❖ *Reduce core municipal GHG emissions annually below the 2016 baseline through 2025.*

❖ *Generate 75% of Louisville's residential and commercial/industrial electric needs from carbon-free sources by 2030.*

❖ *Reduce core community greenhouse emissions annually below the 2016 baseline through 2030.*

**Resolution 25, Series 2019 – Adopted by Louisville City Council on August 6, 2019*

Schlaepfer explained the existing Energy Code adopted in 2021 and current Commercial code, then went on to explain the next phase of the proposed energy update:

Next Phase of Energy Code Update

The City is considering additional new construction code options that will encourage ***higher efficiency****,* ***net zero*** *and/or* ***all electric*** *new construction for:*

• *Multi-family buildings*

• *Commercial buildings*

The City is also reviewing all electric options for single

family homes.

Schlaepfer explained the three pillars of sustainability:

Economic:

- Affordable?

- Promote economic development?

Social:

- Equitable?

- Community benefits?

Environmental:

- Reduce energy use?

- Reduce GHGs?

- Improve air quality?

Schlaepfer explained that they had community engagement meetings and an online survey to collect input to use as part of the presentation to City Council.

Schlaepfer explained the three policy considerations for Commercial Energy Code:

Policy Consideration [1]

2021 IECC, EV readiness, and electric-readiness with on-site or off-site

PV required. Options for PV requirements:

1. Alignment with IECC 2024 Proposal: 0.75 W/sf for largest three floors of building

2. PV on all available roof space.

3. PV provided as to offset any carbon emissions by natural gas systems on site.

Option 1. PV Required to Match 2024 IECC Proposal

Building Type	PV System Size (kW)	PV System SF	Estimated First Cost
Multifamily Building (3 stories, 42,000 SF)	31.5 kW	3,150 SF	$78,750
Office Building (3 stories, 110,000 SF)	82.5 kW	8,250 SF	$206,250
Retail Building (1 story, 90,000 SF)	67.5 kW	6,750 SF	$168,750

Option 2. PV that fits on Roof

Building Type	PV System Size (kW)	PV System SF	Estimated First Cost
Multifamily Building (3 stories, 42,000 SF)	98 kW	9,800 SF	$245,000
Office Building (3 stories, 110,000 SF)	250 kW	25,000 SF	$625,000
Retail Building (1 story, 90,000 SF)	600 kW	60,000 SF	$1,500,000

Option 3. PV Required to Offset Natural Gas Consumption On-Site

Building Type	PV that can fit on the Roof (kW)	PV System Size (kW)	PV System SF	Estimated First Cost
Average Mixed-Fuel Multifamily Building	98 kW	176 kW	17,600 SF	$440,000
Average Mixed-Fuel Office Building	250 kW	153 kW	15,300 SF	$382,500
Average Mixed-Fuel Retail Building	600 kW	608 kW	60,800 SF	$1,520,000

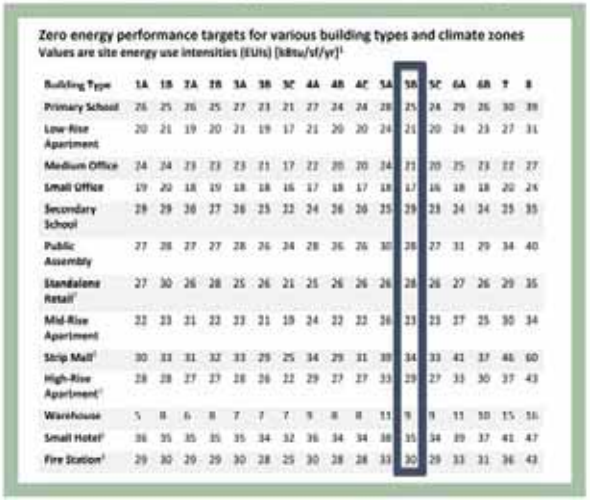
Policy Consideration [2]

- Require projects to meet a maximum-allowed energy use per square foot (EUI) for the performance pathway and require additional efficiency measures for the prescriptive path. Onsite PV can contribute to EUI target.
- Require a solar-ready zone, electric-ready construction, and EV-readiness.

Boulder Fixed EUI Targets

Building Type	Performance Targets (kBtu / square foot)
Medium office (5,000 – 50,000 sf)	23
Mid-rise apartment (Type R2)	32
Primary school	34
Small office (<5,000 sf)	19
Secondary school	31
Warehouse	11

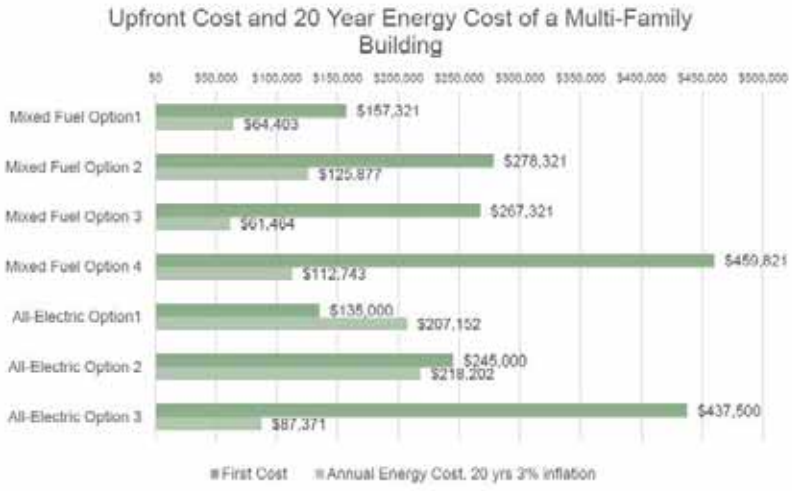
NBI Zero Energy Performance Targets


Zero energy performance targets for various building types and climate zones
Values are site energy use intensities (EUIs) (kBtu/sf/yr)[1]

Building Type	1A	1B	2A	2B	3A	3B	3C	4A	4B	4C	5A	5B	5C	6A	6B	7	8
Primary School	26	25	26	25	27	23	21	27	24	24	28	25	24	29	26	30	39
Low-Rise Apartment	20	21	19	20	21	19	17	21	20	20	24	21	20	24	23	27	31
Medium Office	24	24	23	23	23	21	17	22	20	20	24	21	20	25	23	22	27
Small Office	19	20	18	19	18	18	16	17	18	17	18	17	16	18	18	20	24
Secondary School	29	29	30	27	30	25	22	34	26	26	25	29	23	34	34	25	35
Public Assembly	27	28	27	27	28	26	24	28	26	26	30	28	27	31	29	34	40
Standalone Retail[1]	27	30	26	28	25	26	21	25	26	26	26	28	26	27	26	29	35
Mid-Rise Apartment	22	23	21	22	23	21	19	24	22	22	26	23	23	27	25	30	34
Strip Mall[1]	30	33	31	32	33	29	25	34	29	31	39	34	33	41	37	46	60
High-Rise Apartment[1]	28	28	27	27	28	26	22	29	27	27	33	29	27	33	30	37	43
Warehouse	5	8	6	8	7	7	7	9	8	8	11	9	9	11	10	15	16
Small Hotel[1]	36	35	35	35	35	34	32	36	34	34	38	35	34	39	37	41	47
Fire Station[1]	29	30	29	29	30	28	25	30	28	28	33	30	29	33	31	36	43

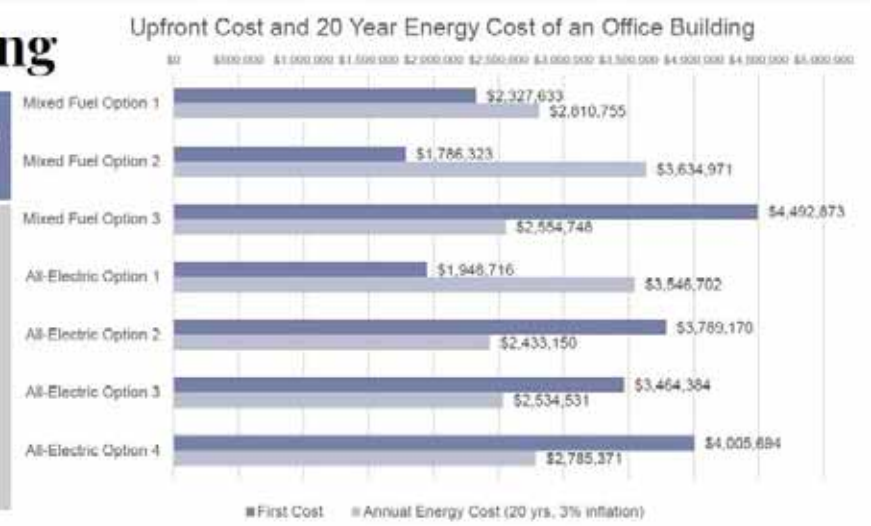
Multifamily

System Type	Site Energy Use Intensity (kBtu/SF-yr)	NBI EUI Target
Mixed Fuel Option 1	39	21
Mixed Fuel Option 2	42	
Mixed Fuel Option 3	35	
Mixed Fuel Option 4	41	
All-Electric Option 1	27	
All-Electric Option 2	27	
All-Electric Option 3	23	



Office Building

System Type	Site Energy Use Intensity (kBtu/SF-yr)	NBI EUI Target
Mixed Fuel Option 1	33	21
Mixed Fuel Option 2	36	
Mixed Fuel Option 3	35	
All-Electric Option 1	35	
All-Electric Option 2	25	
All-Electric Option 3	26	
All-Electric Option 4	26	



Retail Building

System Type	Site Energy Use Intensity (kBtu/SF-yr)	NBI EUI Target
Mixed Fuel Option 1	95	34
Mixed Fuel Option 2	86	
Mixed Fuel Option 3	86	
All-Electric Option 1	79	
All-Electric Option 2	75	
All-Electric Option 3	63	



Gatto joined the meeting.

Giese asked how, in a Multifamily building, how could the cost be maintained if each unit was individually metered. [refer to page 36 of the meeting packet]. **Schlaepfer** and **McCollough** explained that it is more of a design standard than an operational target. Compliance for the code would be met with the energy model. **Giese** said he did not see how the model would be inline with the actual implementation if each unit has it's own meter and that the model does not fit real installation. **Schlaepfer** further explained that once the building

is built, unless the City installed a benchmark program to track operational energy of the building, individual metering does not present a problem for code compliance.

Schlaepfer continued presenting the slides from the meeting packet. She noted from page 38 in the packet, regarding Retail, that the model they did for Louisville includes two restaurants. The NBI target on this slide does not include restaurants, so the Delta is quite different between the two targets.

Schlaepfer continued presenting the slides from the meeting packet.

Policy Consideration [3A] - Appendix CC

- Require net zero new construction for all buildings and utilize Appendix CC from the 2021 IECC. Electric-ready and EV readiness required.
- Exceptions/Reduction of Offset: Industrial, Laboratories, Manufacturing, Restaurants

Policy Consideration [3B] - All-electric new construction + Net Zero

- Require all-electric new construction with required on-site or off-site PV. EV-readiness required.
- Exceptions/reductions of offset and/or for All-Electric: Industrial, Laboratories, Manufacturing, Restaurants

Policy Consideration [3] - Appendix CC – Renewable Procurement Requirements

CC103.3.1 Qualifying off-site procurement methods.

The following are considered qualifying off-site renewable energy procurement methods:

1. Community renewables: an off-site renewable energy system for which the owner has purchased or leased renewable energy capacity along with other subscribers.
2. Renewable energy investment fund: an entity that installs renewable energy capacity on behalf of the owner.
3. Virtual power purchase agreement: a power purchase agreement for off-site renewable energy where the owner agrees to purchase renewable energy output at a fixed price schedule.
4. Direct ownership: an off-site renewable energy system owned by the building project owner.
5. Direct access to wholesale market: an agreement between the owner and a renewable energy developer to purchase renewable energy.
6. Green retail tariffs: a program by the retail electricity provider to provide 100-percent renewable energy to the owner.
7. Unbundled Renewable Energy Certificates (RECs): certificates purchased by the owner representing the environmental benefits of renewable energy generation that are sold separately from the electric power.

CC103.3.2 Requirements for all procurement methods.

The following requirements shall apply to all off-site renewable energy procurement methods:

1. The building owner shall sign a legally binding contract to procure qualifying *off-site renewable energy*.
2. The procurement contract shall have duration of not less than 15 years and shall be structured to survive a partial or full transfer of ownership of the property.
3. RECs and other environmental attributes associated with the procured *off-site renewable energy* shall be assigned to the building project for the duration of the contract.
4. The *renewable energy* generating source shall include one or more of the following: photovoltaic systems, solar thermal power plants, geothermal power plants and wind turbines.
5. The generation source shall be located where the energy can be delivered to the *building site* by the same utility or distribution entity, the same independent system operator (ISO) or regional transmission organization (RTO), or within integrated ISOs (electric coordination council).
6. The *off-site renewable energy* producer shall maintain transparent accounting that clearly assigns production to the building. Records on power sent to or purchased by the building shall be retained by the building owner and made available for inspection by the code official upon request.

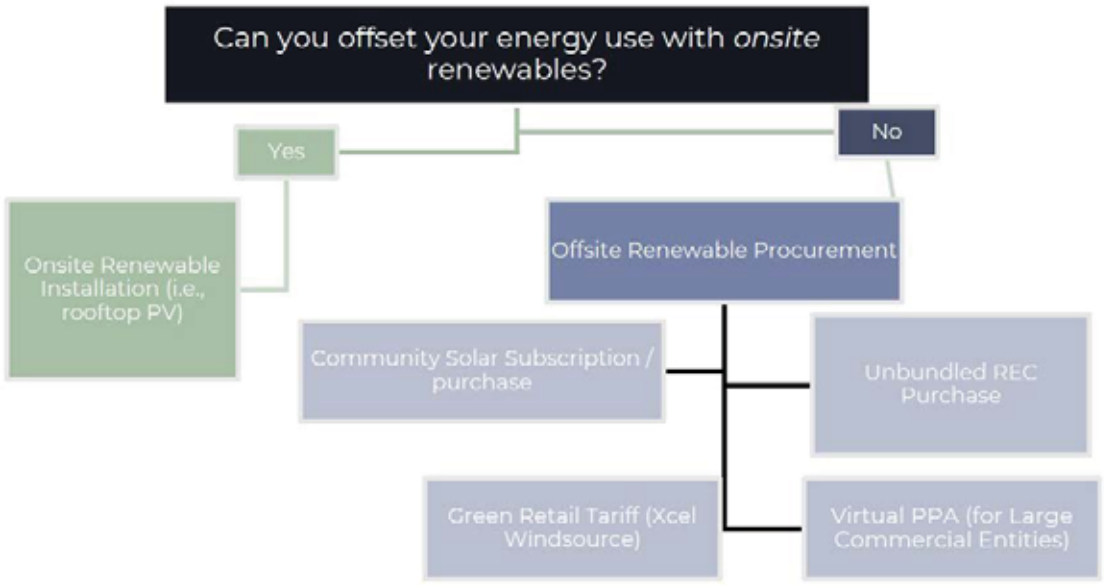
Xcel Energy RECs

Who owns the REC?

Ownership under our renewable programs varies. For some programs, we retire the RECs to the subscriber, while for other programs, we keep the RECs to meet our company's renewable energy requirements and goals.

Here's a guide to our program REC ownership**:**

- Windsource - **Subscriber**
- Renewable*Connect - **Subscriber**
- Solar*Rewards - Xcel Energy
- Solar*Rewards Community - Xcel Energy
- Solar*Rewards for Income Qualified Customers - Xcel Energy
- Net Metering - **Customer**



	Unbundled RECs	Green Retail Tariff	Community Solar	Virtual PPA
Pros	• Low Cost. • Easy to purchase.	• Low Cost. • Easy to purchase. • From local utility.	• Impactful – local renewable energy generation.	• Guarantee additionality. • 15-year contracts.
Cons	• May not be local. • May not contribute to additionality. • Always a cost (no revenue stream). • No 15 year contracts.	• May not contribute to additionality. • Always a cost (no revenue stream). • No 15 year contracts.	• Limited availability. • Annual cost (no revenue stream).	• May not be local. • Additional work to set up VPPA contract/ project.

Betzold stopped **Schlaepfer** and asked if there were questions for them at this point. [page 44 of packet]

Gatto asked about solar procurement and what is considered "local" if a builder needed to use off-site solar procurement. **Schlaepfer** responded that typically national solar procurement would be used. She also said that PPAs would typically be produced wherever solar is the cheapest to produce.

Gatto also asked that since Louisville is limited in space available, is there anything that would be considered "local" within Boulder County or Colorado that are in the works or are being developed. **Schlaepfer** explained that anything within Xcel's territory would be able to contribute to that.

Gatto also asked as far as commercial building limiting their consumption, are there any examples of municipalities (City of Boulder?) meeting those energy reductions, how viable is it?

McCollough asked if **Gatto** was referring to the EUI targets. **Gatto** confirmed.

McCollough stated that the City of Boulder set this code in 2018. They've had success with it. She stated there were two ways building can comply. 1) Developer wants gas; design mixed fuel building and use onsite PV to reduce EUI to meet target. Or 2) Create an all electric building, resulting in lower EUI and it's easier to hit the EUI targets.

McCollough further added that Boulder is working on amending code to make it more energy efficient but no they do not have specifics yet.

Gatto asked if the Google campus building in Boulder met those standards. **McCollough** confirmed.

Betzold asked if there were additional thoughts or questions from the board.

Berry asked what is the most pragmatic path, for example, for a 30,000 square foot warehouse? He stated that options did not sound appealing for smaller developments, which is the majority of what exists in Louisville. The projects he has been involved in, the first question from the developer is cost.

McCollough used City of Boulder as an example for performance energy code.

Boulder's code states that if building costs $500,000 or greater, required to comply with a performance path. They wil have to hire and energy modeler to prove that they are code compliant. She used example showing that Boulder has a fixed EUI target of 11, adding that it is very achievable for a 30,000 square foot warehouse. EUIs can be mixed based on the types of occupancy in the building. She stated that the EUIs are achievable by smaller building because they are based on energy use per square foot and that larger buildings will have a harder time meeting it because they have larger systems and more occupants. All electric constructions systems are more expensive than natural gas systems.

McCollough stated that current code requires building to be built as all-electric ready. **McCollough** used the Multifamily slide, citing the first cost of the Mixed Fuel option of $157,231 as an example and that it includes the all-electric ready infrastructure. The all-electric upfront counterpart is only $135,000 since natural gas would not need to be installed.

Berry stated he wanted to make sure that with these options we were taking into consideration the types of building that would be built in Louisville.

Dino asked how this would translate into an existing Tenant Improvement of existing space. What are the differences between what is required to provide initially and what a new tenant is now required to provide under a new code that would be adopted.

McCollough explained that typically there would be a minimum square footage (about 10,000 square feet in her experience) for a Tenant Improvement to comply with this path, otherwise it would be under the prescriptive path.

Dino gave an example of an existing building with multiple tenants using the 10,000 square foot minimum as an example. With100,000 square foot of space and one tenant is looking to build out a 20,000 portion, all the other spaces are occupied, what is the realistic likelihood that the one tenant will be willing to pay for the infrastructure for the entire building to meet that code.

McCollough explained that this scenario is something that would need to be worked out.

Berry asked how many other municipalities in our metro area have adopted some or all of the 2021 commercial IECC. He further clarified that the City of Boulder has created their own and have not adopted the 2021 IECC for Commercial as written.

McCollough answered that the City of Boulder has used the 2018 IECC Commercial code as their model with enhancements and that the City of Denver is working on amending the 2021 IECC Commercial code with EUI performance targets.

McCollough deffered to **Schlaepfer** to provide examples of other muniticiaplities that have adopted the 2021 IECC Commercial Energy Code.

Schlaepfer answered that only the City of Boulder has adopted any part of the 2021 IECC Commercial Energy Code. **Schlaepfer** further explained that there is a regional cohort that is being organized right now including Boulder County, Erie, City and County of Broomfield, Longmont, and Northglenn. The cohort is working tpo adopt the 2021 Energy base code along with solar-ready, EV-ready, electric, and "electric preferred." Louisville and Superior had already adopted the 2021 Energy Code for Residential. Council meetings have begun in each of these municipalities to adopt the package of amendments, with the exception of the City and County of Broomfield, who will adopt the 2021 IECC code in 2023. To her knowledge, no other municipality in Colorado has adopted the Appendix CC.

Geise commented that the electric grid and that looking at the main commercial area of Louisville, the CTC, that Xcel has not updated their electrical lines coming into that area. **Geise** also gave an example of how eight people in residential Trail Ridge Dr had Teslas and maxxed out the grid.

Dino commented that Xcel is using the same infrastructure in the Marshall Fire burn area in the Trail Ridge/Arapahoe area of Louisville and that Xcel is installing infrastructure that does not support the residential energy code that Louisville has already adopted.

Geise commented that if Xcel cannot deliver the electrical grid necessary to support the proposed changes, the changes cannot be implemented.

Schlaepfer stated that Xcel has long range goals to support clean energy resources and that these proposed changes would be slow since they would only address new construction which would be slow.

Dino stated that since Xcel is already implementing old infrastructure in the Marshall Fire burn area where they know we have passed the 2021 IECC for residential and are still choosing to implement old infrastructure.

Betshold indicated that Xcel has told the City of Louisville that they are planning on providing infrastructure to allow the ability for 320 Amp service for each home.

Geise said that without the infrastructure in place in Colorado, the cost of electric will be more expensive if Colorado has to pay for electricity outside the state in order to meet the demand here if we require all electric.

Dino expressed that he has trying to get Xcel Energy to provide temporary power on site for the rebuild and the contractors working for Xcel have told him that Xcel has already issued purchase orders for transformers that do not meet the requirements that Betshold said they will provide. Dino further expressed that he does not believe that Xcel will provide the infrastructure until it fails.

Betshold said she would work with City staff on the issue.

Schlaepfer stated Xcel hasn't been given any directive from that shows they will require all-electric.

Geise asked for clarification of why one business owner who owns four restaurants would be given more of a break than another who has a large warehouse with distribution, even if the square footage is the same for both.

McCollough responded that with their policy research that the technology for restaurants to use all-electric is not readily available or cost effective, so that industrial and restaurants would not be as strict as other types.

Geise expressed concern that the building requirements cannot be sustained or that an owner would need all available space to meet solar requirements and standards. McCollough agreed that the Appendix CC implementation would be difficult to meet.

Dino expressed concern over the residential implementation and disagreed with the choice to implement it as it was decided. **Dino** further explained that the document that was presented to City Council in 2021 as a collaboration between the BCBOA and City staff did not represent their ideas. He explained that he does not support this code adoption because the infrastructure is not there, Louisville has already lost some businesses to adjacent communities.

Dino suggested the group take a straw vote as whether or not they would approve of the general adoption of the 2021 IECC for Commercial and that if the City adopts the code it is against the recommendation of the BCBOA. **Knapp** seconded.

Berry asked if there were any votes for recommending the 2021 IECC Commercial code. **Gatto** voted yes with recommendations. **Berry** asked which members vote to not adopt any of it. **Berry** and **Dino** voted no. **Giese** would like to see the rest of the slides.

Lane interrupted to clarify that the purpose of the meeting wasn't to have any official vote but just to present information to the Board.

Berry clarified that it was just a straw poll to understand which members agree with the overall adoption of any portion of the IECC commercial code. **Berry** added that with reference to the 2021 IECC residential code adoption in October of 2021 that Appendix RC was never given to the Board for consideration and was a major change but was presented as if the BCBOA had agreed with it so their trust for the process is damaged and that their comments are accurately presented to City Council.

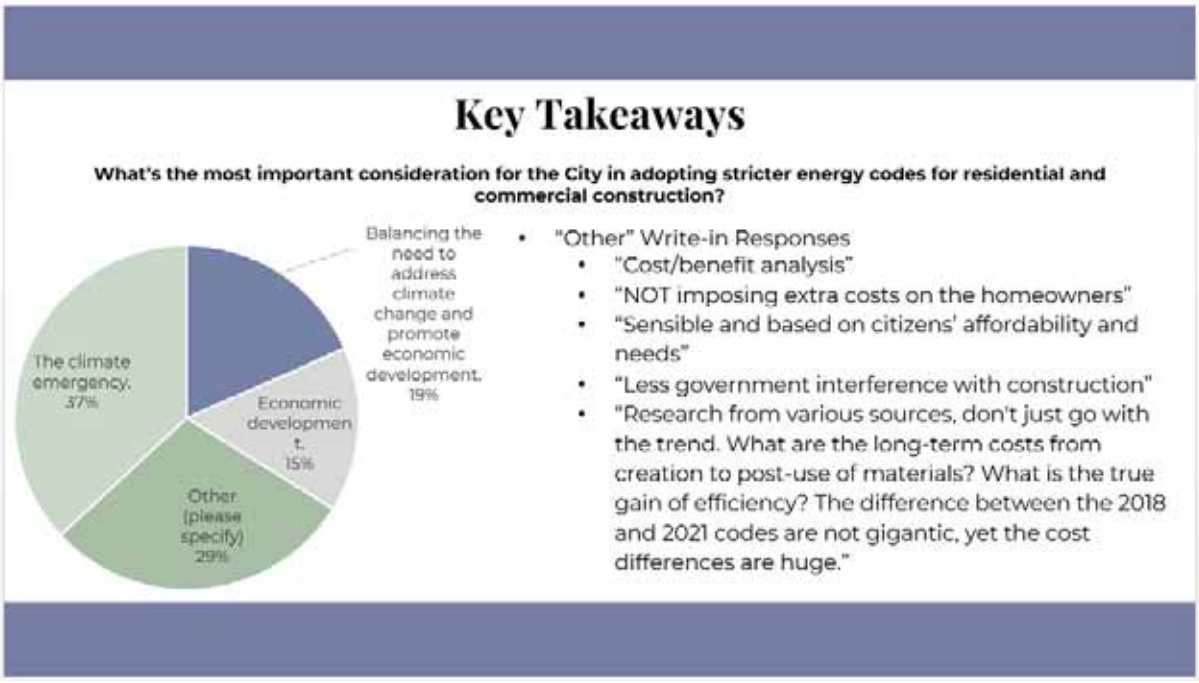
Dino added that when City Council adopted Appendix RC that it created a moratorium on new building permits for over a month and if the BCBOA had been asked in their an advisory role they could have advised as to how to adopt it without issues.

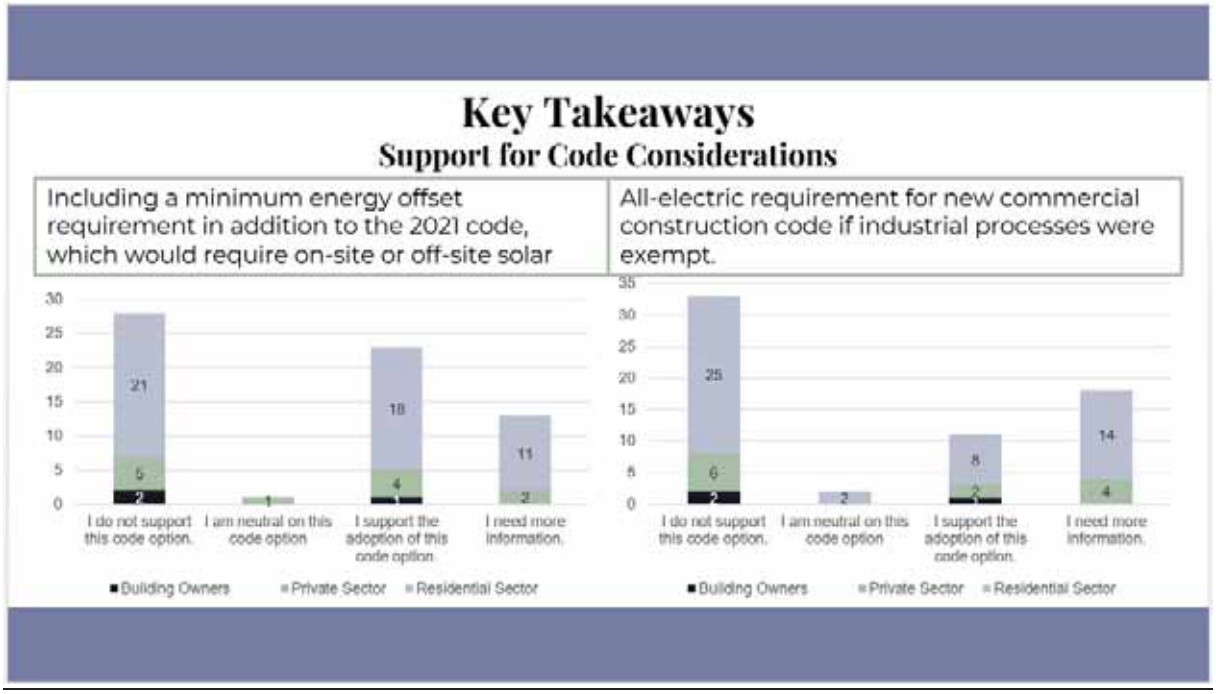
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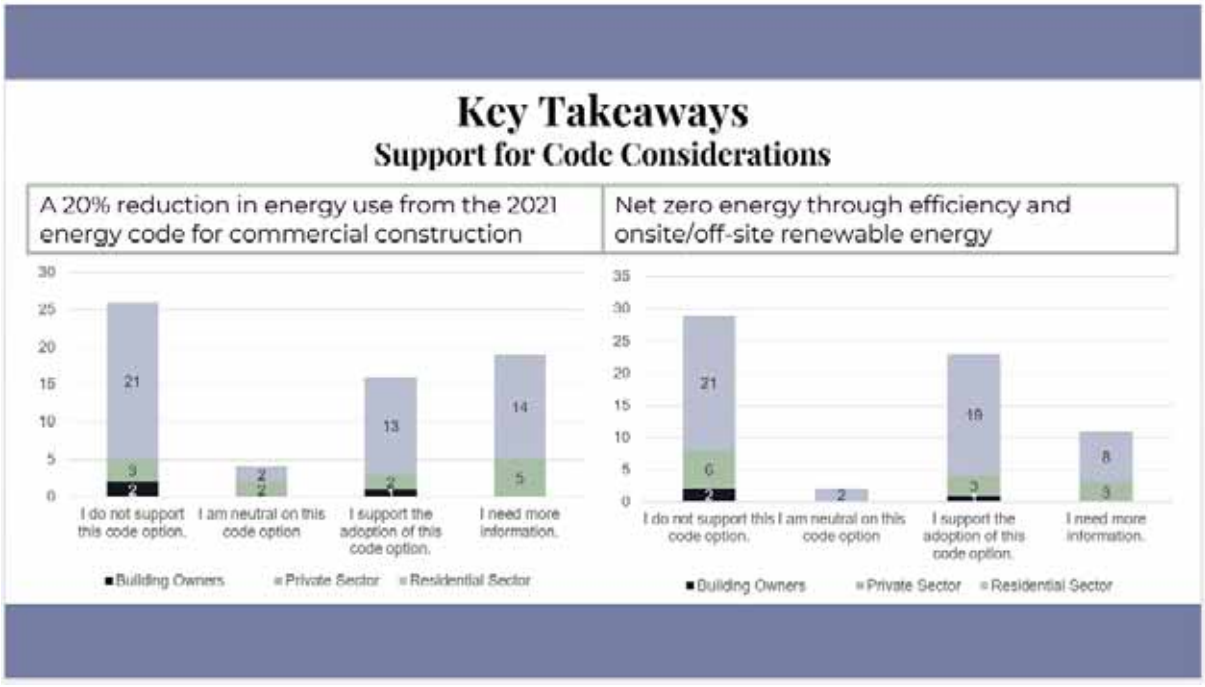
Betzhold asked if there were any more specific comments regarding policy considerations. Gatto added that he would like to see the slides. **Betzhold** directed **Schlaepfer** to present the slides concerning public feedback.

Berry asked where the public feedback came from. **Betzhold** clarified that outreach the City of Louisville did, it was in the June and July Economic Vitality newsletter, in City communications, a news item on website, and hosting public meetings as well as social media. Public feedback was from the survey.

Schlaepfer presented results from the public survey to date. The majority is from homeowners, only 30% of respondents were from the commercial sector. The main overall concern is cost; cost to builders and tenants as well as driving business away from Louisville. The second most concern was builders' lack of knowledge regarding new technology. The most common benefit was fighting climate change.







Schlaepfer indicated that only two building owners responded to the survey.

Building Owner Responses

Building Owner #1	Building Owner #2
How do you perceive the new considerations for energy code would impact your ability to develop/design/build housing affordably in the City of Louisville?	
"It will determine if I want to pay more to stay or go next door to Broomfield."	*"If we make these changes regionally, then industry and government are working together to make it economically viable for all stakeholders. Regionally cooperation is KEY!!!!"*
What data or information do you need to better understand the potential impacts of energy code options on your business and operations?	
"Bottom line cost increases."	*"We need GC, builders, and developers to lead the charge for net-zero construction which is run by renewables. This will not happen overnight, but if people within the industry are leading the charge, then government policies are partners and not the enemy. The climate crisis requires cooperation at all levels."*
Payback time frame tolerances for upfront costs and onsite solar:	
"I am not interested in increasing upfront construction costs for carbon reduction."	*"10-20 years"*

Geise and **Berry** asked if there was a way to get more building owner responses.

Schlaepfer and **Betzhold** responded that the Chamber of Commerce has also shared the survey in their emails as well and that any ideas to get more feedback would be welcome since the survey would only be open for a few more weeks. **Betzhold** also recommended that the Board members could forward the link to the survey to business owners.

Geise asked if there were any other responses since the slides were created, and **Betzhold** added that there were ten responses since the slides were created; nine residential respondents and one business owner.

Schlaepfer continued with the slides.

Other Comments

"The residential net zero appendices did not get much discussion before they passed. Now Marshall Fire victims are letting you know what they think about that. I hope you will take that into consideration in regard to the commercial codes."
(Community meeting comment)

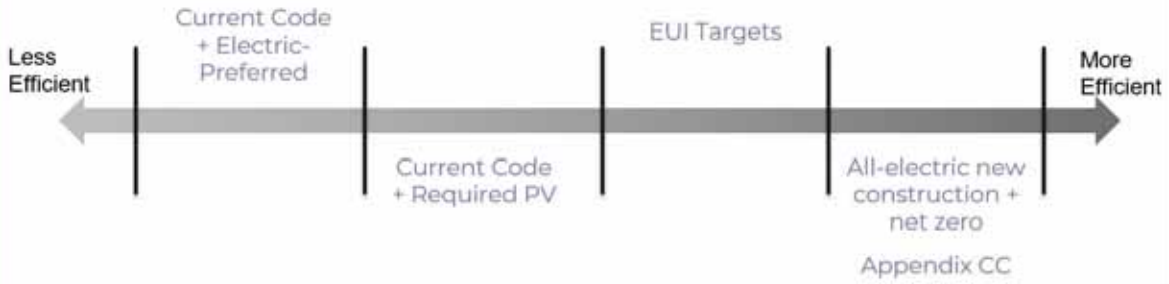
"These proposals sound good in theory. Educating Louisville residents and businesses about what these all mean and how you decided on them would be great. For example, I'm wondering why a 20% reduction? Why not more?"
(Home owner)

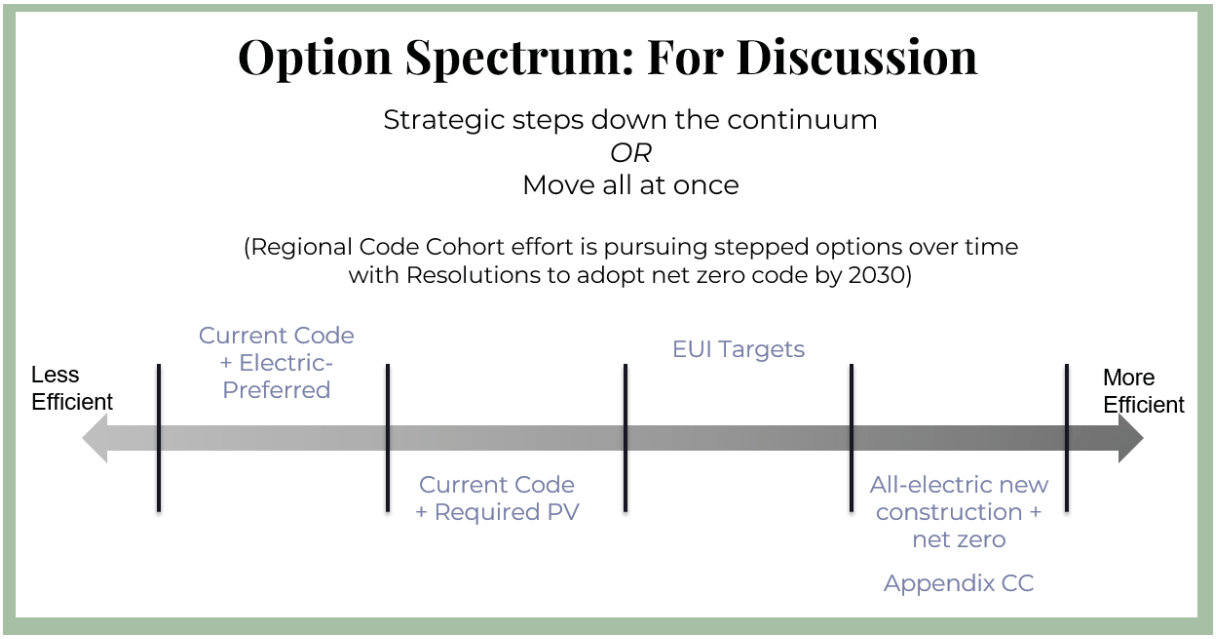
"I'd want to know more about upfront costs and whether this was being done in concert with nearby municipalities. I like the requirement to reduce energy use/become more efficient better than any specific code requirement." (Home owner)

Option Spectrum: For Discussion

Strategic steps down the continuum
OR
Move all at once

(Regional Code Cohort effort is pursuing stepped options over time with Resolutions to adopt net zero code by 2030)





Schlaepfer reiterated that the Board's input is very necessary and helpful when trying to decide which path to choose and that a potential recommendation could be a stepped approach to start at the left end of the spectrum and takes steps in the future.

Schlaepfer also reiterated that Phase I of the Regional Cohort is to get all the communities to adopt the 2021 IECC plus electric preferred and PV preferred. Phase II would begin in August to begin a roadmap to net-zero energy codes.

Geise thanked the external groups for the slideshow presentation.

Betzhold encouraged the Board to continue to research the options presented and the plan is to bring back information back to this Board in September.

Knapp asked if there was any further information for research. **Schlaepfer** answered that the slideshow was available as well as the information on the Engage Louisville website.

Schlaepfer, Berry, and Dino discussed how to get the survey and information out to larger developers and building owners.

Schlaepfer, Betzhold, and Kantor and McCollugh left the meeting.

Election of Officers:

Berry asked for nominations for Chairperson and Vice-Chairperson.

Dino nominated **Berry** for Chairperson and **Gatto** seconded the motion. Voice vote. Motion passed 5-0.

Dino nominated **Geise** for Vice-Chairperson and **Berry** seconded the motion. Voice vote. Motion passed 5-0.

Berry reminded the Staff to check on term limits and **Geise** asked to have a list of everyone's term limits.

Staff Comments:

None heard.

Discussion Items for Next Meeting:

Not enough time to put packet together based on City Council meeting. No indication as to when the next meeting will take place.

Adjourn:

Berry moved and **Gatto** seconded a motion to adjourn the meeting. The meeting was adjourned at 8:05 PM.

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Memorandum

To: **Louisville City Council Members**

From: **Louisville Sustainability Advisory Board**

Date: **December 20, 2022**

Re: **Louisville Commercial Energy Code Ordinance**

Dear members of the Louisville City Council,

The Louisville Sustainability Advisory Board strongly supports the ordinance updating the City's commercial building codes that you will consider on 20 December. The Board generally supports strengthening the City's building codes as a robust means to advance environmental sustainability and, specifically, to mitigate climate change.

When City Council last discussed the possibility of strengthening the City's commercial building codes, the Board recommended moving towards building performance standards based on Energy Use Intensity. The Board principally supported such a commercial building code as these standards would result in newly constructed commercial buildings with superior energy efficiency. The Board was pleased that City Council directed City staff to draft an ordinance on this basis.

The Board also strongly supports the ordinance's restrictions on fossil fuel use and inefficient electricity use for commercial HVAC systems and the ordinance's requirements for reporting operational energy usage. If City Council proceeds with an energy usage benchmarking program for the City's existing commercial buildings, as the Board recently recommended for City Council's 2023 work plan, then this reporting will help to inform future building code updates and future building retrofit programs.

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Previously, the Board advised that the City maintain its commitment to and participation in the Regional Code Cohort, tasked with developing a framework for the adoption of net zero building codes by 2035. The present ordinance aligns with our advice: the Regional Code Cohort is contemplating commercial building codes based on Energy Use Intensity standards, and the City's adoption of such codes would help to inform the Regional Code Cohort's work. Furthermore, the present ordinance aligns with the City of Boulder's existing commercial building codes and the City of Denver's upcoming commercial building codes.

Best regards,

The Louisville Sustainability Advisory Board



Ordinance No., Series 2022

City Council Public Hearing
December 8, 2022

Rob Zuccaro
Community Development Director

Chad Root
Chief Building Official

Kayla Betzold
Sustainability Coordinator

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Ordinance No. 1845, Series 2022

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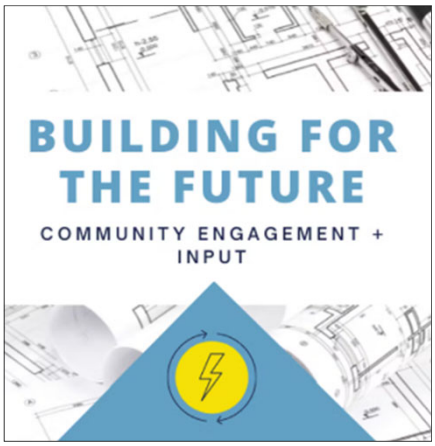
Code Overview

- Amends chapter 15.18.030 of the Louisville Municipal Code concerning amendments and deletions to the 2021 International Energy Conservation Code
- Includes requirements for commercial energy use intensity (EUI) performance targets for specific building types
- Restricts fossil fuel space and water heating equipment
- Applies only to new commercial construction

Ordinance No. 1845, Series 2022

Project Background

- Included as an item on the 2022 City Council Work Plan
- Contracted with consultants to conduct energy modeling, public engagement, and policy research and analysis
- Presented project results to Council at September 27 meeting



Ordinance No. 1845, Series 2022

Public Engagement

- Online survey available June – August
- Two community meetings
- Two City board presentations

Key Takeaways

- Benefits: greenhouse gas reductions, public health improvements (air quality)
- Barriers: additional cost burdens, challenging business environment
- Considerations: Xcel Energy grid resiliency, existing buildings, exemptions/loopholes, small business impacts, implementation



Ordinance No. 1845, Series 2022

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Proposed Energy Code

- Worked with Southwest Energy Efficiency Project (SWEEP), Shums Coda, Washington State Energy Code technical review team contact
- Applies only to new construction

Includes:

- Energy use intensity (EUI) performance based targets for seven (7) building types
- Other building types meet prescriptive requirements of commercial base energy code (IECC 2021 + strengthening amendments)
- All building types meet space and water heating equipment requirements (all-electric)

Ordinance No. 1845, Series 2022

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Energy Use Intensity Performance Targets

- Seven building types reflective of the adopted City of Boulder and proposed City and County of Denver EUI targets
  - These were well-vetted projects that included energy modeling and technical review.
- Reflects basic building types with predictable EUI targets
- The City may consider adding additional building types in future code adoption cycles.

TABLE PT103
PERFORMANCE TARGETS

BUILDING TYPE	PERFORMANCE TARGET (kBTU/ft2)
Multifamily (Occupancy R-2)	32
Office, small (>5,000 ft2)	19
Office, medium (5,000 – 50,000 ft2)	23
Office, large (>50,000 ft2)	28
School, primary	34
School, secondary	31
Warehouse	11

Ordinance No. 1845, Series 2022

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Space and Water Heating Exceptions

The exceptions outlined in the proposed code reflect the exceptions the State of Washington included in their statewide all-electric space and water heating energy code.

- Specific industries require backup power for extended time periods in the case of emergencies/natural disasters.
- Specific industries require a high number of air exchanges per hour.
- Some electric resistance equipment is necessary in heat pump technology.
- Some additional electric resistance equipment is allowed for specific circumstances.

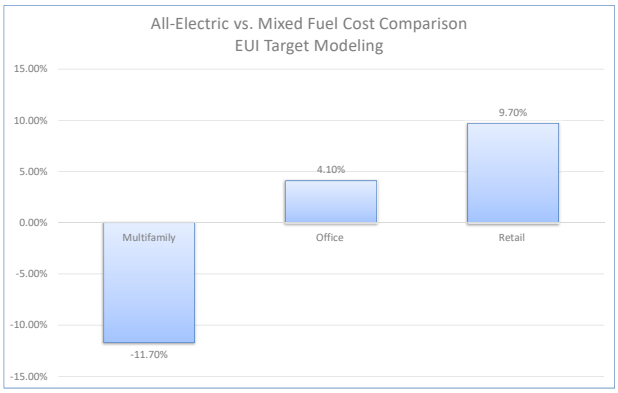
Ordinance No. 1845, Series 2022

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Cost Comparison of All-Electric vs. Mixed-Fuel – EUI Modeling

For the building types that fall within the EUI building types, this graph shows the cost comparison between all-electric and mixed-fuel buildings.

- Multifamily – 11.7% less expensive for all-electric vs. mixed fuel
- Office – 4.1% more expensive for all-electric vs. mixed fuel
- Retail – 9.7% more expensive for all-electric vs. mixed fuel



Ordinance No. 1845, Series 2022

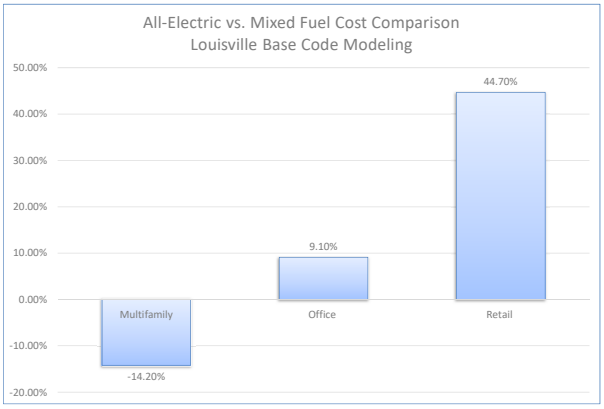
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Cost Comparison of All-Electric vs. Mixed-Fuel — Base Code (IECC 2021 + strengthening amendments)

Building types that are not required to build to EUI targets will need to comply with Louisville's current commercial code + fossil fuel space and water heating restrictions. The modeling below shows the cost comparison between all-electric and mixed-fuel code compliant buildings.

- Multifamily – 14.2% less expensive for all-electric vs. mixed fuel
- Office – 9.1% more expensive for all-electric vs. mixed fuel
- Retail*– 44.7% more expensive for all-electric vs. mixed fuel

*Retail model includes two restaurants with all-electric commercial kitchens. Proposed code only requires all-electric space and water heating.



Ordinance No. 1845, Series 2022

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Building Code Cohort

- The code cohort has completed the phase 2 planning meetings to develop the net zero new construction roadmap.
- There is currently a **draft** roadmap that is being reviewed by communities – the final roadmap will be published in early 2023.

2027 – stricter EUI targets, demand response capability
2030 – stricter EUI targets, energy storage required

Commercial Net Zero New Construction Roadmap

2024

PV installation on maximum available roof space is required.	Available roof space is determined by sizing protocol in adopted solar-ready code language. PV cannot contribute to a building's EUI score (see row 3).
Electrification of space and water heating is required.	Space and water heating shall be provided by high-efficiency all-electric appliances (e.g. heat pumps). Fossil fuel powered cooking appliances, dryers, and process loads are still allowed, as well as, certain technical situations where high-efficiency electric systems are not feasible.
Energy Use Intensity (EUI) Performance Standards are set per building type.	A building must implement measures to achieve a property-type specific EUI standards. Backstop prescriptive requirements will be considered by each jurisdiction to encourage minimum energy efficiency measures which will guarantee a baseline level of energy performance. ***Equity and affordability:*** *Agricultural facilities may have difficulty meeting code requirements and possibly warrant limited alternative pathway. All buildings will need to verify energy performance with energy modeling which may add additional cost burden.*
Energy storage ready spaces are required.	These requirements are outlined in Appendix CB of the 2021 IECC and will already be implemented in participating jurisdictions through Phase 1.

519


Staff recommends approval of
Ordinance 1845, Series 2022
Questions?
City of Louisville
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CITY COUNCIL COMMUNICATION
AGENDA ITEM 7D

SUBJECT: **RESOLUTION NO. 55, SERIES 2022 – A RESOLUTION AMENDING THE 2022 BUDGET BY AMENDING APPROPRIATIONS IN THE SOLID WASTE & RECYCLING FUND AND GOLF COURSE FUND FOR ADDITIONAL APPROPRIATIONS WITHIN SUCH FUNDS – PUBLIC HEARING (advertised *Daily Camera* 12/16/22)**

DATE: **DECEMBER 20, 2022**

PRESENTED BY: **VICTORIA RUNKLE, FINANCE DIRECTOR**

SUMMARY:
The attached resolution proposes amendments to the City's 2022 Operating & Capital Budget. Staff requests these amendments to:

Adopt other operating and capital adjustments to the 2022 expenditure budget for items that staff did not anticipate, or were not measureable, at the time City Council adopted the original 2022 budget in November 2021.

Attachment A illustrates the line items recommended for changes.

- In the Solid Waste Fund, the increase is just to ensure the Fund has enough appropriation to end the year within budget ($20,000).

- The Golf Course has had several issues this year.
  - Higher part time salaries to meet the higher operating and capital activities ($130,000 between variable salaries and Bridgehouse program);
  - Higher sales of goods – this being offset with revenue ($200,000);
  - Banking Charges need increased due to the use of credit cards ($25,000);
  - Marshall Fire expenses that were not identified earlier in the year ($70,000);
  - Custodial, utilities, and ground maintenance expense increases ($40,000).

FISCAL IMPACT:
The proposed budget amendment increases the 2022 expenditure budget by **$485,000.** All funds are expected to remain in full compliance with the Reserve Policies.

PROGRAM/SUB-PROGRAM IMPACT:
The proposed budget amendment impacts various City's Programs and Sub-Programs. The presentation of the budget amendment is designed to meet the Administration & Support Services goals by presenting a transparent document and fiscally responsible recommendation.

RECOMMENDATION:
Hold a public hearing and approve Resolution No. 55, Series 2022, amending the 2022 budget.

ATTACHMENTS:
1. Proposed Resolution No. 55, Series 2022
2. Appendices A, Fund 510, Solid Waste Fund & Recycling Fund and Attachment B Golf Fund to the Resolution

STRATEGIC PLAN IMPACT:

☒	**Financial Stewardship & Asset Management**	☐	**Reliable Core Services**
☐	**Vibrant Economic Climate**	☐	**Quality Programs & Amenities**
☐	**Engaged Community**	☐	**Healthy Workforce**
☐	**Supportive Technology**	☐	**Collaborative Regional Partner**

RESOLUTION NO. 55
SERIES 2022

A RESOLUTION AMENDING THE 2022 BUDGET BY AMENDING APPROPRIATIONS IN THE SOLID WASTE & RECYCLING FUND AND GOLF COURSE FUND FOR ADDITIONAL APPROPRIATIONS WITHIN SUCH FUNDS

WHEREAS, the need exists to amend the 2022 budget by amending appropriations in the Solid Waste & Recycling Fund, and Golf Course Fund; and

WHEREAS, the need to amend the 2022 budget arises to formally adopt other additions and adjustments to the current 2022 appropriations that were not anticipated, or were not measureable, at the time the original 2022 budget was adopted; and

WHEREAS, funding for any increase in appropriations will come from new/increased revenue or from fund reserves.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

SECTION 1. That the 2022 Solid Waste & Recycling Fund appropriation be increased by $20,000 from $1,629,060 to $1,649,060.

SECTION 2. That the 2022 Golf Course Fund appropriation be increased by $465,000 from $2,046,600 TO $2,511,600

PASSED AND ADOPTED this 20th day of December, 2022.

