HISTORIC STRUCTURES
ALONG THE
CACHE LA POUDRE RIVER CORRIDOR
MULBERRY STREET TO SHIELDS STREET

prepared by
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Project:  Cache la Poudre River Corridor
          Historic Resources Analysis

Dear Greg,

In compliance with my proposal and task order with Anderson Consulting Engineers, I have completed the fieldwork and research related to historic resources located along the Cache la Poudre River corridor between Mulberry Street and Shields Street. This work involved several trips to the corridor over the past couple of months to locate and visit each of the resources discussed below. Archival research was conducted online, as well as in the Museum of Discovery and various city offices.

The following report presents the results of my work along the river corridor. However, it should be noted that the current task was not comprehensive in the sense that a deeper level of physical and archival documentation can be completed on each of the historic resources. As we have discussed, this may become necessary as the City determines how it would like to proceed with removal, alteration or retention of the various historic resources in the corridor.

Sincerely,

Ron Sladek
President
The purpose of this first phase of the Cache la Poudre River project is to identify and collect information on historic and potentially historic built resources along the river corridor, specifically focusing upon the approximately two-mile stretch from Mulberry Street to Shields Street. A number of resources relevant to the purpose of the project were found in this area, all of them dating from the nineteenth and twentieth centuries. These are individually addressed in the following text.

While the State and National Registers of Historic Places use a basic guideline that calls for potentially eligible resources to be at least fifty years old unless of tremendous modern importance, the City of Fort Collins imposes no such restriction. Therefore, all major resources within the corridor were reviewed during the course of this project. This included automobile bridges, railroad bridges, irrigation structures, and other structures that are potentially significant from a historical standpoint.

Excluded from this discussion were the many common features along the river that included stormwater discharge pipes, pipes of unknown origin and use, unidentified slabs of concrete and sandstone, riprap and concrete bank stabilization walls, and other small or inconsequential items that did not appear to have any historical significance. The project also did not stray from the river corridor, defined by its adjacent banks, and consequently refrained from including nearby buildings. A few of these, such as Ranch-Way Feeds, the Fort Collins Power Plant (now CSU engines lab), and some of the buildings along Vine Street, are historic and potentially significant. If they may be impacted by work along the river, they will have to be evaluated at the appropriate time.

The historic resources documented along the river corridor are addressed below, moving upstream from southeast to northwest.

**Coy Farm Dam**

The Coy Farm Dam is located in the Cache la Poudre River, along the southern edge of the Woodward Development Site and north of the Mulberry Wastewater Treatment Plant’s northwest corner. It consists of a large horizontal rectangular block of rough poured concrete that extends into the river from the north bank. The dam could not be reached for close inspection because Woodward has closed the site to pedestrian access while earth moving is underway. However, observation from the high riverbank to the south showed that the concrete block is approximately 3’ across the top and perhaps 25’ in length. It is broken and weathered by water and ice. Due to the steep slope covered with vegetation, it
could not be determined whether any remnant of the dam remains along the base of the south bank.

The Coy Farm was settled in 1862, and has long been recognized as one of the first agricultural properties to be developed in the Fort Collins area. Arapahoe Indians also camped on this land until they were pushed north into Wyoming in 1869. During the mid-1860s, the military camp known as Fort Collins was established less than one-half mile to the west, and the town that emerged from the fort began to grow in the 1870s. Despite the elevation change, the Coy Farm extended both north and south of the Cache la Poudre River, and the dam was situated well within the property’s boundaries.

The farm remained in the Coy family and continued to be worked until the late 1980s, when the property was converted into the Link-N-Greens golf course. In the field several hundred yards northeast of the dam, close to where Woodward’s new headquarters will soon be constructed, the Coy barn, silos and milk house remain standing today. These were listed in the State Register of Historic Properties in 1995. Distant from the buildings, the dam was not included in this landmark designation.

Exactly when the Coy Farm Dam was constructed is not currently known. However, it appears on a 1918 Larimer County district court map (see Appendix D). The “Map of Josh Ames, Coy and Other Ditches,” located in Colorado State University’s Morgan Library, simply identifies the feature at this location as a “concrete dam” that spanned the river within the Coy Farm. Other than mention

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on this map, the archival research completed for this project uncovered no other information about the dam’s exact age, builders, or purpose.

Given the dam’s location and the fact that it was developed prior to 1918, it appears likely to have been constructed by members of the Coy family and was somehow related to their agricultural operation. Additional research and field inspection may reveal at least some of the answers to these remaining questions. In the meantime, because of its age and association with the historically prominent Coy Farm, the dam should be considered potentially eligible for local landmark designation. It should not be removed or otherwise altered until it is fully documented and reviewed under the City’s historic preservation code.

