

Stories in Places: Putting Louisville's
Agricultural, Railroad, and Mining Development in Context

Boulder County, Colorado



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**STORIES IN PLACES: PUTTING LOUISVILLE'S
AGRICULTURAL, RAILROAD, AND MINING DEVELOPMENT IN CONTEXT
BOULDER COUNTY, COLORADO**



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EXECUTIVE SUMMARY

PaleoWest Archaeology (PaleoWest) prepared this historic context to help the City of Louisville, Colorado (City) understand its agricultural, railroad, and mining (collectively, industrial) development from the time of Louisville's founding in 1878 to the present day. While some agricultural and railroad activities continue in Louisville today, this context focuses on industrial resources that date to 1955 or earlier. The preparation of three historic contexts—a Residential Context, Commercial Context, and Agriculture, Mining, and Railroad Context—is one of many goals of Louisville's 2015 city-wide Preservation Master Plan.

By connecting personal stories with observed patterns in industrial resources, this context aims to foster the Louisville community's understanding of and support for historic preservation of older agricultural, railroad, and mining resources.

What is an Historic Context?

An historic context is a narrative for understanding a place's history and identity. It is a tapestry of personal stories, architectural descriptions, economic analyses, and collective visions of a community's past, present, and future. An historic context promotes accurate, personal recounting of history and provides information that supports City decision-making.

The Goals of an Historic Context are to

- summarize historical trends in settlement, architecture, and industry;
- identify architectural forms and styles and economic trends that characterize different time periods, geographic areas, industries, and ethnic groups;
- identify gaps in information about architecture and industry;
- prioritize future documentation of buildings, structures, and other resources;
- identify architectural elements that make some buildings and structures significant; and
- understand the kinds of modifications that are and are not compatible with significant historic buildings and structures



The Historic Context Process

To initiate this historic context, PaleoWest and the City hosted a public input session on March 3, 2017. During that session, we gathered information about what some Louisville residents feel is important for their community identity. We heard that members of the community are enjoying the present (e.g., events and shops) and looking forward to the future (e.g., Downtown East Louisville), while feeling a strong connection to the past (e.g., backyard gardens, family stories, and favorite

old houses). Based on feedback received during this session, the clearest path to preserving significant historic resources in Louisville is continuing to strengthen the community's personal

connections with them. PaleoWest gathered additional information for the historic context from a variety of sources, including the Louisville Historical Museum’s public education presentations and quarterly publication (*The Louisville Historian*), previously completed architectural surveys and historical reports, property assessor cards, historical maps, photographs, and newspapers, personal stories, and our own visits to Louisville.

Content

This context intersperses Louisville history, building and structure descriptions, and histories of a selection of Louisville’s industrial endeavors. The context also describes some common early agricultural, railroad, and mining resources and a few typical industrial architectural forms and styles. In addition, the context describes patterning in Louisville’s agricultural, railroad, and mining industries across time and space.



Photo Credit: Louisville Historical Museum

Recommendations

This historic context provides recommendations for future research, documentation, and landmarking. These activities would further deepen our understanding of Louisville’s historical industries of agriculture, railroad, and mining. PaleoWest recommends that the City do the following:

- Document remaining farms and related buildings and structures, water reservoirs, a mine dump, and potential mine company houses
- Conduct landmarking outreach for the best examples of specific agricultural (ditches, water storage reservoirs, a silo, a barn, and farms), railroad (tracks), and mining (mine housing and a mine dump) resources
- Conduct targeted public education about Louisville’s important railroad history
- Conduct further research about Louisville farms’ crops and markets; Type C mine housing; and strikebreaking miners in Louisville during the Long Strike of 1910–1914

Summary

In most ways, Louisville’s agricultural, railroad, and mining development and remaining industrial resources mirror those of many towns and small cities in Colorado and across the United States. Louisville’s present-day boundary encompasses many open spaces but relatively few extant agricultural, railroad, and mining resources. Most of those resources are utilitarian, with some variations in form but few variations in style. These characteristics are typical of late nineteenth- and early twentieth-century industrial resources across most of the United States. At the same time, the present-day Louisville area witnessed some early and/or important regional developments in agriculture (e.g., irrigation ditches and water storage reservoirs), railroading (e.g., the CCR and D&I), and coal mining (e.g., the Welch Mine and the Hecla Mine battle). In recent years, the farm-to-table movement and revitalization of Louisville’s Historic Downtown have engendered interest in (organic) farming and appreciation for Louisville’s unique residential and commercial buildings. Now is a great time to further educate the public about Louisville’s lesser-known industrial history and to integrate Louisville’s past, present, and future.

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SECTION 1: INTRODUCTION AND BACKGROUND



Photo credit: Louisville Historical Museum

INTRODUCTION

This historic context documents Louisville, Colorado's historical and modern agricultural, railroad, and mining (collectively, "industrial") development from 1878 to 2017. These three industries were closely tied because each depended on the others. Agriculture was the first widespread industry in the Louisville area and provided food for settlers and, later, miners, and a need for railroad transport of animals and products to and from markets. The railroad came next but required a source of fuel, which at that time was coal. Mining provided the coal needed by the railroad, while the railroad transported additional coal, as well as agricultural products and other necessities, to and from markets. Only a small number of agriculture-, railroad-, and mining-related buildings and structures remain today within Louisville's present-day boundary (Figure 1). Therefore, to provide a rich historical context for those industries, this document includes an overview of the industries and descriptions of many of the industrial resources (e.g., farms and coal mines) that were formerly present in Louisville, even if they are no longer extant.

PaleoWest Archaeology (PaleoWest) wrote this historic context for the City of Louisville (City) to help the City implement its city-wide Preservation Master Plan (Plan). The Plan recommends the preparation of historic contexts to strengthen historic preservation practice in Louisville and "to support responsible decision-making and facilitate interpretation" (City of Louisville 2015:22). As the Plan states, "Historic contexts explore important themes to share stories of the past and promote understanding of Louisville's built environment" (City of Louisville 2015:26) and "Historic contexts tell the stories of specific people and places at a certain time, linking those themes back to actual historic buildings and sites" (City of Louisville 2015:A-3).

PaleoWest structured our research and writing in keeping with the Plan's description of the roles of an historic context: 1) explains what is most important to community identity; 2) emphasizes stories and human experience; 3) complements historical and architectural surveys; and 4) serves as a precursor to landmarking and the identification of historic districts (City of Louisville 2015:B-1).

Accordingly, this document does the following:

- Describes the project impetus and its goals and parameters;
- Outlines the methods PaleoWest used to gather information, including community input;
- Summarizes Louisville's history, with an emphasis on the national and local events and trends that helped shape Louisville's industrial development;
- Discusses the diverse agriculture-, railroad-, and mining-related buildings and structures that were present historically in Louisville;
- Describes and illustrates some industrial building and structure forms and styles still present in Louisville and provides a list of the defining characteristics of each;
- Identifies priorities for future documentation and investigation;
- Discusses the physical and more intangible characteristics that must be maintained for industrial resources to be landmarkable;
- Discusses the kinds of modifications that could be historically compatible with specific industrial resources; and
- Provides a list of properties recommended for landmarking outreach.

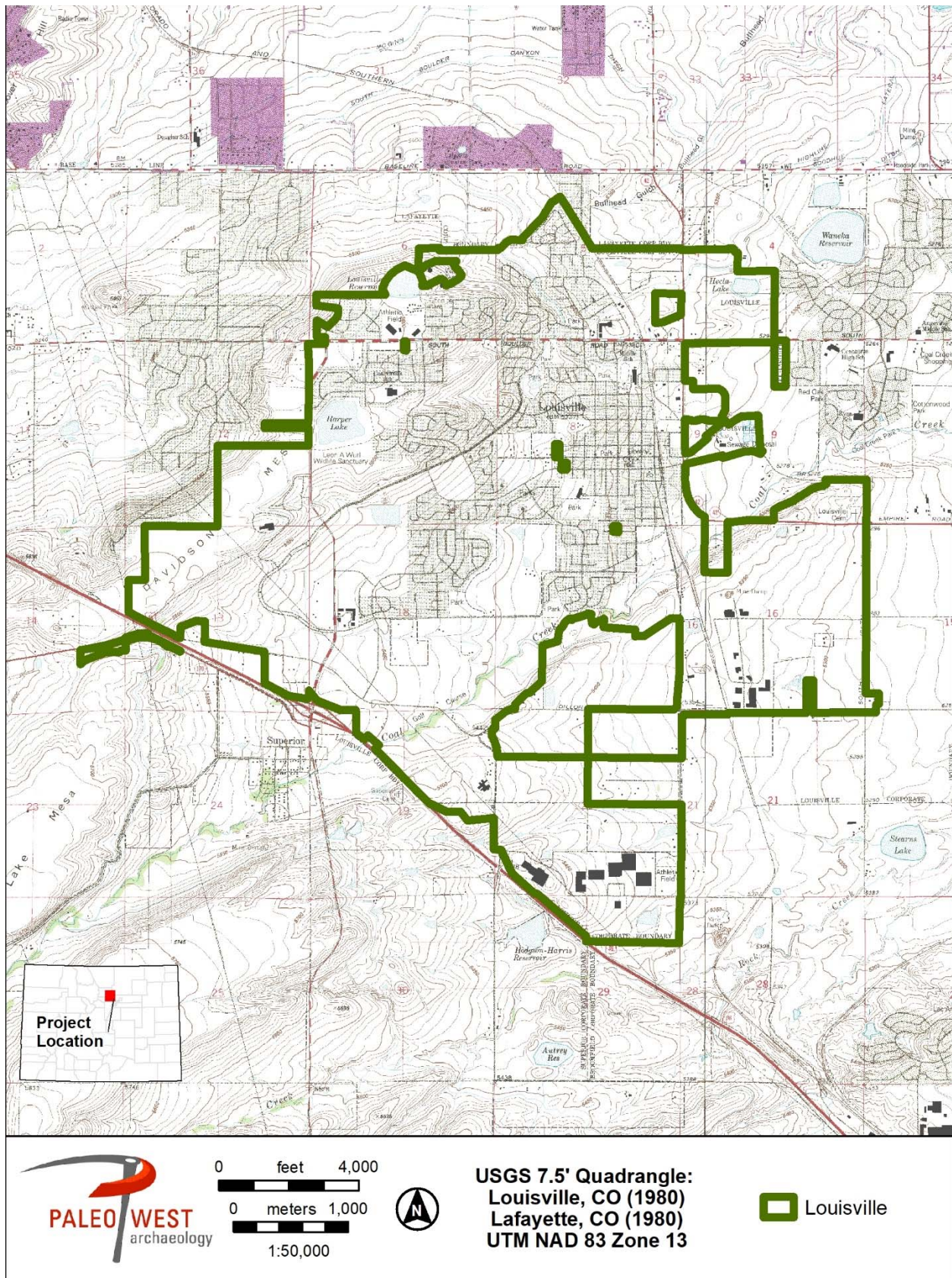


Figure 1. Present-day boundary of Louisville.

ENVIRONMENTAL SETTING

The city of Louisville lies at an average elevation of 5,335 feet above sea level. The city is situated within the Colorado Piedmont portion of the Great Plains physiographic province, just east of the hogbacks/foothills transition zone between the Piedmont and the Southern Rocky Mountains physiographic province (Colorado Geological Survey 2011). Louisville is generally underlain by sandy loams and sandy clay loams, which are derived from ancient wind-reworked alluvial (waterborne) and eolian (windborne) sediments (Natural Resources Conservation Service 2017). Natural vegetative communities for the Piedmont and adjacent foothills to the west are mixed-grass to tall grass prairie. Native plants include big and little bluestem, needle-and-thread grass, fescue, mountain muhly, and oatgrass (Colorado State University Colorado Natural Heritage Program 2011), although vegetation present today also includes goldenrod, mullein, prickly lettuce, narrow-leaf yucca, and many other wildflowers, forbs, and cacti (Figure 2).

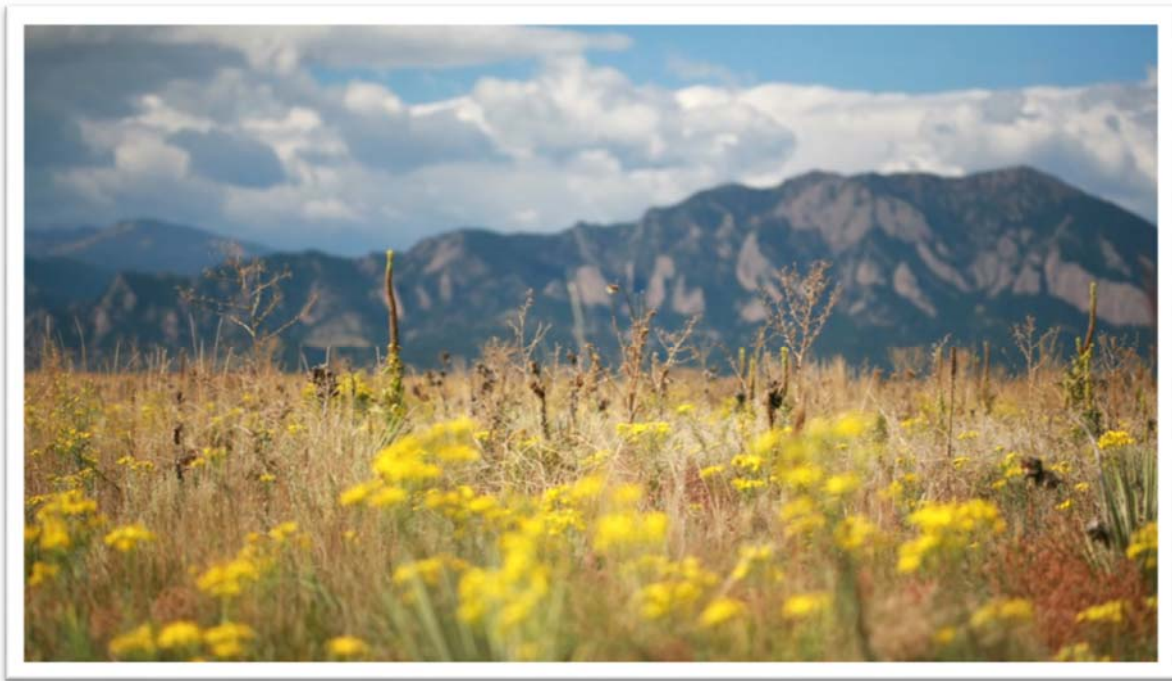


Figure 2. “Mesa Vista” (photo credit: Lindsay Hiatt).

SECTION 2: METHODS



METHODS

MEETINGS WITH CITY REPRESENTATIVES

PaleoWest began work on this historic context by meeting with City of Louisville Planning Department staff member, Lauren Trice, and Louisville Historical Museum (Museum or LHM) director, Bridget Bacon, on October 27, 2016. Dr. Rebecca Schwendler of PaleoWest also conducted a walking tour of Louisville's historic downtown and residential areas with Ms. Trice and met with her to discuss the project on several subsequent occasions. Dr. Schwendler presented a summary of the proposed historic contexts project to the Louisville Historic Preservation Commission (HPC) on November 21, 2016.

PUBLIC OPEN HOUSE

On March 3, 2017, PaleoWest helped City staff host an interactive open house at City Hall to inform the public about the historic contexts project and to solicit stories and information about Louisville's residential, commercial, and industrial development (Figure 3). We provided numerous, diverse key words (e.g., "History," "Farm," "Future," "early 1900s," "2010s") and asked members of the public to write down stories and thoughts that came to mind as a result. We also asked the public to fill in open-ended statements (e.g., "I think the _____ house/building/place is important because:") and to write down their favorite building (Figure 4).



Figure 3. March 3, 2017, public open house (photo credit: Lauren Trice).

RESEARCH

Over a period of months, PaleoWest read as much information as possible about Louisville's history. Sources included past issues of the Museum's quarterly publication, *The Louisville Historian*, previously completed architectural surveys and reports, the City's website, Bureau of Land Management (BLM) General Land Office (GLO) records, other online information, historical photographs, public education presentations, assessor cards, Sanborn Fire Insurance maps, mining company records, historical newspapers, and personal stories. PaleoWest obtained geographic information system (GIS) shapefiles of Louisville's Old Town Overlay District and city boundary from the City. In addition, PaleoWest requested a file search of the Office of Archaeology and Historic Preservation's (OAHP's) COMPASS database to obtain information about previously recorded historical resources in Louisville.

FIELDWORK

After gaining a preliminary understanding of Louisville's history and previously recorded agricultural, railroad, and mining resources, Dr. Schwendler made multiple trips to Louisville, viewing, from public rights-of-way, the buildings, structures, farms, rights-of-way, and open spaces that are related to those aspects of Louisville's industrial development. During tours of Louisville, Dr. Schwendler visited as many resources as possible that are related to Louisville's agricultural, railroad, and mining history while respecting private property. For resources that are not visible or accessible from public rights-of-way, Dr. Schwendler used Google Earth or Google Maps to investigate the resources. From her visits and background research, she created a tally of as many relevant extant resources as possible. To obtain construction dates and ownership information, Dr. Schwendler consulted online Boulder County Assessor Office records (Boulder County Assessor's Office 2018), GLO maps (BLM 2018), historical sources such as the 1899 Willits Farm Map (Willits 1899) and 1953 Marden Map (Marden Maps 1953), historical newspapers, and information maintained by the City. Assessor Office construction dates are sometimes inaccurate by a few or many years, but the scope of this historic context was such that PaleoWest generally did not investigate construction dates further.

ANALYSIS

The overarching goals of PaleoWest's analysis for this context were the following:

- Understand the historical diversity and geographic patterning in Louisville's agricultural-, railroad-, and mining-related resources
- Determine how those patterns related to larger regional and national trends
- Understand Louisville's industrial development in relation to other industries, people's ethnicities and socioeconomic status, and/or other factors
- Understand how many of the historical industrial resources are extant today
- Identify extant resources that are high priorities for future recording and/or landmarking

To facilitate an analysis of patterning, Dr. Schwendler created a master list of resources organized by location and containing associated dates and supporting information (Tables A.1–A.3, Appendix A). PaleoWest used field observations and historical research to identify

properties to recommend for future documentation, investigation, and landmarking. We noted that a large number of the extant agricultural and mining resources (as well as some that no longer exist) have been recorded previously, but there are a handful left to document before they are lost. We also noted that, while (or because?) Louisville retains its key historical railroad resources, Louisville residents may not be very aware of their town's important railroad history. Accordingly, we recommend conducting targeted education about this aspect of Louisville's heritage. We also recommend further investigation of Louisville farms' crops and markets, a group of distinctive houses that are similar to mine company houses, and of strikebreaking miners who were involved in the Long Strike of 1910–1914. For landmarking outreach, we prioritized properties that are unique or rare examples of specific types of agricultural, railroad, and mining resources, even if their integrity has been diminished somewhat. All of those resources were constructed before 1955 (when the last coal mines closed), which is the City's cut-off date for landmarking (City of Louisville 2015:ii). Specific properties are discussed in the Landmarking Outreach section, below.

SECTION 3: HISTORICAL BACKGROUND



Photo credit: Louisville Historical Museum

HISTORICAL BACKGROUND

REGIONAL HISTORY PRIOR TO LOUISVILLE'S FOUNDING (1860–1878)

In the early nineteenth century, Euro-American settlers, or “squatters,” who did not own the land on which they lived were vulnerable to losing their homes and livelihoods when the land was surveyed, put up for auction, and purchased by speculators. Squatters pressured Congress to address this issue, which it did to some extent via a series of temporary preemption laws in the 1830s. During the next decade, U.S. Senator Henry Clay crafted the Pre-Emption Act of 1841, which gave squatters the right to purchase up to 160 acres of surveyed public land for a minimum of \$1.25 per acre before the land was auctioned. The Act remained in effect until 1891. While many speculators abused the act and obtained large tracts of land illegally, the Act paved the way for the passage of the Homestead Act of 1862 (which led many settlers to move to the West) by making preemption an accepted part of U.S. land policy (The Editors of *Encyclopædia Britannica* 1998).

The year 1860 is used as a somewhat arbitrary beginning of the Historic period in Colorado; in that year, Euro-Americans firmly established control over most lands in the eastern part of the state. They relegated the Native American tribes of the Cheyenne and Arapaho to a reservation that was much smaller than the tribes’ traditional hunting grounds, which had been loosely defined by the Platte River on the north and the Arkansas River on the south and included much of present-day eastern Colorado, southeastern Wyoming, southwestern Nebraska, and western Kansas (Fowler 2001). This tightening of Euro-American control over Native Americans was precipitated by numerous events and the dramatically increasing numbers of Euro-Americans who were moving into the West. Following the California Gold Rush, a steady stream of miners, beginning in 1849, traveled through portions of Colorado’s Front Range along overland routes, such as Trapper’s Trail and the Cherokee Trail, to reach mining sites. Then, in 1858, gold was discovered at the confluence of the Platte River and Cherry Creek in Denver. This discovery brought markedly larger numbers of Euro-American settlers to the Front Range, with farmers, ranchers, and miners moving onto lands reserved for tribes and demanding that the federal government dissolve Indian claims (Clark 1999). In reaction, the Northern Arapaho began to withdraw into Wyoming and Montana, allying themselves with the Sioux and Northern Cheyenne tribes. The Southern Arapaho withdrew down the Arkansas River (Fowler 2001). At the same time, the federal government and settlers exerted still more control over land and resources.

During a meeting with the federal government in 1860, the Southern Cheyenne and Arapaho agreed to give up their previously defined lands, except for a triangular-shaped area located between the Arkansas River and Sand Creek, situated approximately 200 miles (322 kilometers [km]) southeast of Louisville. Each tribal member was to receive 40 acres of land within this new reservation. The government also promised a \$30,000 subsidy to tribes for 15 years and the building of a grist mill, saw mill, and schools (Ubbelohde et al. 1995). Not all tribal members were in agreement and not all remained on assigned reservation lands. Then, in 1861, the Colorado Territory was established. Tensions between Native Americans and Euro-Americans continued to increase after the establishment of the Colorado Territory, resulting in the killing of

the Euro-American Hungate family of four in 1864, approximately 25 miles (40 km) southeast of Denver. The Arapaho and Cheyenne leaders travelled to Fort Lyon, less than 200 miles (322 km) south-southeast of Louisville, to make peace, and many families camped on their Sand Creek Reservation during the late fall. On November 29, 1864, Colonel John Chivington, a Methodist clergyman, launched a surprise attack on more than 500 Arapaho and Cheyenne camped at Sand Creek. Chivington's troops killed at least 100 people, primarily women, children, and the elderly. After subsequent revenge and counter attacks, the government crafted the Medicine Lodge Creek Treaty in October 1867, whereby the Southern Cheyenne and Arapaho agreed to move to Indian Territory in present-day Oklahoma. More skirmishes between Euro-Americans and Native Americans occurred over the next two years, with the final military engagement between Native Americans and federal troops occurring at Summit Springs in northeastern Colorado. After that time, Colorado's Front Range was permanently opened for rapid Euro-American exploitation and settlement (Ubbelohde et al. 1995).

Denver and Golden, Colorado, were founded at the end of the 1850s in response to a nearby gold discovery. First Golden, and then Denver, beginning in 1867, served as seats of government for the newly created Colorado Territory. Boulder became the seat of Boulder County that same year. During the mid-1800s, agriculture was the most widespread industry in Boulder County. A historic context for agricultural resources in Boulder County (Wolfenbarger 2008) refers to this first period in the county's agricultural history, ca. 1859 to 1896, as Early Settlement/Pioneer Agriculture. During this time, many Euro-American farming families moved to the area, bringing crops with them from the East and Midwest, and established farms on plains that had formerly been Native American hunting grounds. Along with farms, these early Euro-American settlers dug extensive irrigation systems and founded communities.

To encourage Euro-American population expansion and economic growth in the West, during the mid-1800s, bankers, chambers of commerce, state publicity departments, railroads, and real estate brokers painted a rosy picture of agriculture on the Great Plains. Most importantly, they claimed the region received enough water to practice widespread dry land farming (farming without irrigation) (Hargreaves 1948; Quisenberry 1977, as cited in Christensen 2009:32). As a result, Midwestern farmers brought their seeds and farming methods to Colorado without understanding the cyclical droughts that occur on the plains. Over time, many farms failed, while some farmers developed and adopted crops that were more suitable to Colorado's particular climate. Farmers also improved their dry land farming techniques, although these techniques consistently resulted in lower yields than those supported by irrigation. Dry land farming relies on conserving moisture in the soil and using crops that withstand drought or mature before the hottest and driest time of the year (Hargreaves 1948, as cited in Christensen 2009:32).

The Land Act of 1820 brought the largest number of farmers and other people to eastern Boulder County during the mid-nineteenth century. Many earlier farmers purchased land from the federal government during the War of 1812 (Ohio History Central 2018), when the newly formed United States fought Great Britain over maritime rights related to shipping and sailors' employment (Heidler and Heidler 1999). By the late 1810s, the United States economy took a downturn and, during the Panic of 1819, a currency shortage prevented farmers from making loan payments. Subsequently, farmers across the country (albeit with most still living in eastern states) were in fear of losing their farms. To address this issue, Congress passed the Land Act of 1820 and the

Relief Act of 1821. The Land Act of 1820 reduced the requirement for land purchases from 160 acres (established by the Land Act of 1804) to 80 acres and the cost of land from \$2.00 per acre to \$1.25 per acre. With these changes, the government hoped to encourage additional land purchases to boost the national economy. The Relief Act of 1821 allowed farmers to receive a debt credit from the government if they returned land to the government for which they could no longer pay. Concurrently, the government extended credit to those farmers for an additional eight years, hoping that the economy would improve during that time and people could start to make payments on their government loans. Overall, these measures were successful and allowed many farmers to keep their land (Ohio History Central 2018).

The Land Act of 1820 also motivated many more people, including land speculators, to purchase lands in the still largely undeveloped West, including Boulder County. Table 1 shows that, between 1866 and 1889, 13 different men used the Land Act of 1820 to purchase land that falls at least partly within the boundaries of present-day Louisville (BLM 2018). Notable names discussed below in the Louisville's Early Development section are William A. Davidson and Louis Nawatny. Another notable man was Herman Kountze, who purchased land in Louisville in 1870. In 1857, Herman and two of his five brothers founded Kountze Brothers Bank in Omaha, Nebraska, which merged with First National Bank of Omaha in 1865. In 1862, Herman's brother Luther moved to Denver and opened a branch of Kountze Brothers Bank, which became Colorado National Bank in 1866. In 1868, Luther turned that branch over to his brother, Charles. Herman never actually lived in Colorado, despite owning land here; instead, he, two of his brothers, and other investors continued with Kountze Brothers Bank in Omaha (McKee 2013). Charles B. Kountze also owned land to the south of Louisville's original town, although he lived in Denver, not Louisville (Bridget Bacon, personal communication, March 27, 2018; Drumm 1909). Another man, Adolf Waeneche (later changed to Waneka), is very familiar to historians of Louisville's neighbor town, Lafayette. Waneka was the first settler in the Lafayette area and was the patriarch of an extended family of descendants, many of whom still live in Lafayette.

Information about several other, less notable men is available in records accessible through ancestry.com. One man is Henry O. Wells, who was born in New York in 1832. By 1870, he lived in Boulder and worked as a carpenter. The following year, Wells patented land in the Louisville area (ancestry.com 2009). Another speculator was James Minks, born in Pennsylvania in 1915 or 1916 to parents who were both from that state. By 1870, Minks had moved to Colorado and was working as a farmer; he patented land in the Louisville area that year. Minks and his wife, Martha, had a daughter named Mary (ancestry.com 2009). Minks died in 1902 and was buried in Columbia Cemetery in Boulder (ancestry.com 2012a). Robert Niver was born in New York around 1822 to parents who were both from that state (ancestry.com 2009). He came to Colorado by 1864, at which time he served as postmaster of Coal Creek (ancestry.com 2010a). By 1870, Niver married a woman named Rosalie and was a farmer (ancestry.com 2009). That same year, he patented land in the Louisville area. John Mitchell appears to have been born in Illinois around 1835. He patented land in the Louisville area in 1875, and the 1880 Colorado census records show him to be working as a farmer at that time (ancestry.com and The Church of Jesus Christ of Latter-Day Saints 2010).

Table 1. Historical Land Patent Holders within Present-Day Louisville

Township	Range	Section	Aliquots	Name	Date	Authority	Authority Description	Notes
1S	69W	4	SW	Henry O. Wells	3/25/1871	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—
1S	69W	4	NW¼; NE¼	William A. Davidson	12/15/1870	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act Of 1820	—
1S	69W	6	NW¼; SW¼	William A. Davidson	5/10/1870	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act Of 1820	—
1S	69W	6	SE¼	Herman Kountze	5/10/1870	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—
1S	69W	8	NW¼	Josiah Boon, John Jones	6/20/1870	March 3, 1855: Scrip Warrant Act of 1855 (10 Stat. 701)	Scrip Warrant Act of 1855	—
1S	69W	8	NE¼	William C. Brewster	2/10/1871	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—
1S	69W	8	SW¼	Lowe P. Cook	2/10/1871	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—
1S	69W	8	W½SE¼	Albert L. Eggleston	12/1/1875	May 20, 1862: Homestead Entry Original (12 Stat. 392)	Homestead Act of 1862	—
1S	69W	8	NE¼SE¼	Louis Nawatny	11/5/1878	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—
1S	69W	8	SE¼SE¼	Adolf Waeneche	7/20/1866	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—
1S	69W	17	E½NE¼	Adolf Waeneche	7/20/1866	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—
1S	69W	17	SW¼SW¼	Robert Niver	9/20/1870	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—
1S	69W	18	SE¼SE¼	Robert Niver	9/20/1870	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—
1S	69W	19	N½NE¼	Robert Niver	9/20/1870	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—
1S	69W	17	SW¼NE¼; SE¼NW¼; NE¼SW¼; NW¼SE¼	Christopher C. Truett	5/10/1870	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act Of 1820	—
1S	69W	18	SW¼SW¼	Charles W. Gambol	3/20/1877	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—

Township	Range	Section	Aliquots	Name	Date	Authority	Authority Description	Notes
1S	69W	18	E½NW¼	George W. Hinks	5/15/1876	May 20, 1862: Homestead Entry Original (12 Stat. 392)	Homestead Act of 1862	Patent image says Hinks, not Minks
1S	69W	18	NE¼	Michael Keefe	12/15/1879	May 20, 1862: Homestead Entry Original (12 Stat. 392)	Homestead Act of 1862	—
1S	69W	18	W½NW¼	George W. Minks	6/10/1872	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	Patent image says Minks, not Hinks
1S	69W	18	N½SW¼; SE¼SW¼; SW¼SE¼	Langford R. Wilson	12/15/1873	May 20, 1862: Homestead Entry Original (12 Stat. 392)	Homestead Act of 1862	—
1S	69W	18	N½SE¼	Anthony Wylam	11/5/1878	May 20, 1862: Homestead Entry Original (12 Stat. 392)	Homestead Act of 1862	—
1S	69W	19	Lot/Trct 1 (E½NW¼); Lot/Trct 2 (W½NW¼)	William E.A. Innes	9/12/1889	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—
1S	69W	19	NW¼, Lot/Trct 1; NW¼, Lot/Trct 2	James Minks	5/10/1870	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—
1S	69W	20	NE¼	Joseph V. Beck	12/15/1873	May 20, 1862: Homestead Entry Original (12 Stat. 392)	Homestead Act of 1862	—
1S	69W	20	N½NW¼	Robert Bowes	2/1/1893	May 20, 1862: Homestead Entry Original (12 Stat. 392)	Homestead Act of 1862	Mostly outside current boundaries
1S	69W	20	SE¼	David Cameron, William H Ladien	1/20/1876	March 3, 1855: Scrip Warrant Act of 1855 (10 Stat. 701)	Scrip Warrant Act of 1855	Captain Barcy's Company Louisiana Volunteers; Patent

Township	Range	Section	Aliquots	Name	Date	Authority	Authority Description	Notes
								image says Laxien, not Ladien
1S	69W	20	S½SW¼	Clark Gilbert	12/9/1895	March 3, 1873: Timber Culture (17 Stat. 605)	Timber Culture Act	—
1S	69W	20	S½NW¼; N½SW¼	John Mitchell	3/20/1875	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—
1S	70W	12	E½NE¼; W½NE¼; W½SE¼; E½SW¼; W½SW¼; E½SE¼	William A. Davidson	5/10/1870	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—
1S	70W	14	SE¼;N½	Herman Kountze	5/10/1870	April 24, 1820: Sale-Cash Entry (3 Stat. 566)	Land Act of 1820	—

A smaller number of men purchased land within the boundaries of present-day Louisville through the Scrip Warrant Act of 1855 (two men), the Homestead Act of 1862 (seven men), and the Timber Culture Act, which passed in 1873 (one man). The Scrip Warrant Act was the last of many acts that served the same purpose (the first act was introduced in 1775). These acts provided bounty-land warrants (gifts of land) to encourage volunteer military enlistment and reward Regular Army, Navy, and volunteer militia veterans of various United States wars. Such wars included the Revolutionary War, the War of 1812, the Mexican War, and numerous Indian wars, Indian removals, and other military actions conducted during the 1850s (National Archives and Records Administration 2010). As seen in Table 1, Josiah Boon and John Jones (in 1870), and David Cameron and William H. Ladien or Laxien (in 1876), who were in “Captain Barcy’s Company of Louisiana Volunteers,” obtained land within present-day Louisville through the Scrip Warrant Act. Information from the 1870 Census shows that John Jones was born in Virginia in 1803. By 1870, he lived in Boulder, was married to a woman named Catherine, and was a farmer (ancestry.com 2009). The Louisiana Volunteers were most likely a regiment of men from Louisiana who volunteered for Confederate military service during the Civil War (1861–1865) (e.g., Jones 2018). Being in his late 50s, John Jones would have been unusually old for a Civil War volunteer.

President Abraham Lincoln signed the Homestead Act on May 20, 1862. The Act encouraged western migration by enabling settlers to pay a small filing fee for 160 acres of land. The settlers could either purchase the land for \$1.25 per acre after six months of residency or acquire the land for free if they lived on it continuously for five years. By 1900, the Homestead Act of 1862 had resulted in the distribution of 80 million acres of public land (The Library of Congress 2017).

As seen in Table 1, between 1873 and 1893, seven different men obtained land within the present-day boundary of Louisville through the Homestead Act of 1862. Some were born in other countries and others were native to the United States. For example, Albert Eggleston was born in Ontario, Canada, in 1847. In 1867, he married a woman named Angeline from New York. Their son, Lewis, was born in Jefferson County that same year. The 1870 census records show him working as a farm laborer in Gilpin County. Yet, he patented land in the Louisville area in 1875 (ancestry.com 2009) so the Egglestons must have started living in Boulder County by 1870. They settled along Coal Creek, southwest of present-day Superior, but their descendants intermarried with the Murphy and Waeneche/Waneka families of Louisville and Lafayette (Bridget Bacon, personal communication, March 27, 2018). By 1885, Eggleston was living in Jefferson County and had four children. By 1900, he was living and working as a miner in Ouray. When he died in 1919, he was buried in the Superior Cemetery (ancestry.com 2012b). Michael Keefe was born in Ireland in 1845. He patented land in the Louisville area in 1879. By 1885, he was married and living in Boulder with four daughters, a son, and a servant, with no occupation listed (ancestry.com 2006a). Robert Bowes was born in England in 1856 and arrived in the United States in 1880. He patented land near Louisville in 1893 and lived on his farm. By 1910, Bowes had married Ann, had two children, and was still working as a farmer, although his location of residence is listed as Boulder (ancestry.com 2006b). The other Homestead Act patent holders were born in the United States. Langford Wilson was born in Ohio in 1832. He married a woman named Josephine from Ireland, and they had a son named Langford, Jr., around 1864. Langford, Sr., patented land in the Louisville area in 1873. By 1896, he was retired and living in Boulder (ancestry.com 2011). Anthony Wylam was born in West Virginia in 1835, although both

of his parents were born in England. He patented land in the Louisville area in 1878. By 1885, he was living in Boulder with his wife, one son, and a boarder (ancestry.com 2006a). Wylam died in Elizabeth, Colorado, in 1913, after having five children, but he was buried in the Superior Cemetery (ancestry.com 2012a).

President Ulysses S. Grant signed the Timber Culture Act in 1873 to further encourage settlement of semiarid and arid western lands, help modify the climate through increased vegetation, and provide timber for lumber and fuel. The Act provided a gift of an additional 160 acres to settlers (beyond the 160 allowed by the Homestead Act) if they planted trees on one-quarter of the area. The Act had mixed results; while some settlers were successful in establishing long-lived trees, many others were not. Furthermore, some speculators abused the Act's loopholes and never planted any trees. As a result, the Act was repealed in 1891, but a clause in the repeal act allowed for the patenting of many treeless claims (McIntosh 1975). In 1895, Clark Gilbert was the only man to patent land within the boundary of present-day Louisville through the Timber Cultural Act. He was born in Ohio in 1851 to a father from Ohio and a mother from New York. The 1885 Colorado census records show that, at that time, Gilbert was a farmer (ancestry.com 2006a). He patented land in the Louisville area in 1895. Gilbert married a woman from Colorado, and they had two children, but he was widowed by 1920, at which time he was living in Superior, Colorado (ancestry.com 2010b).

Although they do not appear in patent records, David Kerr and his family purchased 160 acres of land northeast of the present-day intersection of State Highway 42 (SH 42) and 96th Street in 1864 (Avenue L Architects 2013:4-1). Kerr was the uncle of Lafayette's founder, Mary Miller (Conarroe 2018a). After five years of farming the land, Kerr employed the policy of preemption to acquire the land (Mehls, Drake et al. 1985). As discussed below in the Louisville's Early Development section, below, Kerr's land became vital for the development of Louisville due to its underlying coal deposits.

Around the same time, the railroad industry was gaining momentum across the United States. On July 1, 1862, President Abraham Lincoln signed the Pacific Railway Act. The Act authorized land grants and government bonds, amounting to \$32,000 for every mile of track laid, to the Central Pacific Railroad (CP) and the Union Pacific (UP) to construct the first transcontinental railroad. While the CP worked east from Sacramento, California, the UP worked west from Omaha, Nebraska (later extended to Council Bluffs, Iowa) (Figure 5). The two lines joined, with train engines meeting nose-to-nose, at Promontory Summit, Utah, on May 20, 1869 (Linda Hall Library 2018).

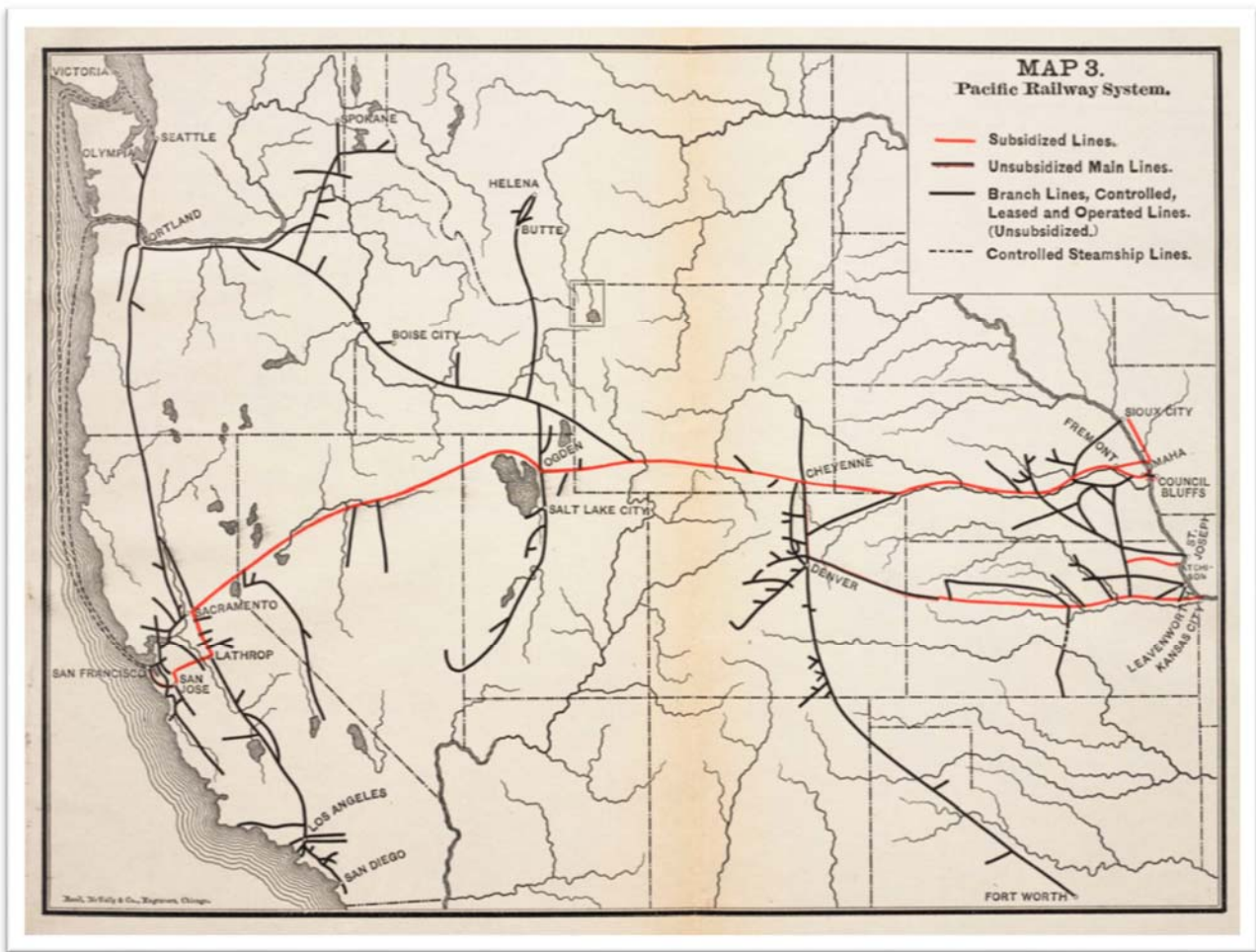


Figure 5. Route of the first transcontinental railroad and branches (Linda Hall Library 2018).

The UP portion of the route traveled through Cheyenne, Wyoming, which motivated leaders in Denver to explore a route that would link Denver directly to Cheyenne; the link was accomplished by 1870. Leaders in Golden, Colorado, also constructed a route that linked that city with Cheyenne (see Figure 5). Just a few months after Denver became connected to Cheyenne, the Kansas Pacific (formerly the UP Eastern Division) arrived in Denver from the East and added more routes. The railroad companies' primary goal was to connect Colorado's mining areas with markets in the East (Abbott et al. 1982, as cited in Christensen 2009:36). Small farming communities began to emerge along the routes and, slowly, railroad companies created new routes to access and expand new agricultural markets. Once enough farmers were present in an area, railroads sent field engineers to collect information and make cost and revenue projections. If the business forecast was good, a railroad would extend its line. Construction proceeded more quickly if one railroad company felt competition from another. Railroads facilitated the development of towns, providing means for passenger travel and shipping of building materials and other supplies. Furthermore, railroads often (although not specifically in Louisville's case) platted towns adjacent to dispersed locations in which they

chose to locate a sidetrack that would serve a grain elevator (Gohlke 1992, as cited in Christensen 2009:36). Railroad companies obtained land for their rail lines and, often, adjacent government land grants on which they platted towns. As seen in Table 2, the UP began to obtain land around present-day Louisville in 1875. Louis Nawatny, who founded Louisville, had served as a mid-level manager for the UP during construction of the first transcontinental railroad (Avenue L Architects 2013:4-2). As described in the Louisville's Early Development: Nineteenth Century section, below, the railroad itself did not plat Louisville, but the first permutation of the town was created as a stop along the railroad.

Table 2. Railroad Land Patents within Present-Day Louisville

Township	Range	Section	Aliquots	Name	Date	Authority	Authority Description
1S	69W	5	S½; Lot/Trct 1 (Lot 1 of S½NE¼); Lot/Trct 2 (Lot 2 of N½NE¼)	Union Pacific Railway Company	4/24/1875	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862
1S	69W	7	E½; Lot/Trct 1 (Lot 1 of E½NW¼); Lot/Trct 2 (Lot 2 of W½NW¼)	Union Pacific Railway Company	4/24/1875	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862
1S	69W	9	W½SW¼	Union Pacific Railway Company	4/24/1875	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862
1S	69W	17	N½NW¼; S½SE¼; NW¼NE¼; SW¼NW¼; NW¼SW¼; NE¼SE¼	Union Pacific Railway Company	4/24/1875	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862
1S	69W	9	NW¼; N½NE¼; S½SE¼	Union Pacific Railway Company	5/10/1883	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862
1S	69W	17	SE¼SW¼	Union Pacific Railway Company	5/10/1883	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862
1S	69W	19	SE¼; S½NE¼; Lot/Trct 1 (Lot 1 of E½SW¼); Lot/Trct 2 (Lot 2 of W½SW¼)	Union Pacific Railway Company	2/26/1897	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862
1S	70W	13	E½	Union Pacific Railway Company	11/8/1881	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862
1S	70W	13	W½	Union Pacific Railway Company	10/15/1902	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862
1S	69W	17	N½NW¼; S½SE¼; NW¼NE¼; SW¼NW¼; NW¼SW¼; NE¼SE¼	Union Pacific Railway Company	4/24/1875	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862
1S	69W	9	NW¼; N½NE¼; S½SE¼	Union Pacific Railway Company	5/10/1883	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862

Township	Range	Section	Aliquots	Name	Date	Authority	Authority Description
1S	69W	17	SE $\frac{1}{4}$ SW $\frac{1}{4}$	Union Pacific Railway Company	5/10/1883	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862
1S	69W	19	SE $\frac{1}{4}$; S $\frac{1}{2}$ NE $\frac{1}{4}$; Lot/Trct 1 (Lot 1 of E $\frac{1}{2}$ SW $\frac{1}{4}$); Lot/Trct 2 (Lot 2 of W $\frac{1}{2}$ SW $\frac{1}{4}$)	Union Pacific Railway Company	2/26/1897	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862
1S	70W	13	E $\frac{1}{2}$	Union Pacific Railway Company	11/8/1881	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862
1S	70W	13	W $\frac{1}{2}$	Union Pacific Railway Company	10/15/1902	July 1, 1862: Grant-RR Union and Central (12 Stat. 489)	Pacific Railway Act of 1862

By the late 1800s, coal mining became the most prevalent industry in Boulder County. As happened with Kerr, mining speculators and investors often purchased land from farmers who had obtained land patents if the speculators believed the lands might be underlain by good coal deposits (Bacon 2016a). Coalbeds underlie approximately 28 percent of Colorado's land area (Figure 6). Coal is the product of millions of years of burial and compression of thick beds of organic matter that accumulated in shallow seas and lakes surrounding the Ancestral Rockies and were buried by sediments that eroded off those mountains. The sediments surrounding that organic matter were compressed, altered, and solidified into sandstones, conglomerates, and shales. When the Rocky Mountains were pushed up, the thick sedimentary layers were moved upwards, fractured, and brought closer to the surface by erosion of overlying rocks. The result was disjointed, but extensive, coal seams located between layers of sedimentary rocks east (and west) of the Rocky Mountains, including a southwest-northeast band in Boulder County (Lafayette Historic Preservation Board and University of Colorado at Boulder Department of Geography [LHPB and UCBDG] 2004).

Louisville is located within the Boulder-Weld County coal field, which is part of the Denver coal basin, also known as Colorado's Northern Coalfield (see Figure 6). Other towns in Boulder and Weld Counties whose coal mines supplied fuel for heating and power along the Front Range included Lafayette, Erie, Superior, and Marshall. Between 1864 and 2002, approximately 163 coal mines operated in Boulder and Weld Counties, representing just over 9 percent of the state's total mines (coal and other) during that timeframe (LHPB and UCBDG 2004). Coal in the Boulder-Weld County coal field beds occur primarily in seven seams, with some localized variations. The narrowest seams are approximately 1 foot thick and were not worth mining. In contrast, the thickest seams are up to 14 feet thick. Miners targeted thicker seams because they were much easier and more economical to mine. Located between the coal seams are sedimentary deposits of the Laramie Formation, dating to around 80 million years old. These sedimentary deposits include sandstones, shales, and clays (LHPB and UCBDG 2004).

The earliest coal mines in Boulder County were located near the future settlements of Marshall (1863) and, then, Erie (1866), where coal seams angled up to or near the ground surface (Fell and Twitty 2008; Lindquist 2010; Town of Erie Historic Preservation Board 2009). This allowed for shallow mining that required relatively little investment of capital. In contrast, large-scale coal mining of deep coal seams required not just land, but railroads to transport coal to markets. At the same time, trains were powered by burning coal. Agriculture fed expanding mining-based communities and trains carried agricultural products to new markets. As a result, the three industries of agriculture, railroading, and mining became intertwined (Lindquist 2010).

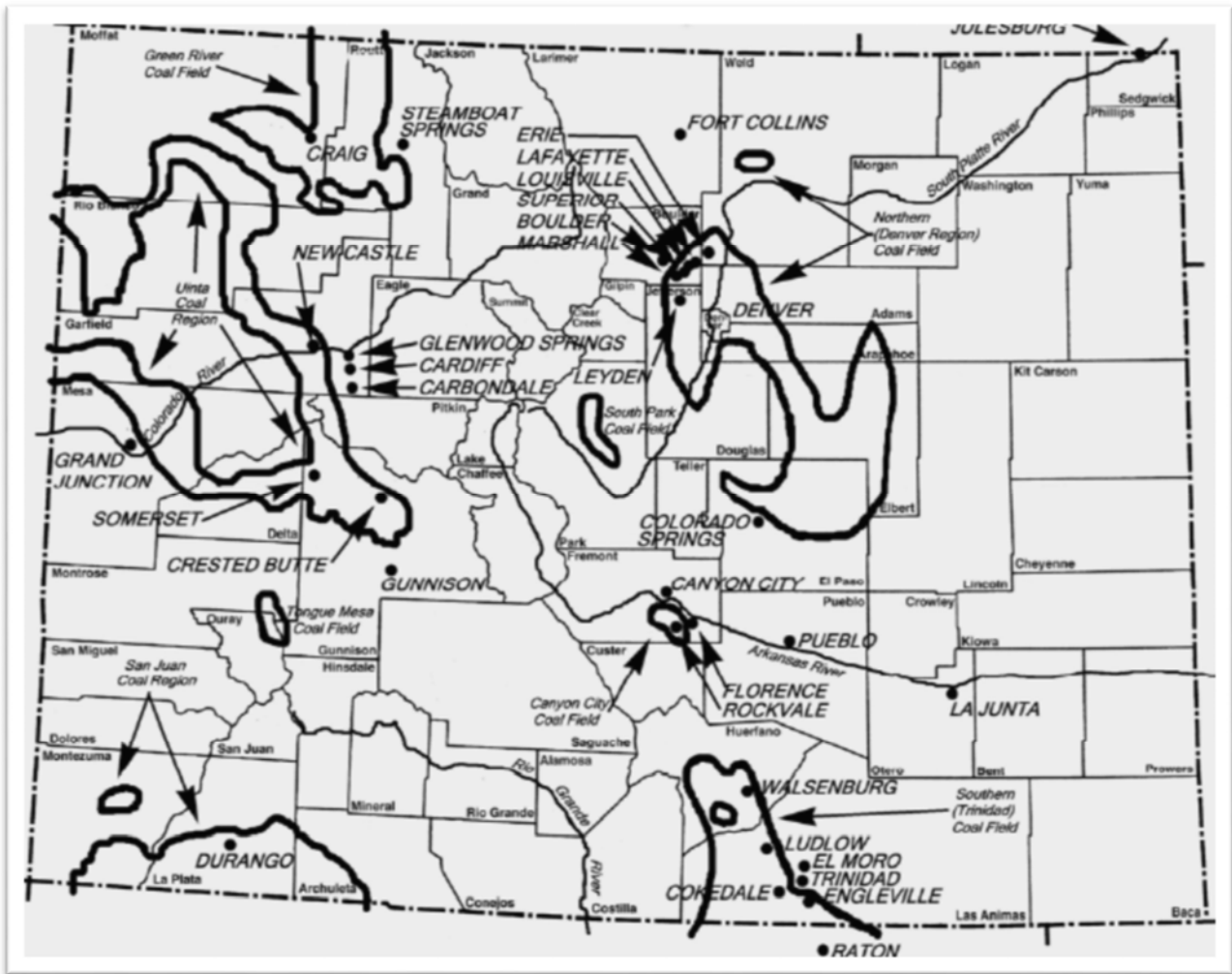


Figure 6. Coal fields in Colorado (Fell and Twitty 2008:E-47).