By:_____
Ashley Stolzmann, Mayor

Attest: _____
Meredyth Muth, City Clerk

ATTACHMENT A
SOLID WASTE AND & RECYCLING UTILITY FUND

Org	Object	Description	CURRENT BUDGET	AMENDMENT	FINAL BUDGET
510481	511000	Regular Salaries	64,800		64,800
510481	511100	Variable Salaries	-		-
510481	511150	Temp/Seasonal Salaries	-		-
510481	511200	Overtime Pay	200		200
510481	512000	FICA Expense	4,580		4,580
510481	512100	Retirement Contribution	4,050		4,050
510481	512200	Workers Compensation	420		420
510481	512300	Unemployment Compensation	-		-
510481	513000	Medical Insurance	6,730		6,730
510481	513100	Dental Insurance	420		420
510481	513200	Vision Insurance	110		110
510481	513300	Life, AD&D & LTD Insurance	490		490
510481	513400	Employee Assistance Plan	10		10
510481	520100	Office Supplies	-		-
510481	522500	Non-Capital Furn/Equip/Tools	-		-
510481	523100	Uniforms and Clothing	-		-
510481	529550	Prepaid Extra Bag Tags	6,000		6,000
510481	532000	Advertising/Marketing	-		-
510481	532020	Sustainability Initiative	-		-
510481	532200	Printing	-		-
510481	532210	Travel	-		-
510481	532220	Business and Auto Allowance	400		400
510481	532230	Dues/Subscriptions/Books	-		-
510481	533090	BC Household Hazardous Waste	71,230	$ 20,000	91,230
510481	535010	Communication Svcs-Cell Phone	100		100
510481	535030	Comm Svcs-Internet/Cable	-		-
510481	538100	Education Expense	-		-
510481	538101	Travel, Training, & Meetings	-		-
510481	538130	Louisville Recycling/Con Board	-		-
510481	540410	Prof Serv-Investment Fee	20		20
510481	540415	Prof Serv-Bank Charges	1,700		1,700
510481	540420	Prof Serv-Disposal & Recycling	50,000		50,000
510481	540470	Prof Serv-Recording Fee	-		-
510481	540480	Prof Serv-Microfilming	-		-
510481	540590	Prof Serv-Solid Waste Hauling	1,404,000		1,404,000
510481	540900	Prof Serv-Other	13,800		13,800
510481	550020	Parts/Repairs/Maint-Equip	-		-
510481	580040	Computer Replacement	-		-
		FUND TOTAL	**1,629,060**	**20,000**	**1,649,060**

ATTACHMENT B
GOLF COURSE FUND

Org	Object	Description	Current Budget	Amendment	Final Budget
520111	570100	Principal-Bonds	-		
520111	570200	Principal Expense	-		
520111	570500	Interest-Bonds	-		
520111	570700	Interest-Other Debt	-		
520111	570800	Bond Issuance Costs	-		
520111	570900	Loss on Defeasance	-		
520111	580010	Amortization	-		
520599	580000	Depreciation Expense	-		
520710	640001	Machinery & Equipment	-		
520711	511000	Regular Salaries	50,780		
520711	511100	Variable Salaries	-		
520711	511150	Temp/Seasonal Salaries	-		
520711	511200	Overtime Pay	-		
520711	512000	FICA Expense	3,530		
520711	512100	Retirement Contribution	3,040		
520711	512200	Workers Compensation	410		
520711	512300	Unemployment Compensation	-		
520711	513000	Medical Insurance	10,160		
520711	513100	Dental Insurance	710		
520711	513200	Vision Insurance	120		
520711	513300	Life, AD&D & LTD Insurance	400		
520711	513400	Employee Assistance Plan	20		
520711	520100	Office Supplies	500		
520711	521000	Computer Supplies	220		
520711	521100	Computer Supplies-Software	-		
520711	522500	Non-Capital Furn/Equip/Tools	300		
520711	522900	Miscellaneous Supplies	-		
520711	522909	Marshall Fire - Supplies	12,100	15,000	27,100
520711	523100	Uniforms and Clothing	200		
520711	528900	Miscellaneous Golf Supplies	210		
520711	532000	Advertising/Marketing	16,000		
520711	532030	Golf Gifts & Promotions	2,000		
520711	532040	Employee Discounts	-		
520711	532100	Insurance	17,300		
520711	532120	Insurance- Deductibles	-		
520711	532200	Printing	3,000		
520711	532210	Travel	-		
520711	532220	Business and Auto Allowance	-		
520711	532230	Dues/Subscriptions/Books	1,000		
520711	532909	Marshall Fire - Services	94,500	60,000	154,500

520711	534050	Utility Services-Water	-		
520711	535010	Communication Svcs-Cell Phone	30		
520711	535030	Comm Svcs-Internet/Cable	-		
520711	535200	Postage	330		
520711	536000	Rentals-Equipment	200		
520711	538100	Education Expense	-		
520711	538101	Travel, Training, & Meetings	410		
520711	538999	Other Services and Charges	-		
520711	540410	Prof Serv-Investment Fee	250		
520711	540415	Prof Serv-Bank Charges	42,000	30,000	72,000
520711	540900	Prof Serv-Other	-		
520711	550090	Parts/Repairs/Maint-Copiers	-		
520711	580000	Depreciation Expense	-		
520711	580040	Computer Replacement	1,610		
520711	580050	Contingency	-		
520711	580090	Loss on WGP Term Agreement	-		
520711	580100	Loss on Written off Assets	-		
520711	580115	Loss on Theft	-		
520712	511000	Regular Salaries	296,360		
520712	511100	Variable Salaries	235,010	75,000	310,010
520712	511150	Temp/Seasonal Salaries	-		
520712	511200	Overtime Pay	6,400		
520712	512000	FICA Expense	36,230		
520712	512100	Retirement Contribution	18,150		
520712	512200	Workers Compensation	5,730		
520712	512300	Unemployment Compensation	-		
520712	513000	Medical Insurance	20,550		
520712	513100	Dental Insurance	1,610		
520712	513200	Vision Insurance	470		
520712	513300	Life, AD&D & LTD Insurance	1,760		
520712	513400	Employee Assistance Plan	80		
520712	520100	Office Supplies	550		
520712	521000	Computer Supplies	750		
520712	521100	Computer Supplies-Software	1,050		
520712	521130	Golf Course Software Subscript	15,800		
520712	521200	Non-Capital Computer Hardware	-		
520712	522500	Non-Capital Furn/Equip/Tools	7,280		
520712	522900	Miscellaneous Supplies	-		
520712	523100	Uniforms and Clothing	2,700		
520712	528100	Golf Cart Supplies	1,500		
520712	528200	Range Balls	6,000		
520712	528250	Range Supplies	1,500		
520712	528400	Cart Barn Supplies	1,000		
520712	528900	Miscellaneous Golf Supplies	550		
520712	529100	Resale Merchandise	60,000	200,000	260,000

520712	532030	Golf Gifts & Promotions	3,800
520712	532200	Printing	110
520712	532210	Travel	-
520712	532220	Business and Auto Allowance	300
520712	532230	Dues/Subscriptions/Books	1,000
520712	532700	Golf Handicap Services	5,000
520712	534050	Utility Services-Water	-
520712	535010	Communication Svcs-Cell Phone	600
520712	535030	Comm Svcs-Internet/Cable	-
520712	536000	Rentals-Equipment	-
520712	538100	Education Expense	-
520712	538101	Travel, Training, & Meetings	1,050
520712	538999	Other Services and Charges	-
520712	540900	Prof Serv-Other	50,000
520712	547040	Prof Serv - Golf Contractors	20,000
520712	550090	Parts/Repairs/Maint-Copiers	-
520712	550230	Parts/Repairs/Maint-Golf Carts	1,000
520712	580040	Computer Replacement	700
520713	511000	Regular Salaries	391,000
520713	511100	Variable Salaries	86,530
520713	511150	Temp/Seasonal Salaries	-
520713	511200	Overtime Pay	24,280
520713	512000	FICA Expense	37,520
520713	512100	Retirement Contribution	23,460
520713	512200	Workers Compensation	5,770
520713	512300	Unemployment Compensation	-
520713	513000	Medical Insurance	39,870
520713	513100	Dental Insurance	2,770
520713	513200	Vision Insurance	740
520713	513300	Life, AD&D & LTD Insurance	3,420
520713	513400	Employee Assistance Plan	190
520713	520100	Office Supplies	150
520713	521000	Computer Supplies	1,000
520713	521100	Computer Supplies-Software	-
520713	522120	Operating Supplies-Safety	1,000
520713	522500	Non-Capital Furn/Equip/Tools	4,900
520713	522900	Miscellaneous Supplies	1,000
520713	523100	Uniforms and Clothing	3,610
520713	525300	Gas & Oil	-
520713	525400	Fuel & Lubricants	13,980
520713	528300	Tee & Green Supplies	3,250
520713	528500	Course Maintenance Supplies	1,500
520713	528900	Miscellaneous Golf Supplies	500
520713	532200	Printing	100
520713	532210	Travel	-

520713	532220	Business and Auto Allowance	300		
520713	532230	Dues/Subscriptions/Books	1,330		
520713	534000	Utility Services-Gas	2,580		
520713	534010	Utility Services-Electricity	45,000		
520713	534020	Utility Service-Trash Removal	3,920		
520713	534050	Utility Services-Water	45,000		
520713	534060	Utility Services-Sewer	-		
520713	535010	Communication Svcs-Cell Phone	100		
520713	535030	Comm Svcs-Internet/Cable	150		
520713	536000	Rentals-Equipment	-		
520713	538100	Education Expense	-		
520713	538101	Travel, Training, & Meetings	2,000		
520713	538999	Other Services and Charges	220		
520713	540160	Prof Serv-Laboratory	-		
520713	540300	Prof Serv-Custodial	1,300		
520713	540900	Prof Serv-Other	20,000		
520713	547000	Prof Serv-Mowing	-		
520713	547010	Prof Serv-Pest Control	1,840		
520713	547031	Prof Serv Lndscp Bridge House	-	52,000	
520713	550000	Parts/Repairs/Maint-Bldgs/Fac	3,600		
520713	550020	Parts/Repairs/Maint-Equip	25,000		
520713	550030	Parts/Repairs/Maint-Grounds	61,710	25,000	86,710
520713	550070	Parts/Repairs/Maint-HVAC	550		
520713	550090	Parts/Repairs/Maint-Copiers	-		
520713	550130	Parts/Repairs/Maint-Security	570		
520713	550140	Parts/Repairs/Maint-Painting	530		
520713	550150	Parts/Repairs/Maint-Fire Syste	100		
520713	550160	Parts/Repairs/Maint-Electrical	200		
520713	550170	Parts/Repairs/Maint-Plumbing	270		
520713	550180	Parts/Repairs/Maint-Lighting	270		
520713	550210	Parts/Repairs/Maint-Irrigation	-		
520713	550260	Parts/Repairs/Maint-Ground Irr	16,570		
520713	580040	Computer Replacement	560		
520714	511000	Regular Salaries	-		
520714	511100	Variable Salaries	-		
520714	511150	Temp/Seasonal Salaries	-		
520714	511200	Overtime Pay	-		
520714	512000	FICA Expense	-		
520714	512100	Retirement Contribution	-		
520714	512200	Workers Compensation	-		
520714	513000	Medical Insurance	-		
520714	520100	Office Supplies	-		
520714	522000	Operating Supplies	-		
520714	522120	Operating Supplies-Safety	-		
520714	523100	Uniforms and Clothing	-		

520714	529300	Food for Resale	-		
520714	529410	Liquor for Resale	-		
520714	529420	Beer for Resale	-		
520714	529430	Wine for Resale	-		
520714	529450	Non-Alcoholic Beverages-Resale	-		
520714	529460	Alcoholic Beverages - Resale	-		
520714	536000	Rentals-Equipment	-		
520714	538100	Education Expense	-		
520714	538999	Other Services and Charges	-		
520714	540900	Prof Serv-Other	-		
520714	550000	Parts/Repairs/Maint-Bldgs/Fac	-		
520714	550020	Parts/Repairs/Maint-Equip	-		
520715	511000	Regular Salaries	24,730		
520715	511100	Variable Salaries	-		
520715	511150	Temp/Seasonal Salaries	-		
520715	511200	Overtime Pay	100		
520715	512000	FICA Expense	1,720		
520715	512100	Retirement Contribution	1,490		
520715	512200	Workers Compensation	480		
520715	512300	Unemployment Compensation	-		
520715	513000	Medical Insurance	3,420		
520715	513100	Dental Insurance	190		
520715	513200	Vision Insurance	50		
520715	513300	Life, AD&D & LTD Insurance	160		
520715	513400	Employee Assistance Plan	10		
520715	520100	Office Supplies	-		
520715	521120	Facilities Maint Software Sub	-		
520715	522000	Operating Supplies	4,100		
520715	522110	Operating Supplies-Janitorial	700		
520715	522120	Operating Supplies-Safety	500		
520715	522500	Non-Capital Furn/Equip/Tools	1,200		
520715	523100	Uniforms and Clothing	100		
520715	528600	Dining Room Supplies	-		
520715	532220	Business and Auto Allowance	-		
520715	534000	Utility Services-Gas	3,800		
520715	534010	Utility Services-Electricity	20,000	8,000	28,000
520715	534020	Utility Service-Trash Removal	3,000		
520715	534040	Utility Service-Haz Waste Disp	-		
520715	534050	Utility Services-Water	2,000		
520715	534060	Utility Services-Sewer	-		
520715	535000	Communication Svcs-Telephone	2,800		
520715	535010	Communication Svcs-Cell Phone	150		
520715	535030	Comm Svcs-Internet/Cable	5,000		
520715	535040	Communication Svcs-T1 Line	200		
520715	536000	Rentals-Equipment	500		

520715	538999	Other Services and Charges	-		
520715	540300	Prof Serv-Custodial	8,200		
520715	540900	Prof Serv-Other	-		
520715	547010	Prof Serv-Pest Control	300		
520715	550000	Parts/Repairs/Maint-Bldgs/Fac	3,000		
520715	550020	Parts/Repairs/Maint-Equip	5,000		
520715	550070	Parts/Repairs/Maint-HVAC	1,000		
520715	550090	Parts/Repairs/Maint-Copiers	600		
520715	550130	Parts/Repairs/Maint-Security	1,500		
520715	550140	Parts/Repairs/Maint-Painting	270		
520715	550150	Parts/Repairs/Maint-Fire Syste	1,500		
520715	550160	Parts/Repairs/Maint-Electrical	500		
520715	550170	Parts/Repairs/Maint-Plumbing	1,700		
520715	550180	Parts/Repairs/Maint-Lighting	500		
520799	600000	Fixed Asset-Capital	-		
520799	620095	Golf Maint Fac Improvements	-		
520799	620096	Clubhouse South Deck Repair	-		
520799	620102	Golf Clubhouse Roof Replacemen	-		
520799	620103	Equipment Storage Building	-		
520799	620112	Shelter Improvements	-		
520799	620126	Chemical Storage Building	-		
520799	630069	Fences	-		
520799	630112	Golf Course Startup	-		
520799	630113	CCGC Identity Package	-		
520799	630115	Cart Paths	-		
520799	630121	Chemical Storage	-		
520799	630126	GC Pavilion Renovation	-		
520799	640000	Motor Vehicle/Road Equipment	-		
520799	640001	Machinery & Equipment	-		
520799	640103	Bucket Truck	-		
520799	640104	Snow Removal Equipment	-		
520799	640141	Golf Carts	-		
520799	650015	Computer-Hardware	-		
520799	650063	Information Technology	-		
520799	650081	Coal Creek Range Furniture	-		
520799	699000	Capital Improvements Plan	-		
520910	580100	Loss on Written off Assets	-		
520910	580110	Loss on Asset Impairment	-		
520910	990101	Transfer to General Fund	-		
520910	990501	Transfer to Water Fund	-		
520910	990502	Transfer to Wastewater	-		
		TOTAL GOLF COURSE BUDGET	**2,046,600**	**465,000**	**2,511,600**

City of Louisville
COLORADO • SINCE 1878

CITY COUNCIL COMMUNICATION
AGENDA ITEM 7E

SUBJECT: **NORTH END BLOCK 11 – 1501 E SOUTH BOULDER ROAD**

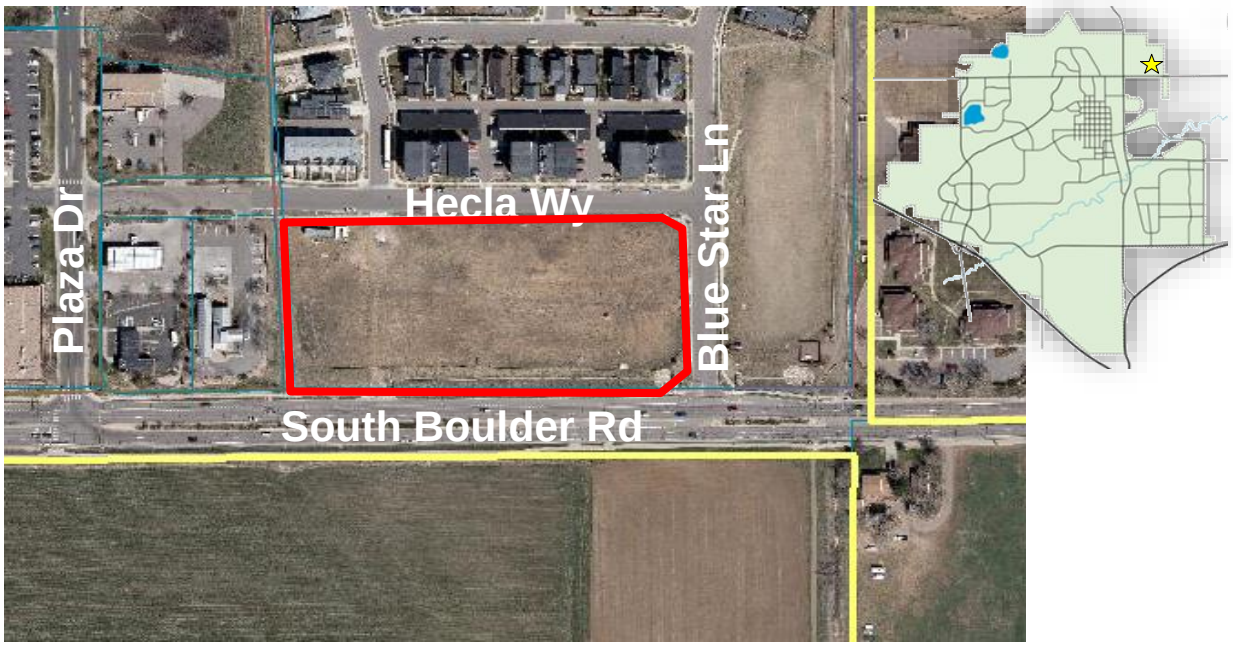
i. **ORDINANCE NO. 1846, SERIES 2022 – AN ORDINANCE APPROVING A FOURTH AMENDMENT TO THE NORTH END GENERAL DEVELOPMENT PLAN TO AMEND ALLOWED RESIDENTIAL USES ON PLANNING AREA 1 AND STANDARDS FOR ROOF OVERHANG ENCROACHMENTS WITHIN SETBACKS AND EASEMENTS FOR BLOCK 11 – 1st READING, SET PUBLIC HEARING 1/03/2023**

ii. **ORDINANCE NO. 1847, SERIES 2022 – AN ORDINANCE APPROVING A PARTIAL VACATION OF SIX PORTIONS OF AN EXCLUSIVE CITY UTILITY EASEMENT ON BLOCK 11 OF THE NORTH END, BLOCK 11 – REPLAT OF NORTH END PARCEL 1, OUTLOT H & OUTLOT K REPLAT SUBDIVISION – 1st READING, SET PUBLIC HEARING 1/03/2023**

DATE: **DECEMBER 20, 2022**

PRESENTED BY: **ELLIE HASSAN, PLANNER II**

VICINITY MAP:



SUMMARY:
The applicant, Ridgeline Development Corporation, requests approval of the following for a 4.57 acre parcel in the North End Subdivision (Block 11):

- A General Development Plan (GDP) Amendment;
- A partial easement vacation;
- A Final Planned Unit Development (PUD) Amendment ; and
- A subdivision replat.

The two ordinances included with this memo for first reading are related to the GDP Amendment and partial easement vacation. The City Council will review the PUD Amendment and subdivision replat applications at the same meeting as the second reading of the two requested ordinances.

Ordinance No. 1846, Series 2022 would approve a fourth GDP Amendment to revise the housing types permitted in Planning Area 1 (Block 11) by eliminating the single family and townhome/duplex housing types. Ordinance No. 1847, Series 2022 would approve a partial easement vacation to vacate portions of an exclusive city utility easement from the previous plat to accommodate changes in the proposed replat of the site.

BACKGROUND:
The property is located within the 73.8 acre North End development, which was originally approved by City Council in December 2006 through a Subdivision Plat, General Development Plan, and Planned Unit Development. The subject property was part of Parcel 1 in the plat and “Planning Area 1” in the GDP. Planning Area 1 allowed for 65,000 square feet of commercial space.

The first GDP Amendment was approved in May 2010 and allocated 12 residential units to Planning Area 1. A second GDP Amendment approved in July 2011 revised the Planning Area 1 boundary and allowed for a total of 21 residential units and 65,000 square feet of commercial space.

In 2012, Parcel 1 was further subdivided in the North End Parcel 1, Outlot H and K Replat (North End Phase II), which established Block 11.

In 2017, the City approved a third GDP Amendment, final plat, and final PUD for Block 11 (see attached for approved plans, Resolution, Ordinance, and minutes from the Planning Commission and City Council). The GDP Amendment authorized 38 residential units in Planning Area 1 and decreased the commercial square footage from 65,000 to 40,000. The third GDP Amendment retained the existing allowance of 21 residential units, and authorized the transfer of an additional 17 residential units that

were undeveloped within other areas of the GDP. The final plat for Block 11 established utility and drainage easements on the property but did not create separate lots.

PROPOSAL:

GDP Amendment

The Applicant is requesting a fourth GDP Amendment to accommodate changes to permitted housing types. The maximum number of residential dwelling units and commercial square footage will not change. The only change to the PUD Dimensional Bulk Standards Table on the GDP is a note allowing roof overhang encroachments into setbacks and easements of 30". Additional changes on the GDP are minor associated revisions to the land use areas as listed below.

The Land Use Area Summary Table was revised to reflect the mix of multifamily and commercial area and the elimination of single family and townhome/duplex housing. As previously stated, the application does not change the proposed number of allowed residential units.

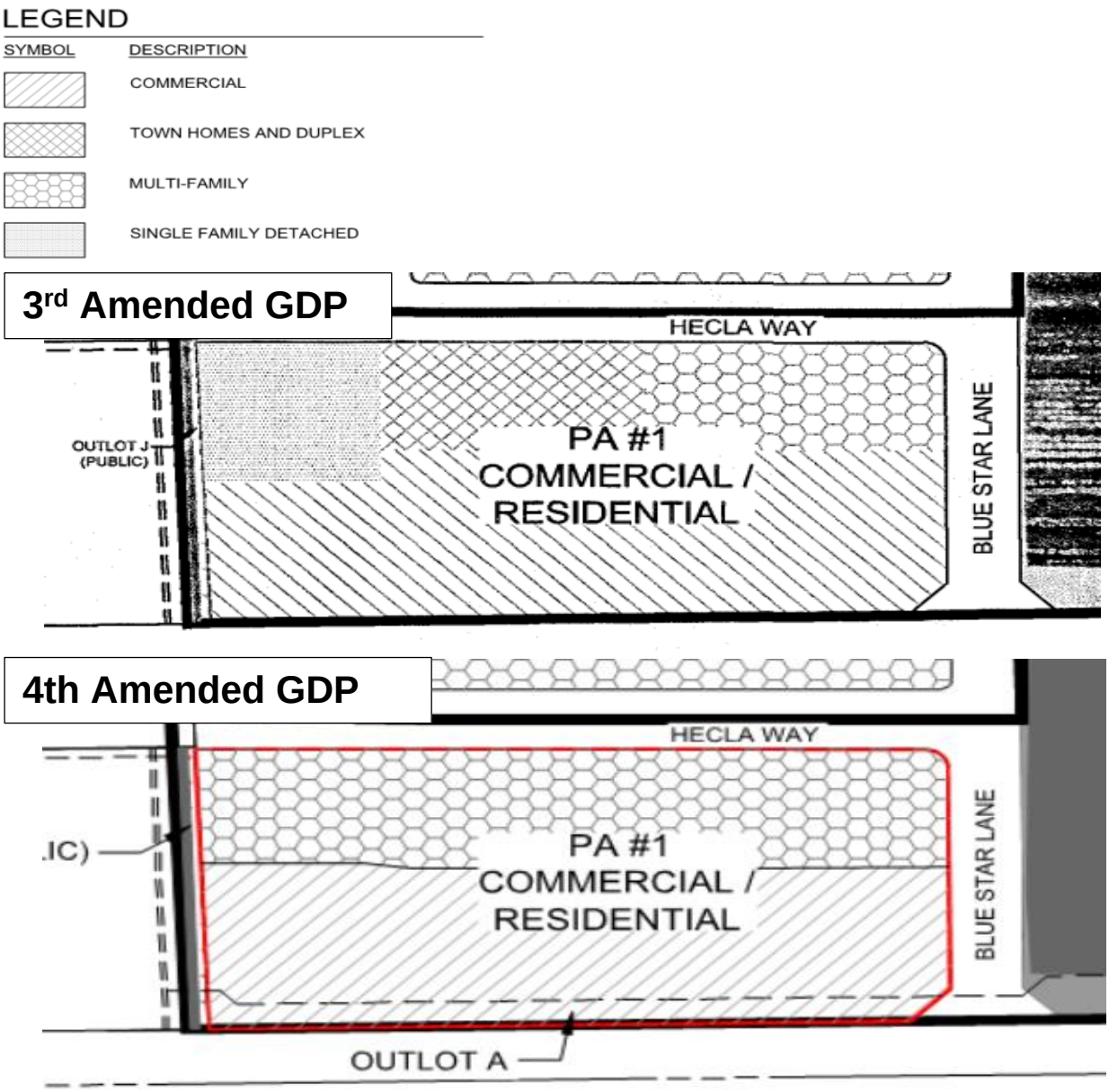
3rd Amended GDP Land Use Area Summary

LAND USE AREA SUMMARY (ACRES)	
	PA #1
COMMERCIAL	2.65
TOWNHOME AND DUPLEX (MEDIUM DENSITY RESIDENTIAL)	0.63
MULTIFAMILY (MEDIUM DENSITY RESIDENTIAL)	0.72
SINGLE FAMILY (LOW DENSITY RESIDENTIAL)	0.57
NON-ENCUMBERED DEDICATED PUBLIC LAND	
ENCUMBERED DEDICATED PUBLIC LAND	0.80
PRIVATE COMMON OPEN AREA	2.61
DEDICATED RIGHT-OF-WAY	1.06
TOTAL	9.04

Proposed 4th Amended GDP Land Use Area Summary

LAND USE AREA SUMMARY (ACRES)	
	PA #1
COMMERCIAL	2.67
TOWNHOME AND DUPLEX (MEDIUM DENSITY RESIDENTIAL)	0.00
MULTIFAMILY (MEDIUM DENSITY RESIDENTIAL)	1.90
SINGLE FAMILY (LOW DENSITY RESIDENTIAL)	0.00
NON-ENCUMBERED DEDICATED PUBLIC LAND	
ENCUMBERED DEDICATED PUBLIC LAND	0.80
PRIVATE COMMON OPEN AREA	2.61
DEDICATED RIGHT-OF-WAY	1.06
TOTAL	9.04

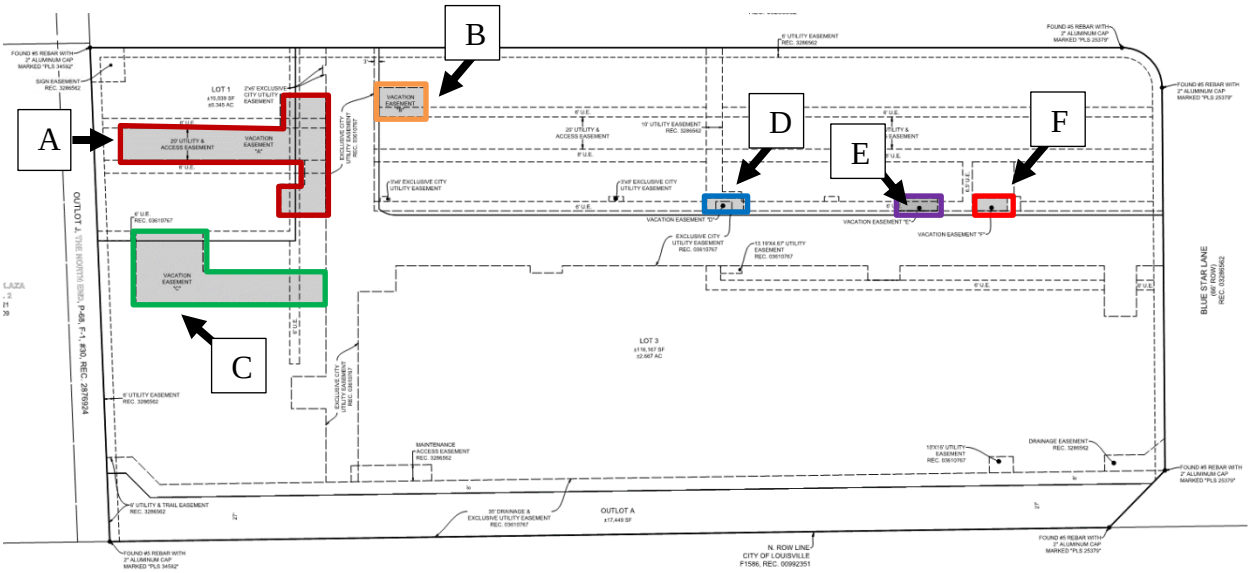
The map of land uses in the North End GDP Planning Area 1 has been revised to reflect multifamily residential only.



Easement Vacations

The easement portions to be vacated were dedicated in 2017 as part of the North End Block 11- Replat of North end Parcel 1, Outlot H and Outlot K Replat. The easements are part of an exclusive city utility easement.

The applicant proposes the partial vacation of six portions of the exclusive city utility easement, labeled as vacations "A" through "F" on the easement vacation exhibit below.



The purpose of the easement vacations is to align the proposed North End Block 11 replat with the proposed PUD Amendment site plan changes.

ANALYSIS:

<u>GDP Amendment</u>

The GDP Amendment is subject to Chapter 17.72 - Planned Community Zone District (PCZD) of the Louisville Municipal Code. Per Sec. 17.72.060.A, any amendments to a GDP are subject to the same process and requirements as the initial approval. The purpose of the planned community zone district in Section 17.72.010 includes the following statements that apply to this application:

- *The purpose of the PCZD is to encourage, preserve and improve the health, safety and general welfare of the people of the city by encouraging the use of contemporary land planning principles and coordinated community design.*

- *The PCZD is created in recognition of the economic and cultural advantages that will accrue to the residents of an integrated, planned community development of sufficient size to provide related areas for various housing types, retail, service activities, recreation, schools and public facilities, and other uses of land.*

Section 17.72.030 includes the following applicability statement:

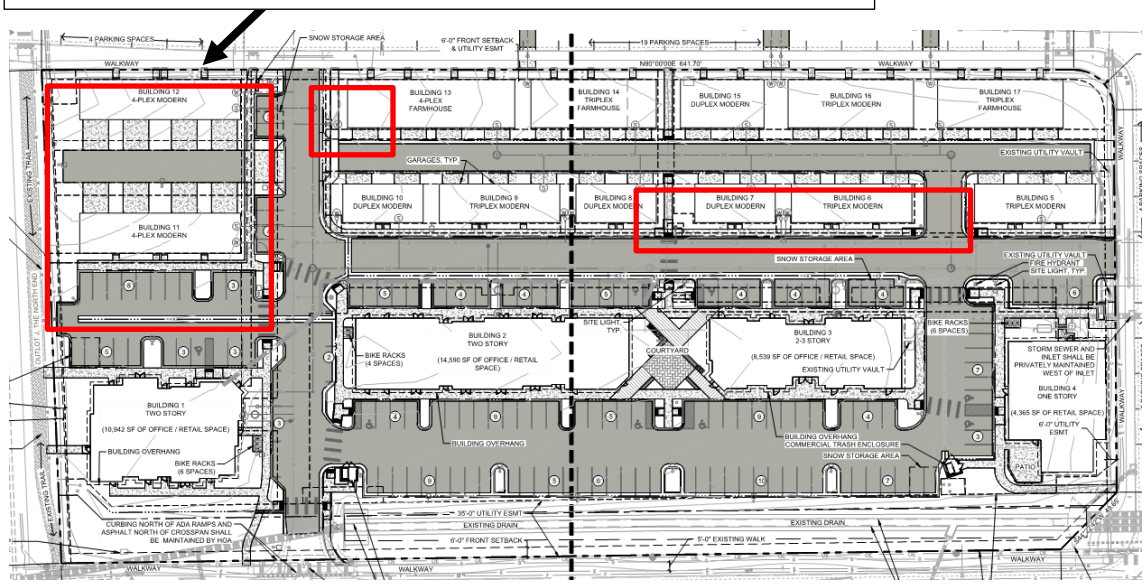
- *The PCZD may be applied only to such land as the city shall determine to be suitable for such a development.*

Staff finds the application meets the purpose and applicability statements in Chapter 17.72 of the Louisville Municipal Code, and finds that the GDP Amendment encourages coordinated community design by allowing a mixed use (commercial/residential) buffer zone between a major arterial of South Boulder Road and the residential uses in the North End neighborhood. Additionally, the amendment continues to provide a variety of multifamily housing configurations and retail/office space. The GDP Amendment provides additional economic opportunity for this area in an integrated and coordinated manner.

Easement Vacation

The proposed PUD site plan includes changes to the site's alleyways and residential dwelling placement, which requires a relocation of utilities and updated site access. The easement vacations are needed in order to facilitate these changes.

Approximate areas on PUD impacted by the easement vacations



Staff referred the proposed easement vacations to relevant utility services and city departments. Public Works, Xcel, and CenturyLink had no conflicts with the easement vacations. No other comments from referral agencies were received at the time of this report.

PLANNING COMMISSION RECOMMENDATION:

A public hearing was held on November 10, 2022. The Planning Commission voted 5-0 to approve the application with the following condition of approval related to the PUD:

1. Prior to the City Council public hearing, the applicant shall incorporate the proposed tree lawn plan into the landscape plan, which has been received and admitted into the public record during the November 10th Planning Commission hearing.

The draft planning commission minutes and the approved resolution from the November 10, 2022 hearing are attached. The link below provides access to the video of the Planning Commission Hearing. The item starts at 21 minutes in the video and ends at 2 hours 40 minutes: https://www.youtube.com/watch?v=r5egq6uEqkM

PUBLIC COMMENTS:
Public comments received to date are provided as an attachment.

RECOMMENDATION:
Staff finds the application complies with applicable criteria and recommends City Council approval of the following two ordinances on first reading and setting the public hearing date:

- Ordinance No. 1846, Series 2022, an ordinance approving a fourth amendment to the North End General Development Plan to amend allowed residential uses on Planning Area 1 and standards for roof overhand encroachments within setbacks and easements for Block 11
- Ordinance No. 1847, Series 2022, an ordinance approving the vacation of six portions of an exclusive city utility easement on Block 11 of the North End, Block 11 – Replat of North End Parcel 1, Outlot H & Outlot K Replat subdivision

ATTACHMENT(S):

1. Ordinance No. 1846, Series 2022
2. Ordinance No. 1847, Series 2022
3. Proposed Easement Vacation Narrative and Exhibits
4. Proposed GDP Amendment
5. Application Materials
6. North End 3rd Amended GDP (2017)
7. North End Block 11 – Replat of North End Parcel 1, Outlot H and Outlot K Replat (2017)
8. November 10, 2016 Planning Commission Minutes
9. City Council Minutes (December 20, 2016 and January 3, January 17, February 7, and February 21, 2017)
10. Draft Planning Commission Minutes, November 10, 2022
11. Planning Commission Resolution 16, Series 2022
12. Public Comments

STRATEGIC PLAN IMPACT:

☐	Financial Stewardship & Asset Management	☐	Reliable Core Services
☒	Vibrant Economic Climate	☐	Quality Programs & Amenities
☐	Engaged Community	☐	Healthy Workforce
☐	Supportive Technology	☐	Collaborative Regional Partner

ORDINANCE NO. 1846
SERIES 2022

AN ORDINANCE APPROVING A FOURTH AMENDMENT TO THE NORTH END GENERAL DEVELOPMENT PLAN TO AMEND ALLOWED RESIDENTIAL USES ON PLANNING AREA 1 AND STANDARDS FOR ROOF OVERHANG ENCROACHMENTS WITHIN SETBACKS AND EASEMENTS FOR BLOCK 11

WHEREAS, the Ridgeline Development Corporation is the owner of certain real property totaling approximately 4.57 acres, which property is located in the North End Block 11 Replat of North End Parcel 1, Outlot H & Outlot K Replat subdivision within Planning Area 1 of the North End General Development Plan (GDP) property attached hereto as Exhibit A (the "Property"); and

WHEREAS, the Property is currently zoned Planned Community Zone district – Commercial/Residential (PCZD – C/R) and, permitted uses are set forth on the existing GDP; and

WHEREAS, the owner has submitted to the City a request for approval of an amended PCZD General Development Plan, which amended Plan is entitled the North End General Development Plan, 4th Amendment and a copy of which is attached hereto as Exhibit A (the "North End Development GDP 4th Amendment") to allow for modifications to the uses permitted on Planning Area 1 ("PA1") and added standards for roof overhand encroachments within setbacks and easements for Block 11; and

WHEREAS, the North End Development GDP 4th Amendment shall serve to identify the zoning, permitted uses and development for the Property and shall serve as the PCZD General Development Plan for the property, in accordance with Title 17 of the Louisville Municipal Code; and

WHEREAS, the Louisville Planning Commission has held a duly noticed public hearing on November 10, 2022 for the proposed North End GDP 4th Amendment and has forwarded a recommendation to the City Council to approve the North End GDP 4th Amendment; and

WHEREAS, the City Council has held a duly noticed public hearing on January 3, 2023 for the proposed North End GDP 4th Amendment; and

WHEREAS, The North End 4th GDP Amendment is consistent with the City of Louisville 2013 Comprehensive Plan and the South Boulder Road Small Area Plan;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council of the City of Louisville hereby approves the North End GDP 4th Amendment (the "North End 4th Amended GDP"), a copy of which is attached hereto as Exhibit A.

Section 2. The North End 4th Amended GDP shall be recorded in the Offices of the

Boulder County Clerk and Recorder.

INTRODUCED, READ, PASSED ON FIRST READING, AND ORDERED PUBLISHED this _____day of _____, 2022.

_____
Ashley Stolzmann, Mayor

ATTEST:

_____
Meredyth Muth, City Clerk

APPROVED AS TO FORM:

_____
Kelly, P.C.
City Attorney

PASSED AND ADOPTED ON SECOND AND FINAL READING, this ____ day of _____, 2023.

_____
Ashley Stolzmann, Mayor

ATTEST:

_____
Meredyth Muth, City Clerk

Exhibit A

North End
4TH AMENDED GDP

LAND USE AREA SUMMARY (ACRES)							
	PARCEL A			PARCEL B			
	PA #1	PA #2	PA #3	PA #4	PA #5	PA #6	TOTAL
COMMERCIAL	2.67						2.67
TOWNHOME AND DUPLEX (MEDIUM DENSITY RESIDENTIAL)	0.00			5.16			5.16
MULTI-FAMILY (MEDIUM DENSITY RESIDENTIAL)	1.90	1.53		2.74			6.57
SINGLE FAMILY (LOW DENSITY RESIDENTIAL)	0.00	9.72	2.97	3.02	7.67		22.38
NON-ENCUMBERED DEDICATED PUBLIC LAND		0.96	9.80			2.15	12.26
ENCUMBERED DEDICATED PUBLIC LAND	0.80	1.63	2.50	0.41	0.63	1.53	6.70
PRIVATE COMMON OPEN AREA	2.51	0.35	0.83	1.08	1.45		6.22
DEDICATED RIGHT-OF-WAY	1.56	4.32	0.65	2.71	2.27	3.35	11.06
TOTAL	9.44	17.91	16.59	15.12	10.92	4.50	73.86

SITE SUMMARY					
	PERMITTED USE	PRODUCT TYPE	# UNITS	GDU/AC	
PLANNING AREA #1	COMMERCIAL	COMMERCIAL	40,309 SF	0.13 FAR	
	MEDIUM DENSITY RESIDENTIAL	MULTI-FAMILY LOFTS, TOWNHOMES, ROWHOMES	38	4.2 DU/AC	
PLANNING AREA #2	MEDIUM DENSITY RES.	MULTI-FAMILY LOFTS, TOWNHOUSES, ROWHOMES, COTTAGES, SINGLE FAMILY LOTS	112	6.23 DU/AC	
PLANNING AREA #3	LOW DENSITY RES.	SINGLE FAMILY LOTS	10	0.6 DU/AC	
PLANNING AREA #4	MEDIUM DENSITY RES.	MULTI-FAMILY LOFTS, TOWNHOUSES, ROWHOMES, COTTAGES, SINGLE FAMILY LOTS	147	9.6 DU/AC	
PLANNING AREA #5	LOW DENSITY RES.	SINGLE FAMILY LOTS	43	3.9 DU/AC	
TOTAL UNITS			350 *		

*MARKET RATE UNITS

GENERAL DEVELOPMENT NOTES

DEVELOPMENT CONCEPT AND GENERAL NOTES

NORTH END IS DESIGNED TO BE A MIXED USE DEVELOPMENT WITH BOTH COMMERCIAL AND RESIDENTIAL USES. THE COMMERCIAL USES ARE INTENDED TO BE COMPLEMENTARY TO EXISTING COMMERCIAL FACILITIES, AS WELL AS SERVING THE NEIGHBORING RESIDENTIAL AREAS. THE RESIDENTIAL DEVELOPMENT IS CHARACTERIZED BY A MIX OF PRODUCTS INCLUDING BOTH DETACHED SINGLE FAMILY HOMES AND ATTACHED UNITS.

DEDICATIONS

ALL PUBLIC ROW'S SHOWN ON THE GENERAL DEVELOPMENT PLAN ARE INTENDED TO BE DEDICATED TO THE CITY OF LOUISVILLE. BUT ARE INTENDED TO BE BUILT BY THE DEVELOPER OF EACH DEVELOPMENT PHASE.
ALL AREAS SHOWN AS PUBLIC LAND DEDICATION ARE INTENDED TO BE DEDICATED TO THE CITY OF LOUISVILLE FOR PURPOSES OF PUBLIC RECREATION. DEVELOPMENT OF THE AREAS LABELED PUBLIC LAND DEDICATION MAY BE UNDERTAKEN BY THE CITY OF LOUISVILLE, OR BY THE DEVELOPER OF THE SURROUNDING PROPERTY. DEVELOPMENT RESPONSIBILITY SHALL BE DETERMINED AT TIME OF SUBDIVISION.
PUBLIC TRAILS TO BE INSTALLED BY DEVELOPER ACCORDING TO SPECIFICATIONS DETERMINED AT TIME OF SUBDIVISION P.U.D.

PERMITTED USE NOTES:

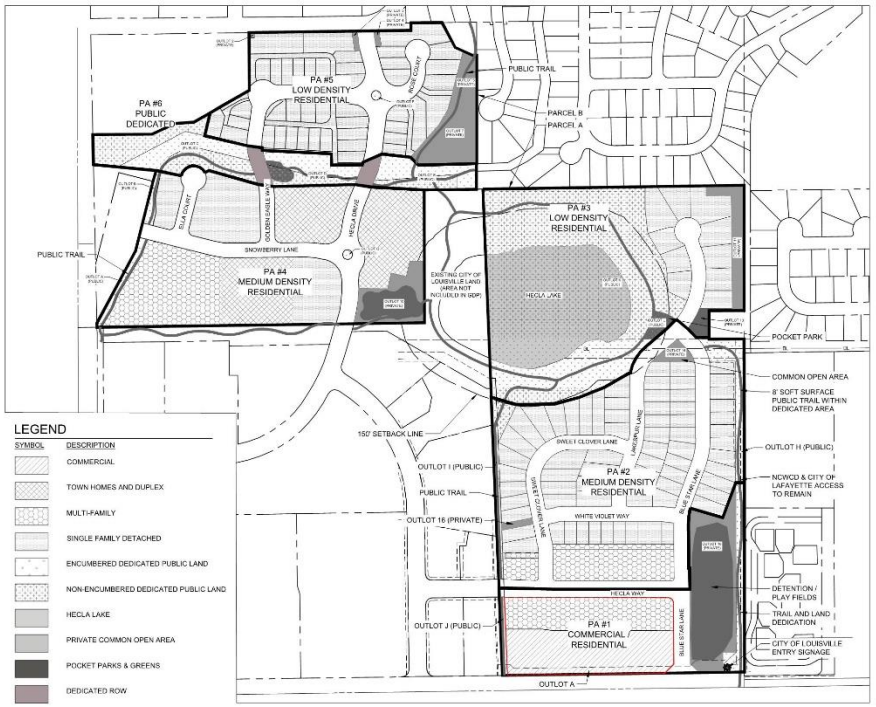
1.) PERMITTED USES IN THE COMMERCIAL DISTRICT - PLANNING AREA 1 WILL BE COMPATIBLE WITH CITY OF LOUISVILLE MUNICIPAL CODE SEC. 17.12.030, COMMERCIAL AND OFFICE, CHAPTER 17.72 PLANNED COMMUNITY ZONE DISTRICT.

PUBLIC LAND DEDICATION	
NON-ENCUMBERED DEDICATED LAND	12.26 AC
ENCUMBERED DEDICATED LAND	6.70 AC
TOTAL	18.96 AC
SITE ACREAGE	73.86 AC
PERCENTAGE OF LAND DEDICATED	25.7%

PUBLIC LAND DEDICATION CALCULATION	
RESIDENTIAL	61.59 AC
MINIMUM REQUIREMENT	15%
TOTAL DEDICATED LAND REQUIRED (BASED ON RESIDENTIAL AREA)	9.24 AC
COMMERCIAL	2.68 AC
MINIMUM REQUIREMENT	12%
TOTAL DEDICATED LAND REQUIRED (BASED ON COMMERCIAL AREA)	9.37 AC
TOTAL DEDICATED LAND REQUIREMENT	9.08 AC

ZONING SUMMARY	
COMMERCIAL*	2.67 AC
MEDIUM DENSITY RESIDENTIAL*	11.23 AC
LOW DENSITY RESIDENTIAL*	22.38 AC
DEDICATED PUBLIC LAND	30.89 AC
PRIVATE COMMON OPEN SPACE	6.22 AC

* NET COMMERCIAL AREA (DOES NOT INCLUDE DETENTION, PRIVATE COMMON OPEN AREA, OR DEDICATED PUBLIC LAND).
* INCLUDES PRIVATE COMMON OPEN AREA, DETENTION, DEDICATED ROW, AND DEDICATED PUBLIC LAND



LEGEND

SYMBOL	DESCRIPTION
	COMMERCIAL
	TOWN HOMES AND DUPLEX
	MULTI-FAMILY
	SINGLE FAMILY DETACHED
	ENCUMBERED DEDICATED PUBLIC LAND
	NON-ENCUMBERED DEDICATED PUBLIC LAND
	HECLA LAKE
	PRIVATE COMMON OPEN AREA
	POCKET PARKS & GREENS
	DEDICATED ROW

Plotted By: Joel Wolkert | Layout: GENERAL DEVELOPMENT PLAN | Printed On: 9/27/2022 10:44 AM | File Name: GENERAL DEVELOPMENT PLAN.dwg

LEGAL DESCRIPTION

KNOW ALL MEN BY THESE PRESENTS, that Ridgeline Development Corporation, a Colorado Corporation, North End Properties, LLC, a Colorado limited liability company, White Hawk Ranch, LLC, a Colorado limited liability company and G.E.M. Holdings, LLC, a Colorado limited liability company being the owner's of that tract of land located in the SW1/4 of Section 4, T1S, R69W of the 6th P.M., City of Louisville, County of Boulder, State of Colorado, and being more particularly describes as follows:

PARCEL A

COMMENCING at the S1/4 Corner of said Section 4, from which the SW Corner of said Section 4 bears S89°11'45"W, (basis of bearing); thence N00°00'03"E, 60.01 feet along the East Line of the SW1/4 of said Section 4 to the Northerly Right-of-way Line of South Boulder Road conveyed to the City of Louisville in that Warranty Deed recorded July 13, 1988 on Film 1588 as Reception Number 00992251 of the records of Boulder County, Colorado and the TRUE POINT OF BEGINNING;

Thence N00°00'03"E, 1314.79 feet along the East Line of the SW1/4 of said Section 4 to the Southeast Corner of that tract of land conveyed to Northern Colorado Water Conservancy District, Acting by and through the Southern Water Supply Project Water Activity Enterprise, a Government Owned Business in that Warranty Deed recorded May 3, 1993 on Film 2050 as Reception Number 01514375 of the records of Boulder County, Colorado;
Thence S89°51'26"E, 139.00 feet along the South Line said Film 2050 as Reception Number 01514375 to the Southwest Corner thereof;
Thence N00°00'03"E, 112.00 feet along a line that is parallel with, as measured at right angles to, the East Line of the SW1/4 of said Section 4 to the Northwest Corner of said Film 2050 as Reception Number 01514375;
Thence N89°51'06"W, 139.00 feet along the North Line said Film 2050 as Reception Number 01514375 to the East Line of the SE1/4 of said Section 4;
Thence N00°00'03"E, 493.62 feet along the East Line of the SW1/4 of said Section 4 to the SW Corner of the N1/2 of the NW1/4 of the SE1/4 of said Section 4;
Thence S89°10'36"E, 1001.44 feet along the Southerly Line of that tract of land conveyed to The Davidson Coal and Iron Mining Company by James Thompson, et al, in that Warranty Deed recorded December 17, 1873 in Book 9 at Page 165 of the records of Boulder County, Colorado to the Northeast Corner of Louisville Plaza Filing No. 2 recorded July 1, 1991 as Plantbe P-25, F-1 #2 of the records of Boulder County, Colorado, said Corner is 660.00 feet South of the North Line of the SW1/4 of said Section 9;
Thence S00°27'40"E, 1021.30 feet along the Easterly Line of said Louisville Plaza Filing No. 2 to the Northerly Right-of-way Line of said South Boulder Road;
Thence N89°11'45"E, 955.62 feet along the Northerly Right-of-way Line of said South Boulder Road to the East Line of the SW1/4 of said Section 4 and the TRUE POINT OF BEGINNING
Area = 43.444 acres, more or less

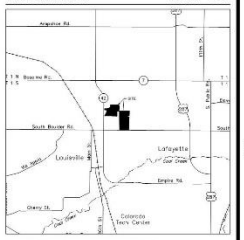
ALSO

PARCEL B

A Tract of land to be known as Parcel B, located in a portion of the SW1/4 of Section 4, T1S, R69W of the 6th P.M., City of Louisville, County of Boulder, State of Colorado, described as follows:
COMMENCING at the W1/4 Corner of said Section 4, from which the S Qtr Corner of said Section 4 bears S00°05'40"E, (basis of bearing), thence S00°05'40"E, 28.93 feet along the West Line of the SW1/4 of said Section 4 to the POINT OF BEGINNING;
Thence N89°23'15"E, 626.19 feet along a line that is parallel with, as measured at right angles to, the North Line of SW1/4 of said Section 4 to the Northeast Corner of said Tract of land conveyed to The Seventh Day Adventist Association of Colorado in that Warranty Deed recorded January 20, 1881 on Film 1152 as Reception Number 431303 of the records of Boulder County, Colorado, Thence continuing N89°23'15"E, 626.19 feet along a line that is parallel with, as measured at right angles to, the North Line of SW1/4 of said Section 4 and along the Northerly Line of said Film 1152 as Reception Number 431303 to the Northeast Corner thereof and the TRUE POINT OF BEGINNING;
Thence continuing N89°23'15"E, 638.62 feet along a line that is parallel with, as measured at right angles to the North Line of SW1/4 of said Section 4;
Thence N00°04'40"W, 28.93 feet to the North Line of said SW1/4 of said Section 4;
Thence N89°12'15"E, 122.99 feet along the North Line of SW1/4 of said Section 4;
Thence S27°54'31"E, 11.79 feet
Thence S63°26'11"E, 74.29 feet
Thence N89°16'35"E, 17.62 feet
Thence S00°03'03"E, 436.31 feet along a line that is parallel with, as measured at right angles to, the East Line of the SW1/4 of said Section 4 to a point on the Northerly Line of Outlot J, Monarch Landing Filing No. 1, recorded January 5, 1994 as Plan File P--30, F--4, #24 of the records of Boulder County Colorado;
Thence S87°56'39"W, 1.03 feet along the Northerly Line of said Outlot J to the Northeast Corner thereof;
Thence S00°05'51"E, 100.99 feet along the Westerly Line of said Outlot J and the Westerly Line of Outlot L, said Monarch Landing Filing No. 1 to the North Line of Louisville Plaza Filing No. 2 recorded July 1, 1991 as Plantbe P--26, F--1, #21 of the records of Boulder County, Colorado, said point is 660.00 feet South of the North Line of the SW1/4 of said Section 4;
Thence S89°23'15"W, 206.60 feet along a line that is parallel with, as measured at right angles to, the North Line of the SW1/4 of said Section 4 to the Northwest Corner of said Louisville Plaza Filing No. 2;
Thence S00°05'40"E, 524.50 feet along a line that is parallel with, as measured at right angles to, the West Line of the SW1/4 of said Section 4 to a Southwesterly Corner of said Louisville Plaza Filing No. 2;
Thence S89°32'15"W, 1243.15 feet along a line that is parallel with, as measured at right angles to, the North Line of the SW1/4 of said Section 4 to the Easterly Right-of-way Line of State Highway No. 42 curveyed to the Department of Highways, State of Colorado in that deed recorded August 5, 1966 as Film 577 as Reception Number 823183 of the records of Boulder County, Colorado;
Thence N04°41'39"W, 76.51 feet along the Easterly Right-of-way Line of said State Highway No. 42 to the Southwest Corner of that tract of land conveyed to Norman L. Barton and Marlene R. Barton in that Warranty Deed recorded December 7, 1959 on Film 589 as Reception Number 834097 of the records of Boulder County, Colorado;
Thence N25°11'22"E, 323.43 feet along the Easterly Line of said Film 589 as Reception Number 834097;
Thence N14°08'20"E, 284.00 feet along the Easterly Line of said Film 589 as Reception Number 834097 to the Southeast Corner of that tract of land conveyed to Rollin E. Anderson and Genevieve N. Anderson in that Quit Claim Deed recorded May 7, 1986 on Film 2135 as Reception Number 01852684 of the records of Boulder County, Colorado;
Thence N14°13'20"E, 143.78 feet along the Easterly Line of said Film 2135 as Reception Number 01852684 to the Northeast Corner thereof;
Thence N89°47'54"E, 248.71 feet along the Northerly Line of said Film 2135 as Reception Number 01905684 to the Easterly Right-of-way Line of said State Highway No. 42;
Thence N07°41'12"W, 118.27 feet along the Easterly Right-of-way Line of said State Highway No. 42 to the Southwest Corner of said Film 1152 as Reception Number 431303;
Thence N89°40'45"E, 233.09 feet along the Southerly Line of said Film 1152 as Reception Number 431303;
Thence N65°04'36"E, 100.68 feet along the Southerly Line of said Film 1152 as Reception Number 431303;
Thence N86°26'03"E, 73.74 feet along the Southerly Line of said Film 1152 as Reception Number 431303;
Thence N82°07'37"E, 252.62 feet along the Southerly Line of said Film 1152 as Reception Number 431303 to the Southeast Corner thereof;
Thence N00°05'40"E, 228.18 feet along a line that is parallel with, as measured at right angles to, the West Line of SW1/4 of said Section 4 and along the Easterly Line of said Film 1152 as Reception Number 431303 to the Northeast corner thereof and the TRUE POINT OF BEGINNING;
Area = 30.456 acres, more or less

VICINITY MAP

SCALE: 1" = 8000'



PROJECT DESCRIPTION

SITE AREA: 73.89 ACRES

ZONING: IN COMPLIANCE WITH CITY OF LOUISVILLE COMPREHENSIVE PLAN

COMMERCIAL	2.66 AC
MEDIUM DENSITY RESIDENTIAL	34.58 AC
LOW DENSITY RESIDENTIAL	26.90 AC
DEDICATED PUBLIC LAND (ENCUMBERED AND NON-)	18.08 AC
PRIVATE COMMON OPEN AREA	6.22 AC

NUMBER OF UNITS:
PLANNED - 350

ACCESS: SOUTH BOULDER ROAD, PASCHAL DRIVE, HECLA WAY, HECLA DRIVE

PUBLIC LAND DEDICATIONS: 18.96 AC
REQUIRED PUBLIC LAND DEDICATION: 9.08 AC

SIGNATURE BLOCKS

CITY COUNCIL

APPROVED THIS ____ DAY OF _____, 20__ BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, CO, ORDINANCE NO. _____ SERIES _____

MAYOR

CITY CLERK

PLANNING COMMISSION CERTIFICATION

APPROVED THIS ____ DAY OF _____, 20__ BY THE PLANNING COMMISSION OF THE CITY OF LOUISVILLE, CO. RESOLUTION NO. _____ SERIES _____

BOULDER COUNTY CLERK & RECORDER CERTIFICATE

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED IN MY OFFICE AT ____O'CLOCK, ____M, THIS ____DAY OF _____, 20__ AND IS RECORDED IN PLAN FILE _____ FEE _____
PAID _____ FILM NO _____ RECEPTION _____

CLERK

RECORDER

OWNERSHIP SIGNATURE BLOCK

BY SIGNING THIS GENERAL DEVELOPMENT PLAN, THE OWNER ACKNOWLEDGES AND ACCEPTS ALL THE REQUIREMENTS AND INTENT SET FORTH BY THIS GENERAL DEVELOPMENT PLAN. WITNESS OUR HANDS AND SEALS THIS ____ DAY OF _____, 20__.

OWNER

NOTARY

OWNERSHIP

RIDGELINE DEVELOPMENT CORP.
C.E.M. HOLDINGS LLC
NORTH END PROPERTIES, LLC
WHITE HAWK RANCH, LLC

PUD DIMENSIONAL AND BULK STANDARDS								
LINE #	DIMENSION / BULK STANDARD	SINGLE FAMILY ALLEY LOAD	BLOCK 5 - LOTS 1 AND 2	SINGLE FAMILY FRONT LOAD	BLOCK 1 - LOT 4	TOWN HOUSE	MULTI-FAMILY	COMMERCIAL
1	MINIMUM LOT AREA (SQUARE FEET)	4000	LOT 1: 17,765 LOT 2: 18,150	7,000	15,288	1800	1,000	5000
2	MINIMUM LOT WIDTH	33'-0"	30'-0"	35'-0"	35'-0"	18'-0"	30'-0"	
4	MAXIMUM LOT COVERAGE (% OF LOT AREA)	65%	30%	55%	38%	75%	80%	0.25 FAR
5	MINIMUM FRONT YARD SETBACK							
	MINIMUM FRONT YARD SETBACK FOR PRINCIPLE USES	5'-0"	5'-0"	5'-0"	4'-0"	0'-0"	5'-0"	0
	MINIMUM FRONT YARD SETBACK FOR PRINCIPLE USES THAT FRONT PASCHAL DRIVE	20'-0"	20'-0"	20'-0"	28'-0"	-	-	-
	MINIMUM FRONT SETBACK TO PORCH	5'-0"	5'-0"	5'-0"	0'-0"	0'-0"	5'-0"	
	MINIMUM FRONT PORCH WIDTH	6'-0"	6'-0"	6'-0"	0'-0"	0'-0"	5'-0"	
	MINIMUM GARAGE FACE SETBACK TO FRONT PROPERTY LINE		-	20'-0"	28'-0"	-		
6	MINIMUM SIDE YARD AND ACCESSORY USES SETBACK:							
	ALL CONDITIONS	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	MINIMUM SETBACK BETWEEN ALL BUILDINGS	10'-0"	16'-0"	13'-0"	13'-0"	13'-0"	13'-0"	15'-0"
7	MINIMUM REAR YARD SETBACK	5' (TO ALLEY EASEMENT)	16' (TO ALLEY EASEMENT)	13'-0"	13'-0"	4' (TO ALLEY EASEMENT)	5' (TO ALLEY EASEMENT)	0 or 10' IF ABUTTING RESIDENTIAL ZONED USE
8	MAXIMUM BUILDING HEIGHT (PRINCIPAL BUILDING)	35'-0"	35'-0"	35'-0"	35'-0"	35'-0"	45'-0"	35'-0"
9	MAXIMUM BUILDING HEIGHT (ACCESSORY BUILDING)	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"
10	PARKING SPACES REQUIRED (OFF STREET) (PER DU TYP.)	2 PER UNIT	2 PER UNIT	2 PER UNIT	2 PER UNIT	2 PER UNIT	1.71 BEDROOM 1.5 / 2 BEDROOM 2 / 3 BEDROOM	
	ALL RETAIL USES							1 SPACE PER 250 SQ FT
	ALL OFFICE USES							1 SPACE PER 300 SQ FT
11	FENCING STANDARDS (MAXIMUM HEIGHT)							
	PRIVACY FENCE	6'-0"						
	OPEN RAIL FENCE	4'-0"						

NOTES TO TABLE:

A. TANDEM GARAGES ARE ALLOWED.

B. NO MINIMUM LOT AREA PER DWELLING UNIT ON MULTI-FAMILY AND TOWN HOUSES.

BLOCK 11: MAXIMUM ROOF OVERHANG ENCROACHMENT WITHIN SETBACKS AND EASEMENTS = 30"

NORTH END MARKET

GDP AMENDMENT

LOUISVILLE, CO

PREPARED BY:

riplеydesign
LANDSCAPE ARCHITECTURE, LAND PLANNING

PLANNER / LANDSCAPE ARCHITECT

RIPLEY DESIGN INC
Sam Coutts
419 CANYON AVE #200
FORT COLLINS, CO 80550
p. 970.224.5828

OWNER

RIDGELINE DEVELOPMENT CORPORATION
Michael Mellal
5723 Arapahoe Ave. #2B
Boulder, CO 80303
p. 303.449.6689

ENGINEER

MPD ENGINEERING, LLC
Marc Dolecal, P.E.
1558 QUINCE AVE.
BOULDER, CO 80304
p: 303.498.9224

NORTH SCALE: 1"=200'-0" (0, 100, 200, 400)

ORIGINAL SIZE 24X36

ISSUED		
No.	DESCRIPTION	DATE
01	PUD	9/23/2016
02	MYLAR	7/27/2017

REVISIONS		
No.	DESCRIPTION	DATE
01	AMENDMENT	03/25/2021
02	AMENDMENT	06/23/2021
03	AMENDMENT	12/10/2021
04	AMENDMENT	10/04/2022

GENERAL DEVELOPMENT PLAN

SEAL:

ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.: 1921-011
DRAWN BY: AG, AW
REVIEWED BY: SC

DRAWING NUMBER:

GDP

Ordinance No, 1846, Series 2022
Page **1** of **3**

ORDINANCE NO. 1847
SERIES 2022

AN ORDINANCE APPROVING A PARTIAL VACATION OF SIX PORTIONS OF AN EXCLUSIVE CITY UTILITY EASEMENT ON BLOCK 11 OF THE NORTH END, BLOCK 11 – REPLAT OF NORTH END PARCEL 1, OUTLOT H & OUTLOT K REPLAT SUBDIVISION

WHEREAS, by the plat of North End Block 11 – Replat of North End Parcel 1, Outlot H & Outlot K Replat, recorded in the Office of the Boulder County Clerk and Recorder on August 23, 2017 at Reception No. 03610767, there was dedicated to the City an easement labeled as "Exclusive City Utility Easement" and incorporated herein by this reference ("existing easement"); and

WHEREAS, a Final Planned Unit Development Amendment, General Development Plan Amendment, and Subdivision Plat have been approved by the City for subdivision and development of property partially encumbered by the existing easement; and

WHEREAS, the City Council finds and determines that the six portions of the existing easement, further described in Exhibits "A" through "F", for which vacation is requested, is not and will not be needed for any public, governmental or utility purposes; and

WHEREAS, the City Council desires to approve the application and vacate the six portions of the existing easement for which vacation is requested;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City hereby approves the partial vacation of the certain six portions of the exclusive city utility easement located on Block 11 of North End Block 11 – Replat of North End Parcel 1, Outlot H & Outlot K Replat which easements herein vacated is in the location further described in Exhibit A through F attached hereto and incorporated herein by this reference ("the six easement vacation portions").

Section 2. All other ordinances or portions thereof inconsistent or in conflict with this ordinance or any portion hereof are repealed to the extent of such inconsistency or conflict.

Section 3. The Mayor and City Manager, or either of them, is authorized to execute such additional documents as may be necessary to evidence the vacation of the six easement vacation portions herein vacated, including but not execution of quit claim deeds.

INTRODUCED, READ, PASSED ON FIRST READING, AND ORDERED PUBLISHED this _____day of _____, 2022.

_____
Ashley Stolzmann, Mayor

ATTEST:

_____
Meredyth Muth, City Clerk

APPROVED AS TO FORM:

_____
Kelly, P.C.
City Attorney

PASSED AND ADOPTED ON SECOND AND FINAL READING, this ____ day of _____, 2023.

_____
Ashley Stolzmann, Mayor

ATTEST:

_____
Meredyth Muth, City Clerk

CORE CONSULTANTS

DECEMBER 3, 2021

EXHIBIT "A"
LEGAL DESCRIPTION
EASEMENT VACATION A

A EXCLUSIVE CITY UTILITY EASEMENT VACATION BEING A PORTION OF THAT EXCLUSIVE CITY UTILITY EASEMENT, BLOCK 11, NORTH END, BLOCK 11-REPLAT OF NORTH END PARCEL 1, OUTLOT H, AND OUTLOT K REPLAT RECORDED AUGUST 23, 2017 AT RECEPTION NO. 03610767, IN THE RECORDS OF THE BOULDER COUNTY CLERK AND RECORDERS OFFICE, LYING WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE SOUTH LINE OF SAID BLOCK 11, BEING ASSUMED TO BEAR S 89°11'46" W, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE SOUTHWEST CORNER OF SAID BLOCK 11, THENCE N 33° 40' 48" E, 242.43 FEET TO A POINT ON THE WEST LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT AND THE POINT OF BEGINNING;

THENCE N 90° 00' 00" W, 28.35 FEET;

THENCE N 00° 00' 00" W, 20.00 FEET;

THENCE N 90° 00' 00" E, 15.09 FEET;

THENCE N 00° 00' 00" E, 15.04 FEET;

THENCE N 90° 00' 00" W, 114.02 FEET;

THENCE N 00° 00' 00" E, 20.00 FEET;

THENCE N 90° 00' 00" E, 98.93 FEET;

THENCE N 00° 00' 00" E, 21.09 FEET;

THENCE N 90° 00' 00" E, 28.35 FEET TO A POINT ON THE WEST LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT;

3473 South Broadway Blvd., Englewood, CO 80113 Telephone: 303.730.5919

THENCE S 00° 00' 00" W, 76.13 FEET ALONG THE WEST LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 3,910 SQUARE FEET, MORE OR LESS



Michael Sean Kervin, PLS 34592
Date: 12-3-21
Project: 18-117
For and on Behalf of
Core Consultants, Inc.

Notes:

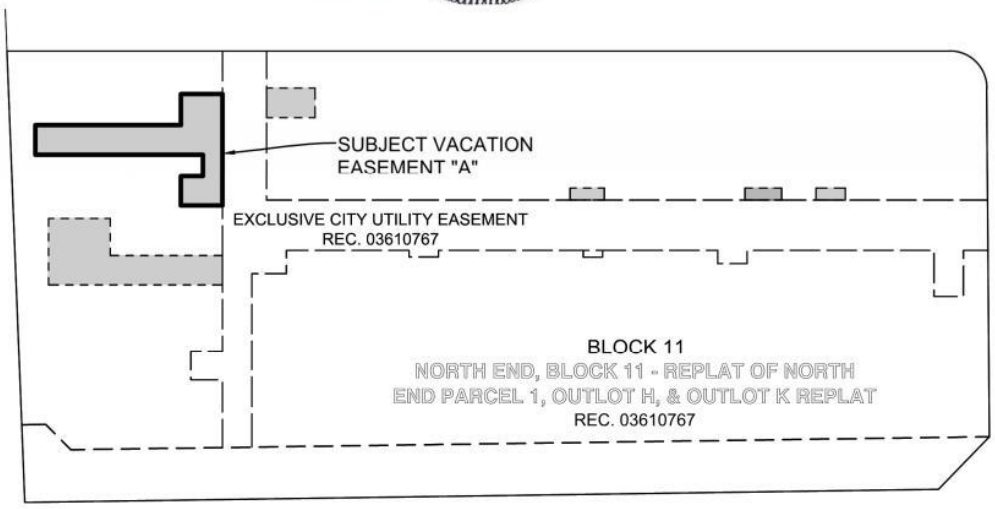
1.) NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discovered such defect. In no event, may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown.
2.) Legal description was prepared by Michael S, Kervin, PLS, 3473 South Broadway Blvd., Englewood, CO 80113.