**U.S. Geological Survey River Gauge**

This feature is located on the sloped north bank of the river, adjacent to the Poudre River Trail about 50’-75’ southeast of the Lincoln Avenue Bridge. It consists of a tall vertical large-diameter corrugated metal pipe with a conical metal cap. Small solar panels and an antenna are mounted on the roof. The corrugated pipe is painted green, except for a small panel on its west face. At this location are the following notations, written in permanent marker:

--- HWM High 11.28
9/13/2013
--- HWM Low 11.19

These are clearly high water markings made during the flood event of September 2013. The high and low numbers represent feet above flood stage.

A short metal ladder is attached to the pipe’s lower west side, above which is a locked and hinged door that can be opened to access the interior of the corrugated pipe. This indicates that the structure is essentially a chart house that records water levels in the river. Projecting toward the west from the lower area of the corrugated pipe is a small-diameter horizontal pipe. This is suspended above the river by two metal pipe posts.

While this structure may appear to have been at this location for some time, it was actually installed during the fall of 2013. The previous river gauge was located on the north bank just west of the Lincoln Avenue Bridge, and also involved the use of a vertical corrugated pipe as a chart house. However, this was damaged in the 2013 flood and required replacement.

The gauge was rebuilt in its current location with new materials a short distance downstream on the east side of the bridge. Horizontal piping associated with the earlier gauge remains in its original location today, marking where it previously stood.
Although the current river gauge plays an important role in the federal government’s collection of data regarding stream flow, it is a modern feature that was recently constructed. For this reason, it is not considered a historic structure and is unlikely to be eligible for any form of landmarking or preservation regulation for many years to come.

Lincoln Avenue Bridge

The Lincoln Avenue Bridge crosses the Cache la Poudre River on the eastern edge of downtown Fort Collins, just east of Ranch-Way Feeds. The reinforced concrete deck girder bridge is 195’ in length, with a roadway width of 28’. Concrete abutments and a single concrete pier along the river’s north bank support the two-span bridge. Four-foot sidewalks run along both sides of the roadway, and steel pipe guardrails are bolted to the tops of the concrete sidewalks. The paved Poudre River Trail runs beneath the northern span, with the river itself running underneath the southern span. Beneath the bridge, the sloped riverbanks are shored up with concrete riprap.

The Lincoln Avenue crossing of the Cache la Poudre River is one of the earliest in the Fort Collins area and dates back to 1873, when the town was being established. Throughout the late 1800s and into the early 1900s, this road served as the primary wagon and auto route between Fort Collins and Greeley. Consequently, the Lincoln Avenue crossing was of utmost importance to the growing community and saw frequent traffic. (see Appendices)
The first bridge constructed there is likely to have been assembled from timbers. An 1884 bird’s eye illustration of Fort Collins shows a two-span open truss bridge at this location. Over the following decades, this was replaced by at least two subsequent steel truss bridges. The first of these, constructed in 1895, was a narrow Pratt through truss bridge supported by concrete and stone abutments. This bridge served the community for decades until it collapsed in November 1943 as two automobiles attempted to cross the light structure at the same time and one hit the bridge, dislodging it from its abutments. Sergeant Charles Montgomery, a young local man on furlough from the Army, died in the accident.

Due to this collapse, the next bridge would have been constructed in 1944 to get the crossing reopened as soon as possible. The replacement was a sturdier open Parker (Camelback) truss bridge with heavier gauge metalwork designed to handle vehicles that weighed more than horse carts and Model T automobiles. While this bridge remained in use for more than thirty years, over time it became obsolete and had to be replaced.

According to City of Fort Collins records, the bridge located at the Lincoln Avenue crossing today appears to have been constructed in 1977. Although a cultural resource survey completed in 1994 suggested that it might be as much as several years older, city documents from 1976 include plans and photographs taken that summer of the 1944 metal truss bridge, which remained in use. These provide clear evidence that the current bridge could not have been completed prior to 1977.
The 1994 cultural resource study concluded that the current bridge was not old enough to be considered eligible for the State or National Registers of Historic Places. This remains the case today. In addition, the bridge is not particularly rare or unique, nor does it exemplify any major development in bridge construction. It is simply representative of the many hundreds of similar reinforced concrete deck bridges constructed throughout Larimer County and Colorado over the past four decades. For the same reasons, the current Lincoln Avenue Bridge is unlikely to be considered eligible for local historic designation and subject to preservation regulation in Fort Collins.

**Unidentified Concrete Structure**

This low rectangular structure is located along the north bank of the Cache la Poudre River, adjacent to and west of the Lincoln Avenue Bridge. It faces toward the southwest in the direction of the opposite bluff, on top of which is the Ranch-Way Feed Mill. Behind it to the north is the Oxbow Property, a vacant piece of land containing a long arc of mature trees that mark the former route of the river’s main channel. The unidentified concrete structure is located at the historic confluence of the oxbow with the river’s current main channel, which may explain something about its original purpose.

The structure itself consists of a low board-formed concrete wall that projects from the earthen bank into the river, rising perhaps three feet above the winter water level. It appears to have a footprint of at least 10’ x 30’, but could in fact be larger. To the northeast, the structure disappears beneath the riverbank. The concrete wall also disappears beneath a mature tree to the northwest. However, the wall re-emerges beyond the tree and continues for some distance to the northwest before it disappears again beneath a build-up of soil and vegetation.