LOUISVILLE'S EARLY DEVELOPMENT (1878–1918)

Late Nineteenth Century

In January 1871, a spur of the UP railroad was completed to Erie, Colorado, making eastern Boulder County more attractive for coal mining (Lindquist 2010). Not long afterward, three men laid the groundwork for Louisville's founding by Louis Nawatny in 1878: William A. H. Loveland (1826–1894), Charles C. Welch (1830–1908), and William A. Davidson (1817–1892). All three men had participated in the California Gold Rush of 1848–1855 and, subsequently, settled in Golden (Lindquist 2010). In 1865, Loveland co-founded the Colorado and Clear Creek Railroad Company (O. L. Baskin and Company 1880:195). In 1866, the railroad changed its name to the Colorado Central & Pacific Railroad, then reorganized and became the Colorado Central Railroad Company (CCR) in 1868 (Baldwin 2017). In 1870, the CCR completed a line from Golden to Jersey Junction, located approximately 3 miles north of Denver at the meeting

point of the Kansas Pacific and Denver Pacific Railroads (O.L. Baskin and Company 1880). By the time the widespread financial crisis and economic depression in Europe and the United States (known as the Panic of 1873) hit, the CCR had begun construction on a line from Golden to Boulder and Longmont (Fraser and Strand 1997:Section E p. 14). The line may have run through present-day Louisville as early as 1873. By 1877, the line included a stop called “Coal Creek” near present-day Pine Street in downtown Louisville. In 1879, after the town of Louisville was created, “Louisville” was listed as a stop on the CCR schedule (Avenue L Architects 2013:4-1, 4-2). The railroad line through Louisville became a subsidiary of the UP in 1879 (Figures 7–8) and part of the Union Pacific Denver & Gulf (UPD&G) in 1890 (Baldwin 2017).

In 1885, the UP organized the Denver, Marshall & Boulder Railroad (DM&B) to take over the Denver Western & Pacific Line, which had been constructed in 1881 (Pearce 1990). After the take-over, the DM&B began laying track northwest, from Denver to the towns of Superior (1885) and Marshall (1886), to haul coal. The line reached Boulder in 1886 and, that year, DM&B initiated freight service between Denver and Boulder. Passenger service began in 1890 (Dorsey 2005:1). In 1899, multiple railroads, including the DM&B and the UPD&G, were consolidated into the Colorado & Southern Railway (C&S) (Baldwin 2017; Dorsey 2005:1).



Figure 7. Excerpt from a map of eastern Colorado, 1885 (The Gold Bug 1992).

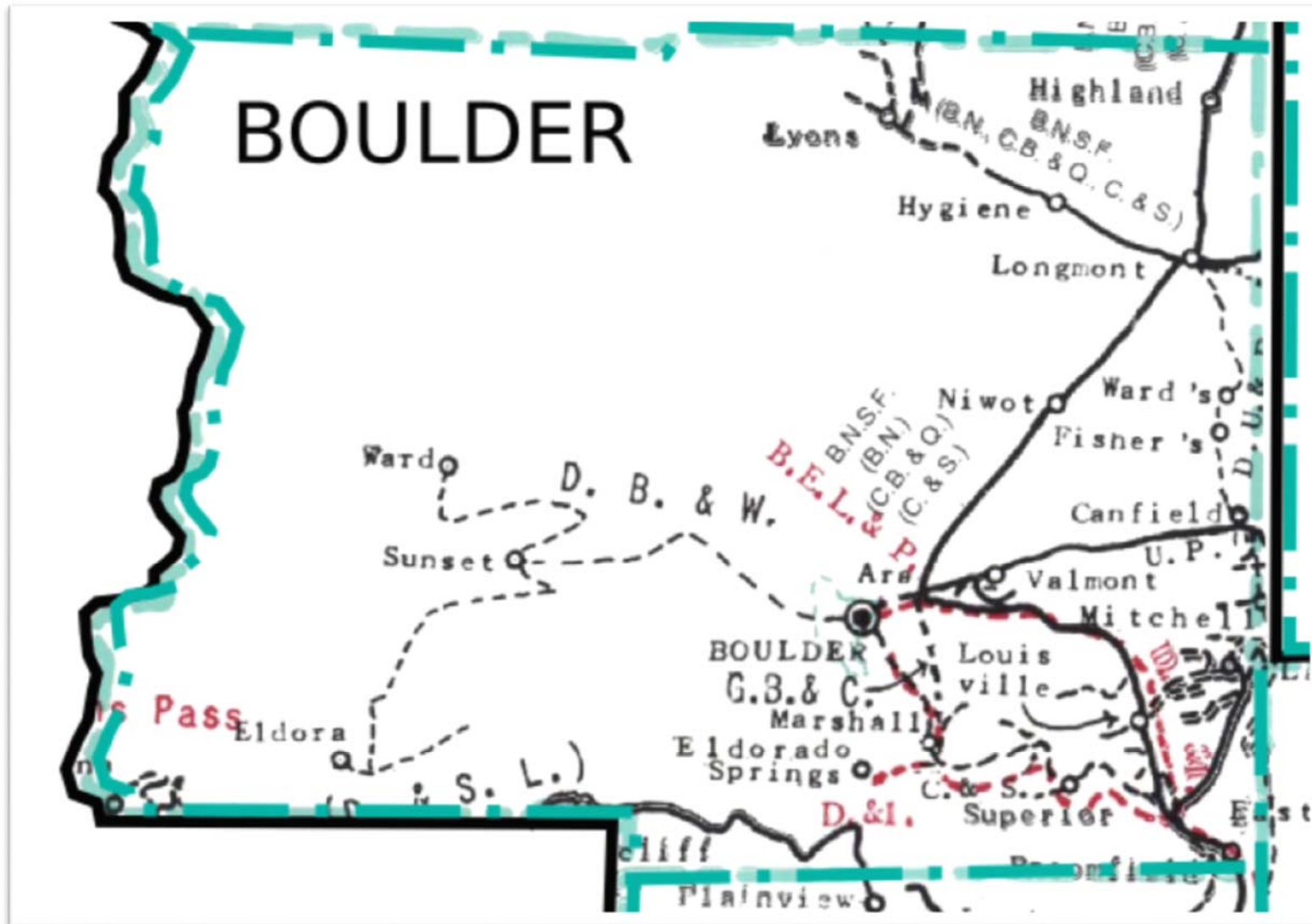


Figure 8. Excerpt of a ca. 2009 map of abandoned and existing railroads in Boulder County (photo credit: Colorado Railroad Museum, as cited in Christensen 2009:55).

Welch had gained mining experience in California and Australia before coming to Colorado in March 1860. For six years, he operated multiple mining and sawmill enterprises in Boulder, Clear Creek, and Gilpin Counties. He settled in Golden in 1867 and began a 25-year-long business relationship with Loveland related to, among other industries, mining, railroading, and real estate development. Welch was also a partner in the CCR. The UP owned the majority of shares in the CCR, but Loveland led the minority stakeholders. After Loveland and others negotiated with the UP, the railroad agreed to fund the construction of a new line from Longmont to Cheyenne, where it connected with the transcontinental railroad. Welch oversaw that construction, which was completed by November 1, 1877 (Lindquist 2010).

Davidson was an entrepreneur who, with his business partner, Samuel Breath, established Boulder's first grocery and mining supply store in a log cabin that they built on the northeast corner of present-day 11th and Pearl Streets. Davidson then created the Niwot coal mine and, subsequently, formed the Davidson Coal and Iron Company (DCIC), which owned more than 7,000 acres of land next to his own 600-acre farm in east Boulder. In 1872, Davidson constructed an irrigation ditch (now called the Davidson Ditch) that diverted water from South Boulder Creek and ran for 11 miles across present-day Davidson Mesa to northern Louisville. The ditch played a vital role in developing agriculture and coal mining in Boulder County (Black 2018a; Lindquist 2010).

Louis Nawatny, a German immigrant, was born in 1835. He was a mid-level manager for the UP when the first transcontinental railroad was constructed between 1863 and 1869 (Avenue L Architects 2013:4-2). Nawatny arrived in Boulder County by at least the mid-1870s and became a respected citizen and construction and labor manager. Welch became interested in opening a new coal mine in Boulder County and was drawn to Nawatny for his experience, reputation, and lack of association with DCIC. On July 25, 1877, Nawatny leased the exclusive right to mine coal on 160 acres of land owned by David Kerr, northeast of the present-day intersection of SH 42 and 96th Street, for 15 years. In return, Nawatny gave Kerr a royalty of five cents per ton of coal. The next day, Nawatny assigned the lease to Welch for one dollar and, on August 26, 1877, Welch entered into a land contract to purchase 240 acres north of Kerr's farm for \$4,800, or \$20 per acre. This was an inflated rate for the time. After Welch had both the lease and the adjacent 240 acres, he filed both transactions with the Boulder County Clerk. Nawatny then constructed a two-story house on what was then U.S. government land, just west of the railroad tracks that ran past Kerr's property, on the present-day southwest corner of Front and Pine Streets in Louisville. On February 11, 1878, Welch replaced Nawatny and Kerr's 15-year lease with one between Welch and Kerr for 75 years. Welch initially appointed Nawatny superintendent of the new mine (called the Welch Mine) but soon hired a replacement manager who had more coal mining experience. Welch shifted Nawatny to developing the town of Louisville (Lindquist 2010).

In 1878, Welch provided financial support for Nawatny to purchase land from the federal government. Nawatny filed a town plat, comprising 20 acres and 85 lots, on the land and named the town of Louisville after himself (Lindquist 2010:11). This area included the present-day 600 to 900 blocks of Front Street and Main Street (called Second Street until the 1920s) and the cross-streets of Walnut, Spruce, and Pine (Bacon 2007a:3). The area was bounded by the CCR tracks on the east, present-day South Street on the north, the alley west of Main Street on the

west, and Elm Street on the south (Avenue L Architects 2013:4-2) (Figure 9). By May 1878, approximately 75 people lived within the platted area. Nawatny, or his representative, applied for a local post office on May 7, 1878, listing Nawatny's wife, Kate, as postmaster (Avenue L Architects 2013:4-2; Lindquist 2010:12).



Figure 9. Nawatny's original 1878 town plat (Bacon 2007a:3).

In 1880, nearly 500 people, including approximately 180 miners, lived in the town of Louisville. An additional 130 people lived on surrounding farms (Lindquist 2010:15). Only 30 people, representing approximately six percent of the town's inhabitants, were born in the United States. Most of the others were immigrants from western Europe (Avenue L Architects 2013:4-7, 4-8). The sub-bituminous coal yielded by Louisville's mines was poor quality and disintegrated rapidly once exposed to the atmosphere. As a result, throughout Louisville's history, people mined coal largely during the cold months of the year, using it within a short timeframe to heat buildings. During warm months, when less coal was needed (e.g., to power machinery), many coal miners farmed, ran other businesses, and/or performed odd jobs (Avenue L Architects 2013:4-8; Bacon 2011a:1).

Despite the town's small number of residents, Louisville businesses were already expanding in 1880. The *Boulder News and Courier* issues for January and February 1880 reported that Stokes & Co. contractors and builders were to construct five houses the following week; soon Mr. V. Plain would open a barber shop; A.T. Henry & Co. had just constructed an addition to their saloon; and Simpson Bros. was building an addition to their general merchandise store (Lindquist 2010:15). Louisville was not founded by a coal mining or other company. Rather, it grew organically as different investors platted different subdivisions, businesspeople opened diverse stores to meet demands, and people from Britain, Europe (e.g., Austria and Germany and, later, Italy, France, and Eastern Europe), and the United States moved to town. As a result, Louisville is characterized by diversity in its architectural, socioeconomic, and cultural histories (Bacon 2007a:6; Barlow et al. 2013:7, 15; Lewis 2011:4; Mehls, Drake et al. 1985).

The Town of Louisville was incorporated on May 26, 1882. Citizens elected John H. Simpson, who sold dry goods, boots, shoes, groceries, hardware, produce, and building materials, as the first mayor (Lindquist 2010). George Giles was one of the town's earliest residents. A carpenter, he built many of the town's first houses (Avenue L Architects 2013:4-17). By 1882, Louisville contained the Miner's Co-Operative Store, four mercantiles/general merchandise stores (including Simpson's), and eight saloons (Lindquist 2010). Most of Louisville's early businesses were found along Front Street or Main Street, within or near the original eight blocks of the town, just west of the railroad tracks (Whissen 1982a:6). Front Street was Louisville's first commercial district and has remained such through the present day. In the late 1800s, Front Street featured a line-up of one- and two-story wooden buildings (Figure 10). These buildings largely contained saloons, which acted as the town's social center for men, blacksmith shops, livery stables, and lumber yards. By the early 1890s, as Louisville's population expanded, more residential subdivisions were platted (Figure 11), and the town required more commercial space, Main Street changed from a predominantly residential area to a commercial and administrative center (Bacon 2008a:7).



Figure 10. Front Street, 1881 (photo credit: Louisville Historical Museum).

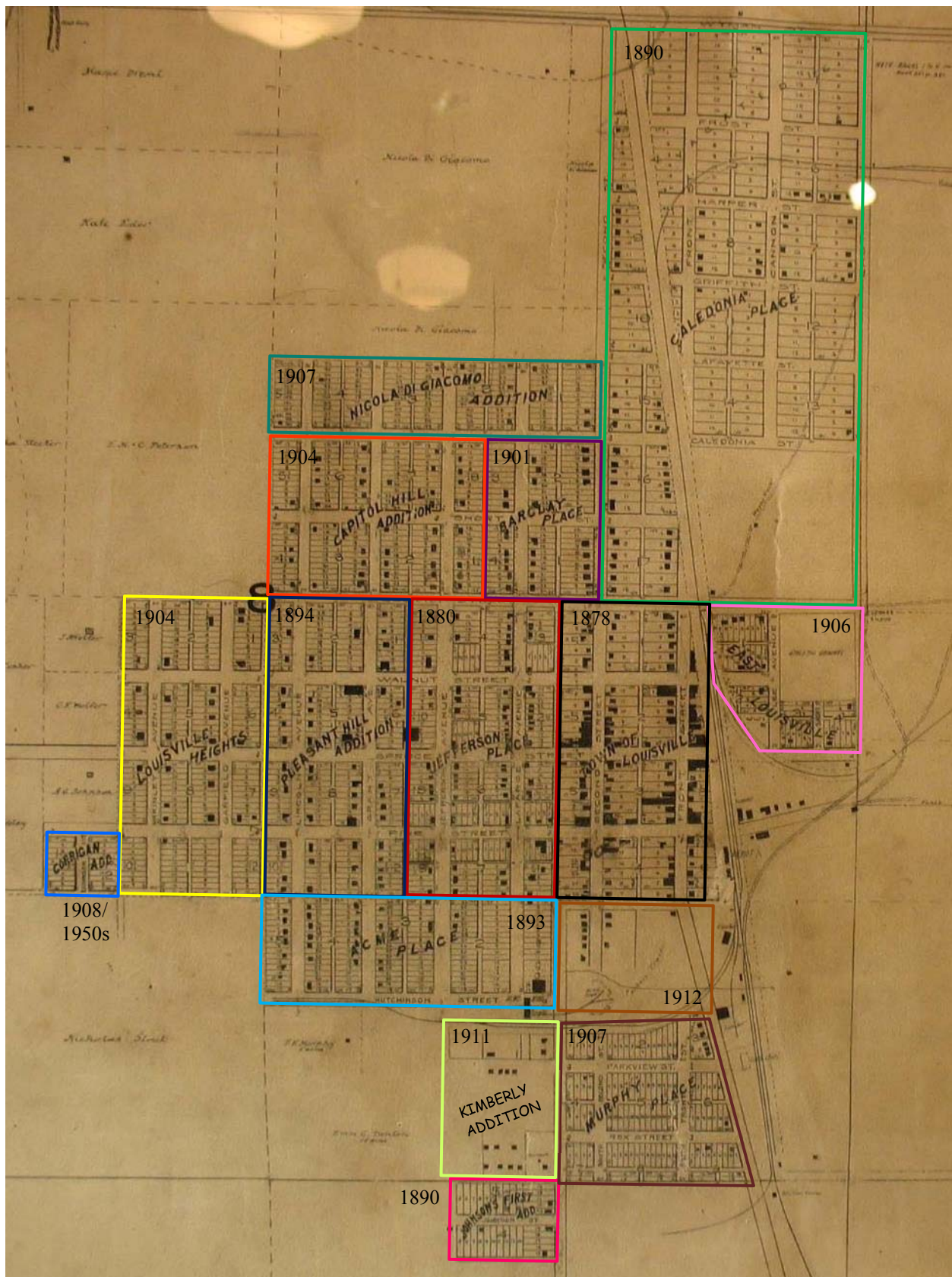


Figure 11. Louisville subdivisions, 1878 to 1912 (photo credit: Louisville Historical Museum).

Louisville's continued growth and success during its initial 20 years of existence belies the hardships of the town's coal miners and other residents. Tensions between coal miners and giant coal mining companies, such as Jay Gould's UP (which owned railroads and mines), had been building in Louisville and across the Northern Coalfields and elsewhere since the 1880s over decreasing wages and poor working conditions. Shortly after Gould and the UP took over Louisville's first mine, the Welch Mine, in 1879, the UP forced miners to sign a contract that stipulated workplace regulations and prohibited labor organization (Lindquist 2012:2). Gould then dropped miners' wages in Louisville and Erie below those of his competitors to win more contracts and make more money. Workers at the Welch Mine went on strike in 1880 (and again briefly in 1881 and 1882), and Gould eventually acquiesced due to miner solidarity and strong demand, by various industries, for coal. However, once more coal mines were operating and supply was meeting or exceeding demand, the UP began to cut production hours and miners' tonnage rates (the amount of money they were paid per ton of coal they mined). This caused strong resentment by the miners toward the UP, which was the largest producer of coal and the most vocal opponent of labor rights (Lindquist 2012:3). A union organization, called the Knights of Labor, expanded its membership rapidly during the mid-1880s but was then replaced by the United Mine Workers of America (UMWA) (Lindquist 2012:6). In October 1884, miners went on a nearly three-month-long strike, with much ill-will aimed at the UP. Miners returned to work in January 1885, but the Welch Mine subsequently closed for several weeks after a series of explosions and fires occurred in an abandoned section of the mine. Shortly after miners returned to work, they called for another strike (Lindquist 2012:6). That year, the UP sold the Welch Mine to Marshall Consolidated Coal Mining Company (Marshall Consolidated), but conditions did not improve for Louisville miners (Lindquist 2012:6).

Due to labor unrest, Louisville's share of the Colorado coal market fell from 7.2 to 2.2 percent in a three-year period (1885–1888), while production across the state rose 42 percent. Many miners moved away from Louisville, and the town's economy suffered accordingly (Lindquist 2012:7). For 10 years after the Welch Mine opened, no other mines were started in Louisville because business people deemed competition with the UP to be nearly impossible. However, in 1887, Congress passed the Interstate Commerce Act, creating an Interstate Commerce Commission that regulated the railroad industry. Federal involvement in railroads abolished monopolies and opened the doors for more competition within the railroad and mining industries (www.ourdocuments.gov 2018). In 1888, Marshall Consolidated closed the Welch Mine. Between 1888 and 1895, eight new mines opened in and near Louisville, and 22 more opened in the Northern Coalfield (Lindquist 2012:6–7).

Louisville's mines brought more people to town and generated more demand for commercial, household, and personal supplies. After new mines, including the Acme, Ajax, Caledonia, and Hecla, opened between 1888 and 1890 (Enrietto 2008:7), Lockwood Trading Company (Lockwood) opened a Louisville store. At the time, Lockwood was the largest mercantile company in Colorado outside of Denver. Their Louisville store featured the only public telephone in town, although telephone service was available to four other Louisville businesses. Concomitantly, the organizers of the Acme Mine, Lyman Andrews and John Chambers, expanded their general merchandise business. New businesses also opened, including saloons, two gristmills, two livery stables, and a cheese factory and creamery located south of town (Bacon 2012a:4; Lindquist 2012:8). Main Street was largely residential during the early years,

with the exception of some commercial buildings located between present-day 800 and 808 Main Street (Bacon 2009:4). The 1893 Sanborn Fire Insurance Map shows that a dwelling was present on every lot located on the west side of the 800 block of Main Street (Bacon 2010a:2). By that same year, several new residential subdivisions were platted outside the original town.

In 1895, the town reservoir was constructed, and the volunteer fire department was established (Whissen 1982a:15). In 1896, approximately 1,500 people lived in Louisville. The town's economy centered on agriculture and coal mining, with smaller businesses and services supporting those two industries. The 1896 Boulder County Directory advertised: "LOUISVILLE is a progressive and prosperous city...In a word, Louisville is a bright, social and flourishing little city" (Hamm 1896). In 1899, the town hall was constructed, and electricity became available (Whissen 1982a:15).

Early Twentieth Century

Louisville's economy continued to expand in the early twentieth century, notably thriving during the first decade. In 1903, telephones were installed across Louisville (Barlow et al. 2013:18). By 1904, according to that year's *Colorado State Business Directory* (Gazetteer Publishing Company 1904), the town contained at least 15 carpenters, seven contractors, four painters, two stone masons, and a plumber (Barlow et al. 2013:18). By 1907, Main Street's burgeoning role as a commercial and administrative center was clear (Bacon 2008a:7) (Figure 12).



Figure 12. Main Street looking south on the 800 block, 1907 (photo credit: Louisville Historical Museum).

Wolfenbarger's (2008) historic context for agricultural resources in Boulder County refers to the earliest twentieth-century phase, dating from approximately 1897 to 1919, as Growth in Agriculture. During this time, people developed crops that were better suited to Colorado's climate, with some farms becoming specialized in one or a few crops. Farms also increased in size and production, partly through increased mechanization, to meet the needs of national and

international markets. Mechanization greatly expanded the commercial agricultural industry in the United States, as a whole, during the first couple decades of the twentieth century. For example, the International Harvester Company began making tractors in 1916 (Cassel 2017) and the Ford Model TT truck was introduced in 1917 (Ford Motor Company 2017). Tractors allowed farmers to tend to their crops and land more easily, and trucks allowed farmers to deliver their crops to grain elevators more quickly (Christensen 2009:34). World War I (WWI) (1914–1918) caused grain prices to skyrocket across the country but also led to much-increased demand (Christensen 2009:34). This situation, together with advancements in transportation, farming technology, and corporate competition, supported the merging of formerly smaller agricultural processing organizations (Christensen 2009:39).

Louisville farmers took advantage of developments in the industry, although agricultural production continued to serve mostly local needs. At the same time, residents of Louisville contributed to local agricultural practices on a small scale by maintaining backyard gardens. Residents grew a variety of vegetables, including peppers, tomatoes, green beans, fava beans, peas, garlic, cucumbers, carrots, zucchini, corn, lettuce, endive, parsley, celery, and cabbage. In addition, many had fruit and nut trees, including plum, apple, peach, cherry, apricot, and walnut. Other fruits included strawberries, raspberries, grapes, and even figs (with elaborate protection from winter cold). Many Italian immigrant families, in particular, grew grapes for household use. They also imported grapes from California to make their own wine (Bridget Bacon, personal communication, September 28, 2018). Some residents dug shallow wells to water their gardens. Some residents of town also raised animals for food, including chickens, rabbits, and hogs. The influence of Old World Italian garden design can be seen in the orderly, geometric layout of some of Louisville's backyard gardens, which emphasize structure over color. These qualities distinguish them from traditional English-type gardens that are characterized by diverse, colorful plants that nearly overflow garden borders (Spaulding and Bacon 2005:1–2).

The peak of coal mining in Louisville (in terms of the number of mines, amount of coal produced, and men employed) occurred between 1907 and 1909 when 12 to 13 of the town's 30 total mines operated simultaneously (Barlow et al. 2013:18). In 1908, the Denver & Interurban Company (D&I), using C&S tracks, began operating a train that ran between Denver and Boulder. By 1909, Louisville's population had increased to 3,200 and more than 12 trains stopped in town, carrying passengers, coal, and other freight. That same year, the D&I operated 16 passenger trains a day between Denver and Boulder, with stops in Louisville and other Front Range towns (Avenue L Architects 2013:4-15; Simmons and Simmons 2015). Tensions between coal miners and mining companies did not end with the turn of the century, however. Due, in part, to mounting tensions, Louisville's population plummeted to 1,706 by 1910 (Barlow et al. 2013:26; Whissen 1982a). During the second decade of the twentieth century, these tensions manifested in a series of strikes called the Long Strike of 1910–1914, discussed in more detail in the Hecla Mine section, below. After the Long Strike, many of the formerly individually owned coal mines were consolidated under new ownership by the Rocky Mountain Fuel Company (RMFC) (Lewis 2011:2).

Tables A.4 to A.6 list occupations and/or names associated with Louisville's agricultural, railroad, and mining industries that are listed in county and city directories between 1880 and 1909.

WAR YEARS (1918–1945)

Wolfenbarger (2008) refers to the second phase in twentieth-century agriculture, dating from approximately 1920 to 1967, as Retrenching and New Directions in Agriculture. During this time, farmers practiced increasing specialization and mechanization but were hit hard, especially on the eastern plains, by extended droughts during the 1930s. As a result, President Franklin D. Roosevelt introduced new government programs for soil conservation and agricultural best practices. After an upswing in agricultural production across the country, many small farms were consolidated into large ones. While much land on Colorado's eastern plains was removed from grain production during the droughts of the 1930s (Christensen 2009:37), Louisville's agricultural industry was minimally affected because most of its agricultural fields were irrigated.

Similarly, after boom years in the late 1800s and early 1900s, many railroad companies across the United States became bankrupt between WWI and World War II (WWII) (1939–1945) due to the stock market crash, declines in grain prices, droughts, and dramatic decline in agricultural production (Christensen 2009:37). While the railroad line in Louisville continued to be used for freight, the D&I train that formerly connected Denver and Boulder stopped running in 1926 (Simmons and Simmons 2015).

Many of Louisville's young men left town to participate in WWI and WWII. Along with the coal miners' strikes, the events of WWI, Prohibition (1916–1933), the Great Depression (1929–1939), and WWII contributed to a dramatic and multi-decade decrease in Louisville's population and subsequent rate of growth. Between 1910 and 1940, Louisville's population increased by just over 300 people to 2,023 and decreased again by approximately 45 people by 1950 (Barlow et al. 2013:7, 26). Louisville's population did not return to its pre-1910 level until the late 1970s (Barlow et al. 2013:26; Whissen 1982a). Still, Louisville fared better than many other small Western towns during the first half of the twentieth century because its mines remained open and its mining industry continued as usual. In fact, several new mines (e.g., the New Centennial, New Crown, Fireside, Regal, and Hi-Way Mines) opened during the late 1920s and 1930s (Bacon 2011a:2). The continuation of Louisville's coal mining industry was due, in part, to the low quality of the coal, which allowed it to be used only by nearby residents, businesses, and the railroad. As a result, Louisville's coal industry was relatively independent and not strongly tied to the regional or national economy (Bacon 2011a:1).

Louisville's small growth in population during the war years was facilitated by an influx of coal miners from more hard-hit areas, including Missouri, Illinois, Kentucky, and Tennessee (Bacon 2011a:2, 2015a:3). Starting during WWI, the United States began to diversify its fuel use and expand the industries of natural gas and oil and, later, hydroelectric power. During the early twentieth century, Colorado also saw a downturn in the mining of gold, silver, lead, and other

metals. These industries had relied heavily on coal to create power for milling, smelting, ore reduction, and railroad transportation of raw and finished products (Avenue L Architects 2013:4-11). By the end of WWII, Louisville's coal industry was in marked decline. The final blow for most local coal mines occurred in 1954, when the Burlington Northern Railroad, which had taken over the line through Louisville, switched from coal power to diesel fuel (McWilliams and McWilliams 2000:4). As many coal mines shut down between the 1930s and 1955, people moved some buildings from the mine camps (e.g., at the Monarch and Industrial Mines) into town (Bacon 2011b). Otherwise, Louisville's housing industry was very slow during the war years. Figure 13 shows an aerial view of Louisville in ca. 1948, with abundant undeveloped land west of Historic Old Town.



Figure 13. Louisville, ca. 1948, view to the southwest (photo credit: Louisville Historical Museum).

POST-WORLD WAR II (1945–PRESENT)

WWII profoundly affected American culture and economy. Across the United States and in Louisville, the early post-WWII years saw a boom in agricultural production, population growth, house construction, automobile use, and new industries. After WWII, the agricultural industry expanded rapidly due to human population explosion, further mechanization, development of new, high-yield varieties of grain, consolidation of farms, and use of chemical fertilizers and pesticides. At the same time, trucks using newly constructed interstate highways and regional roads generally replaced railroads for transporting large-scale agricultural products (Christensen 2009:37).

Dramatically increased agricultural production and a new network of roads created a need for and facilitated larger, dispersed grain elevators (Christensen 2009:37; Gohlke 1992, as cited in Christensen 2009:35). Increased yields often led to long lines of trucks at small country grain elevators that could not easily handle large volumes of product. In contrast, larger elevators could handle larger volumes and accommodate larger trucks. Although they were located farther from production sites, the larger elevators could still be accessed fairly quickly with the new road networks (Boulard 1967, as cited in Christensen 2009:35). Many railroads discontinued or greatly reduced service along lines that did not provide consistent business. Furthermore, some rail lines and grain elevators were abandoned as a result of the bankruptcy of many railroad companies between WWI and WWII (Christensen 2009:37). All of these factors contributed to the abandonment of many country elevators between 1930 and 1960 (Christensen 2009:35), including Louisville's, which closed in 1956 (*The Louisville Times* 1957).

Construction of post-WWII housing was tied to an emphasis on the automobile and the availability of mass-production technology developed during WWII. In 1944, the federal government passed the Federal Highway Act, demonstrating the government's preference for funding highways and roads over mass transit (Corbett et al. 2009:22; Hayden 2003:165–166). The post-WWII reliance on cars was also facilitated by the Interstate Highway System, created by President Dwight D. Eisenhower's 1956 Interstate Highway Act. The Act provided substantial federal funds for the development of a 41,000-mile national interstate system. The general economic prosperity of the WWII years enabled many more people to purchase cars, and the cars, in turn, had a marked impact on people's lifeways and the design of towns and neighborhoods.

Prior to WWII, most businesses were located on towns' main streets or in their downtown business districts near railroad lines. With the post-WWII rise of automobiles, entire new shopping malls and commercial areas were constructed on the edges of or outside towns. This drew people away from historic downtowns and to the fringes, creating suburbs. The resulting development included strip malls, large parking lots, curvilinear street designs, cul-de-sacs, parks, large planned subdivisions, and new forms of houses that had attached garages (Barlow et al. 2013:25). Towns became decentralized but spread along highways, as commercial developers took advantage of cheaper land adjacent to roads with large volumes of traffic (Ames and McClelland 2002). In Louisville, this shift took a couple decades, as the town's growth was slow from 1945 to 1970 (Barlow et al. 2013:31). Just two small new subdivisions were platted in 1948: Acme Terrace First Addition and the Fischer Addition. Two more subdivisions were platted in the 1950s: Bella Vista (1957) and Scenic Heights (1959). Three more were platted in the 1960s: Industrial Area (1960), Paragon Heights (1963), and Cottonwood Manor (1969) (City of Louisville 2017a).

Louisville's post-WWII growth (which began slowly) was supported by an earlier, but similarly functioning, regional road: the Denver–Boulder Turnpike. This road opened in 1952 and allowed the Broomfield, Lafayette, and Louisville areas to serve as bedroom communities for downtown Denver and Boulder (Bacon 2011c:5). Prior to the opening of the Denver-Boulder Turnpike, the

route from Boulder to Denver ran east on Arapahoe Road (SH 7) to Nine-Mile Corner (at present-day U.S. Highway 287 [Hwy 287]), turned abruptly south, followed a zigzag course through Lafayette and Broomfield, then made another 90-degree turn at Cozy Corner, then ran down Mushroom Hill onto North Federal Boulevard. The road was dangerous and heavily traveled, resulting in a large number of accidents (Bearwald 1967:12). Shortly after the end of WWII, when American troops returned from the war and a large labor force was again available, Governor Ralph Carr proposed the construction of a direct road between Boulder and Denver. His proposed means for paying for the road was to collect a toll from drivers until bonds to fund the construction were paid off. Although diverse factions questioned the road's necessity, cost, and route, construction of the Denver–Boulder Turnpike/Highway 36 began on October 16, 1950 (Bearwald 1967:15; Corbett et al. 2009:19; Pettem 2001:155). The road opened for use on Sunday, January 20, 1952, with electric counters located at the Wadsworth underpass in Broomfield estimating that 30,000 cars passed through on the first day. As of 1967, an average of more than 4,000 cars used the turnpike every day (Bearwald 1967:17; *Boulder Daily Camera* 1952), and the \$6.3 million of revenue bonds that were scheduled for retirement in 1980 were paid off in September 1967 (Bearwald 1967:12; Corbett et al. 2009:20).

In the 1950s, Louisville began to markedly change its own infrastructure. In 1951, Louisville constructed a town sewage system (Avenue L Architects 2013:4-20). As described in a *Rocky Mountain News* article from February 10, 1952, Louisville was starting to become a bedroom community for Boulder and Denver. Situated between Hwy 287, the Denver-Boulder Turnpike/Highway 36, and the Boulder–Longmont Highway (SH 119), Louisville came to be known as the Golden Triangle (Whissen 1982a:11, 20). The Atomic Energy Commission's Rocky Flats nuclear weapon parts production facility opened that same year and employed many coal miners who lost their jobs as the mines shut down (Bacon 2007c:9). In 1953, Louisville obtained natural gas and, in 1955, dial telephones (Avenue L Architects 2013:4-20). That same year, the city's last coal mine, the New Crown, closed (Conarro 2001). By 1960, Louisville had paved most of its roads (Bacon 2008b:4). By the early 1960s, large-scale employers in the area included Beech Aircraft Corporation (1955), Ball Brothers Research Corporation (1957), Neodata (1963), and International Business Machines (1965), as well as the National Bureau of Standards (1950) and the National Center for Atmospheric Research (1962) in Boulder (McWilliams and McWilliams 2000:4). Figure 14 provides an aerial view of Louisville in 1958.



Figure 14. Louisville in 1958, view to the southwest (photo credit: Louisville Historical Museum).

Despite national trends, Louisville's population held relatively steady from 1950 to 1970, as it increased from approximately 1,978 people in 1950 to 2,073 people in 1960 to 2,500 people in 1962 (making Louisville a City of Second Class). The population then decreased to 2,409 people in 1970 (Barlow et al. 2013:26). In 1969, a data storage company, Storage Technology (later Storage Tek), opened in Louisville and employed a large number of residents until 2004 (Avenue L Architects 2013:4-26). A dramatic increase in Louisville's growth occurred between 1970 and 1980, by which time the city's population had reached 5,593 people (Barlow et al. 2013:26). That decade was followed by a population explosion between 1980 and 1990, with the population reaching 12,361 people (Barlow et al. 2013:26). Then Rocky Flats closed in 1992 (Avenue L Architects 2013:4-26). Louisville's growth continued, but at a slower pace, between 1990 and 2000, with an increase to a population of 18,937 by 2000 (Barlow et al. 2013:26). In 2001, Louisville became a home rule city, with the power to make legislation relevant to its immediate area (Avenue L Architects 2013:4-26). By 2010, the city's population had decreased slightly to 18,376 (Barlow et al. 2013:26).

In 1967, the Boulder County Commissioners created the first Parks and Open Space Advisory Committee and the City of Boulder created its Open Space program. Louisville developed its Open Space program in the early 1990s (City of Louisville Department of Land Management and Louisville Open Space Citizens Advisory Board 2004). Since then, Boulder County and Louisville's Open Space programs have helped to protect agricultural properties in and surrounding Louisville by purchasing former farms as public open spaces (e.g., Warembourg Open Space) and/or creating easements and leasing farm land (e.g., present-day 7th Generation Farm, historically the Harney-Lastoka Farm). Some irrigation farming and dry land farming still occur in and around Louisville today. Successful crops include barley, alfalfa, hay, and winter

wheat (Boulder County 2004), which uses moisture afforded by late snowfalls. In some Colorado plains communities, although not in Louisville, growth in birdseed and corn production have resulted in the revitalization of some small country elevators (Christensen 2009:35).

From the 1990s through the present, most commercial and residential growth in Louisville has occurred around the edges of the city and along McCaslin Boulevard and South Boulder Road. However, in recent years, the city's historic preservation tax, various recreational events, and a widespread trend toward buying local have supported increased commercial revitalization within Louisville's historic area, especially along Front and Main Streets. Still, many residents commute to Boulder and Denver for work. The largest employers within Louisville itself currently are Avista Adventist Hospital; Balfour Senior Living; the City; Medtronic (medical devices); and Fresca Foods (Aaron DeJong, Louisville Economic Development Director, personal communication, September 5, 2017).

Louisville has no passenger railroad service today. Eight to 12 trains pass through Louisville on the Burlington Northern and Santa Fe Railway's "Front Range Sub" per day, depending on need. The Front Range Sub runs between Denver, Colorado, and Cheyenne, Wyoming (Joe Sloan, BNSF Director of Public Affairs, personal communication June 11, 2018). Trains on this line carry diverse freight, representing industrial to consumer products that include coal from Wyoming (b 2018), I-beams, grain hoppers (GEVOrailfan 2014), wind turbine parts (dbarnkow 2013), grain, and railroad ballast (Metra160 2016a, 2016b).

Louisville has no active coal mines today, and very few above-ground remnants of the city's coal mining heritage remain. Regardless, many people value that heritage. For example, the coal miner's memorial statue (Figure 15), located in front of City Hall, was designed and installed through a volunteer effort as part of the city's Centennial-Bicentennial celebration in 1976–1977 (Bacon 2006c:7). A coal mine punching machine, used to undercut veins of coal prior to their removal, stands in front of the Louisville Public Library (Figure 16). Louisville's coal mining heritage is also memorialized in the names of the library's study rooms, named for the Hecla, Rex, and Monarch Mines, and the Fireside Reading Room, named for the Fireside Mine (Bacon 2006b:5).



Figure 15. Coal miner's memorial statue.

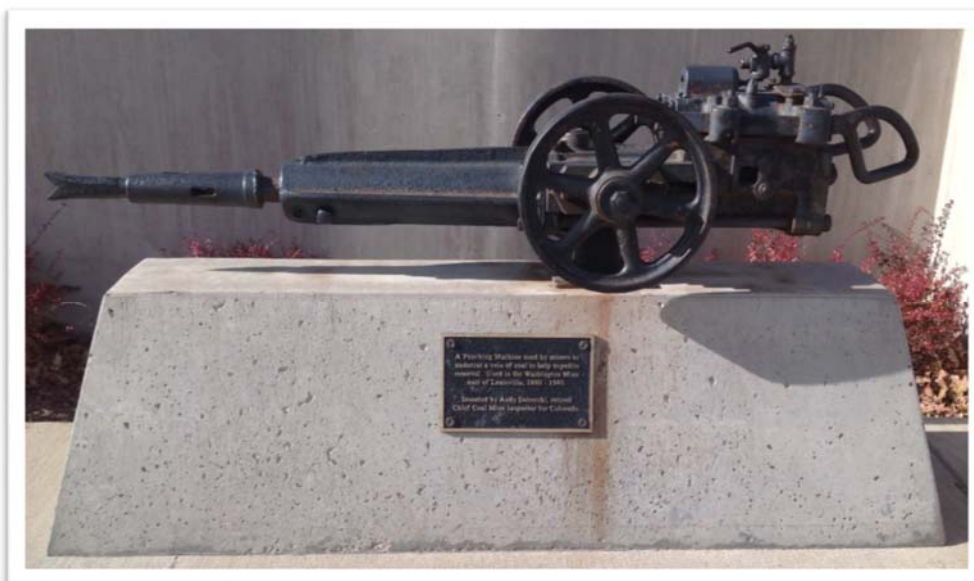


Figure 16. Coal mine punching machine.

AGRICULTURE-RELATED RESOURCES

This section of the context provides details about specific kinds of structures (irrigation ditches, water reservoirs, grain elevators, and silos), buildings (barns and outbuildings), and practices (animal processing) related to Louisville’s agricultural history.

Irrigation Ditches

Given the Front Range’s semiarid climate, agriculture is limited by the availability of water. Small farms or plots may be able to survive on rain and snow melt during wet years, long-term and large-scale agricultural success depends on consistently available water. Accordingly, irrigation ditches, which divert water from reliable sources such as large creeks and reservoirs during the growing season, were vital for Louisville’s agricultural development and population growth (Avenue L Architects 2013:4-1). In Colorado, as a whole, people began irrigating their farms in the middle of the nineteenth century. For example, farmer David Wall constructed the first known irrigation system, for his vegetable farm in Golden, in 1859. The farming community in Greeley, called Union Colony, created the first large-scale irrigation system just over a decade later (Mehls 1984, as cited in Christensen 2009:32).

William A. Davidson, who was introduced in the Louisville’s Early Development section above, constructed the first irrigation ditch in the Louisville area in 1872 (Black 2018a). The next year, Abner Goodhue constructed another ditch (Avenue L Architects 2013:4-8; Black 2018b). Four historical ditches still run through the present-day boundaries of Louisville and a fifth formerly did (Table 3; Figure 17). Each ditch is described below.

Table 3. Irrigation Ditches within Louisville

Ditch Name	Date of Construction	Location within Modern Louisville Boundary	Notes
Davidson Ditch	1872	T1S R69W Sec 5, 6, 7, 8; T1S R70W Sec 12	Diverts water from South Boulder Creek; mostly parallels the Goodhue Ditch but terminates in T1S R69W Sec 7
Goodhue Ditch	1873	T1S R69W Sec 4, 5, 7, 8, 17, 18, 20; T1S R70W Sec 12	Diverts water from South Boulder Creek; branches in two in T1S R69W Sec 5: south to Stearns Lake and east to Waneka Lake. Crosses Coal Creek in T1S R69W Sec 17.
South Boulder and Coal Creek Ditch	1870s	Diverse	Branches extend across Louisville and Superior
Davidson Highline Lateral Ditch	by 1895	T1S R69W Sec 4, 5, 6	Diverges from the Davidson Ditch in T1S R69W Sec 6
Louisville Lateral Ditch/Community Ditch Lateral	by 1897	T1S R69W Sec 6, 7; T1S R70W Sec 12, 13, 14	Lateral branches off Community Ditch just west of Highway 36 and heads northeast to fill Harper Lake and Louisville Reservoir

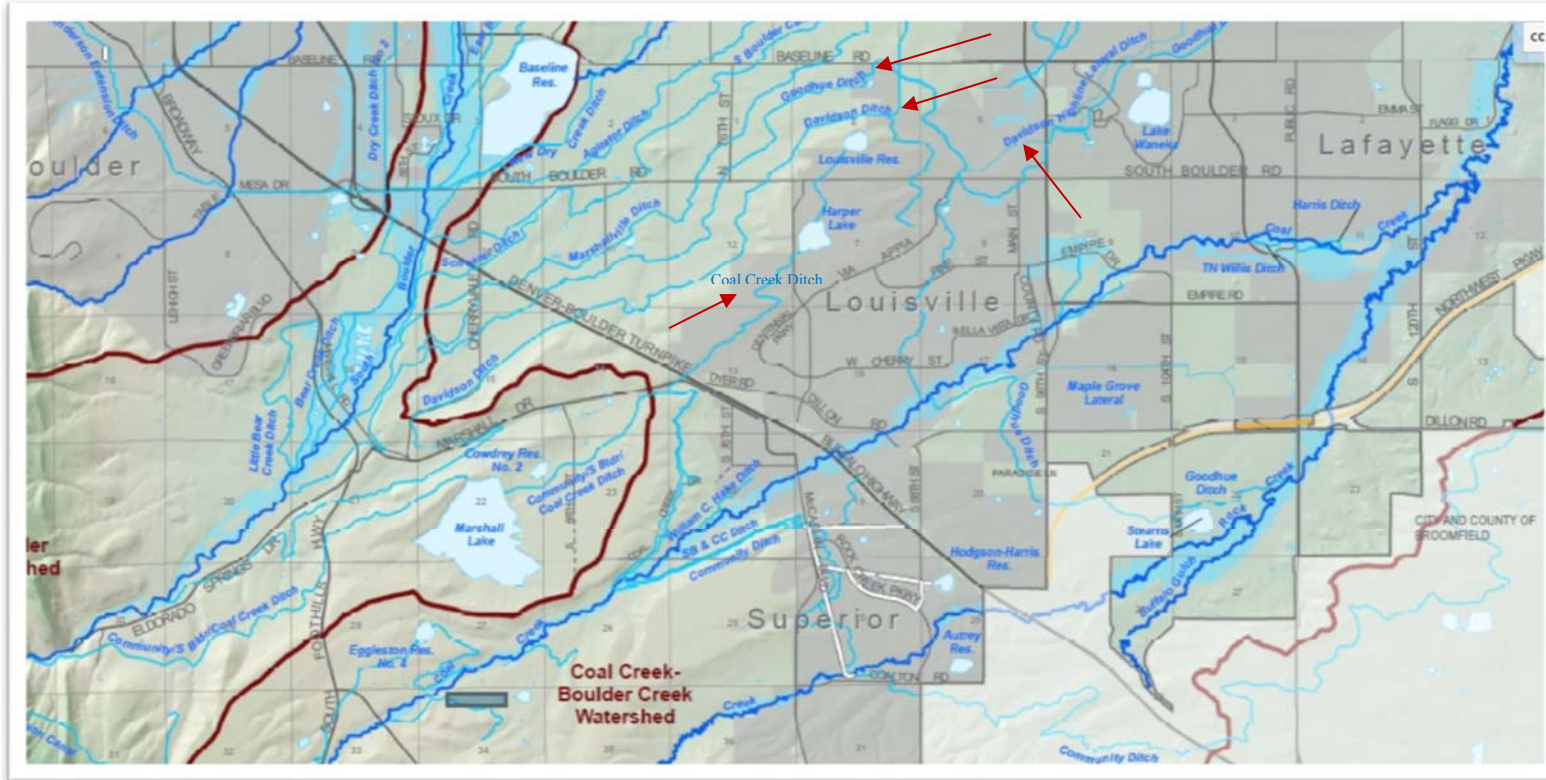


Figure 17. Louisville-area irrigation ditches (Boulder County 2018a).

Davidson Ditch (1872)

William A. Davidson constructed the Davidson Ditch in 1872. The ditch diverted water from South Boulder Creek and ran for 11 miles across present-day Davidson Mesa to northern Louisville (Figure 18). Portions of the ditch have been filled in, but it originally ran under present-day South Boulder Road, not far east of 76th Street, looped around Louisville Reservoir (described below), and ended west of Louisville's Historic Old Town, in the present-day Coyote Run Open Space. The Davidson Ditch originally passed over the Goodhue Ditch in present-day Centennial Park, located on the north side of Regal Street, north of South Boulder Road. The Davidson Ditch provided water that was indispensable for developing agriculture and coal mining in Boulder County (Black 2018a).



Figure 18. Davidson Ditch, today.

Goodhue Ditch (1873)

Canadian immigrant Abner Goodhue first spent time in Minnesota but then traveled extensively across the West. In the late 1860s, he supplied buffalo meat to showman Buffalo Bill Cody's railroad crews. Around 1870, Goodhue stopped at the Rock Creek Stage Station, located just west of Hwy 287, between present-day Broomfield and Lafayette, while transporting 100 head of horses. Goodhue learned that the owners (Lafayette and Mary Miller, the latter of whom went on to found the town of Lafayette, Colorado) wanted to sell the station because they were losing business to the new nearby railroad. Goodhue purchased the station in 1871 and settled in the area (Black 2018b).

In 1873, Goodhue and adjacent land owners dug the 20-mile-long South Boulder and Coal Creek Ditch and the 10-acre Goodhue Reservoir #1 (now called Stearns Lake), in which ditch water is

stored. Goodhue and his neighbors enlarged and extended the ditch in 1875 and 1885; they widened the ditch, added two laterals, and filed for more water. Eventually, due to Goodhue's role in the ditch's creation, the name was changed to the Goodhue Ditch. The Goodhue Ditch diverts water from South Boulder Creek, then flows generally east or northeast in broad S-curves. After approximately 8 miles, the ditch divides into two branches, with the north lateral feeding Waneka Lake in west Lafayette and the south lateral (Figure 19) feeding Stearns Lake in Broomfield, southeast of Louisville. Today, approximately 400 entities use the Goodhue Ditch (Black 2018b). The Goodhue Ditch and other ditches did not just provide irrigation water, though. During historical times, many Louisville kids caught minnows for fishing in the Goodhue Ditch, which resulted in its being called a "minney" (or "minnie") ditch (Bacon 2007c:9).



Figure 19. Goodhue Ditch, today.

South Boulder and Coal Creek Ditch (1870s)

In 2017, Louisville's wastewater treatment plant staff donated numerous records from the South Boulder and Coal Creek Ditch to the LHM. Those records date between 1895 and at least the 1950s, although the South Boulder and Coal Creek Ditch was constructed during the 1870s. William Hake, who founded the town of Superior in 1896 (Town of Superior Colorado 2018), played a key role in the construction of the South Boulder and Coal Creek Ditch, which was sometimes called the Little Ditch (in comparison with the Big Ditch, i.e., the Community Ditch) or the Hake Ditch (Superior Historical Commission 2008:1). The South Boulder and Coal Creek ditch initially had its own head gate to divert water from South Boulder Creek. As documented by The Ditch Project (Black 2018c), South Boulder and Coal Creek Ditch parallels the Community Ditch as it runs northeast briefly, then turns south-southwest just west of the

Denver-Boulder Turnpike/Highway 36, bends back to the northeast after crossing Coal Creek, and passes under McCaslin Boulevard. The South Boulder and Coal Creek Ditch then ends in a pond near the Discovery Office Park in Superior. Based on previous documentation (see Figure 141 and Table A.1), branching feeder ditches, collector ditches, and small reservoirs reportedly associated with the “Coal Creek Ditch” formerly extended into present-day south Louisville. However, after a flood in 1940, the South Boulder and Coal Creek Ditch company moved the point of diversion downstream to the Community Ditch. As a result, since that time, the South Boulder and Coal Creek Ditch delivers water to the company’s shareholders through the Community Ditch and Marshall Lake (both ditches are designed to fill Marshall Lake), and the small portions of the South Boulder and Coal Creek Ditch were abandoned. Louisville currently owns the majority shares in the South Boulder and Coal Creek Ditch (Kowar 2017).

Davidson Highline Lateral Ditch (by 1895)

The Davidson Highline Lateral Ditch (Figure 20), which draws its water from the Davidson Ditch, was constructed in or before 1895, as the lateral was incorporated in that year (Brad Dallam, Davidson Highline Lateral Ditch Company president, personal communication, March 2, 2018; OPENGOVUS.com 2018). The Davidson Highline Lateral Ditch diverges from the Davidson Ditch at Nyland Way and Baseline Road, where the main ditch continues to the north, but the lateral heads to the south and east. The lateral terminates in Bullhead Gulch, located west of Hwy 287 between Arapahoe and Isabelle Roads, north of Louisville (Brad Dallam, Davidson Highline Lateral Ditch Company president, personal communication, February 21, 2018).



Figure 20. Davidson Highline Lateral Ditch just west of SH 42, today, facing east.

Louisville Lateral Ditch/Community Ditch Lateral (by 1897)

An irrigation ditch lateral that is sometimes called the Louisville Lateral Ditch (City of Louisville 2017b) (Figure 21) diverges from the Community Ditch just west of the Denver-Boulder Turnpike/Highway 36 and heads northeast to supply Harper Lake and, then, the Louisville Reservoir. The year of construction of the Louisville Lateral has yet to be discovered, but the ditch was in place by 1897, when John J. Harper filed a plat with the Boulder County Recorder and proposed that Harper Reservoir would derive its water from a feeder ditch off the Louisville Lateral Ditch (Bacon 2015a:2). The ditch is also shown on the 1899 Willits Farm Map. The Willits Farm Map, created and published by Warren C. Willits, depicts land ownership boundaries in all or part of Arapahoe, Boulder, Jefferson, and Weld Counties (Willits 1899).



Figure 21. Louisville Lateral Ditch, today.

The Community Ditch completely skirts the present-day boundary of Louisville. Land speculator and coal company owner Joseph Marshall, together with coal magnates Samuel F. Rouse and John Lathrop Jerome, sponsored the construction of the Community Ditch (also called Community Canal) in 1885. The Community Ditch diverts water from South Boulder Creek, west of Eldorado Springs, runs northeast to fill and then exit Marshall Lake, turns south-southwest just west of the Denver-Boulder Turnpike/Highway 36, bends back to the northeast after crossing Coal Creek, passes under McCaslin Boulevard, and then winds east, southeast, and northeast through Superior and Broomfield. By 1900, Marshall, Rouse, and Jerome sold their interests in the ditch to landowners who were using its water for irrigation. Land speculator and agriculturalist Charles Toll, who had acquired large amounts of land in Boulder and Jefferson counties, obtained and briefly held the largest interest in the ditch (Crifasi 2015). However, in 1902, a group of land development companies purchased the ditch from the Toll family, looking

to make a large profit. Their venture failed due to a lack of expertise and funds. Subsequently, the Farmers Reservoir and Irrigation Company (FRICO), which is a consortium of farmers and investors that was incorporated in 1902 (FRICO 2018), purchased the ditch and established public and private partnerships to maintain and grow the ditch's water portfolio. When families inhabited Superior's Industrial Mine Camp in the early 1900s, children used the ditch for swimming. FRICO and the Town of Superior use and maintain the ditch today. The ditch delivers water to Louisville, Superior, Broomfield, and to individual shareholders as far away as Frederick (Black 2018c; Superior Historical Commission 2008).