3473 South Broadway Blvd., Englewood, CO 80113 Telephone: 303.730.5919

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

COLORADO LICENSED
MICHAEL SEAN KERVIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR





1 inch = 100 ft.

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

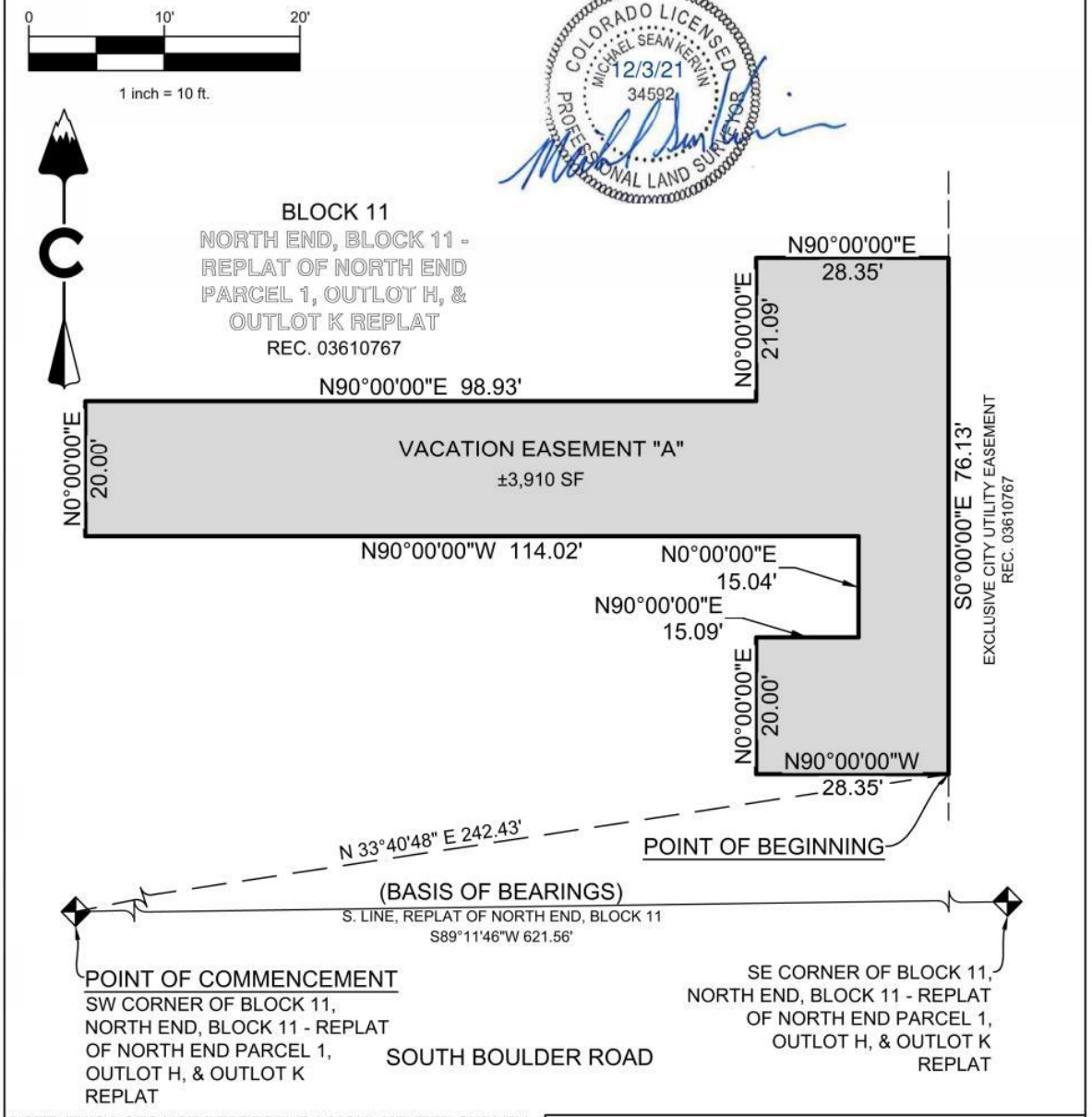
PROJECT: 18-117
DATE: 12-3-21
SHEET 1 OF 2

DR: KDS
DS: MSK

CORE
CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO



NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 18-117 DR: KDS
DATE: 12-3-21 DS: MSK
SHEET 2 OF 2

CORE
CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

DECEMBER 3, 2021

EXHIBIT "B"
LEGAL DESCRIPTION
EASEMENT VACATION B

A EXCLUSIVE CITY UTILITY EASEMENT VACATION BEING A PORTION OF THAT EXCLUSIVE CITY UTILITY EASEMENT, BLOCK 11, NORTH END, BLOCK 11-REPLAT OF NORTH END PARCEL 1, OUTLOT H, AND OUTLOT K REPLAT RECORDED AUGUST 23, 2017 AT RECEPTION NO. 03610767, IN THE RECORDS OF THE BOULDER COUNTY CLERK AND RECORDERS OFFICE, LYING WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE SOUTH LINE OF SAID BLOCK 11, BEING ASSUMED TO BEAR S 89°11'46" W, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE SOUTHWEST CORNER OF SAID BLOCK 11, THENCE N 32° 07' 37" E, 309.21 FEET TO A POINT ON THE EAST LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT AND THE POINT OF BEGINNING;

THENCE N 00° 00' 00" E, 20.00 FEET ALONG THE EAST LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENTS;

THENCE N 90° 00' 00" E, 33.00 FEET;

THENCE S 00° 00' 00" W, 20.00 FEET;

3473 South Broadway Blvd., Englewood, CO 80113 Telephone: 303.730.5919

THENCE N 90° 00' 00" W, 33.00 FEET TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 660 SQUARE FEET, MORE OR LESS



Michael Sean Kervin, PLS 34592
Date: 12-3-21
Project: 18-117
For and on Behalf of
Core Consultants, Inc.

Notes:

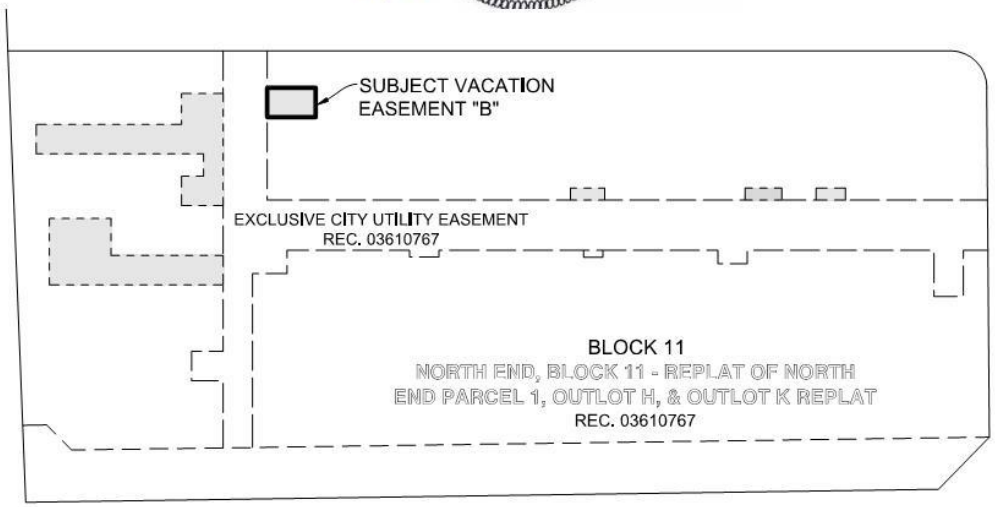
1.) NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discovered such defect. In no event, may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown.
2.) Legal description was prepared by Michael S, Kervin, PLS, 3473 South Broadway Blvd., Englewood, CO 80113.

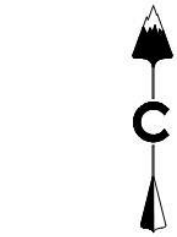
3473 South Broadway Blvd., Englewood, CO 80113 Telephone: 303.730.5919

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

COLORADO LICENSED
MICHAEL SEAN KERVIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR





VACATION EASEMENTS

0 100' 200'

1 inch = 100 ft.

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

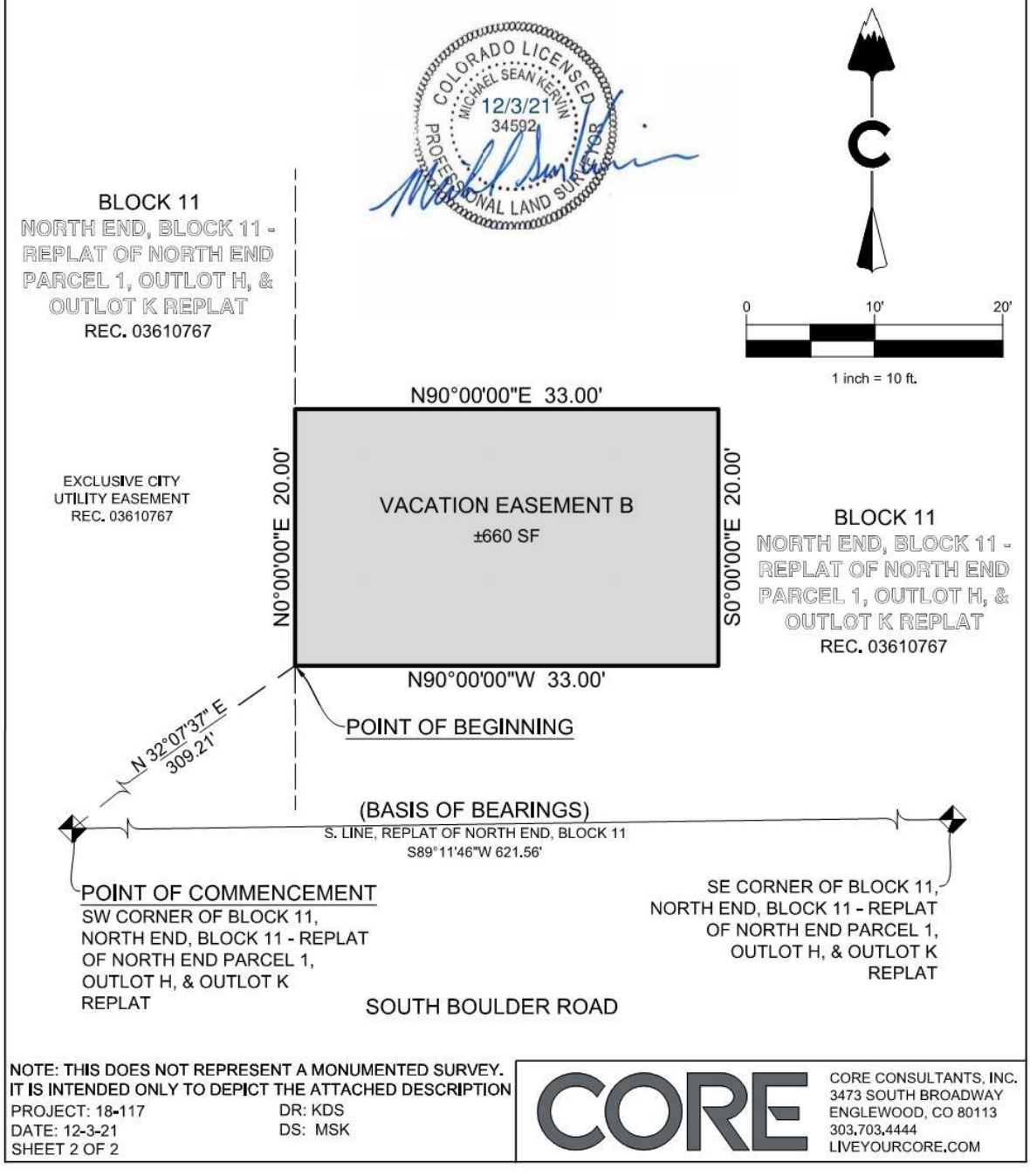
PROJECT: 18-117
DATE: 12-3-21
SHEET 1 OF 2

DR: KDS
DS: MSK

CORE
CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOUNDER, STATE OF COLORADO



NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 18-117
DATE: 12-3-21
SHEET 2 OF 2

DR: KDS
DS: MSK

CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

DECEMBER 3, 2021

EXHIBIT "C"
LEGAL DESCRIPTION
EASEMENT VACATION D

A EXCLUSIVE CITY UTILITY EASEMENT VACATION BEING A PORTION OF THAT EXCLUSIVE CITY UTILITY EASEMENT, BLOCK 11, NORTH END, BLOCK 11-REPLAT OF NORTH END PARCEL 1, OUTLOT H, AND OUTLOT K REPLAT RECORDED AUGUST 23, 2017 AT RECEPTION NO. 03610767, IN THE RECORDS OF THE BOULDER COUNTY CLERK AND RECORDERS OFFICE, LYING WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE SOUTH LINE OF SAID BLOCK 11, BEING ASSUMED TO BEAR S 89°11'46" W, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE SOUTHWEST CORNER OF SAID BLOCK 11, THENCE N 06° 12' 44" E, 148.65 FEET TO THE POINT OF BEGINNING;

THENCE N 00° 00' 00" E, 45.00 FEET;

THENCE S 90° 00' 00" E, 42.00 FEET;

THENCE S 00° 00' 00" W, 25.00 FEET;

THENCE N 90° 00' 00" E, 76.35 FEET TO A POINT ON THE WEST LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT;

THENCE S 00° 00' 00" W, 20.00 FEET ALONG THE WEST LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT;

3473 South Broadway Blvd., Englewood, CO 80113 Telephone: 303.730.5919

THENCE N 90° 00' 00" W, 118.35 FEET TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 3,417 SQUARE FEET, MORE OR LESS.



Michael Sean Kervin, PLS 34592
Date: 12-3-21
Project: 18-117
For and on Behalf of
Core Consultants, Inc.

Notes:

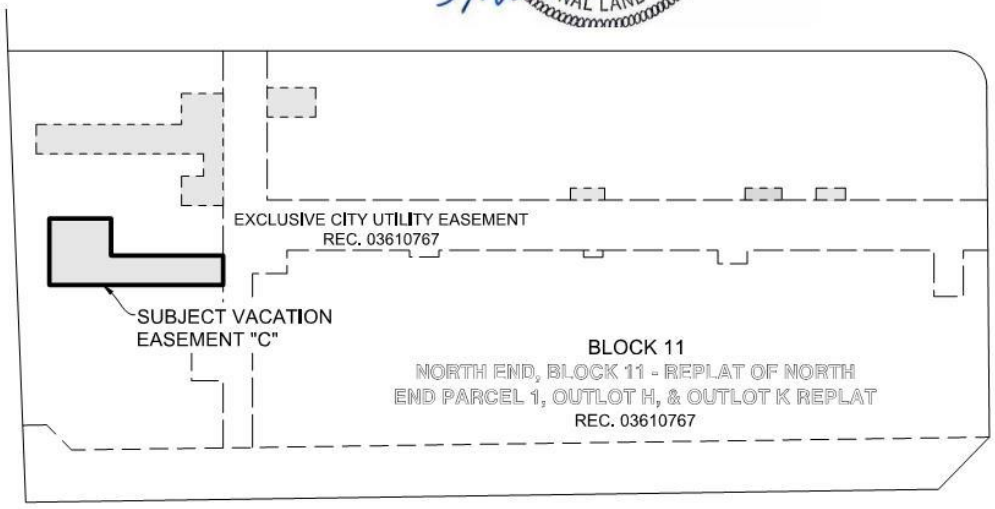
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2.) Legal description was prepared by Michael S, Kervin, PLS, 3473 South Broadway Blvd., Englewood, CO 80113.

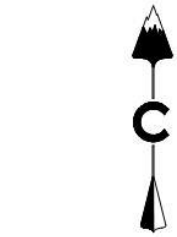
3473 South Broadway Blvd., Englewood, CO 80113 Telephone: 303.730.5919

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

COLORADO LICENSED
MICHAEL SEAN KERVIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR





VACATION EASEMENTS

0 100' 200'

1 inch = 100 ft.

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 18-117
DATE: 12-3-21
SHEET 1 OF 2

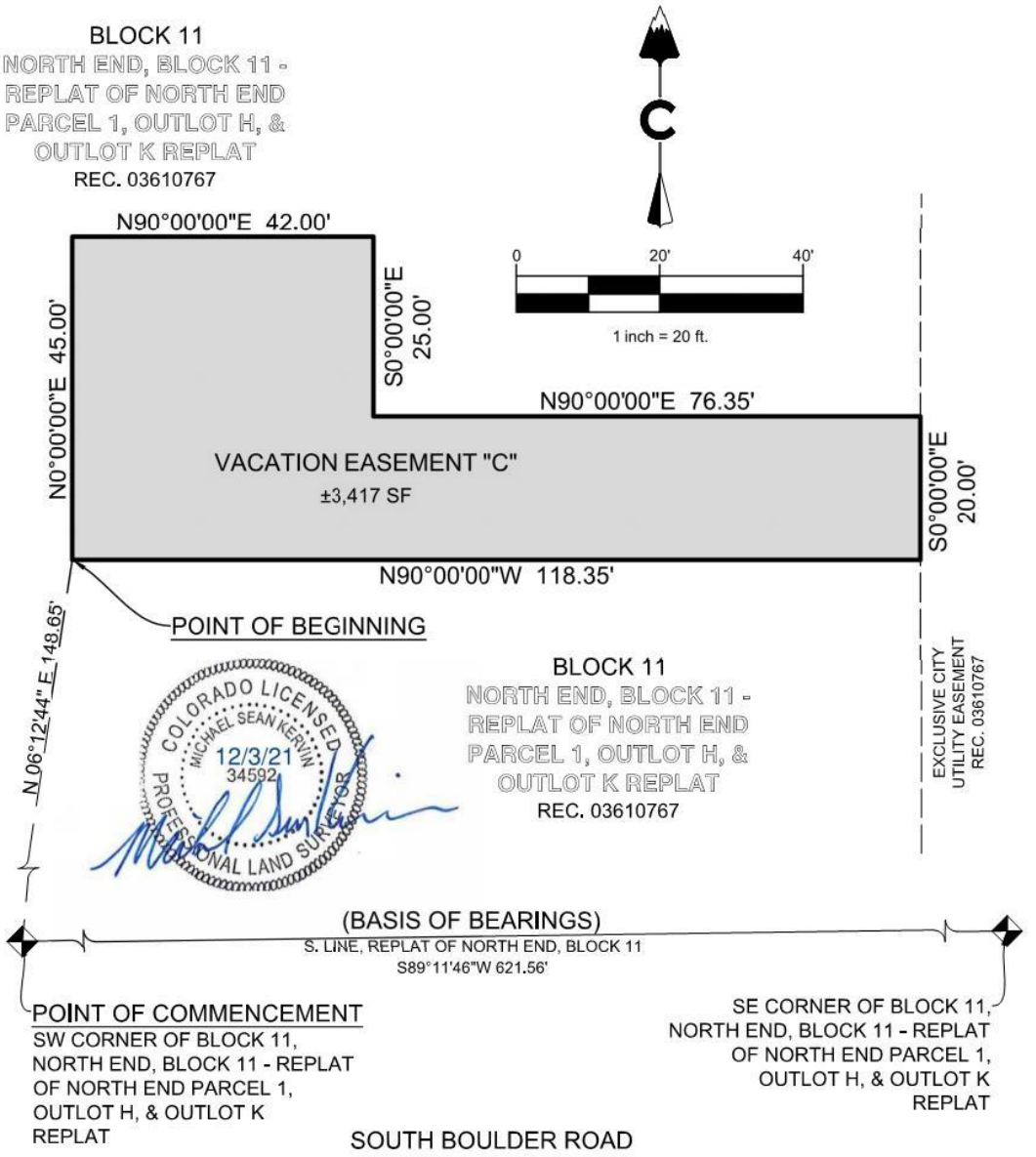
DR: KDS
DS: MSK

CORE

CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO



NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 18-117 DR: KDS
DATE: 12-3-21 DS: MSK
SHEET 2 OF 2

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3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
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DECEMBER 3, 2021

EXHIBIT "D"
LEGAL DESCRIPTION
EASEMENT VACATION D

A EXCLUSIVE CITY UTILITY EASEMENT VACATION BEING A PORTION OF THAT EXCLUSIVE CITY UTILITY EASEMENT, BLOCK 11, NORTH END, BLOCK 11-REPLAT OF NORTH END PARCEL 1, OUTLOT H, AND OUTLOT K REPLAT RECORDED AUGUST 23, 2017 AT RECEPTION NO. 03610767, IN THE RECORDS OF THE BOULDER COUNTY CLERK AND RECORDERS OFFICE, LYING WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE SOUTH LINE OF SAID BLOCK 11, BEING ASSUMED TO BEAR S 89°11'46" W, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE SOUTHWEST CORNER OF SAID BLOCK 11, THENCE N 61° 02' 22" E, 428.95 FEET TO A POINT ON THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT, ALSO BEING THE SOUTHWEST CORNER OF THAT 10' UTILITY EASEMENT RECORDED AT RECEPTION NO. 3286562, SAID BOULDER COUNTY RECORDS AND THE POINT OF BEGINNING;

THENCE N 00° 00' 00" E, 8.25 FEET ALONG THE WEST LINE OF SAID 10' UTILITY EASEMENT;

THENCE N 90° 00' 00" E, 23.24 FEET;

THENCE S 00° 00' 00" E, 8.25 FEET TO THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT;

3473 South Broadway Blvd., Englewood, CO 80113 Telephone: 303.730.5919

THENCE N 90° 00' 00" W, 23.24 FEET ALONG THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 192 SQUARE FEET, MORE OR LESS.



Michael Sean Kervin, PLS 34592
Date: 12-3-21
Project: 18-117
For and on Behalf of
Core Consultants, Inc.

Notes:

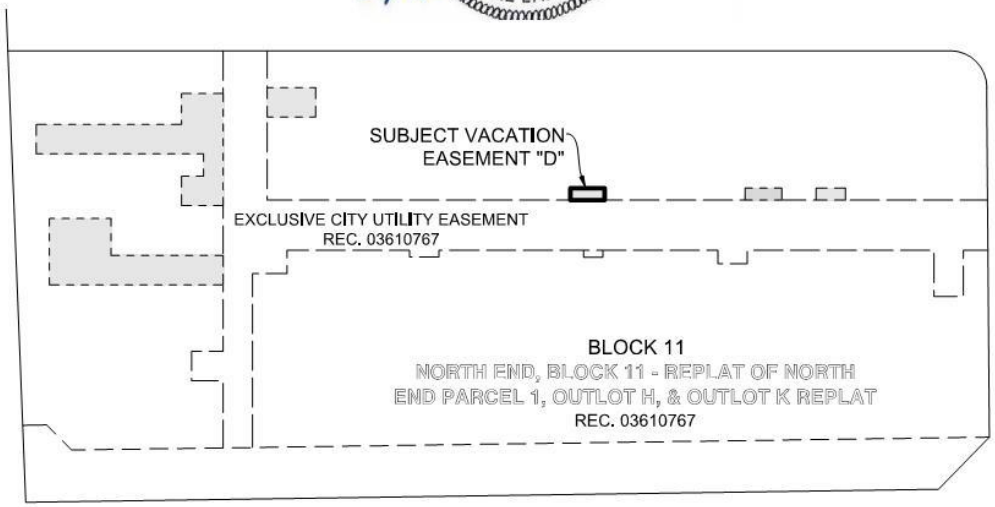
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2.) Legal description was prepared by Michael S, Kervin, PLS, 3473 South Broadway Blvd., Englewood, CO 80113.

3473 South Broadway Blvd., Englewood, CO 80113 Telephone: 303.730.5919

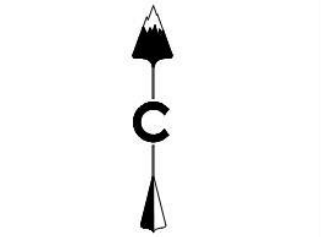
EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

COLORADO LICENSED
MICHAEL SEAN KERVIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR



VACATION EASEMENTS



1 inch = 100 ft.

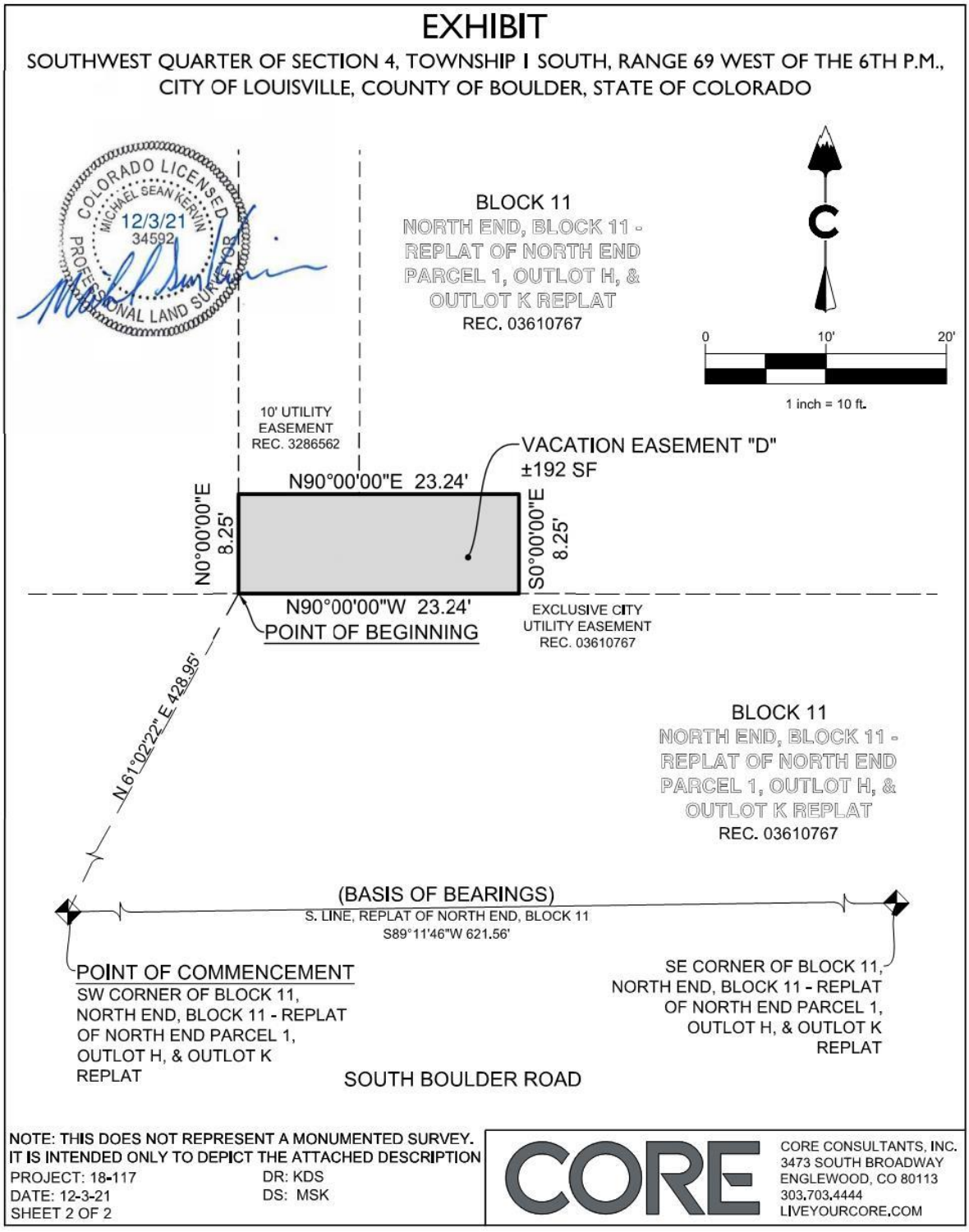
NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 18-117
DATE: 12-3-21
SHEET 1 OF 2

DR: KDS
DS: MSK

CORE

CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM


EXHIBIT
SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO
COLORADO LICENSED
MICHAEL SEAN KERWIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR
BLOCK 11
NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767
C
0
10'
20'
1 inch = 10 ft.
10' UTILITY EASEMENT REC. 3286562
VACATION EASEMENT "D"
±192 SF
N90°00'00"E 23.24'
N0°00'00"E 8.25'
S0°00'00"E 8.25'
N90°00'00"W 23.24'
POINT OF BEGINNING
EXCLUSIVE CITY UTILITY EASEMENT REC. 03610767
N 61°02'22" E 428.95'
BLOCK 11
NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767
(BASIS OF BEARINGS)
S. LINE, REPLAT OF NORTH END, BLOCK 11
S89°11'46"W 621.56'
POINT OF COMMENCEMENT
SW CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
SE CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
SOUTH BOULDER ROAD
NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION
PROJECT: 18-117
DR: KDS
DATE: 12-3-21
DS: MSK
SHEET 2 OF 2
CORE
CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
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DECEMBER 3 2021

EXHIBIT "E"
LEGAL DESCRIPTION
EASEMENT VACATION E

A EXCLUSIVE CITY UTILITY EASEMENT VACATION BEING A PORTION OF THAT EXCLUSIVE CITY UTILITY EASEMENT, BLOCK 11, NORTH END, BLOCK 11-REPLAT OF NORTH END PARCEL 1, OUTLOT H, AND OUTLOT K REPLAT RECORDED AUGUST 23, 2017 AT RECEPTION NO. 03610767, IN THE RECORDS OF THE BOULDER COUNTY CLERK AND RECORDERS OFFICE, LYING WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE SOUTH LINE OF SAID BLOCK 11, BEING ASSUMED TO BEAR S 89°11'46" W, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE SOUTHWEST CORNER OF SAID BLOCK 11, THENCE N 67° 16' 06" E, 531.24 FEET TO A POINT ON THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT AND THE POINT OF BEGINNING;

THENCE N 00° 00' 00" E, 8.25 FEET;

THENCE N 90° 00' 00" E, 25.00 FEET;

THENCE S 00° 00' 00" E, 8.25 FEET TO THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT;

3473 South Broadway Blvd., Englewood, CO 80113 Telephone: 303.730.5919

THENCE N 90° 00' 00" W, 25.00 FEET ALONG THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 206 SQUARE FEET, MORE OR LESS.



Michael Sean Kervin, PLS 34592
Date: 12-3-21
Project: 18-117
For and on Behalf of
Core Consultants, Inc.

Notes:

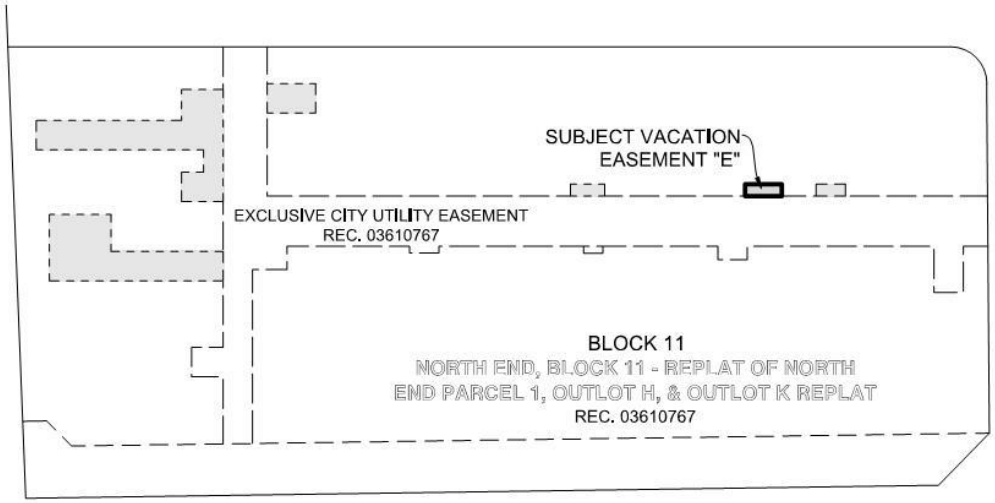
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3473 South Broadway Blvd., Englewood, CO 80113 Telephone: 303.730.5919

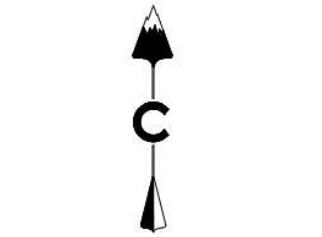
EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

COLORADO LICENSED
MICHAEL SEAN KERVIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR



VACATION EASEMENTS



1 inch = 100 ft.

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 18-117
DATE: 12-3-21
SHEET 1 OF 2

DR: KDS
DS: MSK

CORE

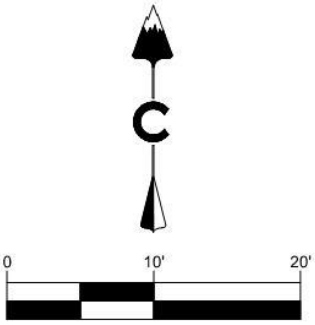
CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOUNDER, STATE OF COLORADO



BLOCK 11
NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767



VACATION EASEMENT "E"
±206 SF

N90°00'00"E 25.00'

N0°00'00"E 8.25'

S0°00'00"E 8.25'

N90°00'00"W 25.00'

POINT OF BEGINNING

EXCLUSIVE CITY UTILITY EASEMENT
REC. 03610767

BLOCK 11
NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767

N 67°16'06" E 531.24'

(BASIS OF BEARINGS)
S. LINE, REPLAT OF NORTH END, BLOCK 11
S89°11'46"W 621.56'

POINT OF COMMENCEMENT
SW CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT

SE CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT

SOUTH BOULDER ROAD

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 18-117
DATE: 12-3-21
SHEET 2 OF 2
DR: KDS
DS: MSK

CORE
CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
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CORE CONSULTANTS

DECEMBER 3, 2021

EXHIBIT "F"
LEGAL DESCRIPTION
EASEMENT VACATION F

A EXCLUSIVE CITY UTILITY EASEMENT VACATION BEING A PORTION OF THAT EXCLUSIVE CITY UTILITY EASEMENT, BLOCK 11, NORTH END, BLOCK 11-REPLAT OF NORTH END PARCEL 1, OUTLOT H, AND OUTLOT K REPLAT RECORDED AUGUST 23, 2017 AT RECEPTION NO. 03610767, IN THE RECORDS OF THE BOULDER COUNTY CLERK AND RECORDERS OFFICE, LYING WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE SOUTH LINE OF SAID BLOCK 11, BEING ASSUMED TO BEAR S 89°11'46" W, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE SOUTHWEST CORNER OF SAID BLOCK 11, THENCE N 69° 07' 17" E, 575.99 FEET TO A POINT ON THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT AND THE POINT OF BEGINNING;

THENCE N 00° 00' 00" E, 8.25 FEET;

THENCE N 90° 00' 00" E, 20.00 FEET;

THENCE S 00° 00' 00" E, 8.25 FEET TO THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT;

3473 South Broadway Blvd., Englewood, CO 80113 Telephone: 303.730.5919

THENCE N 90° 00' 00" W, 20.00 FEET ALONG THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 165 SQUARE FEET, MORE OR LESS.



Michael Sean Kervin, PLS 34592
Date: 12-3-21
Project: 18-117
For and on Behalf of
Core Consultants, Inc.

Notes:

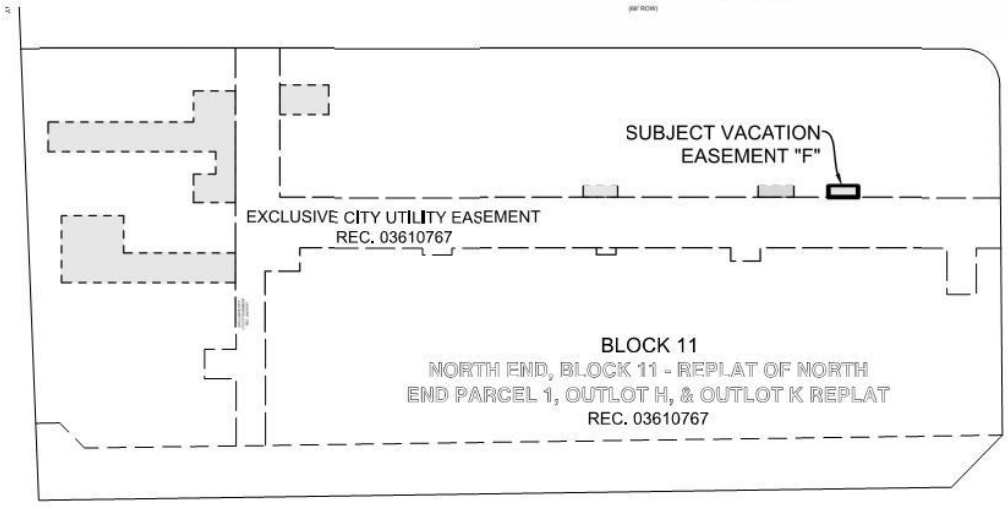
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3473 South Broadway Blvd., Englewood, CO 80113 Telephone: 303.730.5919

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

COLORADO LICENSED
MICHAEL SEAN KERVIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR



NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
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PROJECT: 18-117
DATE: 12-3-21
SHEET 1 OF 2

DR: KDS
DS: MSK

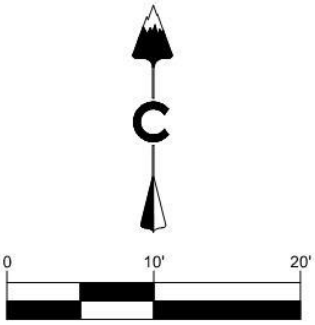
CORE
CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOUNDER, STATE OF COLORADO



BLOCK 11
NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767



VACATION EASEMENT "F"
±165 SF

N90°00'00"E 20.00'

N0°00'00"E 8.25'

S0°00'00"W 8.25'

N90°00'00"W 20.00'

POINT OF BEGINNING

EXCLUSIVE CITY UTILITY EASEMENT
REC. 03610767

N 69°07'17" E 575.99'

BLOCK 11
NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767

(BASIS OF BEARINGS)
S. LINE, REPLAT OF NORTH END, BLOCK 11
S89°11'46"W 621.56'

POINT OF COMMENCEMENT
SW CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT

SE CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT

SOUTH BOULDER ROAD

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
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PROJECT: 18-117
DATE: 12-3-21
SHEET 2 OF 2
DR: KDS
DS: MSK

CORE
CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

ripley design
LANDSCAPE ARCHITECTURE, LAND PLANNING

June 23, 2022

Ellie Hassan
City of Louisville, Planning and Builing Safety
749 Main Street
Louisville, CO 80027

RE: North End Block 11 – Easement Vacation Request

Dear Ms. Hassan,

We are submitting a request for the vacation of six easements on North End Block 11. The intent of the vacations are to update Block 11 to better align with the site plan proposed as part of the current PUD Amendment. The residential products proposed as part of the Block 11 development have evolved since the previous replat in order to create a more pedestrian friendly development adjacent to the commercial component of the site. With the building product changes, vacation requests are required to accommodate revised utility and access needs – please note, no vacations are requested in the commercial portion of the site.

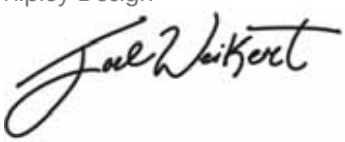
The following are the easements requested to be vacated.

- Vacation Easement “A”
- Vacation Easement “B”
- Vacation Easement “C”
- Vacation Easement “D”
- Vacation Easement “E
- Vacation Easement “F”

Please refer to the associated easement vacation exhibits and Second Replat submitted with our PUD Amendment application for further information. Thank you for the consideration of our applications.

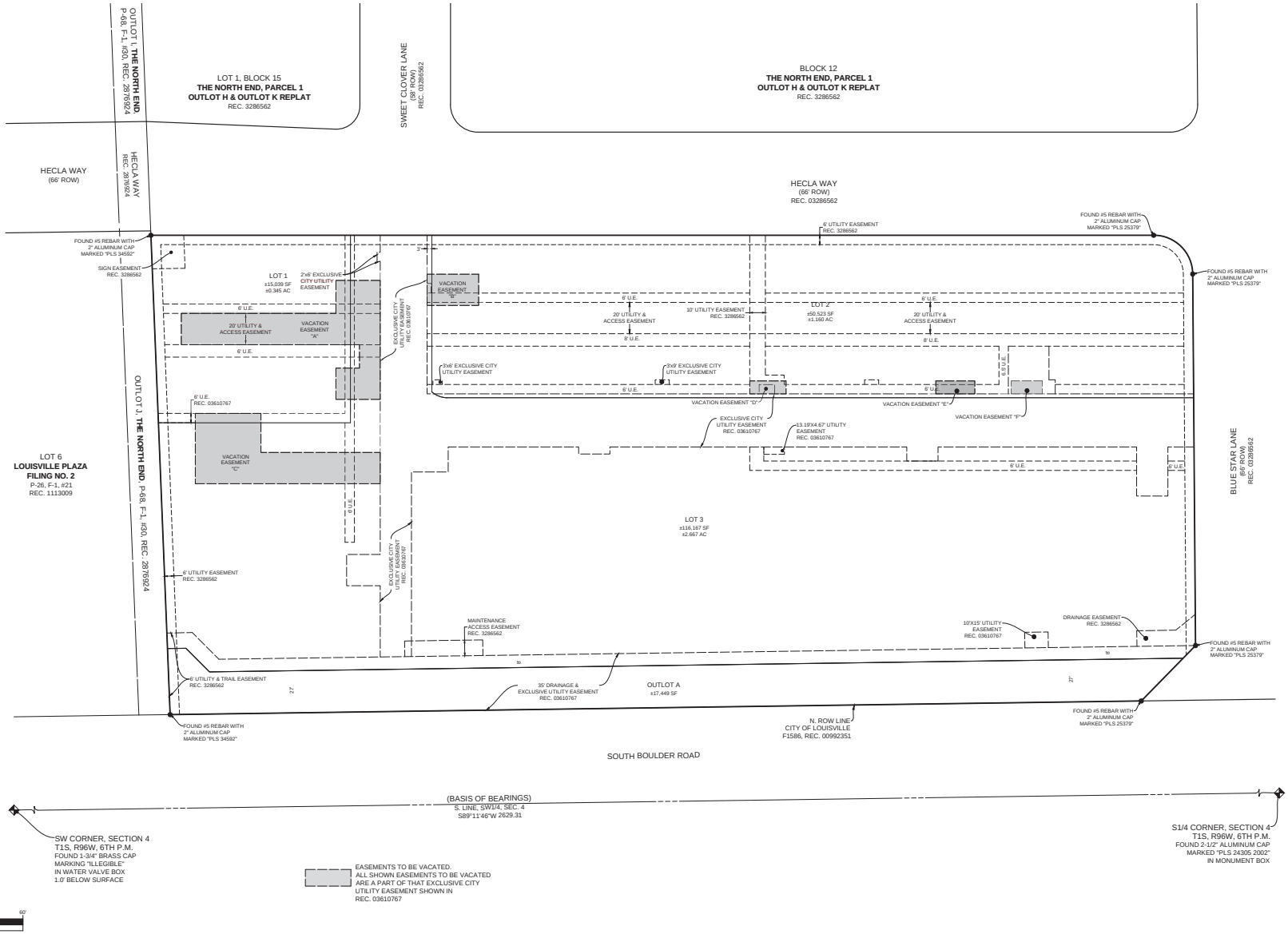
Sincerely,

Joel Weikert
Ripley Design



VACATION EXHIBIT

A PART OF THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO



CORE CONSULTANTS, INC.
241 CENTENNIAL PKWY
ENGLEWOOD, CO 80113
303.703.4444
LAND DEVELOPMENT
ENERGY
PUBLIC INFRASTRUCTURE

NO.	DESCRIPTION	DATE	BY

REVISIONS

VACATION EXHIBIT
SEC. 4, T1S, R69W, 6TH P.M.
BOULDER COUNTY, COLORADO

RELEASE: 12/9/21
DESIGNED: ____
CAD: KDS
QA/QC: MSK

JOB NO. 18-117

SHEET 1 OF 1

569

CORE CONSULTANTS

DECEMBER 3, 2021

EXHIBIT "A"
LEGAL DESCRIPTION
EASEMENT VACATION A

A EXCLUSIVE CITY UTILITY EASEMENT VACATION BEING A PORTION OF THAT EXCLUSIVE CITY UTILITY EASEMENT, BLOCK 11, NORTH END, BLOCK 11-REPLAT OF NORTH END PARCEL 1, OUTLOT H, AND OUTLOT K REPLAT RECORDED AUGUST 23, 2017 AT RECEPTION NO. 03610767, IN THE RECORDS OF THE BOULDER COUNTY CLERK AND RECORDERS OFFICE, LYING WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE SOUTH LINE OF SAID BLOCK 11, BEING ASSUMED TO BEAR S 89°11'46" W, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE SOUTHWEST CORNER OF SAID BLOCK 11, THENCE N 33° 40' 48" E, 242.43 FEET TO A POINT ON THE WEST LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT AND THE POINT OF BEGINNING;

THENCE N 90° 00' 00" W, 28.35 FEET;

THENCE N 00° 00' 00" W, 20.00 FEET;

THENCE N 90° 00' 00" E, 15.09 FEET;

THENCE N 00° 00' 00" E, 15.04 FEET;

THENCE N 90° 00' 00" W, 114.02 FEET;

THENCE N 00° 00' 00" E, 20.00 FEET;

THENCE N 90° 00' 00" E, 98.93 FEET;

THENCE N 00° 00' 00" E, 21.09 FEET;

THENCE N 90° 00' 00" E, 28.35 FEET TO A POINT ON THE WEST LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT;

THENCE S 00° 00' 00" W, 76.13 FEET ALONG THE WEST LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 3,910 SQUARE FEET, MORE OR LESS



Michael Sean Kervin, PLS 34592
Date: 12-3-21
Project: 18-117
For and on Behalf of
Core Consultants, Inc.

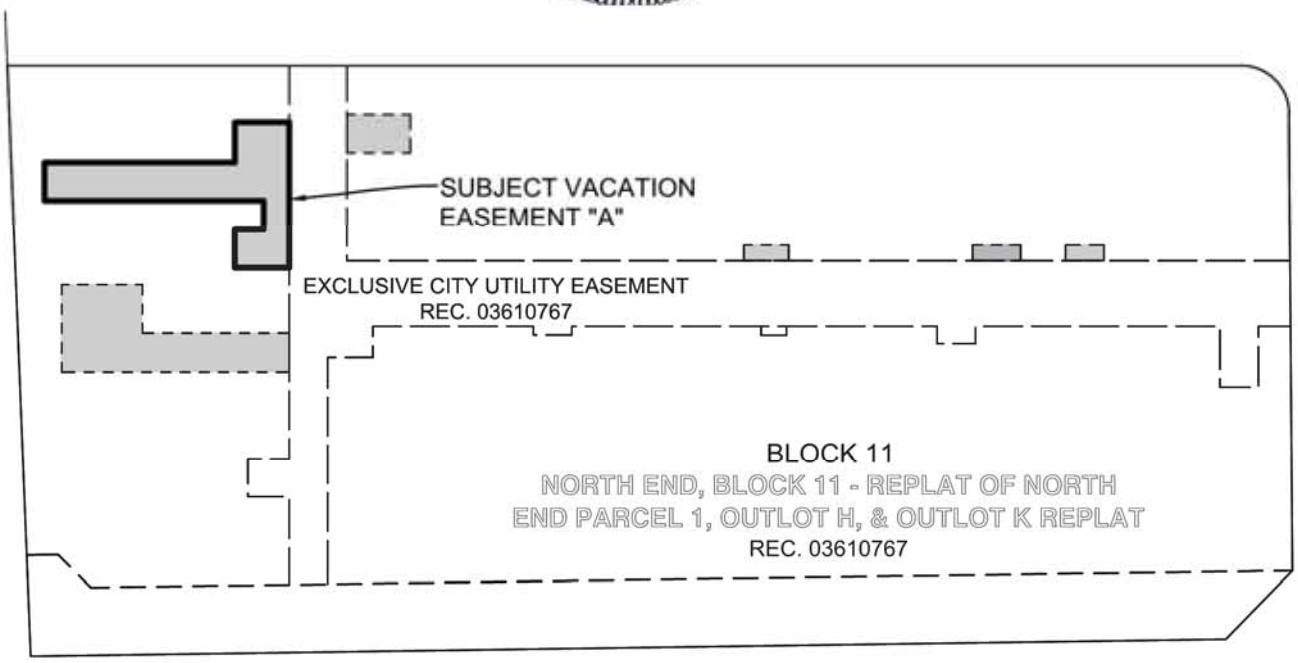
Notes:

1.) NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discovered such defect. In no event, may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown.
2.) Legal description was prepared by Michael S, Kervin, PLS, 3473 South Broadway Blvd., Englewood, CO 80113.

EXHIBIT

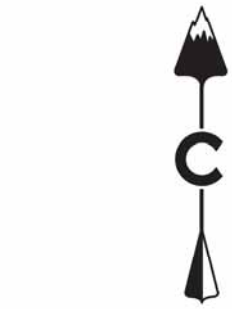
SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

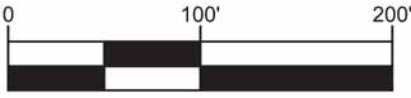
COLORADO LICENSED
MICHAEL SEAN KERVIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR



SOUTH BOULDER ROAD

VACATION EASEMENTS





1 inch = 100 ft.

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

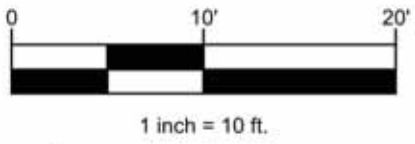
PROJECT: 18-117
DATE: 12-3-21
SHEET 1 OF 2

DR: KDS
DS: MSK

CORE
CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOUNDER, STATE OF COLORADO



1 inch = 10 ft.





BLOCK 11

NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767

N90°00'00"E 28.35'

N0°00'00"E 21.09'

N90°00'00"E 98.93'

N0°00'00"E 20.00'

VACATION EASEMENT "A"
±3,910 SF

S0°00'00"E 76.13'

EXCLUSIVE CITY UTILITY EASEMENT
REC. 03610767

N90°00'00"W 114.02'

N0°00'00"E 15.04'

N90°00'00"E 15.09'

N0°00'00"E 20.00'

N90°00'00"W 28.35'

N 33°40'48" E 242.43'

POINT OF BEGINNING

(BASIS OF BEARINGS)
S. LINE, REPLAT OF NORTH END, BLOCK 11
S89°11'46"W 621.56'

POINT OF COMMENCEMENT
SW CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT

SOUTH BOULDER ROAD

SE CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 18-117
DATE: 12-3-21
SHEET 2 OF 2

DR: KDS
DS: MSK

CORE
CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

DECEMBER 3, 2021

EXHIBIT "B"
LEGAL DESCRIPTION
EASEMENT VACATION B

A EXCLUSIVE CITY UTILITY EASEMENT VACATION BEING A PORTION OF THAT EXCLUSIVE CITY UTILITY EASEMENT, BLOCK 11, NORTH END, BLOCK 11-REPLAT OF NORTH END PARCEL 1, OUTLOT H, AND OUTLOT K REPLAT RECORDED AUGUST 23, 2017 AT RECEPTION NO. 03610767, IN THE RECORDS OF THE BOULDER COUNTY CLERK AND RECORDERS OFFICE, LYING WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE SOUTH LINE OF SAID BLOCK 11, BEING ASSUMED TO BEAR S 89°11'46" W, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE SOUTHWEST CORNER OF SAID BLOCK 11, THENCE N 32° 07' 37" E, 309.21 FEET TO A POINT ON THE EAST LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT AND THE POINT OF BEGINNING;

THENCE N 00° 00' 00" E, 20.00 FEET ALONG THE EAST LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENTS;

THENCE N 90° 00' 00" E, 33.00 FEET;

THENCE S 00° 00' 00" W, 20.00 FEET;

THENCE N 90° 00' 00" W, 33.00 FEET TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 660 SQUARE FEET, MORE OR LESS



Michael Sean Kervin, PLS 34592
Date: 12-3-21
Project: 18-117
For and on Behalf of
Core Consultants, Inc.

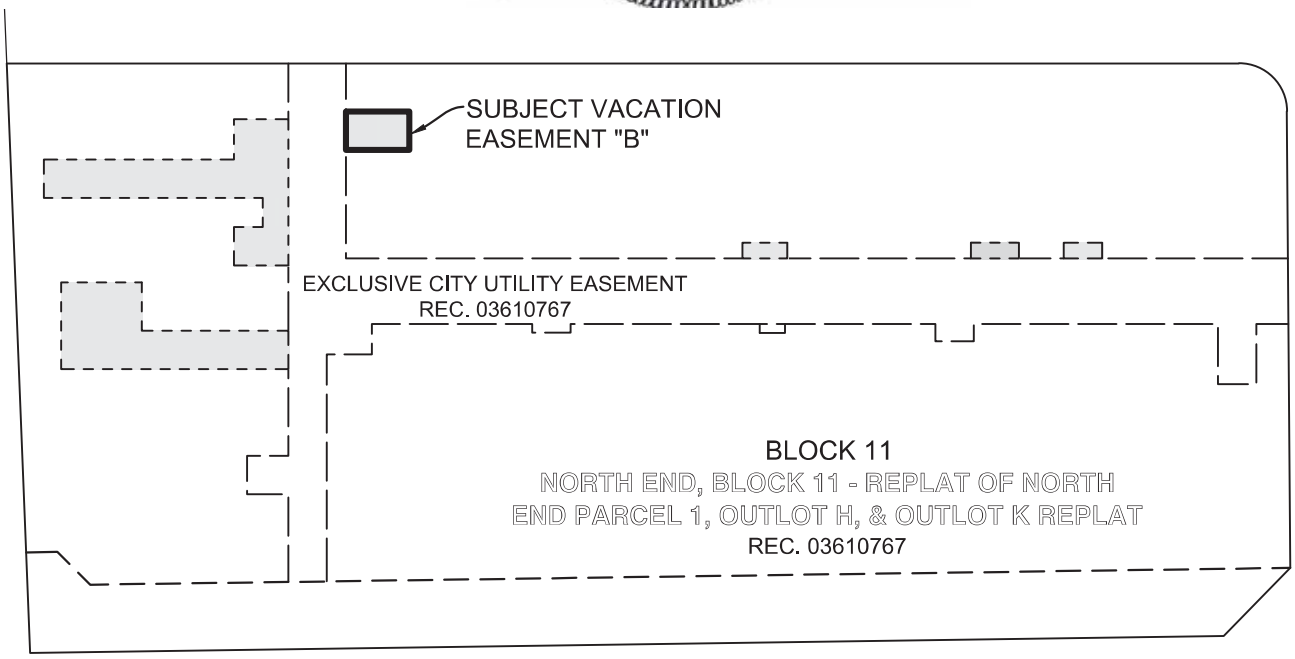
Notes:

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2.) Legal description was prepared by Michael S, Kervin, PLS, 3473 South Broadway Blvd., Englewood, CO 80113.

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

COLORADO LICENSED
MICHAEL SEAN KERVIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR



NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 18-117
DATE: 12-3-21
SHEET 1 OF 2

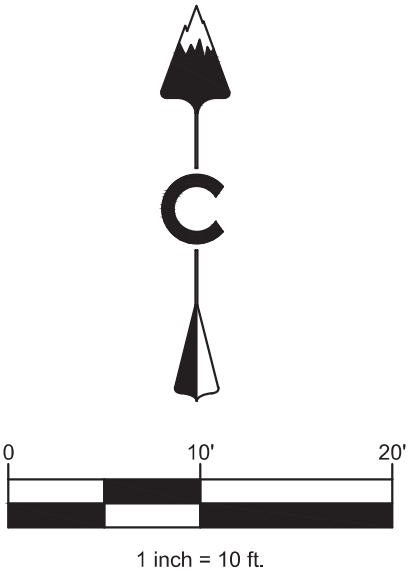
DR: KDS
DS: MSK

CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO





BLOCK 11
NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767

N90°00'00"E 33.00'

EXCLUSIVE CITY UTILITY EASEMENT
REC. 03610767

N0°00'00"E 20.00'

VACATION EASEMENT B
±660 SF

S0°00'00"E 20.00'

BLOCK 11
NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767

N90°00'00"W 33.00'

POINT OF BEGINNING

N 32°07'37" E
309.21'

(BASIS OF BEARINGS)
S. LINE, REPLAT OF NORTH END, BLOCK 11
S89°11'46"W 621.56'

POINT OF COMMENCEMENT
SW CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT

SE CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT

SOUTH BOULDER ROAD

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 18-117
DATE: 12-3-21
SHEET 2 OF 2

DR: KDS
DS: MSK

CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
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DECEMBER 3, 2021

EXHIBIT "C"
LEGAL DESCRIPTION
EASEMENT VACATION D

A EXCLUSIVE CITY UTILITY EASEMENT VACATION BEING A PORTION OF THAT EXCLUSIVE CITY UTILITY EASEMENT, BLOCK 11, NORTH END, BLOCK 11-REPLAT OF NORTH END PARCEL 1, OUTLOT H, AND OUTLOT K REPLAT RECORDED AUGUST 23, 2017 AT RECEPTION NO. 03610767, IN THE RECORDS OF THE BOULDER COUNTY CLERK AND RECORDERS OFFICE, LYING WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE SOUTH LINE OF SAID BLOCK 11, BEING ASSUMED TO BEAR S 89°11'46" W, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE SOUTHWEST CORNER OF SAID BLOCK 11, THENCE N 06° 12' 44" E, 148.65 FEET TO THE POINT OF BEGINNING;

THENCE N 00° 00' 00" E, 45.00 FEET;

THENCE S 90° 00' 00" E, 42.00 FEET;

THENCE S 00° 00' 00" W, 25.00 FEET;

THENCE N 90° 00' 00" E, 76.35 FEET TO A POINT ON THE WEST LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT;

THENCE S 00° 00' 00" W, 20.00 FEET ALONG THE WEST LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT;

THENCE N 90° 00' 00" W, 118.35 FEET TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 3,417 SQUARE FEET, MORE OR LESS.



Michael Sean Kervin, PLS 34592
Date: 12-3-21
Project: 18-117
For and on Behalf of
Core Consultants, Inc.

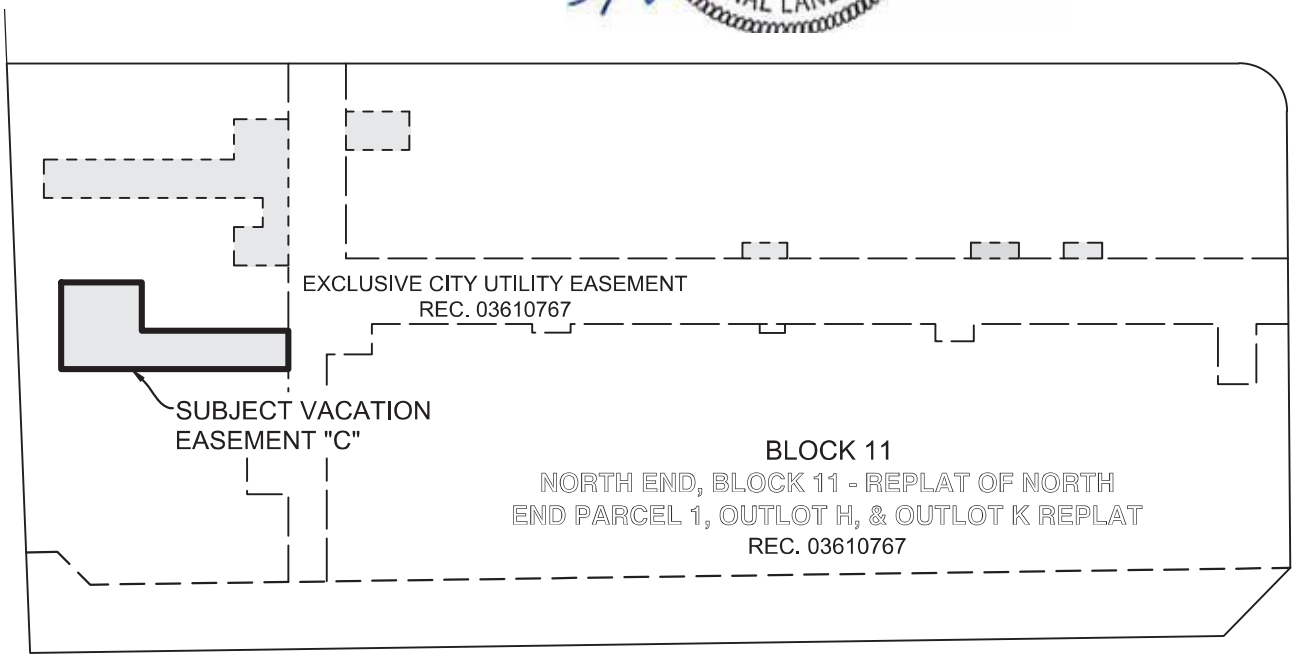
Notes:

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EXHIBIT

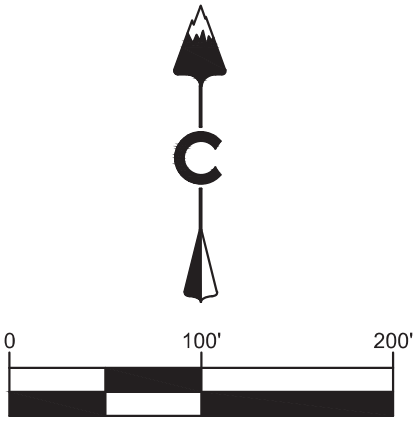
SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

COLORADO LICENSED
MICHAEL SEAN KERVIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR



SOUTH BOULDER ROAD

VACATION EASEMENTS



1 inch = 100 ft.