The riverside edges of the wall, both to the southwest and southeast, are broken by a regular pattern of rectangular openings with metal lips along the bottom, suggesting that these allowed for drainage. Between the openings are vertical metal I-bars, and the concretework behind each of these along the inner wall surface is buttressed with thicker angled concrete. Metal bolts rise from the top of the wall at regular intervals, suggesting that at one time these secured sill plates or a cover (perhaps a floor) on top of the structure. Now out of use, the bolts have been bent to a horizontal position.

Two non-historic features are also present on the structure, neither of which would have been associated with its original use. One is a combination of connected horizontal and vertical pipes that were associated with the river gauge that until recently was mounted adjacent to the structure (see discussion above). This gauge appears to date back no earlier than the 1980s. The other is an unidentified concrete box with a concrete lid and metal door that may also have been related to the river gauge. It appears to be of relatively modern construction.
The interior area of the unidentified concrete structure is filled with rocks, sand, plants and riverside debris, much of which may be due to recent flooding. The bank to the northeast is also eroding into the structure, and appears to have been reshaped and raised higher than it was originally. It is very likely that additional features of the historic structure are buried at the present time.

The original use of this structure is unclear and will require further investigation. So far, research has revealed little about it, as it does not appear in most historical records. Also, no living persons have been located who might remember the structure when it was in use. However, it does appear in a circa 1930 photograph located in the Museum of Discovery archives. (see Appendix F) In this photo, which focuses upon the Lincoln Avenue Bridge, the structure is seen at the confluence of the main channel (now the abandoned oxbow) and a smaller slough to the south (now the main channel). The historic primary river channel flowed around the structure’s northwestern corner.

The low concrete wall is apparent in the photo, complete with its rectangular openings and vertical metal bars. The openings were partially filled with either water or silt, raising a still unanswered question about why it was designed to allow flow through the structure. Above the concrete wall, the structure appears to have had a floor, possibly constructed of wood. A wood railing set back from the river’s edge about eight feet surrounded a small wooden shed that rested upon the deck and faced toward the northeast. Near the structure’s southwest corner was a short stairway with wood handrails that allowed access to and from the riverbank next to the bridge abutment. Finally, the entire structure was exposed, with no built-up riverbank rising behind it.
While the circa 1930 photograph does not fully explain the structure’s use, it answers numerous questions about its original or early appearance, which was in the form of a riverside platform that allowed water to flow underneath the floor. At this time, two possibilities come to the forefront in terms of its possible historic use. One is that it could have had a recreational purpose. The other is that it utilized the flow of water from the oxbow (the main channel) to operate some sort of machinery associated with the shed. In either case, the structure was likely abandoned during the 1950s, when the river through this area was channelized and reshaped. This work diverted the main river flow from the oxbow to its current channel, causing the oxbow to dry up. Additional research may uncover more information on the background and use of this unusual feature, and should be pursued.

Because of its age, location, and known characteristics, this historic resource should be considered potentially eligible for local landmark designation. It should not be removed or otherwise altered until it is fully documented and reviewed under the City’s historic preservation code. In addition to the possibility that further archival research and interviews may reveal more about its origins and use, the resource appears to be an excellent candidate for archaeological investigation.

**Linden Street Bridge**

The Linden Street Bridge crosses the Cache la Poudre River on the northeastern edge of downtown Fort Collins in the historic vicinity of the fort that gave the town both its start and its name. This reinforced concrete deck girder bridge is 204’ in length, with a roadway width of 36’. Concrete abutments and a single concrete pier on a narrow island in the middle of the river support the two-span bridge. Sidewalks run along both sides of the roadway, and steel pipe guardrails are bolted to the tops of the concrete sidewalks.

The first crossing of the Cache la Poudre River along Linden Street was completed in 1903, coinciding with construction of the Great Western Sugar Company factory across the river northeast of downtown. Prior to that time, the river at the northern end of Linden Street presented a challenge to cross. This was due to the presence of two river channels that were separated by an oval body of land known as Grand Island. Due to this topography, the crossing developed in 1903 required the construction of two bridges. (see Appendices)

In 1908, the Denver & Interurban Railroad extended a streetcar line up Linden Street and over the bridges to provide factory workers with access to the sugar plant. During the summer months, this line also offered rides to the recreational facilities and picnic grounds at Lindenmeier Lake. The streetcar system suffered financially during and after World War I, and service across the river was discontinued in 1923 when a flood destroyed the bridges. However the crossing remained important for automobiles, and the bridges were quickly rebuilt.
Over the past 110 years, the Linden Street Bridge has been replaced several times. In 1904 and 1923, replacement became an urgent necessity due to destruction caused by major floods. These events not only destroyed the bridges, but also reshaped the course of the river. For example, by the mid-1920s Grand Island had been cut in two, probably as a result of the 1923 flood. This resulted in the need for three bridges at the Linden Street crossing.