In addition to these large irrigation ditches, several small ditches that are no longer extant ran through Louisville's Historic Old Town. These small ditches collected rain water and/or diverted water from the Goodhue Ditch near the east bridge in present-day Walnut Park (Lindquist 2010). An example was a ditch that ran along La Farge Avenue in 1890. Residents of that street obtained their drinking water from the ditch (Bacon 2008b:2).

Water Storage Reservoirs

Another important element of agricultural systems in Colorado's semiarid climate is water storage. In addition to obtaining irrigation water from reliable creeks, communities augmented natural depressions (e.g., Calkins Lake, which was turned into Union Reservoir in east Longmont [Ken Huson, Union Reservoir Company, personal communication October 25, 2016]) and/or created manmade ones to hold additional water for agriculture and town use. Louisville Reservoir, Harper Lake, and Hecla Lake (Figure 22) have served this purpose in Louisville area since the late nineteenth century. In 1956, a 12-mile-long water pipeline was opened from Eldorado Springs to Louisville, bringing more water for municipal use (Bacon 2017:2).

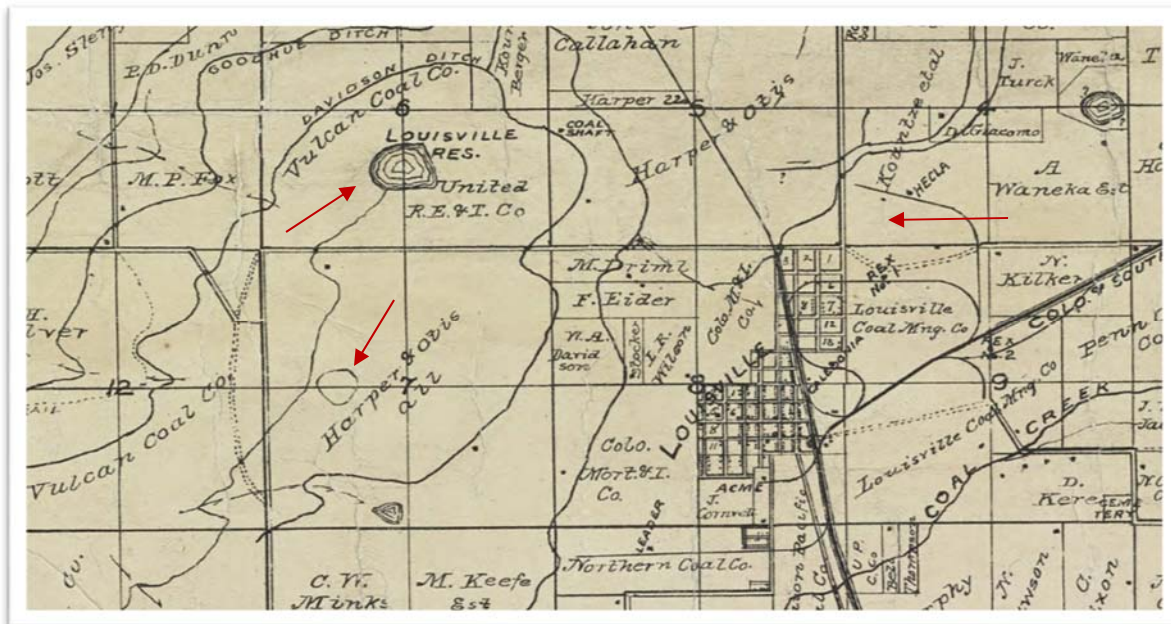


Figure 22. Excerpt from Willits Farm Map, 1899 (photo credit: Louisville Historical Museum).

Louisville Reservoir

Louisville Reservoir (Figure 23) was created in 1888 (Bacon 2015a:3). Although little is known about its origins, it was probably created as a source for town drinking water. The reservoir's location on the top of the hill located closest to the budding town suggests that gravity was used to take water to the town (Bridget Bacon, personal communication, March 27, 2018). Today, the Louisville Reservoir continues to serve as a source of drinking water for the city.



Figure 23. Louisville Reservoir, today.

Harper Lake

Harper Lake was created as an irrigation water reservoir in the late 1890s. John J. Harper filed a plat for the lake with the Boulder County Recorder in 1897 (Bacon 2015a:2), although the 1899 Willits Wall Map of Louisville appears to depict it being constructed at that time (Willits 1899). The lake was named for one of the area's early farming families. As described below in the Harper Farm section, John J. Harper was the middle child of Scottish immigrant John Harper and his wife, Margaret. John J. was a Columbia Law School-educated lawyer, but he devoted some years to agriculture and created Harper Reservoir for water storage, possibly with design help from his younger brother and civil engineer, George. When John J. filed a plat with the Boulder County Recorder in 1897, he proposed that the reservoir would cover 10 surface acres and derive its water from a feeder ditch off the Louisville Lateral Ditch (now referred to as the Community/South Boulder/Coal Creek Ditch). In 1903, the *Colorado State Business Directory* lists J. J. Harper as president of the Davidson Ditch Company (Gazetteer Publishing Company 1903), so it is clear that Harper's role in local irrigation continued to expand. The Matchless Mine, which operated on Harper land from 1903 to 1927, extended under Harper Lake (Bacon 2015a:3). Through the middle of the twentieth century, many local children used Harper Lake for swimming in the summer and ice skating in the winter (Marino 2007:2).

In 1979, the Louisville City Council passed a resolution to name the City-owned open space around Harper Lake the "Leon A. Wurl Wildlife Sanctuary," after 1970s and 1980s Louisville city administrator, Leon Wurl (1931–1998) (Bacon 2015a:3). By the mid-1980s, Louisville had grown considerably and needed more water for citizen use. Accordingly, in 1985, the City enlarged Harper Lake by expanding the surface somewhat and making it considerably deeper; the result was a water capacity 12 times larger than before (Bacon 2015a:3–4) (Figures 24–25).



Figure 24. Expanding Harper Lake, 1985 (photo credit: Carnegie Branch Library for Local History/Daily Camera collection, Karen Schulenburg, photographer).



Figure 25. Harper Lake, today.

Hecla Lake

Hecla Lake was created in the 1890s, presumably as a water supply for the Hecla Mine, which began operation in 1890 (Taylor 2010). Many pieces of equipment used at mines required steam power, which necessitated water; as a result, mine complexes included water tanks or, less frequently, reservoirs. Examples of steam-powered mining equipment include hoists used to raise mine shaft cages that functioned as elevators leading into the mines and punch machines used to drill into coal seams (Bridget Bacon, personal communication, March 27, 2018). A short feeder ditch leads from the Goodhue Ditch to Hecla Lake (Figure 26), which is located southwest of Waneka Lake. The feeder ditch was the site of a 12-hour-long gun battle on April 26 and 27, 1914, between striking members of the UMWA and the mine's guards. The striking miners used the ditch as cover from the guards' machine gun, which was mounted on top of the Hecla Mine's 80-foot-tall tibble (Conarro 2018b). This fight is described in more detail in the Hecla Mine section, below.



Figure 26. Hecla Lake, today.

Grain Elevators

Grain elevators are large, multi-bayed structures used for the large-scale storage, processing, and transportation of grains, cereals, and similar crops. Grain elevators provide efficiency and cost effectiveness for large-scale agricultural production, in that they provide a single location for numerous functions. Grain elevators are typically used to handle cereal and feed products, including corn, wheat, barley, rice, sorghum, millet, oats, rye, and buckwheat. In addition, they can be used to store and distribute diverse seeds, dry beans, and lentils. Farmers use grain elevators as receiving stations for these products, which are weighed, graded for type and quality, cleaned, and dried, and as loading and shipping centers (Fornari 1982, as cited in Christensen 2009:13).

Before 1842, when the grain elevator was invented, grain was stored primarily in single-story warehouses called flathouses. Grain was kept in sacks or open piles, both of which required abundant space and much time for loading, moving, and stacking (Frame 1990; Henderson and Brennan 1999, as cited in Christensen 2009:13). In the early part of the nineteenth century, dramatically increasing crop production in the Midwestern United States and concomitant shipping to East Coast cities necessitated a new approach to grain storage and processing that was faster than men loading and unloading canal barges (e.g., on the Erie Canal in Buffalo, New York). Inventor Joseph Dart responded to this need by developing the first steam-powered grain elevator, borrowing inventor Oliver Evans' ideas for the first steam-powered gristmill. Dart's grain elevator used the "elevator leg" (Figure 27) a continuous vertical conveyor belt with attached buckets, to scoop grain from barges and carry it upward to the top of the mill, then drop it through spouts that led to bins for storage and eventual transportation (Christensen 2009:13). Robert Dunbar used Dart's design to construct the first, all-wood grain elevator in Buffalo in 1843. Use of the grain elevator increased the speed of unloading from 1,800 to 2,000 bushels per day to 1,000 bushels per hour. By modifying the conveyor belt to bring the buckets closer

together, the speed of unloading doubled. Grain elevators quickly spread throughout major shipping ports in the Great Lakes region and Atlantic coastline of the United States and Canada, and in New Orleans (Fornari 1982; Gambrell 2005, as cited in Christensen 2009:14). Shortly thereafter, engineers adapted the technology to a smaller scale of production and made two types of grain elevators (country grain elevators and terminal grain elevators) available in agricultural communities across the United States (Christensen 2009:14).

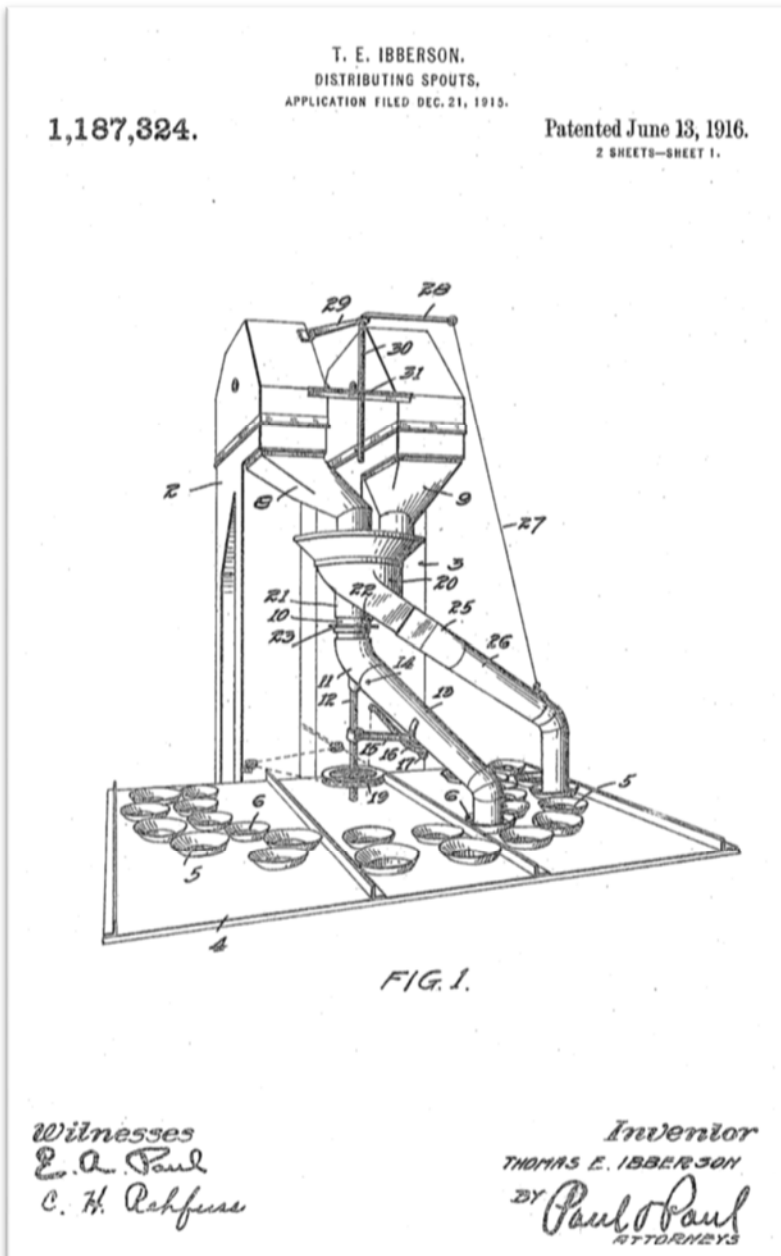


Figure 27. Patent drawing of distributing spouts (Ibberson 1916).

Country grain elevators receive grain directly from farmers for delivery to a terminal. Country grain elevators have a capacity that ranges from less than 100,000 bushels of grain to more than one million bushels (Christensen 2009:14). These grain elevators are placed along railroads approximately every six to 10 miles to connect farmers with larger, more centrally located, grain markets. This spacing was dictated by the availability of water and fuel, potential grain production, the distance at which farmers could deliver their harvests and return home by team and wagon on the same day, and railroad companies' blocking of other companies from the same area. Country elevators are made of wood, steel, brick, tile, and/or concrete (Selyem 2000:1, as cited in Christensen 2009:14). Country grain elevators made of wood come in two forms: studded and cribbed (Christensen 2009:15).

Wood was commonly used for grain elevators until the end of WWII, particularly for country grain elevators such as Louisville's, as wood could be shipped in large quantities by railroad. Cribbed wood grain elevators are constructed of stacked lumber including 2×10 s, 2×8 s, 2×6 s, and 2×4 s, while studded wood grain elevators comprise balloon frame construction (Frame 1990; Mahar-Keplinger 1993:18, as cited in Christensen 2009:20). Cribbed construction is more stable and common for grain elevators than studded construction. The pieces of lumber are laid flat to form a rectangle or square, interlocking like logs in a log cabin, and held together with large metal spikes. Smaller width lumber of decreasing size is used near the top of the grain elevator (Mahar-Keplinger 1993:18, as cited in Christensen 2009:20). Cribbed elevators (Figure 28) are generally topped by one of three types of cupola roofs: triangular, rectangular, or setback triangular. These tops feature stud construction (Mahar-Keplinger 1993, as cited in Christensen 2009:21). Louisville's cribbed grain elevator (Christensen 2009:62) features a triangular cupola roof. Early wood grain elevators were highly susceptible to fire, so builders started to clad the exterior with corrugated steel panels or asbestos. These coverings largely prevented stray sparks from railroad use and other external sources from igniting the grain elevators. As a grain elevator's production increased, it was often necessary to expand the size of the building by adding exterior (usually steel) bins, then routing the grain through the head house to the bins via spouts or conveyors (Christensen 2009:22). Louisville's grain elevator is unusual in that it retains wood siding that has never been replaced with or covered by metal siding (Bacon 2010b:9).

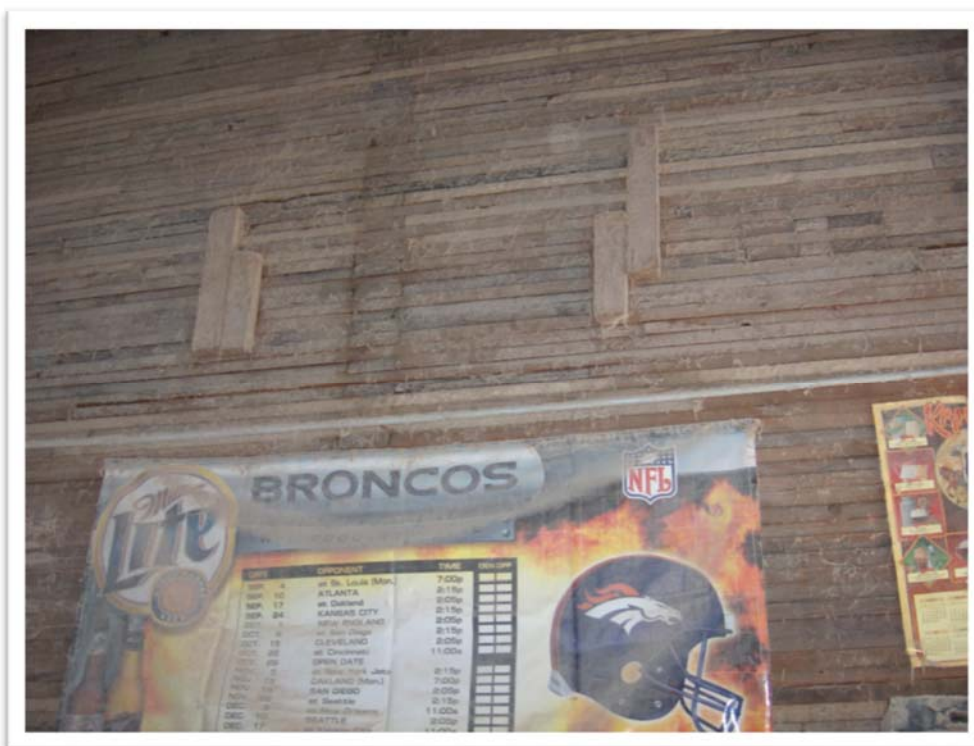


Figure 28. Interior of a cribbed grain elevator in La Junta, Colorado (Christensen 2009:22).

Terminal grain elevators are classified by function as export, transfer, in-land/sub-terminal, receiving, and cleaning types. Colorado contains only in-land/sub-terminal and receiving types. In-land/sub-terminal grain elevators receive grain directly from farmers or from country elevators. In-land/sub-terminal grain elevators store grain; clean, dry, wash, and separate it; and ship it to an export terminal or directly to end users (Christensen 2009:15; Frame 1990). These grain elevators have capacities of at least 10 million bushels (Christensen 2009:15). Receiving grain elevators are located at processing plants (Christensen 2009:15; Frame 1990) such as flourmills, breweries, bio-fuel plants, and feed mills (Christensen 2009:15).

In 1880, approximately 130 people lived and worked on farms and ranches just outside the budding town of Louisville (Lindquist 2010:15). Those farms and ranches supplied grain, produce, and livestock to Louisville, Denver, and other markets. In the 1896 *Colorado State Business Directory*, Lemon & Spangler are listed as feed mill operators (Gazetteer Publishing Company 1896). However, because large cities such as Denver and Boulder depended on outlying areas for increasingly large volumes of agricultural products, business people from those cities constructed and operated some of their own facilities in outlying areas, to ensure a steady supply of products at prices they controlled. An example of this comes from Louisville: Irish immigrant John K. Mullen, who was the general manager of The Colorado Milling and Elevator Company (CM&E), which controlled Colorado's grain supply and flour industry, was responsible for the construction of Louisville's grain elevator (Bacon 2012a). Mullen introduced the Hungarian milling process to Colorado. In that process, rollers (not stones, as used in gristmills) grind the grain. Mullen also helped to create high altitude flour, which is made from hard winter wheat that farmers grow on Colorado's semiarid plains (Reich 2008, as cited in

Christensen 2009:40). By 1924, the CM&E owned almost 300 mills, warehouses, and elevators around Colorado (Convery 2000, as cited in Bacon 2012a:3).

CM&E was a corporate grain elevator operator. Corporate operators functioned as both buyers and re-sellers of grain, so they were able to control the prices of both grain and end products. Most corporate operators had board members who were associated with railroads, so that the corporations could obtain the best transportation rates, shipping times, and occasionally exclusive access to shipping. Corporate operators controlled large facilities, including in-land and export terminals, so that they could store grain for future sales when market conditions were ideal. Their ability to fix grain prices to their advantage had negative consequences for both buyers and farmers (Refsell 1914, as cited in Christensen 2009:46). In reaction to this, during the late 1800s and early 1900s, rural farmers established local co-operatives that lobbied for new legislation that would replace corporate control of the grain market with voter-elected, state-level control commissions (Frame 1990, as cited in Christensen 2009:47). In 1905, Southern farmers established the national Farmers' Co-operative and Educational Union, which members joined by paying an initiation fee and modest monthly dues. This allowed even small, poor farmers to join their state co-operative. The co-operative purchased its members grain and assured them of a fair market price, as well as helped them lease or purchase sites for grain elevators. Farmers could sell their grain to elevators outside the co-operative, although they had to pay a penalty fee based on the number of bushels sold (Refsell 1914, as cited in Christensen 2009:46). Colorado established a chartered co-operative in 1908 and became one of 17 states to have one by the end of that year. By 1920, co-operatives in Colorado began to construct grain elevators and flour mills and helped to develop anti-trust laws, all of which allowed them to compete with CM&E (Convery 2000; Frame 1990, as cited in Christensen 2009:49). Co-operatives continue to be active in Colorado today, employing the philosophy of fair pricing for all (Christensen 2009:49).

In August 1905, Irish immigrant Peter F. Murphy of Louisville purchased the land on which the grain elevator stands from the Union Pacific Coal Company. In October of that year, he sold the land to Mullen. Mullen then had Louisville's grain elevator constructed, probably in 1905–1906 (Bacon 2012a:5). Consistent with Mullen's campaign to placate farmers who suspected that CM&E was fixing prices (Convery 2000, as cited in Christensen 2009:40), he named the grain elevator the Louisville Milling and Elevator Company for the community in which it was located. He also placed it next to the railroad tracks for ease of loading and transporting products (Christensen 2009:10) (Figure 29). The grain elevator was constructed with a 25,000-bushel capacity. For its first 50 years, the grain elevator was used to receive and weigh grain (wheat, corn, oats, and barley) brought by local farmers. The farmers were then paid by the pound of grain. After processing the grain (removing contaminants and grinding product), the grain was loaded onto a train that ran on a side spur from the grain elevator to the main railroad line (Bacon 2012a:6). This same spur continued west to the Acme Mine and served the mine for many years before the grain elevator was constructed (Bacon 2012a:5) (see Figure 29). The railroad took much of the grain to Mullen's Hungarian Flour Mill in Denver. The grain elevator was also a store, at which people could purchase flour and other products that were ready for cooking (Bacon 2012a:6). Over time, the name of the company that owned and ran Louisville's grain elevator changed. Names included Northern Colorado Elevator Company, the Colorado Milling & Elevator Company, and the Denver Elevator (Bacon 2012a:4). Louisville's grain elevator served farmers in the area until it closed in early 1956. In June 1957, the grain elevator was

damaged by fire. While firemen could not determine the cause of the fire, they thought it originated on the outside, possibly from children playing. The flames went up the outer wall of the cover over the driveway for the scales and across the roof of the building, then gutted the empty interior (*The Louisville Times* 1957).

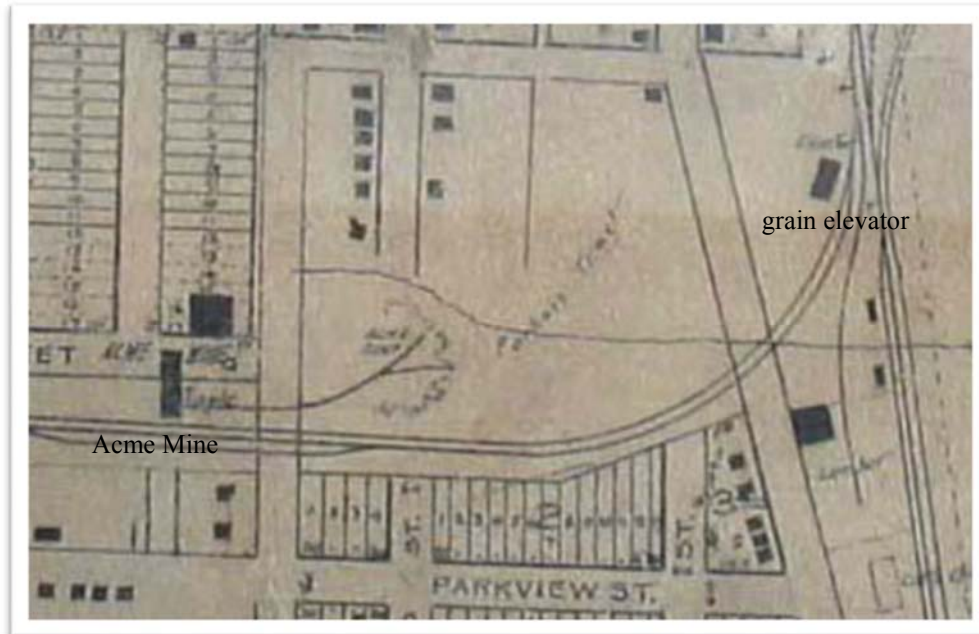


Figure 29. Excerpt from the 1909 Drumm's Wall Map (Drumm 1909), showing the railroad spur to the grain elevator and Acme Mine.

From May 1907, when he left his former position in Longmont (*The Louisville Times* 1957), into the 1920s, Howard A. Moore managed the grain elevator (Figure 30). He and his wife, Zura (sometimes shown as Zara), lived on W. Spruce Street, just west of McKinley Avenue. In the late 1930s and early 1940s, Donald C. Moore (Howard and Zara's son) managed the grain elevator. Donald and his wife, Sadie, lived at 633 Garfield Avenue. By 1946, Charles Thomas (Donald Moore's brother-in-law) was managing the grain elevator. However, after Charles lost his hand while working with the elevator's corn conveyor, Vance Lynn became manager (by 1949) (Bacon 2012a:12). The grain elevator's name was changed to The Denver Elevator by the early 1950s, with Dan Gunkel serving as manager from at least 1951 until its close in 1956. In 1957, Charles and Iona Thomas and Charles' brother, Quentin C. Thomas, purchased the grain elevator. Charles (the same as mentioned above) and Quentin were Louisville residents and grandsons of Welsh immigrant and coal miner Nicholas Thomas and English immigrant and former chain maker Mary Oldacre Thomas (Bacon 2012a:12). Quentin also ran a feed store in Louisville, on Pine Street (at the location of present-day 637 Pine Street). He moved the store to the grain elevator and operated it as such until about 1972 (Bacon 2012a:13). Charles and Iona continued to own the grain elevator through 2000 (Bacon 2012a:1; McWilliams 2000a).

Louisville's grain elevator was listed in the National Register of Historic Places (National Register) in 1986 and was locally landmarked in 2015 (Resolution No. 29, 2015). Today, it is being rehabilitated for commercial use (Figure 31).



Figure 30. Louisville grain elevator, 1916 (photo credit: Louisville Historical Museum).



Figure 31. Louisville grain elevator, today.

Hay Storage and Silos

On American farms, livestock (e.g., horses and cattle) are largely dependent on hay for food. The earliest type of hay storage in North America was the hay barrack, which Dutch immigrants first brought to New Netherland (an eighteenth-century colony in present-day New England). Hay barracks were open-sided structures that comprised four or more posts topped by a peaked roof whose height could be adjusted depending on the height of the haystack underneath it. During the first half of the nineteenth century, farmers cut hay by hand with scythes and created small piles of hay called haystacks. During the second half of the century, many farmers adopted horse-drawn mowers and rakes, which created long rows of cut hay. During the twentieth century, most farmers came to adopt tractor-mounted mowers and rakes. All of these operations result in hay that must dry prior to long-term storage and use. Three options for drying are 1) stacked or baled in open fields (sometimes protected by a hay barrack); 2) loose in sheds or barn haymows (hay storage areas in barns); or 3) in small bundles or bales in hay-drying sheds or barns. The hay fork was invented in the late 1850s and, in its various permutations (e.g., harpoon fork and grapple fork) helped farmers move hay into storage locations. During the mid-nineteenth-century, farmers used a hay press to create compressed bundles of hay. In the early twentieth century, the hay baler replaced the hay press; the baler created small compressed bales that could be stacked easily on top of one another, and transported, sold, and stored in larger quantities. In the late twentieth century, new balers were invented to create massive, cylindrical bales that farmers often just leave in fields (Falk 2015).

Silos provide storage for a different kind of livestock food: silage, which is moist, fermented fodder given to cows and sheep. Silage's high moisture content results in fermentation (called "ensilage") of plant materials in an oxygen-deprived environment. Corn is most frequently used for silage, although alfalfa and oats can also be used; these create haylage and oatlage, respectively. Silos come in four basic forms: pits, towers, bunkers, and bags. American farmers first used pit silos, located within barns, around 1875 in Westchester County, New York. This type spread across the United States by about 1880 (Noble and Cleek 1995:157). While pit silos were easy to fill, they were difficult to empty and tended to be dangerous because of their build-up of toxic gases at the base. In contrast, tower silos were challenging to fill; some kind of engine, rather than simply horsepower, was necessary to raise the plant material to the top of the silo. However, tower silos were easier to keep ventilated and, therefore, safer. Rectangular tower silos comprising a wood frame covered with vertical or horizontal boards were introduced in the 1880s. Their interiors were sometimes lined with vertical tongue-and-groove boards, with inside corners rounded off to create a polygonal shape. Rectangular stone silos were also used, although the rectangular form proved problematic because plant materials became trapped in corners. As a result, by the 1890s, farmers began using round tower silos. The earliest ones were constructed of vertical tongue-and-groove staves held in place with iron bands and turnbuckles. While these lasted only 5 to 10 years (and sometimes longer if coated with creosote), they were relatively cheap to tear down and rebuild as the farmer needed. In most cases, farmers ordered wood silos from a silo production company. More expensive, but longer-lasting, silos were constructed of fieldstone, brick, hollow glazed-clay tiles (Figure 32), galvanized metal, or concrete (blocks and rings) (Figure 33). Concrete silos were developed during the first decade of the twentieth century and came to represent one of the most common forms. After WWII, the A.O. Smith Company invented a silo constructed of blue Harvestore: fiberglass bonded to sheets of metal (Figure 34). These silos were insulated enough to prevent the silage from freezing. In addition, farmers could

unload them from the bottom, which saved human labor. Harvestore silos were larger than those made of other materials, so they tended to be used only on large farms. Present-day farmers still use tower silos, which are usually constructed of concrete or fiberglass and metal panels. Thus, tower silos exhibiting various shapes, materials, and sizes illustrate developments in agricultural practices during the late nineteenth century and throughout the twentieth century (Falk 2015; Noble and Cleek 1995:157–161).



Figure 32. Hollow glazed-clay tile silo on the former Gosselin Farm between Pine and W. Spruce Streets, today.



Figure 33. Concrete silo on the Harney-Lastoka/7th Generation Farm, today.



Figure 34. Harvestore silos (right) west of Nelson Road near Table Mountain in Boulder County, Colorado, ca. 2006 (Wolfenbarger 2006:49).

A different type of silo, dating from the end of WWII, was the trench silo. This form extends underground, with concrete walls. Trench silos were favored for grass silage, mechanical harvesting, and self-feeding. An example can still be seen on the Harney-Lastoka/7th Generation Farm today (Figure 35) (Falk 2015; Noble and Cleek 1995:161).



Figure 35. Trench silo on the Harney-Lastoka/7th Generation Farm, ca. 2006 (photo credit: Carol Beam [Wolfengarger 2006:49]).

Also after WWII, some farmers began to use bunker silos, which are similar to trench silos but located above ground (Wolfenbarger 2006:49). Bunker silos are often dug into the side of a hill and enclosed with concrete walls on three sides. Farm equipment accesses the silo from the fourth, downhill side. Silage in bunker silos is usually protected by plastic tops, onto which dispersed automobile tires are placed to secure the plastic (Figure 36). Farmers use these massive silos to store haylage, which became common in areas of large-scale dairying after WWII. Small-scale farmers may use more informal bunker-type silos that comprise a mound of plant material under plastic, without concrete sides (Figure 37) (Falk 2015; Noble and Cleek 1995:161).



Figure 36. Bunker silo in Ontario, Canada, today (Bunker Silo Sidewalls 2018).



Figure 37. Plastic-covered haylage near Greeley, Colorado, today.

Present-day farmers also sometimes use bag silos. Bag silos are round or loaf-shaped white plastic bags, typically measuring up to eight feet in diameter, that are filled with grass silage or haylage. Some bag silos are narrow but up to a football field long (Figure 38). Bag silos provide good flexibility, as they can store small to large quantities of plant materials and can be moved to different locations each year. Bag silos are often seen in fields, especially on modern dairy farms (Falk 2015).



Figure 38. Bag silos in Kandiyohi County, Minnesota, today (Plume 2014).

Barns

Barns are perhaps the most recognizable buildings on farms. In the United States, barns have historically sheltered livestock of various kinds (e.g., cattle and horses), livestock feed (e.g., hay and grain), and/or farm equipment (e.g., tractors). In addition, they often provide a sheltered work area. Barns vary in size depending on their use and the scale of the farm on which they are located. While most barns in the United States are rectangular, their specific forms are usually related to the function(s) they served, with different kinds of barns being used for livestock, dairying, haying, potato farming, and other specific crops. This diversity in barn types is discussed in the Agriculture-Related Forms and Styles section below. Barns can be constructed of diverse materials, including logs, lumber, concrete, brick, and stone, with different regional traditions often using particular materials. In Colorado, most barns were constructed using lumber. The vast majority of barns derive from European traditions, so they characterize areas settled predominantly by Euro-Americans (Noble and Cleek 1995), including Louisville. In the coldest parts of the United States (e.g., New England and the Upper Midwest), barns may be attached to houses so that people could walk between the two buildings during snowy winters. However, in Colorado, barns typically stand away from houses, which are often surrounded by tall trees that provide shade and help to reduce high winds. Barns are usually associated with a variety of outbuildings.

Outbuildings

Historical farms used a diverse range of outbuildings to meet the specific needs of the farm, depending on the types of animals and crops that were raised. Outbuildings are generally smaller

than barns and more specialized. Examples of outbuildings include loafing sheds for livestock, milk houses and milking barns for cattle, coops and brooder houses for fowl, granaries for grain storage, well, spring, and pump houses for water, and machine sheds, tool sheds, and garages for maintenance and storage. Other farm outbuildings, such as woodsheds and privies, are more closely related to domestic activities than agricultural ones (Noble and Cleek 1995:135). Many outbuildings are used for different activities over time (Noble and Cleek 1995:138). Outbuildings are often grouped by uses, such as having grain and hay storage near livestock barns and loafing sheds, or a tool shed, machine shed, and garage located near one another. Poultry houses are often located relatively close to the main house since they provide readily available food (Wolfenbarger 2008:50).

Granaries are typically found on farms that store small grains such as wheat, barley, and oats. To keep out mice and other vermin, granaries are usually built on stilts or rock piers and have as few openings as possible. They are most typically associated with farmers of German, eastern European, and Scandinavian ethnicity (Noble and Cleek 1995:154). Early granaries were constructed of wood (Figure 39), while later granaries dating from the WWI and WWII periods are often made of metal (Figure 40). Milk houses are particularly diagnostic of dairy farms. During the 1800s, people typically stored milk in relatively cool springhouses. However, in the early 1900s, as farms became increasingly commercialized and government regulations appeared, milk was required to be cooled quickly and stored at a temperature of 50 degrees Fahrenheit or less. Milk houses developed to meet that need. They are typically small, with a rectangular footprint and gabled roof, and constructed as close as possible to the dairy barn. They are often made of concrete or tile blocks and have few or no windows and one or two doors (Noble and Cleek 1995:140) (Figure 41).



Figure 39. Wood granary at the Harney-Lastoka/7th Generation Farm, 2016 (photo credit: Carol Beam).



Figure 40. Metal granaries at the Harney-Lastoka/7th Generation Farm, 2016 (photo credit: Carol Beam).



Figure 41. Milk house at the Harney-Lastoka/7th Generation Farm, 2016 (photo credit: Carol Beam).

Outbuildings tend to be lost more frequently than larger buildings due to a couple of factors: they may be constructed in a more informal way so do not last as long and their small size makes them less well suited to adaptation and re-use. As a result, relatively few outbuildings remain on Louisville's historical farms. However, the Harney-Lastoka/7th Generation Farm still contains a large, representative sample of outbuildings. Those include loafing sheds (e.g., Figure 42), a milk house (see Figure 41), granaries (e.g., see Figures 39–40), a brooding chicken house (Figure 43), and various sheds (e.g., Figure 44).



Figure 42. Loafing shed at the Harney-Lastoka/7th Generation Farm, 2016 (photo credit: Carol Beam).



Figure 43. Brooder house at the Harney-Lastoka/7th Generation Farm, 2016 (photo credit: Carol Beam).



Figure 44. Garage/tool shed at the Harney-Lastoka/7th Generation Farm, 2016 (photo credit: Carol Beam).

Animal Processing Facilities

Louisville's early agricultural industry involved animal husbandry of cattle, hogs, poultry, and sheep, as well as farming. By 1903, the Miners Trading Company (whose building was located at 701 Main Street but is no longer extant) was selling such a large volume of meat to customers (12 to 15 large cows per day plus animals for veal and mutton) that the company constructed its own animal processing facility north of the Hecla Mine. This was north-northeast of the present-day intersection of SH 42 and E. South Boulder Road, north of the King Soopers. The 10-acre facility included cattle sheds, pig pens, yards, a slaughterhouse, and a packing house. The facility provided a market place for farmers in the surrounding area to bring their cattle, hogs, calves, and poultry (*Erie News* 1903). Prior to that time, or as an alternative, farmers slaughtered their own animals for consumers (Figure 45).



Figure 45. Pig processing on a farm, unknown date (photo credit: Louisville Historical Museum).

Farms in Louisville

As mentioned in the Grain Elevators section above, in 1880, approximately 130 people, including immigrants from France (Bacon 2016b:1), England, Ireland, Germany, and Canada, lived on farms surrounding the town of Louisville (Lindquist 2010:15). In 1896, nearly 90 farmers lived in Louisville and grew corn, wheat, hay, and straw (Whissen 1982a:7). At that time, farmers probably sold largely to local markets. As production increased in the first decade of the twentieth century, they may have shipped products to sell in other communities by train (e.g., Christensen 2009). Figure 46 shows the present-day boundary of Louisville overlain on an excerpt from the 1899 Willits Farm Map.

Farms in Louisville are typically known by the names of their founders and/or long-time owners. This section summarizes information about many of those farms. While much is known about some of them, little is known about others. Most of the farms no longer exist, having been replaced by more modern residential and/or commercial developments. However, portions of several former farms remain as open space with agricultural and/or grazing leases (see list below) or as still-working farms (e.g., Harney-Lastoka/7th Generation Farm and Goodhue).

Farms usually include numerous buildings, structures, objects, and associated landscapes. Buildings are set far enough apart to be sanitary and reduce fire risk but close enough to make use convenient. The main residence, followed by the main barn, are most prominent. Outbuildings are placed behind or to the side of the house. Farms also often feature tree wind breaks, fruit trees, and small family gardens (Wolfenbarger 2008:50).

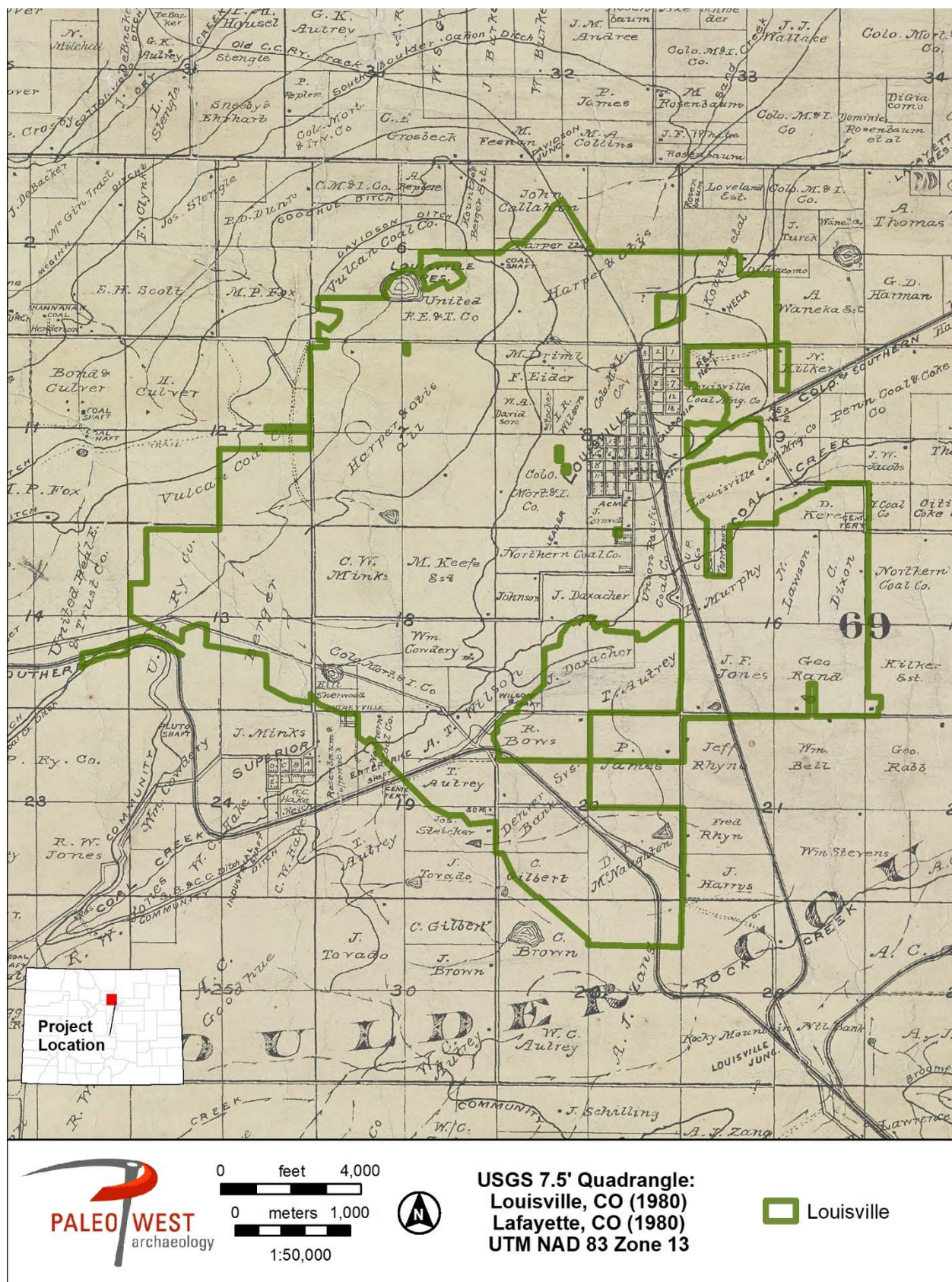


Figure 46. Present-day boundary of Louisville overlain on 1899 Willits Farm Map.

Today, Boulder County, Louisville, and Lafayette jointly own 10 parcels of open space, totaling approximately 950 acres, that are long-standing agricultural properties. Those parcels, all of which are located within or immediately adjacent to the present-day boundary of Louisville, are the following:

- Adler/Fingru Property: 56 acres northeast of Empire Road, just south of Coal Creek
- Admor Property: 79 acres southwest of Dillon Road and S. 96th Street
- Boulder County Land Venture Property: 141 acres east of S. 104th Street, north of Dillon Road
- Bowes Property: 66 acres east of S. 88th Street, south of Dillon Road
- Callahan Property: 46 acres south of Baseline Road, northwest of Franklin Avenue
- Esmail Property: 36 acres east of Empire Road, north of SH 42
- Mayhoffer (Section 15) Property: 154 acres east of S. 104th Street, south of SH 42
- Scriffiny (Section 19) Property: 22 acres west of S. 88th Street, northeast of Highway 36
- Trillium Property: 133 acres west of S. 104th Street, south of Northwest Parkway
- Warembourg Property: 216 acres west of S. 96th Street, north of Dillon Road

Many other small farms in the Louisville area were created and sold over many decades. Many of the farms that were not connected with important coal mines or historical events are not well known. Because they were located outside town, they were not very well documented or photographed historically. Furthermore, in land transactions their locations are described in terms of Public Land Survey System (PLSS) townships, ranges, and sections (one section is 640 acres), rather than by specific addresses. Accordingly, it can be difficult to pinpoint the exact locations of historical farms and much additional research is needed to understand the full details of Louisville's historical farms. One avenue of research would be an investigation of assessor records maintained by the Carnegie Branch Library in Boulder (Bridget Bacon, personal communication, June 19, 2018).

Asti Farm

The Asti family farm was located on the north side of Dillon Road, just east of Coal Creek. This is the present-day location just south of the clubhouse at the south end of the Coal Creek Golf Course. Historically, this area was located between Louisville and Superior and the Asti family was primarily associated with Superior (Bridget Bacon, personal communications, June 23, 2018 and September 28, 2018). The Asti Farm is visible on a 1957 aerial photograph (Bacon 2014a:9) (Figure 47).



Figure 48. Silo on the former Beauprez Farm southeast of Harper Lake, late 1980s or early 1990s (photo credit: Louisville Historical Museum).

Bowes Farm

In 1893, Robert Bowes/Bows patented 80 acres of land in the north half of the northwest quarter of Section 20 in Township 1, South, Range 69 West (see Table 1). This is east of present-day S. 88th Street and south of Dillon Road at 9108 Dillon Road. As mentioned above in the Agriculture-Related Resources section, Bowes was born in England in 1856 and immigrated to the United States in 1880 (ancestry.com 2006b). In the *Colorado State Business Directory* from 1894, 1896, 1899, 1900, and 1903, Bowes is listed as a cattle raiser, with the 1894 directory specifying Jersey cattle (Gazetteer Publishing Company 1894, 1896, 1899, 1900, 1903). By 1910, he had married Ann and had two children. He was still working as a farmer at that time, although his place of residence is listed as Boulder (ancestry.com 2006b). The one-story farmhouse still stands, with 66 acres of the original farm protected as Bowes Open Space since 2000. Today, the property is leased for hay production and livestock grazing (Boulder County 2004) (Figures 49–50).



Figure 49. Bowes farmhouse, today.



Figure 50. Bowes Open Space, today.

Chaussard/Damyanovich Farm

The Chaussard/Damyanovich Farm in Louisville was located at the end of present-day Dyer Road behind Lowe's, near the southwest corner of the present-day boundary of Louisville, although not exactly where the present-day Damyanovich Open Space is located (Bridget Bacon, personal communication, March 27, 2018). French-Americans Henry (1890–1976) and Flora (1894–1981) Chaussard grew up in Marshall, Colorado, and, at one time, also had a farm in the Marshall area at the former Crown Mine. Henry worked as a carpenter and miner in local coal mines outside Louisville and also as a farmer raising (among other things) cattle and chickens.

Having a farm allowed families more economic security during the warm months when the mines closed. As the Chaussards' daughter, Lillian Chaussard Damyanovich, said, "If you lived on a farm, you got to eat." When Lillian started high school, her parents moved into a house in town, located on the southwest corner of Main and Short Streets, so that Lillian could get to school more easily. After she graduated, her parents returned to the farm. Lillian married Andrew Damyanovich, from Erie, Colorado (Lillian Chaussard Damyanovich, oral history provided to Bridget Bacon, December 26, 2007).

Clyncke Farm

The Clyncke farm was formerly located between Harper Lake and Louisville Reservoir, south of South Boulder Road and east of McCaslin Boulevard (Sladek and McWilliams 1995). Andrew Clyncke immigrated to Colorado from Belgium in 1886. His son, Julian, was born in 1898. Over time, the extended Clyncke family purchased a large amount of land in the Louisville area, with much of it located northwest of the city's present-day boundary (Bridget Bacon, personal communication, March 27, 2018). Julian Clyncke's farmland in Louisville was first patented by the Denver and Pacific Railroad in 1875. However, by 1892, significant landowners Harper and Otis owned it. Julian and his wife, Clara, began renting the farm in the 1920s and purchased it from the Harpers in the 1940s. The Clynckes raised beef cattle and operated a small dairy, as well as grew corn and hay. The original farmhouse was demolished, and a new one constructed in the early 1940s (Figure 51). Julian died in 1963, but Clara continued to live on the farm through at least 1995. That year, the farm contained 12 buildings: a house, chicken coop, ice house, workshop, loafing shed, shed, milk shed, silo, and two granaries. In addition, a well on the property was inscribed with "Julian Clyncke June 9, 1932" (Sladek and McWilliams 1995). However, the farm buildings were demolished or removed sometime between 1996 and 2006.



Figure 51. Former Clyncke farmhouse, 1995 (Sladek and McWilliams 1995).

DiGiacomo Farms

There were at least two DiGiacomo Farms in Louisville. One was started around 1900 in the northeast part of the present-day boundary of Louisville, north of South Boulder Road and east of SH 42. Present-day Paschal Drive, Roberts Avenue, and Carmen Street, which are located on the former farm, were named after members of the Italian immigrant DiGiacomo family (Bacon 2007b:4).

The second DiGiacomo Farm was associated with Nicola DiGiacomo. In 1907, he platted the Nicola DiGiacomo Addition along the north edge of town, carving it out of his farm. The subdivision represents the 1200 block that extends from Main Street on the east, to Lincoln Avenue on the west, between Caledonia Street on the south and East Lafayette Street on the north (Bacon 2016a). The former Louisville High School was also constructed on his farm, just north of his subdivision, by the Works Progress Administration in 1939 (Bacon 2011a). In 1938, a part of the farm located just north of the Nicola DiGiacomo Addition, which Nicola had continued to farm, passed to Rosa DiGiacomo Santi, a daughter-in-law of Nicola and Lucia DiGiacomo. In 1946, Rosa conveyed the land to Alvin Fischer, whose family had done construction in Louisville for decades (Bacon 2013a). In 1948, Alvin platted the Fischer Addition subdivision out of the land. The Fischer Addition includes the 1300 blocks of Jefferson, Grant, and Lincoln Avenues and involved the extension of Lincoln Street heading north and Lafayette Street heading west. Still more of the original Nicola DiGiacomo Farm was developed in 1959 when Carmen “Carmie” Scarpella, in partnership first with Joe Colacci and then with Charles Hindman, platted the Scenic Heights subdivision south of South Boulder Road near what is now Louisville Middle School (Bacon 2015b, 2016a). The Goodhue Ditch defines the southern boundary of the subdivision. The ditch was an important source of water for farming this northern part of Louisville in the late nineteenth and early twentieth centuries.

Franchini Farm

The Franchini family had a farm somewhere near Louisville. It was one location (the other being the Tovado Farm west of SH 42 and south of South Boulder Road) where boys from Little Italy and Frenchtown played football games (Marino 2007:2).

Garnier/Johnson Farm

The remains of a small farm that contained an unusual stucco English/Norman cottage style farmhouse (Figures 52–53) was formerly located on the east side of S. 96th Street, approximately 1,700 feet north of Dillon Road (Chambellan 1998a). This may have been a remnant of a much larger, 80-acre farm owned by James F. and Sarah Minks Jones from at least 1872 to 1905 (see also the Naeve Farm and Warembourg/Owen Farm sections, below). In 1905, the Centennial Coal Company purchased the land (Bacon 2010c:1) and opened the Old Centennial Mine (1906–1931). This mine, and the Nonpareil (Brooks) Mine (1907–1925) were excavated beneath the former farm (Roberts et al. 2001). According to the Boulder County Assessor, the unusual English-Norman style stucco cottage on the farm was constructed in 1930 (Bacon 2010c:2). This is very possible, as that style of house was popular during the 1920s and 1930s (History Colorado 2018a). In 1944, Frank and Helen Garnier purchased a large amount of land in this area (around 120 acres, or nearly one-quarter of a PLSS section) and again operated it as a farm. At that time, the farm also contained six outbuildings of various kinds (Bacon 2010c:4–5). By 1998, Richard and Mary Johnson owned the land surrounding the farmhouse. A garage, small horse

barn, milk house, and horse shed remained at that time (Chambellan 1998a). Today, all of the buildings are gone.



Figure 52. Garnier/Johnson farmhouse, 1948 (Louisville Historical Museum [LHM] 2017).



Figure 53. Garnier/Johnson farmhouse, 1998 (Chambellan 1998a).

Goodhue Farm/Stearns Dairy/Rock Creek Farm

As described above in the Goodhue Ditch section, Abner C. Goodhue purchased the Rock Creek Stage Station, which is surrounded by farm land just west of present-day Hwy 287 and north of Rock Creek, in 1871 (Black 2018b). This farm lies outside the present-day boundary of Louisville (in unincorporated Boulder County) but, due to Abner Goodhue and his descendants by marriage, it has ties to Louisville's history. In 1887, Abner married Clara Waynick who was 35 years younger than Abner. By 1896, the Goodhues owned 1,440 acres, specializing in horse breeding and cattle raising. In the *Colorado State Business Directory* from 1894, 1896, 1899, and 1900, Agner Goodhue is listed as a horse raiser (Gazetteer Publishing Company 1894, 1896, 1899, 1900). The 1903, 1905, and 1906 directories list him as a "live stock raiser" (Gazetteer Publishing Company 1903, 1905, 1906), while the 1906–1907 Boulder County Directory describes him as a rancher. In addition, the 1903, 1905, 1906, 1910, and 1911 directories list him as president of the Goodhue Ditch Company (Gazetteer Publishing Company 1903, 1905, 1906, 1910, 1911). After Abner died in 1912, Clara and their three sons continued to run the farm and ditch company. However, a regional drought and nationwide farm crisis caused by inflationary agricultural policies during and after WWI (Perkins 1969) caused the remaining Goodhues to foreclose on their farm in 1924 (Black 2018b). Mae Austin, descendant of William Austin and Jessie Niehoff, married one of the Goodhue sons, Hugh, in 1914. After Mae and Hugh separated, Mae and their daughter, Lois, moved to 717 Main Street in Louisville. Mae taught school at the Monarch Mine camp from 1923–1944 (Bacon 2013b:17). In 1932, the Stearns Dairy Company purchased the property to be a dairy farm and livestock-raising facility. In 1954, Bal Swan purchased the property and renamed it Swan's Hereford Ranch. In 1980, Boulder County acquired the property for open space, with continued agricultural use. After former Boulder County Open Space director, Carolyn Holmberg (who had promoted the acquisition of the property), passed away in 1998, the open space was named the Carolyn Holmberg Preserve at Rock Creek Farm in her honor. In 2004, Boulder County began to rehabilitate the farmhouse for use as a meeting space (Boulder County 2018b; Daily Camera staff 2005).