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
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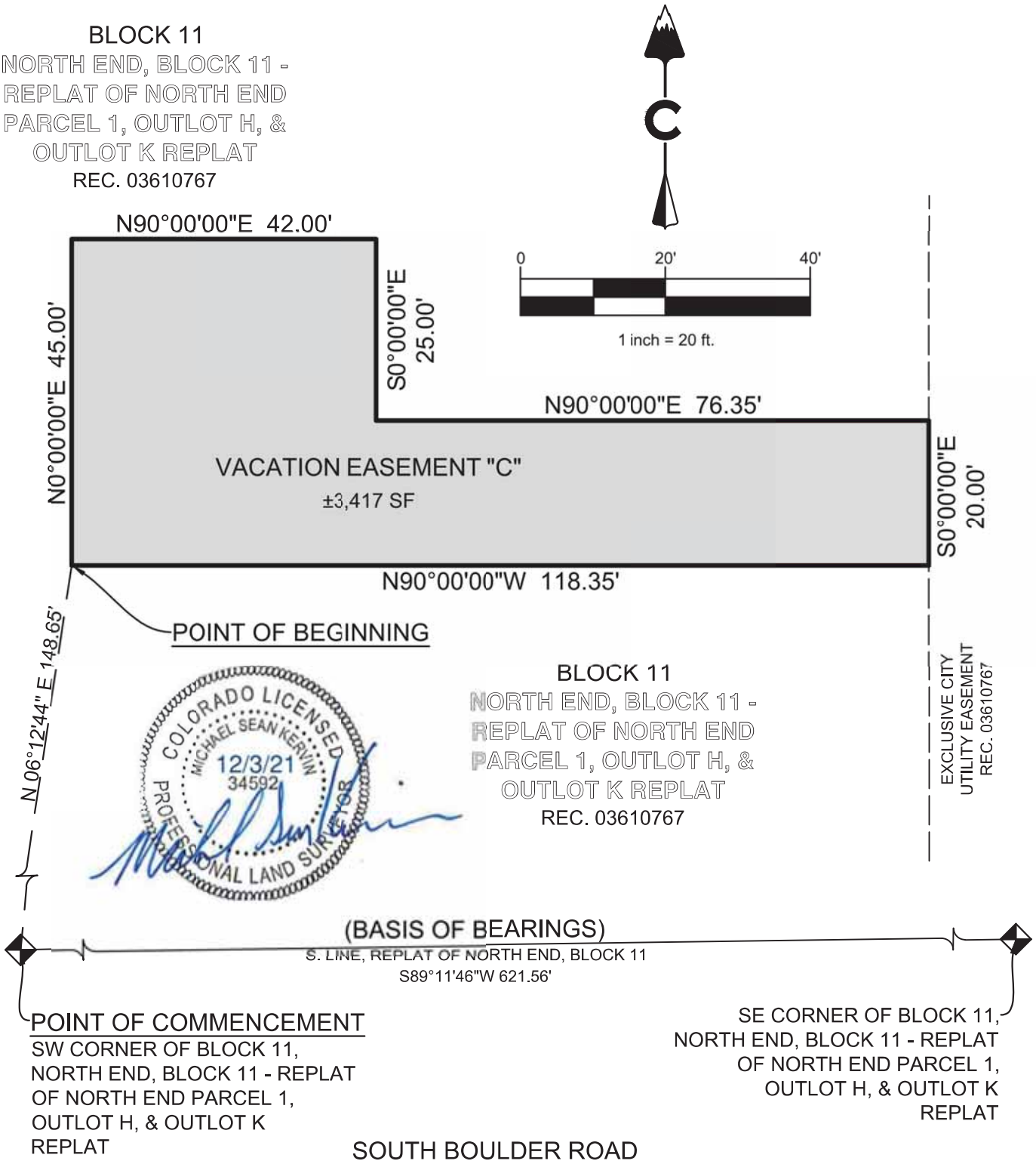
PROJECT: 18-117
DATE: 12-3-21
SHEET 1 OF 2

DR: KDS
DS: MSK

CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO



NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
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PROJECT: 18-117
DATE: 12-3-21
SHEET 2 OF 2

DR: KDS
DS: MSK

CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
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DECEMBER 3, 2021

EXHIBIT "D"
LEGAL DESCRIPTION
EASEMENT VACATION D

A EXCLUSIVE CITY UTILITY EASEMENT VACATION BEING A PORTION OF THAT EXCLUSIVE CITY UTILITY EASEMENT, BLOCK 11, NORTH END, BLOCK 11-REPLAT OF NORTH END PARCEL 1, OUTLOT H, AND OUTLOT K REPLAT RECORDED AUGUST 23, 2017 AT RECEPTION NO. 03610767, IN THE RECORDS OF THE BOULDER COUNTY CLERK AND RECORDERS OFFICE, LYING WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE SOUTH LINE OF SAID BLOCK 11, BEING ASSUMED TO BEAR S 89°11'46" W, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE SOUTHWEST CORNER OF SAID BLOCK 11, THENCE N 61° 02' 22" E, 428.95 FEET TO A POINT ON THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT, ALSO BEING THE SOUTHWEST CORNER OF THAT 10' UTILITY EASEMENT RECORDED AT RECEPTION NO. 3286562, SAID BOULDER COUNTY RECORDS AND THE POINT OF BEGINNING;

THENCE N 00° 00' 00" E, 8.25 FEET ALONG THE WEST LINE OF SAID 10' UTILITY EASEMENT;

THENCE N 90° 00' 00" E, 23.24 FEET;

THENCE S 00° 00' 00" E, 8.25 FEET TO THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT;

THENCE N 90° 00' 00" W, 23.24 FEET ALONG THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 192 SQUARE FEET, MORE OR LESS.



Michael Sean Kervin, PLS 34592
Date: 12-3-21
Project: 18-117
For and on Behalf of
Core Consultants, Inc.

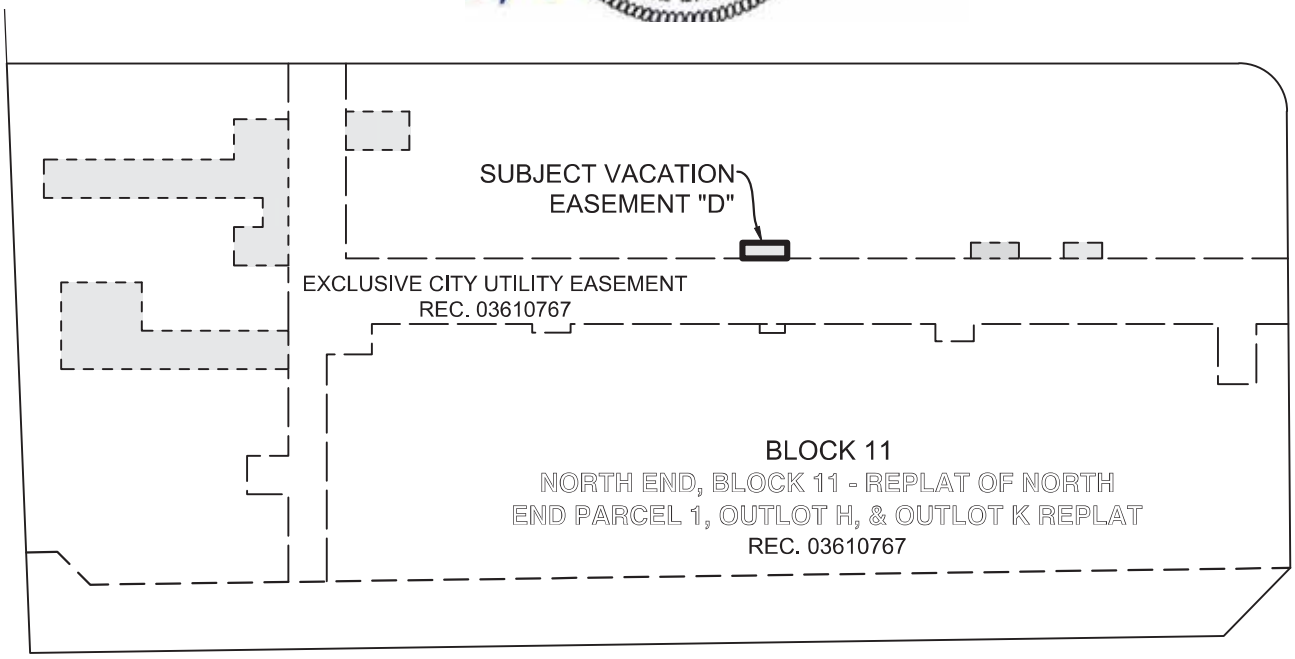
Notes:

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2.) Legal description was prepared by Michael S, Kervin, PLS, 3473 South Broadway Blvd., Englewood, CO 80113.

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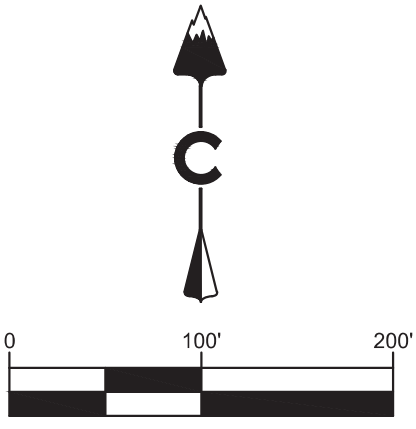
SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

COLORADO LICENSED
MICHAEL SEAN KERVIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR



SOUTH BOULDER ROAD

VACATION EASEMENTS



1 inch = 100 ft.

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
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PROJECT: 18-117
DATE: 12-3-21
SHEET 1 OF 2

DR: KDS
DS: MSK

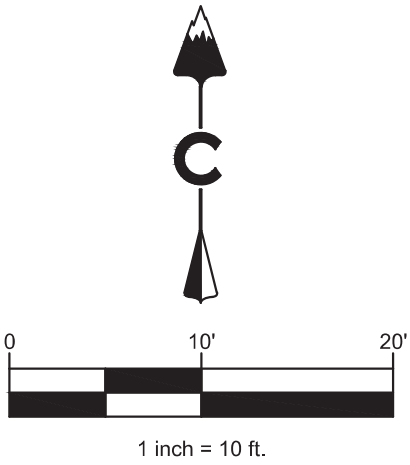
CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO



BLOCK 11
NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767



10' UTILITY EASEMENT
REC. 3286562

VACATION EASEMENT "D"
±192 SF

N90°00'00"E 23.24'

N0°00'00"E 8.25'

S0°00'00"E 8.25'

N90°00'00"W 23.24'

POINT OF BEGINNING

EXCLUSIVE CITY UTILITY EASEMENT
REC. 03610767

N 61°02'22" E 428.95'

BLOCK 11
NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767

(BASIS OF BEARINGS)
S. LINE, REPLAT OF NORTH END, BLOCK 11
S89°11'46"W 621.56'

POINT OF COMMENCEMENT
SW CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT

SE CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT

SOUTH BOULDER ROAD

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 18-117
DATE: 12-3-21
SHEET 2 OF 2

DR: KDS
DS: MSK

CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
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DECEMBER 3 2021

EXHIBIT "E"
LEGAL DESCRIPTION
EASEMENT VACATION E

A EXCLUSIVE CITY UTILITY EASEMENT VACATION BEING A PORTION OF THAT EXCLUSIVE CITY UTILITY EASEMENT, BLOCK 11, NORTH END, BLOCK 11-REPLAT OF NORTH END PARCEL 1, OUTLOT H, AND OUTLOT K REPLAT RECORDED AUGUST 23, 2017 AT RECEPTION NO. 03610767, IN THE RECORDS OF THE BOULDER COUNTY CLERK AND RECORDERS OFFICE, LYING WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE SOUTH LINE OF SAID BLOCK 11, BEING ASSUMED TO BEAR S 89°11'46" W, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE SOUTHWEST CORNER OF SAID BLOCK 11, THENCE N 67° 16' 06" E, 531.24 FEET TO A POINT ON THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT AND THE POINT OF BEGINNING;

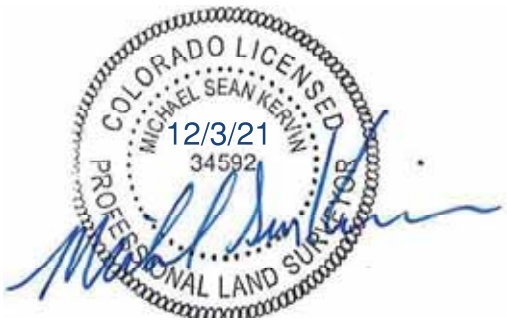
THENCE N 00° 00' 00" E, 8.25 FEET;

THENCE N 90° 00' 00" E, 25.00 FEET;

THENCE S 00° 00' 00" E, 8.25 FEET TO THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT;

THENCE N 90° 00' 00" W, 25.00 FEET ALONG THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 206 SQUARE FEET, MORE OR LESS.



Michael Sean Kervin, PLS 34592
Date: 12-3-21
Project: 18-117
For and on Behalf of
Core Consultants, Inc.

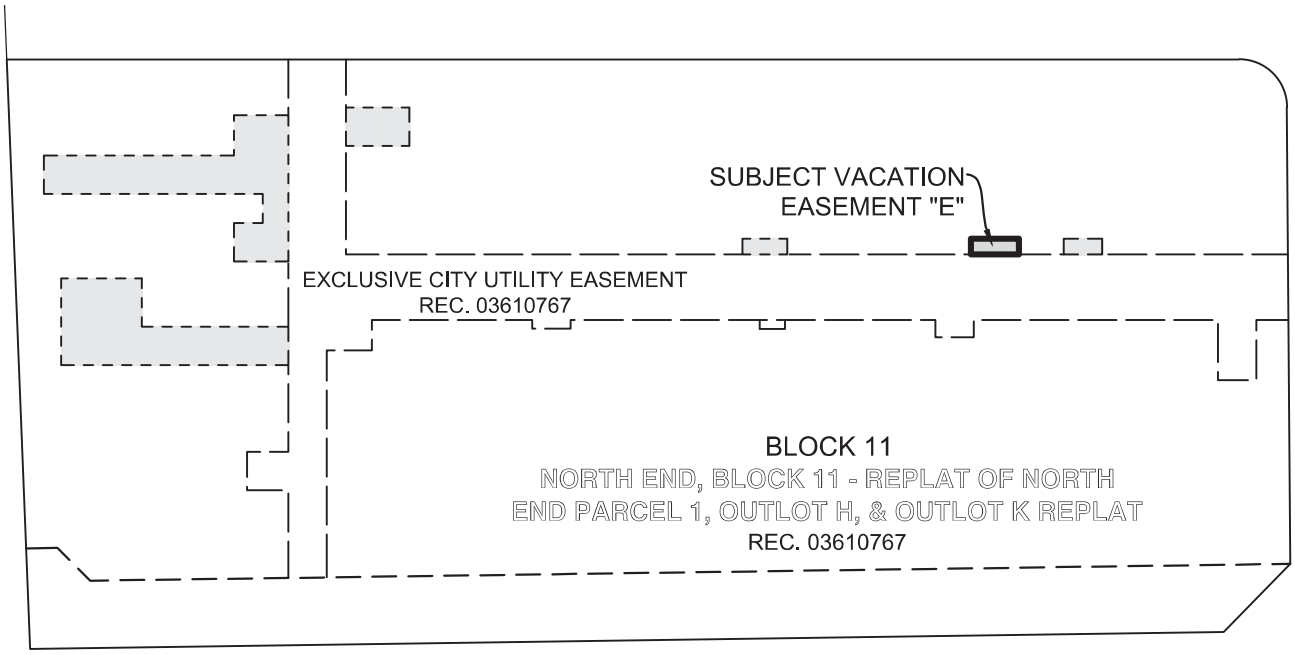
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EXHIBIT

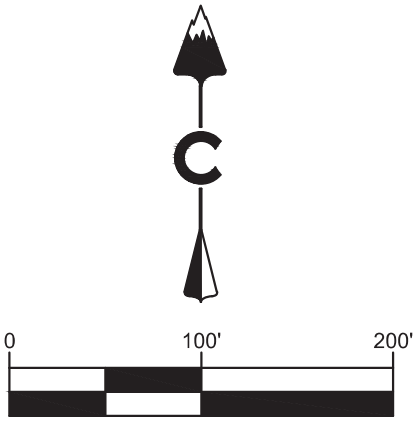
SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

COLORADO LICENSED
MICHAEL SEAN KERVIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR



SOUTH BOULDER ROAD

VACATION EASEMENTS



1 inch = 100 ft.

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
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PROJECT: 18-117
DATE: 12-3-21
SHEET 1 OF 2

DR: KDS
DS: MSK

CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

COLORADO LICENSED
MICHAEL SEAN KERVIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR

BLOCK 11
NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767

0 10' 20'
1 inch = 10 ft.

VACATION EASEMENT "E"
±206 SF

N90°00'00"E 25.00'

N0°00'00"E 8.25'

S0°00'00"E 8.25'

N90°00'00"W 25.00'

POINT OF BEGINNING

EXCLUSIVE CITY UTILITY EASEMENT
REC. 03610767

BLOCK 11
NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767

N 67°16'06" E 531.24'

(BASIS OF BEARINGS)
S. LINE, REPLAT OF NORTH END, BLOCK 11
S89°11'46"W 621.56'

POINT OF COMMENCEMENT
SW CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT

SE CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT

SOUTH BOULDER ROAD

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 18-117
DATE: 12-3-21
SHEET 2 OF 2
DR: KDS
DS: MSK

CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
LIVEYOURCORE.COM

DECEMBER 3, 2021

EXHIBIT "F"
LEGAL DESCRIPTION
EASEMENT VACATION F

A EXCLUSIVE CITY UTILITY EASEMENT VACATION BEING A PORTION OF THAT EXCLUSIVE CITY UTILITY EASEMENT, BLOCK 11, NORTH END, BLOCK 11-REPLAT OF NORTH END PARCEL 1, OUTLOT H, AND OUTLOT K REPLAT RECORDED AUGUST 23, 2017 AT RECEPTION NO. 03610767, IN THE RECORDS OF THE BOULDER COUNTY CLERK AND RECORDERS OFFICE, LYING WITHIN THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE SOUTH LINE OF SAID BLOCK 11, BEING ASSUMED TO BEAR S 89°11'46" W, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE SOUTHWEST CORNER OF SAID BLOCK 11, THENCE N 69° 07' 17" E, 575.99 FEET TO A POINT ON THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT AND THE POINT OF BEGINNING;

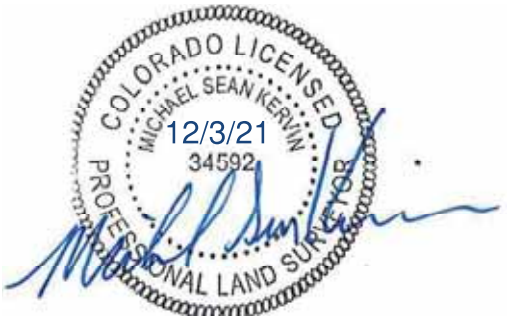
THENCE N 00° 00' 00" E, 8.25 FEET;

THENCE N 90° 00' 00" E, 20.00 FEET;

THENCE S 00° 00' 00" E, 8.25 FEET TO THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT;

THENCE N 90° 00' 00" W, 20.00 FEET ALONG THE NORTH LINE OF SAID EXCLUSIVE CITY UTILITY EASEMENT TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 165 SQUARE FEET, MORE OR LESS.



Michael Sean Kervin, PLS 34592
Date: 12-3-21
Project: 18-117
For and on Behalf of
Core Consultants, Inc.

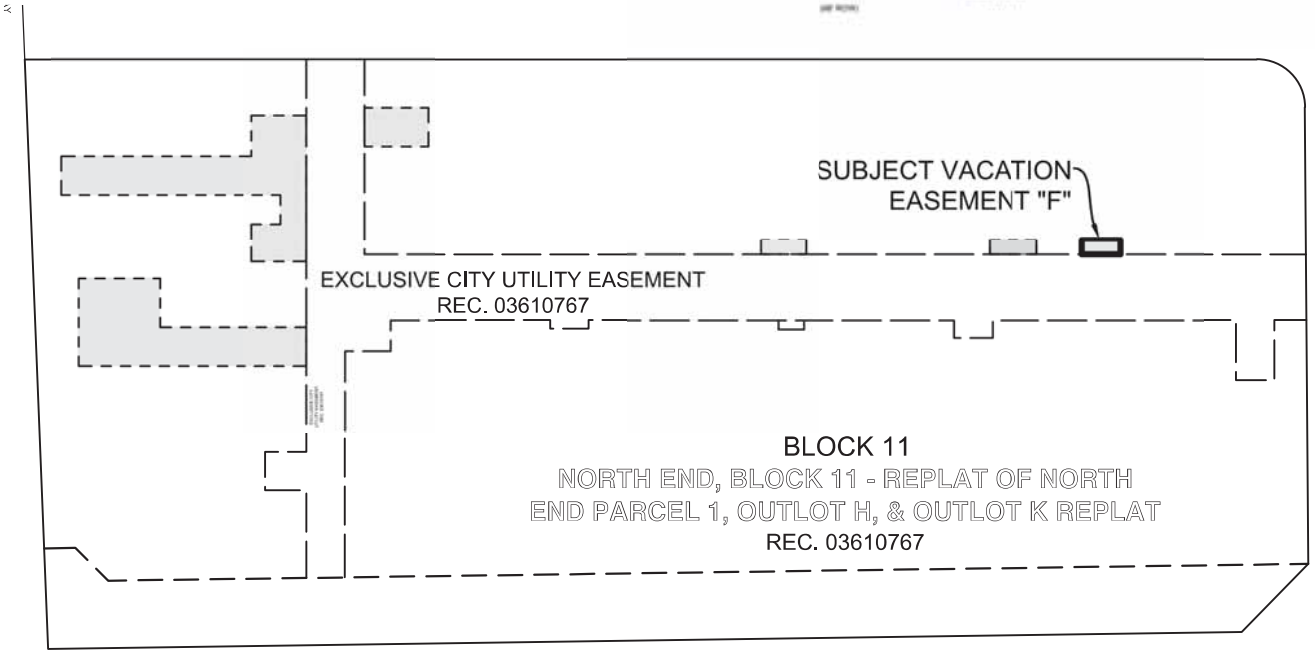
Notes:

1.) NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discovered such defect. In no event, may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown.
2.) Legal description was prepared by Michael S, Kervin, PLS, 3473 South Broadway Blvd., Englewood, CO 80113.

EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOUNDER, STATE OF COLORADO

COLORADO LICENSED
MICHAEL SEAN KERVIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR



NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 18-117
DATE: 12-3-21
SHEET 1 OF 2

DR: KDS
DS: MSK

CORE CONSULTANTS, INC.
3473 SOUTH BROADWAY
ENGLEWOOD, CO 80113
303.703.4444
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EXHIBIT

SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.,
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

COLORADO LICENSED
MICHAEL SEAN KERVIN
12/3/21
34592
PROFESSIONAL LAND SURVEYOR

BLOCK 11
NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767

0 10' 20'
1 inch = 10 ft.

VACATION EASEMENT "F"
±165 SF

N90°00'00"E 20.00'
N0°00'00"E 8.25'
S0°00'00"W 8.25'
N90°00'00"W 20.00'
POINT OF BEGINNING

EXCLUSIVE CITY UTILITY EASEMENT
REC. 03610767

N 69°07'17" E 575.99'

BLOCK 11
NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT
REC. 03610767

(BASIS OF BEARINGS)
S. LINE, REPLAT OF NORTH END, BLOCK 11
S89°11'46"W 621.56'

POINT OF COMMENCEMENT
SW CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT

SE CORNER OF BLOCK 11, NORTH END, BLOCK 11 - REPLAT OF NORTH END PARCEL 1, OUTLOT H, & OUTLOT K REPLAT

SOUTH BOULDER ROAD

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 18-117 DR: KDS
DATE: 12-3-21 DS: MSK
SHEET 2 OF 2

CORE CONSULTANTS, INC.
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North End
4TH AMENDED GDP

LAND USE AREA SUMMARY (ACRES)							
	PARCEL A			PARCEL B			
	PA #1	PA #2	PA #3	PA #4	PA #5	PA #6	TOTAL
COMMERCIAL	2.67						2.67
TOWNHOME AND DUPLEX (MEDIUM DENSITY RESIDENTIAL)	0.00			5.16			5.16
MULTI-FAMILY (MEDIUM DENSITY RESIDENTIAL)	1.90	1.93		2.74			6.57
SINGLE FAMILY (LOW DENSITY RESIDENTIAL)	0.00	9.72	2.57	3.02	7.07		22.38
NON-ENCUMBERED DEDICATED PUBLIC LAND		0.16	9.95			2.18	12.29
ENCUMBERED DEDICATED PUBLIC LAND	0.80	1.03	2.50	0.41	0.03	1.93	6.70
PRIVATE COMMON OPEN AREA	2.61	0.25	0.83	1.08	1.45		6.22
DEDICATED RIGHT-OF-WAY	1.06	4.82	0.65	2.71	2.27	0.39	11.90
TOTAL	9.04	17.91	16.50	15.12	10.82	4.50	73.89

SITE SUMMARY				
	PERMITTED USE	PRODUCT TYPE	# UNITS	GDU/AC
PLANNING AREA #1	COMMERCIAL	COMMERCIAL	40,000 SF	0.10 FAR
	MEDIUM DENSITY RESIDENTIAL	MULTI-FAMILY LOFTS, TOWNHOMES, ROWHOMES	38	4.2 DU/AC
PLANNING AREA #2	MEDIUM DENSITY RES.	MULTI-FAMILY LOFTS, TOWNHOMES, ROWHOMES, COTTAGES, SINGLE FAMILY LOTS	112	6.25 DU/AC
PLANNING AREA #3	LOW DENSITY RES.	SINGLE FAMILY LOTS	10	0.6 DU/AC
PLANNING AREA #4	MEDIUM DENSITY RES.	MULTI-FAMILY LOFTS, TOWNHOMES, ROWHOMES, COTTAGES, SINGLE FAMILY LOTS	147	9.8 DU/AC
PLANNING AREA #5	LOW DENSITY RES.	SINGLE FAMILY LOTS	43	3.9 DU/AC
TOTAL UNITS	-	-	350 *	-

*MARKET RATE UNITS

GENERAL DEVELOPMENT NOTES

DEVELOPMENT CONCEPT AND GENERAL NOTES

NORTH END IS DESIGNED TO BE A MIXED USE DEVELOPMENT WITH BOTH COMMERCIAL AND RESIDENTIAL USES. THE COMMERCIAL USES ARE INTENDED TO BE COMPLEMENTARY TO EXISTING COMMERCIAL FACILITIES, AS WELL AS SERVING THE NEIGHBORING RESIDENTIAL AREAS. THE RESIDENTIAL DEVELOPMENT IS CHARACTERIZED BY A MIX OF PRODUCTS INCLUDING BOTH DETACHED SINGLE FAMILY HOMES AND ATTACHED UNITS.

DEDICATIONS

ALL PUBLIC ROW'S SHOWN ON THE GENERAL DEVELOPMENT PLAN ARE INTENDED TO BE DEDICATED TO THE CITY OF LOUISVILLE, BUT ARE INTENDED TO BE BUILT BY THE DEVELOPER OF EACH DEVELOPMENT PHASE.
ALL AREAS SHOWN AS PUBLIC LAND DEDICATION ARE INTENDED TO BE DEDICATED TO THE CITY OF LOUISVILLE FOR PURPOSES OF PUBLIC RECREATION. DEVELOPMENT OF THE AREAS LABELED PUBLIC LAND DEDICATION MAY BE UNDERTAKEN BY THE CITY OF LOUISVILLE, OR BY THE DEVELOPER OF THE SURROUNDING PROPERTY. DEVELOPMENT RESPONSIBILITY SHALL BE DETERMINED AT TIME OF SUBDIVISION.
PUBLIC TRAILS TO BE INSTALLED BY DEVELOPER ACCORDING TO SPECIFICATIONS DETERMINED AT TIME OF SUBDIVISION P.U.D.

PERMITTED USE NOTES:

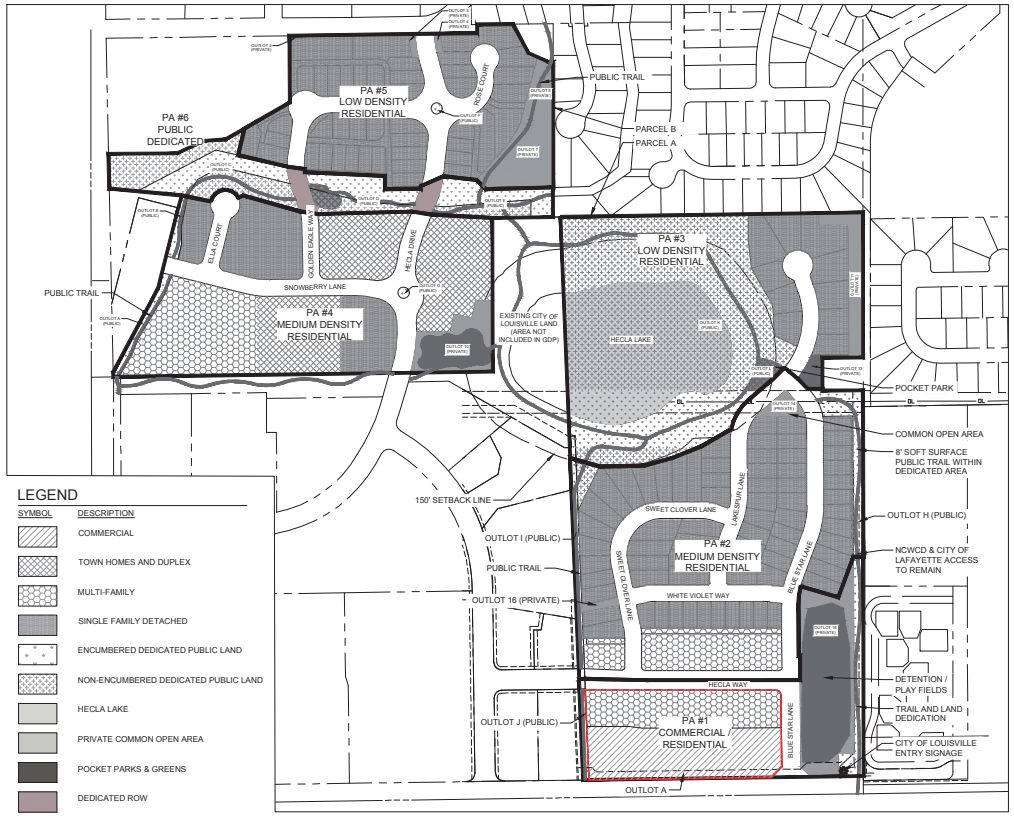
1.) PERMITTED USES IN THE COMMERCIAL DISTRICT - PLANNING AREA 1 WILL BE COMPATIBLE WITH CITY OF LOUISVILLE MUNICIPAL CODE SEC. 17.72.090. COMMERCIAL AND OFFICE, CHAPTER 17.72 PLANNED COMMUNITY ZONE DISTRICT.

PUBLIC LAND DEDICATION	
NON-ENCUMBERED DEDICATED LAND	12.29 AC
ENCUMBERED DEDICATED LAND	6.70 AC
TOTAL	18.99 AC
SITE ACREAGE	73.89 AC
PERCENTAGE OF LAND DEDICATED	25.7%

PUBLIC LAND DEDICATION CALCULATION	
RESIDENTIAL	61.58 AC
MINIMUM REQUIREMENT	15%
TOTAL DEDICATED LAND REQUIRED (BASED ON RESIDENTIAL AREA)	9.24 AC
COMMERCIAL	2.66 AC
MINIMUM REQUIREMENT	12%
TOTAL DEDICATED LAND REQUIRED (BASED ON COMMERCIAL AREA)	0.32 AC
TOTAL DEDICATED LAND REQUIREMENT	9.56 AC

ZONING SUMMARY	
COMMERCIAL*	2.67 AC
MEDIUM DENSITY RESIDENTIAL²	11.73 AC
LOW DENSITY RESIDENTIAL²	22.38 AC
DEDICATED PUBLIC LAND	30.89 AC
PRIVATE COMMON OPEN SPACE	6.22 AC

* NET COMMERCIAL AREA (DOES NOT INCLUDE DETENTION, PRIVATE COMMON OPEN AREA, OR DEDICATED PUBLIC LAND)
² INCLUDES PRIVATE COMMON OPEN AREA, DETENTION, DEDICATED ROW, AND DEDICATED PUBLIC LAND



LEGEND

SYMBOL	DESCRIPTION
	COMMERCIAL
	TOWN HOMES AND DUPLEX
	MULTI-FAMILY
	SINGLE FAMILY DETACHED
	ENCUMBERED DEDICATED PUBLIC LAND
	NON-ENCUMBERED DEDICATED PUBLIC LAND
	HECLA LAKE
	PRIVATE COMMON OPEN AREA
	POCKET PARKS & GREENS
	DEDICATED ROW

LEGAL DESCRIPTION

KNOW ALL MEN BY THESE PRESENTS: that Ridgeline Development Corporation, a Colorado Corporation, North End Properties, LLC, a Colorado limited liability company, White Hawk Ranch, LLC, a Colorado limited liability company and G.E.M. Holdings, LLC, a Colorado limited liability company being the owner's of that tract of land located in the SW1/4 of Section 4, T1S, R69W of the 6th P.M., City of Louisville, County of Boulder, State of Colorado, and being more particularly described as follows:

PARCEL A

COMMENCING at the S1/4 Corner of said Section 4, from which the SW Corner of said Section 4 bears S89°11'46"W, (basis of bearing), thence N00°02'03"W, 60.01 feet along the East Line of the SW1/4 of said Section 4 to the Northerly Right-of-way Line of South Boulder Road conveyed to the City of Louisville in that Warranty Deed recorded July 13, 1989 on Film 1586 as Reception Number 00992351 of the records of Boulder County, Colorado and the TRUE POINT OF BEGINNING;

Thence N00°02'03"W, 1314.79 feet along the East Line of the SW1/4 of said Section 4 to the Southeast Corner of that tract of land conveyed to Northern Colorado Water Conservancy District, Acting by and through the Southern Water Supply Project Water Activity Enterprise, a Government-Owned Business in that Warranty Deed recorded May 3, 1995 on Film 2050 as Reception Number 01514375 of the records of Boulder County, Colorado;
Thence S89°51'06"W, 139.00 feet along the South Line said Film 2050 as Reception Number 01514375 to the Southwest Corner thereof;
Thence N00°02'03"W, 112.00 feet along a line that is parallel with, as measured at right angles to, the East Line of the SW1/4 of said Section 4 to the Northwest Corner of said Film 2050 as Reception Number 01514375;
Thence N89°51'06"W, 139.00 feet along the North Line said Film 2050 as Reception Number 01514375 to the East Line of the SW1/4 of said Section 4;
Thence N00°02'03"W, 493.63 feet along the East Line of the SW1/4 of said Section 4 to the SW Corner of the N1/2 of the NW1/4 of the SE1/4 of said Section 4;
Thence S89°13'06"W, 1031.40 feet along the Southerly Line of that tract of land conveyed to The Davidson Coal and Iron Mining Company by James Thompson, et al, in that Warranty Deed recorded December 17, 1873 in Book V at Page 461 of the records of Boulder County, Colorado to the Northeast Corner of Louisville Plaza Filing No. 2 recorded July 1, 1991 as Plan File P–26, F–1, #21 of the records of Boulder County, Colorado, said Corner is 660.00 feet South of the North Line of the SW1/4 of said Section 4;
Thence S0°27'40"E, 1921.30 feet along the Easterly Line of said Louisville Plaza Filing No. 2 to the Northerly Right-of-way Line of said South Boulder Road;
Thence N89°11'46"E, 955.62 feet along the Northerly Right-of-way Line of said South Boulder Road to the East Line of the SW1/4 of said Section 4 and the TRUE POINT OF BEGINNING.
Area = 43.444 acres, more or less.

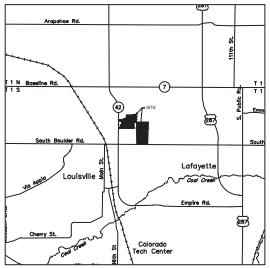
ALSO

PARCEL B

A Tract of land to be known as Parcel B, located in a portion of the SW1/4 of Section 4, T1S, R69W of the 6th P.M., City of Louisville, County of Boulder, State of Colorado, described as follows:
COMMENCING at the W1/4 Corner of said Section 4, from which the SW Corner of said Section 4 bears S00°05'40"E, (basis of bearing), thence S00°05'40"E, 28.93 feet along the West Line of the SW1/4 of said Section 4, Thence N89°12'19"E, 51.80 feet along a line that is parallel with, as measured at right angles to, the North Line of SW1/4 of said Section 4 to the Northeast Corner of that tract of land conveyed to The Seventh Day Adventist Association of Colorado in that Warranty Deed recorded January 20, 1981 on Film 1152 as Reception Number 431303 of the records of Boulder County, Colorado, Thence continuing N89°12'19"E, 626.10 feet along a line that is parallel with, as measured at right angles to, the North Line of SW1/4 of said Section 4 and along the Northerly Line of said Film 1152 as Reception Number 431303 to the Northeast Corner thereof and the TRUE POINT OF BEGINNING;
Thence continuing N89°12'19"E, 638.62 feet along a line that is parallel with, as measured at right angles to the North Line of SW1/4 of said Section 4;
Thence N00°04'41"W, 28.93 feet to the North Line of SW1/4 of said Section 4;
Thence N89°12'19"E, 122.96 feet along the North Line of SW1/4 of said Section 4;
Thence S27°34'31"E, 111.29 feet
Thence S65°36'11"E, 74.29 feet
Thence N89°14'16"E, 17.02 feet
Thence S00°02'03"E, 428.31 feet along a line that is parallel with, as measured at right angles to, the East Line of the SW1/4 of said Section 4 to a point on the Northerly Line of Outlot J, Waneka Landing Filing No. 1, recorded January 5, 1994 as Plan File P–30, F–4, #24 of the records of Boulder County Colorado;
Thence S87°58'59"W, 1.03 feet along the Northerly Line of said Outlot J to the Northwest Corner thereof;
Thence S00°05'51"E, 100.96' feet along the Westerly Line of said Outlot J and the Westerly Line of Outlot L, said Waneka Landing Filing No. to the North Line of Louisville Plaza Filing No. 2 recorded July 1, 1991 as Plantfe P–26, F–1, #21 of the records of Boulder County, Colorado, said point is 660.00 feet South of the North Line of the SW1/4 of said Section 4;
Thence S89°12'19"W, 206.60 feet along a line that is parallel with, as measured at right angles to, the North Line of the SW1/4 of said Section 4 to the Northwest Corner of said Louisville Plaza Filing No. 2;
Thence S00°05'40"E, 524.50 feet along a line that is parallel with, as measured at right angles to, the West Line of the SW1/4 of said Section 4 to a Southeasterly Corner of said Louisville Plaza Filing No. 2;
Thence S89°12'19"W, 1293.15 feet along a line that is parallel with, as measured at right angles to, the North Line of the SW1/4 of said Section 4 to the Easterly Right-of-way Line of State Highway No. 42 conveyed to the Department of Highways, State of Colorado in that deed recorded August 5, 1966 on Film 577 as Reception Number 8231183 of the records of Boulder County, Colorado;
Thence N01°14'10"E, 16.51 feet along the Easterly Right-of-way Line of said State Highway No. 42 to the Southwest Corner of that tract of land conveyed to Norman L. Bertron and Marlene R. Bertron in that Warranty Deed recorded December 7, 1966 on Film 589 as Reception Number 834097 of the records of Boulder County, Colorado;
Thence N28°11'20"E, 323.49 feet along the Easterly Line of said Film 589 as Reception Number 834097;
Thence N14°08'20"E, 284.05 feet along the Easterly Line of said Film 589 as Reception Number 834097 to the Southeast Corner of that tract of land conveyed to Rollin E. Anderson and Genevieve N. Anderson in that Quit Claim Deed recorded May 7, 1996 on Film 2125 as Reception Number 01605684 of the records of Boulder County, Colorado;
Thence N15°43'20"E, 43.78 feet along the Easterly Line of said Film 2125 as Reception Number 01605684 to the Northeast Corner thereof;
Thence N84°31'24"W, 248.71 feet along the Northerly Line of said Film 2125 as Reception Number 01605684 to the Easterly Right-of-way Line of said State Highway No. 42;
Thence N01°14'10"E, 118.27 feet along the Easterly Right-of-way Line of said State Highway No. 42 to the Southwest Corner of said Film 1152 as Reception Number 431303;
Thence N89°40'45"E, 233.09 feet along the Southerly Line of said Film 1152 as Reception Number 431303;
Thence N85°04'36"E, 101.66 feet along the Southerly Line of said Film 1152 as Reception Number 431303;
Thence N86°26'03"E, 73.74 feet along the Southerly Line of said Film 1152 as Reception Number 431303;
Thence N80°07'37"E, 252.60 feet along the Southerly Line of said Film 1152 as Reception Number 431303 to the Southeast Corner thereof;
Thence N00°05'40"W, 228.18 feet along a line that is parallel with, as measured at right angles to, the West Line of SW1/4 of said Section 4 and along the Easterly Line of said Film 1152 as Reception Number 431303 to the Northeast Corner thereof and the TRUE POINT OF BEGINNING;
Area = 30.438 acres, more or less.

VICINITY MAP

SCALE: 1" = 5000'



PROJECT DESCRIPTION

SITE AREA: 73.89 ACRES

ZONING: IN COMPLIANCE WITH CITY OF LOUISVILLE COMPREHENSIVE PLAN:

COMMERCIAL:	2.66 AC
MEDIUM DENSITY RESIDENTIAL	34.68 AC
LOW DENSITY RESIDENTIAL	26.90 AC
DEDICATED PUBLIC LAND (ENCUMBERED AND NON-)	18.98 AC
PRIVATE COMMON OPEN AREA	6.22 AC

NUMBER OF UNITS:
PLANNED - 350

ACCESS: SOUTH BOULDER ROAD, PASCHAL DRIVE, HECLA WAY, HECLA DRIVE

PUBLIC LAND DEDICATIONS: 18.98 AC
REQUIRED PUBLIC LAND DEDICATION: 9.56 AC

SIGNATURE BLOCKS

CITY COUNCIL

APPROVED THIS ____DAY OF _____, 20__ BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, CO. ORDINANCE NO. _____ SERIES_____.

_____
MAYOR

_____
CITY CLERK

PLANNING COMMISSION CERTIFICATION

APPROVED THIS ____DAY OF _____, 20__ BY THE PLANNING COMMISSION OF THE CITY OF LOUISVILLE, CO. RESOLUTION NO. _____ SERIES_____.

BOULDER COUNTY CLERK & RECORDER CERTIFICATE

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED IN MY OFFICE AT ____O'CLOCK____M., THIS ____DAY OF _____, 20__ AND IS RECORDED IN PLAN FILE _____ FEE, _____PAID_____FILM NO._____ RECEPTION _____.

_____
CLERK

_____
RECORDER

OWNERSHIP SIGNATURE BLOCK

BY SIGNING THIS GENERAL DEVELOPMENT PLAN, THE OWNER ACKNOWLEDGES AND ACCEPTS ALL THE REQUIREMENTS AND INTENT SET FORTH BY THIS GENERAL DEVELOPMENT PLAN. WITNESS OUR HANDS AND SEALS THIS ____DAY OF _____, 20__.

_____
OWNER

_____
NOTARY

OWNERSHIP

RIDGELINE DEVELOPMENT CORP.
G. E. M. HOLDINGS, LLC
NORTH END PROPERTIES, LLC.
WHITE HAWK RANCH, LLC

PUD DIMENSIONAL AND BULK STANDARDS								
LINE #	DIMENSION / BULK STANDARD	SINGLE FAMILY ALLEY LOAD	BLOCK 1- LOTS 1 AND 2	SINGLE FAMILY FRONT LOAD	BLOCK 1 - LOT 4	TOWN HOUSE	MULTI-FAMILY	COMMERCIAL
1	MINIMUM LOT AREA (SQUARE FEET)	4000	LOT 1- 17,765 LOT 2- 16,150	4000	18,269	1000	1000	5000
2	MINIMUM LOT WIDTH	30'-0"	30'-0"	35'-0"	35'-0"	16'-0"	30'-0"	-
4	MAXIMUM LOT COVERAGE (% OF LOT AREA)	68%	30%	56%	30%	75%	85%	0.25 FAR
5	MINIMUM FRONT YARD SETBACK:							
	MINIMUM FRONT FOR PRINCIPLE USES	8'-0"	8'-0"	8'-0"	8'-0"	6'-0"	8'-0"	0
	MINIMUM FRONT YARD SETBACK FOR PRINCIPLE USES THAT FRONT PASCHAL DRIVE	20'-0"	20'-0"	20'-0"	20'-0"	-	-	-
	MINIMUM FRONT SETBACK TO PORCH	5'-0"	6'-0"	6'-0"	6'-0"	6'-0"	8'-0"	-
	MINIMUM FRONT PORCH WIDTH	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	8'-0"	-
	MINIMUM GARAGE FACE SETBACK TO FRONT PROPERTY LINE	-	-	20'-0"	20'-0"	-	-	-
6	MINIMUM SIDE YARD AND ACCESSORY USES SETBACK:							
	ALL CONDITIONS	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	0'-0"
	MINIMUM SETBACK BETWEEN ALL BUILDINGS	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
7	MINIMUM REAR YARD SETBACK	5' (TO ALLEY EASEMENT)	10' (TO ALLEY EASEMENT)	10'-0"	10'-0"	4' (TO ALLEY EASEMENT)	4' (TO ALLEY EASEMENT)	0 or 10' IF ABUTTING RESIDENTIAL ZONED USE
8	MAXIMUM BUILDING HEIGHT (PRINCIPAL BUILDING)	35'-0"	35'-0"	35'-0"	35'-0"	35'-0"	40'-0"	40'-0"
9	MAXIMUM BUILDING HEIGHT (ACCESSORY BUILDING)	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"
10	PARKING SPACES REQUIRED (OFF STREET) (9'X18' TYP.)	2 PER UNIT	2 PER UNIT	2 PER UNIT	2 PER UNIT	2 PER UNIT	1.7 BEDROOM 1.5 / 2 BEDROOM 2 / 3 BEDROOM	
	ALL RETAIL USES							1 SPACE PER 250 SQ.FT.
	ALL OFFICE USES							1 SPACE PER 300 SQ.FT.
11	FENCING STANDARDS (MAXIMUM HEIGHT)							
	PRIVACY FENCE	6'-0"						
	OPEN RAIL FENCE	4'-0"						

NOTES TO TABLE:
A. TANDEM GARAGES ARE ALLOWED.
B. NO MINIMUM LOT AREA PER DWELLING UNIT ON MULTI-FAMILY AND TOWN HOUSES.
BLOCK 11: MAXIMUM ROOF OVERHANG ENCROACHMENT WITHIN SETBACKS AND EASEMENTS = 30"

NORTH END MARKET

GDP AMENDMENT

LOUISVILLE, CO

PREPARED BY:

ripley design
LANDSCAPE ARCHITEDTURE, LAND PLANNING
419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.224.6667 | www.ripleydesigninc.com

PLANNER / LANDSCAPE ARCHITECT
RIPLEY DESIGN INC
Sam Coutts
419 CANYON AVE #200
FORT COLLINS, CO 80550
p. 970.224.5828

OWNER
RIDGELINE DEVELOPMENT CORPORATION
Michael Markel
5723 Arapahoe Ave. #2B
Boulder, CO 80303
p. 303.449.8689

ENGINEER
MPD ENGINEERING, LLC
Marc Dolezal, P.E.
1550 QUINCE AVE.
BOULDER, CO 80304
p. 303.498.9224

NORTH
0 100 200 400
SCALE: 1"=200'-0"
ORIGINAL SIZE 24X36

ISSUED		
No.	DESCRIPTION	DATE
01	PUD	8/23/2016
02	MYLAR	7/27/2017

REVISIONS		
No.	DESCRIPTION	DATE
01	AMENDMENT	03/25/2021
02	AMENDMENT	06/23/2021
03	AMENDMENT	12/10/2021
04	AMENDMENT	10/04/2022

GENERAL DEVELOPMENT PLAN

SEAL:

ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R21-011
DRAWN BY:	AG, JW
REVIEWED BY:	SC

DRAWING NUMBER:

GDP

Plotted By: Joel Welkert Layout: GENERAL DEVELOPMENT PLAN Printed On: 9/27/2022 10:44 AM File Name: GENERAL DEVELOPMENT PLAN.dwg

City of Louisville
COLORADO • SINCE 1878

Department of Planning and Building Safety

749 Main Street • Louisville CO 80027 • 303.335.4592 • www.louisvilleco.gov

ELECTRONIC LAND USE HEARING REQUEST CASE NO. _____

APPLICANT INFORMATION

Firm: Ridgeline Development Corporation
Contact: Chad Kipfer
Address: 5723 Arapahoe Avenue, Suite 2B, Boulder, CO 80303
Mailing Address: 5723 Arapahoe Avenue, Suite 2B, Boulder, CO 80303
Telephone: 303.339.6616
Fax: n/a
Email: Chad@MarkelHomes.com

OWNER INFORMATION

Firm: same
Contact: _____
Address: _____
Mailing Address: _____
Telephone: _____
Fax: _____
Email: _____

REPRESENTATIVE INFORMATION

Firm: same
Contact: _____
Address: _____
Mailing Address: _____
Telephone: _____
Fax: _____
Email: m

PROPERTY INFORMATION

Common Address: TBD Address / North End Block 11, North End Phase 2 Plat (TBA)
Legal Description: Lot n/a (N/A) Blk 11 (11)
Subdivision North End (NORTH END)
Area: 4.572 AC / 199,156 sqft Sq. Ft.

TYPE (S) OF APPLICATION

- ☐ Annexation
- ☐ Zoning
- ☐ Preliminary Subdivision Plat
- ■ Final Subdivision Plat
- ☐ Minor Subdivision Plat
- ☐ Preliminary Planned Unit Development (PUD)
- ☐ Final PUD
- ■ Amended PUD
- ☐ Administrative PUD Amendment
- ☐ Special Review Use (SRU)
- ☐ SRU Amendment
- ☐ SRU Administrative Review
- ☐ Temporary Use Permit: _____
- ☐ CMRS Facility: _____
- ■ Other: (easement / right-of-way; floodplain; variance; vested right; 1041 permit; oil / gas production permit)

I hereby request the public hearing(s) on this application be scheduled to be conducted by Electronic Participation in accordance with the attached Resolution No. 30, Series 2020, as adopted by the City Council on April 7, 2020, and in accordance with Resolution No. 38, Series 2020, as adopted by City Council on June 2, 2020 if such hearing(s) can be scheduled during a time period when in-person meetings are not being held due to a health epidemic or pandemic. I acknowledge that holding a quasi-judicial hearing by Electronic Participation may present certain legal risks and involves an area of legal uncertainty, and that having this application heard at a meeting held by Electronic Participation is optional and undertaken at my own risk. I also understand that in-person meetings are preferred for quasi-judicial hearings, and that even if electronic hearing(s) are scheduled, this application will be heard at an in-person meeting if in-person meetings have resumed by the scheduled hearing date(s). I further agree to defend and indemnify the City of Louisville in any action that may arise out of, or in connection with, conducting the hearing by Electronic Participation.

SIGNATURES & DATE

Applicant: _____
Print: Chad Kipfer - Ridgeline Development Corporation
Owner: _____
Print: _____
Representative: _____
Print: _____

CITY STAFF USE ONLY

- ☐ Electronic Hearing Approved: _____
- ☐ Date(s) of Hearing(s): _____

595

Ellie Hassan

From: Melissa Sherburne <melissa@uplandplanning.com>
Sent: Friday, June 24, 2022 9:11 AM
To: Chad Kipfer; Ellie Hassan
Cc: Joel Weikert; Michael Markel; Alex Garvert; Sam Coutts
Subject: Re: North End Block 11 - submittal+

Thank you Chad for the introduction. Ellie, great to meet you and I will be in touch soon to discuss the submittal and scheduling our PC hearing. If you need anything in the meantime, don't hesitate to reach out.

Best,

Melissa

Melissa Sherburne, AICP, LEED AP
melissa@uplandplanning.com
c: 970-222-3983

On Jun 24, 2022, at 7:51 AM, Chad Kipfer <Chad@MarkelHomes.com> wrote:

Hi Ellie:

Melissa Sherburne is going to be the Owner's Representative on this application starting today. I've copied her on this email and request that she be included on any future correspondence with this application. Thank you for all your help on this project!

Best,

Chad Kipfer | Vice President
Markel Homes Construction Company

t. 303.339.6116
e. chad@markelhomes.com
w. markelhomes.com

<image001.png>

From: Ellie Hassan <ehassan@louisvilleco.gov>
Sent: Thursday, June 23, 2022 3:09 PM
To: Joel Weikert <joel.weikert@ripleydesigninc.com>

City of Louisville
COLORADO • SINCE 1878

Department of Planning and Building Safety

749 Main Street • Louisville CO 80027 • 303.335.4592 • www.louisvilleco.gov

ELECTRONIC LAND USE HEARING REQUEST CASE NO. _____

APPLICANT INFORMATION

Firm: Ridgeline Development Corporation
Contact: Michael Markel, President
Address: _____
_____
Mailing Address: 5723 Arapahoe Ave. #2B
Boulder, CO 80303
Telephone: 303-449-8689
Fax: _____
Email: _____

OWNER INFORMATION

Firm: Ridgeline Development Corporation
Contact: Michael Markel, President
Address: _____
_____
Mailing Address: 5723 Arapahoe Ave. #2B
Boulder, CO 80303
Telephone: 303-449-8689
Fax: _____
Email: _____

REPRESENTATIVE INFORMATION

Firm: Ripley Design, Inc.
Contact: Joel Weikert
Address: _____
_____
Mailing Address: 419 Canyon Avenue, #200
Fort Collins, CO 80521
Telephone: 970-498-2994
Fax: _____
Email: joel.weikert@ripleydesigninc.com

PROPERTY INFORMATION

Common Address: 1501 South Boulder Road
Legal Description: Lot _____ Blk 11
Subdivision North End
Area: 198,508 Sq. Ft.

TYPE (S) OF APPLICATION

- ☐ Annexation
- ☐ Zoning
- ☐ Preliminary Subdivision Plat
- ☐ Final Subdivision Plat
- ☐ Minor Subdivision Plat
- ☐ Preliminary Planned Unit Development (PUD)
- ☐ Final PUD
- ☐ Amended PUD
- ☐ Administrative PUD Amendment
- ☐ Special Review Use (SRU)
- ☐ SRU Amendment
- ☐ SRU Administrative Review
- ☐ Temporary Use Permit: _____
- ☐ CMRS Facility: _____
- ■ Other: (easement / right-of-way; floodplain; variance; vested right; 1041 permit; oil / gas production permit) easement vacation

I hereby request the public hearing(s) on this application be scheduled to be conducted by Electronic Participation in accordance with the attached Resolution No. 30, Series 2020, as adopted by the City Council on April 7, 2020, and in accordance with Resolution No. 38, Series 2020, as adopted by City Council on June 2, 2020 if such hearing(s) can be scheduled during a time period when in-person meetings are not being held due to a health epidemic or pandemic. I acknowledge that holding a quasi-judicial hearing by Electronic Participation may present certain legal risks and involves an area of legal uncertainty, and that having this application heard at a meeting held by Electronic Participation is optional and undertaken at my own risk. I also understand that in-person meetings are preferred for quasi-judicial hearings, and that even if electronic hearing(s) are scheduled, this application will be heard at an in-person meeting if in-person meetings have resumed by the scheduled hearing date(s). I further agree to defend and indemnify the City of Louisville in any action that may arise out of, or in connection with, conducting the hearing by Electronic Participation.

SIGNATURES & DATE

Applicant: _____
Print: Michael Markel, Ridgeline Development Corporation
Owner: _____
Print: Michael Markel, Ridgeline Development Corporation
Representative: _____
Print: Joel Weikert, Ripley Design

CITY STAFF USE ONLY

- ☐ Electronic Hearing Approved: _____
- ☐ Date(s) of Hearing(s): _____

Markel Homes

Markel Homes Construction Company
5723 Arapahoe #2B
Boulder, CO 80303
303-449-8689/Fax: 303-444-2798

10 December 2021

Ellie Hassan
Planner II
City of Louisville
749 Main Street
Louisville, CO 80027

Re: North End Phase 2 – Amended Block 11 PUD, GDP and Plat
Response to September comments

Dear Ellie,

Please find enclosed our resubmittal of North End Block 11, Amended PUD, GDP and Final Plat. All items have been addressed on the plans and responded to in detail on the response letter. I wanted to touch on a couple items in this letter.

North End Architecture and Design
The North End subdivision was built and designed with a variety of single-family homes, duplexes, townhomes, and multistory buildings. The wonderful character of North End was created by building a diversity of architecture, colors, and forms through the neighborhood. North End Block 11 continues this process of design evolution and creates continuity with the existing neighborhood and transition to new commercial uses. The residential portion of Block 11 is a pedestrian streetscape that compliments the existing multistory buildings to the north and enhances the entry to North End from Hecla Way and South Boulder Road.

New PUD residential vs. Old PUD
The previous PUD had some detached townhouse style homes that were 3 story units. The proposed residential buildings are similar in floor plan design as 3 story units, but are designed in a condominium building, with a townhouse look. We feel this newer design is more in line with the character of North End townhome and condominium buildings across the street. The pedestrian character of units fronting Hecla way is desired and will compliment the existing neighborhood and transition to commercial uses.

We look forward to presenting this project and gaining your approval. Feel free to contact me if you have any questions or need additional information.

Sincerely,

Chad Kipfer

Markel Homes

Markel Homes Construction Company
5723 Arapahoe #2B
Boulder, CO 80303
303-449-8689/Fax: 303-444-2798

November 2, 2022

Ellie Hassan
Planner II
City of Louisville
749 Main Street
Louisville, CO 80027

RE: North End Phase 2—Amended Block 11 PUD and Replat, Waiver Request, Height

Dear Ellie,

We are requesting a waiver for max height to accommodate architectural diversity and building length. This request is being made because the Louisville Code measures building height from the average of the existing grade to the tallest point of the building, rather than the *true height* of the proposed building. As such, the elevations of the proposed residential and commercial buildings are not individually over 40'-0" in height, but only when taking the measurement from the average grade of the site.

The gable roof styles we are proposing are more striking and architecturally pleasing with a steeper roof slope. Measured individually, no unit breaks the 40' max height; but when you take the entire building, the average grade pushes a few tops of the gables over the 40'-0" height limit for Buildings 3, 13, 14, and 17. Minor code deficiencies range from 0'-5" to 2'-1" above the 40'-0" height limit.

The proposed architecture and site plan is consistent with the guidance of the Urban Pattern as described in the Louisville Comprehensive Plan – of which the North End Development is located in. This guidance includes smaller blocks and parcels, alley loaded properties, and multi-purpose development. Due to reduced block and parcel sizes, the best way to create usable square footage and a viable product is to increase the height of the buildings. At Markel Homes, we are design-driven and believe the architectural diversity and prominent gable roof styles will add a visually striking façade to the North End Block 11 Subdivision.

It is worth noting that the difference between a 40-foot building and a 42-foot building could be considered nominal and inconsequential to a pedestrian walking along Hecla Way as just the peak of the gable is protruding past the height limit and it doesn't affect the mass and scale of the building. Especially when considering that Buildings 12, 15, and 16 (also along Hecla Way) are compliant with building height as measured from average of existing grade. This is because the residential buildings requiring the height waiver (Buildings 13, 14 and 17) utilize a gable roof as part of the Farmhouse style of those buildings. We believe that the gable roof elements along Hecla help complement the neighborhood and further enrich the architectural character of North End.

Thank you for this opportunity to present this redevelopment plan. Please let us know if there is any additional information that may be required, or if you have any questions regarding this project.