Over the following two decades, the naturally braided river channel was intentionally reshaped into a single stream that required just one bridge to span. A new bridge, a Pratt through truss, was erected on Linden Street in 1944. Additional work completed during the 1950s realigned the river’s main channel away from the now-abandoned oxbow to the northeast. This restricted its previously arcing course to the straightened stretch that now runs between Linden Street and Lincoln Avenue. Plans were drafted for another new bridge across the river in 1955, although it is not clear whether these were implemented.

The current Linden Street Bridge was constructed in 1984, replacing the open metal truss bridge that had been constructed there thirty to forty years earlier. It is not old or significant enough to be considered eligible for the State or National Registers of Historic Places. The bridge is not particularly rare or unique, nor does it exemplify a major development in bridge construction. It is simply representative of the many hundreds of similar reinforced concrete deck bridges constructed throughout Larimer County and Colorado over the past several decades. For the same reasons, the Linden Street Bridge is unlikely to be considered eligible for local historic designation and subject to preservation regulation in Fort Collins.
**Colorado & Southern Railway (BNSF) Bridge**

The Colorado & Southern Railway Bridge, now owned by the Burlington Northern Santa Fe Railroad, crosses the Cache la Poudre River on the northern edge of downtown Fort Collins. It is located between the College Avenue and Linden Street bridges, just east of the old Fort Collins Power Plant (Colorado State University’s Engines and Energy Conversion Laboratory) and south of the Gustav Swanson Natural Area.

This narrow steel girder bridge is over 200’ in length and carries a single track across the river. Concrete abutments and four piers support the bridge, which consists of five spans. Two of the piers rest upon the embankments, and the other two are mounted atop concrete foundations within the river channel. Each pier is formed of four heavy vertical steel I-beam piles with smaller I-beam cross braces. A large horizontal rectangular concrete block rests upon each set of piles. These support the two parallel lines of heavy horizontal steel girders that span the length of the bridge. Wood beams rest on top of the girders at regular intervals and are cantilevered to the sides about four feet beyond the tracks. These support metal walkways that flank the tracks, along with wire rope handrails mounted to vertical angle bars. The standard gauge steel rails rest upon a closely placed pattern of wood ties.

The bridge runs between downtown Fort Collins and the Vine Drive marshaling yards (known as North Yard) to the northeast. From there, the rail line runs 45 miles north to Wellington and Cheyenne. To the south, the line runs about 60 miles to Boulder and Denver. This crossing over the Cache la Poudre River is
consequently important to the rail line as a whole. The Poudre River Trail runs along the bank of the river beneath the bridge's southern span.

Incorporated in 1898, the Colorado & Southern Railway (C&S) eventually ran from Casper and Cheyenne, Wyoming south to Texline, Texas. From there, a subsidiary known as the Fort Worth & Denver Railway transported C&S railcars to the Gulf Coast city of Galveston. The railroad primarily became known for hauling freight, including grain, sugar beets and coal. Passenger service also ran along the route between 1905 and 1967. Its most famous train, the Texas Zephyr, provided first class service between Denver and Dallas. The Pioneer Zephyr ran between Cheyenne and Denver, with regular stops at the C&S passenger station at the intersection of Laporte Street and Mason Street in downtown Fort Collins.

In 1908, the C&S became an independent subsidiary of the Chicago, Burlington & Quincy Railroad (CB&Q). Decades later, in 1981, the Burlington Northern Santa Fe Railroad (BNSF) acquired full ownership and operation of the Colorado & Southern. The C&S, and the bridge over the Cache la Poudre River, continue to be owned and operated by the BNSF today.

The first bridge at this crossing of the Cache la Poudre River was constructed in 1903, when the sugar factory was being completed northeast of downtown. (see Appendix E) It appears to have been erected by the recently formed Fort Collins Development Railway Company, which was controlled by the C&S. The rail line crossed the river, ran east along Vine Drive to the sugar plant and marshaling yards, and then curved north to Wellington and Waverly. Passenger service was inaugurated along the route in 1905, after additional track was completed between Wellington and Cheyenne.

A series of bridges appear to have stood at this historic river crossing over the past century, each one replaced due to flood damage or obsolescence. In fact, below the north embankment of the current bridge are the weathered remnants of the previous bridge's wood pilings. The present steel girder bridge resting upon steel pilings appears to have been constructed around the 1980s, and may not be significant enough to qualify for local landmarking or for the State or National Registers of Historic Places. However, whether this is a common bridge type in Colorado has yet to be determined. It does not appear to be common to the Fort Collins area, which may raise its level of significance even though it is only a few decades old.