Gosselin Farm

The Gosselin family were French immigrants who came to Louisville in the late nineteenth or early twentieth century. Brothers Raymond and Victor Gosselin ran a farm located not far west of Louisville's Historic Old Town and south of W. Spruce Street, at present-day 310 W. Spruce Street. Pine Street formerly ended at the west edge of town, while W. Spruce Street was the road used to travel farther west. The farm's silo, which is constructed of hollow glazed-clay tile, remains visible today from Pine Street (Bacon 2006d:8). In the late 1980s or early 1990s, associated outbuildings stood adjacent to it (Figure 54).

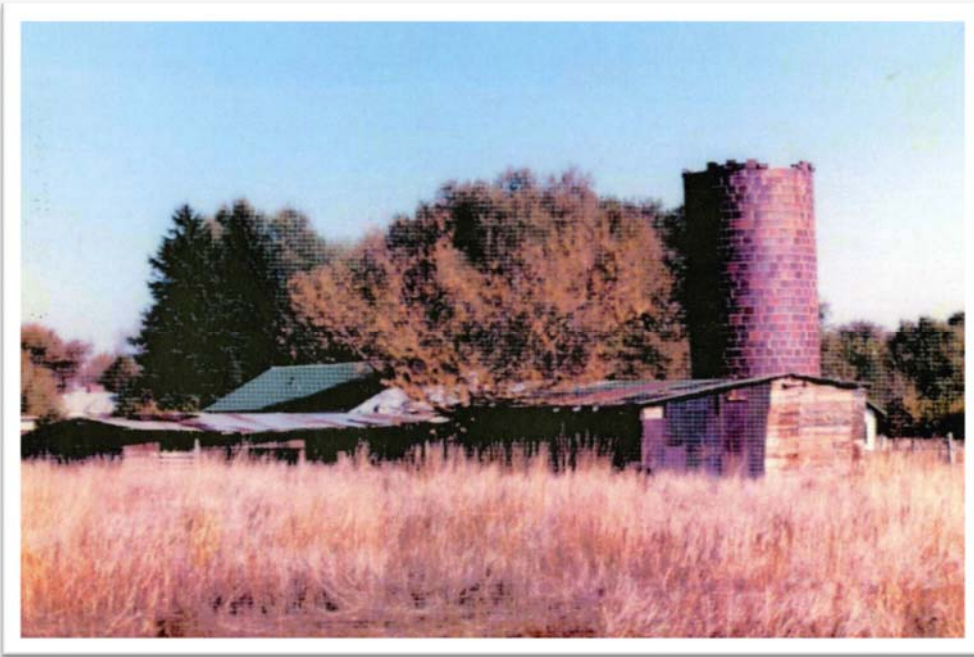


Figure 54. Gosselin Farm silo and outbuildings, late 1980s or early 1990s (photo credit: Louisville Historical Museum).

Harney Farm

From 1948 to 1973, Stephen and Martha Harney operated a small farm west of Louisville's Old Town, north of South Street (if it were to continue farther west) and east of the Goodhue Ditch. As seen in Figure 55, a two-story house and multiple outbuildings were located on the farm. The house was constructed by the farm's previous (currently unknown) owners, prior to 1948. The house appears to exhibit some Victorian characteristics so it may have been constructed in the late nineteenth century or very early twentieth century. In 1973, the Harneys sold 60 acres of the farm to Woods Brothers for the Parkwood housing development, retaining the rest of the land for their continued use (Bridget Bacon, personal communication, June 23, 2018).



Figure 55. Excerpt of photograph showing Harney Farm buildings, early 1940s (photo credit: Carnegie Branch Library for Local History).

Harney-Lastoka Farm

In 1923, Slovak immigrants Joseph and Anna (Lipsak) Harney purchased 130 acres of land from Leanna(h) and John Mayhoffer (described below in the Mayhoffer Farm section) located east of present-day Courtesy Road/SH 42 and south of present-day South Boulder Road at 1536 Courtesy Road/SH 42 (Boulder County Parks and Open Space [BCPOS] 2004:23). Joseph and his first wife had five children before she died giving birth to their sixth child in December 1903. Joseph and his second wife, Anna, married in July 1904 and moved to the town of Louisville thereafter. Anna's two sons from her first marriage, John (Surmay) and Andrew (Surmay), joined her and John in Louisville. Subsequently, Joseph and Anna had six children together: Stephan, Michael, Frank, Peter, Benedict, and Susan (BCPOS 2004:24).

Shortly after moving to the farm (Figure 56), Joseph and his two stepsons, John and Andrew Surmay Harney, constructed a round-topped bread oven there (Lastoka 2006:1) (Figure 57). The family baked 24 loaves of bread in the oven each week (Lastoka 2006:2) until about 1945. After that time, they used the structure for storage and as the roof of a dog house. The bread oven subsequently fell into disrepair, but, in 1999, a group of Eagle scouts restored it (Lastoka 2006:3). The Harney family also constructed the house and, subsequently, all of the farming related buildings and structures on the property. In addition to farming, Joseph Harney served as Trustee for the town of Louisville. In the late 1920s, Joseph moved away to do hard-rock mining around Nederland and Black Hawk. He and Anna divorced prior to his death in February 1942 and hers in December 1942. John and Andrew continued to run the farm into the 1960s. During its history, the farm grew alfalfa, corn, wheat, oats, barley, sugar beets, and a large vegetable garden for the family. In addition, the farm raised up to 75 head of beef cattle, several milk cows, hogs, turkeys, and chickens, and horses and mules that helped with farm labor (BCPOS 2004:24–25). Like many other farmers in the Louisville area, John and Andrew split their time between working for coal mines during the winter months and farming during the summer and

fall (BCPOS 2004:24). In 1944, Susan Harney married Jim Lastoka. They had three children, James, John, and Mariann, who also worked on the farm. In the 1970s, Jim and Susan began leasing the farm to a tenant farmer, Mr. Hartnagle, who was part of a long-time farm family from east Boulder County (BCPOS 2004:31; Carol Beam, personal communication, May 2, 2018). Subsequently, another tenant farmer, Ben Turner, leased at least some of the land from Boulder County for several years (Bridget Bacon, personal communication, September 28, 2018). Beginning in the late 1980s, the lease shifted to Keith Bateman (Carol Beam, personal communication, May 2, 2018).



Figure 56. Working on the Harney-Lastoka Farm, 1920s, with the former Rex Mine No. 2 in the background, facing southeast (photo credit: Louisville Historical Museum).



Figure 57. Bread oven on the Harney-Lastoka Farm prior to restoration, 1996 (photo credit: Louisville Historical Museum).

In 1984, Boulder County and the cities of Louisville and Lafayette entered into an Intergovernmental Agreement to preserve the Harney-Lastoka property and several more hundreds of acres as an open space buffer between the two cities. The three entities signed a second Intergovernmental Agreement in 1993 for essentially the same purpose, albeit with the allowance that each city annex and develop up to 24 acres for active recreation and Louisville annex up to an additional seven acres for expanding its wastewater treatment plant. Between 1993 and 1996, Boulder County and the cities purchased the then-138-acre property. Today, 115 of those jointly owned acres are preserved in perpetuity as the Harney-Lastoka Open Space (BCPOS 2004:2–4). Keith Bateman continues to lease the farm now, along with his nephew. They grow hay, alfalfa, and various vegetables, and raise chickens, ducks, hogs, and other animals on the property as 7th Generation Farm (Bridget Bacon, personal communication, March 27, 2018; 7th Generation Farm 2018).

As of 2008, the Harney-Lastoka/7th Generation Farm contained a Bungalow-style farmhouse and 20 outbuildings: milk house, garage/tool shed, privy, chicken house, storage shed, brooder house, north granary, middle granary, grain bin, calf pen, machine shed, three loafing sheds, granary, silo, pit silo, milking house, milking barn, and pig enclosure (Twitty 2008).

The Rex Mine No. 1, which operated from 1898 to 1917, and the Rex Mine No. 2, which operated from 1898 to 1915, are located on what was originally part of the Kerr/Mahoffer Farm and became the Harney-Lastoka Farm. During the mines' operation, a railroad spur ran east for approximately 500 feet, from present-day SH 42 to the Rex Mine No. 1's large structures. Remnants of mining operations include a concrete block that anchored a hoist, a boiler room that housed a steam engine that powered the hoist, and a large mine waste rock dump visible from

South Boulder Road. After the mine shut down, the boiler room became a chicken coop. Granaries and barns that had served agricultural purposes prior to the mine's opening, and then were used for feeding and sheltering the mine's mules, reverted back to agricultural use (BCPOS 2004:43).

Harper Farm

By the early 1870s, Scottish immigrant John H. Harper (Figure 58) purchased 1,000 acres in the present-day Louisville area (Bacon 2015a:2). This property extended north, northwest, and west of present-day downtown Louisville, and the family's name appears to have inspired the naming of multiple streets within the present-day city boundary (Bacon 2007d:8). Harper and his wife, Margaret, had arrived in Denver by 1865 and John served as mayor there from 1871–1872 (Bacon 2015a:1–2). Harper purchased the land around Louisville as an investment because eastern Boulder County had good economic potential in agriculture and mining. Initially, Harper purchased the land for cattle raising but soon thereafter he partnered with William Davidson, Charles Welch, and Charles Kountze who were developing coal mining resources in the area. Harper died in 1874 and may never have lived on the farm; however, Margaret and their children, Jean, John J., and George, did live there for many years. Jean married Oran Otis and, by 1892, “Harper & Otis” (which referred to the Harper sons and their sister, Jean Harper Otis) owned 1,117 acres of land. In present-day terms, most of their land extended south from South Boulder Road to the Louisville Recreation Center and Arboretum, and from the west side of McCaslin Boulevard east to the eastern edge of Coyote Run Open Space. Jean and Oran also owned land around present-day Alfalfa's and Steel Ranch north of South Boulder Road (Bacon 2015a:3). The *Colorado State Business Directory* from 1894, 1896, 1899, and 1900 lists Harper and Otis as “live stock raisers” (Gazetteer Publishing Company 1894, 1896, 1899, 1900). Although Jean and Oran moved to California in the early 1900s, they continued to own land to the north and west of Louisville, as shown on the 1909 Drumm's Wall Map (Drumm 1909) located at the Louisville Historical Museum. From 1885 to 1892, George concentrated on stock raising in the Louisville area and probably used his recent Yale University training in civil engineering to help design Harper Reservoir and related irrigation ditch laterals (Bacon 2015a:2). John J. appears to have created Harper Lake, platting it as a 10-acre irrigation reservoir and naming it after himself and his family. John J. died in 1934 (Bacon 2007d:8).



Figure 58. John H. Harper, 1871 or 1872 (photo credit: Denver Public Library).

Over subsequent decades, the Harper land was divided into smaller portions and sold to members of the Beuprez, Clyncke, Hocheder, and other farming families. A portion of the Harper land was also incorporated into Paclamar Farms (see the Paclamar Farms section below).

Hotchkiss Dairy Farm

The Hotchkiss Dairy Farm was located along the east base of Davidson Mesa, just west of present-day S. Centennial Drive. It operated between approximately 1900 and the 1960s and was then abandoned. By 1996, its buildings were in ruins. At that time, remaining buildings and structures were a pole barn (Figure 59), wood fence, wooden livestock trough, six segments of irrigation ditches and feeder ditches, and a concrete pipe associated with a ditch head gate (Reiter 1996a).



Figure 59. Former Hotchkiss Dairy Farm, today.

Kasenga Farm

In 1919, the Kasenga family from Slovakia moved from a house in Louisville's Old Town to a 10-acre farm located northwest of the present-day intersection of SH 42 and South Boulder Road. Mr. Kasenga purchased and moved the farmhouse from the Hecla Mine, which was located just to the east, across present-day SH 42. The Kasengas raised various crops and animals, including white popcorn, sweet corn, rhubarb, raspberries, chickens, and eggs. They sold the white popcorn to the Rex Theatre in Louisville and sold milk for a short while (Bacon 2015c:3).

Kerr/Mayhoffer Farm

The present-day Mayhoffer Farm encompasses nearly 200 acres. The large, original farmhouse, silo, and outbuildings (Figure 60) are located just west of Empire Road and northwest of Coal Creek. A smaller, slightly younger (ca. 1905) farmhouse, outbuilding, and grain bin complex stands north of Empire Road and just north of Coal Creek (Figure 61). In 1865, David and Anne Kerr homesteaded the farm and, in 1870, David patented the land (*Boulder County News* 1870). David was born on December 28, 1835. David and Anne had eight children, only four of whom lived to adulthood. The Kerrs initially used the farm only for agriculture and livestock raising. However, in 1877, a coal seam was discovered under the farm's wheat fields (BCPOS 2017). As discussed above in the Louisville's Early Development section, this discovery led to Charles Welch's creation of the Welch coal mine and Louis Nawatny's platting of the town of Louisville. In late 1892, Kerr sold the land on which the Welch Mine was located for \$30,000 (*Boulder Daily Camera* 1893a). Possibly around the same time, and by 1893, Anne Kerr was sent to an insane asylum in the East. Her property then became the subject of care by the Boulder County court. Anne and David's son Thomas served as conservator for a short time but resigned in 1894 to avoid intra-family fighting (*Boulder Daily Camera* 1894a). In late February 1893, a rumor spread that David Kerr had died (*Boulder Daily Camera* 1893a). However, David remained alive

and well. He was a mason for 30 years (*Walsenburg World* 1918) and, in 1894, he hosted The Improved Order of Red Men, the oldest Euro-American fraternal organization in the United States (The Improved Order of Red Men 2018), on his farm (*Boulder Daily Camera* 1894b). David's actual death occurred in Louisville on May 23, 1918, at which time just one daughter and 13 grandchildren were still living (*Walsenburg World* 1918).

In 1887, David and Anne's daughter Leanna married John Mayerhofer. During WWI, the family changed the spelling of its last name to Mayhoffer (BCPOS 2017). The *Colorado State Business Directory* from 1910, 1911, and 1917 lists John Mayhoffer as a dairy operator (Gazetteer Publishing Company 1910, 1911; Gazetteer Publishing and Printing Company 1917). Several of the remaining farm buildings date to this pre-WWII period. In 1923, the Mayhoffers sold 130 acres of their farm to Slovak immigrants Joseph Harney and his second wife, Anna (Lipsak). The resulting Harney-Lastoka Farm is described in that section, above.

In 1938, the Mayhoffer Farm was the site of a tragedy. Coal Creek flooded during a heavy rainstorm and the creek washed out approximately 200 yards of Empire Road around the bridge that crosses the creek just east and south of the Mayhoffer buildings. In places, the wash-out was 15 feet deep. Dr. Walter Boyd and his wife, Kathleen, were driving home to Louisville from Denver, and Dr. Boyd accidentally drove his car into the wash-out. He and his wife were ejected from the car; he fractured his skull and had other serious injuries and she drowned (Bacon 2011a:4).

The smaller, post-1923 Mayhoffer Farm has remained in agricultural use by the Kerr/Mayhoffer family since that time, making it a Centennial Farm. This is an honorary distinction that signifies that a farm has remained in the same family continuously for at least 100 years; it still operates as a working farm; and it encompasses at least 160 acres (State of Colorado 2018). In August 2017, Boulder County, the City of Louisville, and the City of Lafayette finalized an agreement to acquire 165 acres (representing most of the Mayhoffer Farm's agricultural land) as open space, with continued agricultural use. Three residential lots, which encompass historical farmhouses and agricultural buildings and structures, remained under Mayhoffer ownership. Those lots now have conservation easements and development restrictions (Boulder County 2017).



Figure 60. Mayhoffer Farm original nineteenth-century farmhouse and silo, today.



Figure 61. Mayhoffer Farm early twentieth-century buildings, today.

Kilker Farm

Irish immigrants Owen Kilker and his wife, Bridget (Lavell), purchased 160 acres of land at present-day 10433 Dillon Road, at the northeast corner of 104th Street and Dillon Road, around 1878. The Kilkers had nine children, seven of whom lived to adulthood. After Owen died in 1894, Bridget and their surviving children continued to run the farm, which was irrigated by ditch water and became well known in Boulder County for its progressiveness (Stone 1919:541–542). The Kilker Farm’s Gambrel roof dairy barn remains today (see Figure 127). Owen and Bridget’s daughter, Mary, later married coal miner George Ellsberry, and they moved to 1129 Jefferson Avenue in Louisville. Their adopted daughter, Nellie, eventually married Lewton “Lute” McCorkle who ran McCorkle’s grocery store (Bacon 2016c) on the 800 block of Main Street in the first couple decades of the twentieth century (Bridget Bacon, personal communication, January 16, 2018).

Murphy/Warembourg Farm

The Murphy/Warembourg Farm is located just south of present-day Bella Vista Drive and west of Front Street, with Coal Creek running east-west through it. In 1866, Adolf Waneka obtained the east half of the northeast quarter of Section 17 in Township 1 South, Range 69 West, but the land passed to the Union Pacific Coal Company by 1899. Peter Murphy purchased the land (Figure 62) from the Union Pacific Coal Company in 1905 and probably constructed the still-existing house and barn at that time, using the barn for his large dairy operation. Murphy already owned land immediately to the east, in the northwest quarter of Section 16. He probably added a bunker silo and grain bins in the 1940s or 1950s. Murphy died in 1952, after which Walter “Dutch” Warembourg leased the farm, and then purchased it in 1961.

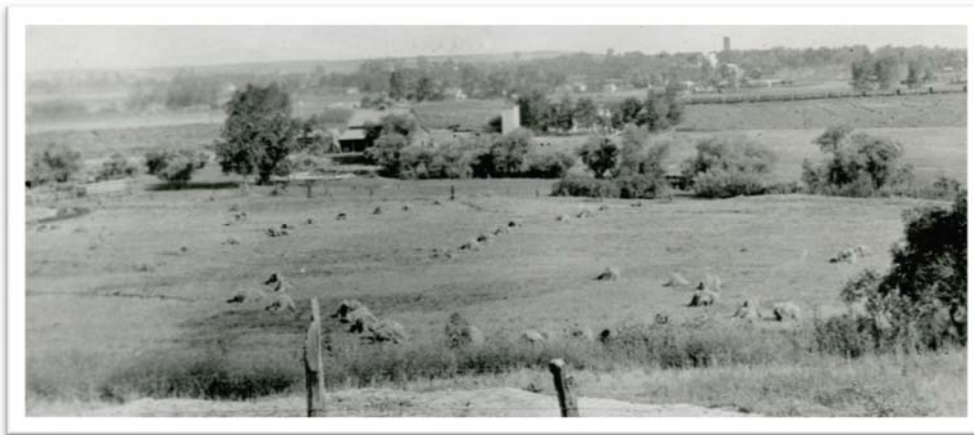


Figure 62. Murphy Farm, early 1900s (photo credit: Louisville Historical Museum).

Dutch Warembourg’s French immigrant parents, August and Fannie, already had a small farm south of Coal Creek, on which they raised crops and operated a dairy. August passed away in 1929, but the 1933 *Colorado State Business Directory* shows that the Warembourg (“Waramburg”) family still operated a dairy at that time (Gazetteer Publishing and Printing Company 1933). Dutch and Fannie subsequently moved to the former Murphy Farm, and Fannie sold their previous farm around 1955. Dutch’s brother, Klubert, owned a farm immediately west of the former Murphy Farm. After Dutch purchased the Murphy Farm, the two brothers jointly

operated their farms, growing corn wheat, hay, and other crops and raising hogs and cattle for beef and milk. During this time, Dutch added a scale house and hog shelter and enclosed the house's porch. He passed away in 1988, leaving the farm to Klubert. In 1995, Klubert sold 50 acres of his original farm (not the former Murphy Farm) to the City for open space. Subsequently, Klubert's daughter, Christine, added a chicken coop and shed and restored the barn on the former Murphy Farm. In 1999, the Warembourg family sold 215.76 acres south of the former Murphy Farm buildings to the City for open space. The City currently leases the land for hay production and livestock grazing (Christman 2015). A livestock pond, created by Klubert Warembourg in the mid-1950s (Figure 63), and an adjacent, modern, concrete water diversion structure are visible just north of Dillon Road at the southwest corner of the Warembourg Open Space. Jack Bowes remembers swimming in the pond as a small child (Jack Bowes, personal communication to Rob Alexander, BCPOS, July 10, 2018). The City holds the house and barn, which are located south of the Louisville Community Dog Park, under a conservation easement (Christman 2015). Present-day Community Park was formerly a Murphy/Warembourg Farm field (Bacon 2016a).



Figure 63. Warembourg Open Space livestock pond, today.

The Warembourg House, which was constructed by Klubert and Dutch's grandfather, Aimable Warembourg, Sr., around 1912, still stands at 901 Rex Street (Figure 64). The Warembourg family was closely connected with Louisville's Frenchtown, which was centered on Rex and Parkview Streets between Roosevelt Avenue and County Road. Other houses owned by members of the Warembourg family are also located in that area (Bridget Bacon, personal communication, June 26, 2018).



Figure 64. Warembourg House at 901 Rex Street, today.

Naeve/Richards/Payne/Cable/Mobley Farm

A small farm, formerly owned by the Naeve family and, subsequently, the Mobley family, is located east of the intersection of Dillon Road and S. 96th Street at present-day 9673 Dillon Road. Originally, this area was part of a much larger, 80-acre farm owned by James F. and Sarah Minks Jones from at least 1872 to 1905. In 1905, the Joneses conveyed part of the farm to the Centennial Coal Company although, based on a map of Louisville's mines (Roberts et al. 2001), the land they conveyed was north or west of the northeast corner of present-day Dillon Road and S. 96th Street. In 1906, the Joneses sold 14 acres of land at the present-day northeast corner of the intersection to German immigrant and blacksmith Henry Naeve and his wife, Anna Kalder Naeve. It appears that the Joneses may have constructed the two-story farmhouse that still stands there, given that a house is shown in that location on the 1899 Willits Farm Map. Naeve may have remodeled or added onto it in 1907. In 1909, the southwest corner of the Naeve Farm was an orchard. The Naeves had at least nine children, with one of their daughters, Emma, working as a teacher in Louisville schools in 1915 and 1916 after Anna passed away in 1914 (Bacon 2012b:2–3). In 1924, the Naeves sold the farm to Welsh immigrant Henry Richards and his wife, Florence. At the time, he was superintendent of a mine but, by 1940, he was working as a farm laborer. In 1946, the Richards sold the farm to Raymond and Dorothy Payne (Bacon 2012b:3). The farmhouse remained simple at that time (Figure 65). The Paynes sold the farm to Clyde and Frances Cable in 1958, who sold it to Donald and Carol Mobley in 1965. In 2000, the Archdiocese of Denver purchased the property, although it appears to continue to serve as a residence today (Bacon 2012b:7).



Figure 65. Assessor card photograph of 9673 Dillon Road farmhouse, late 1940s or early 1950s (LHM 2017).

The farmhouse and outbuildings have been modified over the years but the farm retains the two-story wood Victorian house (Figure 66), a one-story 1948 (constructed or remodeled) Ranch form house, and several buildings and structures constructed or remodeled at three different times: one equipment shed (1907); three general purpose barns, two open cattle sheds, two equipment sheds, and one farm utility building (1948); and two equipment sheds (1978) (Boulder County Assessor's Office 2018). In 1998, the Mobleys suggested that the farmhouse could be as old as 1876, while at least some of the outbuildings were constructed around 1910 (Mehls and Chambellan 1998). The farmhouse (Figure 67) and a few outbuildings still stand today.



Figure 66. Naeve Farm farmhouse, 1998 (Mehls and Chambellan 1998).



Figure 67. Naeve Farm, today.

Paclamar Farms

In the 1960s, Paclamar Farms was located on former Harper land (Bacon 2015a:3). The farm was created by W.R. “Dick” Brooks who relocated from Ohio to Colorado to address his son’s health issues. Once in Colorado, Brooks partnered with Howard Sluyter from Dallas, Texas, and Peter Cook and Edsko Hekman of Grand Rapids, Michigan, to purchase more than 1,200 acres of land. The name “Paclamar” is a combination of the first names of the partners’ wives: Pat, Clara, and Marge. Paclamar Farms raised show-winning Holstein cattle and set trends in the showing, breeding, and merchandising of Holsteins for almost 20 years. Two of Paclamar’s cows won the

National Holsteins show in the 1960s: Snowboots Wis Milkyway in 1962 and 1963 and Harborcrest Rose Milly in 1964 and 1965. Those and other members of Paclamar's herd were influential in Holstein breeding (Nabholz 2017).

Rand/Showalter/Hoyle Farm

In 1878, Canadian immigrant George Rand filed a preemption claim to purchase 160 acres of land (the southeast quarter of Section 16 in Township 1 South Range 69 West) in the area north of present-day Dillon Road and west of 104th Streets from the State of Colorado. Over subsequent years and owners, portions of the farm were sold off, leaving approximately 33 acres by 2015, at the address of 10101 Dillon Road. George and his Canadian wife, Lucinda, had moved to Jefferson County, Colorado, in 1865 and lived there until Rand preempted the Louisville-area land (Simmons et al. 2016:18). Their daughter Katie married Charles Welch Jr., the son of the man who was instrumental in Louisville's founding and early mining. By 1900, the Rands had moved to Denver but still owned the farm (Simmons et al. 2016:20). In 1912, they sold the farm to Henry D. and Gladys M. Showalter. The Showalters raised poultry and possibly other crops and animals that were commonly raised in large quantities in Boulder County during the first half of the twentieth century: wheat, barley, alfalfa, sugar beets, dairy cattle, and hogs (Simmons et al. 2016:21). In 1946, the Showalters sold the farm to Paul R. and Margaret Heeney, who sold it to Martin T. and Ann L. Brethower in 1948. The farm then passed to Walter F. and Nora C. Skrocki in 1953 and to Robert S. and Helen Overton in 1958. The Overtons raised Angus cattle (Simmons et al. 2016:27). In 1962, Ira K. (Kenneth) and Virginia Ruth Hoyle purchased the farm to raise Shorthorn cattle. They also grew hay and alfalfa to supplement income and provide feed for the cattle (Figure 68). Kenneth died in 1997 and the Hoyles stopped farming. The City annexed the property in 2004, and Etkin Johnson Real Estate Partners obtained the property in 2015 to expand the Colorado Technology Center. As a result, the farm buildings were demolished.



Figure 68. Hoyle Farm, 1970s (Simmons et al. 2016:28).

Ryan Farm

In the 1950s, Patrick Ryan operated a goat farm on the south side of present-day Empire Road, west of S. 104th Avenue and south of the Louisville Cemetery. His son, Bill, reportedly delivered goat's milk to people in Louisville who were unable to drink cow's milk and to Italian families who made cheese with it. The farm is gone today, but Bill is still a Louisville resident (Bridget Bacon, personal communication, June 23, 2018).

Spicer Farm

In the late nineteenth or early twentieth century, William Spicer and his wife, Abigail Admire Spicer, settled near the west edge of present-day Louisville, in the area northeast of Highway 36 and west of 88th Street, where Avista Adventist Hospital is today (Bacon 2008a:7).

W. Spruce Street

W. Spruce Street (sometimes called Spruce Lane) was originally the primary street that led west out of Louisville, as Pine Street historically ended around McKinley Avenue, near the west edge of present-day Louisville Elementary. Until the area began to be annexed and developed in the mid-1980s, the west half of W. Spruce Street was unincorporated Boulder County and retained a country feeling. Its small-scale agricultural industry included farms that raised horses, cows, ducks, and chickens (Figure 69). The road was not paved, the area did not receive City services directly, and lots could not be divided until the 1990s. When people began to build on and use the road at the beginning of the nineteenth century, it was called the "Matchless Lane" or just the "Lane" for the Matchless Mine that was located at the road's west end. Miners would walk from Old Town Louisville west along the lane to work. Subsequently, and prior to its paving, the road was also sometimes called "lover's lane" (Starinskas 1979).

Some families owned multiple properties on W. Spruce Street. For example, the Fischer family, which constructed many houses and buildings in Louisville, owned multiple farms there (Bridget Bacon, personal communication, June 23, 2018). This fact was commemorated by the name of a modern residential development located at the west end of W. Spruce Street: Fischer Farms. The Rickman family owned two lots adjacent to one another on the south side of the street.

Beginning in 1923, the Pickett family also owned two houses on W. Spruce Street, at 201 and 309 W. Spruce Street. While Earl and Emily Pickett lived in one of the houses (probably 201), Earl's parents lived in the other (probably 309). Together, the lots encompassed approximately 5 acres. Earl's son, Don Pickett, recollected that their cows would sometimes escape from their pen and wander into town. Then someone would call the Picketts and ask them to come retrieve their animals. Today, the Pickett house at 309 W. Spruce Street looks very similar to how it looked in the 1920s (Don Pickett and Ricky Madonna Pickett, oral history provided to Bridget Bacon, June 28, 2013) (Figure 70).



Figure 69. Aerial photograph of Louisville, 1962, with W. Spruce Street indicated (photo credit: Louisville Historical Museum).



Figure 70. Former Pickett family house at 309 W. Spruce Street, today.

In addition to 309 W. Spruce Street, at least five other houses constructed between about 1920 and 1930 still stand on the lane. Those houses retain various degrees of physical integrity. Three examples that appear to exhibit good integrity are 100 W. Spruce Street (ca. 1920) (Figure 71), whose owners continue the tradition of a household fruit and vegetable garden; 109 W. Spruce Street (ca. 1925) (Figure 72), at least some of whose outbuildings are still standing; and 310 W. Spruce Street (ca. 1930) (Figure 73), which is the former Gosselin Farm on which a hollow glazed-clay tile silo and multiple outbuildings still stand (see the Gosselin Farm section above).



Figure 71. 100 W. Spruce Street.



Figure 72. 109 W. Spruce Street.



Figure 73. 310 W. Spruce Street.

Two other houses have received large additions that have diminished the houses' historical integrity: the former Fiechtl House at 501 W. Spruce Street (ca. 1920) (Figure 74) and the former Brimble House at 504 W. Spruce Street (1925) (Figure 75).



Figure 74. 501 W. Spruce Street.



Figure 75. 504 W. Spruce Street.

W. Spruce Street also contains a later historical house. G. R. Henning, who owned and operated a mortuary in Louisville beginning in 1923 (see Schwendler and Corbett 2018b), constructed the house at 101 W. Spruce Street (Figure 76) in 1951. The house is a unique example of mid-twentieth-century infill in this agricultural area and the property retains an older outbuilding (see Figure 76, far left) and overall good integrity. Henning and some of his partners reportedly owned Shetland ponies that grazed on W. Spruce Street land owned by Henning, Pickett, and others (Don Pickett and Ricky Madonna Pickett, oral history provided to Bridget Bacon, June 28, 2013).



Figure 76. 101 W. Spruce Street.

Steuble Farm

In at least the early twentieth century, Swiss immigrant Henry Steuble operated a farm (Bacon 2014a:9) somewhere near Louisville. Farmers and their teams of horses were vital for conducting large-scale construction and/or building moving projects. In 1913, Henry Steuble's team of four horses dug the basement for Steinbaugh's expanded hardware store, which was formerly located at the northeast corner of Front and Spruce Streets (Figure 77).



Figure 77. Henry Steuble and team digging Steinbaugh's basement, 1913 (photo credit: Louisville Historical Museum).

Stevens Farm

A small farm dating possibly to the 1930s was formerly located at the present-day northwest corner of S. Centennial Parkway and McCaslin Boulevard. Due to its remnant white farmhouse (Figure 78), it was called the White House Farm when it was documented in 1996. At that time, the farm also retained a pumphouse, ice house, and two storage sheds (Reiter 1996b). The 1953 Marden Map suggests that this farm was probably located on land owned by A. Stevens (Marden Maps 1953). Based on a review of Google Earth images, the farm was replaced by commercial development (e.g., Qdoba and Starbucks) by 1999.



Figure 78. Stevens Farm farmhouse, 1996 (Reiter 1996b).

Stout Farm

The Stout Farm was located south of the south ends of Garfield and McKinley Streets, encompassing present-day Cleo Mudrock Park and Louisville Elementary School (Bridget Bacon, personal communication, June 19, 2018).

Tovado Farm

The Italian immigrant Tovado family operated a farm behind present-day Fordyce Auto, which is west of the Harney-Lastoka Farm, west of present-day SH 42 and south of South Boulder Road. This was one of two locations (the other being the Franchini Farm) where boys from Little Italy and Frenchtown played football games. The Tovado farm was known for its apple orchards, in which boys, who pulled pranks on cars, sometimes hid (Marino 2007:2).

Varra Farm

Some members of the Italian Varra family (including City Clerk, Nancy Varra) lived outside town on a farm (Strand 2015:1), while others lived in town. Nancy's uncle Albert and aunt Elizabeth operated Varra's grocery store at 700 Main Street, where The Huckleberry now stands, from 1955 to the mid-1960s (McWilliams 2000b).

Waeneche/Waneka Homestead/Wilson Farm/Murphy Farm

In 1866, German immigrant Adolf Waeneche (later changed to Waneka) purchased land, located near where present-day 96th Street passes over the railroad tracks, from the federal government for \$1.25 per acre. After homesteading a different piece of land, located on the west side of present-day Hwy 287 south of Coal Creek, Waneka sold the land to Lewis Wilson. Wilson also owned multiple pieces of land in the late nineteenth and early twentieth centuries. By 1900, this parcel was owned by Peter Murphy, who apparently constructed a main house and second house. Subsequently, from 1907 to 1925, the Brook-Harrison Fuel Company operated the Nonpareil

Mine under the land, from a shaft that originated east of the railroad tracks. Farms located along 96th Street may have taken in miners as boarders and laborers, and some farmers may even have constructed small cabins on their farms for that purpose. The Waneka/Wilson/Murphy Farm continued to be used for agriculture until after WWII, when land speculation increased in the area. In 1987, the land was purchased to be a potential future part of the Colorado Technology Center. In 2000, the land retained a hipped roof house with multiple additions, a farmhand's house, milk house, shed, garage, chicken house/stock shed, granary, and plywood shed (Mehls and Mehls 2000). None of the buildings remain today.

Warembourg/Owen Farm

A small farm formerly containing a clipped gable bungalow form farmhouse, a rectangular wooden barn with a rectangular cupola and dormers, a stone smoke house, and a stone chicken coop (as well as a modern barn) stands on the east side of S. 96th Street, slightly north of Dillon Road, at present-day 1474 S. 96th Street. This farm was also carved out of a larger 80-acre farm owned by James F. and Sarah Minks Jones from at least 1872 to 1905 (see the Naeve Farm and Garnier/Johnson Farm sections above) (Bacon 2012b:2). It appears that this was the small farm owned by August and Fannie Warembourg and used for crops and dairying in the first half of the twentieth century (see the Murphy/Warembourg Farm description above). Around 1949, August and Fannie's son, Walter, attained ownership of the farm, holding it until 1958 (Bacon 2012b:7). The Old Centennial Mine (1906–1931) air and hoist shafts were located on or immediately north of the farm, and the Old Centennial and Nonpareil (Brooks) Mine (1907–1925) were worked under the farm, or came close to doing so (Roberts et al. 2001). By 1998, Al and Candy Owen owned the farm (Chambellan 1998b). While the Boulder County assessor provides a date of 1948 for the one-story, clipped gable house that still stands on the farm (Bacon 2012b:7) (Figures 79–80), that date seems too young. Clipped gables were common on Bungalow Form houses that date generally between 1900 and 1930 (Schwendler and Corbett 2018a:111).



Figure 79. Warembourg/Owen Farm farmhouse, 1948 (LHM 2017).



Figure 80. Warembourg/Owen Farm farmhouse, today.

Williams Farm/Foster Farm

After the Hecla Mine closed in 1920, RMFC superintendent and land speculator, Jacob Williams, purchased the nearly 160-acre property on which the mine was located. This was north of South Boulder Road and east of SH 42. It appears that Jacob, and then his wife, Jane, after Jacob died, rented the property to tenant farmers who lived in the former Hecla Mine casino building and farmed the land (Figure 81). In 1952, South Dakotans Clifford and Monica Foster purchased the farm and lived in the former casino building. Clifford was a mechanical engineer but also grew corn and wheat on the farm. Monica passed away in 1976 and in 1991 Clifford sold part of the property for construction of the Louisville Plaza commercial center, including the land on which the former casino building sat. Accordingly, Clifford had the building moved to the northwest, to 1800 Plaza Drive, onto land he retained (Bacon 2016d:3–4). The former casino building was demolished in December 2017 to make way for an expansion of the Balfour Senior Living development (Conarroe 2018b:2).



Figure 81. Foster Farm, 1950s (photo credit: Louisville Historical Museum).

RAILROAD-RELATED RESOURCES

This section of the context provides details about specific structures (trains and rails) and buildings (depot) related to Louisville's railroad history.

Trains and Rails

During the nineteenth century, the trains that ran through Louisville were powered by steam locomotives (Figure 82). In the late nineteenth century, steam locomotives ran on wood or coal that men fed into a firebox. From there, hot gas entered boiler tubes (called flues) that heated surrounding water to form steam. The steam then entered pistons, expanded, and drove the locomotive's rods (horizontal iron/steel shafts attached to the wheels), which propelled the train forward. The hot waste gases entered the smoke box and then exited the locomotive via the smoke stack (American-rails.com 2018a).



Figure 82. Steam locomotive, 1920s (American-rails.com 2018a).

A steam-powered engine was first patented by Thomas Newcomen in 1705 and was expanded upon by James Watt in 1769, who employed it in steamboats. The first precursor of the steam locomotive was patented in England in 1802 by Richard Trevithick and Andrew Vivian. In 1804, Trevithick's locomotive began pulling loads of iron ore along a tramway. Beginning in 1814, George Stephenson invented a series of more advanced steam locomotives. With his son, Robert, George designed a steam locomotive, the *Rocket*, that easily won a competition with three other engines on the Liverpool & Manchester Railway in England in 1829. The Stephenson's engine featured the basic defining components of a modern steam locomotive: fire-tube boiler, forced draft from exhaust steam, and direct linkage between the piston and drive wheels (American-rails.com 2018a).

In the United States, a precursor to the steam locomotive was first introduced in 1826 by Colonel John Stevens, who displayed his “Steam Waggon,” a steam-powered horse carriage, in Hoboken, New Jersey. Stevens had previously used steam engines to power steamboats. In 1829, another engine built by the Stephenson and an engine built by Foster, Rastrick & Company of Stourbridge, England, were the first steam locomotives shipped to the United States. From that time on, steam locomotives began to be constructed and further improved upon within the United States. Trains greatly facilitated Euro-American economic expansion across the West and transformed the United States into an industrial powerhouse. The country produced the most advanced steam locomotives between 1925 and the end of WWII. In 1925, Lima Locomotive Works introduced its “Super Power” concept, which comprised the use of a larger firebox and a superheater that, together, sustained steam for a longer time and enabled a locomotive to operate more efficiently. However, by the 1950s, most full-sized locomotives were powered by diesel engines (Americian-rails.com 2018a). Today, several steam locomotives still power trains that run on narrow-gauge or standard-gauge tracks and carry tourists in Colorado: Rio Grande Scenic Railroad out of Alamosa, Cripple Creek & Victor out of Cripple Creek, Durango & Silverton out of Durango, Georgetown Loop out of Silverton, and Comanche Crossing & Eastern Railroad out of Strasburg (Steamlocomotive.com 2018).

The precursors to railroad tracks were created in England in 1630, when men laid down wooden rails, with wooden cross-ties attached for lateral support. Like railroad tracks centuries later, these wooden rails were used to handle coal. Iron rails were first used in 1740 at Whitehaven, Cumberland, England. The flanged wheel, which was invented by William Jessop specifically to travel along iron rails, was introduced in 1789 at Loughborough, Leicestershire, England. England’s first railroad was authorized through an Act of Parliament in 1821. It was called the Stockton & Darlington (S&D) and was a 12-mile-long line that connected the towns of Stockton and Darlington in the coal mining region of northeastern England. The S&D’s primary purpose was to haul coal, but it was also envisioned to be the first railroad to serve the public (American-rails.com 2018a).

Today, railroad tracks in the United States are of standard gauge (the distance between the inside edges of a railroad track): 4 feet 8.5 inches wide. In 1846, this gauge was stipulated for all future railroad construction (with certain exceptions) by the British Parliament. The distance originated with the S&D, whose wooden lines were approximately 5 feet apart. When iron rails were added to the existing timbers, the width shortened. In 1830, George Stephenson used the same width for the more important Liverpool & Manchester Railway. An unknown person added 0.5 inches, probably to allow the train cars to run more freely and to prevent excessive wear on the rails and wheels (Siddall 1969:31–32). Not long after Stephenson and other locomotive manufacturers in Britain adopted the standard of 4 feet 8.5 inches, however, others suggested that a wider track would be smoother and more capable of carrying larger loads and traveling faster. Although a train running on 7-foot-wide tracks outperformed a train on the narrower track, the latter was chosen as the standard because a markedly larger amount of track had already been laid for it. Narrow-gauge lines (measuring between approximately 2 and 3 feet wide) were then introduced, being cited as better suited to rough terrain. However, narrow-gauge track is not actually necessary for rough terrain. Rather, its chief advantages are lower costs for construction and operation (Siddall 1969:34–36).

These ideas about track gauges spread to the United States yet, during the nineteenth century, tracks were not of uniform gauge, despite some states passing laws that stipulated specific legal gauges in the 1850s and 1860s. At the time of the Civil War (1865–1869), 23 different gauges were used in the United States (Siddall 1969:29). However, when the gauge of the United States's first intercontinental train was set at 4 feet 8.5 inches in 1863, railroads began to convert to that gauge to take advantage of connecting with that economic engine. At the same time, narrow-gauge tracks became very popular in Colorado and other states (Siddall 1969:50). For example, in 1870, General William J. Palmer used 3-foot-wide narrow-gauge track for his Denver & Rio Grande Western Railway (Siddall 1969:35). Still, by 1880, standard-gauge track represented an increasingly larger percentage of track across the country. By the early twentieth century, most tracks were standard gauge (Siddall 1969:50, 54).

In 1904, the C&S announced its plans to construct a 110-mile-long standard-gauge electric interurban rail line between Denver, Boulder, Longmont, Loveland, and Fort Collins. An interurban railway is characterized by the following: electric power, emphasis on passenger service, operates on streets in cities and beside roads or on separate rights-of-way in the countryside, and uses equipment that is heavier and faster than city streetcars. To help achieve its goal, the C&S incorporated the existing D&I as its subsidiary. While most interurban railways were constructed by power companies and ran on tracks created specifically for electric engines, the D&I was owned and operated directly by the railroad and used tracks that also served steam locomotives. Interurban electric trains developed from urban streetcars and became an “American transportation phenomenon” (Middleton 1961:12, as cited in Simmons and Simmons 2015: Section IV, p. 8). Interurban trains were developed at the very end of the nineteenth century, employing more than 18,000 miles of track within 20 years. The trains largely disappeared after only about 30 years of use. As a bridge between horses and carriages, on the one hand, and automobiles, on the other, the interurban railway connected people in rural areas with larger cities (Simmons and Simmons 2015).

In 1907, construction began on a 57.24-mile round-trip route between 16th and Arapahoe Streets in Denver and Boulder. The D&I largely electrified and used C&S track that ran over the intervening gently sloping terrain. To avoid disrupting the movements of steam locomotive trains between Modern Junction (in Adams County near the South Platte River) and the former town of Webb (two miles south of Louisville), in that section, the D&I laid its own track parallel to the existing steam locomotive track. The D&I line split at a point called Louisville Junction, located a few miles south of the town of Louisville. The line then formed a loop that ran north through Louisville, northwest to Boulder, south to Marshall, southeast to Superior, and back to Louisville Junction, with a total of 27 stops between Denver, Boulder, and the intervening loop. Due to the resulting shape (Figure 83), the full route became known as The Kite Route and was marketed as such by the D&I (Simmons and Simmons 2015).

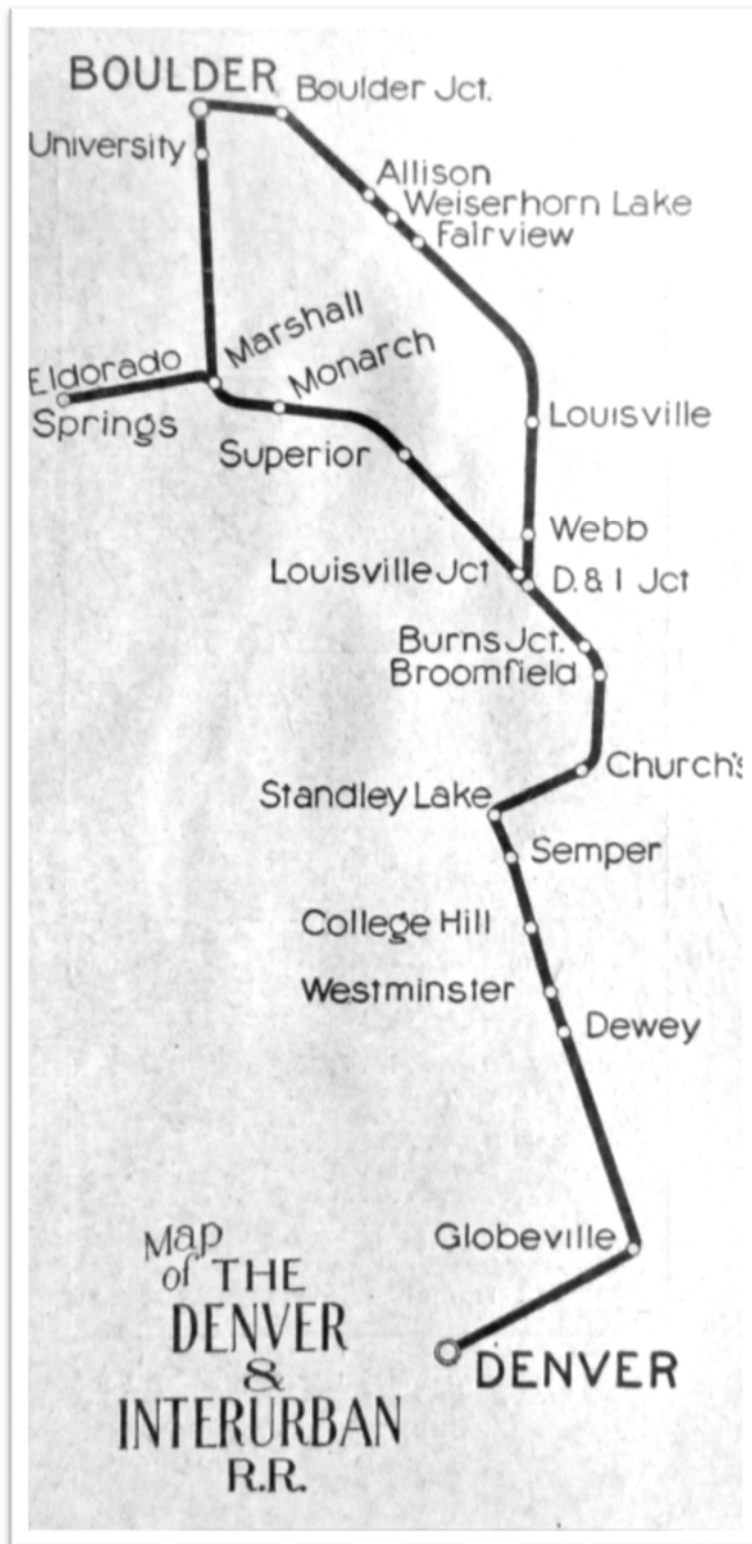


Figure 83. Route of the D&I, 1910 (image from D&I [1910] courtesy History Colorado, Stephen H. Hart Library and Research Center, as cited in Simmons and Simmons 2015).

Within Denver and Boulder, the train operated on direct current (DC) power (Figure 84). Between those cities, rail cars were powered by a Westinghouse 11,000-volt alternating current (AC) system using a pantograph (apparatus mounted on a train roof to collect power through contact with overhead wires) and overhead catenary (system of wires) (see Figure 133). AC power was selected for the intervening stretch because, unlike DC power, it can travel long distances without the need for booster stations. The D&I obtained its power from the Northern Colorado Power Company's newly constructed powerhouse in Lafayette (at present-day Waneka Lake) (Simmons and Simmons 2015).

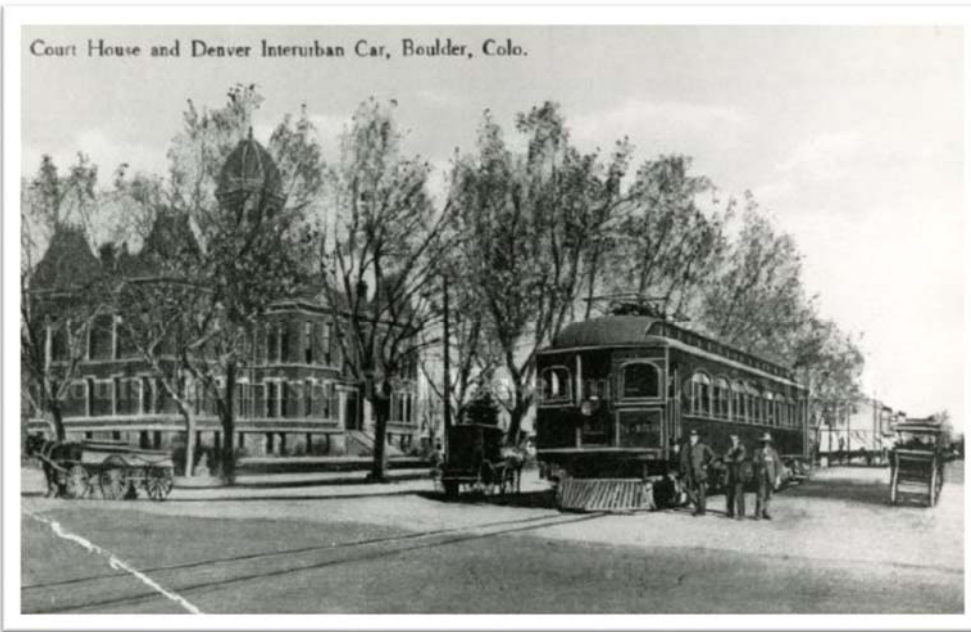


Figure 84. D&I train in Boulder, unknown date (photo credit: Louisville Historical Museum).

Travel from Denver to Boulder took 55 minutes of running time and the train reached a speed of more than 40 mph in several locations. The D&I used eight motorcars (i.e., enclosed sections of train) and four trailers on The Kite Route. Six of the motorcars were straight passenger coaches that could seat 59 passengers (Figure 85). The other two other motorcars featured a baggage compartment, smoking section, and passenger compartment with seating for 46. The motorcars were painted dark green and measured 55 feet 6 inches long. They had wood superstructures with sheet metal roofs, steel plate floors, and steel underframing. The D&I modified two other wood passenger coaches supplied by the C&S to serve as trailers. In general, each operating train comprised a motorcar and a trailer manned by a motorman, conductor, and brakeman. Additional motorcars and a second trailer could be added. Initially, the one-way fare between Denver and Boulder was \$0.70 and the round-trip fare was \$1.25. The train made 16 trips a day, with eight traveling clockwise via Superior and Marshall and taking 80 to 85 minutes, and the other eight traveling counterclockwise via Louisville and taking 70 to 80 minutes (Simmons and Simmons 2015).

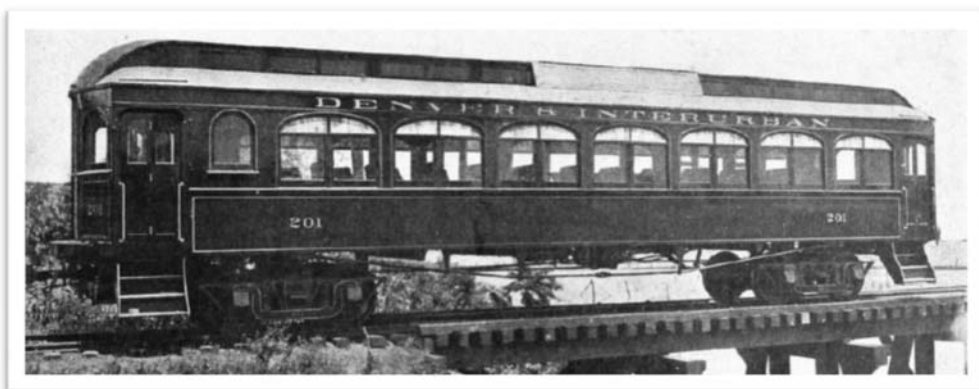


Figure 85. D&I motorcar, 1908 (*Electric Railway Journal* [1908], as cited in Simmons and Simmons 2015).