Sincerely,

Michael Markel
President
Markel Homes

Jason Markel
Vice President
Markel Homes

Markel Homes

Markel Homes Construction Company
5723 Arapahoe #2B
Boulder, CO 80303
303-449-8689/Fax: 303-444-2798

October 4, 2022

Ellie Hassan
Planner II
City of Louisville
749 Main Street
Louisville, CO 80027

RE: North End Phase 2—Amended Block 11 PUD and Replat, Cash in Lieu for Affordable Housing Request

Dear Ellie,

Markel Homes has a strong track record of providing high quality and affordable homes in Boulder County since 1973. We take great pride in meeting the needs of a broad spectrum of homebuyers, across all price points and unit types. In this particular neighborhood, we designed North End around market homebuyers, with a mix of products to meet their diverse needs, so they can live and thrive in Louisville.

As such, we are submitting a request to exercise the Fee in Lieu option for Inclusionary Housing at North End Block 11, Amended PUD and Replat. Per **Chapter 17.76 - Inclusionary Housing**, **Sec. 17.76.050. - Options to satisfy requirements,** there are a number of reasons for us to pursue this direction. For reference, we want to first restate two portions of that section that pertain to our application.

B. *Fee in lieu.* A developer may pay a fee in lieu of providing affordable units.

1. *Amount.* The city council finds that studies performed by municipalities within the vicinity of the city reasonably calculates the impact to the city, including the city's finances and the welfare of the city's residents, of market-rate dwelling units being developed in the city. Accordingly, the fee in lieu is set initially at $9.24 per square foot of finished market-rate for-sale housing, and $4.72 per square foot of finished market-rate rental housing. The fee in lieu of providing any required fraction of a unit shall be pro-rated based on its proportional share (fractional quantity divided by total number of units required) of the amount of fee in lieu that would be required for the whole development. The City Manager shall periodically recalculate the fee in lieu and present the recalculation to the city council.

2. *Timing of payment.* A developer or builder shall pay the fee in lieu for each market-rate unit as a prerequisite for receiving the building permit for that unit. The fee paid shall be the fee in effect at the time of the submittal of a complete building permit application for the development, whichever is later.

H. *City council approval required.*

1. Developments seeking to use options other than on-site location of affordable housing must seek approval of their proposed use of such options from the city council. The city council's decision on such proposals is discretionary and legislative. *The city council will consider whether the proposal will result in more affordable housing, providing more of a benefit to the city, than would the provision of the affordable units on-site under subsection A of this section, whether practical difficulties prevent the inclusion of the affordable units on-site under subsection A of this section, whether the proposal would better benefit the inhabitants of the city than requiring the provision of affordable housing on-site, or any other factors that may be relevant to these considerations***.**

2. Exception to restrictions on placement of affordable housing in low to moderate income areas. The city

600

council may, in its discretion and as a legislative act, grant an exception to the restrictions of subsections C and D of this section on provision of off-site affordable housing and land dedication within low to moderate income areas. The city council will generally consider whether the placement of the required affordable housing in such areas would result in clustering of low-income housing in a way that would negatively impact the inhabitants of the area, the surrounding community, or the city as a whole, and whether positive elements of redevelopment or investment in the area outweigh any potential negative impacts.

3. The city manager shall recommend approval or denial of each proposal before the city council based on compliance with the applicable provisions of this chapter and adopted city policy.

Per the code sections outlined above, we believe that the Fee in Lieu option is the best option for this project for the following reasons:

1. **Timing and Previous Approvals:** North End Block 11 first amended PUD was recorded on 8/23/2017, with all residential units being market rate. Since we did not pull a building permit within 3 years of the PUD approval, no building permits could be issued without reapproving the PUD. We decided at that time to redesign the site and provide market rate townhomes instead of larger residential condominiums, an update that better reflects the current market needs.

2. **Design and Economic Feasibility:** This Block has been entitled, planned, and financed for years as market rate residential units. Inclusion of affordable units would have required this to be incorporated into the site plan, unit mix and proforma since the beginning. The cost of construction has increased dramatically in the last several years, making the inclusion of affordable housing even more challenging. There is a strong need for market rate units in Louisville, which we believe North End is best served to provide. Providing affordable units within this development would drive prices of market units higher, creating a negative impact to other homebuyers in this market segment.

3. **Investment will go further:** The Fee in Lieu will better serve Louisville by contributing to a future affordable housing development that is designed around that purpose. Affordable housing can be constructed at a greater volume and more affordably when done as a complete project, with subsidies and grants applied across the entire development. A Fee in lieu payment from North End will go further when applied to such a development, or to a housing program, than to individual units within North End.

For these reasons, we believe our proposal will result in more affordable housing, provide more of a benefit to the city than building units on-site, and that there are real practical difficulties that prevent us from including affordable units on-site, given the previous approvals and timing of these requirements. We appreciate your consideration and would be happy to discuss this at our upcoming hearings.

Sincerely,

Michael Markel
President
Markel Homes

Jason Markel
Vice President
Markel Homes

Land Title Guarantee Company
Customer Distribution

PREVENT FRAUD - Please remember to call a member of our closing team when initiating a wire transfer or providing wiring instructions.

Order Number: **F70737652-3** Date: **06/17/2022**

Property Address: **NORTH END, BLOCK 11, LOUISVILLE, CO 80027**

PLEASE CONTACT YOUR CLOSER OR CLOSER'S ASSISTANT FOR WIRE TRANSFER INSTRUCTIONS

For Closing Assistance

For Title Assistance
Land Title Builder Team
5975 GREENWOOD PLAZA BLVD
GREENWOOD VILLAGE, CO 80111
(303) 850-4134 (Work)
(303) 850-4188 (Work Fax)
builder@ltgc.com

Seller/Owner
MARKEL HOMES CONSTRUCTION COMPANY
Attention: CHAD KIPFER
Delivered via: Electronic Mail

LAND TITLE GUARANTEE COMPANY
Attention: TUCKER BROCK
2595 CANYON BLVD #340
BOULDER, CO 80302
(303) 859-3671 (Cell)
(303) 444-4101 (Work)
(303) 442-7913 (Work Fax)
tbrock@ltgc.com
Delivered via: Electronic Mail

Land Title Guarantee Company
Estimate of Title Fees

Order Number: **F70737652-3** Date: **06/17/2022**

Property Address: **NORTH END, BLOCK 11, LOUISVILLE, CO 80027**

Parties: **TO BE DETERMINED BUYER**

RIDGELINE DEVELOPMENT CORPORATION, A COLORADO CORPORATION

Visit Land Title's Website at **www.ltgc.com** for directions to any of our offices.

Estimate of Title insurance Fees	
"TBD" Commitment	$312.00
TBD - TBD Income	$-312.00
	Total $0.00
If Land Title Guarantee Company will be closing this transaction, the fees listed above will be collected at closing.	
Thank you for your order!	

Note: The documents linked in this commitment should be reviewed carefully. These documents, such as covenants conditions and restrictions, may affect the title, ownership and use of the property. You may wish to engage legal assistance in order to fully understand and be aware of the implications of the effect of these documents on your property.

Chain of Title Documents:

Boulder county recorded 01/31/2013 under reception no. 03286560

Boulder county recorded 01/31/2013 under reception no. 03286559

Boulder county recorded 01/31/2013 under reception no. 03286558

Boulder county recorded 01/24/2007 under reception no. 2831519

Boulder county recorded 01/24/2007 under reception no. 2831518

Plat Map(s):

Boulder county recorded 08/23/2017 under reception no. 3610767

ALTA COMMITMENT

Old Republic National Title Insurance Company

Schedule A

Order Number: F70737652-3

Property Address:

NORTH END, BLOCK 11, LOUISVILLE, CO 80027

1. **Effective Date:**

   06/02/2022 at 5:00 P.M.

2. **Policy to be Issued and Proposed Insured:**

   "TBD" Commitment $0.00
   Proposed Insured:
   TO BE DETERMINED BUYER

3. **The estate or interest in the land described or referred to in this Commitment and covered herein is:**

   A FEE SIMPLE

4. **Title to the estate or interest covered herein is at the effective date hereof vested in:**

   RIDGELINE DEVELOPMENT CORPORATION, A COLORADO CORPORATION

5. **The Land referred to in this Commitment is described as follows:**

   BLOCK 11, NORTH END BLOCK 11 REPLAT OF NORTH END PARCEL 1, OUTLOT H & OUTLOT K REPLAT, COUNTY OF BOULDER, STATE OF COLORADO.

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ALTA COMMITMENT

Old Republic National Title Insurance Company

Schedule B, Part I

(Requirements)

Order Number: F70737652-3

All of the following Requirements must be met:

This proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.

Pay the agreed amount for the estate or interest to be insured.

Pay the premiums, fees, and charges for the Policy to the Company.

Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.

1. PARTIAL RELEASE OF DEED OF TRUST DATED JANUARY 31, 2013, FROM RIDGELINE DEVELOPMENT CORPORATION, A COLORADO CORPORATION TO THE PUBLIC TRUSTEE OF BOULDER COUNTY FOR THE USE OF BANK OF AMERICA, N.A. TO SECURE THE SUM OF $4,260,000.00 RECORDED JANUARY 31, 2013, UNDER RECEPTION NO. **03286565**.

   DISBURSER'S NOTICE IN CONNECTION WITH SAID DEED OF TRUST WAS RECORDED JANUARY 31, 2013, UNDER RECEPTION NO. **03286566** AND RECORDED SEPTEMBER 5, 2013 UNDER RECEPTION NO. **03340496**.

2. WARRANTY DEED FROM RIDGELINE DEVELOPMENT CORPORATION, A COLORADO CORPORATION TO TO BE DETERMINED BUYER CONVEYING SUBJECT PROPERTY.

   NOTE: ADDITIONAL REQUIREMENTS OR EXCEPTIONS MAY BE NECESSARY WHEN THE BUYERS NAMES ARE ADDED TO THIS COMMITMENT. COVERAGES AND/OR CHARGES REFLECTED HEREIN, IF ANY, ARE SUBJECT TO CHANGE UPON RECEIPT OF THE CONTRACT TO BUY AND SELL REAL ESTATE AND ANY AMENDMENTS THERETO.

   NOTE: THIS COMMITMENT IS NOT A REPORT OR REPRESENTATION AS TO MINERAL INTERESTS, AND SHOULD NOT BE USED, OR RELIED UPON, IN CONNECTION WITH THE NOTICE REQUIREMENTS THAT ARE SET FORTH IN CRS 24-65.5-103.

ALTA COMMITMENT

Old Republic National Title Insurance Company

Schedule B, Part II

(Exceptions)

Order Number: F70737652-3

This commitment does not republish any covenants, condition, restriction, or limitation contained in any document referred to in this commitment to the extent that the specific covenant, conditions, restriction, or limitation violates state or federal law based on race, color, religion, sex, sexual orientation, gender identity, handicap, familial status, or national origin.

1. **Any facts, rights, interests, or claims thereof, not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.**
2. **Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.**
3. **Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.**
4. **Any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the Public Records.**
5. **Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date of the proposed insured acquires of record for value the estate or interest or mortgage thereon covered by this Commitment.**
6. **(a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.**
7. **(a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water.**
8. EXISTING LEASES AND TENANCIES.
9. TERMS, CONDITIONS, AND PROVISIONS OF RELINQUISHMENT AND DEED OF SURFACE ACCESS RIGHTS RECORDED MARCH 07, 2007 UNDER RECEPTION NO. **2840806**.
10. TERMS, CONDITIONS AND PROVISIONS OF NOTICE CONCERNING UNDERGROUND FACILITIES OF UNION RURAL ELECTRIC ASSOCIATION RECORDED OCTOBER 15, 1981 AT RECEPTION NO. **468375**.
11. TERMS, CONDITIONS AND PROVISIONS OF ANNEXATION AGREEMENT RECORDED JUNE 12, 1998 AT RECEPTION NO. **1812880**.
12. THE EFFECT OF FINAL PUD/DEVELOPMENT PLAN MAP RECORDED AUGUST 17, 2007, UNDER RECEPTION NO. **2876925**.
13. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN SUBDIVISION AGREEMENT RECORDED AUGUST 17, 2007 UNDER RECEPTION NO. **2876926**.

ALTA COMMITMENT

Old Republic National Title Insurance Company

Schedule B, Part II

(Exceptions)

Order Number: F70737652-3

14. RESTRICTIVE COVENANTS, WHICH DO NOT CONTAIN A FORFEITURE OR REVERTER CLAUSE, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS CONTAINED IN INSTRUMENT RECORDED JUNE 20, 2008, UNDER RECEPTION NO. **2938096**, AND AS AMENDED BY INSTRUMENT RECORDED JULY 18, 2008 UNDER RECEPTION NO. **2943951**, AND AS AMENDED IN INSTRUMENT RECORDED MARCH 9, 2016 UNDER RECEPTION NO. **03505295**.
15. TERMS, CONDITIONS, PROVISIONS, BURDENS, OBLIGATIONS AND EASEMENTS AS SET FORTH AND GRANTED IN EASEMENT DEED RECORDED AUGUST 22, 2008 UNDER RECEPTION NO. **2951013**.
16. THE EFFECT OF THE 2ND AMENDED GENERAL DEVELOPMENT PLAN ZONING - PCZD MAP RECORDED JANUARY 31, 2013, UNDER RECEPTION NO. **3286561**.
17. TERMS, CONDITIONS AND PROVISIONS OF SUBDIVISION AGREEMENT RECORDED JANUARY 31, 2013 AT RECEPTION NO. **3286564** AND FIRST AMENDMENT RECORDED MAY 2, 2014 UNDER RECEPTION NO. **3378081**.
18. TERMS, CONDITIONS, PROVISIONS, BURDENS, OBLIGATIONS AND EASEMENTS AS SET FORTH AND GRANTED IN EXCLUSIVE UTILITY EASEMENT CROSSING EASEMENT RECORDED JANUARY 31, 2014 UNDER RECEPTION NO. **3364299**.
19. TERMS, CONDITIONS AND PROVISIONS OF MAINTENANCE AGREEMENT RECORDED DECEMBER 03, 2014 AT RECEPTION NO. **3415949**.
20. TERMS, CONDITIONS AND PROVISIONS OF NORTH END 3RD AMENDED GDP RECORDED AUGUST 23, 2017 UNDER RECEPTION NO. **03610766**.
21. EASEMENTS, CONDITIONS, COVENANTS, RESTRICTIONS, RESERVATIONS AND NOTES ON THE PLAT OF NORTH END, BLOCK 11-REPLAT OF NORTH END PARCEL 1, OUTLOT H & OUTLOT K REPLAT RECORDED AUGUST 23, 2017 UNDER RECEPTION NO. **03610767**.
22. TERMS, CONDITIONS AND PROVISIONS OF NORTH END MARKET 1ST AMENDED BLOCK 11 PUD RECORDED AUGUST 23, 2017 UNDER RECEPTION NO. **03610768**.
23. TERMS, CONDITIONS AND PROVISIONS OF NORTH END MARKET SUBDIVISION AGREEMENT RECORDED AUGUST 23, 2017 UNDER RECEPTION NO. **03610770**.

LAND TITLE GUARANTEE COMPANY
DISCLOSURE STATEMENTS

Note: Pursuant to CRS 10-11-122, notice is hereby given that:

(A) The Subject real property may be located in a special taxing district.

(B) A certificate of taxes due listing each taxing jurisdiction will be obtained from the county treasurer of the county in which the real property is located or that county treasurer's authorized agent unless the proposed insured provides written instructions to the contrary. (for an Owner's Policy of Title Insurance pertaining to a sale of residential real property).

(C) The information regarding special districts and the boundaries of such districts may be obtained from the Board of County Commissioners, the County Clerk and Recorder, or the County Assessor.

Note: Effective September 1, 1997, CRS 30-10-406 requires that all documents received for recording or filing in the clerk and recorder's office shall contain a top margin of at least one inch and a left, right and bottom margin of at least one half of an inch. The clerk and recorder may refuse to record or file any document that does not conform, except that, the requirement for the top margin shall not apply to documents using forms on which space is provided for recording or filing information at the top margin of the document.

Note: Colorado Division of Insurance Regulations 8-1-2 requires that "Every title entity shall be responsible for all matters which appear of record prior to the time of recording whenever the title entity conducts the closing and is responsible for recording or filing of legal documents resulting from the transaction which was closed". Provided that Land Title Guarantee Company conducts the closing of the insured transaction and is responsible for recording the legal documents from the transaction, exception number 5 will not appear on the Owner's Title Policy and the Lenders Policy when issued.

Note: Affirmative mechanic's lien protection for the Owner may be available (typically by deletion of Exception no. 4 of Schedule B, Section 2 of the Commitment from the Owner's Policy to be issued) upon compliance with the following conditions:

(A) The land described in Schedule A of this commitment must be a single family residence which includes a condominium or townhouse unit.

(B) No labor or materials have been furnished by mechanics or material-men for purposes of construction on the land described in Schedule A of this Commitment within the past 6 months.

(C) The Company must receive an appropriate affidavit indemnifying the Company against un-filed mechanic's and material-men's liens.

(D) The Company must receive payment of the appropriate premium.

(E) If there has been construction, improvements or major repairs undertaken on the property to be purchased within six months prior to the Date of Commitment, the requirements to obtain coverage for unrecorded liens will include: disclosure of certain construction information; financial information as to the seller, the builder and or the contractor; payment of the appropriate premium fully executed Indemnity Agreements satisfactory to the company, and, any additional requirements as may be necessary after an examination of the aforesaid information by the Company.

No coverage will be given under any circumstances for labor or material for which the insured has contracted for or agreed to pay.

Note: Pursuant to CRS 10-11-123, notice is hereby given:

This notice applies to owner's policy commitments disclosing that a mineral estate has been severed from the surface estate, in Schedule B-2.

(A) That there is recorded evidence that a mineral estate has been severed, leased, or otherwise conveyed from the surface estate and that there is substantial likelihood that a third party holds some or all interest in oil, gas, other minerals, or geothermal energy in the property; and

(B) That such mineral estate may include the right to enter and use the property without the surface owner's permission.

Note: Pursuant to CRS 10-1-128(6)(a), It is unlawful to knowingly provide false, incomplete, or misleading facts or information to an insurance company for the purpose of defrauding or attempting to defraud the company. Penalties may include imprisonment, fines, denial of insurance, and civil damages. Any insurance company or agent of an insurance company who knowingly provides false, incomplete, or misleading facts or information to a policyholder or claimant for the purpose of defrauding or attempting to defraud the policyholder or claimant with regard to a settlement or award payable from insurance proceeds shall be reported to the Colorado Division of Insurance within the Department of Regulatory Agencies.

Note: Pursuant to Colorado Division of Insurance Regulations 8-1-3, notice is hereby given of the availability of a closing protection letter for the lender, purchaser, lessee or seller in connection with this transaction.

Note: Pursuant to CRS 10-1-11(4)(a)(1), Colorado notaries may remotely notarize real estate deeds and other documents using real-time audio-video communication technology. You may choose not to use remote notarization for any document.

JOINT NOTICE OF PRIVACY POLICY OF LAND TITLE GUARANTEE COMPANY, LAND TITLE GUARANTEE COMPANY OF SUMMIT COUNTY LAND TITLE INSURANCE CORPORATION AND OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY

This Statement is provided to you as a customer of Land Title Guarantee Company as agent for Land Title Insurance Corporation and Old Republic National Title Insurance Company.

We want you to know that we recognize and respect your privacy expectations and the requirements of federal and state privacy laws. Information security is one of our highest priorities. We recognize that maintaining your trust and confidence is the bedrock of our business. We maintain and regularly review internal and external safeguards against unauthorized access to your non-public personal information ("Personal Information").

In the course of our business, we may collect Personal Information about you from:

- applications or other forms we receive from you, including communications sent through TMX, our web-based transaction management system;
- your transactions with, or from the services being performed by us, our affiliates, or others;
- a consumer reporting agency, if such information is provided to us in connection with your transaction;

  and
- The public records maintained by governmental entities that we obtain either directly from those entities, or from our affiliates and non-affiliates.

Our policies regarding the protection of the confidentiality and security of your Personal Information are as follows:

- We restrict access to all Personal Information about you to those employees who need to know that information in order to provide products and services to you.
- We may share your Personal Information with affiliated contractors or service providers who provide services in the course of our business, but only to the extent necessary for these providers to perform their services and to provide these services to you as may be required by your transaction.
- We maintain physical, electronic and procedural safeguards that comply with federal standards to protect your Personal Information from unauthorized access or intrusion.
- Employees who violate our strict policies and procedures regarding privacy are subject to disciplinary action.
- We regularly assess security standards and procedures to protect against unauthorized access to Personal Information.

WE DO NOT DISCLOSE ANY PERSONAL INFORMATION ABOUT YOU WITH ANYONE FOR ANY PURPOSE THAT IS NOT STATED ABOVE OR PERMITTED BY LAW.

Consistent with applicable privacy laws, there are some situations in which Personal Information may be disclosed. We may disclose your Personal Information when you direct or give us permission; when we are required by law to do so, for example, if we are served a subpoena; or when we suspect fraudulent or criminal activities. We also may disclose your Personal Information when otherwise permitted by applicable privacy laws such as, for example, when disclosure is needed to enforce our rights arising out of any agreement, transaction or relationship with you.

Our policy regarding dispute resolution is as follows: Any controversy or claim arising out of or relating to our privacy policy, or the breach thereof, shall be settled by arbitration in accordance with the rules of the American Arbitration Association, and judgment upon the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof.

Commitment For Title Insurance

Issued by Old Republic National Title Insurance Company

NOTICE

IMPORTANT—READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON. .

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and the Commitment Conditions, Old Republic National Title Insurance Company, a Minnesota corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured. If all of the Schedule B, Part I—Requirements have not been met within 6 months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

COMMITMENT CONDITIONS

1. DEFINITIONS
   (a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
   (b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
   (c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
   (d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
   (e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
   (f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
   (g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
   (h) "Title": The estate or interest described in Schedule A.

2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:
   (a) the Notice;
   (b) the Commitment to Issue Policy;
   (c) the Commitment Conditions;
   (d) Schedule A;
   (e) Schedule B, Part I—Requirements; and
   (f) Schedule B, Part II—Exceptions; and
   (g) a counter-signature by the Company or its issuing agent that may be in electronic form.

4. **COMPANY'S RIGHT TO AMEND**

   The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. **LIMITATIONS OF LIABILITY**
   (a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
      i. comply with the Schedule B, Part I—Requirements;
      ii. eliminate, with the Company's written consent, any Schedule B, Part II—Exceptions; or
      iii. acquire the Title or create the Mortgage covered by this Commitment.
   (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
   (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
   (d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
   (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.

(f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
(g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

6. **LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT**
   (a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
   (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
   (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
   (d) The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
   (e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
   (f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. **IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT**

   The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

8. **PRO-FORMA POLICY**

   The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. **ARBITRATION**

   The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is $2,000,000 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at http://www.alta.org/arbitration.

IN WITNESS WHEREOF, Land Title Insurance Corporation has caused its corporate name and seal to be affixed by its duly authorized officers on the date shown in Schedule A to be valid when countersigned by a validating officer or other authorized signatory.

Issued by:
Land Title Guarantee Company
3033 East First Avenue Suite 600
Denver, Colorado 80206
303-321-1880

Craig B. Rants, Senior Vice President

OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
A Stock Company
400 Second Avenue South, Minneapolis, Minnesota 55401
(612) 371-1111

By _____ President
Attest _____ Secretary

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Old Republic National Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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FINAL DRAINAGE REPORT

NORTH END, BLOCK 11,
SECOND REPLAT OF NORTH END PARCEL 1,
OUTLOT A AND OUTLOT K REPLAT

Louisville, Colorado

Initial Submittal:	23-June-2021
Revised:	10-December-2021
Revised:	17-June-2022
Revised:	10-August-2022

Prepared for:
Chad Kipfer
Ridgeline Development Corp.
5273 Arapahoe Ave, #200
Boulder, CO 80303
303.449.8689

Prepared by:
Marc Dolezal, P.E.
MPD Engineering
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Boulder, CO 80304
303.845.0555

MPD Project Number: 1915

MPD

ENGINEERING

August 10, 2022

City of Louisville
749 Main Street
Louisville, CO 80027

Attention: Public Works Engineering Department

Subject: **Project Drainage Review – North End, Block 11, Second Replat of North End Parcel 1, Outlot A and Outlot K Replat**
Proposed Site Development of Commercial/Mixed Use Projects
MPD Project Number 1915

Reference is made to:

1. Project Drainage Review – North End Block 11, Filing 2, Proposed Site Development of Commercial/Mixed Use Project, prepared by JLB Engineering Consultants, dated October 5, 2015
2. PUD for North End Block 11, Filing Number 2, Drainage Plan, prepared by JLB Engineering Consultants, dated October 5, 2015
3. Final Drainage Report, North End – Replat of Parcel 1, prepared by JLB Engineering Consultants, dated November 5, 2011

MPD Engineering is pleased to present our summary and findings regarding the drainage from a proposed mixed-use project on the subject lot. This lot (block) is located within the re-plat area of North End Filing 2 and is 4.57 acres in size. Of this 4.57 acres, approximately 0.5 acres contains the outfall drainage swale along S. Boulder Road and is not available for development. A drainage review was previously submitted by JLB Engineering Consultants as referenced. The review was based on the contemplated site plan at the time. Through the PUD process, the site plan was revised to accommodate land uses more compatible with the City's area plan. The result of this amendment is the site plan now has less pervious area and more impervious area than previously planned, however drainage patterns and concepts remain unchanged.

Reference item 1 is attached for details and discussion regarding drainage patterns, proposed systems and related items. As this site plan carries the same drainage patterns and paths, with lower impervious values, the calculations in the previous study yield slightly conservative results than the current site plan and results in less impact to the drainage facilities on the site and in the subdivision. For the purpose of the PUD, we have not revised those calculations.

A new inlet (Inlet C10) will be installed at the east end of the drive in Lot 2. The flow into this inlet is limited by the existing 12" RCP pipe from Ex Inlet C3. Per an email dated 10-15-21 from Craig Duffin, the city will accept any excess flow above the 12" RCP's capacity to

overflow the curb at Inlet C10 and flow to the street which drains to an existing inlet. The existing Inlet C-9 will be removed. Proposed 12" yard inlet (Inlet C-11) will just serve to allow the bend in the 12" PVC.

Below is the summary of amendment and changes in the site areas for reference:

Block 11 is 4.572 acres as platted. The original and revised site plan breakdown of surfaces is as follows:

	Prior Plan	Proposed Plan
Building Roofs:	62,158 sf	50,110 sf
Parking, Drives & Walks:	81,543 sf	99,828 sf
Landscape:	55,456 sf	49,219 sf

The corresponding data for Basin D4 from the Master Drainage Study (the primary site basin for this project) vs. the proposed plan is summarized below:

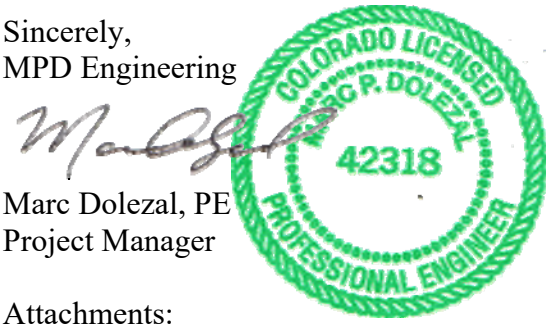
Runoff Coeff.	Master Drainage Study	Proposed Plan
C5	0.87	0.73
C100	0.93	0.85

Based on these values, the runoff coefficients and imperviousness for this proposed site are less than those expected from the Master Drainage Study.

In conclusion, the proposed amendment to the PUD site plan for North End Block 11, Second Replat is in general accordance with the Master Drainage Study for the North End Re-plat of Parcel 1 as referenced. The development of this site in accordance with that plan will not impact the drainage design for the overall project. Please refer to the previous letter and current drainage map attached. The attached Master Drainage Plan for this development depicts the basins as they are currently proposed.

Please do not hesitate to call should you have any questions or comments.

Sincerely,
MPD Engineering



Marc Dolezal, PE
Project Manager

Attachments:

- Calculations
- Project Drainage Review – North End Block 11, Filing 2, October 5, 2015
- Master Drainage Plan for North End, Block 11, Second Replat

Professional Engineers
Civil Engineering

October 5, 2015

City of Louisville
749 Main Street
Louisville, CO 80027

Attention: Public Works Engineering Department

Subject: **Project Drainage Review – North End Block 11, Filing 2**
Proposed Site Development of Commercial/Mixed Use Projects
JLB Project Number 1425

Reference is made to:

1. PUD for North End Block 11, Filing Number 2, Drainage Plan, dated October 5, 2015

2. Final Drainage Report, North End – Replat of Parcel 1, prepared by JLB Engineering Consultants, dated November 5, 2011

To Whom It May Concern:

JLB Engineering Consultants is pleased to present our summary and findings regarding the drainage from a proposed mixed use project on the subject lot. This lot (block) is located within the re-plat area of North End Filing 2 and is 4.57 acres in size. Of this 4.57 acres, approximately 0.5 acres contains the outfall drainage swale along S. Boulder Road and is not available for development. This drainage memo addresses the potential impact of the proposed development on Block 11 with respect to the original drainage report approved for the overall project.

This block is located in the southern end of the North End development and is adjacent to S. Boulder Road on the south, Blue Star Lane on the east, Hecla Drive on the north and the existing Louisville Plaza commercial development on the west. All surrounding areas are fully developed with infrastructure and buildings. The subdivision provided for the drainage outfall and conveyance connections and those amenities were accepted for beneficial use by the City. The subdivision process included the installation of infrastructure surrounding and within the block.

The primary drainage infrastructure installed as it relates to this site is the regional detention facility east of the project, the storm drain system stubbed into this site and the adjacent drainage

swale along the south side of the lot, in an easement. The subdivision installed a 30" RCP drainage pipe from Blue Star Lane stubbed into the east side of this site to accept runoff from all regulatory storm events. This RCP is the outfall for the site. The natural grade of the site is from west to east and is supported very well by the outfall location.

The proposed development includes several stand-alone buildings spread through the site of various sizes and use; associated parking areas, access drives and other hardscape amenities such as walks and patios; and landscape areas. Based on the PUD site plan provided, we have calculated the areas of improvements divided into Buildings (roofs), walks and drives and landscape areas. These features are depicted in the background of the included plans. For the purposes of this study, we are determining characteristics and the extent of impacts of the drainage from the overall block. A detailed drainage study will be necessary to finalize inlet and collection points, roof drain sizing, parking garage drainage and treatments and connections to systems.

There are four drainage basins covering this block, Basin SC2, SC3, D4 and D5. In addition, basin OS1 is tributary to the west side of the site from Louisville Plaza and will pass through this site as anticipated in the Master Drainage Study. The primary basin for this site is D4. Basin D5 is the area to the north and Hecla Drive, however a small part of this site was anticipated to drain to Hecla Drive from the sidewalks and landscape areas in front of buildings. Basins SC2 and SC3 are the outfall channel located in an easement along the south side of the site and covey off site runoff to the east and were accounted for in the master drainage study and do not need to be further addressed with this plan.

Basin D4 is tributary to an existing outfall storm drain system. The outfall storm drain system extends into the site near the east-central property line from Blue Star Lane and as noted above is a 30" RCP storm drain. This system will be extended into the site and capture/convey runoff from the site to the existing detention pond east of Blue Star. This detention pond was previously certified and accepted by the City. At some point, the storm drain system will be considered a private improvement, that location needing to be determined through the development plan and agreement process.

Block 11 is 4.572 acres as platted. The proposed site plan breakdown of surfaces is as follows:

Building Roofs:	62,158 sf
Parking and Drives:	81,543 sf
Landscape:	55,456 sf

Based on this surface area, the average runoff coefficients for the site and percentage of imperviousness is as follows:

B11								
		(ac)					(%)	
Design Point	Surface Improvement	Area	2	5	10	100	I	Comments
Site								
	Lawns, Clay	1.27	0.10	0.20	0.30	0.60	0.00	27.8%
	Roofs	1.43	0.80	0.85	0.90	0.90	90.00	31.2%
	Drives/Walks	1.87	0.85	0.87	0.90	0.92	96.00	40.9%
	Avg.		0.63	0.68	0.73	0.82	67.40	100.0%
	Total Area	**4.57**			Avg. % Imperviousness		**68**	

As noted above, basins SC2 and SC3 are accounted for with the overall drainage study for North End and the improvements for that subdivision. When removing those basins from this analysis, the ensuing runoff coefficients and percentage of imperviousness for comparison to the Block 11 site basin as anticipated in the master drainage study is as follows:

B11 Less SC2 and SC3								
		(ac)					(%)	
Design Point	Surface Improvement	Area	2	5	10	100	I	Comments
Site								
	Lawns, Clay	0.74	0.10	0.20	0.30	0.60	0.00	18.4%
	Roofs	1.43	0.80	0.85	0.90	0.90	90.00	35.3%
	Drives/Walks	1.87	0.85	0.87	0.90	0.92	96.00	46.3%
	Avg.		0.69	0.74	0.79	0.85	76.23	100.0%
	Total Area	**4.04**			Avg. % Imperviousness		**77**	

The corresponding data for Basin D4 from the master drainage study, the primary site basin for this project, is:

C5 = 0.87
C100 = 0.93

Based on these values, the runoff coefficients for this proposed site plan are quite a bit less than those expected from the master drainage study.

The time of concentration for primary basin D4 was calculated based on the site plan. Overland flow begins in the northwest area of the site and conveys as sheet flow to the new parking lot south of Building 1. From there, it travels as shallow flow in curbs and gutters to the proposed drainage system on site, and then is collected in pipes that connect to the existing 30" RCP storm drain stub into the site. The time of concentration for the site is now 7.6 minutes versus 7.3

minutes per the master drainage study, therefore the rainfall intensity from the site is lower than the master drainage study.

				RURAL OR NON URBANIZED											
	SUB-BASIN DATA			INITIAL/OVERLAND TIME (ti)			TRAVEL TIME (tc)					tc CHECK (URBANIZED)		FINAL tc	REMARKS
7	D4	0.74	4.13	110	4	4.3	570	2.2	2.9	3.3					
							180	1.1	6	0.5	7.6	860.0	14.8	7.6	Comml Parcel to Storm System C

Given that the time of concentration is longer, resulting in lower intensities and the runoff coefficients are lower, the resulting rational calculations will yield less runoff than anticipated in the master drainage study. The runoff rates for the proposed site are as follows:

D4	4.04	2	0.69	2.95	8.3
7	7.6	5	0.74	4.16	12.4
		10	0.79	5.15	16.4
		100	0.85	8.08	27.9

Runoff rates from the master drainage study were as follows:

D4	4.13	2	0.87	3.02	10.9
7	7.3	5	0.88	4.22	15.3
		10	0.90	5.25	19.5
		100	0.93	8.22	31.6

The minor variation in tributary surface area from 4.13 acres down to 4.04 acres tributary is due to a landscape grass buffer area that will remain along the north side of the adjacent outfall channel, south of the proposed parking lot. This 0.09 acres of landscape area will drain into the existing channel on the south side of the site. The runoff from this small area has a 5 minute time of concentration and the peak of the flow of 0.5 cfs. This increases the flow rate in the channel at that site basin time of concentration from 0.4 cfs to 0.9 cfs but will not change the peak of the flow running through the channel, which has a peak runoff time of 60 minutes and a flow rate of 107 cfs as per the master drainage study as the basin will not contribute runoff at the 60 minute time slot. Additionally, the volume of water in the channel provides for sufficient storage and attenuation of this small additional flow and when adding this release to the developed basin site runoff, is still less than the runoff rates anticipated in the master drainage study.

On the north side of the site, the tributary basin to Hecla Drive changes slightly in shape and constituency. The tributary basin to Hecla Drive will be more landscape than hardscape, thus lessening the impact to that basin D5 as well.

In conclusion, the proposed PUD site plan for Block 11, North End Filing 2 is in general accordance with the Master Drainage Study for the North End Re-plat of Parcel 1 as referenced. The development of this site in accordance with that plan will not impact the drainage design for the overall project. Please refer to the various attachments and drainage drawing that depict the

revised calculations and site plan. A detailed drainage study for pipe sizing, roof drains and outfall systems will be required with final construction drawings. The attached Master Drainage Plan for this development depicts the basins as they are currently contemplated and will be updated and calculated with the final plan and report.

Respectfully Submitted,
JLB Engineering Consultants

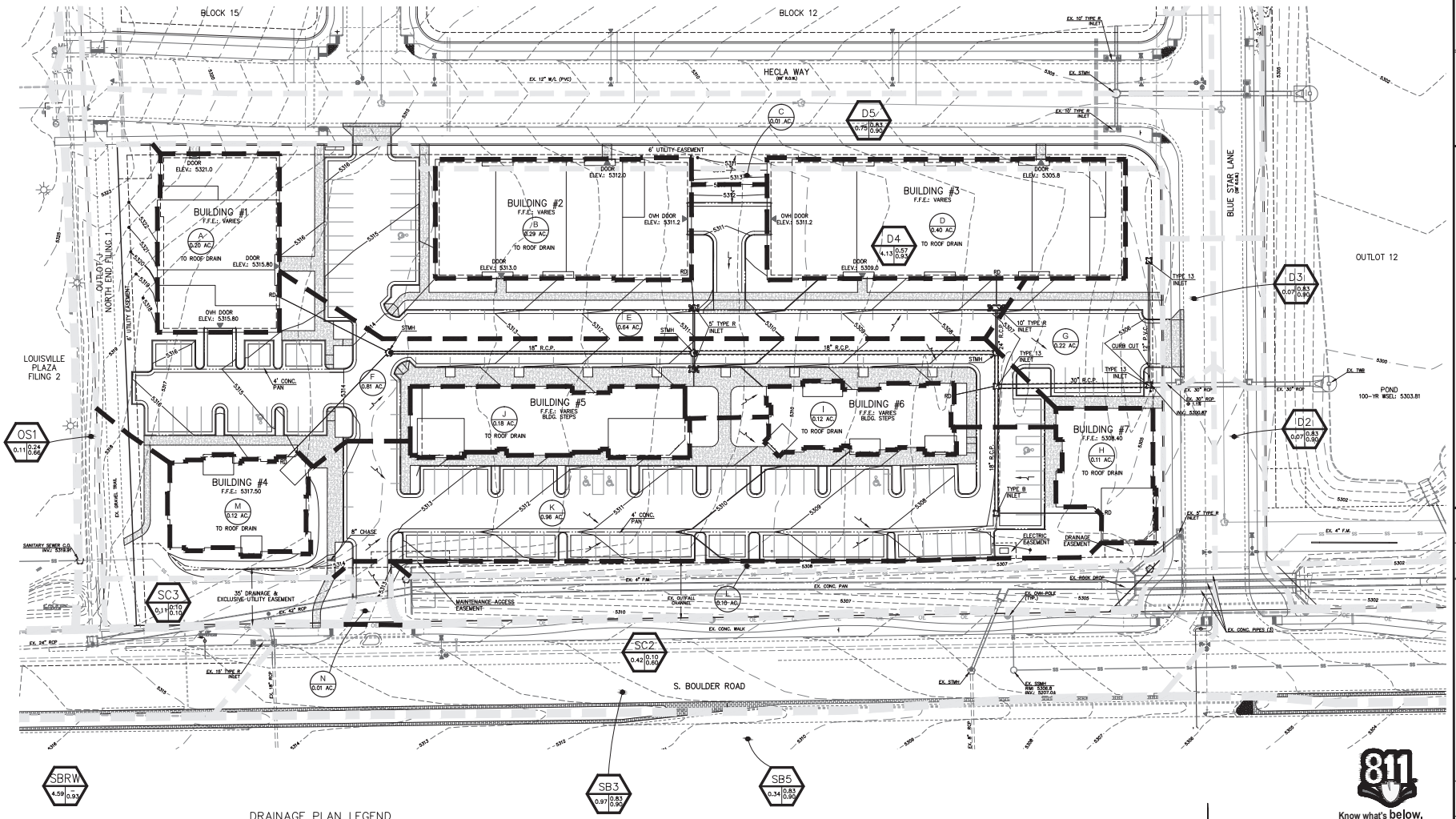
10/5/15

James Blankenship, P.E.
Project Manager

Attachments:

- Drainage Plan for Block 11, North End 2

MASTER DRAINAGE PLAN - BLOCK 11 FILING 2



DRAINAGE PLAN LEGEND

BASIN BOUNDARY — HISTORIC / PROPOSED
CONTOURS (1') (EX.) 5800 (PROP.) 5800
10-YEAR WSEL — 10-WS
100-YEAR WSEL — 100WS
PROP. STORMLINE
FLOW DIRECTION

DESIGN POINT
MAJOR SITE DRAINAGE BASIN — BASIN 1, AREA (Ac.) H 1.5 0.25 0.65, C2 AND C100
MINOR SITE DRAINAGE BASIN — BASIN A, AREA (Ac.) .53

Know what's below. Call before you dig.

NORTH END PARCEL I REPLAT
PLANNED DEVELOPMENT

SITUATED IN THESOUTHWEST ONE QUARTER OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

4.57 ACRES MORE OR LESS

1"=30'
30 0 30 60
scale feet

CITY OF LOUISVILLE APPROVAL

By: _____
Date: _____
Document Approval Expires: _____

This document was reviewed for conformance with City of Louisville Design and Construction Standards. City approval does not relieve owners, design engineer, or contractor of responsibility to correct errors or omissions relating to this document.

JLB Civil Engineers
745 PEAR COURT
LOUISVILLE, COLORADO 80027
PHONE: 303.604.1634
FAX: 303.604.1674

COLORADO REGISTERED JAMES LEE BUMGARDNER 30736 10/3/2014 PROFESSIONAL ENGINEER

PUBLIC IMPROVEMENTS, GRADING AND EROSION CONTROL
PHASE 2, NORTH END FILING 2, BLOCK 11
MASTER DRAINAGE PLAN
LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 NORTH, RANGE 69 WEST
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

DATE	BY	REVISION/ISSUE	APP'V	DATE

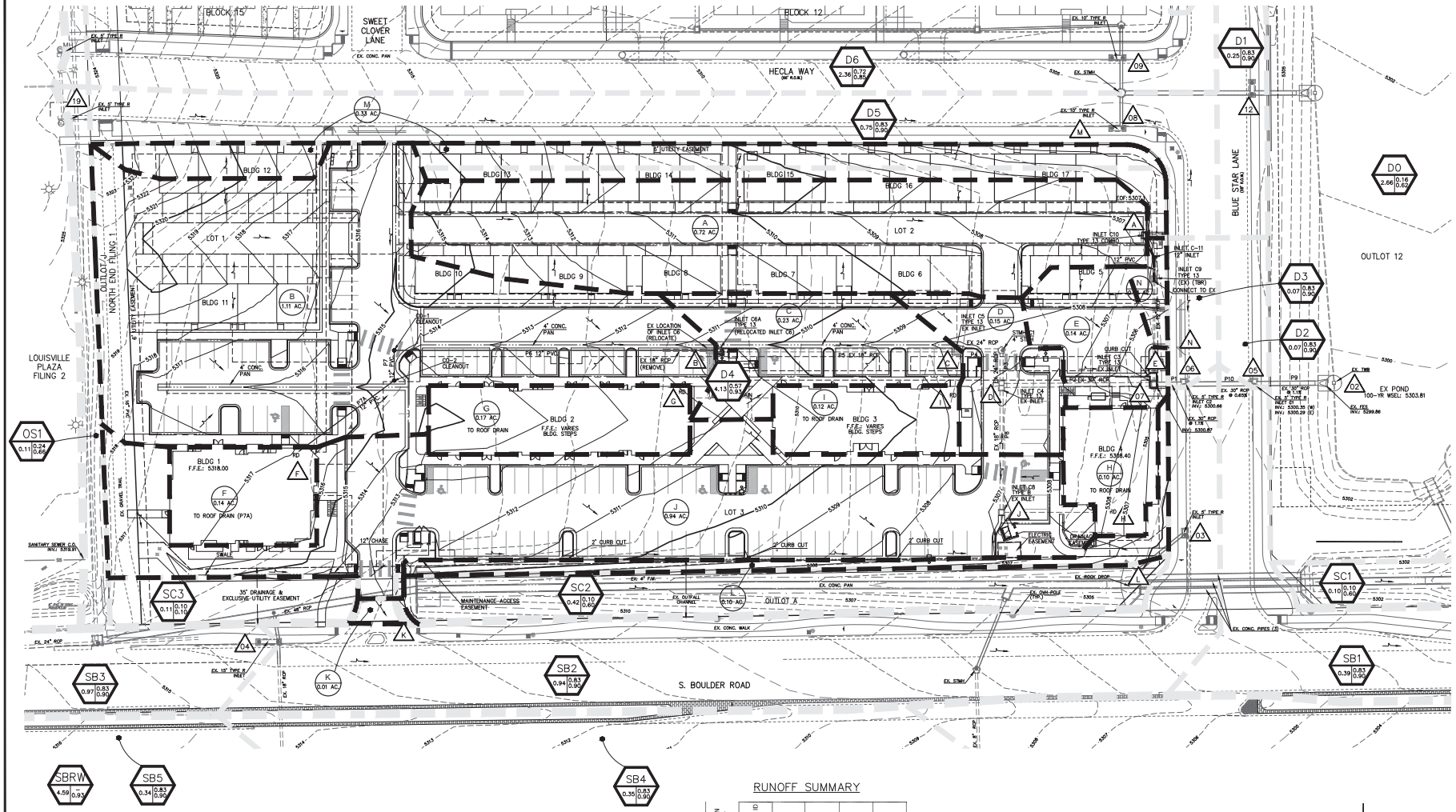
© JLB ENGINEERING CONSULTANTS

Design JLB	Drawn DSS
Checked JLB	Checked JLB
Date OCTOBER 2, 2015	
Job No. 1425	
D- 1425.1	

SHEET 1 OF 1 SHEETS

621

MASTER DRAINAGE PLAN - NORTH END BLOCK 11, SECOND REPLAT



DRAINAGE PLAN LEGEND

BASIN BOUNDARY — HISTORIC / PROPOSED

CONTOURS (1') (EX.) 5800 / (PROP.) 5800

10-YEAR WSEL 10 WS

100-YEAR WSEL 100WS

PROP. STORMLINE FLOW DIRECTION

MAJOR SITE DRAINAGE BASIN — BASIN: H; 1.5 | 0.25 | 0.65; AREA (Ac.); C2 AND C100

MAJOR SITE DESIGN POINT: 01

MINOR SITE DRAINAGE BASIN — BASIN: A; 0.36; AREA (Ac.)

MINOR SITE DESIGN POINT: A

RUNOFF SUMMARY

DESIGN POINT	BASIN ID	AREA (AC)	Q2 (CFS)	Q10 (CFS)	Q100 (CFS)
A	A	0.72	1.79	3.50	5.92
B	B	1.11	2.49	4.94	8.81
C	C	0.23	0.57	1.09	1.88
D	D	0.15	0.38	0.73	1.26
E	E	0.14	0.33	0.65	1.14
F	F	0.14	0.36	0.71	1.14
G	G	0.17	0.45	0.89	1.43
H	H	0.10	0.27	0.53	0.86
I	I	0.12	0.32	0.63	1.02
J	J	0.94	2.20	4.29	7.58
K	K	0.01	0.03	0.05	0.09
L	L	0.11	0.05	0.21	0.62
M	M	0.33	0.60	1.31	2.46
N	N	0.03	0.05	0.10	0.19

1"=30' scale: 30 0 30 60 feet

MPD ENGINEERING
1550 QUINCE AVE.
BOULDER, CO 80304
PHONE: 303.498.9224
marc@mpd-engineering.com

COLORADO REGISTERED PROFESSIONAL ENGINEER — MARC P. DRISCOLL — 42318 — 8/10/22

NORTH END, BLOCK 11, SECOND REPLAT OF NORTH END PARCEL 1, OUTLOT A AND OUTLOT K REPLAT

MASTER DRAINAGE PLAN

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 1 SOUTH, RANGE 69 WEST
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

DATE	BY	REVISION/ISSUE
12/10/21	MPD	PER CITY COMMENTS 9-23-21
6/17/22	MPD	PER CITY COMMENTS 3-1-22
8/10/22	MPD	PER CITY COMMENTS 7-21-22

Design MPD Drawn DSS
Checked MPD Approx MPD
Date JUNE 23, 2021
Job No. 1915
D- 1915.1

SHEET MDP

1 OF SHEETS

622

MELVILLE TANDEM™

FREESTANDING & RETAINING WALL

MULTIPLE SIZES ALLOW FOR A SEAMLESS CONNECTION BETWEEN UNITS.

BELGARD
PAVES THE WAY





MELVILLE TANDEM™

FREESTANDING & RETAINING WALL

MULTIPLE SIZES ALLOW FOR A SEAMLESS CONNECTION BETWEEN UNITS.

FEATURES & BENEFITS

- Contemporary smooth face with natural stone color blends
- Versatile and easy to install
- Ideal for curved or straight walls, fire and water features, and outdoor kitchens
- System designed to allow for easy installation of plumbing and wiring
- Engineered 90° corners create a clean look and eliminate cutting
- Cap with Tandem or Laguna Universal
- Tandem Modular Block allows for easy installation of walls, columns, stairs and custom outdoor living projects

AVAILABLE COLORS



DARK CHARCOAL



RIO

SHAPES & SIZES

UNIT 1



7 x 13 13/16 x 2 5/8

UNIT 2



7 x 15 13/16 x 2 5/8

UNIT 3



7 x 18 7/16 x 2 5/8

MODULAR BLOCK UNIT



7 1/16 x 7 7/8 x 7 7/8

UNIVERSAL CONNECTOR* (Sold Separately)



8" CONNECTOR (Sold Separately)



TANDEM CAP



3 1/4 x 24 x 15

LAGUNA CAP



3 1/8 x 14 3/16 x 23 5/8

**Universal Connector is use for the Tandem Modular Block*

BELGARD® | PAVES THE WAY™

For more info, visit Belgard.com

AMCOR
333 S. Redwood Road
North Salt Lake, UT 84054
(800) 800-4004

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MELVILLE™ PLANK

metromaxtex

Melville Plank offers a smooth face and clean lines to create a stylish, contemporary look with classic appeal. It can be used alone or to add accents or borders to a variety of paver designs.

Not intended for vehicular use.

*All colors and/or products may not be available in all areas. Please inquire for availability and special order options.

COLORS



APPLICATIONS

PRICING

$



This product was featured in the HGTV® Dream Home 2020.

Belgard is proud to be the exclusive hardscape sponsor of the HGTV® Dream Home since 2016. From stunning driveways to gourmet outdoor kitchens and cozy fire pit patios, our dream outdoor spaces have added flare and functionality to each home.

LEARN MORE →

SPECS | TECHNICAL INFORMATION



Melville™ Plank - Slim
5 x 11 13/16 x 3 1/8
5 x 15 3/4 x 3 1/8
5 x 19 11/16 x 3 1/8



Melville™ Plank - Large
7 1/2 x 11 13/16 x 3 1/8
7 1/2 x 15 3/4 x 3 1/8
7 1/2 x 19 11/16 x 3 1/8









CATALINA™ SLATE

features

Catalina Slate™ offers the same modular design flexibility of our Catalina pavers, but with the textured finish of natural slate. The three-piece system offers a multitude of laying patterns and is ideal for walkways, patios, and residential driveways.

*All colors and/or products may not be available in all areas. Please inquire for availability and special order options.

COLORS



APPLICATIONS

PRICING

$$

SPECS | TECHNICAL INFORMATION



3pc Stone
12 x 4 x 2 3/8
12 x 9 x 2 3/8
12 x 12 x 2 3/8



LANDSCAPE RETAINING WALL

HARINGTON® FREESTANDING 3-PC

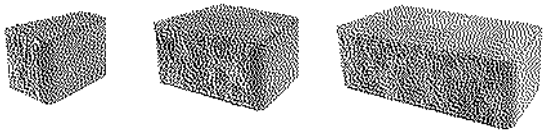
The Harington Freestanding 3-pc includes three different sized trapezoidal wall blocks; combine with a modulating corner/ column block and a double-split cap to satisfy the most demanding aesthetic requirements and maintain an ease of construction. This versatile system can create curved and straight freestanding walls in addition to columns, outdoor kitchens and other outdoor living elements.

Granite Blend



FREESTANDING WALLS | COLUMNS | FIRE PITS | STEPS

BUNDLED



Small | Medium | Large

Freestanding 3-Pc System

Unit Dimensions & Weights:

Large:	6"h x 18"w x 9"d; 70 lbs (152mm x 457mm x 229 mm; 35 kg)
Medium:	6"h x 12"w x 9"d; 45 lbs (152 x 305 x 229 mm; 23 kg)
Small:	6"h x 6"w x 9"d; 20 lbs (152 x 152 x 229 mm; 13 kg)
Sq.Ft./Set:	1.5

FEATURES & BENEFITS

Maximum Versatility and Performance

- Split on both sides for maximum flexibility; freestanding and parapet walls.
- Capable of creating stunning outdoor living elements.
- Made of durable concrete with iron oxide pigments that resist fading in extended UV exposure. Meets or exceeds applicable requirements of ASTM C1372 for compressive strength, absorption and dimensional tolerance.

Ease of Installation

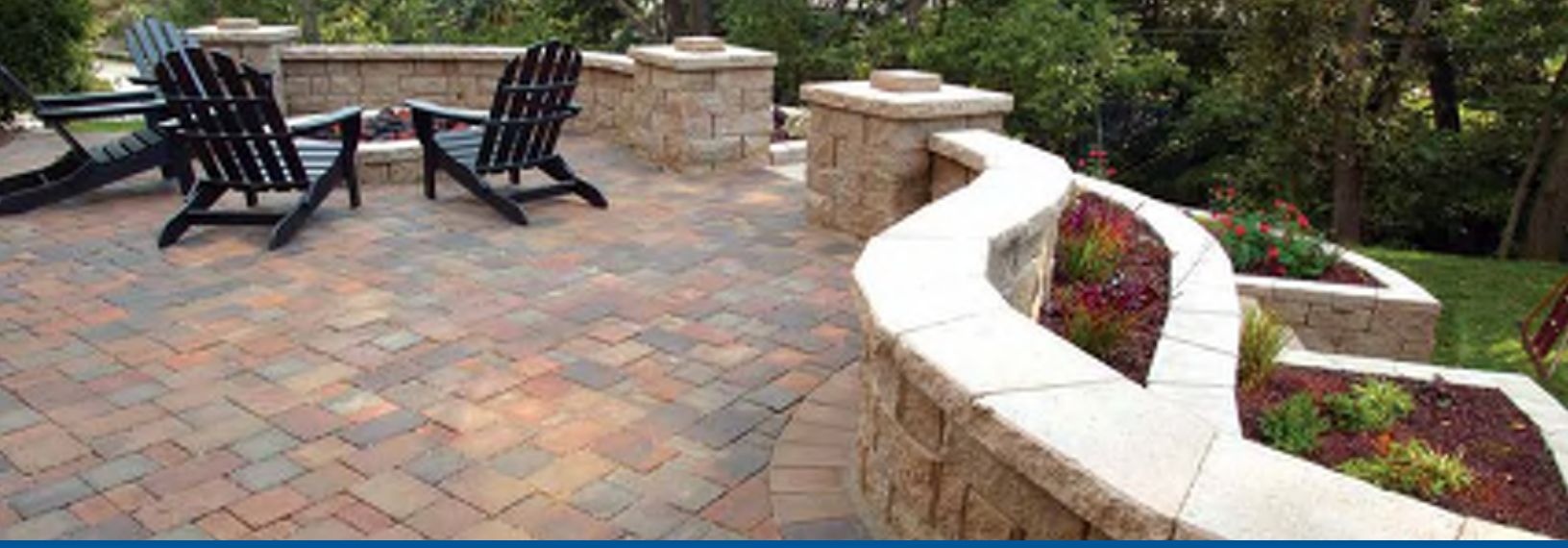
- Install with exterior concrete construction adhesive.
- Versatile uncored block makes jobsite sawing and splitting easy.

Aesthetics

- Rustic RockFace finish creates the look of weathered natural stone.

Note: Unit color, dimensions, weight, and availability varies by manufacturer.

Before specifying a specific product, please confirm availability with your local producer.



LANDSCAPE WALL | HARINGTON® FREESTANDING 3-PC

INSTALLATION INSTRUCTIONS

STEP 1: Leveling Pad Units

Excavate down and create a leveling pad of compacted, ¾" minus base material that extends a minimum 6" in front of and 6" behind the base course units. This leveling pad should also be a minimum of 6" deep. Once the pad is level and compact, begin placing the units. The base course must be buried completely below grade and is included when calculating total wall height.

STEP 2: Base Course

To build the wall, use the trapezoidal-shaped units. The long side should be placed in alternating directions (back and front) to form a straight wall. To turn a radius, units can be placed facing the same direction or saw-cut if needed. Level the base course units using a torpedo level and dead blow hammer from left to right and front to back.

STEP 3: Wall Construction

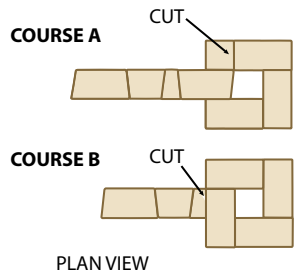
Units can be placed in any order to form an aesthetically pleasing pattern. Units should be fitted tightly against one another.

After setting the first course, sweep it clean to remove any debris before setting the second course on top of it. Units can be placed randomly in the wall without regard to bond. However, when building the wall, ensure that vertical joints do not line up on more than two courses. All units in a freestanding wall or column including the cap course shall be adhered to each other with a suitable exterior concrete adhesive.

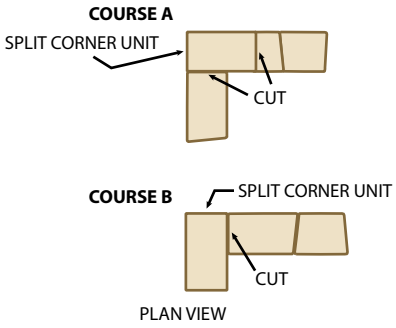
Column: Add a dignified look and increased stability to a wall. Columns are also a great way to incorporate lighting. Columns can be located in the middle or at the ends of a wall. The space left in the center of a column allow for reinforcement or electrical wiring if needed. To build columns, cut one column stone in half and stack column stones in a rotating pattern for each course. Two (2) column stone halves are needed for every four (4) courses.

NOTE: Colors are shown as accurately as possible in brochures and samples, but due to the nature of the product, regional color differences and variables in print reproduction, colors may not match exactly.