Additional research and analysis may conclude that the bridge exhibits a rare or unique engineering design, one that represents a major development in bridge construction. On the other hand, it may turn out to be unremarkable. For this reason, it is recommended that additional work be completed to answer these questions before any replacement or alteration of the bridge takes place.
Coy Diversion Dam, Headgate & Ditch

The Coy Diversion Dam and Headgate are located along the Cache la Poudre River, north of the old Fort Collins Power Plant (Colorado State University's Engines and Energy Conversion Laboratory) and about eighty yards east of the College Avenue Bridge. The low concrete dam spans the entire width of the river. At the center of the river, the structure includes a fish ladder and a boat chute. These are flanked on either side by spillways. The steep southern riverbank, at the south end of the dam below the Poudre River Trail, is supported by a vertical concrete retaining wall. A metal headgate operated by an electric motor is recessed into the dam, about four feet south of its northern end near the Coy Ditch headgate.

The Coy Ditch headgate is situated along the river’s north bank at the north end of the dam, where it has historically drawn water into the ditch. Board formed concrete walls flank the headgate to the east and west of its inlet. To the west, the wall extends along the north bank of the river all the way to the College Avenue Bridge. Several feet within the concrete inlet structure is the recessed metal headgate for the Coy Ditch. The metal gate is raised and lowered with a simple geared ratchet bar system that is commonly found on similar structures. Just outside the concrete wall west of the gate is a vertical metal pipe and box with a hinged lid that were presumably used as the ditch’s charthouse.

Running from the headgate to the northeast and then east is the Coy Ditch. This extends through the Gustav Swanson Natural Area, passing through two small ponds along the way. It continues east just south of Vine Drive, and then turns to
the south at Linden Street. The ditch runs south and then southwest for several blocks along the west side of Linden Street. It wraps around the west side of the Gustav Swanson Natural Area parking lot and finally tails out in the Cache la Poudre River just west of the Linden Street Bridge.

The pioneer Coy family settled in the countryside east of today’s downtown Fort Collins in 1862, before the fort had even been established (see the Coy Farm Dam above). In the arid climate, it quickly became apparent that irrigation would benefit their crop production. Three years after they arrived, the Coys acquired water rights along the Cache la Poudre River (priority number 13) and set to work developing their own irrigation ditch. A headgate was constructed along the north bank of the river across from the fort, and excavation of the ditch was accomplished by hand and with the aid of a horse-drawn scraper.

When completed, the Coy Ditch extended for about 1.5 miles to the southeast, crossing through the open fields that today are occupied by the New Belgium Brewery and Buckingham neighborhood. (see Appendix C) It continued across Lincoln Avenue into the Coy farm (now the Woodward development site), where for over a century it supported the growth of crops such as alfalfa, corn, grains, and later sugar beets. The ditch tailed out in the Cache la Poudre River near today’s intersection of Mulberry Street and Lemay Avenue. After the farm was converted into the Link-N-Greens golf course in the late 1980s, it continued to provide water to the site. With development increasing in the area, over the past two decades the ditch has been truncated and substantially altered, leaving it a remnant of what it was historically.

With the constant flow of water and ice, riparian irrigation structures such as dams and headgates require periodic repair and even reconstruction. The Coy Dam and Headgate have been no exception to this rule. Both of these structures have seen at least portions of their concrete and metalwork repaired over the past century, with some of this work completed during the past few decades. For example, it appears that the dam’s downstream face was covered with rocks until about a decade ago, when these were removed and replaced with smooth concrete. The headgate structure and wall to the west do not appear to have been altered for many decades. Additional research is likely to answer more questions about possible changes to these structures over the past century.

At this time, it seems unlikely that the Coy Diversion Dam, Headgate and Ditch would be eligible for designation to the State or National Registers of Historic Places. The dam appears to have been constructed much later than the headgate and has experienced alterations that might disqualify it for local landmarking. The ditch itself has been substantially altered and is clearly not eligible. However, given the fact that the headgate was developed during the 1860s by one of the area’s most prominent pioneer families, it should be considered potentially eligible for local landmark designation despite the fact that it has most likely been rebuilt. It should not be removed or otherwise altered until it is fully documented and reviewed under the City’s historic preservation code.
College Avenue Bridge

The College Avenue Bridge (U.S. Highway 287) crosses the Cache la Poudre River on the northern edge of downtown Fort Collins, carrying heavy traffic along the city’s main north-south thoroughfare. The reinforced concrete box girder bridge is 228’ in length, with a four-lane roadway width of 76’. Concrete abutments and three large piers support the four-span bridge, which crosses both the river and the Poudre River Trail. Concrete sidewalks run along both sides of the asphalt roadway, separated from the traffic by low guardrails.

Viewing platforms project from the walkways in three locations (directly above the piers) along each side of the bridge, allowing pedestrians to step out of the way and observe the river from above. Metal guardrails rise from the outer edges of the sidewalks. Four reproduction light fixtures featuring a vintage design with glass globes rise from concrete bases on either side of the bridge. Below the deck, the concrete piers are ornamented with vertical striations. Overall, it is apparent that the structure was designed to be both functional and attractive, marking the northern entrance into downtown Fort Collins. Recognizing its important role and location, in the 1990s the city named the structure the “North College Gateway Bridge.”