In December 1908, the Chicago, Burlington & Quincy Railroad (CB&Q) purchased the C&S and its subsidiaries. The CB&Q prioritized transport between the Gulf of Mexico in Texas and the Pacific Northwest so it never expanded the D&I line to Fort Collins. From 1909 to 1922, the D&I carried an average of 565,234 passengers annually. Its largest ridership was in 1910, when it carried 666,287 passengers. The D&I provided transportation for a great variety of people, including work commuters, students (e.g., Broomfield residents traveling outside town for high school), shoppers, tourists (e.g., traveling to the Eldorado Springs thermal springs resort), and hunters (going to Standley Lake in Jefferson County) (Simmons and Simmons 2015).

On Labor Day 1920, tragedy struck the line and Louisville. Two motorcars collided head-on north of Globeville (outside Denver) killing at least 12 people, injuring more than 100, and putting two motorcars out of service. Many of the people injured, and six of the people killed were from Louisville. Those killed were Frank Dalby (miner), Frank Carveth (miner), Joseph (Joe) Cortez (railroad man), William Zarina (miner), William Helburg (miner), and Joseph Lombardi (miner) (Bridget Bacon, personal communication, October 30, 2018; *Herald Democrat* 1920a, 1920b). The conductor and motorman of the outbound special car and the Globeville station agent were charged with criminal negligence that caused the collision (*Fort Collins Courier* 1920). The D&I continued to make a small profit, but ridership decreased from its high of the previous decade, with fewer than 500,000 passengers in both 1921 and 1922. Like other electric interurbans across the United States, the D&I became increasingly obsolete due to expanded and improved roads and an increasing number of automobiles. The D&I posted losses from 1923 until its close in 1926 (Simmons and Simmons 2015).

Both the CCR and DM&B lines, which together formed the D&I, run or ran through the present-day boundary of Louisville. The former CCR line cuts through Historic Downtown and is still in operation as BNSF (see Thomas Mangan Photography 2018). In contrast, the former DM&B line formerly jogged through the southern portion of Louisville. Portions of that line were abandoned in 1932 and 1947, and the rails, bridges, and berms subsequently largely removed (Hand 2005; Pearce 1990).

Two railroad cars and a caboose are parked in Louisville today (Figure 86). The structures are welded onto a short, false railroad track located just east of the functioning railroad tracks and

south of South Boulder Road. The cars, and two others that are now gone, came from the C&S, while the caboose came from the Santa Fe Railroad. In 1972, realtors Clifford Brock and his mother, Eva, and automobile salesman William Arnold moved the cars and caboose to this location to create a train-themed restaurant as part of a planned 14-acre Coal Creek Station commercial and residential development. In addition, they constructed the two-story building, located just to the east, to resemble a train station. Today, that building houses Louisville Cyclery and a few other businesses (Figure 87). The development team also constructed the round-topped building to resemble a railroad water tower. Today, that building houses Precision Pours coffee (Figure 88). After modifying the train cars and caboose, Clifford Brock and Chuck and Al Saenz opened the Gandy Dancer (term for a workman who installed railroad track) restaurant there. That restaurant lasted only a few years and was followed by a string of others, including Coal Creek Junction, Brothers Three, Kaddy Shack BBQ, and Hickory Sticks Smokehouse and Grill. The last restaurant closed around 2000 (Bacon 2013c). The train cars and caboose do not exhibit good historical integrity because their exact origins are unknown and they were highly modified for use as restaurants. Furthermore, they have not been in place in Louisville for 50 years. Accordingly, they are recommended not eligible for landmarking. A planned unit development has been approved for this area for a mixed commercial-residential development, with the train cars and caboose proposed for relocation or demolition (Robinson 2013).



Figure 86. Railroad cars and caboose from Gandy Dancer, today.



Figure 87. Faux train station, today.



Figure 88. Faux railroad water tower, today.

Depots

Train stations, depots, terminals, and union stations are all stopping points along railroad lines, although each is somewhat different. While the generic term “train station” conjures up an image of a physical building, railroad companies define stations simply as stopping points, which might or might not contain buildings; rather, they might feature only a water tank, a railroad siding (a short track that parallels the main track), or a location sign. The term “depot” refers to a small building where passengers could purchase tickets, shelter while waiting for a train, and embark and disembark. In contrast, the term “terminal” refers to very large buildings in large cities that handled thousands of people (e.g., Grand Central Terminal in New York City). Finally, the term “union station” refers to a building (ranging from very small to very large) that was used by two or more different railroads (e.g., Union Station in Denver).

The Baltimore & Ohio Railway constructed two of the earliest known train depots in the United States in 1830: in Ellicott's Mills (now Ellicott City), Maryland and at Mount Clare in Baltimore, Maryland. Large terminals and union stations in cities were generally architecturally impressive buildings that were constructed of multiple materials (e.g., brick, wood, stone, and marble) and exhibited a specific architectural style (e.g., Victorian or Spanish Revival). In contrast, small town depots such as the one in Louisville were much humbler. In Colorado, depots were typically constructed of wood or stone and sometimes exhibited a few Victorian stylistic elements (e.g., steep roofs and bay windows). Train depots in small towns often served as information hubs before telephones were widely used; people would gather there to await news from people and mail arriving on the next train (American-rails.com 2018b).

In Louisville, the C&S depot became important three decades after the town's founding. In 1910, the C&S Railroad Company and the Denver Interurban Railroad Company jointly constructed the depot on the west side of the railroad tracks, south of Pine Street (Figure 89). A railroad agent and a cashier, who sold tickets, worked inside the depot. The agent/operator helped to keep the trains' movements coordinated, safe, and efficient. When a train arrived at a station, the agent reported its arrival via telegraph or, later, telephone, using a two-letter identification that was specific to each depot. If the regional dispatcher sent orders, the agent would write those down, then hand them to the train's head-end crew and caboose crew on the fly using a large hoop (which was sometimes permanently mounted near the track). Railroad crew members had to become skilled at grabbing these orders at speed. The agent/operator also controlled a semaphore system, which let the inbound train crew know if they were going to receive orders. During the twentieth century, some depots updated the semaphore system with a system of green, yellow, and red lights. However, the hoop system was used well into the 1980s (American-rails.com 2018b)! In June 1920, the agent at Louisville's C&S depot was William McCulloch (Figure 90, left) and the cashier was William "Bill" Clark (Figure 90, right). After the depot closed in 1962, the Louisville Lions Club purchased it and moved it to 628 La Farge Avenue (Figure 91), where it now serves as the Louisville Preschool (Barlow et al. 2013:29) (Figure 92).



Figure 89. C&S depot in its original location, ca.1910 to 1914 (photo credit: Louisville Historical Museum).



Figure 90. C&S depot interior, 1920 (photo credit: Louisville Historical Museum).



Figure 91. C&S depot at 628 La Farge Avenue, early 1960s (photo credit: Louisville Historical Museum).



Figure 92. 628 La Farge Avenue, today.

MINING-RELATED RESOURCES

This section of the context briefly describes the process of mining and the buildings (shops, shaft houses, tunnel houses, mine company houses), structures (adits and shafts, foundations, privies and privy pits, tipples, and rail lines, trestles, and coal cars) and other features (dumps and mines) related to Louisville's mining history. Few remnants of Louisville's coal mining heritage remain visible today, but the descriptions of coal mine-related buildings and structures provided in this section provide context for understanding coal mining and Louisville's historical mines. The mining remnants that are present are scattered across the present-day city limits and include former mine company houses and other buildings that were moved into town, a few foundations from mining-related structures, areas of subsidence, waste dumps, and names.

To mine a buried coal seam, men sank a shaft to reach the seam, then excavated a horizontal tunnel into the seam. Even in the first few decades of the twentieth century, workers used horse-powered equipment to excavate the shafts of small mines (Figure 93). The main tunnel was usually more than 6 feet tall and 3 feet wide and contained rails on which miners and mules could transport coal cars (Figure 94). This main tunnel was also called the haulageway. This was a dangerous place for people and animals due to the presence of heavy, brakeless, frequently moving coal cars and tight spaces (Bacon 2006a:8). From the main tunnel, miners excavated smaller side feeder tunnels, removing the coal in linear rooms separated by intervening supporting pillars (Figure 95). Collapsed tunnels may manifest as linear areas of subsidence although, if they are deep underground, there may be no surface indication of collapse (Fell and Twitty 2008). Lindquist (2010:10–11) provides a detailed description of the Welch Mine, as described in a September 26, 1879, article in the *Boulder News and Courier*.



Figure 93. Excavating the shaft of the Hi-Way Mine, 1927 (photo credit: Louisville Historical Museum).



Figure 94. Coal car rails and men in the Hi-Way Mine, unknown date (photo credit: Louisville Historical Museum).

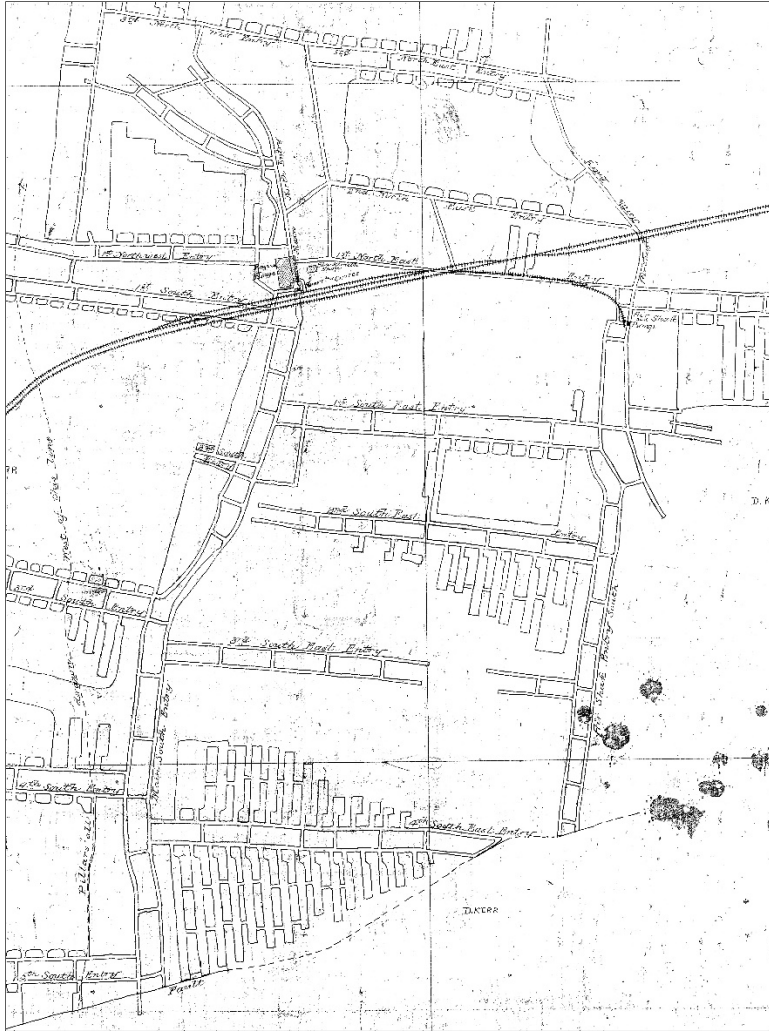


Figure 95. Excerpt of a drawing of the Welch Mine showing the room-and-pillar excavation method, unknown date (photo credit: Louisville Historical Museum).

Buildings

Shop

One of the buildings present at coal mines was a shop. The building's size depended on the size of the mining operation, but the building's role was the same: it provided a location for a blacksmith and/or other workers to repair and maintain equipment (e.g., sharpening picks, coal augers, and rockdrills), to manufacture hardware, and sometimes to do carpentry. The shop was typically located close to the adit and often within the shaft house itself (see the Shaft House section below), so that workers were sheltered from the elements and heavy and dirty equipment did not have to be transported very far (Fell and Twitty 2008).

Shaft House

A shaft house enclosed the collar of the shaft (see Adits and Shafts section below), the hoisting system, and usually the shop. Mine rail lines usually began inside the shaft house and continued outside it (Fell and Twitty 2008) (Figure 96). The shaft house might also contain a compressor for powering rockdrills and other machines (Figure 97).



Figure 96. Rex Mine No. 2 rail lines, tipple, shaft house, and other infrastructure, unknown date (photo credit: Louisville Historical Museum).

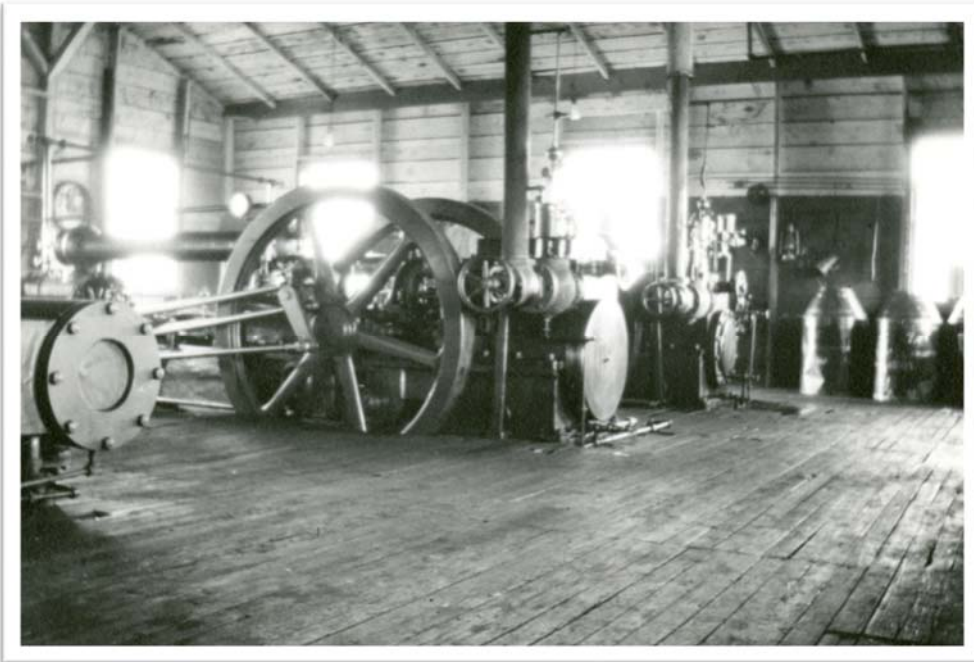


Figure 97. Compressor at the Acme Mine, unknown date (photo credit: Louisville Historical Museum).

Tunnel House

A tunnel house enclosed the portal of the tunnel and often a shop. Typically, a mine rail line continued from the tunnel through the tunnel house and beyond. A trench or flume that diverted drainage water also usually passed through the tunnel house. At large mines, a tunnel house may also have enclosed a mechanized shop and a work area where miners dressed timbers (Fell and Twitty 2008).

Mine Company Houses

At least four of Louisville's historical subdivisions (Caledonia Place [1890], Johnson's First Addition [1890], Acme Place [1893], and Kimberly Addition/Kimbertown [1911]) were platted specifically to create residential areas for or by the town's coal miners and their families. These subdivisions and their houses are discussed in *Stories in Places: Putting Louisville's Residential Development in Context, Boulder County, Colorado* (Schwendler and Corbett 2018a). In addition, large coal mining companies sometimes constructed simple housing and other buildings for their workers. These mine company houses are discussed in the Mining-Related Forms and Styles section, below.

Structures

Adits and Shafts

An adit is the horizontal opening to a mine through which coal cars, men, and mules could enter. The opening was usually less than 6×3 feet. Collapsed adits manifest as linear areas of subsidence. A shaft is a vertical or inclined opening to a mine, through which equipment, men, and mules were transported via a cage or elevator. The opening was usually at least 8×4 feet, with some shafts divided into compartments: a large hoisting compartment and smaller utility compartment. Collapsed shafts manifest as circular depressions or even holes in the ground (Fell and Twitty 2008). The haulage shaft and ventilation shaft of the former Rex Mine No. 1 and No. 2 remain on the Harney-Lastoka Farm/7th Generation Farm (Twitty 2008).

Foundations

Coal mines used different kinds of equipment depending on their size and dates of operation, but all mines needed in-ground foundations for various pieces of equipment. All shaft coal mines included concrete foundations for a hoist, boiler, vent blower, other machinery, and a tippie (Eric Twitty, personal communication, March 25, 2016). Louisville retains no above-ground mine structures. However, several foundations remain on the Harney-Lastoka/7th Generation Farm (Twitty 2008), and the former Hecla Mine's hoist foundation remains on the grounds of Balfour Senior Living, northeast of the intersection of 95th Street and South Boulder Road. Some types of foundations are distinctive and can be used to identify exactly which piece of equipment was located in a specific place. Different types of foundations found at coal mines, including those in Louisville, include the following (Fell and Twitty 2008):

- Ventilation blower (blew fresh air into the mine): timbers embedded into the ground adjacent to the mine opening; 4×3 feet or less, with four anchor bolts
- Air compressor (powered rockdrills): timber for small compressors; different kinds of rock or brick masonry or concrete foundations for large compressors

- Headframe (framework complex above a mine shaft): timber frame embedded in waste rock surrounding a shaft; the timbers flanked the shaft and extended toward the location of the hoist
- Hoist (mechanism for raising and lowering equipment via the headframe): for steam hoists, usually rectangular, flat foundations of timber with at least four anchor bolts; range from 3×2 feet to 6×6 feet, often associated with remnants of plumbing and gaskets. For gasoline hoists, elongated concrete rectangle measuring at least $6 \times 2 \times 1$ feet, oriented toward and aligned with the mine shaft, with at least two rows of three anchor bolts, with rear two closer than the others; often associated with thin wires, spark plugs, small parts, and fine machine parts
- Boiler (created steam to power hoists and other equipment in small operations): simple rock or brick supports for portable boilers; flat rock or brick masonry measuring 18×10 feet for larger return-tube boilers, often with a bridge wall (low row of bricks between the walls)
- Motor (electrical, cylindrical power source with pulley used to drive various equipment): stout, slightly rectangular concrete foundation (usually less than 5×4 feet), with four to six anchor bolts, aligned with the machine that the motor powered

Privies and Privy Pits

Most coal mine operations included one or more privies, or outhouses. These were typically small, wood-frame buildings with a door and bench that included one or more cutouts for toilet seats. Some larger outhouses had two doors. Privy pits are deep, hand-dug pits that underlie privies. They are generally less than 5 feet in diameter and at least 5 or more feet deep (Fell and Twitty 2008). Privy pits often contain abundant historical artifacts, as they were convenient places to dispose of trash and, especially, items the possessor did not want other people to see.

Tipples

Above-ground hoisting systems were necessary for pulling coal cars and other equipment and people out of coal mines. Most coal mine shafts were inclined (rather than horizontal), so mining engineers favored A-frame type hoist headframes, also known as tipples (Figure 98). Before 1910, coal companies used steam hoists; after that time, they used electric hoists (Fell and Twitty 2008). No original tipples remain in Louisville. In the 1980s, restaurateur Rick Ross brought a tipple from a New Mexico mine to Louisville to create a portion of the Black Diamond Saloon, which is now The Melting Pot at 732 Main Street.



Figure 98. Fireside Mine tippie, between 1931 and 1944 (photo credit: Louisville Historical Museum).

Rail Lines, Trestles, and Coal Cars

Coal cars that ran on rail lines were vital for removing large volumes of coal from mines (Figure 99). Because coal is relatively light, as compared to hard rock ores, mules rather than locomotives usually pulled the cars out of the mine (Figure 100). In Louisville's coal mines, those mules were stabled underground (Bacon 2006a:8). The track usually ended at a coal bin where the coal was stored or at a breaker house where miners extracted impurities and sorted coal lumps by size. A trestle is an above-ground framework that supported a rail line, walkway, or pipeline. Small trestles were often present on the sides of waste dumps to facilitate dumping. Remnants of trestles can include wood posts, piers, and partial stringers. Coal that was shipped from Louisville to other markets was loaded into much larger railroad cars (Figure 101). After a coal mine closed, the rail line was usually dismantled for re-use. However, workers often left some remnant ties and damaged or partial rails. Other remnants of coal mine rail lines are ground surface impressions from ties and the rail bed itself (Fell and Twitty 2008).



Figure 99. Mule and mule drivers in the Monarch Mine, unknown date (photo credit: Louisville Historical Museum).

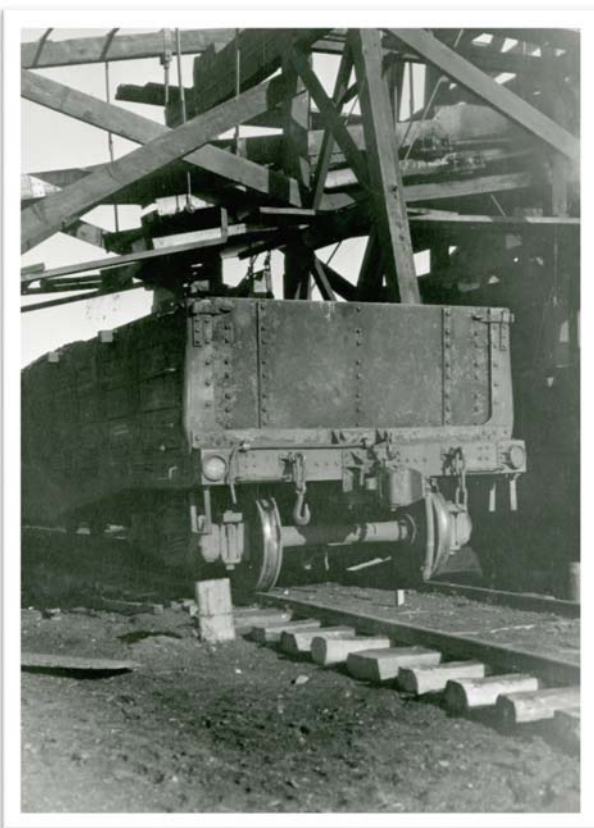


Figure 100. Coal car possibly from the Hecla Mine, unknown date (photo credit: Louisville Historical Museum).



Figure 101. Coal from the Acme Mine in a railroad car, 1917 (photo credit: Louisville Historical Museum).

Dumps

Coal mining generated large amounts of waste materials generated by different processes. These waste materials may be the most visible remnants of coal mining in Louisville today. Mine dumps comprised the rock, clay, and slate that were removed from the ground during mining, as well as the lowest quality coal that was rejected or sloughed off during processing. Coal dumps burned and smoldered continuously, reducing much of their contents to red ash. In Louisville, most dump remnants are now scattered in fields and open spaces. However, the dump from the Rex Mine No. 1, located on the 7th Generation Farm (formerly the Harney-Lastoka Farm), is highly visible from South Boulder Road (Figure 102).



Figure 102. Rex Mine No. 1 dump, today.

Historically, the Acme Mine dump (Figure 103) was also very well known, as it was located at the south end of Main Street east of present-day Hutchinson Street. Red ash from the dump was used to create roadbeds in town and, during the Great Depression, town residents gathered remnant pieces of coal to help heat their houses (Mayor 2007:1).



Figure 103. Acme Mine dump (right background), 1926 (photo credit: Louisville Historical Museum).

In contrast with mine dumps, boiler dumps comprise primarily clinkers (dark, vesicular, ashy, stone-like material that results from burning coal), with smaller amounts of slate fragments, unburned coal, and sometimes hardware. Prior to the 2013 flood, boiler clinkers were present along the Coal Creek Trail between Lafayette and Louisville. Some are still visible on Lafayette's frisbee golf course near Waneka Lake (Figure 104) although few or none are known to remain in Louisville (Bridget Bacon, personal communication, June 23, 2018).



Figure 104. Clinkers in Lafayette, today.

Mines in Louisville

This section describes Louisville's coal mines, as well as a mine located just east of Louisville (Hi-Way Mine), in alphabetical order. Dates provided are known or approximate start dates. In some cases, different names were given to the same mines that operated at different times (e.g., Lucas and Monarch). In other cases, different names were given to mines that comprised different shafts excavated into the same or overlying coal lenses (e.g., Hecla No. 1 and Hecla No. 2). Information about mine ownership, leasing, and names can be very confusing and contradictory between sources. Consultation of mine records themselves was beyond the scope of this context, so the document relies largely on dates and names provided by Roberts et al. (2001). At the same time, we include some information provided by other sources (e.g., historical newspapers and local mining history researchers). This information sometimes contradicts Roberts et al. (2001), but PaleoWest was unable to resolve the contradiction during present research. Much information is known about some of the mines (e.g., Welch, Acme, and Hecla), while very little information is known about many of the other mines. Table 4 provides a summary of primary names, alternate names (in parentheses), primary name dates of use, alternate name dates of use, if applicable (in parentheses), and code numbers shown in Figure 105.

Table 4. Louisville Area Mines and Dates

Mine Name (Alternate Name)	Date(s) of Use	Number in Figure 105
Acme	1888–1928	M1
Ajax	1890–1892	M2
Caledonia	1890–1899	M22
Old Centennial	1906–1931	M27
New Centennial	1936–1952	M28
New Crown	1938–1955	M38
Fireside	1931–1944	M53
Hecla No. 1; Hecla	1890–1899; 1899–1920	M68
Hecla No. 2; Hecla	1895–1899; 1899–1920	M68
Hi-Way	1927–1954	M71*
Old Imperial	1895–1898	M73
Leader	1893–1899	M79
Louisville No. 2	1888–1891	N/A
Matchless; Champion; Sunland	1903–1918, 1925–1927; 1917/8–1921, 1923; 1922	M94
Monarch (Monarch No. 2); Lucas	1909–1947; 1908	M107
Nonpareil (Brooks)	1907–1925	M112
Paramount (DiGiacomo)	1933–1939	M115
Regal	1935–1947	M127
Rex No. 1	1898–1917	M129
Rex No. 2	1898–1915	M130
Welch (Louisville No. 1)	1877–1888	M159
Wilson Shaft	Pre-1899	M161

Note: Gray shading denotes a mine located outside present-day Louisville.

*Blue area at far east edge of Figure 105.

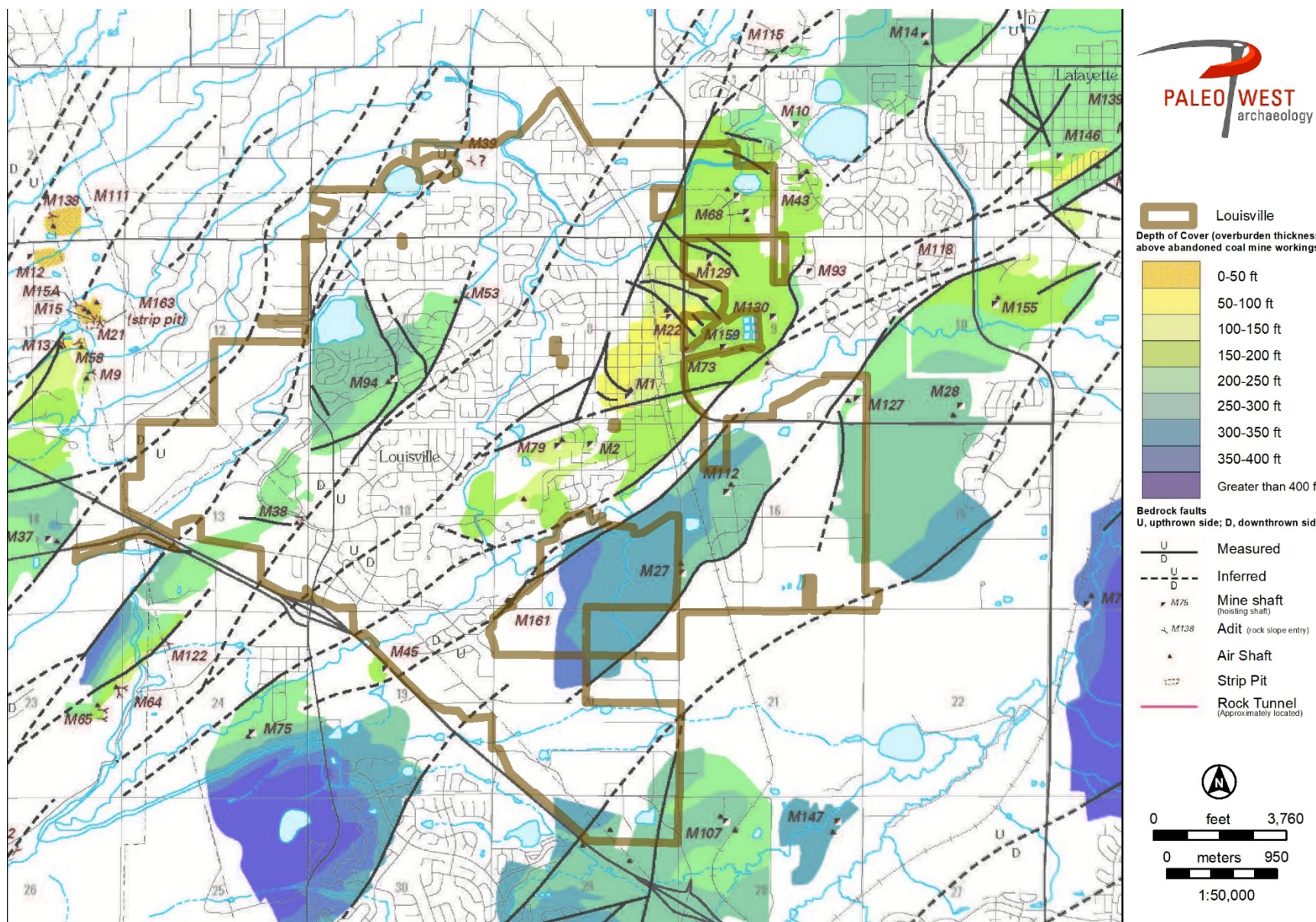


Figure 105. Locations of mines in Louisville (modified from Roberts et al. 2001).

Acme Mine (1888–1928)

The Acme Mine was the first to be developed after the Welch Mine, apparently by Joseph Donley and James Hood, in 1888 (Bacon 2008b:1; Bacon 2014b). As with the Welch Mine, many of the miners who worked in the Acme Mine during its earliest years were from English-speaking countries (Bacon 2014b:2). In 1891, Donley and Hood sold 40 acres to the Acme Coal Mining Company. The United Coal Company purchased the mine in 1893, and the Northern Coal and Coke Company purchased the mine in 1901. In 1911, the RMFC acquired the mine and operated it until the mine closed in 1928 (Bacon 2014b). The mine was idle for several stretches, including from 1899 to 1903, in 1911, and from 1913 to 1916. Details about the mine's depth vary from one source to another but according to historical sources from the time, its first shaft went about 130 feet below the surface to access an upper coal vein. A lower vein was discovered through drilling in 1903, four years after the upper seam had been depleted and the mine abandoned. Shafts used to access that vein were about 190 feet deep. The upper vein was about 8 to 10 feet thick, while the lower was about 6 feet thick. In 1905, the mine's production was 71,875 tons of coal. The following year, it was 115, 246 tons. However, as with many other mines in the Northern Coalfield, the strike of 1910–1914 reduced production; the Acme Mine produced only 35,858 tons of coal in 1910 (Pineda et al. 1986). During its life span, the mine produced a total of 1,729,282 tons of coal (Conarroe 2001).

The Acme Mine's hoist shaft, tippie, and rail car trestle were located near the present-day southwest corner of Hutchinson Street and Jefferson Avenue, with the water tank, engine house, and boiler house to the north, a blacksmith shop to the west, an office to the northwest (Figure 106), and most underground portions of the mine to the east-northeast. A railroad spur from Louisville's main north-south line connected the mine to the main railroad (Figure 107). A spur, heading east from the main railroad, led to the Louisville grain elevator (Bacon 2014b:3). The mine's massive dump (see Figure 103) was located east of the project area, just across present-day Roosevelt Avenue. In 1927, a fire destroyed the mine tippie, which contributed to the mine's closure the following year. The mine dump was removed in July 1933. The mine buildings appear to have been removed not long after the mine shut down, but the shaft was left open for many years. Boys and teenagers would dump ashes from residential ash pits down the shaft. Subsequently, people who brought traveling shows to the city camped in what became a vacant lot, and local people used the lot for baseball and softball games (Bacon 2014b).

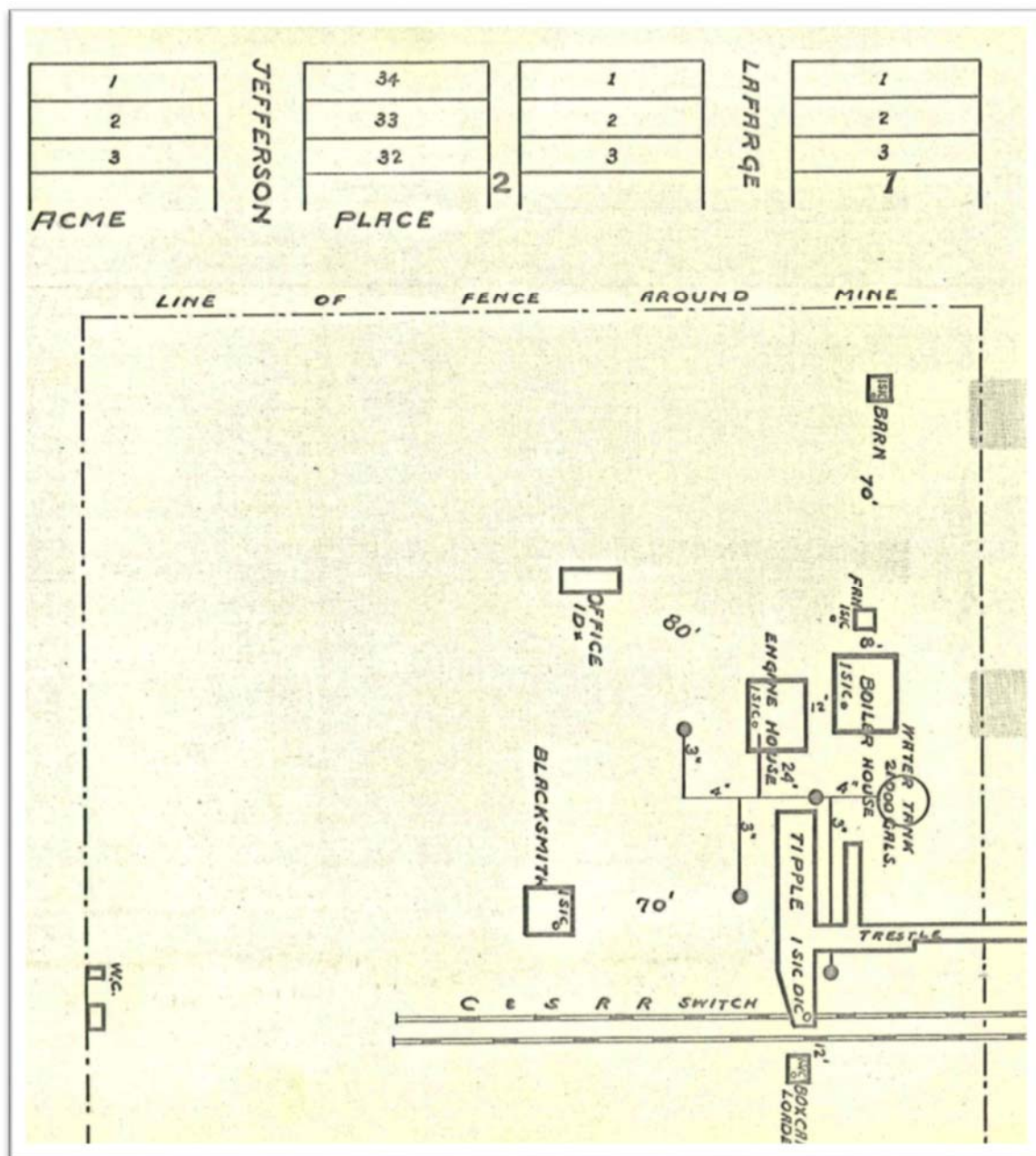


Figure 106. Excerpt of a map of the Acme Mine, unknown date (photo credit: Louisville Historical Museum).



Figure 107. Acme Mine buildings, view to west, pre-1901 (photo credit: Louisville Historical Museum).

Ajax Mine (1890–1892)

Mr. H. H. Johnson of Boulder (*The Louisville Times* 1990) opened the Ajax Mine in 1890, southwest of Louisville’s Historic Downtown, in the green space located between present-day east and west sections of Lois Drive (Enrietto 2008). In 1891, Robert (Bob) Loch obtained a five-year lease of the Ajax Mine. On June 27, 1891, M. V. Johnson was reported to be the manager of the mine but, by July 15, 1891 (*Boulder Daily Camera* 1891a), Matt Allan was set to become the new manager (*Boulder Daily Camera* 1891b). However, in 1892, the Colorado Coal and Coke Company reportedly operated the Ajax Mine (*Boulder Daily Camera* 1892a). By 1893, it was reported that John Connell had leased the Ajax Mine (*Boulder Daily Camera* 1893b), although Roberts et al. (2001) provide an end date of 1892 for the Ajax Mine. In January 1895, a miner at the Ajax [sic] had his thumb amputated after it was crushed by falling coal (*Boulder Daily Camera* 1895a). John Connell’s lease and the miner’s thumb amputation may actually be associated with the Leader Mine, which operated between 1893 and 1899 adjacent to/in the same coal seam as the former Ajax Mine.

Caledonia Mine (1890–1899)

The Caledonia Mine in 1890, on the north side of Historic Downtown, east of the railroad tracks and Short Street (Bacon 2016a). This area was situated between Little Italy and Miners Field (Enrietto 2008). On June 13, 1891, the mine produced more than 500 tons of coal, making it the top producer in the area at the time (*Boulder Daily Camera* 1891c). In 1892, many issues of the *Boulder Daily Camera* advertised “Caledonia Coal: Best in the Market.” However, that same year also saw tragedy when a mule, an Italian coal miner, and an Austrian man died in separate incidents there (*Boulder Daily Camera* 1892b, 1892c, 1892d). In 1894, after the Caledonia Mine’s shaft was extended 70 feet down, it tapped into the same coal vein that the Welch Mine had extracted from (*Boulder Daily Camera* 1894c, 1895d). In 1895, the mine’s owner, United

Coal Company, reorganized its management, with James Cannon, Jr., taking over as president (*Boulder Daily Camera* 1895e).

Old Centennial Mine (1906–1931)

Peter Peltier and Ephraim Nesbit co-owned the Old Centennial Mine, which was located near the present-day Louisville Cemetery (Enrietto 2008), between 1906 and 1931. Ephraim Nesbit began his coal mining career in Walsenburg and became a mine operator. His son, Fred Nesbit, Sr., became president of the Boulder Valley Coal Company and moved to Louisville in 1920. He and his family lived in a house on Jefferson Avenue. After the Old Centennial Mine closed, some of its buildings were moved into the town of Louisville (Bridget Bacon, personal communication, March 27, 2018).

New Centennial Mine (1936–1952)

Sometime after the Old Centennial Mine closed in 1931, Fred Nesbit, Sr., opened the New Centennial Mine to its northeast, just outside the present-day boundary of Louisville (although the underground mine extended into the boundary). In 1940, Fred Nesbit, Jr., quit school at the Colorado School of Mines and went to work full-time as the weigh boss at the New Centennial Mine, working for his father who was the manager (*The Louisville Times* 1940). The New Centennial (Figure 108) was an economically important coal mine that opened in the 1930s (Bacon 2011a:2) and continued to employ many men into the early 1950s (Bridget Bacon, personal communication, March 27, 2018). Despite somewhat more advanced mining technologies, twentieth-century mines still saw accidents. For example, in late September 1942, a cave-in occurred in the New Centennial Mine that injured Walter Phemister (*The Louisville Times* 1942a). In early December of that year, Stanley Fotis died from injuries sustained while working in the mine (*The Louisville Times* 1942b). Later that month, Samuel Barone was seriously injured in a fall in the mine (*The Louisville Times* 1942c). Historical newspapers reported many other non-fatal accidents at the Centennial and other mines during the 1940s. In 1943, the Centennial Mine and the Hi-Way Mine were burglarized, with guns taken from the Centennial Mine and blasting powder taken from the Hi-Way Mine. In early February 1944, two men were arrested in California for questioning about the burglaries (*The Louisville Times* 1944a). In June 1944, a federal inspector examined the Centennial Mine and recommended several safety improvements. At that time, the mine employed 160 men and produced approximately 760 tons of coal per day (*The Louisville Times* 1944b).



Figure 108. New Centennial Mine building, 1947 (photo credit: Louisville Historical Museum).

New Crown Mine (1938–1955)

The New Crown Mine was located west of present-day McCaslin Boulevard near S. Centennial Parkway. It opened in 1938 and had the distinction of being the last mine to close (in 1955) in Louisville (Conarroe 2001; Enrietto 2008:7).

Fireside Mine (1931–1944)

In the 1930s, during the Great Depression, coal miner Nicholas Thomas, Jr., and his sons formed the Ko-Z Coal Company and operated the Fireside Mine (Bacon 2011a:2, 2012a:12–13), located within present-day Coyote Run Open Space to the west-northwest of Louisville's Old Town. Prior to that, Nicholas Jr. had co-founded the small, independent Big Six Coal Company, which operated the Sunnyside Mine just southeast of Louisville on the present-day Carolyn Holmberg Preserve at Rock Creek Farm. Nicholas Jr. was the son of Welsh immigrant Nicholas Thomas and English immigrant Mary Oldacre Thomas. The three Thomases had come to Louisville in 1883. Nicholas Sr. was a coal miner, while Mary was a blacksmith who had made chain in England. Present-day Fireside Elementary School, located southwest of the open space, is named after this mine (Bridget Bacon, personal communication, March 27, 2018). The Fireside Mine area is experiencing a slow-moving landslide that appears to have been caused by heavy rains and flooding in 2013 (American GeoServices, LLC 2015).

Hecla Mine No. 1/Hecla Mine (1890–1899; 1899–1920)

The Hecla Mine, formerly located at the northeast corner of SH 42 and South Boulder Road, may be Louisville's most notorious mine because of the violent events that occurred there between 1910 and 1914. The Hecla Mine No. 1 opened in 1890, with Citizens Coal and Coke Company leasing the coal rights beginning in 1892. In 1899, the Hecla Mine No. 1 was combined with Hecla Mine No. 2 (together, the Hecla Mine) and sold to Northern Coal and Coke (Conarroe 2018b:4). The Hecla Mine continued to operate until 1920 (Enrietto 2008:7). In 1910, the UMWA declared a strike for better wages and working conditions in the Northern Coalfields that resulted in 3,000 coal miners walking off their jobs at many coal mines in Louisville, Lafayette, Superior, and Erie (Buffo 2014:1), including the Hecla Mine. However, Northern Coal and Coke, the RMFC, and other coal giants were looking out for their profits and did not want mining to cease during the strikes. Accordingly, they brought in other miners, sometimes paying for their transportation to their new place of employment (Conarroe 2018b:3). Many of these miners were Bulgarian immigrants who did not speak English well and may not have completely understood the situation (Bacon 2014c:1) or been able to talk to striking miners or were beholden to the mining company that paid their way to the mine (Conarroe 2018b:3). In 1910, Northern Coal and Coke created a fenced compound for the strikebreaking substitute miners (Bacon 2016d:2), who were often called scabs. As a result, the Hecla Mine compound, located on Hecla Heights, was referred to as scabtown (Bacon 2014c:1). It contained dozens of mine company houses, a casino, and other buildings within a tall wire fence, spotlights, and machine guns on towers (Figure 109). The area of workers' housing (Figure 110) was located approximately where the present-day Burger King stands at 1325 E. South Boulder Road, while the casino was located near the present-day front door of the adjacent King Soopers at 1375 E. South Boulder Road (Bacon 2013d:7).



Figure 109. Hecla Mine houses, water tank, casino, and boarding house within a fenced compound, 1914 (photo credit: Louisville Historical Museum).

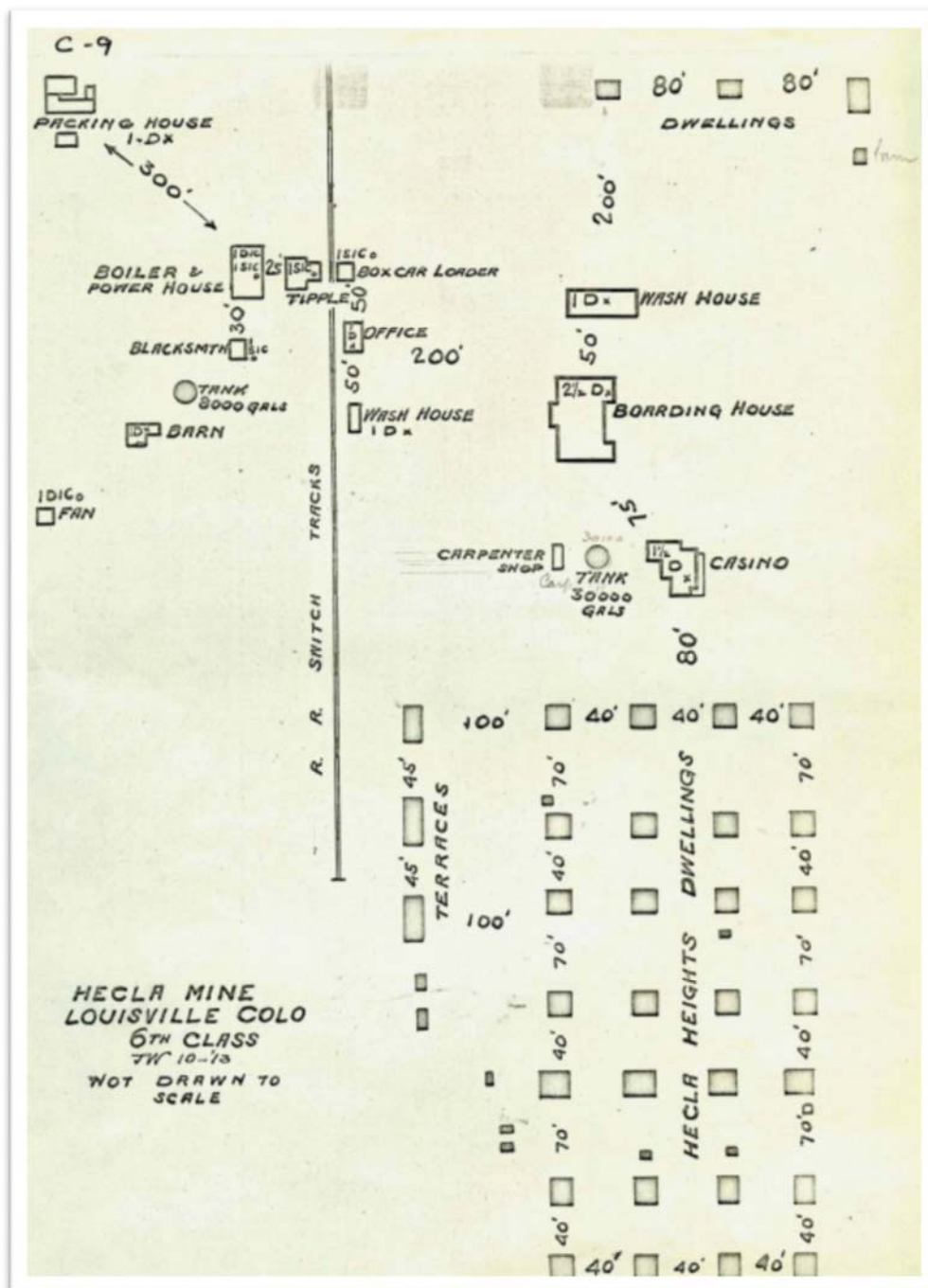


Figure 110. Drawing of the Hecla Mine camp by the RMFC, with north to left, unknown date (Bacon 2016d:6).

This tension between striking miners, on the one hand, and Northern Coal and Coke, the RMFC (which bought Northern Coal and Coke in 1911 [Conarroe 2018b:2]), and their strikebreakers, on the other hand, ebbed and flowed for the next four years. Shots were frequently exchanged between men who controlled the Hecla compound and striking miners in town. Many of the houses and outbuildings in Louisville received bullet holes. Then, on April 10, 1914, the

Colorado Militia killed four children and eleven women during the Ludlow Massacre in the Southern Coalfield, further inciting tensions in Louisville. On the evening of April 27, 1914, after report of a shooting at the Vulcan Mine in Lafayette, dozens of striking Louisville miners descended on the Hecla Mine and an estimated 25,000 rounds of ammunition were fired between detectives and strikebreakers, on the one hand, and striking miners, on the other hand (Buffo 2014). During the fighting, Bulgarian strikebreaker Pete Staneff/Stanoff was killed (Bacon 2013e:2). To re-establish peace, on April 28, 1914, Colorado Governor Elias M. Ammonds ordered 128 members of the Colorado National Guard to travel from Cañon City to Louisville. These were the same men who had participated in the Ludlow Massacre, so striking miners in Louisville were wary of more conflict. The commander of the Colorado National Guard closed all of the saloons in Louisville to try to limit violence and secret planning and an additional group of Colorado Militia were brought to Louisville. At the request of the governor, on May 3, 1914, 158 men from the Twelfth U.S. Cavalry came from Fort Robinson, Nebraska, to Louisville, to replace the Colorado National Guard and camp on Miners Field (Buffo 2014) (Figure 111). Louisville citizens viewed the federal troops as more neutral than the state militia, and the troops were generally a common and friendly presence in town (Bacon 2014c:3). Still, some violence continued; in December 1914, Italian miner Tony Perry shot Eastern European Stoyan Kojuharoff just outside the Hecla casino. Kojuharoff was a RMFC contractor who decided which men got to work at the Hecla Mine (Bacon 2013e:2). The strike ended that same month, and miners returned to work, albeit with none of the changes they had initially request (Buffo 2014:4). At the order of President Woodrow Wilson, the federal troops left abruptly on January 3, 1915, and the barracks and barns that had been constructed for them were auctioned off (Bacon 2014c:4).



Figure 111. Federal troops in Louisville, 1914 (photo credit: Louisville Historical Museum).

Hecla Mine No. 2/Hecla Mine (1895–1899; 1899–1920)

The Hecla Mine No. 2 was a shaft separate from, but located only approximately 200 feet away from, the Hecla Mine No. 1 shaft (Figure 112). The Hecla Mine No. 2 was in operation by 1895 and, like the Hecla Mine No. 1, was approximately 150 feet deep. Rex Coal Company operated the Hecla Mine No. 2. In 1899, the two mines were combined, becoming simply the Hecla Mine, and were sold to Northern Coal and Coke Company (Conarroe 2018b:4).

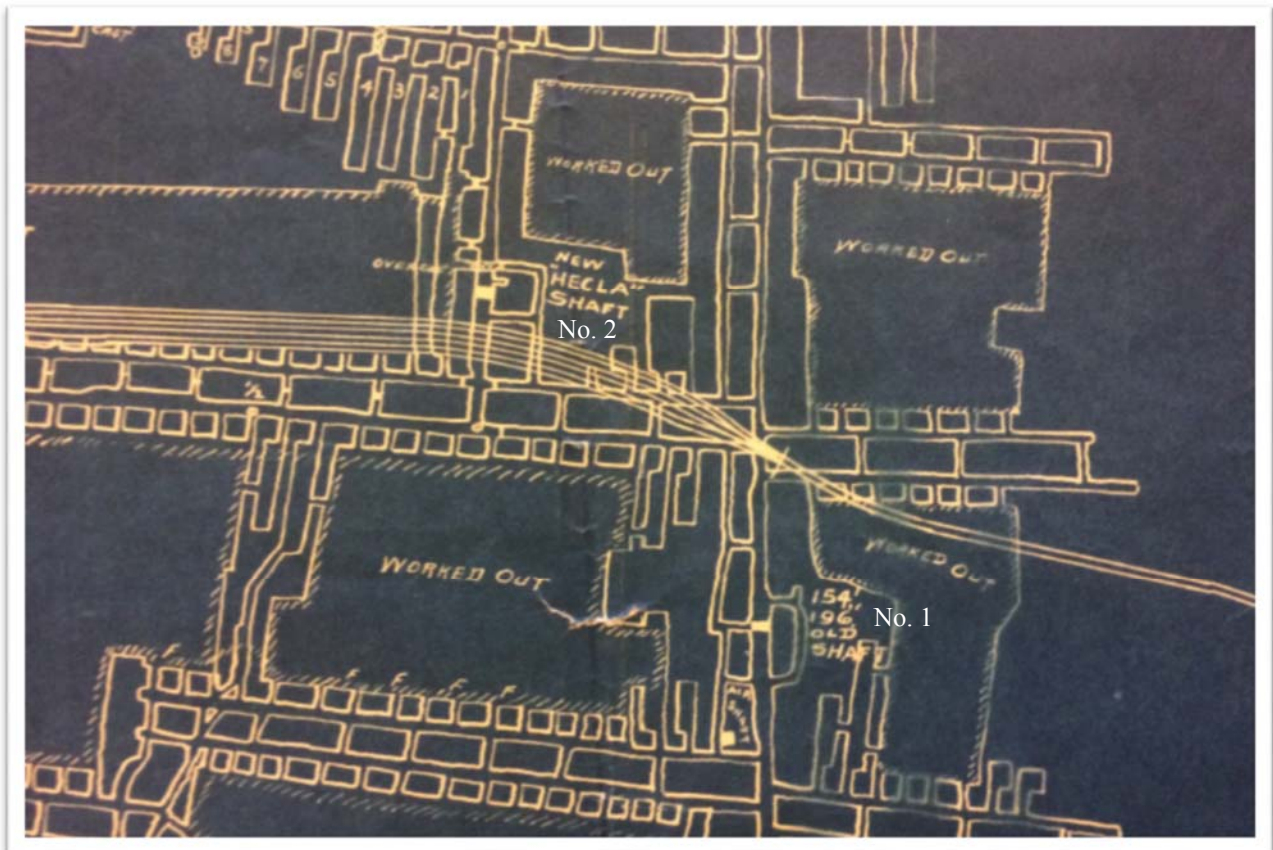


Figure 112. Drawing of the Hecla No. 1 and No. 2 Mines, unknown date (image courtesy Western History Collection, Denver Public Library, as cited in Conarroe 2018b:4).