COLUMN INSTALLATION



CORNER INSTALLATION

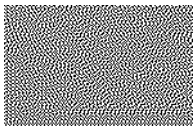


Keystone Retaining Wall Systems LLC
4444 West 78th Street • Minneapolis, MN 55435
(952) 897-1040 • **www.keystonewalls.com**

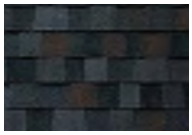
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KEYSTONE® RETAINING WALL SYSTEMS

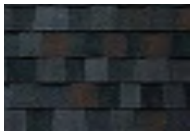
Color Package #	51	
	North End Blk 11	
Body #1		BM 2097-30 *Hedgehog Brown*
Body #2		BM CW-270 *Nicolson Red*
Fascia/Soffits		SW 7550 *Resort Tan*
Accent per plan		BM 211 *Bittersweet Chocolate*
Stone or Masonry per plan		Boral Pro-Fit Ledgestone *Mohave*
Front Door		Natural Fir or BM 978 *Raccoon Hollow* (Fiberglass door)
Garage Door		BM 2097-30 *Hedgehog Brown*
Roof		Tamko Rustic Slate
Metal Roof per plan		Metal Sales *Mansard Brown*
Metal Siding per plan		n/a
Cedar **Solid Body Stain** per plan		BM *Natural Cedartone*

Color Package #	52	
	North End Blk 11	
Body #1		BM 1575 *Rainy Afternoon*
Body #2		BM AC-17 *Sea Pine*
Fascia/Soffits		SW 7641 *Colonade Gray*
Accent per plan		SW 7736 *Garden Sage*
Stone or Masonry per plan		Boral Pro-Fit Ledgestone *Platinum*
Front Door		SW 0006 *Toile Red*
Garage Door		BM 1575 *Rainy Afternoon*
Roof		Tamko Thunderstorm Grey
Metal Roof per plan		Metal Sales *Mystique Plus*
Metal Siding per plan		n/a
Cedar **Solid Body Stain** per plan		BM 1547 *Dragon's Breath*

Color Package #	53	
	North End Blk 11	
Body #1		BM 2100-20 *Leather Saddle Brown*
Body #2		BM HC-88 *Jamesboro Gold*
Fascia/Soffits		BM HC-89 *North Hampton Putty*
Accent per plan		BM 1547 *Dragon's Breath*
Stone or Masonry per plan		Boral Pro-Fit Ledgestone *Platinum*
Front Door		Natural Fir or SW 7047 *Porpoise* (Fiberglass door)
Garage Door		BM HC-88 *Jamesboro Gold*
Roof		Tamko Rustic Slate
Metal Roof per plan		Metal Sales *Weathered Copper*
Metal Siding per plan		n/a
Cedar **Solid Body Stain** per plan		BM 1547 *Dragon's Breath*

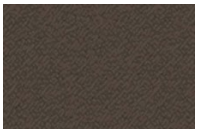
Color Package #	54
	North End Blk 11
Body #1	 SW 7031 *Mega Greige*
Body #2	 BM 2114-30 *Desert Shadows*
Fascia/Soffits	 BM 2140-20 *Tuscany Green*
Accent per plan	 SW 6151 *Quiver Tan*
Stone or Masonry per plan	 Boral Pro-Fit Ledgestone *Echo Ridge*
Front Door	 BM 2142-30 *Moutain Moss*
Garage Door	 SW 6151 *Quiver Tan*
Roof	 Tamko Rustic Black
Metal Roof per plan	 Metal Sales *Weathered Copper*
Metal Siding per plan	n/a
Cedar Solid Body Stain per plan	 BM 1470 *Bear Creek*

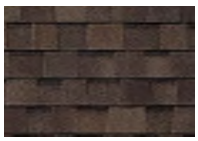
Color Package #	82	
	North End Blk 11	
Body #1		BM OC-40 *Albescent*
Body #2		BM CC-724 *Homestead*
Fascia/Soffits		BM 2122-10 *Dark Pewter*
Accent per plan		BM HC-23 *Yorkshire Tan*
Stone or Masonry per plan		Boral Pro-Fit Ledgestone *Winterhaven*
Front Door		BM HC-135 *Lafayette Green*
Garage Door		BM 979 *Stampede*
Roof		Tamko Rustic Slate
Metal Roof per plan		Metal Sales *Medium Bronze*
Metal Siding per plan		n/a
Cedar **Solid Body Stain** per plan		BM 979 *Stampede*

Color Package #	55	
	North End Blk 11	
Body #1		BM 2132-50 *Pilgrim Haze*
Body #2		SW 7047 *Porpoise*
Fascia/Soffits		SW 7069 *Iron Ore*
Accent per plan		BM 2057-10 *River Blue*
Stone or Masonry per plan		Boral Country Ledgestone *Ashfall*
Front Door		BM 2057-20 *Galapagos Turquoise*
Garage Door		SW 7047 *Porpoise*
Roof		Tamko Rustic Black
Metal Roof per plan		Metal Sales *Metallic Silver*
Metal Siding per plan		n/a
Cedar **Solid Body Stain** per plan		BM *1134* Hidden Valley

Color Package #	56	
	North End Blk 11	
Body #1		SW 7512 *Pavillion Beige*
Body #2		BM 1197 *Pumice Stone*
Fascia/Soffits		BM 2122-10 *Dark Pewter*
Accent per plan		BM AF-660 *Granite*
Stone or Masonry per plan		Boral Country Ledgestone *Chardonnay*
Front Door		SW 7622 *Homburg Gray*
Garage Door		BM AF660 *Granite*
Roof		Tamko Rustic Slate
Metal Roof per plan		Metal Sales *Old Zinc Gray*
Metal Siding per plan		n/a
Cedar **Solid Body Stain** per plan		BM 2108-30 *Brown Horse*

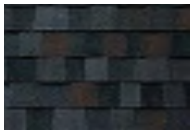
Color Package #	57	
	North End Blk 11	
Body #1		BM 2121-10 *Gray*
Body #2		BM HC 167 *Amherst Gray*
Fascia/Soffits		BM 1473 *Gray Huskie*
Accent per plan		BM 2131-40 *Smoke Stack Gray*
Stone or Masonry per plan		Boral Pro-Fit Ledgestone Echo Ridge
Front Door		SW 6390 *Bosc Pear*
Garage Door		BM 2131-40 *Smoke Stack Gray*
Roof		Tamko Rustic Slate
Metal Roof per plan		Metal Sales *Mystique Plus*
Metal Siding per plan		n/a
Cedar **Solid Body Stain** per plan		SW 7673 *Pewter Cast*

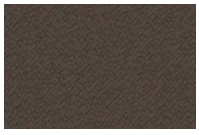
Color Package #	58	
	North End Blk 11	
Body #1		BM 2114-10 *Bittersweet Chocolate*
Body #2		BM HC 67 *Clinton Brown*
Fascia/Soffits		SW 6055 *Fiery Brown*
Accent per plan		SW 7515 *Homestead Brown*
Stone or Masonry per plan		Boral Pro-Fit Ledgestone *Mohave*
Front Door		Natural Fir or BM HC-88 *Jamesboro Gold* (Fiberglass door)
Garage Door		BM HC 67 *Clinton Brown*
Roof		Tamko Rustic Slate
Metal Roof per plan		Metal Sales *Burnished Slate*
Metal Siding per plan		n/a
Cedar **Solid Body Stain** per plan		BM 2097-30 *Hedgehog Brown*

Color Package #	59	
	North End Blk 11	
Body #1		SW 7069 *Iron Ore*
Body #2		BM 2108-40 *Stardust*
Fascia/Soffits		SW 7024 *Functional Gray*
Accent per plan		BM 2108-20 *Sierra Spruce*
Stone or Masonry per plan		Boral Country Ledgestone *Bucks County*
Front Door		Behr PPU17-19 *Arabian Veil*
Garage Door		BM 2108-20 *Sierra Spruce*
Roof		Tamko Rustic Slate
Metal Roof per plan		Metal Sales *Weathered Copper*
Metal Siding per plan		n/a
Cedar **Solid Body Stain** per plan		2108-20 *Sierra Spruce*

Color Package #	60	
	North End Blk 11	
Body #1		BM 2108-40 *Stardust*
Body #2		BM 2108-20 *Sierra Spruce*
Fascia/Soffits		SW 7024 *Functional Gray*
Accent per plan		SW 7069 *Iron Ore*
Stone or Masonry per plan		Boral Pro-Fit Ledgestone Echo Ridge
Front Door		SW 7083 *Dark Room*
Garage Door		BM 2108-20 *Sierra Spruce*
Roof		Tamko Rustic Slate
Metal Roof per plan		Metal Sales *Weathered Copper*
Metal Siding per plan		n/a
Cedar **Solid Body Stain** per plan		BM 2108-20 *Sierra Spruce*

Color Package #	61	
	North End Blk 11	
Body #1		BM 2143-70 *Simply White*
Body #2		BM 2143-70 *Simply White*
Fascia/Soffits		SW 7642 *Pavestone*
Accent per plan		BM 2143-70 *Simply White*
Stone or Masonry per plan		n/a
Front Door		BM 1651 *New Providence Navy*
Garage Door		SW 7642 *Pavestone*
Roof		Tamko Rustic Slate
Metal Roof per plan		Metal Sales *Slate Gray*
Metal Siding per plan		Metal Siding: Metal Sales LSRV *Red #24* Longboard Accent: *Dark Knotty Pine*
Cedar **Solid Body Stain** per plan		BM HC-175 *Briarwood*

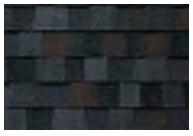
Color Package #	62	
	North End Blk 11	
Body #1		BM 2143-70 *Simply White*
Body #2		BM HC164 *Puritan Gray*
Fascia/Soffits		BM AC-28 *Smoke Embers*
Accent per plan		BM 2143-70 *Simply White*
Stone or Masonry per plan		n/a
Front Door		BM HC123 *Kennebunkport Green*
Garage Door		BM HC-166 *Kendall Charcoal*
Roof		Tamko Rustic Black
Metal Roof per plan		Metal Sales *Old Zinc Gray*
Metal Siding per plan		Metal Siding: Metal Sales *Slate Gray* Longboard Accent (per plan): *Dark Knotty Pine*
Cedar **Solid Body Stain** per plan		BM HC 167 *Amherst Gray*

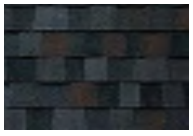
Color Package #	63	
	North End Blk 11	
Body #1		BM 2108-70 *Lacey Pearl*
Body #2		BM 2108-70 *Lacey Pearl*
Fascia/Soffits		BM 2112-30 *Stone Brown*
Accent per plan		BM 2108-70 *Lacey Pearl*
Stone or Masonry per plan		n/a
Front Door		BM 2096-30 *Grandfather Clock Brown*
Garage Door		BM 2108-70 *Lacey Pearl*
Roof		Tamko Rustic Slate
Metal Roof per plan		Metal Sales *Burnished Slate*
Metal Siding per plan		Metal Siding: Metal Sales *Rustic Steel* Longboard Accent (per plan): *Dark Knotty Pine*
Cedar Solid Body Stain per plan		BM 2105-30 *Rabbit Brown*

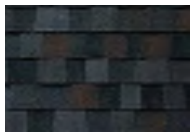
Color Package #	64	
	North End Blk 11	
Body #1		BM 2143-70 *Simply White*
Body #2		BM HC179 *Platinum Gray*
Fascia/Soffits		BM 2130-30 *Lead Gray*
Accent per plan		BM 2143-70 *Simply White*
Stone or Masonry per plan		n/a
Front Door		BM 1665 *Mozart Blue*
Garage Door		BM 2130-30 *Lead Gray*
Roof		Tamko Thunderstorm Grey
Metal Roof per plan		Metal Sales *Old Zinc Gray*
Metal Siding per plan		<u>Metal Siding</u>: Metal Sales *Charcoal* <u>Longboard Accent</u> (per plan): *Dark Knotty Pine*
Cedar **Solid Body Stain** per plan		BM PM-7 *Platinum Gray*

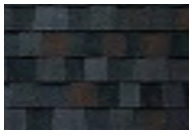
Color Package #	65	
	North End Blk 11	
Body #1		BM 2143-70 *Simply White*
Body #2		BM PM-7 *Platinum Gray*
Fascia/Soffits		BM HC160 *Knoxville Gray*
Accent per plan		BM HC160 *Knoxville Gray*
Stone or Masonry per plan		n/a
Front Door		BM 720 *Bella Blue*
Garage Door		BM PM-7 *Platinum Gray*
Roof		Tamko Thunderstorm Grey
Metal Roof per plan		Metal Sales *Old Zinc Gray*
Metal Siding per plan		<u>Metal Siding:</u> Metal Sales *Hemlock Green* <u>Longboard Accent</u> (per plan): Dark Knotty Pine
Cedar **Solid Body Stain** per plan		BM 2121-10 *Gray*

Color Package #	66	
	North End Blk 11	
Body #1		SW 7632 *Modern Gray*
Body #2		BM 2143-70 *Simply White*
Fascia/Soffits		BM HC160 *Knoxville Gray*
Accent per plan		BM HC160 *Knoxville Gray*
Stone or Masonry per plan		n/a
Front Door		SW 6390 *Bosc Pear*
Garage Door		BM PM-7 *Platinum Gray*
Roof		Tamko Thunderstorm Grey
Metal Roof per plan		Metal Sales *Old Zinc Gray*
Metal Siding per plan		<u>Metal Siding:</u> Metal Sales Weathered Copper <u>Longboard Accent</u> (per plan): Dark Knotty Pine
Cedar **Solid Body Stain** per plan		BM HC-175 *Briarwood*

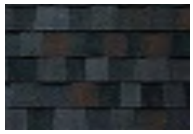
Color Package #	73	
	North End Blk 11	
Body #1		BM 2143-70 *Simply White*
Body #2		BM HC-159 *Phillipsburg Blue*
Fascia/Soffits		SW 7069 *Iron Ore*
Accent per plan		BM 2143-70 *Simply White*
Stone or Masonry per plan		n/a
Front Door		BM 2085-10 *Arroyo Red*
Garage Door		BM 2143-70 *Simply White*
Roof		Tamko Rustic Black
Metal Roof per plan		Metal Sales *Mystique Plus*
Metal Siding per plan		Metal Siding: Metal Sales Metallic Silver Longboard Accent (per plan): Dark Knotty Pine
Cedar **Solid Body Stain** per plan		BM 1608 *Ashland Slate*

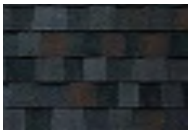
Color Package #	80	
	North End Blk 11	
Body #1		BM 2143-70 *Simply White*
Body #2		BM 2143-70 *Simply White*
Fascia/Soffits		BM OC-20 *Pale Oak*
Accent per plan		BM 2143-70 *Simply White*
Stone or Masonry per plan		n/a
Front Door		BM 2124-10 *Wrought Iron*
Garage Door		BM 2143-70 *Simply White*
Roof		Tamko Rustic Black
Metal Roof per plan		Metal Sales *Matte Black*
Metal Siding per plan		<u>Metal Siding:</u> Metal Sales Old Zinc Gray <u>Longboard Accent</u> (per plan): Dark Knotty Pine
Cedar **Solid Body Stain** per plan		BM *1125 Acorn*

Color Package #	67	
	North End Blk 11	
Body #1		BM AC-28 *Smoke Embers*
Body #2		BM 2137-40 *Desert Twilight*
Fascia/Soffits		BM 2124-30 *Deep Silver*
Accent per plan		BM 2124-30 *Deep Silver*
Stone or Masonry per plan		n/a
Front Door		SW 6215 *Rocky River*
Garage Door		BM 2137-40 *Desert Twilight*
Roof		Tamko Rustic Black
Metal Roof per plan		n/a
Metal Siding per plan		n/a
Cedar **Solid Body Stain** per plan		BM 2137-40 *Desert Twilight*

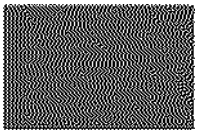
Color Package #	68	
	North End Blk 11	
Body #1		BM 1509 *Spanish Olive*
Body #2		BM AF-400 *Elemental*
Fascia/Soffits		SW 7047 *Porpoise*
Accent per plan		BM AF-705 *Cinder*
Stone or Masonry per plan		n/a
Front Door		BM 1302 *Sweet Rosy Brown*
Garage Door		BM AF-400 *Elemental*
Roof		Tamko Rustic Black
Metal Roof per plan		n/a
Metal Siding per plan		n/a
Cedar **Solid Body Stain** per plan		BM AF-705 *Cinder*

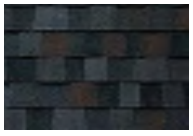
Color Package #	69	
	North End Blk 11	
Body #1		BM AF 510 *Dragonfly*
Body #2		BM 467 *High Park*
Fascia/Soffits		BM HC-115 *Georgian Green*
Accent per plan		BM 2139-50 *Silver Marlin*
Stone or Masonry per plan		Optional Tile: Basaltina 01 Natural 12" x 24" Grout: Pewter #19 Stone: Boral *Platinum* ProFit Ledgestone
Front Door		BM 2173-30 *Salmon Stream*
Garage Door		BM AF 510 *Dragonfly*
Roof		Tamko Thunderstorm Grey
Metal Roof per plan		Metal Sales *Metallic Silver*
Metal Siding per plan		Metal Sales *Metallic Silver*
Cedar **Solid Body Stain** per plan		BM 1477 *Deep Creek*

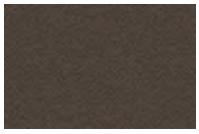
Color Package #	70	
	North End Blk 11	
Body #1		BM HC-115 *Georgian Green*
Body #2		BM HC 167 *Amherst Gray*
Fascia/Soffits		BM HC 157 *Narraganset Green*
Accent per plan		BM AC-17 *Sea Pine*
Stone or Masonry per plan		Optional Tile: Essential Collection *Seamless Cool* 01 12" x 24" Grout: *Natural Gray #09* Stone: Boral Pro-Fit *Ethos Terrain* Ledgestone
Front Door		BM 2114-10 *Bittersweet Chocolate*
Garage Door		BM 2114-10 *Bittersweet Chocolate*
Roof		Tamko Rustic Black
Metal Roof per plan		Metal Sales *Old Zinc Gray*
Metal Siding per plan		Metal Sales *Old Zinc Gray*
Cedar **Solid Body Stain** per plan		SW 7047 *Porpoise*

Color Package #	76	
	North End Blk 11	
Body #1		BM 467 *High Park*
Body #2		BM 508 *Tree Moss*
Fascia/Soffits		BM 560 *Flint*
Accent per plan		BM 2123-20 *Caribbean Teal*
Stone or Masonry per plan		Optional Tile: *Basaltina 03 Natural* 12 x 24" Grout: *Winter Gray #335* Stone: Boral Pro-Fit *Arcadia Terrain* Ledgestone
Front Door		SW 6286 *Mature Grape*
Garage Door		BM 560 *Flint*
Roof		Tamko Rustic Black
Metal Roof per plan		Metal Sales *Metallic Silver*
Metal Siding per plan		Metal Sales *Slate Gray*
Cedar **Solid Body Stain** per plan		BM 1608 *Ashland Slate*

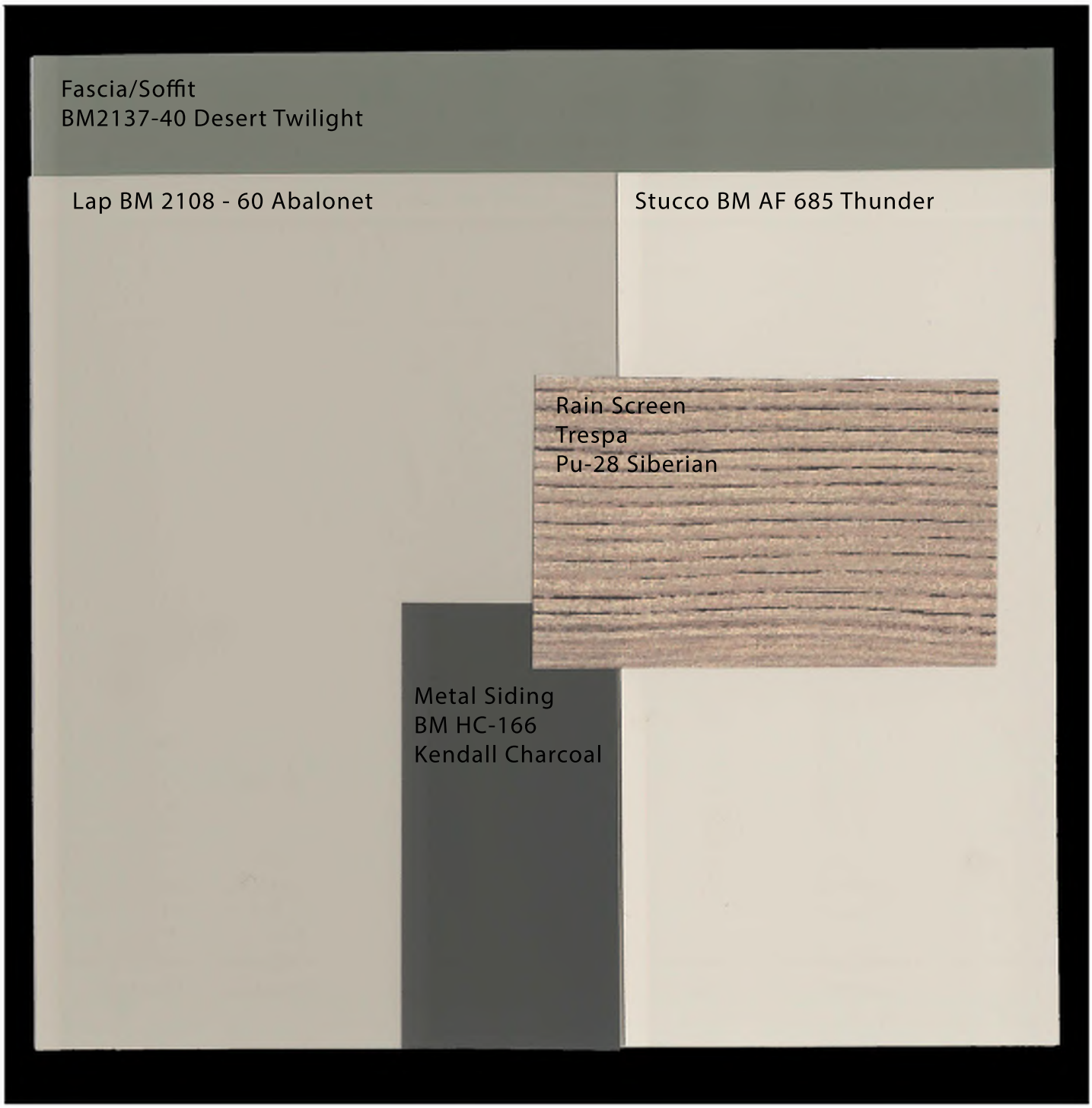
Color Package #	77	
	North End Blk 11	
Body #1		BM CW-235 *Brickyard Clay*
Body #2		BM 2140-60 *Moonshine*
Fascia/Soffits		BM 1566 *Stonybrook*
Accent per plan		BM 2123-20 *Caribbean Teal*
Stone or Masonry per plan		Optional Tile: *Army Canvas White* 12 x 24" Grout: *Cape Gray #546* Stone: Cultured Stone *Platinum* ProFit Ledgestone
Front Door		BM 2053-20 *Dark Teal*
Garage Door		BM 1566 *Stonybrook*
Roof		Tamko Thunderstorm Grey
Metal Roof per plan		Metal Sales *Old Town Gray*
Metal Siding per plan		Metal Sales *Old Town Gray*
Cedar **Solid Body Stain** per plan		SW 7047 *Porpoise*

Color Package #	81	
	North End Blk 11	
Body #1		BM AC-28 *Smoke Embers*
Body #2		BM 2143-70 *Simply White*
Fascia/Soffits		BM 2121-10 *Gray*
Accent per plan		BM HC-168 *Chelsea Gray*
Stone or Masonry per plan		Optional Tile: Essential Collection *Seamless Cool #03* 12 x 24" Grout: Custom Solutions #370 *Dove Gray* Stone: Boral *Platinum* ProFit Ledgestone
Front Door		BM 2074-10 *Grape Juice*
Garage Door		BM AC-28 *Smoke Embers*
Roof		Tamko Thunderstorm Grey
Metal Roof per plan		Metal Sales *Ash Grey*
Metal Siding per plan		Metal Sales *Ash Grey*
Cedar **Solid Body Stain** per plan		BM 2121-10 Gray

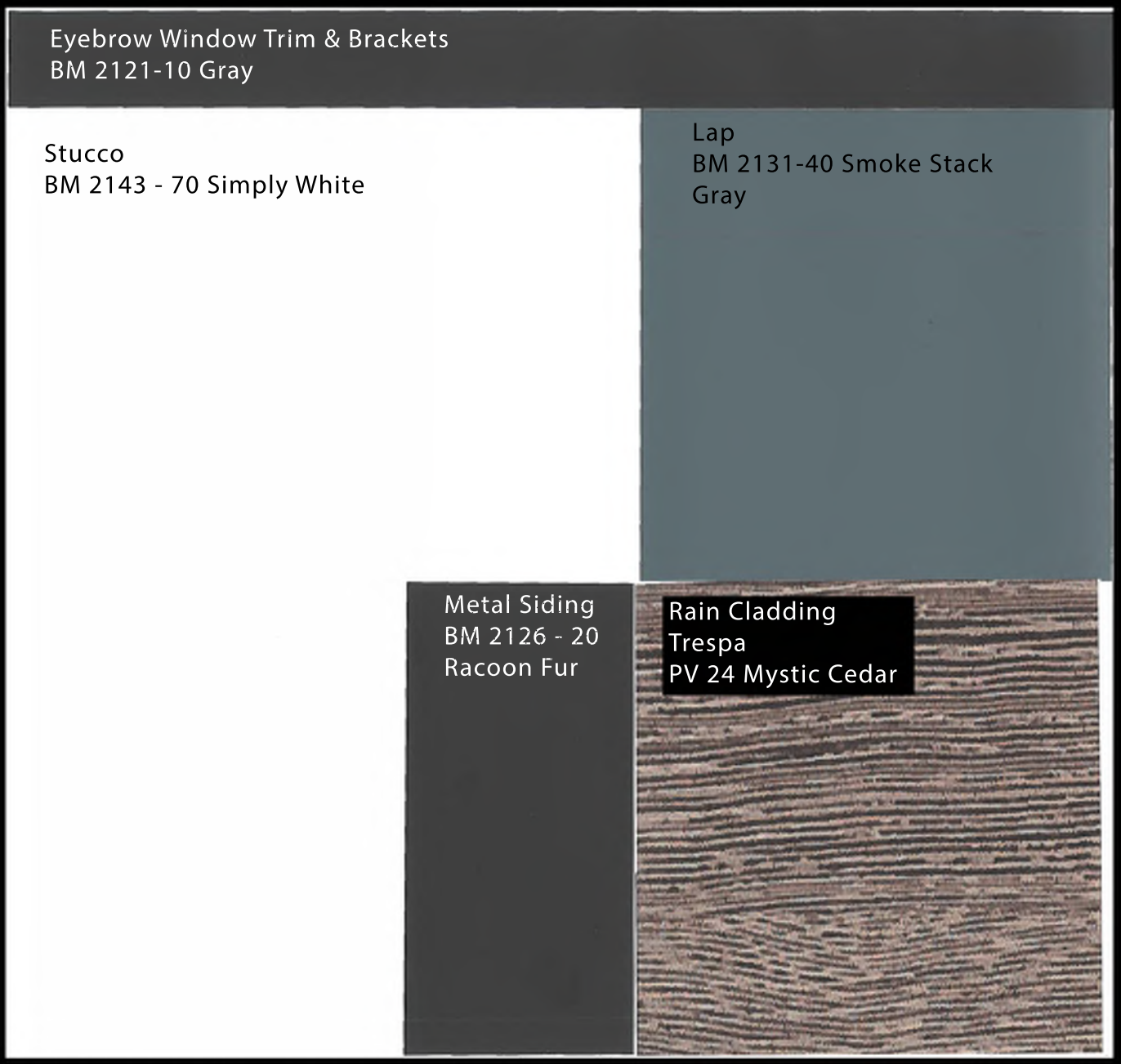
Color Package #	71	
	North End Blk 11	
Body #1		BM 1627 *Manor Blue*
Body #2		BM HC-167 *Amherst Gray*
Fascia/Soffits		SW 2802 *Rockwood Red*
Accent per plan		BM 2124-30 *Deep Silver*
Stone or Masonry per plan		n/a
Front Door		BM 496 *Chopped Dill*
Garage Door		SW 2802 *Rockwood Red*
Roof		Tamko Rustic Black
Metal Roof per plan		Metal Sales *Weathered Copper*
Metal Siding per plan		Metal Sales *Metallic Silver*
Cedar **Solid Body Stain** per plan		BM 2124-30 *Deep Silver*

Color Package #	79	
	North End Blk 11	
Body #1		BM 2085-10 *Arroyo Red*
Body #2		BM 1029 *Coconut Grove*
Fascia/Soffits		BM 1547 *Dragon's Breath*
Accent per plan		BM 1021 *Long Valley Birch*
Stone or Masonry per plan		n/a
Front Door		BM 2062-30 *Blue Danube*
Garage Door		BM 2085-10 *Arroyo Red*
Roof		Tamko Rustic Slate
Metal Roof per plan		Metal Sales *Burnished Slate*
Metal Siding per plan		Metal Sales *Old Zinc Gray*
Cedar **Solid Body Stain** per plan		BM 1547 *Dragon's Breath*

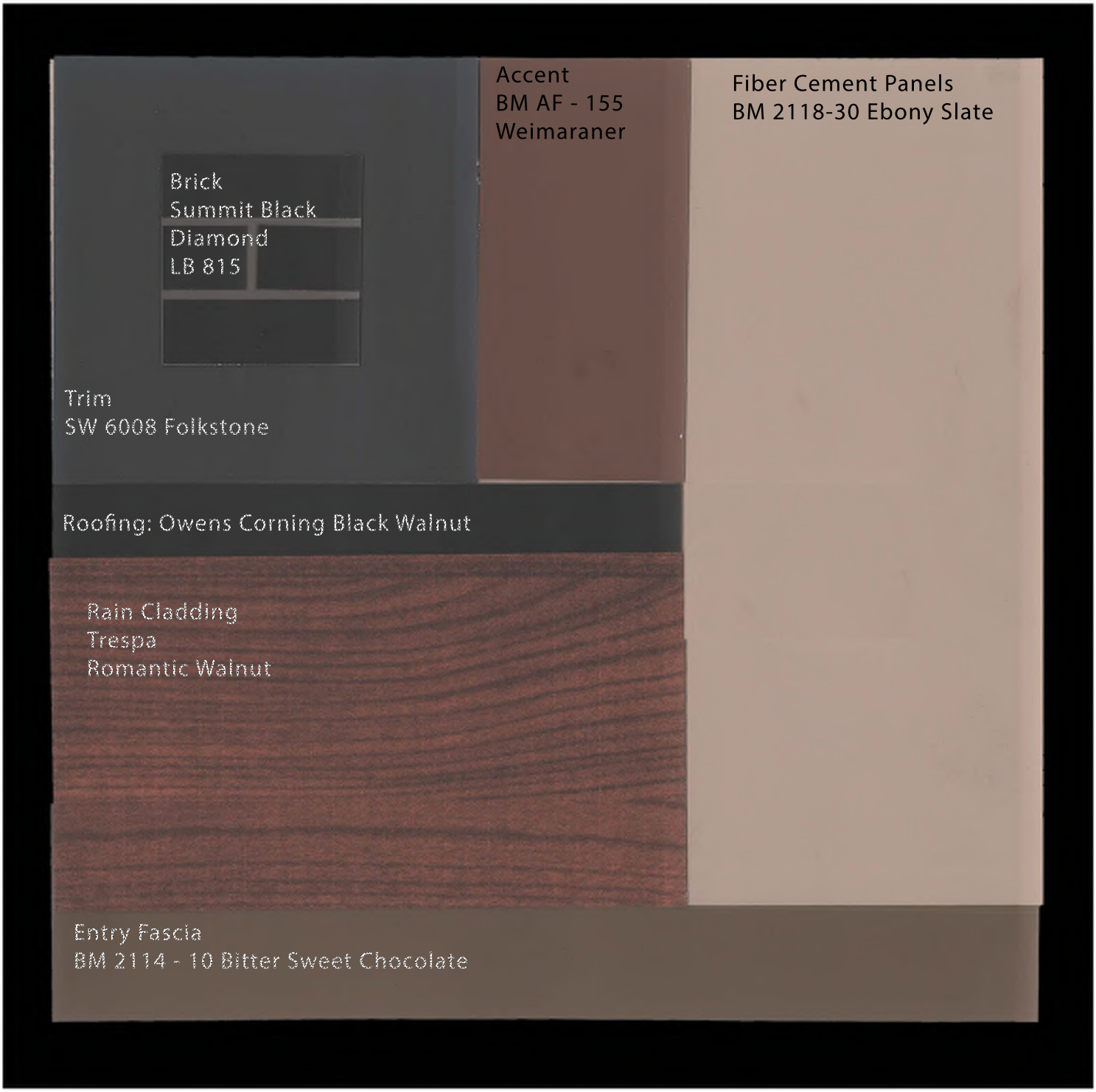
North End Building 1



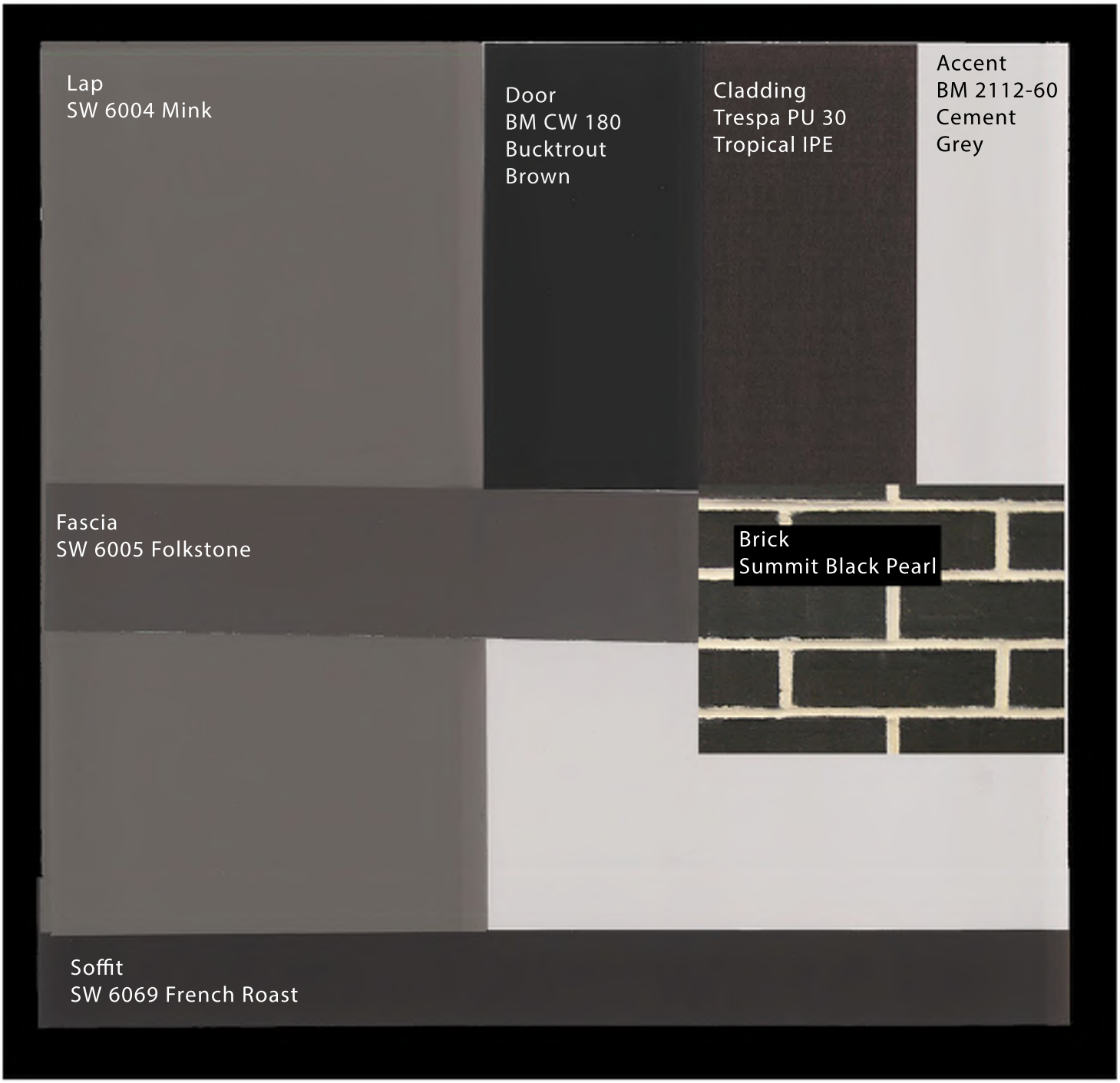
North End Building 2



North End Building 3



North End Building 4



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Page 1 of 1
08/22/2017 11:04 AM
Boulder County Clerk, CO
RF: $13.00
DF: $0.00

North End
3RD AMENDED GDP

LAND USE AREA SUMMARY (ACRES)	PARCEL A			PARCEL B			
	PA #1	PA #2	PA #3	PA #4	PA #5	PA #6	TOTAL
COMMERCIAL	2.65						2.65
TOWNHOME AND DUPLEX (MEDIUM DENSITY RESIDENTIAL)	0.63			5.16			5.79
MULTIFAMILY (MEDIUM DENSITY RESIDENTIAL)	0.72	1.93		2.74			5.39
SINGLE FAMILY (LOW DENSITY RESIDENTIAL)	0.57	9.72	2.57	3.02	7.07		22.95
NON-ENCUMBERED DEDICATED PUBLIC LAND		0.16	9.95			2.18	12.29
ENCUMBERED DEDICATED PUBLIC LAND	0.80	1.03	2.50	0.41	0.03	1.93	6.70
PRIVATE COMMON OPEN AREA	2.61	0.25	0.83	1.08	1.45		6.22
DEDICATED RIGHT-OF-WAY	1.06	4.82	0.65	2.71	2.27	0.39	11.90
TOTAL	9.04	17.91	16.50	15.12	10.82	4.50	73.89

SITE SUMMARY	PERMITTED USE	PRODUCT TYPE	# UNITS	DU/AC
PLANNING AREA #1	COMMERCIAL	COMMERCIAL	40,000 SF	0.17 FAR
	MEDIUM DENSITY RESIDENTIAL	MULTI-FAMILY LOFTS, TOWNHOMES, ROWHOMES, COTTAGES, SINGLE FAMILY LOTS	38	11.3 DU/AC
PLANNING AREA #2	MEDIUM DENSITY RES.	MULTI-FAMILY LOFTS, TOWNHOMES, ROWHOMES, COTTAGES, SINGLE FAMILY LOTS	112	5.0 DU/AC
PLANNING AREA #3	LOW DENSITY RES.	SINGLE FAMILY LOTS	10	0.6 DU/AC
PLANNING AREA #4	MEDIUM DENSITY RES.	MULTI-FAMILY LOFTS, TOWNHOMES, ROWHOMES, COTTAGES, SINGLE FAMILY LOTS	147	9.8 DU/AC
PLANNING AREA #5	LOW DENSITY RES.	SINGLE FAMILY LOTS	43	3.9 DU/AC
TOTAL UNITS	-	-	350 *	-

*MARKET RATE UNITS

GENERAL DEVELOPMENT NOTES

DEVELOPMENT CONCEPT AND GENERAL NOTES

NORTH END IS DESIGNED TO BE A MIXED USE DEVELOPMENT WITH BOTH COMMERCIAL AND RESIDENTIAL USES. THE COMMERCIAL USES ARE INTENDED TO BE COMPLEMENTARY TO EXISTING COMMERCIAL FACILITIES, AS WELL AS SERVING THE NEIGHBORING RESIDENTIAL AREAS. THE RESIDENTIAL DEVELOPMENT IS CHARACTERIZED BY A MIX OF PRODUCTS INCLUDING BOTH DETACHED SINGLE FAMILY HOMES AND ATTACHED UNITS. THE SUBDIVISION DEVELOPMENT MIRRORS THE LOUISVILLE COMPREHENSIVE PLAN IN TERMS OF DENSITIES AND USES.

DEDICATIONS

ALL PUBLIC ROW'S SHOWN ON THE GENERAL DEVELOPMENT PLAN ARE INTENDED TO BE DEDICATED TO THE CITY OF LOUISVILLE, BUT ARE INTENDED TO BE BUILT BY THE DEVELOPER OF EACH DEVELOPMENT PHASE.
ALL AREAS SHOWN AS PUBLIC LAND DEDICATION ARE INTENDED TO BE DEDICATED TO THE CITY OF LOUISVILLE FOR PURPOSES OF PUBLIC RECREATION. DEVELOPMENT OF THE AREAS LABELED PUBLIC LAND DEDICATION MAY BE UNDERTAKEN BY THE CITY OF LOUISVILLE, OR BY THE DEVELOPER OF THE SURROUNDING PROPERTY. DEVELOPMENT RESPONSIBILITY SHALL BE DETERMINED AT TIME OF SUBDIVISION.
PUBLIC TRAILS TO BE INSTALLED BY DEVELOPER ACCORDING TO SPECIFICATIONS DETERMINED AT TIME OF SUBDIVISION P.U.D.

PERMITTED USE NOTES:

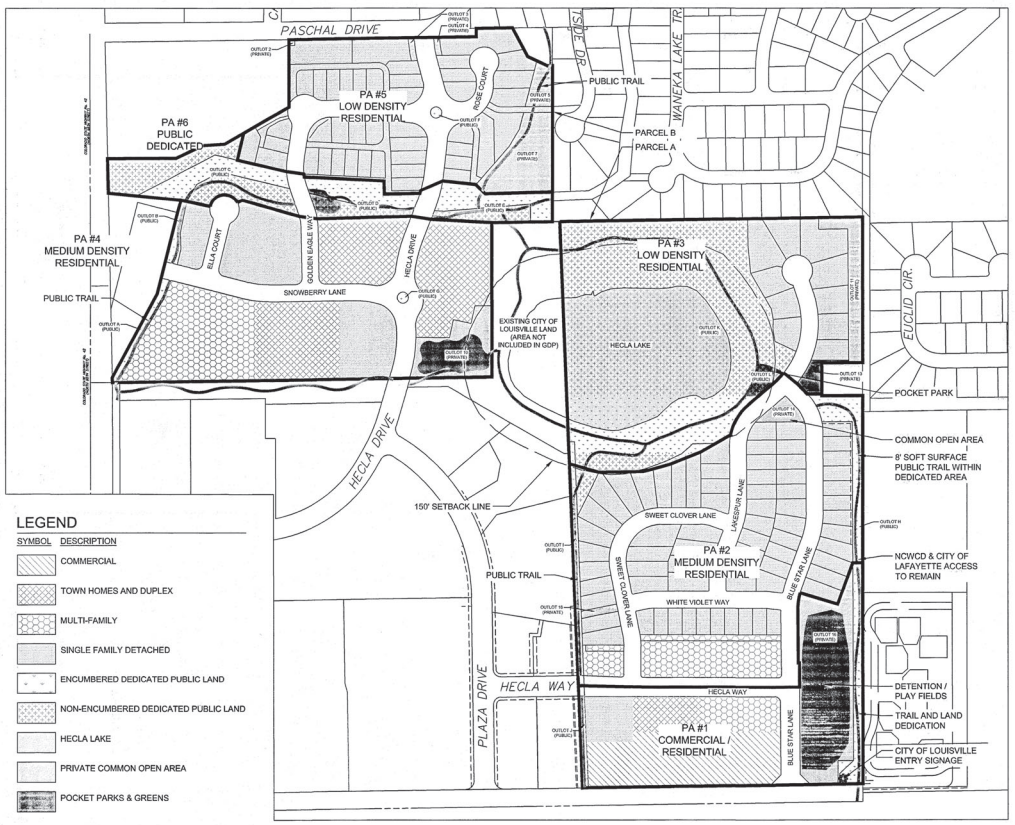
1.) PERMITTED USES IN THE COMMERCIAL DISTRICT - PLANNING AREA 1 WILL BE COMPATIBLE WITH CITY OF LOUISVILLE MUNICIPAL CODE SEC. 17.72.090, COMMERCIAL AND OFFICE, CHAPTER 17.72 PLANNED COMMUNITY ZONE DISTRICT.

PUBLIC LAND DEDICATION	
NON-ENCUMBERED DEDICATED LAND	12.29 AC
ENCUMBERED DEDICATED LAND	6.70 AC
TOTAL	18.99 AC
SITE ACREAGE	73.89 AC
PERCENTAGE OF LAND DEDICATED	25.7%

PUBLIC LAND DEDICATION CALCULATION	
RESIDENTIAL	61.58 AC
MINIMUM REQUIREMENT	15%
TOTAL DEDICATED LAND REQUIRED (BASED ON RESIDENTIAL AREA)	9.24 AC
COMMERCIAL	2.65 AC
MINIMUM REQUIREMENT	12%
TOTAL DEDICATED LAND REQUIRED (BASED ON COMMERCIAL AREA)	0.32 AC
TOTAL DEDICATED LAND REQUIREMENT	9.56 AC

ZONING SUMMARY	
COMMERCIAL*	2.65 AC
MEDIUM DENSITY RESIDENTIAL*	34.11 AC
LOW DENSITY RESIDENTIAL*	27.47 AC
DEDICATED PUBLIC LAND	18.99 AC
PRIVATE COMMON OPEN SPACE	6.22 AC

* NET COMMERCIAL AREA (DOES NOT INCLUDE DETENTION, PRIVATE COMMON OPEN AREA, OR DEDICATED PUBLIC LAND)
* INCLUDES PRIVATE COMMON OPEN AREA, DETENTION, DEDICATED ROW, AND DEDICATED PUBLIC LAND



LEGEND

SYMBOL	DESCRIPTION
	COMMERCIAL
	TOWN HOMES AND DUPLEX
	MULTI-FAMILY
	SINGLE FAMILY DETACHED
	ENCUMBERED DEDICATED PUBLIC LAND
	NON-ENCUMBERED DEDICATED PUBLIC LAND
	HECLA LAKE
	PRIVATE COMMON OPEN AREA
	POCKET PARKS & GREENS

LEGAL DESCRIPTION

KNOW ALL MEN BY THESE PRESENTS: that Ridgeline Development Corporation, a Colorado Corporation, North End Properties, LLC, a Colorado limited liability company, White Hawk Ranch, LLC, a Colorado limited liability company and G.E.M. Holdings, LLC, a Colorado limited liability company being the owner's of that tract of land located in the SW1/4 of Section 4, T1S, R69W of the 6th P.M., City of Louisville, County of Boulder, State of Colorado, and being more particularly described as follows:

PARCEL A

COMMENCING at the S1/4 Corner of said Section 4, from which the SW Corner of said Section 4 bears S89°11'46"W, (basis of bearing), thence N00°02'03"W, 60.01 feet along the East Line of the SW1/4 of said Section 4 to the Northerly Right-of-way Line of South Boulder Road conveyed to the City of Louisville in that Warranty Deed recorded July 13, 1989 on Film 1586 as Reception Number 00992351 of the records of Boulder County, Colorado and the TRUE POINT OF BEGINNING;

Thence N00°02'03"W, 1314.79 feet along the East Line of the SW1/4 of said Section 4 to the Southeast Corner of that tract of land conveyed to Northern Colorado Water Conservancy District, Acting by and through the Southern Water Supply Project Water Activity Enterprise, a Government-Owned Business in that Warranty Deed recorded May 3, 1995 on Film 2050 as Reception Number 01514375 of the records of Boulder County, Colorado;
Thence S89°51'06"W, 139.00 feet along the South Line said Film 2050 as Reception Number 01514375 to the Southwest Corner thereof;
Thence N00°02'03"W, 112.00 feet along a line that is parallel with, as measured at right angles to, the East Line of the SW1/4 of said Section 4 to the Northwest Corner of said Film 2050 as Reception Number 01514375;
Thence N89°51'06"W, 139.00 feet along the North Line said Film 2050 as Reception Number 01514375 to the East Line of the SW1/4 of said Section 4;
Thence N00°02'03"W, 493.63 feet along the East Line of the SW1/4 of said Section 4 to the SW Corner of the N1/2 of the NW1/4 of the SE1/4 of said Section 4;
Thence S89°13'06"W, 1031.40 feet along the Southerly Line of that tract of land conveyed to The Davidson Coal and Iron Mining Company by James Thompson, et al, in that Warranty Deed recorded December 17, 1873 in Book V at Page 461 of the records of Boulder County, Colorado to the Northeast Corner of Louisville Plaza Filing No. 2 recorded July 1, 1991 as Plan File P-26, F-1, #21 of the records of Boulder County, Colorado, said Corner is 660.00 feet South of the North Line of the SW1/4 of said Section 4;
Thence S02°17'40"E, 1921.30 feet along the Easterly Line of said Louisville Plaza Filing No. 2 to the Northerly Right-of-way Line of said South Boulder Road;
Thence N89°11'46"E, 955.62 feet along the Northerly Right-of-way Line of said South Boulder Road to the East Line of the SW1/4 of said Section 4 and the TRUE POINT OF BEGINNING.
Area = 43.444 acres, more or less.

ALSO

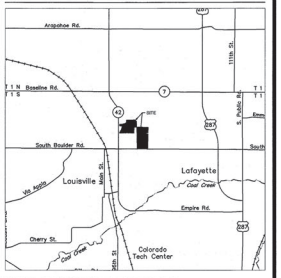
PARCEL B

A Tract of land to be known as Parcel B, located in a portion of the SW1/4 of Section 4, T1S, R69W of the 6th P.M., City of Louisville, County of Boulder, State of Colorado, described as follows:

COMMENCING at the W1/4 Corner of said Section 4, from which the SW Corner of said Section 4 bears S00°05'40"E, (basis of bearing), thence S00°05'40"E, 28.93 feet along the West Line of the SW1/4 of said Section 4, Thence N89°12'19"E, 51.80 feet along a line that is parallel with, as measured at right angles to, the North Line of SW1/4 of said Section 4 to the Northeast Corner of that tract of land conveyed to The Seventh Day Adventist Association of Colorado in that Warranty Deed recorded January 20, 1981 on Film 1152 as Reception Number 431303 of the records of Boulder County, Colorado, Thence continuing N89°12'19"E, 626.10 feet along a line that is parallel with, as measured at right angles to, the North Line of SW1/4 of said Section 4 and along the Northerly Line of said Film 1152 as Reception Number 431303 to the Northeast Corner thereof and the TRUE POINT OF BEGINNING;
Thence continuing N89°12'19"E, 638.62 feet along a line that is parallel with, as measured at right angles to the North Line of SW1/4 of said Section 4;
Thence N00°04'41"W, 28.93 feet to the North Line of SW1/4 of said Section 4;
Thence N89°12'19"E, 122.96 feet along the North Line of SW1/4 of said Section 4;
Thence S27°54'31"E, 111.29 feet
Thence S65°36'11"E, 74.29 feet
Thence N89°14'16"E, 17.02 feet
Thence S00°02'03"E, 428.31 feet along a line that is parallel with, as measured at right angles to, the East Line of the SW1/4 of said Section 4 to a point on the Northerly Line of Outlot J, Waneka Landing Filing No. 1, recorded January 5, 1994 as Plan File P-30, F-4, #24 of the records of Boulder County Colorado;
Thence S87°58'59"W, 1.03 feet along the Northerly Line of said Outlot J to the Northwest Corner thereof;
Thence S00°05'51"E, 100.96' feet along the Westerly Line of said Outlot J and the Westerly Line of Outlot L, said Waneka Landing Filing No. to the North Line of Louisville Plaza Filing No. 2 recorded July 1, 1991 as Plan File P-26, F-1, #21 of the records of Boulder County, Colorado, said point is 660.00 feet South of the North Line of the SW1/4 of said Section 4;
Thence S89°12'19"W, 206.60 feet along a line that is parallel with, as measured at right angles to, the North Line of the SW1/4 of said Section 4 to the Northwest Corner of said Louisville Plaza Filing No. 2;
Thence S00°05'40"E, 524.50 feet along a line that is parallel with, as measured at right angles to, the West Line of the SW1/4 of said Section 4 to a Southwesterly Corner of said Louisville Plaza Filing No. 2;
Thence S89°12'19"W, 1293.15 feet along a line that is parallel with, as measured at right angles to, the North Line of the SW1/4 of said Section 4 to the Easterly Right-of-way Line of State Highway No. 42 conveyed to the Department of Highways, State of Colorado in that deed recorded August 5, 1966 on Film 577 as Reception Number 823183 of the records of Boulder County, Colorado;
Thence N01°14'10"W, 16.51 feet along the Easterly Right-of-way Line of said State Highway No. 42 to the Southwest Corner of that tract of land conveyed to Norman L. Bertron and Marlene R. Bertron in that Warranty Deed recorded December 7, 1966 on Film 589 as Reception Number 834097 of the records of Boulder County, Colorado;
Thence N28°11'20"E, 323.49 feet along the Easterly Line of said Film 589 as Reception Number 834097;
Thence N14°08'20"E, 284.05 feet along the Easterly Line of said Film 589 as Reception Number 834097 to the Southeast Corner of that tract of land conveyed to Rollin E. Anderson and Genevieve N. Anderson in that Quit Claim Deed recorded May 7, 1996 on Film 2125 as Reception Number 01605684 of the records of Boulder County, Colorado;
Thence N15°43'20"E, 43.78 feet along the Easterly Line of said Film 2125 as Reception Number 01605684 to the Northeast Corner thereof;
Thence N84°31'24"W, 248.71 feet along the Northerly Line of said Film 2125 as Reception Number 01605684 to the Easterly Right-of-way Line of said State Highway No. 42;
Thence N01°14'10"W, 118.27 feet along the Easterly Right-of-way Line of said State Highway No. 42 to the Southwest Corner of said Film 1152 as Reception Number 431303;
Thence N89°40'45"E, 233.09 feet along the Southerly Line of said Film 1152 as Reception Number 431303;
Thence N65°04'36"E, 101.66 feet along the Southerly Line of said Film 1152 as Reception Number 431303;
Thence N86°26'03"E, 73.74 feet along the Southerly Line of said Film 1152 as Reception Number 431303;
Thence N60°07'37"E, 252.60 feet along the Southerly Line of said Film 1152 as Reception Number 431303 to the Southeast Corner thereof;
Thence N00°05'40"W, 228.18 feet along a line that is parallel with, as measured at right angles to, the West Line of SW1/4 of said Section 4 and along the Easterly Line of said Film 1152 as Reception Number 431303 to the Northeast corner thereof and the TRUE POINT OF BEGINNING;
Area = 30.438 acres, more or less.

VICINITY MAP

SCALE: 1" = 5000'



PROJECT DESCRIPTION

SITE AREA: 73.89 ACRES

ZONING: IN COMPLIANCE WITH CITY OF LOUISVILLE COMPREHENSIVE PLAN:

COMMERCIAL:	2.65 AC
MEDIUM DENSITY RESIDENTIAL	34.11 AC
LOW DENSITY RESIDENTIAL	27.47 AC
DEDICATED PUBLIC LAND (ENCUMBERED AND NON-)	18.99 AC
PRIVATE COMMON OPEN AREA	6.22 AC

NUMBER OF UNITS:
PLANNED - 350

ACCESS: SOUTH BOULDER ROAD, PASCHAL DRIVE, HECLA WAY, HECLA DRIVE

PUBLIC LAND DEDICATIONS: 18.98 AC
REQUIRED PUBLIC LAND DEDICATION: 9.56 AC

SIGNATURE BLOCKS

CITY COUNCIL

APPROVED THIS 21st DAY OF February, 2017 BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, CO, ORDINANCE NO. 1760 SERIES 2016

MAYOR

CITY CLERK

PLANNING COMMISSION CERTIFICATION

APPROVED THIS 12th DAY OF December, 2016 BY THE PLANNING COMMISSION OF THE CITY OF LOUISVILLE, CO, RESOLUTION NO. 24, SERIES 2016

BOULDER COUNTY CLERK & RECORDER CERTIFICATE

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED IN MY OFFICE AT 11:04 O'CLOCK A. M., THIS 22nd DAY OF August, 20 17 AND IS RECORDED IN PLAN FILE 23 AT 39, FEE $ 13.00 PAID ____ FILM NO ____ RECEPTION 3610766

CLERK

RECORDER

OWNERSHIP SIGNATURE BLOCK

BY SIGNING THIS GENERAL DEVELOPMENT PLAN, THE OWNER ACKNOWLEDGES AND ACCEPTS ALL THE REQUIREMENTS AND INTENT SET FORTH BY THIS GENERAL DEVELOPMENT PLAN. WITNESS OUR HANDS AND SEALS THIS 22nd DAY OF July, 2017

OWNER

NOTARY

JANET ANN [illegible]
Notary Public - State of Colorado
Notary ID 20164009419
My Commission Expires May 9, 2019

OWNERSHIP

RIDGELINE DEVELOPMENT CORP.
G. E. M. HOLDINGS, LLC
NORTH END PROPERTIES, LLC
WHITE HAWK RANCH, LLC

PUD DIMENSIONAL AND BULK STANDARDS								
LINE #	DIMENSION / BULK STANDARD	SINGLE FAMILY ALLEY LOAD	BLOCK 1- LOTS 1 AND 2	SINGLE FAMILY FRONT LOAD	BLOCK 1 - LOT 4	TOWN HOUSE	MULTI-FAMILY	COMMERCIAL*
1	MINIMUM LOT AREA (SQUARE FEET)	4000	LOT 1- 17,705 LOT 2- 16,150	4000	16,269	1000	1000	5000
2	MINIMUM LOT WIDTH	30'-0"	30'-0"	35'-0"	35'-0"	18'-0"	30'-0"	-
4	MAXIMUM LOT COVERAGE (% OF LOT AREA)	66%	30%	56%	30%	75%	85%	0.25 FAR
5	MINIMUM FRONT YARD SETBACK:							
	MINIMUM FRONT FOR PRINCIPLE USES	8'-0"	8'-0"	8'-0"	8'-0"	6'-0"	6'-0"	0
	MINIMUM FRONT YARD SETBACK FOR PRINCIPLE USES THAT FRONT PASCHAL DRIVE	20'-0"	20'-0"	20'-0"	20'-0"	-	-	-
	MINIMUM FRONT SETBACK TO PORCH	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	-
	MINIMUM FRONT PORCH WIDTH	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	-
	MINIMUM GARAGE FACE SETBACK TO FRONT PROPERTY LINE	-	-	20'-0"	20'-0"	-	-	-
6	MINIMUM SIDE YARD AND ACCESSORY USES SETBACK:							
	ALL CONDITIONS	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	0'-0"
	MINIMUM SETBACK BETWEEN ALL BUILDINGS	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
7	MINIMUM REAR YARD SETBACK	6' (TO ALLEY EASEMENT)	10' (TO ALLEY EASEMENT)	10'-0"	10'-0"	4' (TO ALLEY EASEMENT)	4' (TO ALLEY EASEMENT)	0 or 10' IF ABUTTING RESIDENTIAL ZONED USE
8	MAXIMUM BUILDING HEIGHT (PRINCIPAL BUILDING)	35'-0"	35'-0"	35'-0"	35'-0"	35'-0"	40'-0"	40'-0"
9	MAXIMUM BUILDING HEIGHT (ACCESSORY BUILDING)	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"	28'-0"
10	PARKING SPACES REQUIRED (OFF STREET) (9'X18' TYP.)	2 PER UNIT	2 PER UNIT	2 PER UNIT	2 PER UNIT	2 PER UNIT	1 /1 BEDROOM 1.5 / 2 BEDROOM 2 / 3 BEDROOM	1 /1 BEDROOM 1.5 / 2 BEDROOM 2 / 3 BEDROOM
	ALL RETAIL USES							1 SPACE PER 250 SQ FT
	ALL OFFICE USES							1 SPACE PER 300 SQ FT
11	FENCING STANDARDS (MAXIMUM HEIGHT)							
	PRIVACY FENCE	6'-0"						
	OPEN RAIL FENCE	4'-0"						

NOTES TO TABLE:
A. TANDEM GARAGES ARE ALLOWED.
B. NO MINIMUM LOT AREA PER DWELLING UNIT ON MULTI-FAMILY AND TOWN HOUSES.
* REFERENCE BLOCK 11 BULK STANDARDS FOR MORE INFORMATION ON RESIDENTIAL UNITS WITHIN COMMERCIAL PLANNING AREA

NORTH END - 3RD AMENDED

GENERAL DEVELOPMENT PLAN

LOUISVILLE, CO

PREPARED BY:

RIPLEY DESIGN INC.
■ land planning ■ landscape architecture ■ ■ urban design ■ entitlement ■
419 Canyon Ave. Suite 200 Fort Collins, CO 80521
phone 970.224.5828 | fax 970.225.6657 | www.ripleydesigninc.com

APPLICANT

RIPLEY DESIGN INC.
Stephanie Dykes, PLA
419 Canyon Ave. Suite 200
Fort Collins, CO 80521
p. 970.224.5828
f. 970.225.6657

OWNER

RIDGELINE DEVELOPMENT CORP

NORTH SCALE: 1"=200'-0" 0 100 200 400

ORIGINAL SIZE 24X36

ISSUED		
No.	DESCRIPTION	DATE
01	GENERAL DEVELOPMENT PLAN	11/23/16
02	GENERAL DEVELOPMENT PLAN	12/12/16

REVISIONS		
No.	DESCRIPTION	DATE

GENERAL DEVELOPMENT PLAN

SEAL:

ENTITLEMENT DRAWINGS NOT FOR CONSTRUCTION

PROJECT No.:	R15-057
DRAWN BY:	SC
REVIEWED BY:	SLV

DRAWING NUMBER:

GDP

Plotted By: Sam Coutts Layout: GDP GENERAL DEVELOPMENT PLAN Printed On: 5/15/2017 2:27 PM File Name: GDP GENERAL DEVELOPMENT PLAN.dwg

03610767
Page 1 of 2
DF: $0.00
RF: $23.00
08/23/2017 11:04 AM
Boulder County Clerk, CO

FINAL PLAT

NORTH END, BLOCK 11 – REPLAT OF NORTH END PARCEL 1, OUTLOT H & OUTLOT K REPLAT

A SUBDIVISION LOCATED IN A PORTION OF THE SW1/4 OF SECTION 4, T1S, R69W, 6TH P.M., CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO.

DEDICATION AND OWNER'S STATEMENT:

KNOW ALL MEN BY THESE PRESENTS: that Ridgeline Development Corporation, a Colorado Corporation and the City of Louisville, Colorado, being the owner's of that tract of land located in the SW1/4 of Section 4, T1S, R69W of the 6th P.M., City of Louisville, County of Boulder, State of Colorado, and being more particularly described as follows:

All of Outlot 11, NORTH END PARCEL 1, OUTLOT H & OUTLOT K REPLAT, a subdivision located in the SW1/4 of Section 4, T1S, R69W of the 6th P.M., City of Louisville, County of Boulder, State of Colorado, according to the plat recorded January 31, 2012 as Reception Number 3286562 of the records of Boulder County, Colorado.