The College Avenue crossing of the Cache la Poudre River is one of the earliest in the Fort Collins area and dates back to the 1870s, when the town was first established. (see Appendices) In 1873, the Larimer County Commissioners earmarked $1,200 for the construction of a bridge over the Cache la Poudre River at the north end of College Avenue. The street was anticipated to develop...
into the town’s primary north-south commercial artery, and the trail north of the river provided access to the countryside as far as Laramie, Wyoming. Consequently, a reliable crossing over the river at this location was of utmost importance to the growing community. In March 1875, R. W. Cloud was engaged to erect the first bridge at this location for $864. The county paid his fee with the stipulation that the Town of Fort Collins improve the approach to the bridge from the south.

It is very likely that the first bridge erected at the College Avenue crossing was constructed of timbers. According to an 1873 map, it spanned the river’s main channel, but a small slough to the south evidently had to be forded. An 1884 bird’s eye illustration of the town showed two bridges spanning the river, one over the main channel and another over the small slough. The short road segment between them crossed over a small island. From the illustration, these appear to have been deck bridges resting upon pilings. Ten years later, the slough and island were gone, and just one bridge was used to cross the river.

By the early 1900s, the Cache la Poudre River at the College Avenue crossing was spanned by a metal truss bridge, possibly a Pratt through truss. This is likely to have been erected after the devastating 1904 flood that destroyed most of the bridges in the vicinity. At that time, most of the traffic over the bridge would still have been horse-driven. By the 1910s and 1920s, automobiles were commonplace on area roads. The earlier truss bridge was replaced in the 1930s by a concrete and metal I-beam structure capable of handling heavier vehicles and faster traffic. Laborers employed by the federal Works Progress Administration reportedly constructed this bridge. U.S. Highway 287 was established in 1939, running from Denver to Yellowstone National Park through the center of Fort Collins and over the College Avenue Bridge.

In 1955, a modern five-span steel girder deck bridge was constructed at the crossing, paid for by the Colorado Department of Highways. The project may actually have involved a major expansion and improvement of the 1930 bridge. With a length of 303’, the new bridge included sidewalks, handrails, and pole lights. Concrete abutments and four large piers supported it from beneath. At that same time, new bridges were constructed to the north at the College Avenue crossings over the Lake Canal and Eaton Ditch.

Located along a federal highway, the current College Avenue Bridge over the Cache la Poudre River was constructed in 1995 and is owned by the Colorado Department of Transportation. At this time, it is not old or significant enough to be considered eligible for the State or National Registers of Historic Places. The bridge is not particularly rare or unique, nor does it exemplify a major development in bridge construction. It is simply representative of the many hundreds of similar bridges constructed throughout Larimer County and Colorado over the past few decades. For the same reasons, the bridge is unlikely to be considered eligible for local historic designation and subject to preservation regulation in Fort Collins.
Union Pacific Railroad Bridge

The Union Pacific Railroad Bridge crosses the Cache la Poudre River on the northern edge of downtown Fort Collins. It is located about 200’ west of the College Avenue Bridge, just east of Lee Martinez Park and the River’s Edge Natural Area. Not only does the bridge span the Cache la Poudre River, it also crosses the Poudre River Trail and the broad floodplain north of the river channel. Due to its historic use, visible location, and physical characteristics, the structure is well known in the community and for several generations has been referred to as the “Telephone Pole Bridge.”

This open deck timber bridge is over 500’ in length and carries a single track across the river. Wood and earthen abutments, along with multiple sets of evenly spaced pole pilings, support the bridge, which consists of 31 spans. Each set of five pilings is constructed of heavy vertical poles supported by horizontal and diagonal dimensional lumber braces. Sturdy horizontal wood beams rest on top of the pilings and project to the sides about two feet. These support the long parallel lines of heavy horizontal wood girders that span the length of the bridge. Numerous wood ties cap the girders, held in place by thick boards that run the length of the bridge’s upper surface. Between these boards are the steel rails upon which the trains travel. All of the bridge’s wooden members are held together with metal bolts.

In 1911, the Union Pacific Railroad arrived in Fort Collins, extending its main line into the downtown area from the southeast parallel to Jefferson Street. Separate passenger and freight depots were constructed, both of which remain standing.
today. Eager to capture new business, in 1924 the railroad constructed an agricultural spur line that would run from its main line in downtown Fort Collins into the countryside to the north. (see Appendix E) Key to the route’s success, a long timber bridge was erected across the Cache la Poudre River and its floodplain that year, just west of and parallel to College Avenue. Opened to traffic on September 1st, the 17-mile route extended to Waverly and Buckeye, where a wye allowed the engines to turn around and head back south.

With the bridge and tracks completed, trains began traveling north several times each week during the growing season. At Waverly and Buckeye, they picked up loads of alfalfa, sugar beets and livestock, and hauled them back to Fort Collins. In 1926, a spur was extended from this line into the developing oilfield north of town, delivering supplies and hauling crude oil to market in tanker cars. Another spur to the northwest allowed the Union Pacific Railroad to serve the Ideal Cement Plant, which opened in 1927 north of Laporte.