Hi-Way Mine (ca. 1927–1954)

The Louisville-Lafayette Coal Company operated the Hi-Way Mine (Figure 113) east of the present-day boundary of Louisville and south of Lafayette during the late 1920s, just before the Great Depression. Although the mine was located outside those two towns, it was economically important for both. Like other mines that operated in the 1930s, the Hi-Way Mine exhibited increased mechanization, including electric lights and continuous coal cutter machines (Bacon 2011a). Unfortunately, these advances (as well as traditional mining methods) also had their dangers. In 1933, miner Charles Foss was electrocuted in the Hi-Way Mine when he accidentally grabbed an uncovered wire that took electricity to a coal cutting machine (*The Louisville Times* 1933). In 1935, Martin Lyons was killed, and William T. Baldwin sustained life-threatening injuries when the sheave wheel fell off the tippie and down the shaft of the Hi-Way Mine, striking both men who were in the cage ready to come above ground (*The Louisville Times*

1935). In October 1947, John Romano died of injuries sustained when he was crushed by a coal car in the Hi-Way Mine (*The Louisville Times* 1947). On a more positive note, during WWII, mines and individuals donated old files to the Army to be made into knives for soldiers. In March 1943, the Hi-Way Mine contributed by far the most, at 310 (*The Louisville Times* 1943).



Figure 113. Hi-Way Mine, ca. 1934–1937 (photo credit: Louisville Historical Museum).

Old Imperial Mine (1895–1898)

This mine was located adjoining an old (not the C&S) train depot, with a side track leading to the mine (*Boulder Daily Camera* 1896b). This location was at the northeast corner of Empire Road and S. 96th Street (Bridget Bacon, personal communication, June 23, 2018; Enrietto 2008:7).

Leader Mine (1893–1899)

Roberts et al. (2001) show the air and mine shaft of the Leader Mine to be located a few present-day streets west of the Ajax's mine shaft, near the east edge of the present-day northern Warembourg Open Space. On March 5, 1895, John Connell, president of the Leader Company, came from Denver to Louisville to address and resolve a miner's strike at the Leader Mine (*Boulder Daily Camera* 1895b). By November 1895, M. V. Johnson and John Connell owned the Leader Mine. The owners had recently purchased a new air compressor and new boilers. In addition, Mr. Connell closed a contract with the owners of the Smokeless Coal and Coke Company of Lafayette to buy their output for the year. He also increased the output of the Leader Mine from 150 to 200 tons of coal per day to 400 tons per day, making it one of the largest producers in the area at that time (*Boulder Daily Camera* 1895c). In 1896, miner Edward Robson, aged 57, was killed in the Leader Mine when a large amount of coal fell on him in the room in which he was blasting and clearing coal (*Boulder Daily Camera* 1896a).

Louisville Mine No. 2 (1888–1891)

In 1888, the Marshall Consolidated company closed the Welch Mine (also called Louisville Mine No. 1) and opened the Louisville Mine No. 2 nearby (Lindquist 2012:7). It was located southeast of the present-day Harney-Lastoka Open Space, northeast of the intersection of SH 42 and Empire Road.

Matchless Mine (1903–1918; 1925–1927)/Champion Mine (1917/8–1921; 1923)/Sunland Mine (1922)

Three men partnered to open the Matchless Mine (Figure 114) in 1903 on land owned by Harper and Otis (Bacon 2015a:3): local brothers-in-law, David Evans and Michael P. Fox; and Irish immigrant, businessman, and politician, Tom Patterson (Bacon 2018:2). The Matchless Mine was in the present-day Hillside Open Space, just east of Louisville Fire Station #2 along Via Appia. Mine tunnels extended north under Harper Lake. A railroad spur connected the mine with the main railroad track approximately where present-day Alfalfa's is located at 785 E. South Boulder Road. At least some of Via Appia probably follows the route of the railroad spur (Bacon 2018:1). Many miners walked to the mine from present-day Old Town via Spruce Lane (now W. Spruce Street), which was nicknamed the "Matchless Lane." At that time, Spruce Lane was in the countryside, outside of town (Bacon 2018:2). At least seven miners died in the Matchless Mine at different times: Swedish immigrant Carl Shostrom, English immigrants James Rees and Richard Hutchinson, and Austrian immigrants Thomas Brandacher, Ludwig "Louis" Kolb, George Batchiletti, and Moritz Wieser (Bacon 2018:2–3). In 1909, Richard Hutchinson died in a cave-in after he warned the pit boss of a prior cave-in but was forced to return to work. Hutchinson's widow, Grace Ashburn, was left with one child and another on the way. She sued the mine owners for \$5,000, with a jury awarding her \$3,500 (Bacon 2012c:3, 2018:3). The Champion Mine and the Sunland Mine were alternate names for the mine. Each mine saw sporadic use over a span of approximately 24 years (Enrietto 2008:7; Roberts et al. 2001).

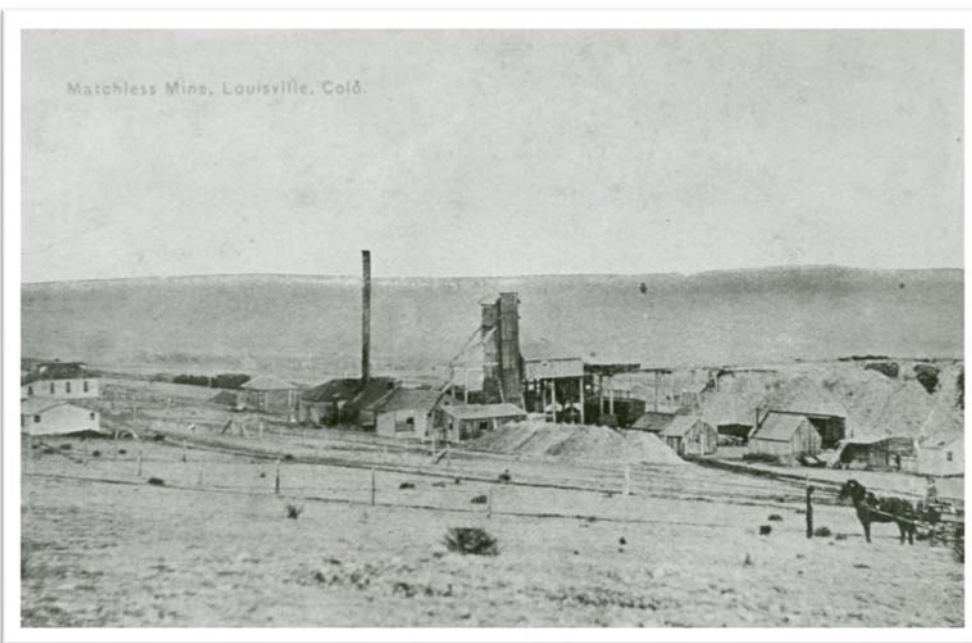


Figure 114. Matchless Mine, unknown date (photo credit: Louisville Historical Museum).

Monarch Mine (Monarch No. 2) (1909–1947)/Lucas Mine (1908)

The Monarch Mine opened in 1909 in the area north of present-day Highway 36 and Flatiron Crossing Mall. In 1908, it was also or alternatively called the Lucas Mine. The Monarch Mine is sometimes also referred to as the Monarch Mine No. 2 to differentiate it from an earlier Monarch Mine in Marshall (Roberts et al. 2001). While the Monarch Mine No. 2's air shaft and mine shaft were located just east of the present-day boundary of Louisville, the mine extended underground into the boundary. The National Fuel Company owned the mine and constructed a mining camp adjacent to the mine, with up to 80 houses for miners and their families, as well as a school, store, bunk house, and other buildings (Figure 115). A school bus drove older children to the town of Louisville for school (Bacon 2005:3) (Figure 116). Tragically, this mine saw one of the worst accidents in Louisville's mining history. Around 6:20 am on January 20, 1936, a spark of unknown origin likely ignited leaking methane gas in the mine's main haulage area, which also contained a large amount of dry, combustible coal dust. The resulting huge explosion killed eight (Raymond Bailey, Oscar Baird, Steve Davis, Tony De Santis, Joe Jaramillo, Kester Novinger, Tom Stevens, and Leland Ward) of the 10 miners who were finishing their overnight shift as more than 100 other miners assembled above-ground for the day shift at the mouth of the main shaft. Tom Stevens and Steve Davis both lived on the 1000 block of La Farge Avenue (Bacon 2008b:3). Although the mine closed down briefly afterwards, it re-opened a few months later. A Coroner's Jury determined that the National Fuel Company was responsible for the accident because the company ignored a previous order by the State Mine Inspector to clean up the abundant coal dust and dangerous conditions (Cohen 2005:1). The explosion motivated many miners to do everything they could to avoid having their sons begin coal mining (Bacon 2011a:5). The mine closed in 1947, and several of the camp houses and other buildings were moved into town. They included probably the bunk house and shower house, which together became the Wagon Wheel Inn (present-day Union Jack Liquor at 1160 E. South Boulder Road) and houses located on Jefferson Avenue and Front, Main, and Parkview Streets (Bacon 2005:3).



Figure 115. Teacher Mae Goodhue and girls at the Monarch Mine camp, unknown date (photo credit: Louisville Historical Museum).



Figure 116. Monarch Mine school bus, 1925 (photo credit: Louisville Historical Museum).

Nonpareil Mine/Brooks Mine (1907–1925)

The Brooks-Harrison Fuel Company operated the Nonpareil Mine, also called the Brooks Mine, from 1907 to 1925. The mine shaft was located east of present-day S. 96th Street and the railroad tracks, between Dillon and Empire Roads, on land formerly owned by Adolf Waeneche/Waneka, P. Murphy (Mehls and Mehls 2000).

Paramount Mine (DiGiacomo) (1933–1939)

According to Conarroe (2001:13), both the DiGiacomo and Domenico families owned and/or operated mines called the Paramount, in northeast and southwest parts of Louisville, respectively. Roberts et al. (2001) show just one Paramount Mine, however. It is located just northeast of the present-day northeast corner of Louisville. This was the Paramount Mine associated with the DiGiacomo family. The mine operated during the Great Depression.

Regal Mine (1935–1947)

The Regal Mine opened in 1935, just north of the Louisville Cemetery (Bacon 2011a; Roberts et al. 2001). In early September 1936, Frank Intihar was killed in the Regal Mine when a several-ton piece of coal sloughed off from the roof of the mine, broke three supporting timbers, and struck him on the chest (*The Louisville Times* 1936). Two years later, Ferdinand Cernich was electrocuted while repairing the transformer on a machine at the Regal Mine (*The Louisville Times* 1938). Multiple newspaper articles reported that the Regal Mine had a strong safety record during the early 1940s. However, when a federal inspector examined the mine in the spring or summer of 1944, the inspector made several recommendations for safety improvements, largely pertaining to avoiding the build-up of lethal gas. At the time of the inspection, Louis Gaspar and Tony Volsic leased the mine, which employed 160 men and produced approximately 760 tons of coal per day (*The Louisville Times* 1944b). Unfortunately, another miner, Greek immigrant John Kamakaris, was killed in the Regal Mine in early August 1945 (*The Louisville Times* 1945).

Rex Mine No. 1 (1898–1917)

The Rex Mine No. 1 opened in 1898 at the present-day southeast corner of South Boulder Road and SH 42 (Figure 117). At that time, the superintendent was English immigrant John Hutchinson (Bacon 2012a:3). As shown on the 1909 Drumm's Wall Map, the Louisville Mining Company owned the land by at least the early twentieth century (Drumm 1909). By 1914, the RMFC owned the Rex Mine No. 1 (Bacon 2014b:2). After the mine closed in 1917, use of the land reverted to agriculture under ownership of Leanna and John Mayhoffer. In 1923, the Mayhoffers sold this portion of the land to Slovak immigrants Joseph and Anna (Lipsak) Harney (described in the Kerr/Mayhoffer Farm section above) (BCPOS 2004:23).



Figure 117. Rex Mine No. 1, 1912 (photo credit: Louisville Historical Museum).

Rex Mine No. 2 (1898–1915)

The Rex Mine No. 2 was a separate shaft located southeast of the Rex Mine No. 1 (Figure 118) and southeast of the present-day Harney-Lastoka Open Space, northeast of the intersection of SH 42 and Empire Road. As with the Rex Mine No. 1, the Louisville Mining Company owned the Rex Mine No. 2 in 1909, but the RMFC took over by 1914 (Bacon 2014b:2; Drumm 1909).

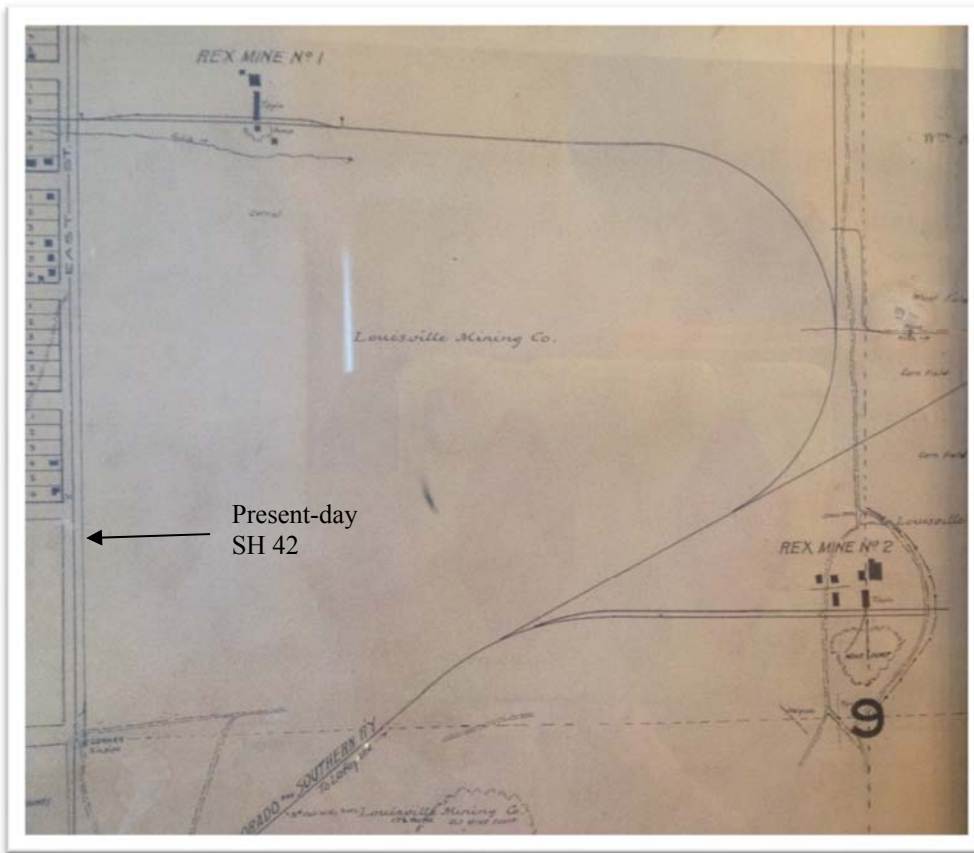


Figure 118. Rex Mine Nos. 1 and 2 on Drumm's Wall Map, 1909 (Drumm 1909).

Welch Mine (Louisville Mine No. 1) (1877–1888)

The Welch Mine, also sometimes called the Louisville Mine No. 1 (Jones 2013:1), was the first coal mine in Louisville. As discussed in the Louisville's Early Development section above, Louis Nawatny and Charles Welch coordinated their activities to open the Welch Mine in 1877. The mine was located partly on farmer David Kerr's land, northeast of the present-day intersection of Empire Road and SH 42, with the mine entrance located west of the present-day Louisville wastewater treatment plant (Lindquist 2010). Welch hired Charles Niehoff first as a fireman and then as an engineer for drilling the Welch Mine (Jones 2013:1). Nawatny initially served as superintendent of the mine, but Welch soon hired a different manager who had more experience with coal mining (Lindquist 2010). In 1879, Union Pacific railroad owner, Jay Gould, took control of the railroads in northern Colorado and purchased the rights to the Welch Mine. Because Gould had previously proven his business acumen, speculators assumed that Louisville would prosper (Lindquist 2012:1). By 1880, the Welch Mine was the largest coal mine in Colorado (Lindquist 2012:1). However, over the next several years, miners protested Gould's ruthless business practices through a series of strikes at the Welch Mine (Lindquist 2012:2–3). In early 1885, the Welch Mine closed for several weeks after a series of explosions and fires occurred in an abandoned section of the mine (Lindquist 2012:6). In 1885, Marshall Consolidated took over management of Union Pacific's mines in Louisville and Erie, including the Welch Mine. In 1888, Marshall Consolidated closed the Welch Mine (Lindquist 2012:6).

Wilson Shaft (pre-1899)

The Wilson Shaft is shown on the 1899 Willits Farm Map so the mine was operating by 1899. It was located north of present-day Dillon Road, south of Coal Creek (Enrietto 2008:7). The mine was apparently named for A. T. Wilson, who owned land along the south side of Coal Creek, northwest of land owned by Robert Bowes/Bows (Willits 1899).

Mine Ownership

Coal mines in Louisville demonstrated a juxtaposition between mines operated by “coal giants” (massive coal companies that operated numerous mines) and those operated by small, independent coal companies, groups, or families (Bridget Bacon, personal communication, March 27, 2018).

The following list provides examples of Louisville mines and the coal giants that operated the mines for at least part of their history. Dates of ownership, which do not necessarily correspond to the date range of operation, are in parentheses:

- Acme Mine: United Coal Company (from at least 1894–1910)
- Ajax Mine: Northern/Colorado Coal and Coke (in at least 1892)
- Caledonia Mine: United Coal Company (in at least 1893–1895)
- Hecla Mine (No. 1 and 2 combined): Northern/Colorado Coal and Coke (1899–1911)
- Hecla Mine (No. 1 and 2 combined): RMFC (1911–1920)
- Rex Mine No. 1: Northern Coal and Coke (in at least 1910)
- Rex Mine No. 2: Northern Coal and Coke (in at least 1910)
- Welch Mine: Union Pacific (1879–1885)

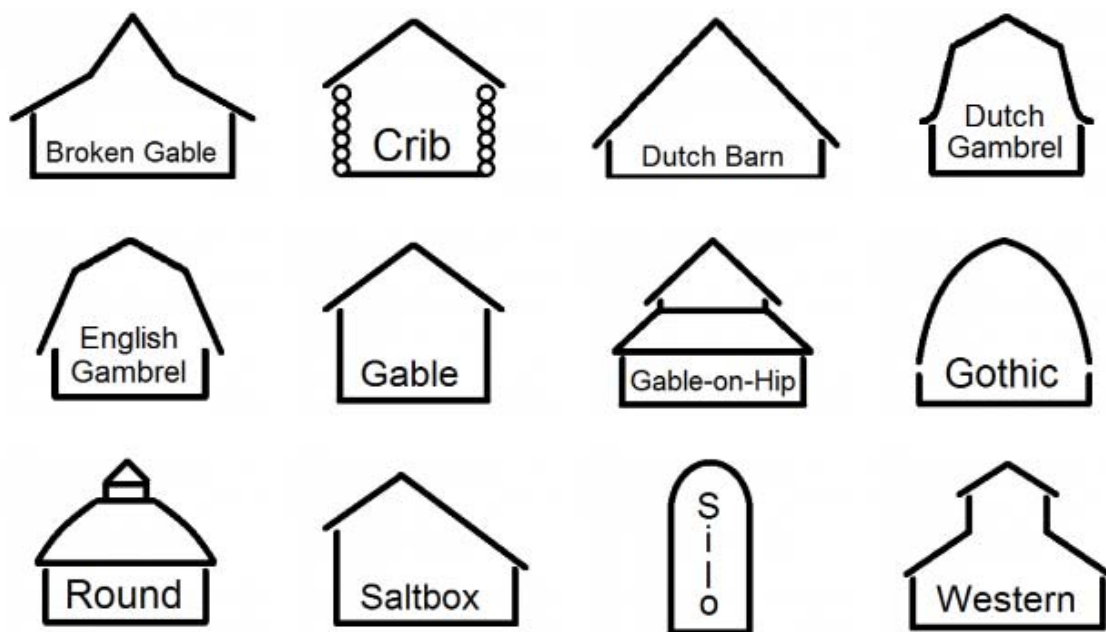
The following list provides examples of Louisville mines and the small companies or groups that operated the mines for at least part of their history. Dates of ownership, if known, are in parentheses. These do not necessarily correspond to the date range of operation:

- Acme Mine: Acme Coal Mining Company
- Ajax Mine: Leader Company (in at least 1895)
- Hecla Mine No. 1: Citizens Coal and Coke Company (1892–1899)
- Hecla Mine No. 2: Rex Coal Company (1895–1899)
- Hi-Way Mine: Louisville-Lafayette Coal Company (ca. 1927–1954)
- Leader Mine: Leader Company
- Nonpareil Mine: Brooks-Harrison Fuel Company (1907–1925)
- Old Centennial Mine: Centennial Mine Company (beginning in 1905), American Fuel Company, Boulder Valley Coal Company

The following list provides examples of Louisville mines and the families or individuals that operated the mines for at least part of their history. Dates of ownership, if known, are in parentheses. These do not necessarily correspond to the date range of operation:

- Paramount Mine: DiGiacomo family (and possibly Domenico family)
- Old Centennial Mine: Peter Peltier and Ephraim Nesbit
- Fireside Mine: Thomas family/Ko-Z Company (1930s)
- Regal Mine: John and Myron Morgan and two Denver partners

SECTION 4: AGRICULTURAL, RAILROAD, AND MINING FORMS AND STYLES



(City - County of Spokane Historic Preservation Office 2018)

AGRICULTURAL, RAILROAD, AND MINING FORMS AND STYLES IN LOUISVILLE

Louisville's important agricultural development occurred between 1866, when people first patented land in the immediate area, and in 1956, when the grain elevator closed. The key period of railroad development dates between 1877, when the Coal Creek stop was created along the CCR, and 1962, when the train depot closed. Louisville's mining development occurred between 1878, when the Welch Mine opened, and 1955, when the New Crown Mine closed. As discussed in the Agriculture-Related Resources, Railroad-Related Resources, and Mining-Related Resources sections above, these industries employed specific kinds of buildings and structures. Many of those buildings and structures do not convey specifically recognized or consistently termed architectural forms and styles. Rather, their forms were closely related to their functions and, in some cases, available materials. As such, agricultural, railroad, and mining buildings and structures are generally more indicative of their specific industry (and geographic, ethnic, and resource-specific contexts) than of a specific time period, although the latter may sometimes apply. Furthermore, researchers working in different regions and countries sometimes use different terms for the same forms. Accordingly, this section of the context addresses a small subset of the buildings and structures that were addressed in the previous sections, and that exhibit broadly recognized and defined variations in form and style. PaleoWest hopes that a greater understanding of historical industrial resources and building forms and styles will help to foster long-term public understanding and voluntary buy-in to historic preservation in Louisville.

FORMS AND STYLES IN INDUSTRIAL ARCHITECTURE

The terms "form" and "style," as applied to architecture, are used in this document. To understand how these terms function in the context of historical architecture, it is worthwhile to examine them. Different publications and researchers sometimes categorize industrial buildings (e.g., barns, train depots, and mine company houses) using different criteria (e.g., layout versus roof form), or they use different terms for similar types of buildings (e.g., Western barn and Monitor barn). To make things more complex, occasionally a single industrial building will exhibit characteristics of multiple building forms and/or styles. As a result, trying to categorize industrial buildings can be challenging. Accordingly, this historic context focuses on the most easily differentiated forms of industrial buildings (e.g., barns with different types of roofs) and references some forms and styles discussed in *Stories in Places: Putting Louisville's Residential Development in Context, Boulder County, Colorado* (Schwendler and Corbett 2018a:151). The primary source of information used here for agricultural building forms is *The Old Barn Book: A Field Guide to North American Barns & Other Farm Structures*, by geographers Allen G. Noble and Richard K. Cleek (1995). The primary source of information used for railroad building forms is the U.S. Department of the Interior National Park Service (NPS) National Register of Historic Places Multiple Property Documentation Form for Railroads in Colorado 1858–1948 (Fraser and Strand 1997). Finally, the primary source of information used for mining buildings and structures is the NPS National Register of Historic Places Multiple Property Documentation Form for The Mining Industry in Colorado (Fell and Twitty 2008). This context only includes information about industrial building and structure forms and styles that are present in Louisville.

Architectural Form generally describes the configuration of a building. Elements such as the plan, massing, shape, and internal layout combine to form a distinguishable whole that can often be categorized as a type. Form is recognized much more often in industrial buildings and structures than style due to the utilitarian (rather than high architectural) nature of industrial buildings.

Architectural Style is the combination of visual patterns and elements that can be applied to a building and connect it to recognizable movements, periods, or groups. Historically, most architectural styles used for agricultural buildings in the United States derive from British and Western European (e.g., German and Dutch) architectural traditions, due to the geographical origins of the buildings' builders (e.g., Noble and Cleek 1995). Styles used for railroad-related buildings were more diverse and included Beaux Arts, Chateau, Colonial, Gothic, Greek Revival, Italianate, Mission/Mission Revival, Revival, Romanesque, and Victorian (American-rails.com 2018b).

Clear architectural style is most prevalent where people or builders employed professional architects to construct buildings, or used pattern book plans. People who lived in small towns and rural areas generally constructed their buildings themselves or employed local craftsmen to do so, creating buildings that generally fall into folk categories. In the late nineteenth century, several lumberyards and sawmills operated in Boulder, and Louisville had a lumberyard at the northwest corner of Front and Pine Streets. In addition, the railroad made possible the transportation of large quantities of lumber and other building materials into Louisville. This allowed individual builders to obtain materials relatively cheaply and easily (McAlester 2017:105). Some miners were already experienced with building timber support systems for mine shafts, and they used the same skills to build the frameworks of their houses (Barlow et al. 2013:16) and, presumably, barns.

AGRICULTURE-RELATED FORMS AND STYLES

Farmhouses

The farmhouses seen in Louisville, either in person today or in historical photographs, exhibit a great diversity of forms. While a few have Folk Victorian stylistic characteristics, a few others were constructed in the Bungalow form, and rare examples could be called English/Norman cottages. These forms and styles, and many others, are discussed in *Stories in Places: Putting Louisville's Residential Development in Context, Boulder County, Colorado* (Schwendler and Corbett 2018a). However, most farmhouses in the Louisville area are vernacular, meaning that they met the needs and tastes of their owners, rather than conforming to a specific residential form or style. Therefore, this context does not discuss specific architectural forms and styles of farmhouses.

Barns

American barns are commonly categorized according to their plans and/or roof forms, although some typologies depend on a combination of both factors. In other cases, different roof types may be applied to a single barn or barn form (Auer 1989; Noble and Cleek 1995:35). In the early

1800s (and earlier), barns in the eastern United States were typically constructed of hand-hewn timber. By the time people began to construct barns in the western United States, in the mid- to late-1800s, standardized sizes of sawn lumber had generally replaced hewn lumber. As a result, barn forms became more regular in appearance, albeit with different forms initially connected with different ethnic groups and agricultural functions (e.g., livestock barns versus hay barns versus dairy barns) (Noble and Cleek 1995:2–3, 14). Most wooden barns are sided with vertical wood planks to help shed moisture, but if a barn is constructed by someone more used to building houses, it may feature horizontal wood planks because those are more typically used on houses (Noble and Cleek 1995:30). While different ethnic groups initially maintained their own traditions, by the early 1900s, farmers became increasingly interested in the efficiency and size of barns, with gambrel roofs often replacing gable roofs to expand storage (Noble and Cleek 1995:37). Furthermore, by that time, people could order barn plans and even whole buildings from catalogs, as well as concrete blocks molded to look like stone. The result of these trends was that, over time, barns came to look increasingly similar and to be increasingly larger (Noble and Cleek 1995:9, 14, 34).

Most barns in Boulder County are constructed as Transverse Frame (also called Transverse) barns, meaning that doors are present on both ends of the barn. These allow people, animals, and machines to pass through the length of the barn. In this respect, the Transverse Frame form developed, in part, from barns in northern Germany that also feature wagon doors in each end. This placement contrasts with other barn forms that feature doors on their sides. The Transverse Frame barn has a generally rectangular footprint and a front-gabled roof that is supported by a series of great struts or collars (Figure 119). Transverse Frame barns are constructed with a wood frame that is usually clad with horizontal wood planks, brick, or—less often—stone. Their wood frame differentiates them from Transverse Crib barns, which are constructed of logs. The availability of milled dimensional lumber of standard sizes, which could be shipped to Louisville by train beginning in the late nineteenth century, fostered the construction of the Transverse Frame barn and the form became popular across the Midwest and West at that time. Transverse Frame barns typically feature livestock and storage areas on the ground level and a hay loft above. The ground level has a central aisle with bays on each side. The bays are divided into livestock stalls, food storage cribs, and/or equipment storage/work rooms (Figure 120). The first Transverse Frame barns featured hay lofts that were accessible by interior stairs or ladders but, early on, builders of this barn form adopted gable-end exterior loft doors for easier loading of hay. Some Transverse Frame barns feature a cupola or multiple roof vents. Because Transverse Frame barns can be adapted for different and/or mixed uses, they have remained popular and increased in size (from 30 feet to as much as 100 feet long) and complexity during the twentieth century (History Colorado 2018b).

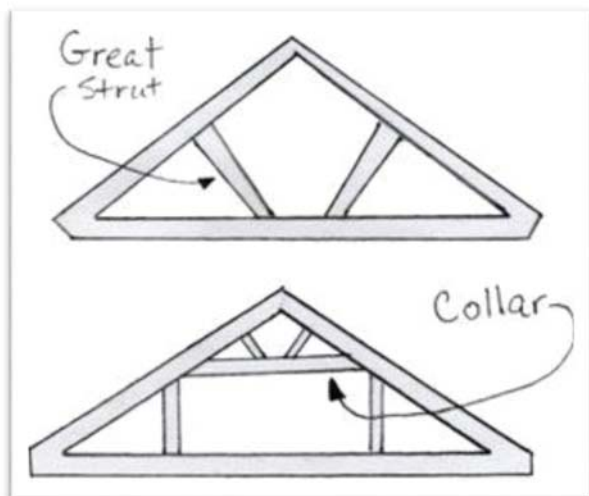


Figure 119. Drawing of Transverse Frame barn roof support variations (History Colorado 2018b).



Figure 120. Transverse Frame barn (photo credit: Carol Beam [Wolfenbarger 2006:43]).

Defining characteristics of Transverse Frame barns in Louisville are the following (adapted from History Colorado 2018b and Noble and Cleek 1995:72) (see Figure 120):

- Rectangular footprint
- Timber frame
- Front-gabled roof
- Large wagon door in both gable ends
- Central passage running parallel to roof ridge
- Livestock and storage bays on each side of central passage

A much less common form of barn construction in Boulder County is the Bank Barn (Figure 121). Bank barns are constructed perpendicular to a hillside, with doors on their sides. This configuration allows for entry to the lower level from the downslope side and to the upper level from the upslope side (History Colorado 2018c; e.g., Wolfenbarger 2006:43). No examples of Bank barns are present in Louisville.

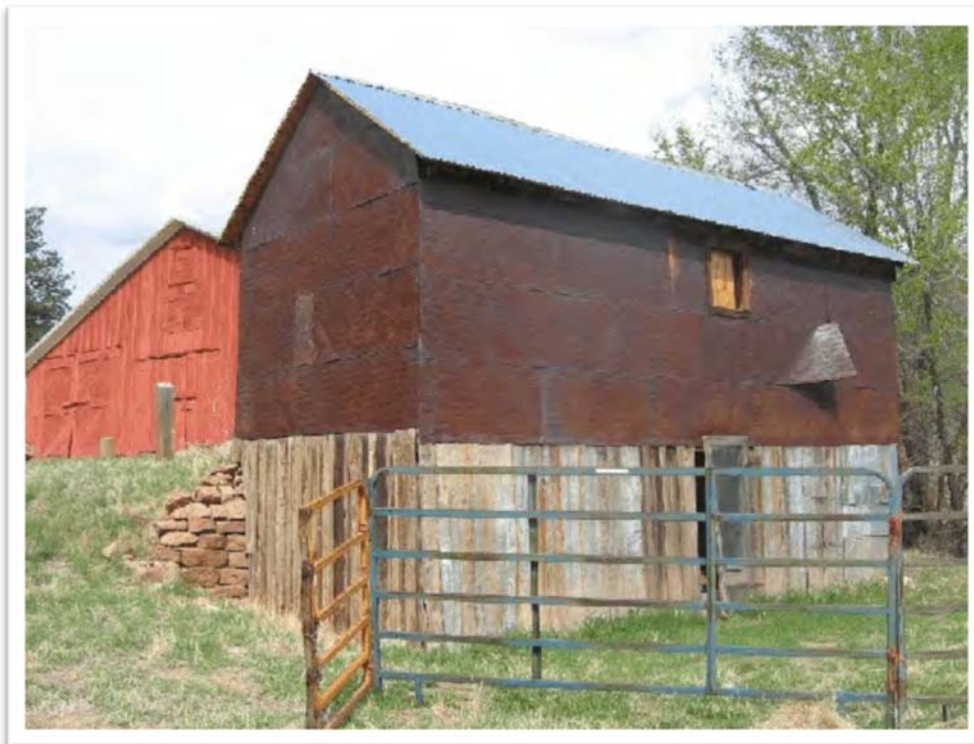


Figure 121. Bank barn at Hall Ranch (photo credit: Carol Beam [Wolfenbarger 2006:43]).

Transverse Frame barns may be constructed with diverse roof forms. Different researchers sometimes use different terms for what is essentially the same barn, depending on the region in which the barn is located and/or the features the researcher wants to emphasize. With that caveat, at least four barn roof forms are or were present in Louisville: Monitor, Gable, Broken Gable, and Gambrel.

Gable Roof Barn (ca. 1830–1910)

The simplest barn roof form is the Gable roof barn, whose roof comprises two equal slopes that meet in the middle and run the length of the barn. The earliest gable roofs were very steeply pitched so that their thatched roofs shed precipitation. However, with the development of shake and shingle (and, later, asphalt) roofs, Gable barn roofs became less steeply pitched (City - County of Spokane Historic Preservation Office 2018; Noble and Cleek 1995:35). Near and in Louisville, examples are or were seen at the Goodhue/Rock Creek Farm (Figure 122), the Naeve Farm (Figure 123), and the Warembourg/Owen Farm (Figure 124).

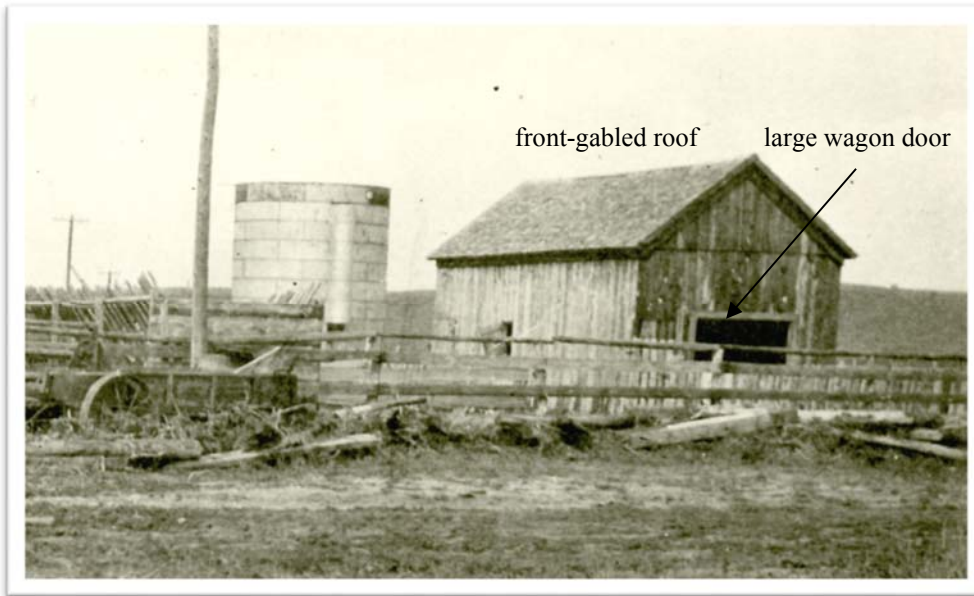


Figure 122. Gable barn on the Goodhue/Rock Creek farm, unknown date (photo credit: Louisville Historical Museum).



Figure 123. Gable roof barn on the Naeve Farm, late 1940s or early 1950s (LHM 2017).



Figure 124. Gable roof barn on the Warembourg/Owen Farm, 1948 (LHM 2017).

Defining characteristics of Gable roof barns in Louisville are the following:

- Rectangular footprint
- Timber frame
- Front-gabled roof
- Large wagon door in gable end(s)
- Livestock and storage areas on ground level
- Hay loft or other storage area on second level (optional)

Broken Gable Roof Barn (ca. 1850–1910)

The Broken Gable roof barn form comprises a front-gable roof with tall, shed-roofed lean-tos attached to one (Figure 125–126) or both (Figure 127) sides. The central gable roof is more steeply pitched than the side shed roofs. Most commonly, the lean-tos are additions to the barn that are added subsequent to the barn's initial construction; however, people sometimes constructed barns in this form all at once (City - County of Spokane Historic Preservation Office 2018). In and near Louisville, examples are or were seen on the Kerr/Mayhoffer Farm (see Figure 125), Naeve Farm (see Figure 126), and Goodhue/Rock Creek Farm (see Figure 127).



Figure 125. Broken Gable barn on the Kerr/Mayhoffer Farm, today.



Figure 126. Broken Gable barn on the Naeve Farm, late 1940s or early 1950s (LHM 2017).

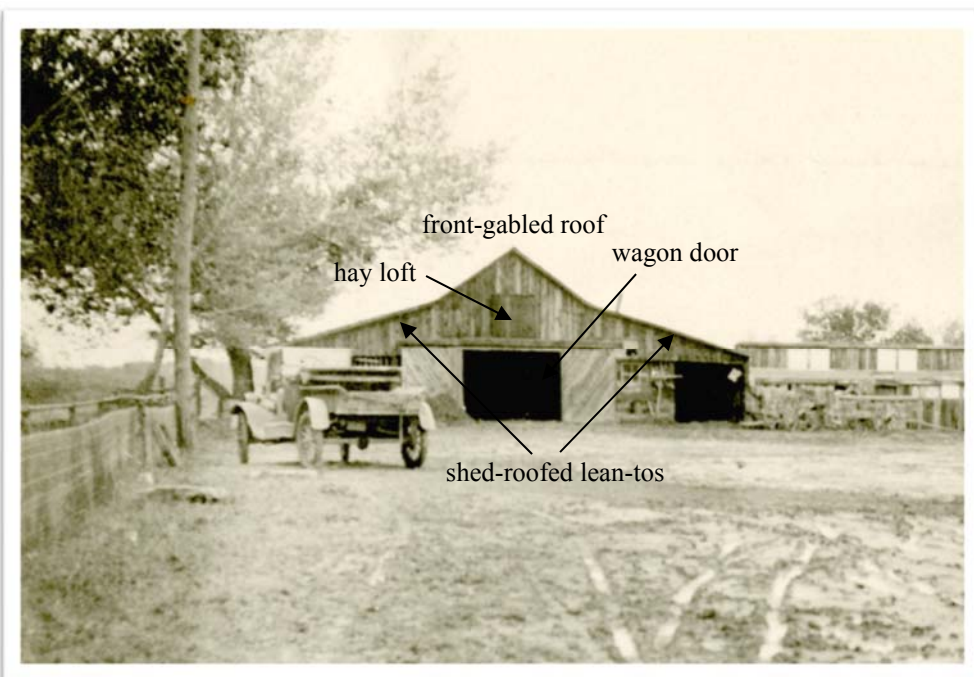


Figure 127. Broken Gable barn on the Goodhue/Rock Creek Farm, unknown date (photo credit: Louisville Historical Museum).

Defining characteristics of Broken Gable roof barns in Louisville are the following:

- Wide rectangular footprint
- Timber frame
- Central front-gable roof with shed-roofed lean-to along one or both sides
- Large wagon door in gable ends
- Livestock and storage areas on ground level
- Hay loft or other storage area on second level

Monitor Roof Barn (ca. 1880–1920)

The Monitor roof barn (Figure 128) is sometimes called a Western roof, Basilican roof, or Clerestory roof barn. It has a wide rectangular footprint due to the presence of a central, raised, front-gable roof aisle with flanking divisions (e.g., livestock and storage areas) and lower shed-roof lean-tos that run the full length of both sides of the central portion. A hay loft or other storage area may be present in the top floor of the central aisle. The raised central aisle allows for better light and ventilation and more loft storage than a simple gable roof does (City - County of Spokane Historic Preservation Office 2018; Noble and Cleek 1995:39). The central front-gable roof is separated from the side shed roofs by a short vertical wall that often features windows for monitoring the barn's surroundings. A cupola may also be present near the center of the roof. A large wagon door opens at both ends of the central aisle, with additional doors and/or windows providing exterior access and light to the shed-roofed side areas (Gordon 1992:145; Pratt 2018a). In Louisville, examples are seen at the Murphy/Warembourg Farm and formerly at the Austin-Niehoff house (Figure 129). Based on the 1900 and 1908 Sanborn Fire Insurance maps, the latter dates between those two years.

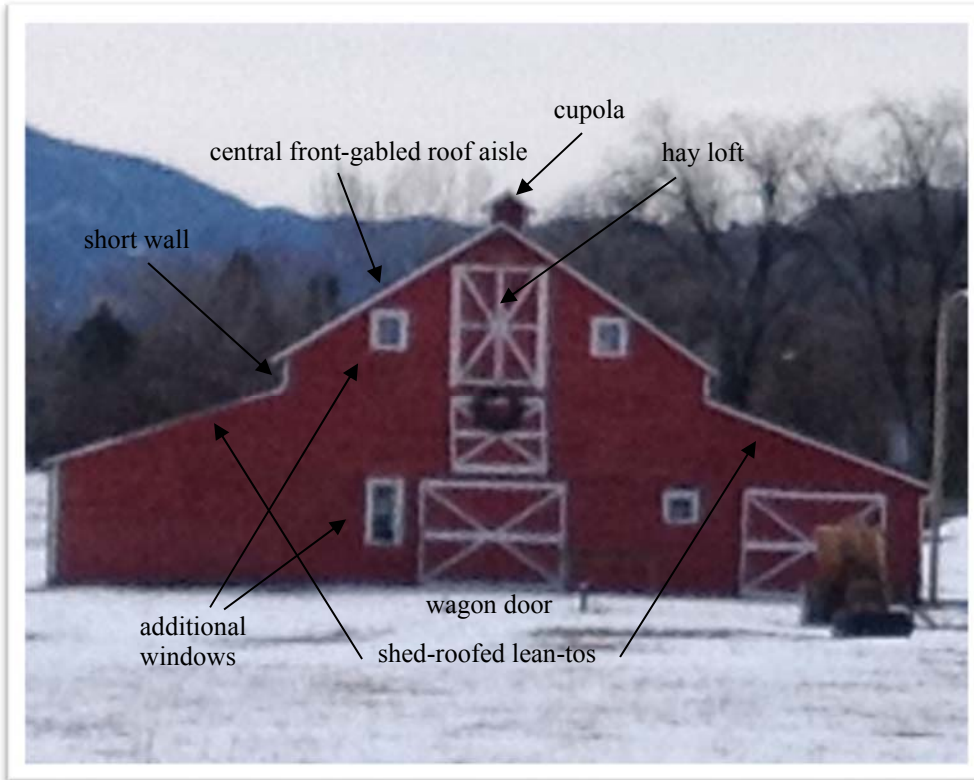


Figure 128. Monitor roof barn on the Murphy/Warembourg Farm, today.



Figure 129. Monitor roof barn formerly behind the Austin-Niehoff house, unknown date (photo credit: Louisville Historical Museum).

Defining characteristics of Monitor roof barns in Louisville are the following (adapted from Pratt 2018a):

- Wide rectangular footprint
- Timber frame
- Central, high, front-gabled roof separated from lower side shed roofs
- Windows along both side walls of the central, front-gabled roof
- Cupola
- Large wagon door in central gable ends
- Livestock and storage areas on ground level
- Hay loft or other storage area on second level, accessed and lit by door and windows

Gambrel Roof Barn (ca. 1865–1940)

Gambrel roof barns have a rectangular footprint and a symmetrical, front-gable Gambrel roof that features two slopes on each side; the upper slope is gentler and the lower slope is steeper. Gambrel roof barns are generally constructed on a timber frame but exist in two variations: Dutch and English. Dutch Gambrel roofs (Figure 130) exhibit a slight flare at the eave line, while English Gambrel roofs have eaves that extend straight past the building's walls (Pratt 2018b). The roof often features a central cupola. A large wagon door opens in one or both gable ends. A hay loft or other storage area is typically present in the upper level, with a door and windows providing exterior access and light. Gambrel roof barns may have one or more shed-roof additions to provide additional storage space. Gambrel roof barns, sometimes called Wisconsin Dairy Barns, were particularly popular on dairy farms from about 1900 to 1930 (Gordon 1992:150), although the Gambrel roof form appeared in the second half of the nineteenth century and became widespread after the Civil War (1861–1865) (City - County of Spokane Historic Preservation Office 2018). This form was frequently featured in barn equipment manufacturer's catalogues and kit designs sold by lumber companies (Gordon 1992:150). The relatively expansive Gambrel roof provides more storage capacity in the hay loft than does a gable roof (Auer 1989). In some cases, people rebuilt Gable roof barns into Gambrel roof barns to gain that additional space (City - County of Spokane Historic Preservation Office 2018). In Louisville, examples are seen at the Kilker Farm (see Figure 130) and formerly at the Rand/Showalter/Hoyle Farm (Figure 131). The latter barn, which was constructed around 1918, is somewhat unusual in that it is constructed with painted cinderblock lower walls and wood upper walls, rather than being all timber frame (Simmons et al. 2016:14–15).



Figure 130. Gambrel roof barn on the Kilker Farm, today.



Figure 131. Assessor card photograph of Gambrel roof barn on the Rand/Showalter/Hoyle Farm, 1948 (photo credit: Carnegie Branch Library for Local History, from Simmons et al. 2016:28).

Defining stylistic characteristics of Gambrel roof barns in Louisville include the following (adapted from Noble and Cleek 1995:122 and Pratt 2018b):

- Rectangular footprint
- Timber frame
- Front-gable Gambrel roof
- Cupola
- Large wagon door in gable ends
- Central passage with bays on each side, parallel to roof ridge
- Livestock and storage areas on ground level
- Hay loft or storage on second level, accessed and lit by door and windows
- Numerous small windows on sides, especially if used as a dairy barn

RAILROAD-RELATED FORMS AND STYLES

Depots

A large variety of architectural forms and styles were used historically for train depots and terminals, with styles including Beaux Arts, Chateau, Colonial, Gothic, Greek Revival, Italianate, Mission/Mission Revival, Revival, Romanesque, and Victorian. The former UP passenger train depot in Boulder, Colorado is an example of a clearly Victorian style depot, with its tall tower, archway, and stone construction (American-rails.com 2018b). The depot was built at 14th Street and present-day Canyon Street in 1890 (Roadhouse Boulder Depot 2018) (Figure 132).



Figure 132. Former UP depot in Boulder, Colorado, late 1890s or early 1900s (Roadhouse Boulder Depot 2018).

In contrast, Broomfield's (Figure 133), Lafayette's (Figure 134), and Louisville's (Figure 135) C&S depots were constructed of wood, and Lafayette and Louisville's were much smaller and humbler than Boulder's. In different ways, the Broomfield and Lafayette depots exhibit some elements of Late 19th and Early 20th Century American Movements styles (1890–1930) (Simmons and Simmons 2015), of which the Craftsman style is an example (Pennsylvania Historical and Museum Commission 2018). For example, the Broomfield and Lafayette depots both exhibit widely overhanging eaves with shaped rafter tails and the Lafayette depot exhibits decorative half timbering on its gable ends; both of these are Craftsman style characteristics. Craftsman style houses are described in detail in *Stories in Places: Putting Louisville's Residential Development in Context, Boulder County, Colorado* (Schwendler and Corbett 2018a). In contrast, Louisville's depot (constructed in 1910) does not convey as clear of an architectural style. Instead, it appears to emphasize form and functionality. While the Louisville depot has widely overhanging eaves, those eaves do not appear to have rafter tails so they do not convey a clear Craftsman style. Overhanging eaves would have been functional, not just stylistic, as they helped to protect waiting passengers from the elements. More than any style, the Louisville depot exhibits elements of the National Folk form of functional hipped-roof houses. Hipped and pyramidal-roofed National Folk houses are also described in detail in Schwendler and Corbett (2018a).



Figure 133. Broomfield C&S depot, 1912 (photo courtesy Broomfield Depot Museum, as cited in Simmons and Simmons 2015).

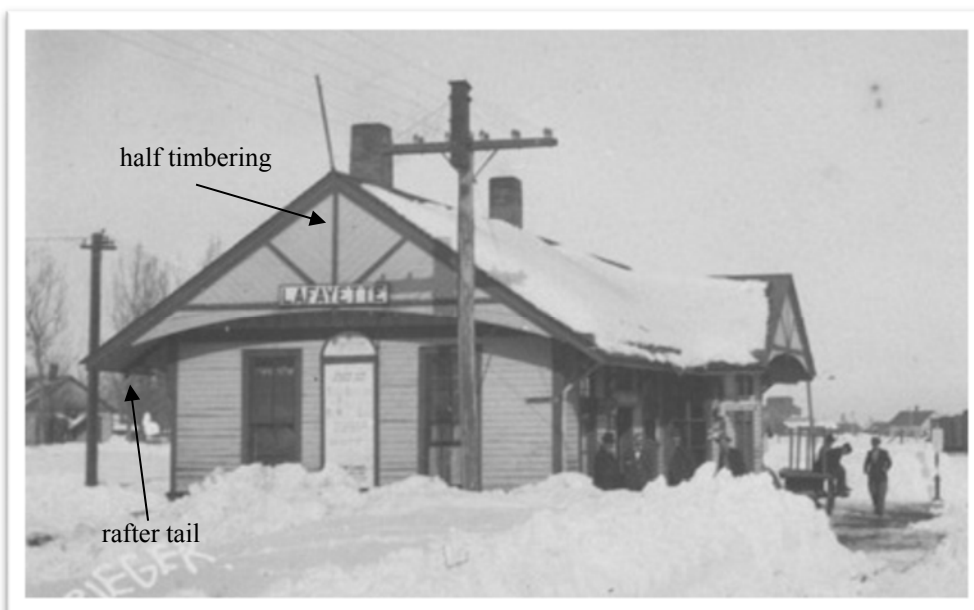


Figure 134. Lafayette, Colorado C&S depot, 1913 (photo credit: City of Lafayette Library).