Area = 4.572 acres, more or less.

Has laid out, subdivided and platted said land as per drawing hereon contained under the name and style of NORTH END BLOCK 11 REPLAT OF NORTH END, PARCEL 1, OUTLOT H & OUTLOT K REPLAT a subdivision of a part of the City of Louisville, County of Boulder, State of Colorado, and by these presents do hereby dedicate to the City of Louisville and the public, all municipally owned and/or franchised utilities and services those portions of said real property which are so designated as easements and right-of-ways for the construction, installation, operation, maintenance, repair and replacement for all services, including without limiting the generality of the foregoing, telephone and electric lines, works, poles and underground cables, gas pipelines, water pipelines, sanitary sewer lines, street lights, culverts, hydrants, drainage ditches and drains and all appurtenances thereto, it being expressly understood and agreed by the undersigned that all expenses and costs involved in constructing and installing sanitary sewer system works and lines, gas service lines, electrical service works and lines, storm sewers and drains, street lighting, grading and landscaping, curbs, gutters, street pavement, sidewalks and other such utilities and services shall be guaranteed and paid for by the subdivider or arrangements made by the subdivider thereof which are approved by the City of Louisville, Colorado, and such sums shall not be paid by the City of Louisville, Colorado, and that any item so constructed or installed when accepted by the City of Louisville, Colorado, shall become the sole property of said City of Louisville, Colorado, except private roadway curbs, gutter and pavement and items owned by municipally franchised utilities and/or Century Link which, when constructed or installed, shall remain the property of the owner and shall not become the property of the City of Louisville, Colorado.

Has caused its name to be hereunto subscribed this 24th day of July, 20 17 BY Ridgeline Development Corporation.

BY: Michael Markel

STATE OF COLORADO } SS
COUNTY OF Boulder }

The foregoing Instrument was acknowledged before me this 24 day of July, 20 17 BY Michael Markel as President of Ridgeline Development Corporation, a Colorado Corporation.

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES: 3/9/2018

JANET RAGLIN
Notary Public - State of Colorado
Notary ID 20104009419
My Commission Expires Mar 9, 2018

NOTARY PUBLIC: Janet Raglin

Has caused its name to be hereunto subscribed this _____ day of _____, 20___ BY City of Louisville, Colorado.

BY: _____ MAYOR _____ CITY CLERK

STATE OF COLORADO } SS
COUNTY OF _____ }

The foregoing Instrument was acknowledged before me this _____ day of _____, 20___ BY _____ as Mayor of the City of Louisville, Colorado.

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES: _____

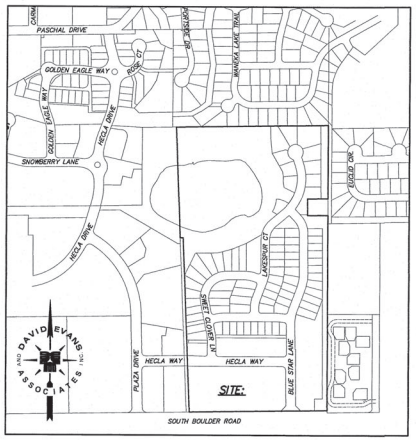
_____
NOTARY PUBLIC:

OWNER/DEVELOPER:
MICHAEL MARKEL
RIDGELINE DEVELOPMENT CORPORATION
5723 ARAPAHOE ROAD, UNIT B
BOULDER, CO 80301

DATE PREPARED:
JULY 20, 2017

ENGINEER:
JLB CIVIL ENGINEERS
743 PEAR COURT
LOUISVILLE, CO 80027
303-604-1634

SURVEYOR:
DAVID EVANS AND ASSOCIATES, INC.
1600 BROADWAY, SUITE 800
DENVER, CO 80202
970-531-8499



VICINITY MAP
1"=400'

NOTES:

1.) Bearings shown on the accompanying plat are based on the assumption that the South Line of the SW1/4 of Section 4, bears S89°11'46"W, as monumented and shown on the plat recorded August 17, 2007 as Reception Number 2876924 in Plan File P-68, F-1, #30 of the records of Boulder County, Colorado.

2.) Set 18" long #5 rebar with 2" outside diameter aluminum cap marked PLS 34592 at all exterior boundary corners unless otherwise noted.

3.) the U.S. Survey Foot was used for all measurements on this survey, pursuant to C.R.S. 38-52.103(2) metric conversion is: one meter equals 3937/1200 feet.

4.) The exterior boundary, recorded easements and rights-of-way, if any, are shown on the accompanying Plat as disclosed in the First Colorado Title Company, LLC case number 95949 dated November 12, 2010. Lands shown hereon may also be subject to the exceptions in said commitment number. Other interests or easements may exist. Per the request of the owner, no additional research was completed by David Evans and Associates Inc.

5.) Utility easements are indicated on sheet 2. The utility easements are for use by the City and other utilities as licensed with the City.

6.) That six foot (6') utility easement shown on Sheets 2 along the right-of-ways was established by Reception Number 3286562.

7.) There shall be a minimum of 5' horizontal clearance provided between public facilities (water, sewer and storm) and other utilities as directed by the City of Louisville.

NOTES:

8.) Roof overhangs may penetrate into side yard setbacks and easements up to 30 inches.

9.) The Exclusive Utility Easement shown on the plat are for use only by the City of Louisville with regard to utilities. Other than indicated, no other uses are permitted.

10.) City of Louisville exclusive utility easements are dedicated and conveyed solely to the City of Louisville for its exclusive use thereof for water, sanitary and storm sewer lines, facilities and appurtenances. No other uses or improvements are permitted within such exclusive easements without the prior written consent of the City of Louisville.

11.) Block, Lot and Outlot numbering shown hereon was required to match the approved preliminary plat by the City of Louisville.

12.) Easements for monument signs are for the installation of signs by the North End development.

13.) The City of Louisville is granted a 10' maintenance access easement where access is reasonably available beyond the utility easements granted to the City by this plat. The 10' maintenance access easement shall be allowed on either side of the utility easement, or 5' on each side of the utility easement, in either case this easement is not meant to restrict building or improvements allowed within the pud, but instead allow access where reasonably available on site. Minimum surface distrubance is allowed by the City's use whtin this easement.

CITY COUNCIL CERTIFICATE:

Approved this 21st day of February, 2017 by the City Council of the City of Louisville, Colorado. Resolution Number 29 Series 2016

MAYOR _____ CITY CLERK _____

PLANNING COMMISSION CERTIFICATE:

Recommended approval this 15th day of November, 2016 by the Planning Commission of the City of Louisville, Colorado. Resolution Number 29 Series 2016

CLERK AND RECORDERS CERTIFICATE:

I hereby certify that this instrument was filed in my office at 11:04 o'clock, A. M., this 23 day of Aug, 2017 and duly recorded Plan File _____ as Reception Number 3286562

Fee $23.00 _____ Hillary Hall
CLERK AND RECORDER

NOTICE:

According to Colorado law you MUST commence any legal action based upon any defect in this survey within three years after you first discovered such defect. In NO event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

SURVEYOR'S CERTIFICATE:

I, Michael Sean Kervin, a duly licensed land surveyor in the State of Colorado, do hereby certify that this plat of NORTH END, BLOCK 11 REPLAT OF NORTH END, PARCEL 1, OUTLOT H & OUTLOT K REPLAT was prepared by me or under my direct supervision and correctly shows the location and dimensions of the lots in compliance with C.R.S. 38-50 through 38-53 concerning the subdivision of land.

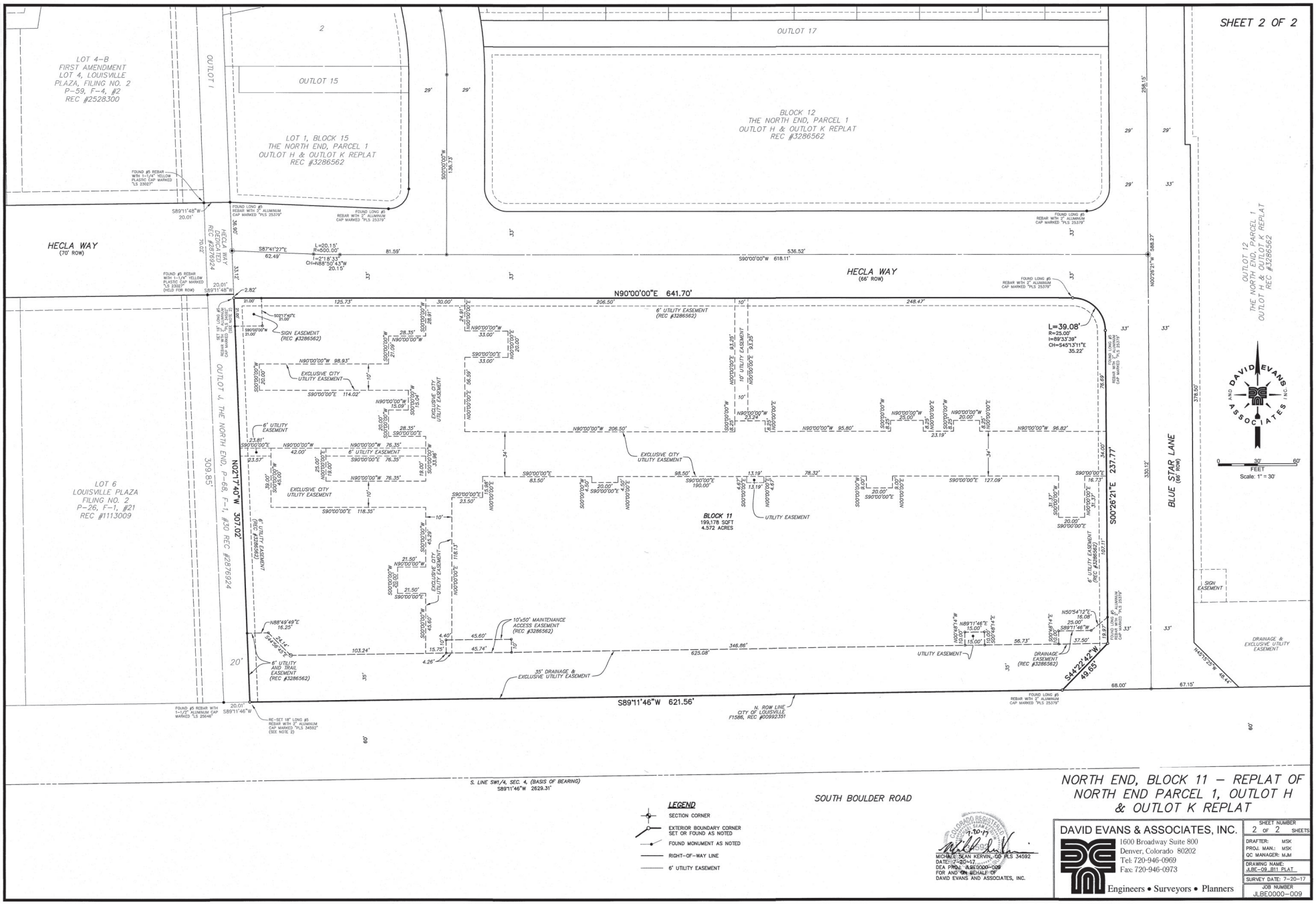
COLORADO REGISTERED PROFESSIONAL LAND SURVEYOR 34592 7-20-17

MICHAEL SEAN KERVIN, CO PLS 34592
DATE: 7-20-17
DEA PROJ. JLBE0000-009
FOR AND ON BEHALF OF
DAVID EVANS AND ASSOCIATES, INC.

NO:	BY:	DATE:	REVISIONS:
1	MSK	1-14-16	Original Submittal
2	MSK	11-30-16	2nd Submittal
3	MSK	5-9-17	Rev. Note 13
4	MSK	7-10-17	Rev. Easement

DAVID EVANS & ASSOCIATES, INC.
1600 Broadway Suite 800
Denver, Colorado 80202
Tel: 720-946-0969
Fax: 720-946-0973
Engineers • Surveyors • Planners

SHEET NUMBER 1 OF 2 SHEETS
DRAFTER: MSK
PROJ. MAN.: MSK
QC MANAGER: MJM
DRAWING NAME: JLBE-09_B11 PLAT
SURVEY DATE: 7-20-17
JOB NUMBER JLBE0000-009



LEGEND

- SECTION CORNER
- EXTERIOR BOUNDARY CORNER SET OR FOUND AS NOTED
- FOUND MONUMENT AS NOTED
- RIGHT-OF-WAY LINE
- 6' UTILITY EASEMENT

NORTH END, BLOCK 11 – REPLAT OF NORTH END PARCEL 1, OUTLOT H & OUTLOT K REPLAT

MICHAEL SEAN KERWIN, CO PLS 34592
DATE: 7-20-17
DEA PROJ. #JBE0000-009
FOR AND ON BEHALF OF
DAVID EVANS AND ASSOCIATES, INC.

DAVID EVANS & ASSOCIATES, INC.
1600 Broadway Suite 800
Denver, Colorado 80202
Tel: 720-946-0969
Fax: 720-946-0973
Engineers • Surveyors • Planners

SHEET NUMBER	2 OF 2 SHEETS
DRAFTER:	MSK
PROJ. MAN.:	MSK
QC MANAGER:	MJM
DRAWING NAME:	JLBE-09_B11 PLAT
SURVEY DATE:	7-20-17
JOB NUMBER	JLBE0000-009

City of Louisville
COLORADO • SINCE 1878

Planning Commission
Meeting Minutes
November 10, 2016
City Hall, Council Chambers
749 Main Street
6:30 PM

Call to Order – Pritchard called the meeting to order at 6:30 P.M.

Roll Call was taken and the following members were present:

Commission Members Present:	Chris Pritchard, Chair
	Steve Brauneis, Secretary
	Tom Rice
	David Hsu
	Monica Sheets
Commission Members Absent:	Ann O'Connell, Vice Chair
	Jeff Moline
Staff Members Present:	Rob Zuccaro, Dir of Planning & Building Safety
	Kristin Dean, Principal Planner
	Lauren Trice, Planner II
	Susie Bye, Planning Clerk

Approval of Agenda:
Pritchard states he asked Staff to amend the agenda to reflect old business and new business. **Brauneis** moved and **Hsu** seconded a motion to approve the amended November 10, 2016 agenda. Motion passed by voice vote.

Approval of Minutes:
Brauneis moved and **Hsu** seconded a motion to approve the October 13, 2016 minutes. Motion passed by voice vote. **Sheets** abstains.

Public Comments: Items not on the Agenda
None.

Old Business – Public Hearing Items

- **Delo Lofts Final Plat/PUD/SRU: Resolution 25, Series 2016,** a resolution recommending approval of a final plat for 4.39 acres which includes a 1.91 acre final planned unit development (PUD) and special review use (SRU) within the core area of the Highway 42 Revitalization District for 33 apartments and 8 live/work units.
  - Applicant: Delo East, LLC (Justin McClure)
  - Owner: Boom, LLC (Elizabeth Law-Evans)
  - Representative: RMCS, Inc. (Justin McClure)
  - Case Manager: Scott Robinson, Planner III/Kristin Dean, Principal Planner

Conflict of Interest and Disclosure:
None. **Sheets** abstains because she was not present at the October meeting for the first presentation.

Name	Vote
Chris Pritchard	Yes
Ann O'Connell	n/a
Steve Brauneis	Yes
Jeff Moline	n/a
Tom Rice	Yes
David Hsu	Yes
Monica Sheets	Yes
Motion passed/failed:	Pass

Motion passes 5-0.

New Business – Public Hearing Items

- **North End Market PUD/GDP, Resolution 29, Series 2016,** a resolution recommending approval of a General Development Plan (GDP) amendment, final plat and final planned unit development (PUD) to construct a multi-use development consisting of 38 dwelling units and 40,000 SF of commercial space at Block 11, North End Phase II.
  - Applicant, Owner, and Representative: Ridgeline Development Corp (Chad Kipfer)
  - Case Manager: Scott Robinson, Planner III/ Kristin Dean, Principal Planner

Conflict of Interest and Disclosure: None.

Public Notice Certification:
Published in the Boulder Daily Camera on October 23, 2016. Posted in City Hall, Public Library, Recreation Center, and the Courts and Police Building and mailed to surrounding property owners and property posted on October 21, 2016.

Staff Report of Facts and Issues:
Dean presented from Power Point:

- Located in north Louisville
- Zoned PCZD-C
- 4.55 acres
- 38 Residential units
- 40,000 SF commercial

GENERAL DEVELOPMENT PLAN

- Originally approved in 2006
- Maximum of 350 Residential Units. Density has been shifted via past GDP Amendments. Planning Area 1 was originally intended for 65,500 square feet of commercial use. With the first amendment to the GDP, they moved 12 residential units from Planning Area 4 to Planning Area 1 with the intention to facilitate a more a mixed-use development. Under the second amendment of the PUD, 9 residential units were moved from Planning Area 2 to Planning Area 1 for a total of 21 residential units, now being permitted in Planning Area 1. The boundaries of Planning Area 1 were also modified under that amendment.
- Under this amendment, they propose to transfer 17 units from Planning Area 4 to Planning Area 1 to allow for a total of 38 residential units and decrease the commercial to 40,000 SF. The residential density will not exceed the 350 units that were allowed under the original GDP.
- The GDP includes a note regarding the overall development concept of North End. Since its inception, North End has been envisioned to be a mixed-use development. The commercial uses are intended to be complementary to the existing commercial uses in the area and serve the neighboring residential areas.
- The residential uses are intended to be a mix of attached and detached single and multi-family units. The 38 units integrated closely with these commercial uses with a workable pedestrian-friendly environment that does create the true mixed-use development.

- A similar plan was reviewed in March 2016. Under that plan, there were 65 residential units proposed. It was a PUD and GDP amendment. They were transferring the same 17 units, reducing the commercial density, but proposed 31 age-restricted units. It was in multi-family buildings where residential was located. The commercial uses are all along So Boulder Road. In March 2016, the PC did approve that plan as proposed.
- In April 2016, the So Boulder Road Small Area Plan was approved. In that plan, it essentially adopted a policy that restricted residential density to that for which the property was already zoned. The option for the SRU for additional residential density beyond what the property was presently zoned was removed. While the So Boulder Road Small Area Plan is not applicable to this project because it did come in before its adoption, the developer decided it would be best to remove the age-restricted units from the development plan and come back with a revised plan that meets the residential density allowed by the GDP. They felt they were complying with this element of the So Boulder Road Small Area Plan.
- The current proposal is for 38 residential units and 40,000 SF of retail space. Block 12 and Block 15 have been approved and are under construction.
- The 6 single family units proposed are on the west end of the project. There are 8 townhome units in two buildings and 24 multi-family units in two buildings. All commercial is still along So Boulder Road.
- The project is considered to be in accordance with the 2013 Comp Plan. The Comp Plan identifies this area as an urban corridor with a focus on commercial, office, and neighborhood retail, with higher density housing in close proximity to the roadway. Additionally, the Comp Plan states that development and urban corridors must demonstrate a positive fiscal return and establish residential density allowances up to 25 units per acre. The fiscal impact model estimates that this project will general $963,000 over a 20 year period or $48,150 annually. It does have a positive fiscal impact.
- The Comp Plan also includes policies related to housing, specifically to insure mixed housing types and that prices meet changing economic social and multi-generational needs. The project includes a mix of single family, townhomes, and multifamily. The previous proposal supported by the PC with age-restricted units would have diversified the housing stock. Because of the new policy in the So Boulder Road Small Area Plan, those units were removed from this application to insure it meets the density cap.
- There are three primary access points into this project.
    - Right-in, right-out off of So Boulder Road
    - Blue Star Lane and Hecla Way
    - Hecla Way to Plaza Drive to the traffic signal
    - With this proposal and reduction in residential units, the trip generation rates have dropped from what was previously approved.
- The City traffic engineer concurs with the findings and the traffic impact studies submitted. There are no additional lanes or lights necessary to facilitate traffic generated from this project. The traffic impact study found that the level of services would be maintained with or without this added development project.
- 149 parking spaces are required for the 40,000 SF of commercial and office space. 163 spaces are proposed in a surface lot and an additional 43 spaces are available on Hecla Way and Blue Star Lane.
- All residential units will have garage parking. Any guest parking will be accommodated by excess parking in the surface lots or on the roads. This application does meet all the parking requirements.
- The commercial architecture has not changed since the plans submitted in March 2016. There is a third story element added to Building 6. The commercial buildings range from 30' to 33'. The third story element will take this building up to 40'. The maximum height on this development site is 40'.

- The brewery height is generally shown at 25'. There are no design guidelines for the residential structures. The architecture is reflective of other North End residential structures that were approved and built. The height of these units ranges from 35' to 40'.
- A condition of the approved March 2016 project required a sidewalk connection on the east side of the So Boulder Road access point. That sidewalk has been added to the plans.
- The plan meets all requirements of landscaping and lighting.
- The applicant is processing a plat to dedicate all necessary access, utility, and drainage easements for the site.

Staff Recommendations:
Staff recommends Planning Commission move to approve **North End Market PUD/GDP, Resolution 29, Series 2016,** a resolution recommending approval of a General Development Plan (GDP) amendment, final plat and final planned unit development (PUD) to construct a multi-use development consisting of 38 dwelling units and 40,000 square feet of commercial space at Block 11, North End Phase II.

Commission Questions of Staff:
Hsu says the difference from the previously approved plan is that there were 65 units and now there are 38 residential units. Are the 17 units from Planning Area 4 different from what we decided before or is that the same?
Dean says that is the same. It is unbuilt density in Planning Area 4 that is being shifted.
Hsu says regarding the age-restricted units that went from 31 units to 0 units. How is that related to meeting the density requirements? You alluded that removing the age-restricted units helped meet the density requirements.
Dean says in the original application, they were capped at 350 units. They were asking for additional units which would be age-restricted units as a way to balance out the increase in residential density. Because that is now capped by the So Boulder Road Small Area Plan, they removed the age-restricted units.
Sheets says in terms of the age-restricted units, will they be put somewhere else in the development that remains. Did we completely lose them?
Dean says as far as I know, they are completely gone.
Rice says I remember this discussion about moving the residential units. My principle concern at the time was taking commercial space and converting it to residential, which is seen quite frequently. My main concern was that whatever happened, we weren't blowing the cap on what was originally approved in terms of residential density on the old development. Isn't 350 units the top amount? **Dean** says yes.
Zuccaro says the previous proposal included a GDP amendment and a SRU to increase the overall residential density above the 350 units. This current proposal brings it back to 350 units.
Rice says since we are reducing the number of residential units in this development, is the trade-off that the residential units will be larger in square footage?
Dean says the applicant can answer that question.
Sheets says I was involved in the discussions in 2006 of this GDP. There were two approvals and conditions that were part of the original plans for North End which included an underpass under So Boulder Road with great discussion at length about it. There was supposed to be a monument sign at the east corner of North End which would say "Welcome to Louisville". For a number of years, there has been a very small sign which may not be there anymore.
Zuccaro says regarding the signage, over the last couple of years, Staff has been working with PC and CC to create a wayfinding sign program for the City which includes these types of City entry signs. It is outside the scope of this proposal. We will bring a final plan to PC and CC in the first quarter of next year. There will be new signs pointing to Downtown and community entry signs. There is a trail connection to the east with a signal but I am not aware of any capital plan or City plan for an underpass.

Pritchard says in terms of conditions in 2006, I don't believe there were any. I remember the conversations of surface crossing and control device. The underpass was discussed but we did not move forward on it. I don't recall the sign discussion.

Applicant Presentation:
Chad Kipfer, Markel Homes, 5723 Arapahoe Avenue, Boulder, CO
Michael Markel, Markel Homes, 5723 Arapahoe Avenue, Boulder, CO

As a quick overview, the project was approved in 2007 for 350 units and up to 65,000 SF of commercial. Phase One is constructed and we are working on Block 10 with some single family duplexes. We have some multi-family coming up on the west of it. Phase Two is nearing completion with some single family houses left to build. We have three multi-family condo buildings under construction. We will be starting Block 15 which is six units. Phase Three is under construction with eight houses. Block 11 is the current location.

In terms of signage, Phase Two was approved in 2007 with a PUD amendment in 2012. At that time, we reconfigured the GDP. In the area where the sign would be, we have dedicated land for the sign. The City will install the sign but I don't believe it has been installed.

In terms of trail connection, there is a trail that comes down on the east side of the property and hits a HAWK intersection, a lighted crossing, and makes the connection.

When we originally approved this project, there was 25% dedicated for open space. It includes Hecla Lake, trail corridors, and common open space owned by the HOA. All the trails on the map have been constructed. There are extensive improvements to Hecla Lake.

The total unit count is 350 units. In the 2012 GDP amendment and during the recession, we were in Filing Area 4 and did a number of PUD amendments. We did not do corresponding GDP amendments to coordinate it. We just kept track with Staff as we went through it. This is a clean-up effort to make sure got everything formalized. The total 350 units are at build out as proposed. When we were before you in spring 2016, we asked for additional units. Our understanding of the So Boulder Road Small Area Plan is it is a Comp Plan amendment so we are trying to hit the vision for Louisville. We believe the 350 units meets the plan, the vision, and the original vision for North End.

Regarding traffic, in 2012 with Phases Three, Two, and One and the 65,000 SF of commercial and 160 dwelling units in that zone, the traffic report had 3,277 average weekday trips. The public improvements installed along So Boulder Road and the collector roads of Blue Star to Hecla Way to Plaza Drive are deemed to be of service for this neighborhood. It met acceptable levels. In January 2016, we asked for 40,000 SF of commercial and 197 units, and we went above the original approval. The traffic report went down in average weekday trips because of less commercial. With this plan tonight, we are asking for 160 units and the same amount of commercial. There will be less traffic than what was originally approved. The main circulation route is right-in, right-out to So Boulder Road, Hecla Way, and Blue Star.

We propose to build commercial and residential at the same time, starting from the east side of the site to the west. There will be two sets of townhouses with four units each. There will be two 12-plex buildings with underground parking. The commercial buildings are in the same configuration. These buildings have retail on the main level with second story office. Markel Homes plans to move our offices to one the buildings.

The 38 residential units require 64 parking spaces. We have sold out the first condo building and are on to the third building. We have had meetings with HOA and neighbors to take a survey of who lives where and how many cars. Everyone has one car. It fits into the requirement.

The commercial is 40,000 SF and requires 149 parking spaces. We have 163 spaces provided on site with an additional 7 spaces. There are 43 extra spaces outside.

It is an easy walk for North End residents with connections throughout the site. There is an outdoor seating area as part of the brewery. There is an RTD parking space. Trails along the east side connect to sidewalks. It is a walkable pedestrian-friendly environment.

Commission Questions of Applicant:
Sheets says in your survey with the residents who have one car, were most of those units sold to one person only? I think of most families as having two people and two cars.
Kipfer says Block 12 has condo buildings with 1,000–1,200 SF with two bedrooms. We don't think the market for those units is families, but for a number of different people from young to older. It seems to be fitting the market needed in the City.
Sheets asks what has happened with the 31 age-restricted units and where will they go or will they be built?
Pritchard says because they were in excess of the 350 units, they will not be built.
Kipfer says we do not propose to go over the 350 units for North End. We will not build age-restricted units because it is not required.
Rice says with the proposal tonight, it brings us back to the 350 units.
Kipfer says everything in North End is broken up into Planning Areas. The numbers in Planning Areas One and Four changed on the GDP. The total units are exactly the same. In Planning Area Four where we did a PUD amendment for Block 9, Block 7, Block 6, and Block 10, some of those were combined together. Those were some changes from townhouses to single family. Block 10 was iterations of making it work. The reason that Block 11 was not submitted in 2012 is because we were changing Block 10 in Planning Area Four and it was decided to bring it forward later. We didn't want to amend it again.
Rice says if we compare the proposal under consideration tonight to the one presented in March 2016, the density has gone down in terms of residential units. How much space is being built and how does that compare?
Kipfer says the units are very similar in size. The condo buildings are 1,000-1,200 SF, 2-bedroom units and are similar in size to what is currently built across the street. The townhouses are in the 1,800 SF range and the detached units are small but vertical. It's in a different configuration and different streetscape and presence and architecture. The aggregate is smaller because of less units being built from the March 2016 proposal. There is less density.
Hsu asks why we can't have any age-restricted units in the remainder. There were people speaking highly of them.
Michael Markel says when we presented in March 2016, we were asking for additional density with lower impact and to serve a specific need. When the So Boulder Road Small Area Plan was approved by CC, we decided to stay with the original approval of 350 market rate units. The people who are buying our condos are mostly 55+ people. These units are elevator accessible.
Hsu says is it possible to have age-restricted units.
Markel says these units are market-rate units. It is a disadvantage for us to have deed restricted units. When we asked for extra density, we were willing to do age-restricted for those extra units. In the market-rate environment we currently have, at the price we have, and type of building we have, we are already capturing that demographic.

Public Comment:
Mark Cathcart, 1763 Sweet Clover Lane, Louisville, CO
I live in one of the single family homes and have lived there since February 2016. I am 59 years old but I have an 8 year-old. I have some concerns. I am entirely in support of what Markel is doing with North End Market. It was the primary reason I bought my house. We got to pick a lot and a model. I would like to put on the record that I have met with **Rob Zuccaro** and **Chad Kipfer. Cathcart** shows a couple of slides regarding traffic. He shows proposed or approved developments. The Balfour facility was approved and the Phase Three is approved and ready to go. They are building Block 15 which is immediately adjacent to my house. Markel is proposing to develop the Blue Sage subdivision in Lafayette immediately across from North End Phase Two and Phase Three. As part of that 53 dwelling unit development, Lafayette's City Council is requiring as a condition of development to put a traffic light in at So Boulder Road. When it is done, we will have a traffic light at the Blue Sage development, a right-in/right-out at Blue Star Lane, and a right-in/right-out at Sweet Clover Lane. This means all traffic in Louisville as well as

the North End development has to exit via Plaza Drive if they want to go east on So Boulder Road. The only alternative is to go to Highway 42, down to the lights on Highway 42 and So Boulder Road, and make a left. I am concerned about this because before all this will be built, we already suffer from regular back-ups at the traffic lights. **Zuccaro** has agreed to look at the traffic lights and see if they can extend the timing on them. What happens is essentially gridlock. There is traffic that comes down from Plaza Drive from the north and traffic coming out of the King Soopers Plaza, and you can't get out from Hecla Way. Unless you are going right, you can't get out. From my house for eight months, I was able to sit and watch construction traffic and residents making illegal left turns out of Blue Star to go east on So Boulder Road. It is already an issue. A number of residents and I are concerned that when a brewpub is open on Blue Star and So Boulder Road, the only legal way to exit is Hecla Way. We may have alcohol-infused people going to Plaza Drive to exit or they may make illegal left turns. Markel has met the City requirements for the exits. It is a difficult problem.
Pritchard asks Staff about traffic. Is the City looking at this issue along So Boulder Road since we are using a right-in/right-out access? Is it a question of warrants? Is So Boulder Road a City road or a state road?
Zuccaro says So Boulder Road is a City road in that section. We control the lights and access. The applicant provided a traffic study that our City engineer reviewed. It analyzed the density and resulting traffic flows at the intersections and ranks them to a 20 year period. Everything appears to be operating at acceptable levels under that traffic study. As far as people making illegal left turns, there are improvements intended to stop or limit that and are shown on the plans. On Blue Star Lane, is a "pork chop" to direct people to make right turns.
Brauneis says with the right-in/right-out access, was it arrived at due to the size and speed of So Boulder Road? Is the reason we have no left turn because of the traffic pattern and speed?
Zuccaro says this decision was made before I came so I don't know what discussions happened.
Kipfer says when we came in for Phase Two in 2012, there were discussions about the trail connection. Because of the sequence of lights, the City looked at where to place a signal. The decision was made to make the connection across So Boulder Road at the HAWK light.

Summary and request by Staff and Applicant:
Staff recommends Planning Commission move to approve **North End Market PUD/GDP, Resolution 29, Series 2016,** a resolution recommending approval of a General Development Plan (GDP) amendment, final plat and final planned unit development (PUD) to construct a multi-use development consisting of 38 dwelling units and 40,000 square feet of commercial space at Block 11, North End Phase II, without conditions.

Closed Public Hearing and discussion by Commission:
Hsu says I think about the age-restricted housing. Maybe I am hung up on the math or maybe I am holding Markel to a different standard. They were generous before and now I would like to see that housing. They offered 31 age-restricted units before and they didn't have to, although perhaps that was a condition of going over the GDP. Is there enough variety in housing types? Is there a consideration and provision for low and moderate income housing? If the order had been changed as far as how it was presented, I wouldn't be considering age-restricted housing. Now, because of the order, I think about it. We were concerned that the land area of the buildings was too dense and now we have it much less dense. It makes the area look nicer than what it was before.
Brauneis says I appreciate your desire for age-restricted housing and I think it speaks well for the community in the long and midterm, perhaps not an issue in the short term. I don't see that as an issue at this point with the development as proposed. We don't have that policy within the City at this point. We don't have much to stand on. I don't find any particular issues with it as proposed.

Rice says comparison between this plan and the one we had previously, I think this plan is far superior to what existed before for two reasons. I am happy that we brought this back to the density that was originally envisioned for this overall development, and that is a real positive. The second thing is in looking at this plan, it is compatible with the So Boulder Road Small Area Plan. This is what was envisioned in that plan and I think it is perfect for that. The third point goes to the issue of age-restricted housing. I have real issues with using age-restricted housing as a planning tool. I think it is bad because it essentially creates externalities in the market that cause property to be tied up in perpetuity in a way we intend. In the past, we have seen this used as a tool to allay concerns about school crowding. Even that is an inexact tool because it is a deed restriction, but it is not who can live there. Someone who is 55 can buy one unit and rent it to someone who is younger, as I understand it. It is an inexact tool for the purpose intended. I don't think this development is intended to be senior housing. It may prove that this is the market it speaks to very well. That is good. We ought to, as a body, be very careful about placing deed restriction age on housing stock.
Sheets says I agree with Tom in terms of the age restriction in housing, but I would like to encourage Louisville to keep looking at units that are appropriate for empty nesters and those wishing to downsize. I am glad that people are finding it in your housing stock. I am generally supportive of this and think it is a nice proposal. You have done nice things with the trails.
Pritchard says I am supportive of this proposal. In regard to the age restriction, that was an enticement and why it was used. It is something we would like to encourage in this community. This is a completely different proposal. I understand where the applicant is coming from and it is a long time coming, from 2006 to 2016. The applicant has a strong history in our community. It will be nice to have their corporate involvement in our community. I have concerns about the traffic flow. Since the City will be looking at it, the PC can monitor it, especially if we see complaints and an escalation of accidents. I believe our Staff has been made aware of it.

Motion made by **Sheets** to approve Staff recommends Planning Commission move to approve **North End Market PUD/GDP, Resolution 29, Series 2016,** a resolution recommending approval of a General Development Plan (GDP) amendment, final plat and final planned unit development (PUD) to construct a multi-use development consisting of 38 dwelling units and 40,000 SF of commercial space at Block 11, North End Phase II, seconded by **Rice**. Roll call vote.

Name	Vote
Chris Pritchard	Yes
Ann O'Connell	n/a
Steve Brauneis	Yes
Jeff Moline	n/a
Tom Rice	Yes
David Hsu	Yes
Monica Sheets	Yes
Motion passed/failed:	Pass

Motion passes 5-0.

- **Crystal Springs SRU, Resolution 26, Series 2016,** a resolution recommending approval of a Special Review Use (SRU) to allow for an approximately 720 SF outdoor patio seating area associated with the proposed Crystal Springs Brewing Company satellite tap room located at 600 Main Street (Lot 7, Block 4, Louisville Old Town)
  - Applicant and Representative: Crystal Springs Brewing Company, LLC (Tom Horst)
  - Owner: Martin and Karen Achtermann
  - Case Manager: Rob Zuccaro, Planning and Building Safety Director

Email entered into record:
Rice makes motion to enter public comment letter into the record, seconded by **Brauneis**. Applicant has made response to the letter. Passed by voice vote.

City of Louisville
COLORADO SINCE 1878

City Council

Meeting Minutes

December 20, 2016
City Hall, Council Chambers
749 Main Street
7:00 PM

Call to Order – Mayor Muckle called the meeting to order at 7 00 p m

Roll Call was taken and the following members were present

City Council	***Mayor Robert Muckle, Mayor Pro Tem Jeff Lipton, Councilmembers Jay Keany, Chris Leh, and Ashley Stolzmann***
Absent.	***Susan Loo*** ***Dennis Maloney***
Staff Present	***Heather Balser, Deputy City Manager*** ***Kevin Watson, Finance Director*** ***Aaron DeJong, Director of Economic Development*** ***Kevin Watson, Director of Finance*** ***Rob Zuccaro, Director of Planning & Building Safety*** ***Lauren Trice, Planner II*** ***Meredyth Muth, City Clerk***
Others Present	***Sam Light, City Attorney***

PLEDGE OF ALLEGIANCE

All rose for the pledge of allegiance

APPROVAL OF AGENDA

Mayor Muckle called for changes to the agenda and hearing none, moved to approve the agenda, seconded by Councilmember Keany All were in favor Absent Councilmembers Loo and Maloney

PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

Local Licensing Authority – John Carlson, Marguerite Lipton, Matt Machado
Open Space Advisory Board – Laura Scott Denton, Mike Schantz, Fiona Garvin, Jim Gibb (alternate)
Parks & Public Landscaping Advisory Board – Shelly Alm, Mark Newland, Diana Gutowski
Planning Commission – Monica Sheets
Revitalization Commission – Rob Lathrop, Jochen Manning Lebek
Mayor Muckle noted the Golf Course Advisory Board had no appointments while the Council considers other options or changes for that board and the need for completion of the strategic plan

Mayor Pro Tem Lipton recused himself on the vote due to his spouse being reappointed to the Local Licensing Authority

Mayor Muckle moved to approve the appointments as presented, Councilmember Keany seconded 4-0 Mayor Pro Tem Lipton abstained Councilmembers Maloney and Loo absent

NORTH END MARKET – GENERAL DEVELOPMENT PLAN AMENDMENT AND FINAL PLAT AND PLANNED UNIT DEVELOPMENT

ORDINANCE NO 1730, SERIES 2016, AN ORDINANCE APPROVING AN AMENDMENT TO THE NORTH END GENERAL DEVELOPMENT PLAN (GDP) TO TRANSFER 17 RESIDENTIAL UNITS FROM PLANNING AREA 4 TO PLANNING AREA 1 AND REDUCE THE COMMERCIAL SPACE TO 40,000 SQUARE FEET IN PLANNING AREA 1 – 1st READING – SET PUBLIC HEARING 01/03/17

RESOLUTION NO 78, SERIES 2016 – A RESOLUTION APPROVING A FINAL PLAT AND FINAL PLANNED UNIT DEVELOPMENT (PUD) TO CONSTRUCT A MULTI-USE DEVELOPMENT CONSISTING OF 38 DWELLING UNITS AND 40,000 SQUARE FEET OF COMMERCIAL SPACE, BLOCK 11, NORTH END PHASE TWO – *CONTINUE TO 01/03/17*

City Attorney Light introduced Ordinance No 1730, Series 2016

Mayor Muckle moved to approve Ordinance No 1730, Series 2016 on first reading, send it out for publishing and set the public hearing for January 3, 2017 Councilmember Keany seconded All in favor Councilmembers Maloney and Loo absent

Council Members continued Resolution No 78 to the January 3, 2017

CITY ATTORNEY'S REPORT

City of Louisville
COLORADO • SINCE 1878

City Council

Meeting Minutes

January 3, 2017
City Hall, Council Chambers
749 Main Street
7:00 PM

Call to Order – Mayor Muckle called the meeting to order at 7:00 p m

Roll Call was taken and the following members were present.

City Council:	***Mayor Robert Muckle, Mayor Pro Tem Jeff Lipton, Councilmembers Jay Keany, Chris Leh (arrived 7:02 pm), Susan Loo, Dennis Maloney, and Ashley Stolzmann***
Staff Present:	***Malcolm Fleming, City Manager*** ***Heather Balser, Deputy City Manager*** ***Aaron DeJong, Director of Economic Development*** ***Rob Zuccaro, Director of Planning & Building Safety*** ***Lauren Trice, Associate Planner*** ***Dave Hayes, Police Chief*** ***Meredyth Muth, City Clerk***
Others Present:	***Sam Light, City Attorney***

PLEDGE OF ALLEGIANCE

All rose for the pledge of allegiance

APPROVAL OF AGENDA

Mayor Muckle called for changes to the agenda and hearing none, moved to approve the agenda, seconded by Councilmember Loo All were in favor.

PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

Debbie Fahey, 1118 West Enclave Circle, representing the Seniors of Louisville Board, stated the board is sponsoring the upcoming FACE concert on January 14th at 7 PM. The concert is a fund raiser to raise money for seniors in need of help with energy bills, emergency costs, activity scholarships, and more. She encouraged everyone to attend.

Councilmember Loo stated the land swap makes sense and gives the City a better opportunity for a parking structure. A new building on Main Street would be a nice addition to downtown. She sees the land swap as an opportunity that shouldn't be passed on

Councilmember Maloney stated he appreciates Councilmember Stolzmann's perspective but notes the land swap gives a better foot print for future use. He supports the swap but wishes the Council had taken more time and had better discussion prior to entering into something like this. Councilmember Leh agreed with Councilmember Maloney.

Mayor Muckle asked for Public Comment. There were no public comments.

Mayor Pro Tem Lipton stated he is concerned that land purchases are being done incrementally without a long-term plan. He is reluctant to move on future projects without more planning for the downtown area. He is concerned, in general, about the valuations being used for land purchases and if we are getting the highest and best use of properties.

Councilmember Stolzmann stated this doesn't create more parking in the long run as it is a loss of 17 spaces when the new building is complete. Additionally, this commits the City to repave this lot after construction which is an added expense. She stated filling the gap on Main Street will limit the footprint of the building in the long run She does not support the swap.

Ordinance No 1729, Series 2017 – Councilmember Keany moved to approve the ordinance as amended; Councilmember Loo seconded the motion A roll call vote was taken and it passed 6-1, Councilmember Stolzmann voted no.

Resolution No. 73, Series 2017 – Mayor Muckle moved to approve the resolution. Councilmember Keany seconded the motion A roll call vote was taken and it passed 6-1; Councilmember Stolzmann voted no.

NORTH END MARKET – GENERAL DEVELOPMENT PLAN AMENDMENT AND FINAL PLAT AND PLANNED UNIT DEVELOPMENT

ORDINANCE NO. 1730, SERIES 2016, AN ORDINANCE APPROVING AN AMENDMENT TO THE NORTH END GENERAL DEVELOPMENT PLAN (GDP) TO TRANSFER 17 RESIDENTIAL UNITS FROM PLANNING AREA 4 TO PLANNING AREA 1 AND REDUCE THE COMMERCIAL SPACE TO 40,000 SQUARE FEET IN PLANNING AREA 1 – 2nd READING –PUBLIC HEARING (advertised *Daily* Camera 12/25/16)

RESOLUTION NO. 78, SERIES 2016 – A RESOLUTION APPROVING A FINAL PLAT AND FINAL PLANNED UNIT DEVELOPMENT (PUD) TO CONSTRUCT A MULTI-USE DEVELOPMENT CONSISTING OF 38 DWELLING UNITS AND 40,000 SQUARE FEET OF COMMERCIAL SPACE; BLOCK 11, NORTH END PHASE TWO – *CONTINUED FROM 12/20/16*

Attorney Light introduced the ordinance by title stating this is a 2nd reading and public hearing; he noted the associated resolution Mayor Muckle opened the public hearing.

Director Zuccaro stated the applicant has requested a continuance for more time to review the original General Development Plan (GDP) and to take a look at the fiscal model information Council has asked for additional information on the fiscal analysis for the entire GDP area and staff is working with the applicant to get this information They plan to run the current fiscal model on the original GDP from 2006 and also on the proposed changes to the GDP.

Mayor Muckle moved to continue the item to 1/17/16; Councilmember Loo seconded the motion. City Attorney Light noted this will continue both the ordinance and the resolution. All were in favor of the continuance.

ORDINANCE NO. 1731, SERIES 2017, AN ORDINANCE AMENDING CHAPTER 9.22 AND CHAPTER 9.72 OF THE LOUISVILLE MUNICIPAL CODE REGARDING MINORS AND ALCOHOL AND AMENDING SECTION 9.76.020 OF THE LOUISVILLE MUNICIPAL CODE REGARDING POSSESSION AND CONSUMPTION OF MARIJUANA BY MINORS – 1st READING – SET PUBLIC HEARING 01/17/17

City Attorney Light introduced the ordinance by title on first reading. Mayor Muckle moved to approve the ordinance on first reading and set the public hearing for 1/17/17. Councilmember Leh seconded the motion. Members voted 7-0 to approve.

14.12 OF THE LOUISVILLE MUNICIPAL CODE REGARDING VIOLATIONS OF PARKS AND RECREATION REGULATIONS – 1ST READING – SET PUBLIC HEARING 01/17/17

City Attorney Light introduced the ordinance by title on first reading. Mayor Muckle moved to approve the ordinance on first reading and set the public hearing for 1/17/17. Councilmember Leh seconded the motion Members voted 7-0 to approve.

CITY ATTORNEY'S REPORT

Attorney Light noted the sale of the grain elevator was completed in December. He will be sending Councilmembers information on a recent case relating to Amendment 41 He added he would like to do some training on open meetings rules and quasi-judicial matters with the Council at a future meeting

City of Louisville
COLORADO • SINCE 1878

City Council

Meeting Minutes

January 17, 2017
City Hall, Council Chambers
749 Main Street
7:00 PM

Call to Order – Mayor Muckle called the meeting to order at 7 00 p m.

Roll Call was taken and the following members were present:

City Council:	***Mayor Robert Muckle, Councilmembers Jay Keany, Chris Leh, Susan Loo, Dennis Maloney, and Ashley Stolzmann***
Absent:	***Mayor Pro Tem Jeff Lipton***
Staff Present:	***Malcolm Fleming, City Manager*** ***Heather Balser, Deputy City Manager*** ***Kevin Watson, Finance Director*** ***Rob Zuccaro, Director of Planning & Building Safety*** ***Beth Barrett, Director of Library and Museum Services*** ***Bridget Bacon, Museum Coordinator*** ***Meredyth Muth, City Clerk***
Others Present:	***Sam Light, City Attorney*** ***Colette Cribari, Prosecuting Attorney***

PLEDGE OF ALLEGIANCE

All rose for the pledge of allegiance

APPROVAL OF AGENDA

Mayor Muckle called for changes to the agenda and hearing none, moved to approve the agenda, seconded by Councilmember Stolzmann All were in favor.

PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

John Caraluzzi, 1441 Norwood Avenue, Boulder, Colorado, stated he is interested in opening a retail marijuana store in downtown Louisville. He asked the Council to

NORTH END MARKET – GENERAL DEVELOPMENT PLAN AMENDMENT AND FINAL PLAT AND PLANNED UNIT DEVELOPMENT – *continued from 1/3/17* –

ORDINANCE NO. 1730, SERIES 2016, AN ORDINANCE APPROVING AN AMENDMENT TO THE NORTH END GENERAL DEVELOPMENT PLAN (GDP) TO TRANSFER 17 RESIDENTIAL UNITS FROM PLANNING AREA 4 TO PLANNING AREA 1 AND REDUCE THE COMMERCIAL SPACE TO 40,000 SQUARE FEET IN PLANNING AREA 1 – 2nd READING –PUBLIC HEARING (advertised *Daily Camera* 12/25/16)

RESOLUTION NO. 78, SERIES 2016 – A RESOLUTION APPROVING A FINAL PLAT AND FINAL PLANNED UNIT DEVELOPMENT (PUD) TO CONSTRUCT A MULTI-USE DEVELOPMENT CONSISTING OF 38 DWELLING UNITS AND 40,000 SQUARE FEET OF COMMERCIAL SPACE; BLOCK 11, NORTH END PHASE TWO

applicant requests a continuance to 2/7/17

Director Zucarro stated the applicant has requested a continuance to the 2/7/17 meeting so that all members of the development team may be in attendance

Attorney Light introduced the two items by title, noting this is the second reading of the ordinance and public hearing Mayor Muckle opened the public hearing and incorporated the comments from Director Zuccaro and City Attorney Light.

Councilmember Keany stated he was recently quoted in the newspaper, but noted he has not made a decision on this application and his decision will be made on the criteria, the information presented in the meeting materials, and the information presented at the public hearing on 2/7/17. He stated he has not made up his mind and he can make a fair and impartial decision on the application

Seeing no other Council comments Mayor Muckle made a motion to continue the ordinance and public hearing to 2/7/17; Councilmember Loo seconded the motion; all in favor.

Mayor Muckle moved to continue the resolution to 2/7/17, Councilmember Loo seconded the motion; all in favor

RESOLUTION NO. 4, SERIES 2017 – A RESOLUTION APPROVING THE LOUISVILLE HISTORICAL MUSEUM CAMPUS MASTER PLAN

Bridget Bacon, Museum Coordinator, stated she is presenting the master plan for the Council's approval The Historical Commission approved this Plan in August and it is the same version that Council reviewed in September. She stated the museum is already moving forward with some items from the Plan These steps have increased

City of Louisville
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City Council

Meeting Minutes

February 7, 2017
City Hall, Council Chambers
749 Main Street
6:00 PM

Call to Order – Mayor Muckle called the meeting to order at 7:00 p m

Roll Call was taken and the following members were present.

City Council:	***Mayor Robert Muckle, Mayor Pro Tem Jeff Lipton, Councilmembers Chris Leh, Susan Loo, Dennis Maloney, and Ashley Stolzmann***
Absent:	***Jay Keany***
Staff Present:	***Malcolm Fleming, City Manager*** ***Heather Balser, Deputy City Manager*** ***Kevin Watson, Finance Director*** ***Aaron DeJong, Director of Economic Development*** ***Kurt Kowar, Director of Public Works*** ***Rob Zuccaro, Director of Planning & Building Safety*** ***Kristin Dean, Principal Planner*** ***Meredyth Muth, City Clerk***
Others Present:	***Sam Light, City Attorney***

PLEDGE OF ALLEGIANCE

All rose for the pledge of allegiance

APPROVAL OF AGENDA

Mayor Muckle made a motion to amend the agenda so that item 8E be just after 8B. Councilmember Loo seconded the motion. All in favor. Absent: Councilmember Keany.

PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

David Hsu, 975 Saint Andrews Lane, noted he is a member of the Planning Commission but he is in attendance tonight speaking as a private citizen. He stated he appreciates the efforts regarding inclusivity and diversity in the City, but would like to

if it was to encourage fixed, government affordable housing She does not support including the TOD language but does support first and final mile language and improving the transit connections.

Mayor Pro Tem Lipton does not support the Special Review Use language as it is too loose unless there are some restrictions such as the need to prove "exceptional community benefit " He also does not support changes to Centennial Parkway without a full planning process for the area.

Mayor Muckle moved to continue the conversation to the March 7 meeting. Councilmember Maloney seconded the motion. Members unanimously agreed. The Mayor recapped the direction to staff to look at the December 6 version but to also include some Transit Oriented Development language.

City Manager Fleming stated staff will continue to work on the fiscal model to find any errors and clarify the numbers

NORTH END MARKET – GENERAL DEVELOPMENT PLAN AMENDMENT AND FINAL PLAT AND PLANNED UNIT DEVELOPMENT – *continued from 1/3/17 and 1/17/17*

ORDINANCE NO. 1730, SERIES 2016, AN ORDINANCE APPROVING AN AMENDMENT TO THE NORTH END GENERAL DEVELOPMENT PLAN (GDP) TO TRANSFER 17 RESIDENTIAL UNITS FROM PLANNING AREA 4 TO PLANNING AREA 1 AND REDUCE THE COMMERCIAL SPACE TO 40,000 SQUARE FEET IN PLANNING AREA 1 – 2nd READING –PUBLIC HEARING (advertised *Daily Camera* 12/25/16)

RESOLUTION NO. 78, SERIES 2016 – A RESOLUTION APPROVING A FINAL PLAT AND FINAL PLANNED UNIT DEVELOPMENT (PUD) TO CONSTRUCT A MULTI-USE DEVELOPMENT CONSISTING OF 38 DWELLING UNITS AND 40,000 SQUARE FEET OF COMMERCIAL SPACE; BLOCK 11, NORTH END PHASE TWO

City Attorney Light introduced the item by title Mayor Muckle opened the public hearing and called for the staff presentation.

Planner Dean presented the project stating it is a request for a Final Plat, Final Planned Unit Development (PUD), and General Development Plan (GDP) Amendment to the North End GDP to construct a multi-use development consisting of 38 dwelling units and 40,000 square feet of commercial space at Block 11, North End Phase II. The proposed development is located in north Louisville, zoned Planned Community Zone District – Commercial (PCZD-C), is 4.55 acres, and contains 38 Residential units and 40,000 SF of commercial space The GDP was originally approved in 2006 with some

density being transferred between planning areas within the GDP from what was approved in the original GDP and earlier GDP amendments.

In 2010, 12 multifamily units were moved to this property and in 2011, 17 units were moved to this property. Also in 2011, the commercial square footage on this property was reduced to a maximum of 65,000 s.f. The current GDP states the residential units in the planning area shall not take away from the commercial development area and no single family units are allowed in this area.

Planner Dean showed the comparison of the fiscal impact of the current proposal with the original GDP from 2006, the amendments that have been approved to date, and this current proposal There is still a net positive fiscal gain over 20 years.

This area is defined as an urban corridor in the Comprehensive Plan and calls for a mix of housing to meet the needs of a variety of residents. The current proposal is still within the 350 units allowed in the original 2006 GDP

Planner Dean reviewed the traffic and parking plans proposed for the site, stating the proposal exceeds the requirements. In addition all units are below the 40-foot height limit There is a phasing plan for the PUD where each phase of residential will be built with a phase of commercial It meets all landscaping and lighting requirements. Planner Dean stated staff recommends approval of the Ordinance and Resolution.

Chad Kipfer, 5723 Arapahoe Avenue, Boulder, representing Markel Homes, reviewed the history of the North End development. He stated this section under discussion is not great retail space as currently configured, but the proposed changes with more visibility from South Boulder Road should make this a more successful layout and should be fiscally positive for the City.

Michael Markel, 5723 Arapahoe Avenue, Boulder, representing Markel Homes, noted this is the finish line for the North End project. He stated this particular location has difficulties including poor access. He stated they have done studies and market analysis for the site and every study shows for commercial to be successful on this lot it would require an anchored tenant in this location which is really not feasible. He noted they are not asking for any additional residential density. He committed to moving the Markel Homes offices from its current location in Boulder and by so doing subsidizing the commercial development in this location He committed to building the commercial first on this site He stated he is actively pursuing retailers for the site.

Mayor Muckle asked for Council questions.

Mayor Pro Tem Lipton asked if there is a way to guarantee in the GDP that these commitments will happen.

City Attorney Light stated there is not a clear way to do this but it could possibly be addressed in the subdivision agreement or GDP agreement.

City Attorney Light noted the phasing plan states the commercial will be built before or concurrently with the residential and that would need to be reflected in the documents. Mr. Markel stated his commitment is to start the commercial in the first phase prior to doing the residential units in phase one, and in each additional phase.

Councilmember Stolzmann asked what the current zoning of the property is. Director Zuccaro state it is PCZD-C. It does not require a Special Review Use for residential uses because the residential number set in the original GDP (350 units) and this does not exceed it

Mayor Muckle asked for public comment.

Brian Topping, 1550 White Violet Way, stated as a resident of North End he is very happy with the diversity of housing within the neighborhood He supports the request and likes the plan as presented. He feels this proposal will be a benefit to the neighborhood.

David Starnes, 1907 Lakespur Lane, stated he lives in North End and supports the amendment to the GDP. He likes the vision for the development and is anxious for the commercial piece. It is consistent with the Comprehensive Plan. Louisville needs more diversity in housing and this offers some. The condominiums offer a great entry level product.

RJ Harrington, 457 East Raintree Court, stated he supports the amendment and noted this mixed use development shows a positive financial impact to the City.

City Attorney Light asked the Council by motion to formally include in the record of the public hearing the following documents: all application materials submitted by the applicant submitted for the GDP amendment; the final Plat, final PUD application; all materials in the City Council packet consisting of the staff communication and all attachments to it; the public hearing notices and proofs of publication for this hearing, all written referral and public comments; presentations given this evening and all documents posted as agenda related materials, the zoning ordinances as set for in the Municipal Code; the Comprehensive Plan; the South Boulder Road Small Area Plan; and the CDDSG. Councilmember Loo so moved, Councilmember Stolzmann seconded the motion. All in favor.

Mayor Muckle asked for Council comments.

Mayor Pro Tem Lipton asked if there is a way to enforce Mr Markel's verbal commitments. He noted there have been changes to the GDP along the way and in each one the City has been looking for the commitment to the original 65,000 sf of

commercial He stated he is disappointed that the current proposal has reduced that commercial square footage.

Councilmember Stolzmann stated she would like to add language to the plan to document the commitments made by Mr Markel. She too is disappointed in the reduction in commercial square footage. She stated it is really not a mixed use development as the two uses can be easily separated and are not combined within buildings vertically.

Mayor Muckle stated he doesn't disagree with earlier comments; however, he is satisfied with the plan as presented. He is happy to see the project coming to completion and he appreciates the difficulties of this site. He supports it and he would like to see the commitments on the phasing codified somehow. Councilmembers Leh and Loo agreed with the Mayor.

Councilmember Maloney stated he would like to see three things codified. 1) the commitment to building the commercial as proposed; 2) the commitment to the relocation of the business and 3) commitment to the phasing as proposed If those can be committed to he can support the proposal

Attorney Light stated codifying these items may be difficult and language will need to be crafted.

Mayor Muckle asked if the Council would be willing to vote on these tonight and authorize the mayor and Mayor Pro Tem to finalize the language Mayor Pro Tem Lipton suggested continuing it so final language can be crafted and agreed upon.

Mayor Pro Tem Lipton moved to continue the item to February 21 so conditions of approval can be added to the ordinance and the phasing language added in the resolution. Seconded by Councilmember Loo. All in favor.

CITY ATTORNEY'S REPORT

None.

COUNCIL COMMENTS, COMMITTEE REPORTS, AND IDENTIFICATION OF FUTURE AGENDA ITEMS

Councilmember Loo noted the Planning staff is currently giving presentations to various boards on the City's wayfinding plan. She asked that the wayfinding plan come to Council as a study session or regular meeting item to discuss the project in greater detail.

Councilmember Leh thanked staff for saving money on the Water Rights Consultants contract.

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City Council

Meeting Minutes

February 21, 2017
City Hall, Council Chambers
749 Main Street

6:00 PM
EXECUTIVE SESSION

Call to Order – Mayor Muckle called the meeting to order at 6:00 p.m.

Roll Call was taken and the following members were present:

City Council:	***Mayor Robert Muckle***
	Mayor Pro Tem Jeff Lipton
	Councilmember Jay Keany
	Councilmember Chris Leh
	Councilmember Susan Loo
	Councilmember Dennis Maloney
	Councilmember Ashley Stolzmann
Staff Present:	***Malcolm Fleming, City Manager***
	Heather Balser, Deputy City Manager
	Rob Zuccaro, Director of Planning and Building Safety
	Aaron DeJong, Director of Economic Development
	Joe Stevens, Director of Parks & Recreation
	Meredyth Muth, City Clerk
	Sam Light, City Attorney

EXECUTIVE SESSION

REAL PROPERTY ACQUISITION AND DISPOSITION
(Louisville Charter, Section 5-2(c) – Authorized Topics – Consideration of real property acquisitions and dispositions, only as to appraisals and other value estimates and strategy, and C.R.S. 24-6-402(4)(a))

PENDING LITIGATION
(Louisville Charter, Section 5-2(d) – Authorized Topics – Consultation with an attorney representing the City with respect to pending litigation, and C.R.S. 24-6-402(4)(b))

which might affect the General Fund, Debt Service Fund, and possibly the Rec Center bonds.

He noted the Downtown parking two-hour limit is being enforced and everyone should know where the all-day parking is. The paving of South Street east of the railroad tracks is now underway.