The oilfield spur was abandoned in 1946, and traffic ceased along the line to Waverly and Buckeye in 1965. What remained active was the spur that served the cement factory. Trains still traverse this route today, crossing over the wooden bridge in Fort Collins and heading to and from the cement plant, which halted production in 2002 and has since been used as a distribution center.

Over the decades since it was constructed, the bridge has had to be repaired on a number of occasions due to flood damage. A major flood in 1976 forced the railroad to replace many of the timbers, and additional repairs were completed following the 2013 flood. Although this work changed out some of its wooden parts, these appear to be duplicates of the originals. Overall, the Union Pacific Railroad Bridge remains in its original location and appears to have retained its original style, wood construction, and historic appearance. It is also a rare example of a substantial open deck timber bridge, very few of which remain standing in the region today.

For ninety years, this bridge has played a key role in the development of agriculture and industry in the countryside north of Fort Collins. For this reason, and despite the fact that some of its wooden members have been replaced over the years, the bridge appears to be eligible for local landmarking. In addition, it may be eligible for State and/or National Register designation. In any case, it is important that the bridge be fully documented and preserved, if at all possible, and that no attempts be made to have it demolished.

**Lake Canal Diversion Dam & Headworks**

The Lake Canal Diversion Dam and Headworks are located along the Cache la Poudre River, about 1,000’ west of College Avenue along the south side of Woodlawn Drive south of Legacy Park and northeast of Lee Martinez Park. The low concrete, two-step dam spans the entire width of the river, with vertical
concrete wingwalls stabilizing the banks at either end. At the eastern end of the dam (essentially the north bank of the river) are the ditch headworks, surrounded by chain link fencing. Diverted by the dam, river water must first pass through a long horizontal grizzly, or screen, formed of vertical metal pipes before it approaches the gates. This prevents larger floating objects such as wood and ice from clogging the gates or getting into the ditch. A narrow concrete sidewalk with metal pipe handrails and supported by two concrete piers runs along the top of the grizzly.

The intake structure is lined with concrete walls that direct the water to two side-by-side gates at its eastern end. While much of the structure appears to be decades old, the gates and their surrounding concretework are of modern construction and are controlled by electric motors. After passing through the gates, the water enters the earthen Lake Canal. This snakes eastward beneath College Avenue, through the northern area of the city, and into the countryside beyond. The canal runs twenty miles to the southeast, supplying water to numerous agricultural users and filling Thompson Lake and Lake Canal Reservoir No. 1 between Windsor and Timnath.

The Lake Canal was constructed in 1873, when the Fort Collins Agricultural Colony and the Town of Fort Collins were established. (see Appendices B & C) To build the irrigation system, the Colony engaged John C. Abbott, a former member of the Union Colony (which became the town of Greeley) and future state auditor, along with Benjamin H. Eaton, a prominent pioneer farmer and future Colorado governor. As they oversaw construction of the Lake Canal, the
men were also busy coordinating development of the Larimer County Canal #2, which diverted river water through the countryside west and south of Fort Collins. During the drought of 1874, a heated dispute arose between the Fort Collins and Union Colonies over water diversions into these ditches. The Union Colony threatened legal action, claiming that the Fort Collins Colony was removing so much water from the river that it was leaving downstream users without adequate supplies for their crops. Settlement of the conflict led to adoption of the Colorado system of water appropriations that remains in place today.

During the early decades of irrigation in Colorado prior to 1900, the ditch companies recognized that water storage was critical to their operations. Many began to construct reservoirs that would capture and hold water for use late in the growing season and during period of drought. The Lake Canal Company, which owned and managed the ditch, built reservoirs of its own in the countryside southeast of Fort Collins. The Lake Canal remains in use today, providing water to numerous irrigators along its length.

In 1994, a cultural resource survey was completed on the Lake Canal Diversion Dam and Headworks. This document concluded that the resource was eligible for both local landmarking and the National Register of Historic Places. While the diversion dam and headgate have been reconstructed, perhaps several times, since they were first built well over a century ago, they remain in their original locations and are still used for their original purpose.

Photographs taken during the course of the 1994 project show that the headgate structure, but not the entire headworks, was rebuilt during the past twenty years. Subject to the constant forces of water and ice, it is common for structures such as this to require regular maintenance and periodic reconstruction. Despite this, the Lake Canal remains notable as a prominent early irrigation ditch associated with Benjamin Eaton, and for its role in the early development of the system of water appropriations in Colorado.

Due to its significance and probable eligibility for landmark designation on some level, any plans for alteration or removal of these features should involve careful documentation of the structure and mitigation planning prior to any work being completed. At minimum, the headworks should be left in place even if the diversion dam is removed.