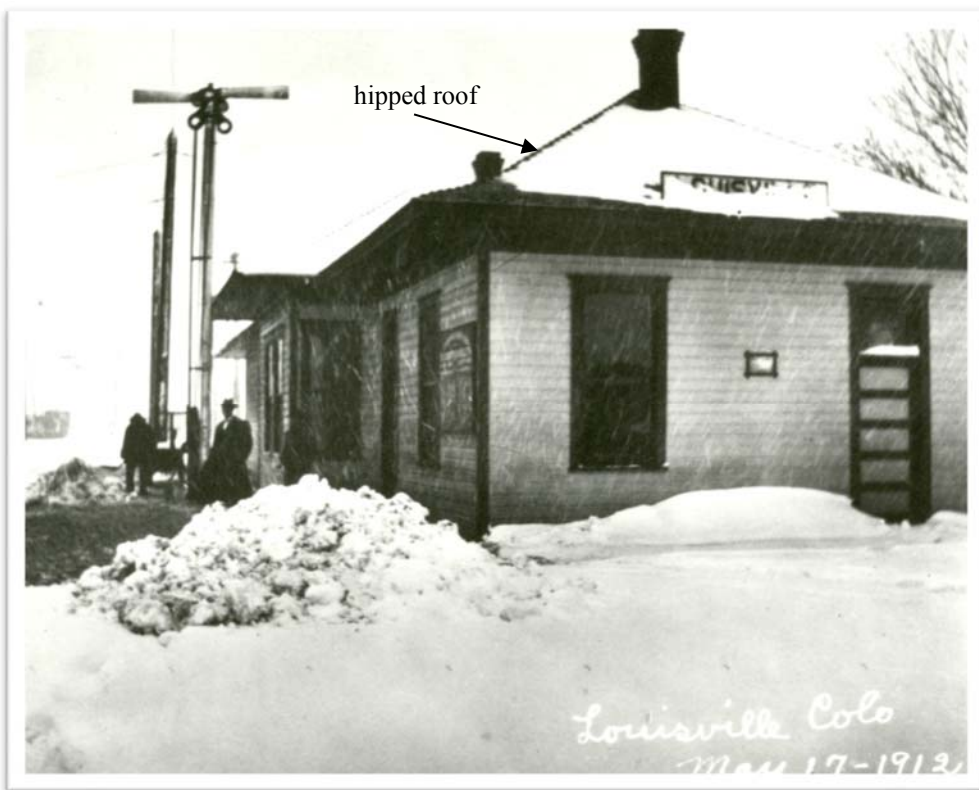


Figure 135. Louisville C&S depot, May 17, 1912 (photo credit: Louisville Historical Museum).

***M*INING-*R*ELATED *F*ORMS AND *S*TYLES**

Mine Company Houses

As mentioned in the Mine Company Houses section above, large coal mining companies sometimes constructed simple housing and other buildings for their workers. In Louisville and the rest of the Northern Coalfield, this was particularly true during the Long Strike (1910–1914) when the coal giants created fenced compounds for strikebreaking miners. Some of the mine company houses remain in Louisville today (Conarroe 2017).

In 1910, at the start of the Long Strike, Northern Coal and Coke Company commissioned Chief Mining and Construction Engineer, Robert Ansel Pierce, with creating 12 mine workers' house and boarding house designs within a few months. Pierce designed house Types E, F, H, J, K, and N. Types A, B, C, and (presumably) D had already been designed by 1907. Pierce employed elements of the Craftsman style in his houses. Those included deep eaves with exposed rafter tails, dormers, and large covered front porches. In general, the houses were less than 600 square feet and featured a hipped roof. Most of the mine company houses that remain in Louisville and neighboring Lafayette, Erie, and Superior are Types E and H. Type E houses were 20 feet wide, with a simple overhang above the front stoop (Figure 136). Type H houses were 24 feet on a side and featured a hipped front porch supported by two posts (Figure 137) (Conarroe 2017).



Figure 136. Type E house, 1910 (image courtesy Western History Collection, Denver Public Library, as cited in Conarroe 2018b:7).

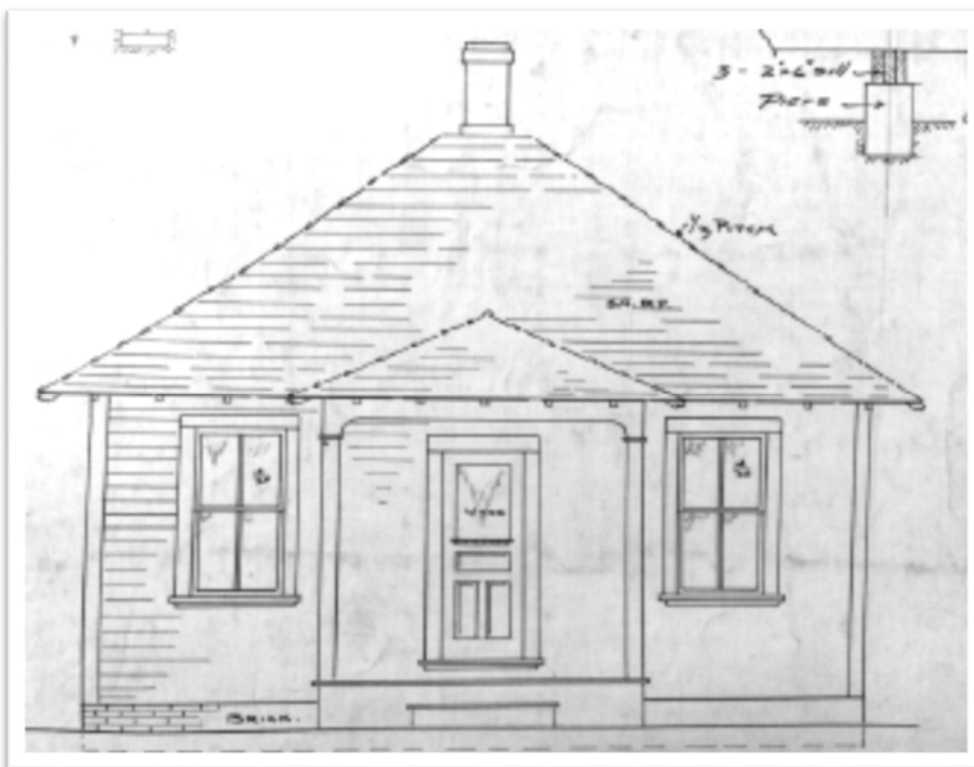


Figure 137. Type H house, 1910 (image courtesy Western History Collection, Denver Public Library, as cited in Conarroe 2017:4).

When the Rocky Mountain Fuel Company consolidated ownership of several mines after the Long Strike of 1910–1914, and again after most mines closed in the 1930s, mining companies sold many houses to private owners (Conarroe 2017:3; Lewis 2011:2). At least one historical photograph (e.g., Figure 138) shows a Type E house being moved from Hecla Heights (at the Hecla Mine) into the town of Louisville. In addition, at least two Type E houses survive in town today. Business owner J.J. Steinbaugh helped move one, located at 609 Main Street (Figure 139), to town in 1916. Today, this building houses Allstate Insurance (Figure 140). The father of Frank Domenico helped move the other one, located at 540 Lincoln Avenue (Figure 141), at an unknown date. This house continues to be a residence today (Figure 142) (Conarroe 2018b:2; Doug Conarroe, personal communication, June 15, 2018).



Figure 138. Type E house being moved from Hecla Heights into town, 1916 (photo credit: Louisville Historical Museum).



Figure 139. Assessor card photograph of 609 Main Street, 1948 (Louisville Historical Museum 2017).



Figure 140. 609 Main Street, today.



Figure 141. Assessor card photograph of 540 Lincoln Avenue, 1948 (Louisville Historical Museum 2017).



Figure 142. 540 Lincoln Avenue, today.

As described in *Stories in Places: Putting Louisville's Residential Development in Context, Boulder County, Colorado* (Schwendler and Corbett 2018a:151), other houses, located at 822, 1013, 1021, 1029, and 1040 La Farge and 548 Lincoln Avenue, appear similar or even identical (i.e., 1021 La Farge Avenue) to the Type C mine company house (Figures 143–144). The six houses have a very distinctive form that comprises a pyramidal- or hipped-roof main portion and a small, front-gabled room on the side. Saloon owner E.J. Di Francia reportedly purchased or constructed the houses at 1013, 1021, and 1029 La Farge Avenue for his daughters as early as 1906 (Bacon 2016e:1). This makes it unlikely that they originated at a coal mine, although their strong similarity to Type C houses constructed by Northern Coal and Coke Company creates questions about their origins. It is possible that private builders copied or borrowed from the coal companies' house plans (Doug Conarro, personal communication, October 10, 2017). Specifically, the blueprints for Type C say "Mine – Acme Place," suggesting a potential connection between 1021 La Farge Avenue and the Acme Mine (Doug Conarro, personal communication, August 18, 2017).

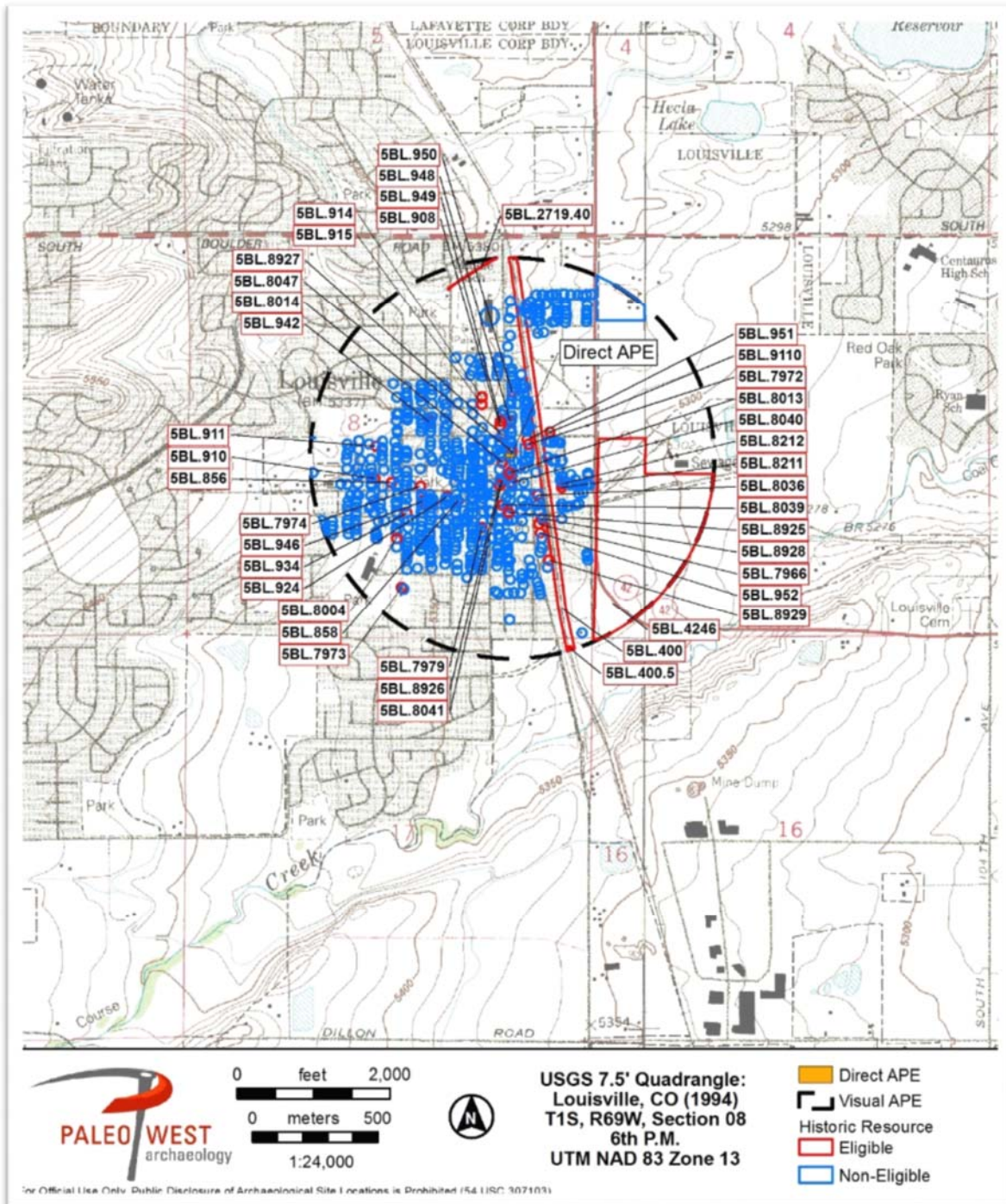


Figure 143. Type C house, 1907 (image courtesy Western History Collection, Denver Public Library, as cited in Conarro 2017:3).



Figure 144. 1021 La Farge Avenue, today.

SECTION 5: PREVIOUS DOCUMENTATION



PREVIOUS DOCUMENTATION

Mr. Bob Cronk of OAHP performed a file search of the COMPASS cultural resource database on January 6, 2017, for all of Louisville. PaleoWest requested this file search to help map the locations of sampled properties and to determine how many historical residences had been recorded previously. The file search revealed that 725 total cultural resources had been recorded previously in Louisville at that time. Of those, approximately 114 are (or were) related agriculture (76), railroad (15), and/or mining (23). PaleoWest's GIS staff used the file search results shapefile provided by OAHP to create a figure showing the locations of these industrial resources across Louisville's modern boundary (Figure 145). Only a small percentage of the large number of historical farms formerly present in Louisville have been documented in recent decades, as most former farms have been subsumed by historical and/or modern development. All of the primary irrigation ditches and railroad resources discussed elsewhere in this context have been at least partly documented. In contrast, several coal mines have not been documented, undoubtedly because most surface traces of those mines have been demolished or buried over the years. Furthermore, 10 mining-related resources that have been documented were not included in the OAHP GIS shapefile so they are not shown on Figure 145. PaleoWest used a combination of previously collected information and our own observations to investigate patterning in Louisville's agricultural, railroad, and mining resources, focusing on properties that date to 1955 or earlier since that is the end date for landmarking in Louisville (City of Louisville 2015:ii).

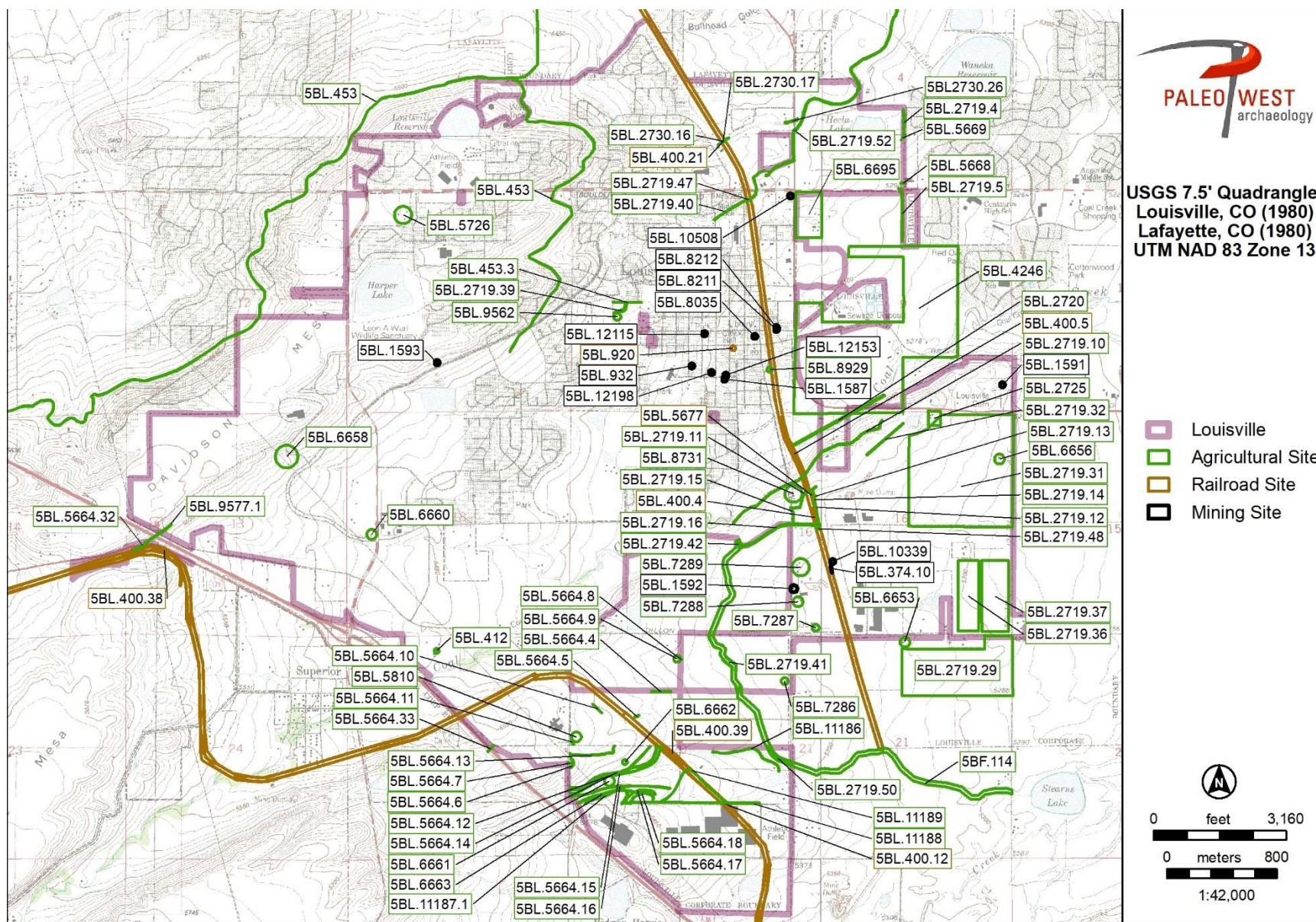


Figure 145. Locations of previously recorded agricultural, railroad, and mining resources in Louisville.

AGRICULTURE-RELATED SITES

As described above, historical agriculture-related sites in Louisville are irrigation ditches, water storage reservoirs, a grain elevator, hay storage structures and silos, barns, outbuildings, animal processing facilities, and farms. Some of these resources have been documented previously, while others have not (Table A.1).

Irrigation Ditches

At least 55 resources related to irrigation ditches and located within the present-day boundary of Louisville have been recorded so far. Those resources include 53 segments of irrigation ditches, laterals, spreaders, or inlets and two associated features representing the Goodhue Ditch, Davidson Ditch, Davidson Highline Lateral, Louisville Lateral/Community Ditch Lateral, and Community/South Boulder/Coal Creek Ditch.

Water Storage Reservoirs

One water storage reservoir in Louisville has been recorded so far: the “Coal Creek Ditch Reservoir,” which is a small, long-abandoned reservoir located south of Dillon Road, between 88th and S. 96th Streets (Gerstle and Martinez 1995).

Grain Elevator

The Louisville grain elevator has been documented several times between 1982 and 2011, at which time a historic structure analysis was completed for it to identify priorities for stabilization and rehabilitation (Anderson Hallas Architects 2011). The grain elevator was listed in the National Register in 1986 and locally landmarked in 2015.

Hay Storage and Silos

No silos or other hay storage structures in Louisville have been documented individually, although some have been recorded as elements of farms (see Farms section below).

Barns

One barn located within the present-day boundary of Louisville was documented individually but subsequently demolished: the Biella Barn (5BL412). This was one of the oldest barns in the state, dating to the late 1850s, and made of hand-hewn logs (Figure 146). The barn formerly stood on a larger farm located just northeast of Highway 36 and north of Coal Creek. The barn may have been the location of the first court case in Colorado (at that time the Kansas Territory), held by a “people’s court,” which formed when the need arose (Weiss 1981). The barn and farm were located where Coal Creek Circle and the Residence Inn stand today. Other barns have been recorded as elements of farms (see Farms section below).



Figure 146. 5BL412, the former Biella Barn, unknown date (Weiss 1981).

Outbuildings and Structures

A livestock corral, a stock shed complex, a stock dam, a two-track road, and three deteriorated “agricultural complexes” in Louisville have been recorded individually. The latter comprise livestock ponds, farm equipment storage areas, building foundations, and/or diverse artifacts (e.g., nails, wire, and fragments of bottle glass and ceramic dishes). Other outbuildings have been recorded as elements of farms (see Farms section below).

Animal Processing Facilities

No animal processing facilities in Louisville have been documented.

Farms

At least 11 farms located within the present-day boundary of Louisville have been recorded so far. Some were not given names (e.g., 5BL2725, formerly located at 10142 Empire Road) and/or no longer exist (e.g., 5BL5726, the Clara Clyncke Farm; 5BL6660, the White House Farm; 5BL8731 Waneka/Wilson/Murphy Farm). Others remain but are abandoned and dilapidated (e.g., 5BL6658, the former Hotchkiss Dairy Farm; and 5BL7288, the former Owen Farm). Still another is a former farm that retains only a few outbuildings today but is protected as open space (i.e., 5BL7286, Admor Property). Other historical farms have recognizable names and locations (e.g., 5BL4246, the Mayhoffer Farm and 5BL6695, the Harney-Lastoka Farm).

RAILROAD-RELATED SITES

As described above, historical railroad-related sites in Louisville are trains and rails and depots. Examples of all of these resources have been documented previously (Table A.2).

Trains and Rails

Thirteen segments of railroad track and one area of backdirt mounds representing the CCR, C&S, D&I, and DM&B have been documented within the present-day boundary of Louisville.

Depot

Louisville's single depot, associated with the C&S and D&I, was documented in 1985 (Mehls, Mehls et al. 1985), 2000 (McWilliams 2000c), and 2013 (Lingo et al. 2013).

MINING-RELATED SITES

As described above, historical coal mining-related sites in Louisville are buildings, structures, dumps, and mines. Examples of buildings, structures, and mines have been documented previously within Louisville's modern boundary (Table A.3).

Buildings

Many dozens of buildings (especially houses) were constructed by and/or for coal miners in Louisville. Of those, at least seven buildings that are directly related to coal mines were documented during previous projects. The seven buildings are as follows:

- Former Hecla Mine house now located at 540 Lincoln Avenue (5BL932) and discussed in the Mine Company Houses section above
- Former Hecla Mine house now located at 609 Main Street (5BL8007) and discussed in the Mine Company Houses section above
- A very small, simple “miner’s cabin” formerly located (according to its site forms) at 727 or 737 1/4 Front Street within Lot 2 Block 2 (5BL8035) that was one of seven similar, adjacent, now-demolished buildings reportedly moved to this location from an unspecified nearby mine (Figure 147) (Mehls and Fell 1985; Whissen 1982b)
- Present-day Union Jack Liquor building (5BL10508) located at 1160 E. South Boulder Road that was constructed out of the bunk house and shower house from the former Monarch Mine, referenced in the Monarch Mine section above
- The house at 515 Jefferson Avenue (5BL12198) that was created out of two formerly separate houses moved from the Monarch Mine in the 1940s
- The house at 740 Grant Avenue (5BL12115) that was moved to that location from Superior (possibly from the Industrial Mine) in the 1940s
- The house at 509 La Farge Avenue (5BL12153) that was moved to that location from Superior (possibly from the Industrial Mine) in the 1940s (Bacon 2011b:5)



Figure 147. 5BL8035 miner's cabin, 1982 (Whissen 1982b).

Structures

One railroad spur (5BL374.10), which may have originally related to the Nonpareil Mine, was recorded previously.

Dumps

No coal mine dumps have been recorded individually in Louisville but a few have been documented as part of larger coal mine complexes.

Mines

At least 13 mines, located wholly or partly within the present-day boundary of Louisville, have been recorded previously to at least some extent: Acme Mine, Ajax Mine, Caledonia Mine, Davidson Mine, Hecla Mine, Leader Mine, Matchless Mine, Nonpareil Mine, Old Centennial Mine, Old Imperial Mine, Regal Mine, Rex Mine No. 1, and Welch Mine.

ETHNIC GROUPS

Information about ethnic groups related to Louisville's agricultural, railroad, and mining history is scattered throughout this document. In sum, certain ethnic groups in Louisville were sometimes more often affiliated with specific industries than others. However, over its history, Louisville was home to diverse ethnicities that overlapped considerably in their activities and building forms and styles.

Agriculture

As discussed in the Agriculture-Related Resources and the Agriculture-Related Forms and Styles sections above, agricultural buildings are largely utilitarian. As a result, they may be constructed using a specific form but they do not often exhibit a decorative style. In some cases, the form itself may belie the ethnicity of the builder. For example, in the late nineteenth century and very early twentieth century, people of German and other northern European origins generally constructed transverse barns with openings in each gable end. People of English descent more often constructed barns that had openings in their sides (e.g., bank barns) (Noble and Cleek 1995). However, Louisville's extant barns do not appear to demonstrate ethnic patterning. A Gable roof barn is associated with Abner Goodhue, a Canadian immigrant (Goodhue/Rock Creek Farm). Broken Gable barns are associated with Goodhue and with David Kerr, who was not an immigrant (Goodhue/Rock Creek Farm and Kerr/Mayhoffer Farm). A Monitor barn is present on a farm owned by Irish immigrant Peter Murphy (Murphy/Warembourg Farm). Gambrel roof barns were used on farms owned by Irish immigrant Owen Kilker, and Canadian immigrant George Rand and non-immigrant Henry Showalter (Rand/Showalter/Hoyle Farm). In the latter cases, the presence of Gambrel roof barns was probably more closely connected with the farms' dairy operations and/or dates than with their owners' ethnicities.

Railroad

The railroad industry was complex and highly competitive. As described in the Louisville's Early Development section above, the railroad industry in the Denver/Boulder area was run largely by men who had been in the United States for at least a generation or two: William A.H. Loveland, Charles C. Welch, William A. Davidson, and Jay Gould.

Mining

Louisville's mining industry exhibited the closest ties to specific ethnicities, although those were also not absolute. Although Louisville is known for its large and active Italian population, experienced coal miners and their families from England represented the single largest nationality during Louisville's early years. In 1879, approximately 75 percent of the nearly 150 miners working in the Welch Mine were from English-speaking countries (e.g., England, Ireland, and Wales) (Lindquist 2012:1). English miners taught their mining techniques and long history of worker solidarity and activism to people in Louisville and other areas. English immigrants came from many coal-mining areas, including counties Durham, Cumbria, Northumberland,

Lancashire and West Midlands (Bacon 2012c). Members of the Kimber/Wardle family from England platted the Kimberly Addition (also known as Kimbertown) near the southwest corner of the town in 1911. Kimbertown (and Murphy Place, which was founded by Irish immigrant Peter Murphy in 1907 but became known as Frenchtown [Bacon 2016a, 2016b:2]) was separated from Louisville's downtown commercial area by the large Acme Mine dump until 1933 (Bacon 2011a:5). Many of the people who lived in the Kimberly Addition, including members of the Kimber/Wardle, Dixon, and Barker families, originated from Coffee Pot Row in Trimdon Colliery, County Durham in England (Bacon 2012c). This was a coal mining village in northeastern England that experienced great tragedy in 1882 when 74 people were killed in a mine explosion there (Durhamrecordsonline.com 2017).

Italian immigrants from diverse parts of Italy began coming to Louisville in large numbers in the 1890s. Many of them were, or became, miners. For example, coal miners Peter and Joseph Zarini immigrated to Louisville in the early 1890s. Together with their large families, they owned and lived in much of the 800 block of La Farge Avenue (Avenue L Architects 2013:4-24). However, when coal miners went on strike, coal mining companies purposely brought in strikebreakers who were of different ethnicities than the striking miners. As described by long-time Marshall resident Joann Sampson in 1989, "When one group went out on strike, say the English, then they would bring in scab labor from a different group, say the Italian or Greeks, so [there] was a language barrier and the miners couldn't get together and talk about how bad the conditions were" (oral history interview of Joann Sampson by historian Ann Dyni, as cited in Conarro 2018b:3).

As described in the Mines in Louisville section above, during the Long Strike of 1910 to 1914, large coal mining companies brought in many Eastern European miners, including Bulgarian immigrants (Bacon 2014c:1; Conarro 2018b:3). Two of those miners, Bulgarian Pete Staneff/Stanoft and Eastern European Stoyan Kojuharoff, were shot by striking miners (Bacon 2013e:2).

The daughter of a French-American coal miner explained that Frenchmen were reputed to have good carpentry skills, so they often did the carpentry work. She also stated that other ethnic groups were known for being good at doing different things in the mines, although she did not specify what those ethnic groups and tasks were (Lillian Chaussard Damyanovich, oral history provided to Bridget Bacon, December 26, 2007).

MOVING BUILDINGS AND STRUCTURES

Like many other towns, Louisville has a history of buildings and structures having been moved into town from elsewhere (see Figure 138). Historically, people did not demolish buildings the way we do today; building materials were expensive and, at times, scarce, and people generally used and reused as much as they could (e.g., Lewis 2011:3). As described in the Trains and Rails section above, four train boxcars and one caboose were moved into Louisville in the early 1970s to create a restaurant. Several coal mine houses and buildings were also moved into town after the Hecla, Centennial, Monarch, and other area mines closed. In addition, some other mining-related buildings are currently being moved to new locations within Louisville. In total, 10 of these diverse examples of relocated former coal mine buildings have been documented previously. They are described in the Mining-Related Sites section above.

In addition, several other buildings were moved from Louisville-area coal mines into Louisville but have not yet been documented. Those buildings are as follows:

- House moved from the Centennial Mine to 936 Parkview Street in 1935 (Bacon 2012d:8) (Figure 148)
- House moved (according to its assessor card) from the Centennial Mine at an unspecified date to 327 Front Street, no longer extant
- House moved from a mining camp in Erie to 1209 La Farge Avenue (Figure 149) in the 1930s. This was the Di Francia House (Bacon 2008c:9)



Figure 148. 936 Parkview Street, today.



Figure 149. 1209 La Farge Avenue, today.

SECTION 6: RECOMMENDATIONS AND SUMMARY



RECOMMENDATIONS

In this section, PaleoWest presents recommendations for future documentation and ongoing research into Louisville's agricultural, railroad, and mining development. We created these recommendations with input from past architectural inventories and historical surveys, the HPC ordinance and guidance documents, our own observations, and community input.

PRIORITIES FOR **F**UTURE **D**OCUMENTATION

In general, Louisville retains only a small percentage of its original agriculture- and mining-related resources. In contrast, Louisville retains all of its (few) key railroad-related resources. Thankfully, some industrial resources (e.g., farms and mines) that are no longer extant were documented a few decades ago when they still existed. To help increase the body of information that will tell the story of Louisville's industrial heritage to future generations, this section of the document provides recommendations for resources to be recorded. These resources comprise several large and small farms and related buildings and structures, water reservoirs, a mine dump, and several houses that are or may be related to Louisville's mining history.

For buildings and structures, recording (i.e., documentation) generally comprises a Smithsonian number and an OAHF Form 1403 Architectural Inventory Form completed by a trained architectural historian. For historical archaeological sites (e.g., irrigation ditches, railroad segments, and building foundations), documentation generally comprises a Smithsonian number, OAHF Form 1400 Management Data Form, and OAHF Form 1402 Historic Archaeology Component Form or OAHF Form 1418 Linear Component Form. A Smithsonian number is a unique trinomial that is assigned to a documented archaeological or historical resource in the United States. The trinomial comprises a leading number that identifies the state, two letters that signify the county, and final digits that indicate the order of the resources recorded in that county. For example, the trinomial 5BL6695 represents the Harney-Lastoka Farm at the southeast corner of SH 42 and South Boulder Road. The "5" is for Colorado, the "BL" is for Boulder County, and the "6695" indicates that this property was the 6,695th resource documented in Boulder County. Segments of linear resources, such as irrigation ditches and railroad segments, are usually further distinguished. For example, the trinomial 5BL2719 represents the Goodhue Ditch overall. The Trinomial 5BL2719.52 represents the 52nd segment of the Goodhue Ditch to be recorded in Boulder County. An Architectural Inventory Form records detailed information about the building(s) on the property, including their construction materials, footprint, architectural style, history of construction and modification, and eligibility for listing in the National and State Registers. A Management Data Form records detailed information about the resource's location, surrounding environment, condition, and eligibility for listing in the National and State Registers. A Historic Archaeology Component Form records detailed information about the resource's history and associated features and artifacts. A Linear Component Form records similarly detailed information, albeit as appropriate for a linear resource. During reconnaissance surveys, researchers may report only a small amount of information about a property that is easily accessible by viewing the property or doing preliminary research using assessor records. This is true for many of Louisville's commercial buildings and some of its agriculture-related resources. During intensive surveys, researchers should conduct thorough and extensive research to completely understand the history of a

property. PaleoWest recommends that any documentation of Louisville's industrial resources be intensive.

Table 5 lists 19 previously unrecorded properties that PaleoWest recommends should be documented.

Table 5. Resources Recommended for Recording

Address	Name	Related Industry	Type	Date
N/A	Hecla Lake	Agriculture	Water storage reservoir	1890s
N/A	Louisville Reservoir	Agriculture	Water storage reservoir	1888
10433 Dillon Road	Kilker Farm	Agriculture	Barn	1878
9108 Dillon Road	Bowes Farm	Agriculture	Farm	1893
212 Front Street	Murphy/Warembourg Farm	Agriculture	Farm	1905
100 W. Spruce Street	N/A	Agricultural	Former small farm	ca. 1920
101 W. Spruce Street	Henning House	Agricultural	Former small farm	ca. 1951
109 W. Spruce Street	N/A	Agricultural	Former small farm	ca. 1925
309 W. Spruce Street	Pickett House	Agricultural	Former small farm	ca. 1923
310 W. Spruce Street	Gosselin Farm	Agricultural	Former small farm	ca. 1930
501 W. Spruce Street	Fiechtl House	Agricultural	Former small farm	ca. 1920
504 W. Spruce Street	Brimble House	Agricultural	Former small farm	ca. 1925
1013 La Farge Avenue	N/A	Mining?	Residence	1906
1021 La Farge Avenue	N/A	Mining?	Residence	1906
1029 La Farge Avenue	N/A	Mining?	Residence	1906
1040 La Farge Avenue	N/A	Mining?	Residence	1912
936 Parkview Street	N/A	Mining	Residence	1920
1209 La Farge Avenue	Di Francia House	Mining	Residence	1908
Harney-Lastoka/7th Generation Farm	Rex Mine No. 1 Dump	Mining	Mine dump	1898–1917

PRIORITIES FOR **F**URTHER **I**NVESTIGATION

Avenues of further investigation for Louisville's agricultural development are the types of crops local farmers grew, the distance over which Louisville agricultural products were exported, and the role Louisville farmers played in the regional economy over time. For example, sugar beets came to be vital for the region's twentieth-century economy in the neighboring city of Longmont and supported the immigration of many Mexican laborers to the region. This changed ethnic dynamics in the area. What role, if any, did Louisville farmers play in the sugar beet industry?

Delving into the detailed history of Louisville's striking coal miners and the strikebreakers was beyond the scope of this historic context. However, the topic of strikebreakers in Louisville would be a good avenue of future investigation that would help enrich knowledge of Louisville's mining history and ethnic relations (Taylor 2010).

PaleoWest also recommends further investigation of six properties, two of which have already been documented, because they may have the potential to yield further information about industrial development and patterning in Louisville (Table 6). *Stories in Places: Putting Louisville's Residential Development in Context, Boulder County, Colorado* also recommended these properties for further investigation (Schwendler and Corbett 2018a). In addition to recording the four properties that have not yet been documented, PaleoWest recommends further investigating the potential relationships among those properties to see if they have similar or intertwined origins.

Table 6. Properties Recommended for Further Investigation

Smithsonian Number	Address	Date	Industry	Type
5BL12470	548 Lincoln	1909	Mining?	Miner's house
N/A (not yet recorded)	1013 La Farge	1906	Mining?	Miner's house
N/A (not yet recorded)	1021 La Farge	1906	Mining?	Miner's house
N/A (not yet recorded)	1029 La Farge	1906	Mining?	Miner's house
N/A (not yet recorded)	1040 La Farge	1912	Mining?	Miner's house
5BL1991	822 La Farge	1900	Mining?	Miner's house

EVALUATION FOR LANDMARKING AND DEMOLITION STAYS

The Agriculture-Related, Railroad-Related, and Mining-Related Forms and Styles in Louisville sections of this historic context provide lists of the common features of various industrial architectural forms and styles observed in Louisville. While an industrial building or structure does not need to retain every feature on the list (and may never have had every feature), it should exhibit a number sufficient to be clearly recognizable as that form or style.

Historic Integrity

All properties change over time. An industrial building or structure that is used for a consistent purpose over the course of its history may remain largely the same in architecture and appearance. However, if the industrial use changes, the building or structure may see substantial remodeling to become more appropriate for its new use. Most industrial buildings and structures fall somewhere within these two extremes. The National Register Bulletin, “How to Apply the National Register Criteria for Evaluation,” explains that the Secretary of the Interior’s *Standards and Guidelines for Archeology and Historic Preservation* (Standards) defines historic integrity as “the ability of a property to convey its significance” (Andrus et al. 2002:44). The bulletin also presents seven aspects of integrity that should be considered, both separately and collectively, to determine if a property successfully conveys its significance (Andrus et al. 2002:44–45). Interpretations of the seven aspects of integrity are as follows:

- *Location: The building remains in the place where the historic property was constructed or the place where an historic event occurred.* Recently moved properties rarely retain sufficient integrity of location to support eligibility, although a property that was moved historically could potentially retain integrity of location. As discussed above, several buildings in Louisville were moved into the city from surrounding coal mines or other towns, so this pattern is historically important itself. If whatever first made a building historically important is still present or occurred after the building was moved, the building could still have enough other aspects of integrity to convey its significance. A building that exhibits clear architectural innovation or distinction could still be significant, although its integrity of location and setting would be negated. On the other hand, if an important historical event occurred in association with the building after it was moved, then the building’s integrity of location would be intact. Finally, if a building was moved so very long ago that it is understood to have essentially always been in its current location, it could have “re-attained” historic significance and integrity of location.
- *Design: The combination of elements that create the form, plan, space, structure, and style of a building are still intact.* These elements may represent historical technologies or functions, or an historical cultural ethos that, although it is no longer prevalent, can be better understood through the lens of historical architecture.
- *Setting: The physical environment of an historic property remains the same or similar to what it was at the time for which it is significant.* This aspect of integrity addresses the relationship between the building or structure and its environment; it considers whether the surroundings of the resource are essentially the same or similar to what they

originally were. For 1890 farm buildings that are surrounded by a 2012 business park, integrity of setting may no longer be present. Yet, for a 1905 railroad segment that runs through an industrial part of town, integrity of setting may be intact despite the addition of 1990s warehouses adjacent to the railroad.

- *Materials: Physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form an historic property remain the same or similar to what they were originally.* The materials that are chosen by owners and/or builders and the ways in which these materials are used can be important indicators of the values and preferences of people in the past. Among the considerations that help determine a building or structure's significance are the materials' origins (imported from afar or obtained locally) and architectural use (support traditional ideas or represent architectural innovation).
- *Workmanship: The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory remains the same or similar to what it original was.* This aspect of integrity is the statement of skill and care used by the builders of a property. As with materials and design, workmanship may be a testament to local traditions, businesses, and/or values.
- *Feeling: A property's expression of the aesthetic or historic sense of a particular period of time remains detectable.* This is arguably the most abstract of the seven aspects of integrity. Feeling can be understood as the result of the other aspects of integrity taken in combination, and their ability to work together to create a sense of the past.
- *Association: A direct link exists between an historic property and an historically important event or person.* This aspect of integrity is rarely applied to properties whose significance is architectural; it is more commonly applied to properties that are important for their association with important events or people. As with feeling, this aspect of integrity depends on individual perception and should be considered only when other aspects of integrity are sufficiently present to support a building or structure's eligibility.

Linear resources such as irrigation ditches and railroads present special cases, in that changes in materials and workmanship over time may not diminish their integrity or preclude them from being significant. As long as both types of resources are in use, they typically must be maintained on a regular basis. For irrigation ditches, that means periodically being dredged and having vegetation cut down or removed from banks, and having head gates and other infrastructure replaced, as needed. For railroads, that means having ties, rails, switches, and other elements replaced as they wear out. Because maintenance activities are necessary for the continued use and longevity of linear resources, they are not considered, in themselves, to be detrimental. However, the ways in which maintenance is carried out, and the changes that are made as a result, should be evaluated for their impacts on the resource's integrity. For example, dredging a hand-dug dirt irrigation ditch but otherwise leaving the ditch as-is does not reduce integrity. Lining a dirt irrigation ditch with concrete would negate the ditch's integrity of materials and workmanship, although if the ditch retains its location it may still convey enough integrity to be significant. Replacing old wooden railroad ties with new wooden ties, or old steel

rails with new steel rails, does not diminish the railroad's integrity of materials and workmanship. Replacing old wooden ties with experimental fiberglass ones, or removing rails and ties and leaving only the roadbed, would negate the railroad's integrity of materials and workmanship. However, if the railroad retains its location, setting, and feeling it may exhibit enough aspects of integrity to convey significance (e.g., Fraser and Strand 1997:148).

Chapter 15.36 of the Louisville Municipal Code defines the criteria for designating a building or structure as an historic landmark, or a group of buildings and structures as an historic district. The criteria include four aspects of integrity, which are largely related to, but not exactly the same as, the seven aspects of integrity included in the Standards. The seven aspects provide background information that could be helpful when applying Louisville's four criteria of integrity. For a property to be designated an historic landmark, or to be worthy of a stay of demolition, most designating entities require that the building or structure retain sufficient integrity to convey the building's or structure's historic significance. For architecture, some aspects of integrity may be absent, while others are intact, and it is the responsibility of the City's staff liaison and/or HPC to determine if those aspects are present in the quantity or combination warranted to support designation or a stay of demolition. In general, buildings and structures that are eligible for landmarking under one or more architectural criteria should, at a minimum, retain integrity of location, design, materials, and workmanship. More important aspects of integrity for buildings and structures that are eligible for landmarking under one or more social criteria may include location, setting, feeling, and association. Buildings and structures that are eligible under one or more geographic/environmental criteria should at least retain integrity of location, setting, and feeling. In all cases, however, the more aspects of integrity a building or structure conveys, the stronger the argument a property owner or the HPC can make for landmarking or stay of demolition. In the cases of unique, unusual, or last-remaining buildings and structures, those rare qualities may outweigh limited integrity. The HPC should exercise their authority to weigh the details of each case brought before them, while still consistently upholding the law and spirit of the preservation ordinance.

In some cases, a resource may be of an age that places it within a period of historically significant development for that community, but the building no longer retains sufficient integrity to convey its history to those who encounter it, or the building is not one of the best examples for doing so. In those cases, marked physical changes may be allowable, although they may further erode the historic fabric of the town.

Agriculture-Related Resources

The Agricultural Resources of Boulder County Multiple Property Documentation Form (Wolfenbarger 2008) discusses eight property types (listed below) that are relevant to Louisville. This document is invaluable for evaluating the potential significance of agriculture-related resources in Louisville, particularly for the National Register. Rather than reiterate the information provided for each property type, this section of the context provides a brief summary of the HPC's criteria for historic landmark designation (e.g., A6, B1, C2) (City of Louisville 2018) that could most likely pertain to the resource type, assuming the resource retains sufficient integrity. The eight property types are as follows:

- **Farms, ranches, agricultural districts and rural cultural landscapes**
 - A6: Architectural - represents a built environment of a group of people in an era of history that is culturally significant to Louisville
 - A7: Architectural - pattern or grouping of elements representing at least one of the above criteria
 - B1: Social - site of historic event that had an effect upon society
 - B2: Social - exemplifies cultural, political, economic or social heritage of the community
 - B3: Social - association with a notable person or the work of a notable person
 - C1: Geographic/Environmental - enhances sense of identity of the community
 - C2: Geographic/Environmental - an established and familiar natural setting or visual feature that is culturally significant to the history of Louisville

- **Farmhouses, ranch houses, and worker housing**
 - A1: Architectural - Exemplifies specific elements of an architectural style or period
 - A4: Architectural - represents an innovation in construction, materials or design
 - A5: Architectural - style particularly associated with the Louisville area
 - A6: Architectural - represents a built environment of a group of people in an era of history that is culturally significant to Louisville
 - A8: Architectural - significant historic remodel
 - B2: Social - exemplifies cultural, political, economic or social heritage of the community
 - B3: Social - association with a notable person or the work of a notable person

- **Barns and secondary outbuildings**
 - A1: Architectural - Exemplifies specific elements of an architectural style or period
 - A4: Architectural - represents an innovation in construction, materials or design
 - A5: Architectural - style particularly associated with the Louisville area
 - A6: Architectural - represents a built environment of a group of people in an era of history that is culturally significant to Louisville
 - A7: Architectural - pattern or grouping of elements representing at least one of the above criteria
 - A8: Architectural - significant historic remodel
 - B2: Social - exemplifies cultural, political, economic or social heritage of the community
 - C1: Geographic/Environmental - enhances sense of identity of the community
 - C2: Geographic/Environmental - an established and familiar natural setting or visual feature that is culturally significant to the history of Louisville

- **Farm and ranch feed storage and processing resources** (e.g., silos and granaries; i.e., for animals)
 - A4: Architectural - represents an innovation in construction, materials or design
 - A6: Architectural - represents a built environment of a group of people in an era of history that is culturally significant to Louisville
 - A7: Architectural - pattern or grouping of elements representing at least one of the above criteria
 - B2: Social - exemplifies cultural, political, economic or social heritage of the community
 - C1: Geographic/Environmental - enhances sense of identity of the community
 - C2: Geographic/Environmental - an established and familiar natural setting or visual feature that is culturally significant to the history of Louisville

- **Farm and ranch food storage, processing and sales resources** (e.g., root cellars and milk houses; i.e., for people)
 - A4: Architectural - represents an innovation in construction, materials or design
 - A6: Architectural - represents a built environment of a group of people in an era of history that is culturally significant to Louisville
 - A7: Architectural - pattern or grouping of elements representing at least one of the above criteria
 - B2: Social - exemplifies cultural, political, economic or social heritage of the community
 - C1: Geographic/Environmental - enhances sense of identity of the community
 - C2: Geographic/Environmental - an established and familiar natural setting or visual feature that is culturally significant to the history of Louisville

- **Watering facilities, windmills, and irrigation resources**
 - A2: Architectural - example of the work of an architect or builder who is recognized for expertise nationally, statewide, regionally, or locally.
 - A4: Architectural - represents an innovation in construction, materials or design
 - A6: Architectural - represents a built environment of a group of people in an era of history that is culturally significant to Louisville
 - A7: Architectural - pattern or grouping of elements representing at least one of the above criteria
 - B1: Social - site of historic event that had an effect upon society
 - B2: Social - exemplifies cultural, political, economic or social heritage of the community
 - B3: Social - association with a notable person or the work of a notable person
 - C1: Geographic/Environmental - enhances sense of identity of the community
 - C2: Geographic/Environmental - an established and familiar natural setting or visual feature that is culturally significant to the history of Louisville

- **Agricultural landscape features** (e.g., fields, pastures, orchards, fences, and corrals)
 - A4: Architectural - represents an innovation in construction, materials or design
 - A6: Architectural - represents a built environment of a group of people in an era of history that is culturally significant to Louisville
 - A7: Architectural - pattern or grouping of elements representing at least one of the above criteria
 - B1: Social - site of historic event that had an effect upon society
 - B2: Social - exemplifies cultural, political, economic or social heritage of the community
 - B3: Social - association with a notable person or the work of a notable person
 - C1: Geographic/Environmental - enhances sense of identity of the community
 - C2: Geographic/Environmental - an established and familiar natural setting or visual feature that is culturally significant to the history of Louisville

- **Transportation resources** (e.g., roads, railroad tracks/spurs and roadbed, and depots)
 - A4: Architectural - represents an innovation in construction, materials or design
 - A6: Architectural - represents a built environment of a group of people in an era of history that is culturally significant to Louisville
 - A7: Architectural - pattern or grouping of elements representing at least one of the above criteria
 - B1: Social - site of historic event that had an effect upon society
 - B2: Social - exemplifies cultural, political, economic or social heritage of the community
 - B3: Social - association with a notable person or the work of a notable person
 - C1: Geographic/Environmental - enhances sense of identity of the community
 - C2: Geographic/Environmental - an established and familiar natural setting or visual feature that is culturally significant to the history of Louisville

An example of a Louisville farm that was assessed for significance (using National Register criteria) as the property type “Farms, ranches, agricultural districts and rural cultural landscapes” was the Rand/Showalter/Hoyle Farm, formerly located at 10101 Dillon Road. This farm, which was demolished in 2017, included (in 2016) a house, garage, chicken house, machine shed, wood storage shed, two feed storage sheds, granary, well house, barn, silo, loafing shed, clothesline, watering trough, and fire/trash pit (Simmons et al. 2016:5). Simmons et al. (2016:2) recommended the farm eligible at the local level for its representation of agriculture in Boulder County (e.g., raising wheat, chickens, cattle, hay, and alfalfa) for more than 100 years and retaining sufficient integrity to convey its historical character. Notable buildings on the property included a large Gambrel roof barn, an increasingly rare example of a concrete stave silo, and a rare rural example of an English/Norman Cottage-style farmhouse. Together, these and the other extant buildings supported the historical feeling and association (with Boulder County agriculture) of the farm. If this property were to have been evaluated against the HPC’s criteria for historic landmark designation (e.g., A6, B1, C2) (City of Louisville 2018), it might have met the following criteria:

- **Example of the Rand/Showalter/Hoyle Farm**

- o A1: Architectural - Exemplifies specific elements of an architectural style or period
- o A4: Architectural - represents an innovation in construction, materials or design
- o A6: Architectural - represents a built environment of a group of people in an era of history that is culturally significant to Louisville
- o A7: Architectural - pattern or grouping of elements representing at least one of the above criteria
- o B2: Social - exemplifies cultural, political, economic or social heritage of the community
- o C1: Geographic/Environmental - enhances sense of identity of the community
- o C2: Geographic/Environmental - an established and familiar natural setting or visual feature that is culturally significant to the history of Louisville

Railroad-Related Resources

The National Register Multiple Property Documentation Form for Railroads in Colorado 1858–1948 (Fraser and Strand 1997:Section F, pp. 142–148, 156–163) discusses three property types (listed below) that are or could be relevant to Louisville. This document is invaluable for evaluating the potential significance of railroad-related resources in Louisville, particularly for the National Register. Rather than reiterate the information provided for each property type, this section of the context provides a brief summary of the HPC’s criteria for historic landmark designation (e.g., A6, B1, C2) (City of Louisville 2018) that could most likely pertain to the resource type, assuming the resource retains sufficient integrity. The three property types are as follows:

- **Railroad tracks and roadbed**

- o A6: Architectural - represents a built environment of a group of people in an era of history that is culturally significant to Louisville
- o B1: Social - site of historic event that had an effect upon society
- o B2: Social - exemplifies cultural, political, economic or social heritage of the community
- o B3: Social - association with a notable person or the work of a notable person
- o C1: Geographic/Environmental - enhances sense of identity of the community
- o C2: Geographic/Environmental - an established and familiar natural setting or visual feature that is culturally significant to the history of Louisville

- **Depots**

- o A1: Architectural - Exemplifies specific elements of an architectural style or period
- o A6: Architectural - represents a built environment of a group of people in an era of history that is culturally significant to Louisville
- o B2: Social - exemplifies cultural, political, economic or social heritage of the community
- o B3: Social - association with a notable person or the work of a notable person
- o C1: Geographic/Environmental - enhances sense of identity of the community

Mining-Related Resources

The National Register of Historic Places Multiple Property Documentation Form for The Mining Industry in Colorado (Fell and Twitty 2008:213–232) discusses two property types (listed below) that are relevant to Louisville. This document is invaluable for evaluating the potential significance of mining-related resources in Louisville, particularly for the National Register. Rather than reiterate the information provided for each property type, this section of the context provides a brief summary of the HPC’s criteria for historic landmark designation (e.g., A6, B1, C2) (City of Louisville 2018) that could most likely pertain to the resource type, assuming the resource retains sufficient integrity. The two property types are as follows:

- **Coal Mine** (including adits, foundations, mine rail lines, privies, dumps, machines, roads, shafts, trestles, tunnels, and buildings related to these features)
 - A4: Architectural - represents an innovation in construction, materials or design
 - A6: Architectural - represents a built environment of a group of people in an era of history that is culturally significant to Louisville
 - A7: Architectural - pattern or grouping of elements representing at least one of the above criteria
 - B1: Social - site of historic event that had an effect upon society
 - B2: Social - exemplifies cultural, political, economic or social heritage of the community
 - B3: Social - association with a notable person or the work of a notable person
 - C1: Geographic/Environmental - enhances sense of identity of the community
 - C2: Geographic/Environmental - an established and familiar natural setting or visual feature that is culturally significant to the history of Louisville
- **Mining Settlement and Residence** (including worker housing, manager and owner housing)
 - A1: Architectural - Exemplifies specific elements of an architectural style or period
 - A2: Architectural - example of the work of an architect or builder who is recognized for expertise nationally, statewide, regionally, or locally.
 - A4: Architectural - represents an innovation in construction, materials or design
 - A5: Architectural - style particularly associated with the Louisville area
 - A6: Architectural - represents a built environment of a group of people in an era of history that is culturally significant to Louisville
 - A7: Architectural - pattern or grouping of elements representing at least one of the above criteria
 - B1: Social - site of historic event that had an effect upon society
 - B2: Social - exemplifies cultural, political, economic or social heritage of the community
 - B3: Social - association with a notable person or the work of a notable person
 - C1: Geographic/Environmental - enhances sense of identity of the community
 - C2: Geographic/Environmental - an established and familiar natural setting or visual feature that is culturally significant to the history of Louisville

HISTORICALLY COMPATIBLE MODIFICATIONS

Relatively few industrial buildings and structures remain in Louisville. With a few exceptions (e.g., the C&S depot), the resources that do remain exhibit fairly good physical integrity, as they have continued to serve the same or similar purposes over the decades. Some other buildings and structures, such as houses that were moved from coal mines into town, may have achieved historical significance in their current locations. In addition, the pattern of moving buildings from mines into town is, itself, important in Louisville's history even if the building itself does not retain high physical integrity. Given the paucity of industry-related resources that remain, it is recommended that the HPC prioritize the rarity or uniqueness of an extant resource higher than its integrity.