REGULAR BUSINESS

LIFE IN LOUISVILLE PHOTO CONTEST AWARDS

Emily Kropf, Assistant to the City Manager, stated the City received 156 photographs submitted by 24 people for the 9th annual Life in Louisville photography contest. The photos chronicle events and daily life from September 8, 2015 through December 31, 2016, and will be added to the City's archives to serve as a cultural reference for future generations In each of the winning photographs, the jury found something that is unique to Louisville and represents the history, community, and sense of place that makes Louisville a great place to live. Councilmember Keany presented certificates to the winners of each category

NORTH END MARKET – GENERAL DEVELOPMENT PLAN AMENDMENT AND FINAL PLAT AND PLANNED UNIT DEVELOPMENT – *continued from 1/3/17, 1/17/17, & 2/7/17*

ORDINANCE NO. 1730, SERIES 2016, AN ORDINANCE APPROVING AN AMENDMENT TO THE NORTH END GENERAL DEVELOPMENT PLAN (GDP) TO TRANSFER 17 RESIDENTIAL UNITS FROM PLANNING AREA 4 TO PLANNING AREA 1 AND REDUCE THE COMMERCIAL SPACE TO 40,000 SQUARE FEET IN PLANNING AREA 1 – 2nd READING –PUBLIC HEARING (advertised *Daily Camera* 12/25/16)

RESOLUTION NO. 78, SERIES 2016 – A RESOLUTION APPROVING A FINAL PLAT AND FINAL PLANNED UNIT DEVELOPMENT (PUD) TO CONSTRUCT A MULTI-USE DEVELOPMENT CONSISTING OF 38 DWELLING UNITS AND 40,000 SQUARE FEET OF COMMERCIAL SPACE; BLOCK 11, NORTH END PHASE TWO

City Attorney Light introduced the ordinance and stated it had been continued from the February 7 meeting and this is a second reading and public hearing; he also introduced the resolution Mayor Muckle reopened the public hearing.

Planner Dean stated at the February 7 hearing, the applicant committed to starting the commercial construction in each phase of development prior to starting the construction for the residential structures in each phase. The applicant also committed to moving the

Markel Homes headquarters to Louisville and specifically to Commercial Building 6 in the proposed development To ensure compliance with these commitments, the applicant, staff and the City Attorney all agreed on the following conditions:

1. Prior to the recordation of the PUD, the PUD plans shall be revised to include the following notes to the Phasing Plan:
    a. In Phase I, no residential building permits shall be issued until completion and final inspection approval of a foundation for Building 6.
    b In Phase II, no residential building permits shall be issued until completion and final inspection approval of a foundation for Building 5.
    c In Phase III, no residential building permits shall be issued until completion and final inspection approval of a foundation for Building 4.
    d. A residential building permit in Phase II shall not be issued until after a Certificate of Occupancy has been issued for Building 6.

2. The subdivision agreement shall also include language which reflects these phasing requirements.

Staff recommends City Council approve Ordinance No 1730, Series 2016, on second reading and approve Resolution 78, Series 2016, approving the proposed GDP amendment and final PUD for the North End Market with the conditions listed above.

Michael Markel, 5723 Arapahoe Avenue, Boulder, stated he accepts the conditions as presented by staff.

Mayor Muckle asked for public comments None were heard.

Mayor Muckle closed the public hearing

Councilmember Maloney moved to approve Ordinance No. 1730, Series 2016, Councilmember Loo seconded.

Councilmember Stolzmann stated she supports the motion as she feels with the conditions, this is consistent with the criteria and there is no increase in the residential units

Roll Call Vote: Motion passed (**summary:** Yes = 5, No = 1, Abstain = 1).
Yes: Mayor Muckle, Council Member Stolzmann, Council Member Loo, Council Member Leh, Council Member Maloney.
No: Mayor Pro Tem Lipton.
Abstain: Council Member Keany.

Councilmember Keany stated he abstained as he was not at the February 7 meeting and did not hear the earlier conversation and is not qualified to vote on this.

Councilmember Maloney moved to approve Resolution No 78, Series 2016, Councilmember Loo seconded. Vote 5-1-1 Mayor Pro Tem Lipton No, Councilmember Keany Abstain.

RESOLUTION NO. 13, SERIES 2017 – A RESOLUTION APPROVING AN AMENDED PLANNED UNIT DEVELOPMENT FOR COAL CREEK BUSINESS PARK AND AMENDED PLANNED UNIT DEVELOPMENT FOR CORPORATE CENTER I COAL CREEK BUSINESS PARK FOR A 40,000 SQ. FT. OFFICE EXPANSION – Medtronic Expansion

Director Zuccaro stated this is a request for a 40,000 sf expansion of the existing Medtronic Building in the Coal Creek Business Park. The proposal includes a landscape buffer and public trail access The adjacent parcel B is in a conservation easement with the City It would be in two 20,000 sf phases, the second part only being done in the future if needed.

The proposal would amend two PUDs:

- Business Park Allowed Area Would Increase from 280,000 Sq. Ft to 318,000 Sq. Ft. and Gross Area and 250,000 Sq Ft. to 284,000 Sq. Ft. Net Leasable Area
- Lot 2 Allowed Area Would Increase from 81,266 Sq. Ft to 120,629 Sq. Ft.

This proposal would exceed the caps for developed property in the original PUD.

The applicant is requesting four waivers:

- Maximum Lot Coverage Increase from 70% to 74 4%/Minimum Open Space Decrease from 30% to 25.6%
- Minimum Parking Setback from US 36 from 40' to 10'
- Minimum Parking Setback from Internal Lot from 10' to 2-10'
- Minimum Parking Ratio from 4 spaces per 1,000 Sq. Ft. to 2.7 Spaces per 1,000 Sq. Ft.

There would be reconfigured parking for the site but this does not meet the setback requirement from the rights-of-way There is a landscape buffer between the parking lot set back and the conservation easement.

There are not the required parking spaces, but does have a shared parking agreement with the neighbors and parking for the trailhead for evenings and weekends. The Open Space Advisory Board has reviewed this and recommends approval with the condition of some additional signage for the trailhead.

The applicant justifies the waivers as they feel there is a benefit to the public through the proposed trailhead parking and expansion of trails connecting to Coal Creek and the parking reduction justified by trails connections, proximity to McCaslin Bus Rapid Transit (BRT) and existing and proposed bicycle parking

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Planning Commission

Meeting Minutes

November 10, 2022
City Hall, Council Chambers
749 Main Street
6:30 PM

Call to Order – Chairperson **Brauneis** called the meeting to order at 6:30 PM.

Roll Call was taken and the following members were present:

Commission Members Present:	Steve Brauneis, Chair Dietrich Hoefner, Vice Chair Keaton Howe Jeff Moline Allison Osterman
Commission Members Absent:	Tamar Krantz
Staff Members Present:	Rob Zuccaro, Dir. of Community Development Elizabeth Kay Marchetti, Senior Planner Ellie Hassan, Planner II

Approval of Agenda
The agenda is approved by all members.

New Business – Discussion

A. Review of Recommended Inclusions in the 2023 City Council Work Plan

Discussion by Commissioners:
Moline says he is excited to see the comprehensive plan update in the works and is very comfortable having the dark sky lighting on there as well.
Howe says priority two helps the commission evaluate proposals and is in favor of it.
Zuccaro mentions that staff is working on a commercial energy efficient building code.
Hoefner says he is excited about this update.
Osterman says she supports the proposed work plan and does not have any additional comments.
Brauneis is excited about dark sky lighting and seeing that in the work plan.

Election of Planning Commission Secretary
Howe nominates Commissioner Moline for the position. **Hoefner** seconds that nomination. Motion passes by a roll call vote.

Public Comments on Items Not on the Agenda
None is heard.

Public Hearing Items

A. Adoption of Resolution 13, Series 2022 recommending denial of the Redtail Ridge Preliminary and Final Plat: Redtail Ridge Filing No. 1 Preliminary and Final Subdivision Plat for a 389.10-acre property, located northwest of US 36 and Northwest Parkway and Southeast of S 88th Street and Campus Drive. *Continued from October 13, 2022*
   Applicant: Sterling Bay
   Case Planner: Rob Zuccaro, Dir. of Community Development

Hoefner recuses himself from discussion since he has a conflict of interest.

Discussion by Commissioners:
Howe mentions that he was not present at the last meeting but watched the entire recording. He thought it was a good discussion and the motion of denial is in alignment with his vote.

Howe moves and **Osterman** seconds a motion to approve the denial of Resolution 13, Series 2022 as drafted by staff. Motion ties 2-2 with a roll call vote.

Name	Vote
Steve Brauneis	No
Jeff Moline	No
Keaton Howe	Yes
Allison Osterman	Yes
Motion passed/failed:	Ties

Moline moves and **Howe** seconds a motion to continue this agenda item to the December 08, 2022 meeting. Motion passes unanimously by a roll call vote.

Public Hearing Items – New Business

A. General Development Plan (GDP) Amendment, Planned Unit Development (PUD) Amendment, and a Replat With Easement Vacations –1501 S Boulder Rd – A request for a GDP Amendment, a PUD Amendment, and a replat with easement vacations for a mixed-use development of 38 residential units across 13 multi-family buildings and 40,562 square-feet of commercial area across four buildings at Block 11, North End – Replat of North End Parcel 1, Outlot H and Outlot K Replat.
   Applicant: Michael Markel, Owner

Case Planner: Ellie Hassan, Planner II

All notice was met as required and there is no commissioner conflict of interest.

Staff Presentation:
Hassan begins her presentation by sharing that the property is 4.57 acres and is zoned for Planned Community commercial and residential. The site is bordered by Hecla Way to the north, Blue Star Lane to the east, South Boulder Rd to the south, and a commercial property to the west. It is located within the 73.8-acre North End development, which was originally approved in December 2006 through a Subdivision Plat, General Development Plan, and Planned Unit Development. The property was part of Planning Area 1 in the GDP. It was replatted in 2012 to create Block 11.

In 2017, the City approved a third GDP Amendment, final plat, and final PUD for Block 11. The third GDP Amendment authorized 38 residential units in Planning Area 1 and 40,000 square feet of commercial. The final plat for Block 11 established utility and drainage easements on the property but did not create separate lots. The Planned Unit Development proposed a mixed-use neighborhood consistent with the densities proposed in the third GDP amendment.

The Applicant is requesting a fourth GDP Amendment to accommodate changes to permitted housing types. The maximum number of residential dwelling units and commercial square footage will not change. The tables shown are for the changes to the Land Use Area summary, which allocates all residential acreage to multifamily residential and eliminates single family and townhome/duplex housing types. The map of land uses in Planning Area 1 has been revised to reflect multifamily residential only as well. The use is shown as a honeycomb pattern on the map.

The applicant is requesting a replat to subdivide Block 11 into three lots. The replat accommodates two multifamily lots and a single commercial development lot. New access and utility easements are proposed that coincide with alleyways proposed on the PUD Amendment. The existing easements were platted as part of the 2017 subdivision plat. The applicant proposes the vacation of easements that are no longer needed from the original plat, as shown in red. This will be further evaluated at the City Council hearing.

The PUD Amendment proposes construction of 17 buildings, including 4 commercial retail/office buildings on the southern half of the site towards South Boulder Road and 13 residential multi-family buildings containing 38 dwelling units on the northern half of the site.

The site layout is similar to the 2017 PUD Amendment and includes a north-south private drive that connects South Boulder Road and Hecla Way. An east-

west access drive into the site off Blue Star Lane is located in a similar location to the existing 2017 PUD. The PUD Amendment proposes alleyways for access to the residential buildings. Areas on the site are connected through a network of drive aisles and internal walkways. The walkways connect to the adjacent streets and trail to the west. Walkways are 5ft in width and 6.5ft in width in areas adjacent to parking spaces. Existing drainage infrastructure is maintained in the southern 35ft drainage easement.

A total of 92 spaces are provided for the 38 residential units. Parking is provided through two-stall garages in each unit, along with two driveway spaces for buildings 11 and 12. A total of 148 parking spaces are provided for the office and retail uses on the site. Some spaces are used for snow storage seasonally; however, the required 142 spaces will still be available. Sixteen bicycle spaces are proposed where 15 are required, as shown in red. Bicycle spaces are proposed adjacent to commercial buildings in convenient locations off the sidewalks. The site provides the required number of EV spaces per Section 17.20.170 of the Municipal Code. EV charging spaces are separated out per use as seen in the PUD parking plan tables on Sheet 5.

There are four commercial buildings on site. Building 1 is a two-story structure with retail on the first floor and office on the second floor. Each floor is 5,471 square feet or 10,942 square feet total.

The building has varying forms to add architectural interest and depth to the building. Most materials on the forms are contiguous between the first and second stories. The forms consist of stucco, cementitious lap siding, and board and batten siding. Small amounts of metal siding are used on the east and west elevations on the first story.

Building 2 is two-stories and also contains retail on the ground floor and offices on the second floor. The building has 7,295 square feet per floor or 14,590 square feet total. Building 2 consists of mostly flat roofs with butterfly roofs on the east and west sides of the building. It has the same materials as Building 1, excluding the metal siding accent areas. The building has similar varied forms, which are broken up by a combination of the entry fascias and a transitioning of stucco to other materials between many first and second story areas.

Building 3 is an 8,539 square-foot three-story structure with 3,472 square feet retail on the ground floor with 4,164 square feet of office on the second and 633 square feet of office on the third floor. The height of the building is 40ft 5in and exceeds the 40ft maximum per the GDP, requiring a waiver. Building 3 contains varied forms, with a mix of flat roofs and shed roofs. A majority of the building is a two-story mass, with a smaller central three-story element with a balcony facing out towards the residential properties to the north. The first story has brick siding on the first floor with a portion extending onto the second and third story. The

brick is broken up by board and batten between the first and second story. Fiber cement panels are included in the second and third story facades.

Building 4 is a 4,365 square-foot one-story retail structure with an outdoor patio area to the southwest of the building. The building's form is more simplistic than other commercial buildings on site and is broken up by material changes and fascia elements over the windows. The roof is mostly flat with a shed roof on the southern portion. Materials consist of brick siding, cladding, and cementitious lap siding.

There are 13 residential buildings proposed on the northern half of the site. There are 38 units total across duplexes, triplexes, and 4-plexes. The units are proposed in either modern or farmhouse architectural styles, as shown in the elevations on this slide. The residential buildings use materials including board and batten, horizontal siding, fiber cement panels, brick, and stucco. The materials match those used on the commercial buildings and in other North End developments.

Because the scope is a mix of commercial and residential uses, staff determined the Commercial Development Design Standards and Guidelines (CDDSG) requirements would only be applicable to the commercial portion of the site on Lot 3. Perimeter landscaping was required along South Boulder Road, and the lot is required to meet building site landscaping and parking lot landscaping requirements.

The South Boulder Road frontage proposes 17 trees where 16 are required. Per the tree survey, 5 existing dead trees along South Boulder Road are proposed for removal and 4 existing trees are proposed to remain. A total of 148 commercial parking spaces are provided, which requires 19 parking lot landscape trees. A total of 20 trees are provided in parking islands and areas adjacent to parking spaces.

The CDDSG also requires that 25% of the area around a building perimeter is landscaped with a 6ft wide planting area. All four commercial buildings have at least 25% of the perimeter bordered by a 6ft or wider planting area. Landscaping around the residential portions of the site include new tree and shrub plantings between the driveways and between alleyway and sidewalk spaces at the entrances to units. While not subject to CDDSG requirements, elements such as a planting area around the building perimeter are incorporated. The development proposes a courtyard as a pedestrian amenity. The courtyard is located between commercial buildings 2 and 3 in the center of the site and is accessible to the rest of the site. The paving consists of pavers in plank and herringbone patterns. The colors of the pavers match the adjacent building colors. The courtyard also proposes landscaping, trash receptacles, and stone seat walls, which are shown in dark grey.

The PUD Amendment maintains the same general phasing concept as the last amendment, but changes the number of units and commercial area in each phase. The phases allow for residential and commercial buildings to be constructed concurrently, with the provision that residential building permits in each phase are not issued until the foundation inspection for the commercial buildings in each phase is approved. This application is subject to the inclusionary housing ordinance adopted last summer. The applicants are pursuing the fee in lieu option. City Council approval is required in order to pursue this option and it will be further evaluated at their public hearing.

Traffic studies for the overall north end development in 2006 and 2011 assumed for 362 residential units and 65,000 square feet of commercial space. Over time north end developed with a maximum of 350 units and 40,000 SF of commercial area, which is less than the amount anticipated in the reports. Public Works finds that the traffic assumptions are adequate to accommodate this development.

The applicant requests zoning waivers from the maximum height established in the GDP, which is listed as 40ft for both multifamily and commercial uses. A table of height waivers is listed on the slide. Building 3 proposes a 5-inch increase to the 40ft height limit. The height increase allows for a shed roof form that is compatible with other roof forms on the site. The third story element adds variation and architectural interest to the site while providing additional office space vertically rather than increasing the building footprint.

Three residential buildings also require height waivers. The waivers allow for modern, higher ceiling residential structures that provide a garage and living area at the main level with two stories of living area above, creating efficient and improved designs. The density, height, and design are compatible with the existing North End Block 12 multifamily units adjacent to the property as well. For these reasons, staff supports requested height waivers.

Staff finds the application meets the purpose and applicability statements in Chapter 17.72 of the Louisville Municipal Code. The GDP Amendment encourages coordinated community design by allowing a mixed-use buffer zone between a major arterial, South Boulder Road, and the residential uses in the North End neighborhood. Staff finds the final plat for North End, Block 11 conforms in all respects to the requirements of Title 16 of the Louisville Municipal Code. The plat complies with the Comprehensive Plan by supporting an urban pattern that is more compact and walkable through the creation of alleyways and smaller lots. The plat is compliant with the GDP since it meets minimum lot sizes permitted in the North End GDP.

Staff finds the PUD is compatible with the GDP and with the included height waivers for four of the buildings. The commercial portion of the PUD is compliant with the CDDSG and meets parking and landscaping requirements. The PUD is compatible with Section 17.28 of the Municipal Code as well. The development is

compliant with the Comprehensive Plan's framework for urban corridor properties. The site is also compatible with the South Boulder Small Area Plan policies, as discussed in the next slides.

The South Boulder Road Small Area Plan has policies related to building height. The Building Height Plan anticipates development along South Boulder Road to be primarily one and two stories for the south half of the property, and two to three stories for the north half of the property.

Residential buildings on the north half of the property are proposed at three stories. The Small Area Plan states conditions for a third story, including design, public improvements, and limited impacts on view sheds or shadows on surrounding properties. The three-story design allows the site to have more compact, modern designs. The height and massing is compatible in scale with the neighboring North End Block 12 residential buildings as well. The buildings have a minimum 35ft north-south separation between each structure, which mitigates impacts of shadows. Staff therefore supports the 3-story building heights.

Commercial buildings in the first half of the site are one to two stories in height, with a small, approximately 630 square foot, three-story portion proposed in the center of building 3. The building height is similar to the roof forms of building 2, which is a two-story structure. Staff therefore finds that the impact of the third story element could be analyzed similarly to the conditions required to add a second story in the Small Area Plan. The design is compatible with the existing North End architecture with the materials and forms used, such as the shed roofs and variation on the building façade depth. The building and has a setback of 100ft from South Boulder Road and 58ft from the nearest residential building, which mitigates impacts from shadows and view sheds. The element helps add architectural interest to the building and is compatible architecturally with the rest of the buildings in the development through the shed roof and fiber cement panels. In addition, the commercial buildings vary from 1-3 stories tall, which provides building height variation on the southern area of the site. Because of this, staff finds that the third story element is compatible with the small area plan.

Staff Recommendation:
Staff recommends approval of Resolution No. 16, Series 2022, requesting a General Development Plan Amendment, a Planned Unit Development Amendment, and a Final Plat with easement vacations for a mixed-use development consisting of 38 residential units and 40,562 square feet of commercial area at Block 11 of North End.

Commissioner Questions of Staff:
Hoefner asks what the key differences are from the last version that was approved.

Hassan says this includes attached units versus the previous included detached units but there are different bedroom sizes.
Brauneis asks if she can describe the difference with dropping the townhouse designation and moving it to what it is now.
Hassan says the original plan came with townhomes and these were individually platted units. Now, these are all under one solid platting.
Hoefner says regarding traffic, the public seems to be more concerned with speeding versus the traffic pattern. Has staff looked into that?
Zuccaro says the concern is with the existing roadway and that would be something outside of the scope of this proposal.
Hoefner says he thought there was an extension between Sweet Clover Lane into Hecla Way.
Zuccaro says staff did not ask about this but we could ask the applicant to look into it, such as a speed bump.
Howe asks if there is any kind of requirements with our city forester for proposals like this.
Hassan says this proposal was reviewed by our parks and recreation department.
Howe asks that if the fee in lieu was not approved by city council and required them to do affordable housing, would this come back to the commission with a new PUD?
Zuccaro says no, the affordable housing is administered outside of the PUD process.
Howe asks if staff can talk about the lighting along South Boulder Rd and the pedestrian path that runs north and south.
Hassan says there are pole lights and individual, wall mounted lights for each residential unit. There are also pole lights for the residential alleyway and parking spaces. There are only entryway lights along South Boulder Rd.
Moline says one public comment we got pertained to the intersection of South Boulder Rd. and Blue Star. Future improvements to that intersection would be the city's responsibility and are not be related to this proposal.
Zuccaro says this roadway was built with this anticipated density in mind. We would not recommend that additional capacity is needed because the land uses and density are not changing. If this were to be built out and these roadworks were not operating appropriately, it would be the city's responsibility to make the improvements.
Howe asks if there are any net zero requirements for these buildings.
Zuccaro says we do not have net zero requirements for commercial.

Applicant Presentation:
Melissa Sherburne, 262 Belford St, Frisco, CO 80443, Markel Homes

Sherburne begins her presentation by introducing the Markel Homes team as well as gives a background on Markel Homes. She gives an overview of what communities Markel has developed in the Boulder County area.

Sam Coutts, Ripley Design
Coutts shows in an aerial image where this proposal is located and reviews the GDP Amendment's previous plan versus the current proposal. The previous site plan and current proposal have 38 dwelling units and 40,000+ sq ft of commercial. He shows farmhouse architecture as well as modern architecture for the duplexes, triplexes, and 4-plexes.

As mentioned in staff's presentation, he explains the building height for Building 3, 13, 14, and 17. Each of these buildings will be 40' from the proposed average grade. A neighboring, existing building has a height of 37' 11 ¼" and this proposed building would be at 36' 6", having an 89' 0" distance between the two.

He ends his presentation discussing city policy. The following items are in relation to the Comprehensive Plan's urban pattern:

- Streets / Parcels
    - Smaller blocks and parcels, alley loaded properties, and multi-purpose development as envisioned by the urban pattern area of the comprehensive plan.
- Building Design and Orientation
    - Sidewalks and plazas to enhance pedestrian experience.
- Civic and Public Infrastructure
    - Mix of residential and office/retail to provide services to the community and encourage walkability.

Regarding South Boulder Rd.'s Small Area Plan, this proposal meets its design principles by having places to go and places to stay, it is easy to get to and easy to get around, it is knitting the community together, and it is a development that contributes to the community.

Commissioner Questions of Applicant:
Moline asks if they can walk him through the landscape maintenance and the responsibility of the development team with regards to maintenance.
Coutts says this will be managed and maintained by an HOA.
Moline asks how the property has currently been managed.
Jason **Markel**, with Markel Homes, says North End is under an HOA. Block 11 will have its own HOA and will be under the guidelines of the master HOA of North End. The sub association will be responsible for maintaining and planting.
Moline asks who is responsible for maintenance on block 11.
Markel says we use maintenance companies and we manage it.
Brauneis asks if he can speak to the multi-family versus townhomes concept.
Markel says the HOA is the reasoning behind that. Once we wanted to get the detached single family out of that zone, we have an HOA that can be uniform across the block.
Brauneis asks what is your current understanding of net zero and multi-family.

Markel says we do a decent amount of net zero for single family but when you switch to multi-family, it is different because of the design of party walls. Party walls are harder to achieve net zero.
Hoefner talks about commercial vacancies. What is your optimism level of filling 40,000 sq ft of commercial space?
Markel says we are planning to adhere to the phasing requirements. He has hope because of the phasing process, they will be able to get those vacancies filled.
Howe asks if he can comment on affordable housing and why they are choosing the fee in lieu option.
Markel says when we come forward with multi-family, some units are market value and some are affordable. It presents a major challeng to get the building financed. It is better for all the residents to have the entire building affordable.
Brauneis asks what the fee in lieu cost would be.
Markel says he is not sure and would have to check with staff. It is a square footage calculation.
Howe asks if they can comment on the water runoff and where the water retention would be.
Markel says they already have the water detention accounted for this block.
Brauneis asks if he can speak to the LEED buildings that Markel homes has done. Can you tell us the locations of those?
Markel says: Blue Sage, Silver Creek, North End, all mostly single-family homes.

Public Comment:
Mark Cathcart, 1763 Sweet Clover
Cathcart does not want this application held up. He has concerns about the traffic. He mentions traffic from Plaza Rd to South Boulder Rd and gives reasons of how traffic could affect the city. He thinks it could be problematic selling those three lots separately.

Tim Merkel, 1849 Sweet Clover Ln
Merkel says 50% of the North End's master HOA budget goes to landscaping. He passes a document to the commissioners showing what their landscaping standards are and requests that the applicant adopt these standards for the tree lawn.

Brian Topping, 1550 White Violet Way
Topping says he would like to see this developed as soon as possible. He comments further on the proposal and what it could do for the area.

Jojo Follmar, 1712 Steel St, Apt 7302
Follmar says she is in favor of more affordable housing and is disappointed with the fee in lieu. She appreciates the sustainability goal and would like to push that further if possible.

Sherry Sommer, 910 S Palisade Ct

Sommer says she does not think this should be rushed but thought out more. The issues with dust is no reason to rush an application. She advocates not to have the change for townhomes. She would like to see more green space. She does not like the fee in lieu and does not agree with the height waiver.

Kevin King, 1505 Hecla Way, #302
King says the community did not get the most updated version of the plan that was shown in the presentations. He comments on the speed when driving through Hecla Way. He is concerned that the heights of these buildings could cause problems for the upper units.

Marie Boric, 1505 Hecla Way, #202
Boric comments on the speed on Hecla Way. She wants this application pushed through as fast as possible. She proposes benches for this area.

Moline moves and **Howe** seconds a motion to add the material submitted by Tim Merkel into the public record. Motion passes unanimously by voice vote.

Closing Statement by Applicant:
Coutts addresses tree lawns and thinks that is completely doable and Markel is comfortable adopting Tim Merkel's tree lawn standards. He mentions because of these approved documents, we cannot just pour a foundation and change it from commercial to a residential use. In regards to open space, open space just means more that it is not a building. It does not have to mean more green space. This follows the Comprehensive Plan for an urban environment.
Moline asks if he can talk more about the urban orientation.
Coutts shows the previous site plan image and shares the comparison image for the current proposal.
Moline asks if the front units on Hecla will be front-loaded.
Coutts says no those would be alley loaded.
Michael **Markel**, with Markel Homes, thanks staff for their time and attention as well as his team. He describes his vision for this property and his pride in what kind of development he wants to build in Louisville. They want to build commercial and try to get the right owners in those spaces who would be right for Louisville. We are the only builder who build energy star condominiums along the Front Range. We want to make sure that the buildings we build will be occupied. He discusses market level costs for these units and the costs for building.
Howe asks if he can comment on the concurrency of the development of the three lots.
Markel says they try to figure out how they can divide so it is in bite size chunks. In talking with development lenders, they like to see spaces separated and phased out. There will have to be some kind of separation for the HOA because that is what they want to see.
Brauneis asks which buildings would be energy star certified.
Markel says our residential multi-family will be energy star certified.

Closing Statement by Staff:
Hassan says they checked the development applications webpage and the latest version of the North End PUD was not there. The only changes that were not on the website were related to the building height elevations.
Zuccaro says the plan set that is online has the exact same site plan and elevations. We worked with the applicant on height elevation waivers, which is what is not shown on the website but it is in the packet.

Discussion by Commissioners:
Howe says this is a great proposal and seems like there is a lot of support from the community. He is in support of this. It would be nice to have a little more green in the parkway.
Moline says he is in support of this. He likes the approach of having phases and the residential being mixed with the commercial. He would be in favor of having a condition in regards to the tree lawn along Hecla and Blue Star. He is in support of the urban orientation that we wanted to see in our comp plan.
Hoefner says he sees the height waiver as not being substantial. He is encouraged to see duplexes and triplexes in this proposal. On traffic, he agrees that the majority of them are outside of this application. He is finding himself in support.
Osterman is leaning towards being in favor given the support of the community. In terms of the changes in the housing types, that seems appropriate for the area. She thinks the request for the height waiver is reasonable. Regarding the inclusionary housing, she is disappointed the developer is going the fee in lieu option but they can do that because of the code.
Brauneis is in favor of this proposal. He is disappointed that there is not on site affordable housing but that is how our code is written. He suggests going to city council with the traffic comments.
Howe says it would be nice to have lighting consistent with South Boulder Rd.
Brauneis says it seems that will already be in place.

Hoefner moves and **Howe** seconds a motion to approve Resolution No. 16, Series 2022 with the condition that before the applicant goes before city council, they would incorporate the tree lawn plan that was submitted into the packet this evening. Motion passes unanimously by a roll call vote.

Hoefner moves and **Moline** seconds a motion to continue Resolution No. 15, Series 2022 to the December 08, 2022 meeting. Motion passes unanimously by a voice vote.

Planning Commission Comments
Brauneis mentions that he really enjoyed the various trees planted throughout the city.
Howe comments on the intersection of South Boulder Rd and Via Appia. It is much friendlier to pedestrians.

Staff Comments
None is heard.

Discussion Items for Next Meeting
A. Coal Creek Ranch Filing 3 PUD Amendment - Fences

Adjourn
The meeting adjourned at 9:13 PM.

RESOLUTION NO. 16
SERIES 2022

A RESOLUTION RECOMMENDING APPROVAL OF A GENERAL DEVELOPMENT PLAN AMENDMENT, A PLANNED UNIT DEVELOPMENT AMENDMENT, AND A FINAL PLAT WITH EASEMENT VACATIONS FOR A MIXED-USE DEVELOPMENT CONSISTING OF 38 RESIDENTIAL UNITS AND 40,562 SQUARE FEET OF COMMERCIAL AREA FOR BLOCK 11 OF NORTH END AT 1501 S BOULDER RD.

WHEREAS, there has been submitted to the Louisville Planning Commission an application for a General Development Plan Amendment, a Planned Unit Development Amendment, and a Final Plat with easement vacations for a mixed-use development consisting of 38 residential units and 40,562 square feet of commercial area at Block 11 of North End (1501 South Boulder Rd).; and

WHEREAS, City staff has reviewed the information submitted and found that the application complies with the Louisville zoning regulations and other applicable sections of the Louisville Municipal Code; and

WHEREAS, the Planning Commission has considered the application at a duly noticed public hearing on November 10, 2022, where evidence and testimony where entered into the record.

NOW THEREFORE, BE IT RESOLVED that the Planning Commission of the City of Louisville, Colorado does hereby recommend approval of a General Development Plan Amendment, a Planned Unit Development Amendment, and a Final Plat with easement vacations for a mixed-use development consisting of 38 residential units and 40,562 square feet of commercial area at Block 11 of North End (1501 South Boulder Rd) with the following condition:

1. Prior to the City Council public hearing, the applicant shall incorporate the proposed tree lawn plan into the landscape plan, which has been received and admitted into the public record during the November 10th Planning Commission hearing.

PASSED AND ADOPTED this 10th day of November, 2022.

By: _____
Steve Brauneis, Chair
Planning Commission

Attest: _____
_____, Secretary
Planning Commission

Ellie Hassan

From: Ellie Hassan
Sent: Thursday, November 10, 2022 6:23 PM
To: Ellie Hassan
Subject: FW: Please reject PUPL-0370-2021 / ZON-0389-2021 and VACA-0415-2022

Categories: Public Correspondence

From: Brian Topping
Sent: Thursday, November 10, 2022 5:42 PM
To: Planning <planning@Louisvilleco.gov>
Subject: Please reject PUPL-0370-2021 / ZON-0389-2021 and VACA-0415-2022

Greetings,

As a single-family homeowner within 50 yards of this project, I am writing to ask the planning commission to **OUTRIGHT REJECT** these applications as a poorly conceived use and continued bait-and-switch of this property. It is completely out-of-alignment with the representations made to homeowners in the North End Phase 2 development when we purchased our homes and a theft of service to everyone living nearby.

When we bought into the development, we were told that there would be offices, services and amenities built in this area. The most common attraction that was talked about was a gastropub, with significant office space promised for the rest of the square footage. During our purchase experiences, we shared ideas of coworking spaces, childcare, nearby professional offices we could rent. All of them responded to with bright smiles and flowery words.

What was not sold with that pitch was caveats about "whether the project was profitable when it was finally built". A very small amount of research will lead anyone to understand how much money the Markel family has made off of our communities. **We significantly contributed to that wealth in exchange for their promises of a walkable community!**

Then came a proposal for over-50 condominium homes in a large part of the complex. Planning accepted this, but instead of holding Markel to completion on the project, approved even more construction by them toward downtown, on the property where the old train caboose was removed from. (Why is that?)

They did nothing with their prior approval and let it expire. Now they have the gall to propose an even worse plan, with MORE housing and LESS office and services. This makes some sense given the work-from-home realities post-COVID, but people are already emerging from these patterns and returning to needs such as work-focused office space, childcare, etc.

Long story short, the buyers in North End Phase 2 were PROMISED that we would have services and attractions on this lot, ***even if a gastropub might not make it in to the final plans***. A leisurely walk to and from a neighborhood attractions that would also attract diverse customers from around the area. Office space professionals in the neighborhood could rent at market rates.

Instead, planning is getting solicited for more Markel shenanigans. If these plans appear in any way attractive, it is only because the eyesore of that empty field is so awful and these plans are mildly better than the atrocious condominium construction that they littered the area with in the past. Seriously?

If planning applies the “three legged stool” mantra, they will see that the area is a desert of walkability. It takes at least 30 minutes to walk to downtown, on a very unpleasant walk at that.

The City of Louisville approved North End because it was pitched with the original plan around office and commercial space. The first mistake was that the city did not get a completion bond for the overall package. It would be insult after injury of this empty lot to let Markel bring more housing density to this area in exchange for a BRIBE to the rest of the city, most of which are note even aware about the livability of our homes or the promises we made when buying them.

PLEASE REJECT THESE PROPOSALS BY MARKEL WITH PREJUDICE! We are tired of playing cat and mouse with them and request that the city holds Markel to the original plans for the lot, plans that are IN THE NAME of "NORTH END MARKET”! **Do tell, *WHERE IS THE MARKET?!?***

If they refuse to build it, ***condemn the land and force a sale.*** Lumber prices (for instance) are back to pre-pandemic levels, labor and other materials are likely to follow. We’ve waited this long and Markel walked on their previous two approvals. Better to build what we were promised. It will happen eventually.

Residents depend on the city to hold greedy developers such as Markel to their word. We cannot do it alone. Please accept this plea and do the right thing for the area. We need your help.

Thank you,

Brian Topping
1550 White Violet Way
Louisville CO, 80027

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Ellie Hassan

From: Mark Cathcart
Sent: Thursday, July 21, 2022 10:47 PM
To: Ellie Hassan
Subject: Re: North End Block 11
Attachments: South Boulder Rd(8222016).pdf

Categories: Public Correspondence

Thanks for remembering me. I understand, hopefully Markel will organize something anyway, I've asked the current President of the Master HOA to approach Markel as well.

I'll have a look at the plans and let you know if I have any concerns. Unless either Markel or the city is going to reconfigure the right-only turn out from Blue Star Ln, that will be first on my list. I presented to Planning in 2016 about this. It's way too easy for people to turn left there.

For the original council minutes when the North End GDP was being discussed that was supposed to be a light. With the build out at Lot 11 that will mean Plaza drive is the only legal left/west turn for all the traffic from Louisville Plaza, and North End much less the cut through traffic. Thats mad.

Markel got away without building any kind of playground in either North End phase-1 or phase-2(the rocks at Hecla Lake don't count), they got away without a playground at Blue Sage or a light at Blue Sage(Lafayette). They should be required to provide some public benefit.

++Mark.

_____
https://ctproduced.com
https://markcathcart.com/about/
On 7/21/2022 12:54 PM, Ellie Hassan wrote:

> Hi Mark,
>
> We had another round of comments sent out to the developers today. You can view their latest plan sets on the Current Development webpage.
>
> I verified our department policy and unfortunately staff do not facilitate or host meetings between the developer and residents (it's not part of the city's PUD/public hearing process in the Municipal Code). The meeting would have to be set up independently from the City. If requested, we can attend said meetings to answer general zoning and procedural questions but it will be up to the developer to organize everything else.
>
> We would recommend reaching out to Markel and their team with any concerns/to see if they're willing to meet with you and the neighborhood. Chad is no longer with Markel and their new applicant contact is Melissa Sherburne (melissa@uplandplanning.com or 970-222-3983).
>
> Sincerely,
> Eliana “Ellie” Hassan
> Planner II – Planning & Building Safety
> City of Louisville
> ehassan@louisvilleco.gov

Mon-Thurs - City Hall, Office Phone: 303-335-4591
Fri - Home Office, Cell Phone: 303-349-6977

-----Original Message-----
From: Mark Cathcart
Sent: Wednesday, June 15, 2022 9:00 AM
To: Ellie Hassan <ehassan@louisvilleco.gov>
Subject: RE: North End Block 11

Thanks, apology not needed.

I suspect the biggest concern will be lighting. Rob knows this is already a bugbear for the Hecla way town homes and a couple of people in the westerly condo block.

I personally have had long term concerns that the junction of blue star LN and s Boulder rd, as currently configured, currently is safe, I still see illegal left turns made there, so am keen to see a final configuration for that corner from markel.

Thanks again.

++Mark.

_____
https://ctproduced.com
https://markcathcart.com

On Jun 15, 2022, 10:50, at 10:50, Ellie Hassan <ehassan@louisvilleco.gov> wrote:
>Hi Mark,
>
>Sorry for the delay. I think we can definitely set something up once
>they resubmit. Our Director, Rob Zuccaro, has been helping me review
>the plans so I'll likely invite him as well. I'll keep you updated when
>we receive a resubmittal.
>
>Thanks,
>Eliana "Ellie" Hassan
>Planner II – Planning & Building Safety City of Louisville
>ehassan@louisvilleco.gov<mailto:ehassan@louisvilleco.gov>
>Mon-Thurs - City Hall, Office Phone: 303-335-4591 Fri - Home Office,
>Cell Phone: 303-349-6977
>
>From: Mark Cathcart <m_cathcart@yahoo.co.uk>
>Sent: Monday, June 6, 2022 3:27 PM
>To: Ellie Hassan <ehassan@louisvilleco.gov>
>Subject: Re: North End Block 11
>
>Thanks Ellie, thats great news. A lot of us are keen to see Markel
>deliver on the promises his sales team made when we were sold houses in
>North End.
>

>To avoid any issues becoming confrontational at the Planning
>Commission, once the plans have been submitted. Would you be willing to
>host a zoom call for Michael/Chad/Markel to talk through the plans so
>we can raise any questions?
>
>There are some 42-dwellings that will directly overlook this
>development, as well as a number of us that will be impacted during
>what I expected will be a extended construction period.
>
>
>
>++Mark.
>
>_____
>
>https://ctproduced.com
>
>https://markcathcart.com/about/
>On 6/6/2022 12:43 PM, Ellie Hassan wrote:
>Hello Mark,
>
>I spoke with the applicant and it sounds like they are anticipating a
>resubmittal in the next few weeks. I will update the current
>developments page with the new drawings when they come in:
>https://www.louisvilleco.gov/local-government/government/departments/planning-building-safety/current-developments-15283.
>
>Thanks,
>Eliana “Ellie” Hassan
>Planner II – Planning & Building Safety City of Louisville
>ehassan@louisvilleco.gov<mailto:ehassan@louisvilleco.gov>
>Mon-Thurs - City Hall, Office Phone: 303-335-4591 Fri - Home Office,
>Cell Phone: 303-349-6977
>
>From: Mark Cathcart
><m_cathcart@yahoo.co.uk><mailto:m_cathcart@yahoo.co.uk>
>Sent: Thursday, June 2, 2022 2:30 PM
>To: Ellie Hassan
><ehassan@louisvilleco.gov><mailto:ehassan@louisvilleco.gov>
>Subject: North End Block 11
>
>Any activity from Markel on this application?
>
>
>
>--
>
>++Mark.
>
>_____
>
>https://ctproduced.com

>
>https://markcathcart.com/about/
>
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707

East Bound
South Boulder RD
Access Concerns

Prepared by Mark Cathcart for meeting on 8/11/16

(updated 8/22/16)


North End Phase III
Louisville City Council
Balfour Senior Living
Louisville City Council
Blue Sage subdivision
Lafeyette City Council
South Boulder Rd Small Area Plan
Louisville City Council
North End Market
Louisville City Council
W South Boulder Rd
8/22/2016

Current Situation

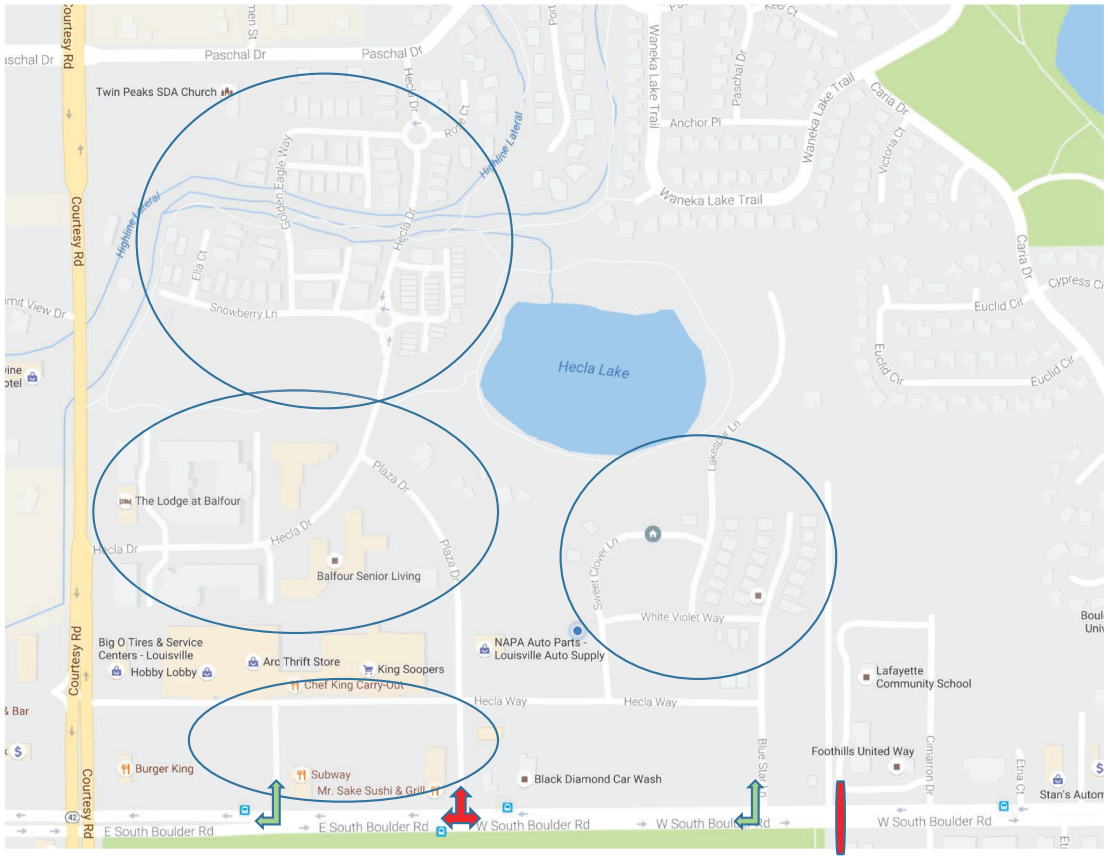
Massive feeder zone for single, left, east bound access to South Boulder Rd

1. 4-5 cars backed up on Hecla waiting to turn left onto Plaza but limited by traffic coming from north of Kings Supers on Plaza Dr to S Boulder RD.

2. More cars waiting at the light on Plaza to turn left on South Boulder than can make it through a green light

3. Cars backed up along Plaza Dr obstructing safe turns into Hecla from north bound Plaza Dr, and out of Louisville Plaza onto Plaza Dr.

4. Already see traffic making “illegal” left from Blue Star Ln



Key: Right in, Right out only  Light controlled  Light Controlled pedestrian crossing

710

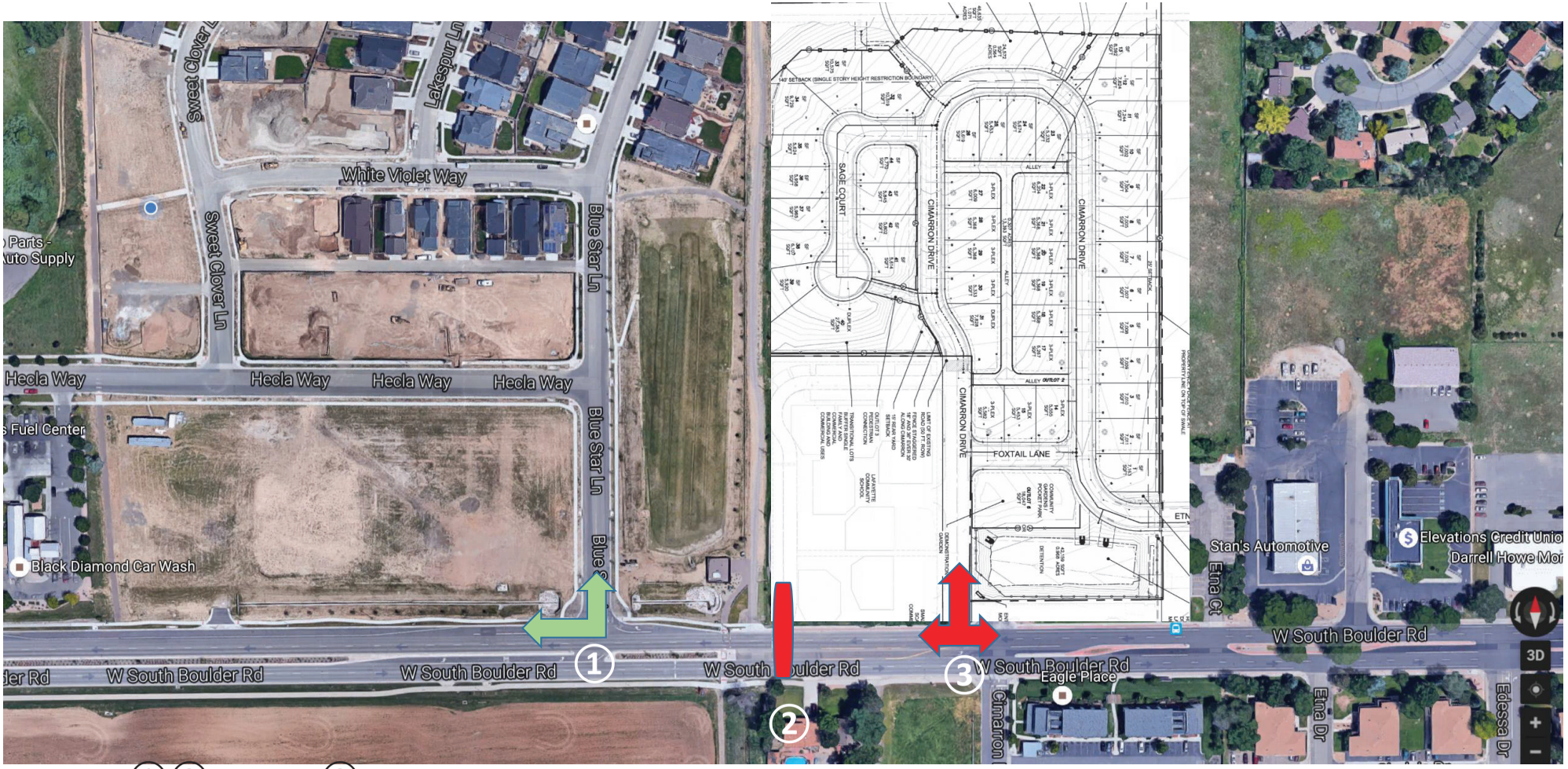
Current Problem



- Picture Taken 16th August, 4:12pm - common but not constant problem
  - Traffic waiting to turn left at light, blocks exit from Louisville Plaza, also blocking left turn exit from Hecla Ln
  - Completely blocking right turn on S Boulder Rd from Plaza Dr.

Blue Sage Development - Lafayette

- Markel Developer, sketch plan approved May 2016
  - 29 Single Family Homes; 10 Duplex; 39 Triplex;
  - “The [prior] development agreement for the Westgate Office Park Subdivision included provisions for providing proportional funding for a traffic signal at Cimarron Drive and South Boulder Road.”
  - Condition of approval “The applicant shall be responsible for 50% of the costs of the future traffic signal at Cimarron Drive and South Boulder Road.”
- Developer indicated they’d be back at Lafayette Council before end of summer for plan approval



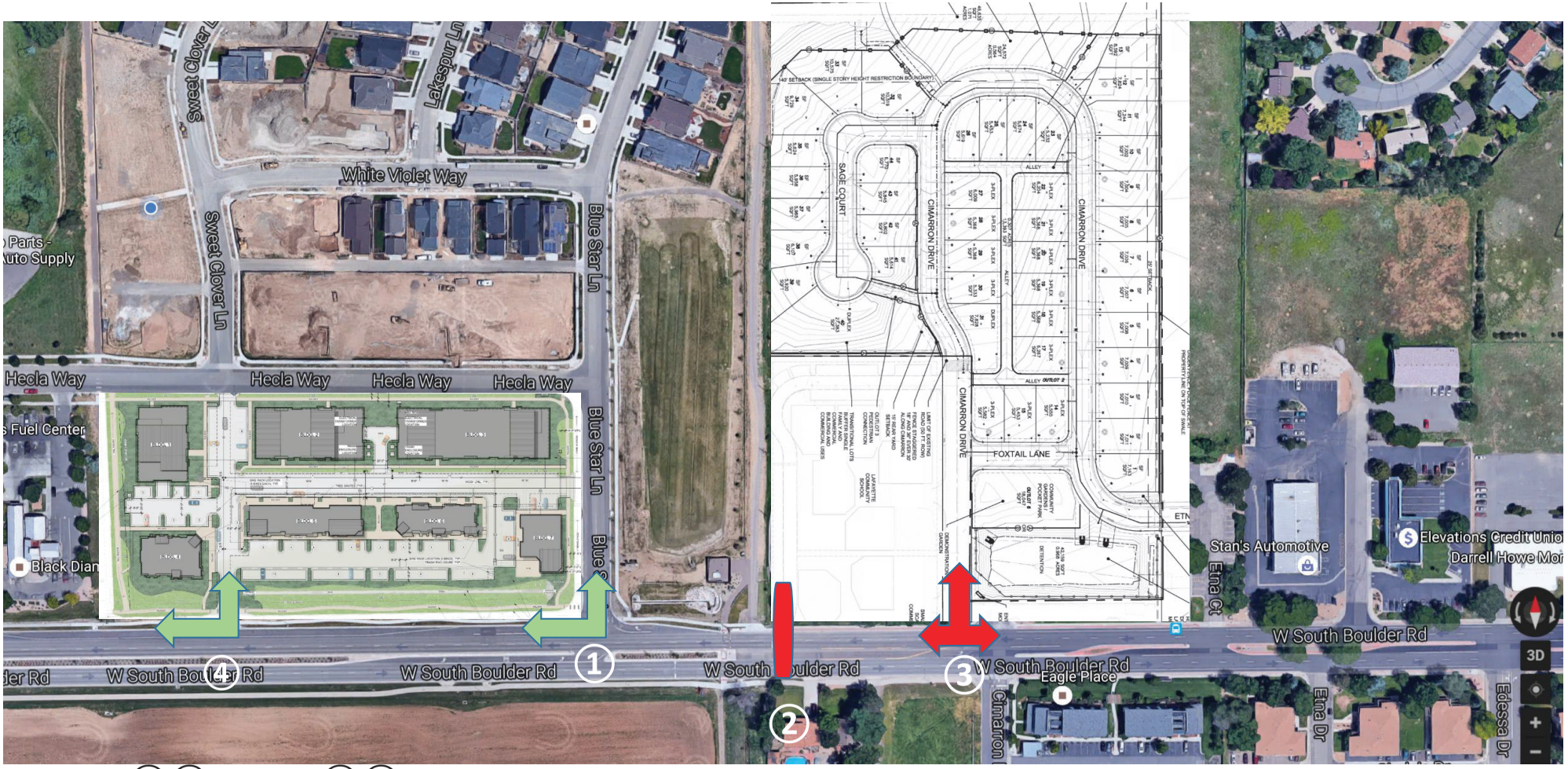
Existing: ① ② New: ③

Key: Right in, Right out only Light controlled Light Controlled pedestrian crossing

713

North End Markey (Block 11) Development - Louisville

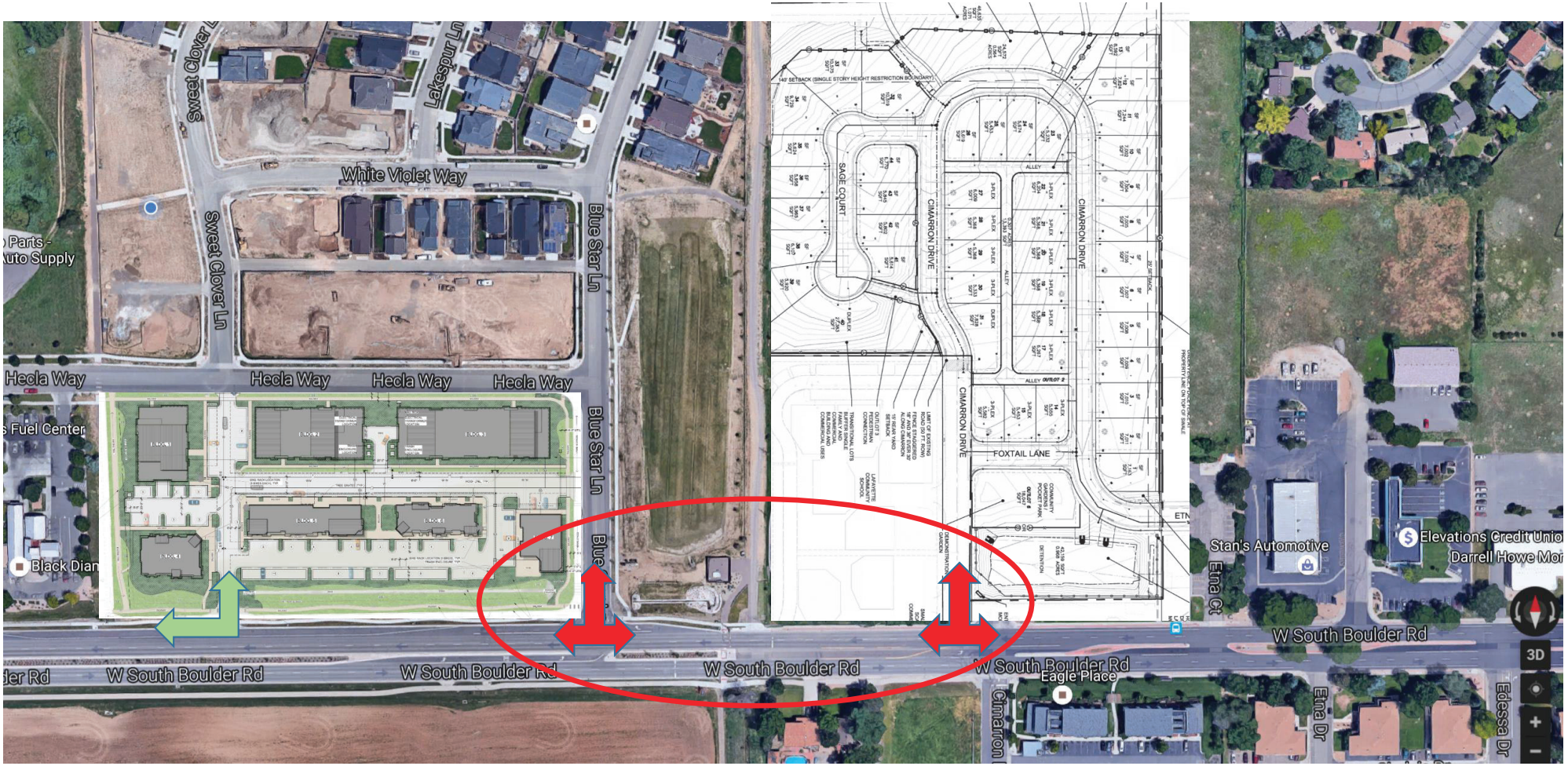
- Markel Developer, expected Planning Commission 2016
  - Likely to add 3 Residential Buildings; some 65 units
  - 4 Commercial Buildings, 40,000 sqft
    - Retail on 1st Floor; Office in 2nd Floor
- Markel has indicated they have a potential “brew-pub” tenant
- Likely to significantly increase traffic
- Only (external) road change
  - Expected to be extension of Sweet Clover LN
  - Another right-in/right-out only intersection with South Boulder Rd
- This will significantly increase problems at Plaza Dr



Existing: ①② New: ③④

Key: Right in, Right out only Light controlled Light Controlled pedestrian crossing

715



Solution to add left/East bound access from Blue Star Lane; Link pedestrian crossing with proposed Cimarron Dev. Lights; synchronize lights to minimize delay and pollution from stationary cars

716

Proposed alternative

- Looking for feedback, help, advice
- Cooperation between Louisville City Gov. and Lafayette City Gov. , other road authorities and developer, Markel
- Solution to add left/East bound access from Blue Star Lane; Link pedestrian crossing with proposed Cimarron Dev. Lights; synchronize lights to minimize delay and pollution from stationary cars

- Other options?
  - Extending timing of light at Plaza Dr is necessary but NOT sufficient.

Ellie Hassan

From: Mark Cathcart
Sent: Thursday, September 30, 2021 4:30 PM
To: Ellie Hassan
Cc: Rob Zuccaro
Subject: RE: North End Block 11 Final Plat and PUD Amendment

Categories: Public Correspondence

As we've found, and Rob can fill you in, the shielding is ineffective at both Speedy Sparkle and the new 1413 Hecla Way lot. While the energy value of new LED lights is improved, the white light they emit caries much further than the old lighting. It's the neighbors view in North End that the lights at both these properties are excessive in relation to the risk they are installed to mitigate after hours. It's not some remote outcrop where robberies and break-ins are frequent.

Thank you for any action you can take at this point, my neighbors and I will, I'm sure be involved once the application gets to Planning Commission. If we can get a best available solution to the lighting and speed, I for one and I'm sure many of my neighbors will be supportive and glad to see Markel/Ridgeline move forward on this development.

Thank you.

++Mark.

https://ctproduced.com
https://markcathcart.com/about/

From: Ellie Hassan <ehassan@louisvilleco.gov>
Sent: Thursday, September 30, 2021 3:31 PM
To: Mark Cathcart <m_cathcart@yahoo.co.uk>
Cc: Rob Zuccaro <rzuccaro@louisvilleco.gov>
Subject: RE: North End Block 11 Final Plat and PUD Amendment

Hello Mark,

Thank you for your comment. We will include your email in our public records which will be reviewed by the applicant and the Planning Commissioners/City Council.

I will see if there is anything we can do from a Planning Department standpoint for the speed mitigation/traffic calming on that road.

Regarding the request for lighting, we still have some time before our Dark Sky initiatives will be enacted, however our existing regulations do have some lighting standards such as shielding to help mitigate light pollution. Unfortunately the first round of plans from the applicant did not include a photometric plan but we hope to have more lighting details in future submittals from the applicant.

Sincerely,
Eliana "Ellie" Hassan
Planner II – Planning & Building Safety
City of Louisville
ehassan@louisvilleco.gov
Office: 303-335-4591 | Cell: 303-349-6977

From: Mark Cathcart
Sent: Thursday, September 30, 2021 2:03 PM
To: Ellie Hassan <ehassan@louisvilleco.gov>
Cc: Rob Zuccaro <rzuccaro@louisvilleco.gov>
Subject: North End Block 11 Final Plat and PUD Amendment

Ellie, I'm Mark Cathcart, I live on Sweet Clover Ln in North End Phase II.

I've just been looking at the resubmitted Ridgeline/Markel plans, overall the changes look fine. I am though concerned with speeding through the development on the extension of Sweet Clover Ln from Hecla Way to E South Boulder Rd. Please do everything you can to have speed mitigation built in from the start, rather than us have to campaign for it when it becomes a problem, as it surely will.

A raised curb/step-up at both ends if possible would be a good place to start.

Also, we already have enough light pollution from the speedy sparkle car wash and the new 1413 Hecla Seed and Smith development. Again, where possible at this stage, please limit the use of LED and other lights to the minimum required rather than allow the developer to add additional lights for whatever reason. The city's Dark Sky initiative is great, but it needs an application that considers existing neighbors.

++Mark.

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