**Mason & Hottel Mill Race Headgate**

Two modern pedestrian bridges cross the Cache la Poudre River west of the Lake Canal between the McMurry and Salyer Natural Areas to the north and the Poudre River Trail to the south. Built since 1980, neither of these is of historic interest. West of these, where a line drawn due north from Loomis Street meets the trail and south bank of the river, is a large concrete structure that appears to be associated with the historic Mason & Hottel Mill Race. (see Appendices A-C)
Located adjacent to the Poudre River Trail, the board formed concrete structure sits about twenty feet south of the river. It is also several feet above the river’s surface. Since the late 1800s, periodic floods have substantially altered the river’s course and reshaped its banks. Soils and debris built up against the concrete walls, partially obscuring them from view. A large tree has also grown up against the structure’s northeast riverside face. The western wingwall has shifted outward and is no longer fully upright. Overall, the structure appears to have been both constructed and abandoned many decades ago.

The riverside length of the eastern wingwall is perhaps ten feet longer than the others. Opposite this toward the river is a parallel, slightly lower concrete wall, with a gap between them of about five feet. The walls were constructed so they form a channel that narrows to the west and is open to the east. About halfway along their lengths are opposing vertical recessed panels with bolts that still retain wood boards. Weathered horizontal boards also currently span the gap between the walls at this location. A tree is growing within the channel. An old wood fencepost wrapped in wire still stands at the eastern end of the upper wall.

A map from 1873 and an 1884 bird’s eye illustration of Fort Collins both show a bridge located across the river at the north end of Sherwood Street, two blocks east of this location. In addition, the 1884 illustration places the headgate of the Mason & Hottel Mill Race next to the bridge. However, this appears to be in error. Plans for the town during those early years did call for development to extend northward along a number of the north-south streets all the way to the river. But this did not occur and the low-lying area between the river and Elm Street remained agricultural and undeveloped, possibly due to periodic flooding.
Later maps from 1906, 1918 and 1929 show that the mill race headgate was actually located farther west at a point due north of Loomis Street. This is where the large concrete structure is found today. Whether a bridge was ever constructed there is unclear, and seems very unlikely. All of this points to the likelihood that the structure on this site is in fact the Mason & Hottel Mill Race headgate. Drawing water from the south bank of the river, the mill race extended toward the southeast through present-day Lee Martinez Park in the direction of downtown Fort Collins. After crossing College Avenue just north of Cherry Street, it continued to the southeast down Willow Street. The mill was located along the south bank of the river at today’s intersection of Willow Street and Lincoln Avenue, a property now occupied by Ranch-Way Feeds (the old mill is incorporated into this facility).

Constructed in 1869 by Elizabeth “Auntie” Stone and Henry Peterson, both prominent founders of the town of Fort Collins, the business initially operated as the Lindell Mill and was the first in the region to produce flour marketed under the names Defiance, Jack Frost, Snow Trader, and Pride of Colorado. Powered by water drawn from the river, the headgate and race were constructed at the same time the mill was being built. Joseph Mason purchased the business in 1873, and in 1880 sold half of it to Benjamin Hottel. They remained partners until Mason’s death in 1881, after which Hottel continued to fully own and operate the business. Four years later, he sold the mill to the Denver-based Colorado Milling & Elevator Company, a growing western agricultural processing enterprise with facilities in several states.

During the late 1800s and early 1900s, the headgate and mill race would have required regular maintenance and periodic replacement. This would especially have been the case following floods. River water continued to power the mill until the facility switched over to electricity in 1919. This suggests that the headgate structure along the river dates from sometime prior to that year. Additional research may determine exactly when the current structure was constructed, as it may have replaced the original headgate. In any case, the mill race was abandoned and over the years was erased from the landscape, leaving the headgate along the river as its sole surviving structure. The mill continued producing flour until 1948, after which it shifted to the production and sale of animal feeds. The expanded facility remains in operation today as Ranch-Way Feeds, the oldest continually operating business in the city of Fort Collins.

Due to its significance as an important resource related to early agricultural industrial production in Fort Collins, the headgate structure is likely to be eligible for local landmark designation. Whether it might be eligible on the state or national levels is currently unclear. However, any plans for alteration or removal of the structure should involve careful documentation and mitigation planning prior to any work being completed. Ideally, the headgate should be left in place and interpreted for visitors along the Poudre River Trail.
APPENDIX A

Franklin Avery’s Map of Fort Collins, 1873
APPENDIX B

Willits Map of Fort Collins, 1894
APPENDIX C

Map of Josh Ames, Coy & Other Ditches, 1918
Lincoln Avenue Bridge (lower right)
to Hottel Mill Race Dam (upper left)

Source: Morgan Library, Special Collections, Colorado State University
APPENDIX D

Map of Josh Ames, Coy & Other Ditches, 1918
Coy Farm Dam (lower right)
to Lincoln Avenue Bridge (upper left)

Source: Morgan Library, Special Collections, Colorado State University
APPENDIX E

Map of Fort Collins, 1925
APPENDIX F

Lincoln Avenue Bridge & Concrete Structure
circa 1930
View to the northwest

Source: Fort Collins Museum of Discovery Archives (Image #H19791)