The recommendations provided in this section follow from the discussion presented in the preceding section. The Standards make it clear that original materials should be retained whenever possible, or replaced in-kind if they are too deteriorated to be restorable. This is particularly important for industrial buildings and structures that could be eligible for or listed in the National Register. Somewhat more extensive changes may be allowable for industrial buildings and structures that do not satisfy National Register criteria of significance but are still potentially eligible for local landmarking. In those cases, the changes' effects on the building or structure must be evaluated against HPC's criteria of integrity for historic landmark designation (City of Louisville 2018). Changes that retain the building or structure's overall appearance (e.g., repainting or addition of narrow-width vinyl siding over original wood clapboard without change to building form) may minimally affect a building's integrity and qualification for local landmarking because the overall appearance remains similar. Replacement of original large storefront windows with modern large windows is a less desirable change, although if the same window openings are used without modification and/or the modern windows provide the same open storefront feel as the older windows, there may be a relatively minimal reduction in the building's look and feel. These kinds of changes should not be advocated for, going forward. However, if the changes have been completed prior to evaluation of an industrial building or structure for landmarking or a demolition stay, the HPC may decide that the building still retains sufficient integrity to qualify for one of those actions.

Far less appropriate and much more detrimental to the integrity of an industrial building or structure would be marked modern changes in exterior materials and/or architectural features. Examples of potentially inappropriate modern changes would be the replacement of wood siding with metal, brick, stucco, or concrete. Similarly, enlarging or reducing window openings, and closing up or moving windows or doors, could dramatically change the external appearance of a building and markedly diminish the building's integrity (Avenue L Architects 2013:5-5). An example of this is seen at 609 Main Street, where large fixed windows replaced original double-hung windows (see Figures 139–140). Therefore, the HPC must evaluate the relative degree and impact of such modern modifications against the HPC's criteria of integrity for historic landmark designation (City of Louisville 2018). Any changes that disguise, remove, or falsely add defining characteristics listed for each form and style in the Agriculture-Related, Railroad-Related, and Mining-Related Forms and Styles in Louisville sections could irreparably diminish the building or structure's integrity. Evaluating these effects is somewhat relative; if an industrial building or structure retains numerous defining characteristics and loses one, it may exhibit sufficient

integrity to be considered significant, particularly for local landmarking. However, if just one or two defining characteristics remain, and those are changed, the building's integrity should be considered irreparably lost.

Another inappropriate kind of modification that can reduce the integrity of an historic industrial building or structure is the addition of non-original materials to make the building look more "historic." The Standards for Rehabilitation state, "Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken" (NPS 2017). Furthermore, Longstreth (2000:4) specifically warns against "façadism": reducing an historical building to just a façade that hides a new building behind it.

Larger-scale changes can also vary in the extent to which they reduce an historic industrial building or structure's overall integrity of design, workmanship, and materials. In keeping with the Standards, additions to significant industrial buildings and structures should be subordinate to and ideally located behind the original building or structure. They should exhibit similar massing and scale and reference forms found on the original building (e.g., roof angle and size) or structure (e.g., material and form), while being differentiated from the original. Most industrial buildings and structures in Louisville that date before 1955 are largely utilitarian, with little or no ornamentation. Therefore, the creation of new ornamentation or specific stylistic elements would generally not be in keeping with the building's or structure's historical appearance and function. Additions that do not meet the Standards would diminish the integrity of an industrial building or structure to the extent that it should no longer be considered significant for the National Register, although it may still qualify for local landmarking if changes are minimal. In contrast, an industrial building or structure that has an addition that does meet the Standards may still exhibit sufficient integrity to be considered significant.

Adding or removing buildings and/or structures from a property can also differentially affect a property's integrity of location, setting, and feeling. This is particularly true for farms, in which integrity depends on a suite of buildings, structures, and agricultural landscape features, rather than on just one or two buildings. For a farm to retain these aspects of integrity, the historical spatial organization, setbacks, circulation, boundaries, character, and feeling of the property as a whole, together with multiple original buildings and structures, should be intact (Avenue L Architects 2013:5-5). Accordingly, adding a small, modern storage building to a farm or removing a small, highly deteriorated loafing shed or a 1960s metal garage from a farm probably would not diminish the farm's integrity to a great degree. In contrast, removing five outbuildings or constructing modern dwellings on fields that surround the historical farmhouse would markedly diminish or negate the farm's integrity.

The City of Louisville and the HPC already provide thorough recommendations for potentially appropriate changes to historical residential and commercial buildings that would leave those buildings with sufficient integrity. Helpful information includes Alteration Certificate Criteria (City of Louisville 2005), Old Town Overlay Zoning District Regulations (City of Louisville 2017c), and Best Practices - Old Town Additions (City of Louisville 2017d). The same recommendations can be made for industrial buildings and structures, although many of those

resources are not located within the Old Town Overlay Zone. A caution regarding the last document: even stepped-back second-story additions on one-story historic houses (e.g., former coal mine houses) can result in an irreparable loss of integrity and may render the property not significant. Additional guidance from the NPS regarding maintaining integrity of historic industrial buildings and structures includes Rehabilitation Standards and Guidelines (NPS 2017) and Preservation Brief 14: New Exterior Additions to Historic Buildings: Preservation Concerns (Grimmer and Weeks 2010). Other NPS documents that may be of use on a limited scale for farms and mining-related resources, respectively, are Guidelines for Evaluating and Documenting Rural Historic Landscapes (McClelland et al. 1999), Guidelines for Identifying, Evaluating and Registering Historic Mining Sites (Noble and Spude 1997). Potentially helpful guidance for evaluating railroad segments and corridors are Guidelines for Documenting and Evaluating Railroads (Pennsylvania Historical and Museum Commission 2015) and the Pennsylvania Department of Transportation's (PennDOT) document Researchers Guide for Documenting and Evaluating Railroads (PennDOT 2018).

LANDMARKING OUTREACH

Individual Properties

PaleoWest's current study relied on cursory field observations, consultation of historical photographs, and, in some cases, general or specific recommendations made and/or more in-depth research conducted by others during previous architectural surveys (e.g., Avenue L Architects 2013; Simmons and Simmons 2015; Simmons et al. 2016; Whissen 1982a; Wolfenbarger 2008). The recommendations listed below are based more on social and geographic qualities than on architectural characteristics, given that industrial buildings and structures are typically utilitarian, rather than stylistic. As a result, they do not respond to all of the HPC's criteria for historic landmark designation (City of Louisville 2018). Furthermore, PaleoWest's recommendations stem, in part, from an attempt to capture the full range of historical industrial resources in Louisville even if some of the resources have lost integrity due to modern changes. Finally, our recommendations are for local landmarking; we are not making recommendations about the potential for various properties to be eligible for the State Register or National Register. As organized by resource type, PaleoWest recommends that the City prioritize the resources listed below for further assessment and potential landmarking outreach. A photograph of each property is provided in Appendix B.

Agriculture

Ditches

- Davidson Ditch: vital for Louisville's early agricultural development and associated with important early entrepreneur William A. Davidson; some segments retain good integrity (Figure B.1)
- Davidson Highline Lateral Ditch: important for Louisville's early agricultural development; some segments retain good integrity (Figure B.2)
- Goodhue Ditch: vital for Louisville's early agricultural development, associated with early settler Abner Goodhue, and connected with the 1914 Hecla Mine battle; some segments retain good integrity (Figure B.3)
- Louisville Lateral: important for Louisville's early agricultural development; some segments retain good integrity (Figure B.4)

Water Storage Reservoirs

- Hecla Lake: important for Louisville's mining and agricultural development and retains good integrity (Figure B.5)
- Louisville Reservoir: vital for Louisville's early development and retains adequate integrity (Figure B.6)

Hay Storage and Silos

- Silo on the former Gosselin Farm located at 310 W. Spruce Street: good, now-rare example of a hollow glazed-clay tile silo and retains adequate integrity (Figure B.7). The property as a whole is also recommended for landmarking under Small Farms.

Barns

- Kilker barn at the northeast corner of 104th Street and Dillon Road: rare example of a Gambrel roof dairy barn in Louisville and retains excellent integrity (Figure B.8)

Large Farms

- Bowes Farm at 9108 Dillon Road: good example of Louisville's continued agricultural industry and buildings, structures, and farm in general retain good integrity (Figure B.9)
- Harney-Lastoka Farm at 1536 Courtesy Road/SH 42: excellent example of Louisville's continued agricultural industry and related to Louisville's mining history; buildings, structures, and farm in general retain good integrity (Figure B.10)
- Kerr/Mayhoffer Farm at 10014 Empire Road: good example of Louisville's agricultural heritage and buildings, structures, and farm in general retain good integrity (Figure B.11)
- Murphy/Warembourg Farm located south of Bella Vista Drive and west of Front Street: good example of Louisville's agricultural heritage and buildings, structures, and farm in general retain sufficient integrity (Figure B.12)

Small Farms

- 100 W. Spruce Street: good example of Louisville's small-scale agricultural heritage on W. Spruce Street, and the house, in general, retains good integrity (Figure B.13)
- 101 W. Spruce Street (Henning House): unique example of 1950s small-scale agricultural infill on W. Spruce Street and related to important local businessman George R. Henning; and house and outbuilding retain good integrity (Figure B.14)
- 109 W. Spruce Street: example of Louisville's small-scale agricultural heritage on W. Spruce Street with its house and outbuildings, which retain good integrity (Figure B.15)
- 309 W. Spruce Street (Pickett House): good example of Louisville's small-scale agricultural heritage on W. Spruce Street, and house retains good integrity (Figure B.16)
- 310 W. Spruce Street (Gosselin Farm): example of Louisville's small-scale agricultural heritage on W. Spruce Street with its house, outbuildings, and silo, which retain adequate integrity (Figure B.17)

Railroad

Tracks

- C&S/D&I/BNSF tracks that run north-south through Louisville: represents Louisville's railroad history; retains good integrity (Figure B.18)

Mining

Mine Company Houses

- 540 Lincoln Avenue (5BL932): rare example of a Northern Coal and Coke Type E house; retains good integrity (Figure B.19)
- 1021 La Farge Avenue: apparent example of a Northern Coal and Coke Type C house; retains excellent integrity (Figure B.20)
- 1209 La Farge Avenue: example of a former coal mine house moved from a mining camp in Erie to Louisville in the 1930s; retains good integrity (Figure B.21)

Dump

- Rex Mine No. 1 dump within the Harney-Lastoka Farm at the southeast corner of SH 42 and South Boulder Road: last remaining large coal mine dump in Louisville and visible from a public right-of-way; retains adequate integrity to convey the image of a dump even though the integrity of the former surrounding mine is gone (Figure B.22)

District

Louisville does not retain enough agricultural, railroad, and/or mining resources to create sizable historic districts for any of those industries. However, for a few reasons, PaleoWest believes that W. Spruce Street remains a distinctive part of Louisville, and its agricultural history should be recognized as such. The street as a whole has seen many changes, with its paving in the 1990s and the construction of many modern houses along it since that time. Still, the Goodhue Ditch continues to run under the street, albeit now within a concrete channel rather than an earthen one. In addition, the street retains some large, old trees that continue to give it a pastoral feel. Finally, and most importantly, several original houses that date from the 1920s to 1950s still stand there, exhibiting varying degrees of integrity. PaleoWest recommends that a discontinuous historic district, comprising several individual properties and having a period of significance from 1920–1951, would be most appropriate for W. Spruce Street. Houses that would contribute to such a district are listed below. Those recommended for individual landmarking, in addition to the district, are marked with asterisks.

Discontinuous District

- 100 W. Spruce Street*
- 101 W. Spruce Street (Henning House)*
- 109 W. Spruce Street*
- 309 W. Spruce Street (Pickett House)*
- 310 W. Spruce Street (Gosselin Farm)*
- 501 W. Spruce Street (Fiechtl House)
- 504 W. Spruce Street (Brimble House)

COMMUNITY INPUT

Louisville strives to attain public buy-in for historic preservation; accordingly, PaleoWest and the City sought public input about Louisville's past, present, and future development to help inform recommendations for this historic context, as well as for contexts about Louisville's residential and commercial development. Most of the comments and stories the public provided concerned past and present businesses (Figure 150). However, specific industrial resources cited as favorites were: the "old grain mill" (grain elevator), "miner houses on Spruce (Lee) east of tracks behind 740 Front" (formerly at 801 and 809 Lee Street), "Brother's 3 (the train cars) in 1987; my 2nd waitress job in town (when "Black Diamond" closed down)" (Brothers Three), and "1987 – Tamarisk Open Space Denver Urban Drainage and Sled Hill. Social trails only and you see what was access to a closed mine. Present: known as Coyote Run with maintained trails. Sled Hill is gone and there are no visible mine remnants today" (Fireside Mine). In addition, people shared thoughts about their personal connections with Louisville's agricultural and mining heritage. Several people told stories about or showed interest in Louisville farms: "walking to Louisville Elementary and worried to walk across the farm at McKinley because there were bones and the story was that she was a witch and she would kill kids that walked across her farm" (Stout Farm?); "Grandpa and Grandma Harney bought in 1923 – open acreage" (Harney-Lastoka Farm); 7th Generation Farm (Harney-Lastoka Open Space); "Red barn" (Murphy/Warembourg Farm); and llama farm in the Colorado Technology Center. One person commented about houses built in the early 1900s that "Our house (built ~1915) was moved to Little Italy ~1940. It came from the Columbine Mine in Erie." Two people felt that Louisville's backyard gardens, chicken coops, and community gardens represent Louisville's past and present, and are worthy of additional historical research. Looking to the future, two people were supportive of the upcoming "gateway under [the] railroad tracks" leading to DELO (Downtown East Louisville)."

SUMMARY

PaleoWest prepared this historic context to help the city of Louisville, Colorado, better understand its agricultural, railroad, and mining development from the time of its founding in 1878 to the present day, albeit focusing on resources that date to before 1955. Following the City's Plan, the ultimate goal of this context is to strengthen the community's understanding of and support for historic preservation of older agricultural, railroad, and mining resources.

PaleoWest structured this historic context in keeping with the Plan. Together with the City, we gathered public input in an effort to understand what residents feel is important to their community identity. We also amassed existing information from *The Louisville Historian*, previously completed architectural surveys and reports, the City's website, GLO records, other online information, historical photographs, public education presentations, assessor cards, Sanborn Fire Insurance maps, mining company records, historical newspapers, and personal stories. Drawing from these varied sources allowed us to intersperse family histories and personal stories with descriptions of industrial resources present in Louisville.

Louisville's present-day boundary encompasses many open spaces but relatively few extant agricultural, railroad, and mining resources. Most of those resources are utilitarian, with some variations in form but few variations in style. These characteristics are typical of late nineteenth- and early twentieth-century industrial resources across most of the United States. Still, the present-day Louisville area witnessed some early and/or important regional developments in agriculture (e.g., irrigation ditches and water storage reservoirs), railroading (e.g., the CCR and D&I), and coal mining (e.g., the Welch Mine and the Hecla Mine battle).

PaleoWest recommends that a way to preserve Louisville's agricultural, railroad, and mining heritage is to landmark the best examples of extant farms, barns, silos, irrigation ditches, water storage reservoirs, and mine company houses, as well as the remaining railroad and coal mine dump; to record previously undocumented extant farms; and to further research agricultural crops and markets; Type C mine company houses; and strikebreaking miners in Louisville.

During our public input event, PaleoWest and the City heard that members of the Louisville community have great personal stories about Louisville's historical farms and coal mines, some of which are no longer extant. Surprisingly, no one mentioned the active railroad that runs through the city or the former train depot. Perhaps people do not think of a working railroad as a historical resource. Some members of the community look forward to Louisville's modern development and role in continuing technological and economic advancement, both of which are impacting Louisville's industrial heritage. Examples are the new railroad underpass that leads to DELO and further expansion of the CTC, which resulted in the demolition of historical farm buildings and land. It seems that people may be less aware of the agricultural, railroad, and perhaps even the mining history (i.e., mine operations) of Louisville than they are of the city's historical houses and businesses. Accordingly, it seems that the clearest path to preserving Louisville's remaining significant historical industrial resources, while also making room for future growth, is to more widely communicate that history and continue to strengthen the community's personal connections with Louisville's agricultural, railroad, and mining remnants.

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Photo credit: Louisville Historical Museum

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APPENDIX A: SUPPORTING INFORMATION

Table A.1. Agriculture-Related Resources in Louisville Recorded Previously and/or Included in this Study

Smithsonian Number	Name or Type	Address	Date	Feature(s)	Use When Recorded	Date Recorded	National Register Eligibility
5BF114	Goodhue Ditch	N/A	1873	Ditch	Irrigation	11/13/1989	Field needs data
5BL412	Biella Barn	8208 Dillon Road	1850s	Barn	Barn	3/26/1981	Field eligible
5BL453	Davidson Ditch	N/A	1872	Irrigation Ditch	Irrigation	5/5/1981	Field eligible
5BL453.3	Davidson Ditch Lateral	N/A	1895	Ditch	Irrigation	7/16/2004	Field not eligible
5BL2719.4	Goodhue Ditch Feeder	N/A	post-1873	Irrigation Ditch	Irrigation	05/05/1995	Officially not eligible
5BL2719.5	Goodhue Ditch Lateral	N/A	post-1873	Irrigation Ditch>Culvert>Concrete>Metal	Irrigation	05/05/1995	Does not support eligibility of entire linear resource
5BL2719.10	Goodhue Ditch Lateral	N/A	post-1873	Irrigation Ditch	Irrigation	09/28/1995	Officially not eligible
5BL2719.11	Goodhue Ditch Leader or Spreader	N/A	post-1873	Irrigation Ditch	Irrigation	05/12/1995	Officially not eligible
5BL2719.12	Goodhue Ditch Feeder	N/A	post-1873	Irrigation Ditch	Irrigation	05/12/1995	Officially not eligible
5BL2719.13	Goodhue Ditch Spreader	N/A	post-1873	Irrigation Ditch	Irrigation	05/15/1995	Officially not eligible
5BL2719.14	Goodhue Ditch Abandoned Segment	N/A	post-1873	Irrigation Ditch	Not in Use	05/15/1995	Officially not eligible
5BL2719.15	Goodhue Ditch Spreader	N/A	post-1873	Irrigation Ditch	Irrigation	05/15/1995	Officially not eligible
5BL2719.16	Goodhue Ditch Primary Channel	N/A	post-1873	Irrigation Ditch	Irrigation	11/13/1989	Officially not eligible
5BL2719.29	Goodhue Ditch Segment	N/A	post-1873	Ditches>Headgate>Concrete>Pipes	Irrigation	2/22/1996	Field not eligible
5BL2719.31	Goodhue Ditch Segment	N/A	post-1873	Ditches>Headgate>Pit>Dams>Stock Tank	Irrigation	2/22/1996	Field not eligible
5BL2719.32	Goodhue Ditch Segment	N/A	post-1873	Ditches	Irrigation	2/22/1996	Field not eligible
5BL2719.34	Goodhue Ditch Segment	N/A	post-1873	Ditches>Headgate>Pipe	Irrigation	2/22/1996	Field not eligible
5BL2719.35	Goodhue Ditch Segment ~ Davidson Lateral	N/A	post-1873	Ditch	Irrigation	2/22/1996	Field not eligible
5BL2719.36	Goodhue Ditch Segment	N/A	post-1873	Ditch	Irrigation	2/22/1996	Field not eligible
5BL2719.37	Goodhue Ditch Segment	N/A	post-1873	Ditch	Irrigation	2/22/1996	Field not eligible
5BL2719.39	Goodhue Ditch	N/A	post-1873	Ditch	Irrigation	7/16/2004	Field not eligible
5BL2719.40	Goodhue Lateral Segment	N/A	post-1873	Ditch>Box Culvert>Concrete	Irrigation	5/2004	106 - Officially eligible
5BL2719.41	Goodhue Ditch Segment	N/A	post-1873	Ditch>Segment	Irrigation	5/13/1998	Field not eligible
5BL2719.42	Goodhue Ditch Segment	N/A	post-1873	Ditch>Segment>Pipeline	Irrigation	11/13/1989	Officially not eligible
5BL2719.47	Goodhue Ditch Segment	N/A	post-1873	Ditch	Irrigation	06/20/2008	Does not support eligibility of entire linear resource
5BL2719.48	Lateral of Goodhue Ditch Segment	N/A	post-1873	Pipe Culvert>Ditch>Segment	Not in Use	05/19/2004	Officially not eligible
5BL2719.50	Goodhue Ditch	N/A	1873	Ditch>Segment	Not in Use	04/15/2010	Officially needs data
5BL2719.52	Goodhue Ditch	N/A	1873	Ditch>Segment	Irrigation	3/1/2017	Does not support eligibility of entire linear resource
5BL2720	Ditch	N/A	ca. 1900	Ditch>Segment	Abandoned	11/27/1989	Field not eligible

Smithsonian Number	Name or Type	Address	Date	Feature(s)	Use When Recorded	Date Recorded	National Register Eligibility
5BL2725	Farm	10142 Empire Road	ca. 1910	N/A	Farming>Farming>Single Dwelling	3/14/1990	Officially not eligible
5BL2730.1	Highline Lateral Ditch (actually the Goodhue Ditch but mis-recorded)	N/A	1873	Ditch>Earth>Concrete>Culverts>Concrete	Irrigation	01/09/1990	Officially not eligible
5BL2730.16	Highline Lateral Segment	N/A	1895	Ditch>Box Culvert>Wood>Concrete	Irrigation	5/2004	106 - Officially eligible
5BL2730.17	Highline Lateral Segment	N/A	1895	Ditch	Irrigation	06/20/2008	Does not support eligibility of entire linear resource
5BL2730.26	Davidson Highline Lateral/Highline Lateral Ditch	N/A	1895	Ditch>Segment	Irrigation	3/1/2017	Does not support eligibility of entire linear resource
5BL4246	Mayhoffer Farm (Centennial Farm) ~ Kerr/Mayhoffer Farm	10014 Empire Road	1870	Single Dwelling>Storage Shed>Garage>Barn>Milk House>Silo>Chicken House>Machine Shop>Smokehouse>Equipment Shed	Agricultural Complex>Storage>Shop>Equipment Shed>Single Dwelling>Garage>Not in Use	1990	Centennial Farm>106 - Officially eligible
5BL5664.4	Coal Creek Ditch Feeder	N/A	1872	Ditch>Earth	Irrigation	05/15/1995	Officially not eligible
5BL5664.5	Coal Creek Ditch Feeder	N/A	1872	Ditch>Earth	Irrigation	05/18/1995	Officially not eligible
5BL5664.6	Coal Creek Ditch Feeder	N/A	1872	Ditch>Earth	Irrigation	05/18/1995	Officially not eligible
5BL5664.7	Coal Creek Ditch Collector	N/A	1872	Ditch>Earth	Irrigation	05/18/1995	Officially not eligible
5BL5664.8	Coal Creek Ditch Reservoir Overflow Drainage	N/A	1872	Ditch>Earth	Irrigation	04/05/1995	Officially not eligible
5BL5664.9	Coal Creek Ditch Reservoir	N/A	post-1872	Reservoir	Not in Use	05/15/1995	Officially not eligible
5BL5664.10	Coal Creek Ditch Feeder	N/A	1872	Ditch>Earth	Irrigation	08/03/1995	Officially not eligible
5BL5664.11	Coal Creek Ditch Feeder	N/A	1872	Ditch>Earth	Irrigation	08/03/1995	Officially not eligible
5BL5664.12	Coal Creek Ditch Collector	N/A	1872	Ditch>Segment	Irrigation	08/03/1995	Officially not eligible
5BL5664.13	Coal Creek Ditch System	N/A	1872	Ditch	Unknown	3/2/1996	Field not eligible
5BL5664.14	Coal Creek Ditch System	N/A	1872	Ditch	Unknown	3/2/1996	Field not eligible
5BL5664.15	Coal Creek Ditch System	N/A	1872	Ditch	Unknown	3/2/1996	Field not eligible
5BL5664.16	Coal Creek Ditch System	N/A	1872	Ditch	Unknown	3/2/1996	Field not eligible
5BL5664.17	Coal Creek Ditch System	N/A	1872	Ditch	Unknown	3/2/1996	Field not eligible
5BL5664.18	Coal Creek Ditch System	N/A	1872	Ditch>Feature	Unknown	3/2/1996	Field not eligible
5BL5664.32	Coal Creek Ditch	N/A	1872	Ditch>Segment	Irrigation	10/26/2005	Officially not eligible
5BL5664.33	CDOT Structure E-16-FT for Three Coal Creek Ditch Laterals	N/A	1951–1952	Irrigation Lateral	Irrigation	03/27/2006	Officially not eligible
5BL5668	Field Boundary Berm	N/A	N/A	Berm>Earth	Water Diversion	05/05/1995	Officially not eligible
5BL5669	Drainage Ditch	N/A	N/A	Ditch>Earth	Irrigation	05/05/1995	Officially not eligible

Smithsonian Number	Name or Type	Address	Date	Feature(s)	Use When Recorded	Date Recorded	National Register Eligibility
5BL5726	Clara Clyncke Farm ~ Klenke Farm	8190 South Boulder Road	1926	Silo>Shop>Storage Shed>Privy>Machine Shed>Granary>Ice House>Chicken House>House>Pumphouse>Loafing Shed>Business>Milk House	Demolished	02/07/1995	Field not eligible
5BL5810	Agricultural Complex	N/A	ca. 1920	Stock Pond>Storage Feature	Storage>Water Storage	08/03/1995	Officially not eligible
5BL6653	Agricultural Complex	N/A	ca. 1941	Foundation>Concrete>Depression>Road	Not in Use	2/22/1996	Field not eligible
5BL6656	Stock Shed Complex	N/A	ca. 1890–1945	Foundation>Road>Depression	Not in Use	3/10/1996	Field not eligible
5BL6658	Hotchkiss Dairy Farm	N/A	ca. 1900–1960	Barn>Fence>Wood>Trough>Irrigation Ditch>Pipe>Concrete	Not in Use	3/23/1996	Field not eligible
5BL6660	White House Farm	Cherry Street	1930s	Single Dwelling>Storage	Abandoned	03/25/1996	Officially not eligible
5BL6661	Stock Dam	N/A	post-1870	Reservoir>Berm	Demolished	3/2/1996	Field not eligible
5BL6662	Livestock Corral	N/A	N/A	Corral	Not in Use	3/10/1996	Field not eligible
5BL6663	Two-Track Road	N/A	1940s	Two Track Road	Not in Use	3/10/1996	Field not eligible
5BL6695	Harney-Lastoka Farm	1536 Courtesy Road/SH 42	1923	House>Milk House>Garage>Privy>Chicken House>Granary>Brooder House>Grain Bins>Animal Pen>Machine Shed>Storage Shed>Loafing Shed>Silo	Not in Use	03/14/1990	Officially not eligible
5BL7286	Admor Property	S. 96 th Street	1949	—	Single Dwelling>Storage>Animal Facility	05/12/1998	Officially not eligible
5BL7287	Mobley Property/Nave Place	9673 Dillon Road	1904	—	Single Dwelling>Garage>Storage>Horse Barn>Storage Shed	05/05/1998	Officially not eligible
5BL7288	Owen Property	1474 S. 96 th Street	ca. 1948	—	Single Dwelling>Tack House>Barn>Storage>Animal Shelter	05/13/1998	Officially not eligible
5BL7289	Johnson Property	1326 S. 96 th Street	1930	—	Unknown>Single Dwelling>Garage>Horse Barn>Storage>Animal Shelter	05/13/1998	Officially not eligible
5BL8731	Waeneche Homestead ~ Waneka Homestead ~ Wilson Farm ~ Murphy Farm	1325 S. 96 th Street	1866, 1900	—	Not in Use	9/10/2000	Field not eligible
5BL8929+*	Louisville Milling & Elevator Co. ~ Louisville Grain Elevator ~ The Denver Elevator	Front Street and Elm Street	1903	—	Not in Use	02/14/1986	Listed on National Register>Multiple Resource Component
5BL9562	Building and Shed Foundations/Agricultural Complex	400 W. Spruce Street	ca. 1940–1950s	Barn>Foundations>Wood Pile	Unknown>Storage	07/16/2004	Officially not eligible
5BL9577.1	Louisville Reservoir Inlet Segment	N/A	ca. 1885	Ditch>Box Culvert>Concrete>Gate>Steel>Turnout	Irrigation	5/2004	106 - Officially eligible
5BL11186	Ditch	N/A	1900–1940	Ditch	Irrigation	04/15/2010	Officially needs data

Smithsonian Number	Name or Type	Address	Date	Feature(s)	Use When Recorded	Date Recorded	National Register Eligibility
5BL11187.1	Ditch	N/A	ca. 1956	Ditch>Segment>Headgate	Irrigation	04/15/2010	Officially needs data
5BL11188	Ditch	N/A	N/A	Ditch	Irrigation	04/15/2010	Officially needs data
5BL11189	Ditch	N/A	N/A	Ditch	Not in Use	04/15/2010	Officially needs data
N/A	House/Small Farm	100 W. Spruce Street	1920	House	Residence	N/A	N/A
N/A	House/Small Farm	109 W. Spruce Street	1925	House, outbuildings	Residence	N/A	N/A
N/A	Pickett House/Small Farm	309 W. Spruce Street	1923	House	Residence	N/A	N/A
N/A	Gosselin Farm	310 W. Spruce Street	1930	House, silo, outbuildings	Residence	N/A	N/A
N/A	House/Small Farm	501 W. Spruce Street	1920	House	Residence	N/A	N/A

Note: Gray shading denotes a property known to have been demolished; + Denotes a property listed in the National Register; * Denotes a Louisville historic landmark

Table A.2. Railroad-Related Resources in Louisville Recorded Previously and/or Included in this Study

Smithsonian No.	Name or Type	Address	Date	Feature(s)	Use When Recorded	Date Recorded	National Register Eligibility
5BF70.2	Denver, Marshall, & Boulder Railroad ~ Colorado Southern	N/A	1886, 1898	Railroad Grade	Not in Use	11/20/1990	Officially not eligible
5BF70.5	Colorado & Southern Railroad	N/A	1899	Railroad Grade>Segment	Abandoned	12/1989	Field not eligible
5BL400	Colorado & Southern Railroad Company ~ Colorado Central Railroad ~ Burlington Northern & Pacific ~ Denver & Interurban Railway Extension	N/A	1868, 1886, 1909	Railroad	Abandoned	05/11/1981	106 - Officially eligible
5BL400.1	Colorado & Southern Railroad Company ~ Denver & Interurban Extension	N/A	1899, 1909	Railroad Bed>Segment	Abandoned	05/11/1981	Officially not eligible
5BL400.4	Burlington Northern Railroad	N/A	pre-1954	Railroad Bed	Railroad	10/15/1993	Officially not eligible
5BL400.5	Colorado & Southern Railroad	N/A	1899	Railroad	Railroad Grade	08/24/2000	106 - Officially eligible >Supports eligibility of entire linear resource
5BL400.12	Colorado & Southern Railroad	N/A	1899	Railroad Grade>Segment	Abandoned	12/1989	Field not eligible
5BL400.15	Colorado & Southern Railroad Extension/Interurban ~ Denver, Marshall & Boulder Railroad	N/A	1899, 1909	Railroad Grade	Not in Use	05/18/1995	Officially not eligible
5BL400.16	Colorado & Southern Railroad Extension/Denver & Interurban	N/A	1899, 1909	Railroad Grade	Not in Use	08/03/1995	Officially not eligible
5BL400.17	Denver, Marshall, & Boulder Railroad ~ Colorado Southern	N/A	1886, 1899	Railroad Grade	Not in Use	11/20/1990	Officially not eligible
5BL400.21	Colorado & Southern Railroad (Segment) ~ Burlington Northern & Santa Fe Railroad, Highline Lateral Bridge at Milepoint 20.68	N/A	1899, pre-1954	Culvert	Culvert	06/20/2008	Supports eligibility of entire linear resource
5BL400.38	Denver Marshall & Boulder Railway (Segment)	N/A	1886	Railroad Grade>Segment>Railroad Bridge	Abandoned	04/26/2004	Officially not eligible
5BL400.39	Colorado Central Railroad/Denver & Interurban Railroad/Colorado & Southern Railroad	N/A	1868, 1899, 1909	Railroad>Segment	Recreation	04/15/2010	Officially not eligible

Smithsonian No.	Name or Type	Address	Date	Feature(s)	Use When Recorded	Date Recorded	National Register Eligibility
5BL5677	Backdirt Mounds	N/A	N/A	Dirt Piles	N/A	5/15/1995	Field not eligible
5BL920	Colorado & Southern Railroad Depot ~ Elks Lodge (Louisville) ~Louisville Loins Club ~ Louisville American Legion Post #111~ Louisville Preschool	628 La Farge Avenue	1910	Building	Preschool	08/02/1985	Field not eligible

Note: Gray shading denotes a property known to have been demolished

Table A.3. Mining-Related Resources in Louisville Recorded Previously and/or Included in this Study

Smithsonian No.	Name or Type	Address	Date	Feature(S)	Use When Recorded	Date Recorded	National Register Eligibility
5BL374.10	Nonpareil Coal Mine Spur?	N/A	N/A	N/A	Abandoned	05/19/2004	Officially needs data
5BL932	Rocky Mountain Fuel House ~ Lewerke Residence	540 Lincoln Avenue	1910	Rectangular Plan>Hipped Roof>1 Story>Horizontal Siding>Asphalt Shingle Roof>Porch>Turned Spindle Porch Supports>Addition>Bay Window>Overhanging Eaves	Single Dwelling	08/03/1985	Field needs data
5BL1587	Acme Mine	N/A	1888–1928	Shaft	Abandoned	11/01/1986	Officially not eligible
5BL1591	Regal Mine	N/A	1935–1947	Shaft	Abandoned	11/1/1986	Field not eligible
5BL1592	Old Centennial Mine	N/A	1906–1931	N/A	Not in Use	11/01/1986	Officially not eligible
5BL1593	Matchless Mine	N/A	1903–1918; 1925–1927	2 Shafts>Hoist	Abandoned	11/01/1986	Officially not eligible
5BL8035	Miner's Cabin	727 Front Street	ca. 1910	L-Shaped Plan>Side Gabled Roof>Horizontal Siding>Tar Paper on Roof>Shed Roof Addition>Chimney	Single Dwelling	06/28/1982	Field not eligible
5BL8211	Mrs. Downer's Cabin ~ Miner's Cabin	801 Lee Avenue	ca. 1940	Rectangular Plan>Front Gabled Roof>1 Story>Log>Wood>Asphalt Roof>Overhanging Eaves>Exposed Rafters	Vacant	01/13/2000	106 - Officially eligible
5BL8212	Mrs. Downer's Cabin ~ Miner's Cabin	809 Lee Avenue	ca. 1940	Rectangular Plan>Front Gabled Roof>1 Story>Log>Wood>Asphalt Roof>Overhanging Eaves>Exposed Rafters	Vacant	01/13/2000	106 - Officially eligible
5BL9657	Hecla Mine (Hecla Mine No. 1 and No. 2)	N/A	1890–1920	N/A	Not in Use	01/1978	No assessment given on form
5BL9667	Rex #1 Mine (Rex Mine No. 1)	N/A	1898–1917	N/A	Not in Use	01/1978	No assessment given on form
5BL9673	Ajax Mine	N/A	1890–1892	N/A	Not in Use	01/1978	No assessment given on form
5BL9684	Welch Mine	N/A	1877–1888	Mine Shaft	Not in Use	01/1978	No assessment given on form
5BL9686	Caledonia Mine	N/A	1890–1899	N/A	Not in Use	01/1978	No assessment given on form
5BL9687	Davidson Mine	N/A	1888–1892	N/A	Unknown	01/1978	No assessment given on form
5BL9691	Leader Mine	N/A	1893–1899	N/A	Unknown	01/1978	No assessment given on form
5BL10334	Imperial Mine	N/A	1895–1898	Mine	Unknown	01/1978	No assessment given on form
5BL10339	Nonpareil Mine	N/A	1907–1925	Mine	Not in Use	01/1978	No assessment given on form

Smithsonian No.	Name or Type	Address	Date	Feature(S)	Use When Recorded	Date Recorded	National Register Eligibility
5BL10508	Wagon Wheel Inn ~ The Depot ~ Union Jack Liquors	1160 E. South Boulder Road	1947	Two Conjoined Former Mine Buildings	Commercial>Business	11/05/2007	Officially not eligible
N/A	New Centennial Mine	N/A	1936–1952	Mine	N/A	N/A	N/A
N/A	New Crown Mine	N/A	1938–1955	Mine	N/A	N/A	N/A
N/A	Fireside Mine	N/A	1931–1944	Mine	N/A	N/A	N/A
N/A	Monarch Mine No. 2	N/A	1908–1947	Mine	N/A	N/A	N/A
N/A	Paramount Mine	N/A	1933–1939	Mine	N/A	N/A	N/A
N/A	Hecla Mine No. 2	N/A	1895–1920	Mine	N/A	N/A	N/A
N/A	Rex Mine No. 2	N/A	1898–1915	Mine	N/A	N/A	N/A
N/A	Louisville Mine No. 2	N/A	1888–1891	Mine	N/A	N/A	N/A
N/A	Wilson Shaft	N/A	pre-1899	Mine	N/A	N/A	N/A

Note: Gray shading denotes a property known to have been demolished

Table A.4. Louisville Agriculture-Related Professions Listed in Available Directories between 1880 and 1909

YEAR	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1894	1896	1899	1900	1901	1903	1904/5 partial	1906	1907-8	1909	Total
<i>Population</i>	<i>200</i>	<i>N/A</i>	<i>550</i>	<i>600</i>	<i>600</i>	<i>600</i>	<i>600</i>	<i>600</i>	<i>N/A</i>	<i>500</i>	<i>500</i>	<i>1100</i>	<i>1100</i>	<i>1100</i>	<i>1100</i>	<i>966</i>	<i>1000</i>	<i>1000</i>	<i>N/A</i>	<i>N/A</i>	<i>2300</i>	
PROFESSION																						
Blacksmith		1 Wm. Dire	1 Jas. Fullerton	2 Jas. Fullerton; Geo H. Paige	2 Jas. Fullerton; Geo H. Paige	2 Jas. Fullerton; Geo H. Paige	1 Geo H. Paige	1 Geo H. Paige	1 G. H. Paige	1 S.A. Lemon	1 S.A. Lemon	2 Lemon and Spangler ; Jno. J. Steinbau gh	2 H.Nevatt; Jno. J. Steinbau gh	2 H.Nevatt; John J. Steinbau gh	2 S.A.Lem on; John J. Steinbau gh	2 Jos McCray; J. J. Steinbau gh	2 Harry Garrett; J. J. Steinbau gh	1 Harry Garrett		1 J. J. Steinbaugh	1 Andy Teague	28
Cattle Raiser												1 Robert Bowes	1 Robert Bowes	1 Robert Bowes	1 Robert Bowes	1 Robert Bowes	1 Robert Bowes					6
Dairy												1 Jos. Scheche r	1 Jos. Scheche r				1 A. Stecker				2 Lee Bros; A. Stecker	5
Ditch																	2 J.J. Harper ¹ A.C. Goodhue ²	1 A.C. Goodhue ²	1 A.C. Goodhue ²			4
Farmer													3 Geo. W. Willis; Oliver E. Willis; W.A. Willis									3
Feed and Implement/ Farmers' Supply													1 Lemon and Spangler	2 Noble Merc. & Investme nt Co; Hoke and Friel. ³	2 Noble Merc. & Investme nt Co; Hoke and Friel ³	2 Noble Merc. & Investme nt Co; Hoke and Friel ³				1 H.A. Moore ⁴	2 Lee and Sons; H.A. Moore ⁴	10
Harness																1 Farmers Supply Co	1 TC Ardourel		1 J. Friel	1 J.D. Portman		4
Horse Raiser												1 A.C. Goodhue	1 A.C. Goodhue	1 A.C. Goodhue	1 A.C. Goodhue							4

YEAR	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1894	1896	1899	1900	1901	1903	1904/5 partial	1906	1907-8	1909	Total
Livestock Raising												2 Harper & Otis; Jas. F. Jones	2 Harper & Otis; Jas. F. Jones	3 Harper & Otis; J. F. Jones; John Leigh	3 Harper & Otis; J. F. Jones; John Leigh	1 A.C. Goodhue	1 A.C. Goodhue	1 A.C. Goodhue	1 A.C. Goodhue			14
Packing Company														1 Huck and Hames ⁶	1 Huck and Hames ⁶							2
Rancher																			13 ⁷			13
Thrasher																			1 Geo. Flether			1
Veterinarian																	1 G.A.Webber					1
TOTAL	0	2	3	3	3	3	2	2	1	2	2	9	13	12	12	8	10	4	18	5	7	121

1 Davidson Ditch Company
2 Goodhue Ditch Company
3 Farmers Supply Co.
4 Louisville Milling and Elevator Co
5 Louisville Livery Barn
6 Louisville Packing Co
7 A.A. Alexander, W.A. Boyd, Clem Eppley, A.C. Goodhue, John Harper, Wesley Jacobs, Gabin Keller, David Ker, Nels Lawson, John Meyerhoffer, Geo. Minks, Peter Murphy Jr., William Stutheft,

Table A.5. Louisville Railroad-Related Professions Listed in Available Directories between 1880 and 1909

YEAR	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1892	1894	1896	1899	1900	1901	1903	1904/5 partial	1906	1907-8	1909	Total
Population	200	N/A	550	600	600	600	600	600	N/A	500	500	N/A	1100	1100	1100	1100	966	1000	1000	N/A	N/A	2300	
PROFESSION																							
Conductor												1 William Smith, UP											1
Agent													1 J. Turner Jr., UP	1 J. Turner Jr., UP	1 J. Turner Jr., UP, C&S	1 J. Turner Jr., UP, C&S	1 J Turner	1 J. Turner Jr., UP, C&S					6
TOTAL	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	7

Table A.6. Louisville Mining-Related Professions Listed in Available Directories between 1880 and 1909

YEAR	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1892	1894	1896	1899	1900	1901	1903	1904/5 partial	1906	1907-8	1909	Total
Population	200	N/A	550	600	600	600	600	600	N/A	500	500	N/A	1100	1100	1100	1100	966	1000	1000	N/A	N/A	2300	
PROFESSION																							
Mine	1 Welsh Coal Mining Co.													4 Acme Coal Mine; Citizens Coal and Coke Co.; United Coal Co.; Rex Coal Mine						1 Hecla Coal Mine		5 Acme Coal Mine; Brooks- Harrison Fuel; Hecla Coal Mine Co.; Rex Coal Mines Nos 1 and 2; Vulcan Coal Mine	11
Coal Miners			2 Stewart; Findahl									7 Miners ¹		14 Miners ²						132 Miners ³			155
Co-op Store Manager			1 J.S. Chamber s																				1
Mine Superintendent			1 A. Eurgens, Welsh	1 Robert McDowel l, Welsh	1 L.J. Welch, Welsh	1 L.J. Welch, Welsh	1 H.Green, Marshall Cons. Coal Mining Co	1 H.Green, Marshall Cons. Coal Mining Co	1 H.Green, Marshall Cons. Coal Mining Co	1 H.Green, Marshall Cons. Coal Mining Co	1 Thos. Carlton, Acme Coal Mining Co.		3 W.H. Brown, Hecla; James Camell, Leader Coal Co; H.W. Bittner, United Coal Co.	4 W.H. Brown, Hecla; James Camell, Leader Coal Co; J.H. Hood, Industrial Coal Mine; J. Hutchins on, Rex Coal Mine	3 C. McNiel, Marshall Cons. Coal Mining Co; W.H. Brown, Hecla Mine; J.H. Hood, Industrial Coal Mine	1 J.C. Williams, Northern Coal Co.	1 Chas Combs, Sunnysid e Mine	4 W.J. Bowie J.C. Williams, Northern Coal Co.; D.E. Evans, Fox and Patterso n Mine; Edw. Hodgson , Hecla Mine; Chas Combs, Sunnysid e Mine	1 J.C. Williams, Northern Coal Co.	2 D.E. Evans; J.C. Williams		3 J. Simpson, Electric Coal Mine Co.; D.E. Evans, Matchles s Coal Mine; J.C. Williams, Northern Coal & Coke Co.	31
Mine Manager											3 A.V. Johnson, Ajax; Robert Loch, Caldonia Coal Mining Co.; Matt Allen, Ajax		1 M.V. Johnson, Ajax	3 M.V. Johnson, Ajax; J.C. Williams, Imperial Coal Mine; J. Donley, Pluto Coal Mine	1 W.H. Brown, Citizens Coal and Coke Co.				1 Hodges and Humphrey, Hecla Mine				9
Mine Engineer											1 L.W. Spangler , Ajax												1
Mine President													1 Jas. Cannon Jr., United Coal Co.									1 F.C. Webb, Vesuvius Coal Mining Co.	2
Mine Secretary													1 H.C. Brooks, United Coal Co.Jr										1

YEAR	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1892	1894	1896	1899	1900	1901	1903	1904/5 partial	1906	1907-8	1909	Total
Mine Agent															1 Tom Kerr, Louisville Coal Mining Co.								1
Mine Receiver																1 Jno McNeil, United Coal Co.							1
Mine Proprietor																	1 Geo. Morrison, Industrial Mine						1
Mine Inspector																	1 Henry Denman	2 Northern Coal Co, Rex Coal Mines 1 and 2					3
Mine Foreman																				7 Foreman 4			7
Mine Clerk																				3 W.H. Bittner; A.J. Carveth; R.H. Sloan			3
Mine Carpenter																				1 Antone Mangus			1
Mine Laborer																				2 J.E. Reed; John Williams			2
Mine Treasurer																				1 Jno. T. Lund, Vesuvius Coal Mining Co.			1
TOTAL	1	0	4	1	1	1	1	1	1	1	5	7	6	25	5	2	3	6	2	149	0	9	231

1 Owen Smith, Thomas Thirleway, Nicholas Thomas, Nicholas Thomas Jr., John Thompson, Joseph Uke, O.C. Underwood
2 Samuel Wilcoxson, Jacob Williams, Harry Williamson, Joseph Winkler, James Wintle, John P. Wolf, William Woodman, Charles Yoder, Joseph Youk, Joseph Zarini, Charles Zarini, John Zurik, Martin Zurik, Martin Zurik Jr.
3 Jas. Alex, Sam Atkina, Jas, A..ng, S.S. Barrett, Jas Baumer, Casper Bayer, Thos. Bell, August Benot, Thos. Beveridge, John Biella, Jas. Biella, Peter Biella, B. Birtmar, Baptiste Bottinelli, Geo. Bottinelli, Jas. Brantner, Henry Brierly, John Brodie, William Brown, D.D. Butcher, Ed Campbell, A.G. Carlson, John Carlton, Alex Clark, Andrew Clarkson, P.J. Cummings, James Dalby, A. DeGabin, Jos. Doerfler Sr., James Dominico, John Eberhart, Jas. Ebrel, B. Fenoglia, Harry Fern, Jas. Fern, Peter Fichtl, Mike Fidel, N. Foss, John Freeburg, Peter Giorzelle, Geo. Golden, Louis Goodfelder, Julian Gradel, G. Graedler, John Graham, Jas. Harney, William Harrigan, Andrew Hassier, Victor Helburg, William Hill, Gaspar Hillbar, William Hilton, Albert Hoffmere, Louis Hoffmire, Pascal Jacovetto, Carlo James, Gregory James, Toney James, Joe Jasko, Gus Jefferson, Geo. Jones, Frank Jordinelli, Robert Jordinelli, Jeff Keleir, Geo. Kimber, John Kroell, Ludvig Kroell, Lewis La Count, Jas. Lapinsky, Dan Larden, William La Salle, Phil Latronic, Ben Lawrence, J. Leggerina, B. Lissalo, John Lyons, Fred Lyman, Andrew Letavitz, L. Mchugh, John Machin, Hugo Machin, Frank Malone, Peter Mangus, Geo. Mann Sr., Steve Melich, Jas. Messoro, Ben Nichoff, Jno. Nelson, G. Nuocci, David O'Brien, F.N. Oberding, A. Onerata, Jas. Palmer, John Palmer, Clause Peterson, Paul Petrum, Joe Pistello, Geo. Pistello, Henry Porta, A. Rappa, Thos. Rizzi, I Robbins, Dave Robinson, Frank Ross, James Rossa, Frank Scarpella, Geo. Serockman, Ed Smeltzer, Frank smith, Geo. Smith, Jacob, Soffranko, Joe Stevens, Bab. Stretz, Robert Thirlaway Sr., Thos. Thirlaway Sr., J.D. Thomas, Thos. Thompson, O.F. Todd, Felix Tosona, H.E. Usinger, A. Vargo, John Vercelona, S. Wilcoxon, D.R. Williams, Harry Williamson, Robert Wilson, Jas. Winttle, Jas. Yonk. R.W. Young, Steve Zarling, Jas. Zarina, John Surick
4 William Atkins, John Dunmire, Emery Fisher, Geo. Giles, Thos. Hilton, Ned Hodgins, Louis Wilson

**APPENDIX B: PHOTOGRAPHS OF RESOURCES RECOMMENDED FOR
LANDMARKING**

DITCHES



Figure B.1. Davidson Ditch.



Figure B.2. Davidson Highline Lateral Ditch.



Figure B.3. Goodhue Ditch.



Figure B.4. Louisville Lateral Ditch.

WATER STORAGE RESERVOIRS



Figure B.5. Hecla Lake.



Figure B.6. Louisville Reservoir.

HAY STORAGE AND SILOS



Figure B.7. Silo on the former Gosselin Farm.

BARN



Figure B.8. Kilker Barn.

LARGE FARMS



Figure B.9. Bowes Farm.



Figure B.10. Harney-Lastoka/7th Generation Farm.

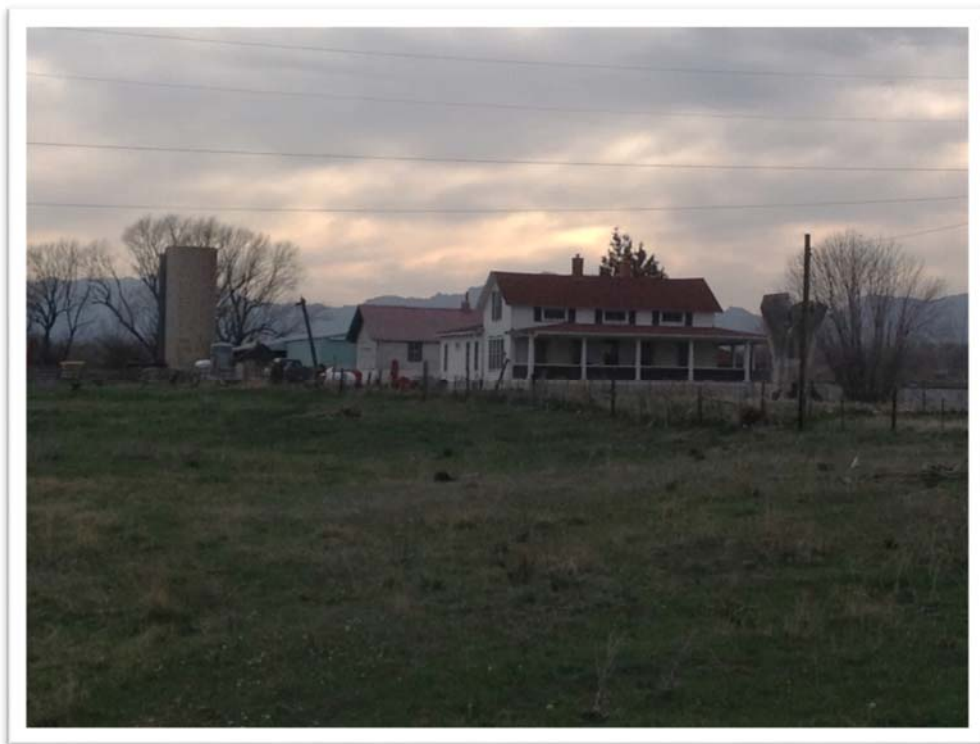


Figure B.11. Kerr/Mayhoffer Farm.



Figure B.12. Murphy/Warembourg Farm.

SMALL FARMS



Figure B.13. 100 W. Spruce Street.



Figure B.14. 101 W. Spruce Street.



Figure B.15. 109 W. Spruce Street.



Figure B.16. 309 W. Spruce Street.



Figure B.17. 310 W. Spruce Street.

RAILROAD TRACKS



Figure B.18. C&S/D&I/BNSF railroad tracks.

MINE COMPANY HOUSES



Figure B.19. 540 Lincoln Avenue.



Figure B.20. 1021 La Farge Avenue.



Figure B.21. 1209 La Farge Avenue.

MINE DUMP



Figure B.22. Rex Mine No. 1 dump.