A Cultural Resources Inventory within the Ogden Canyon Waterline EA Area, Weber County, Utah

Utah State Project Authorization No.: U-11-LI-0827s
State of Utah Archaeological Inventory Permit No.: 24

Prepared for:
Utah Department of Transportation and Utah Division of Drinking Water

Submitted by:
Danny Mullins, M.S., RPA; Garrett Webb M.A., RPA; Mike Eichorn, B.A.; and Nate Nelson, B.A..

Logan Simpson Design Inc.
8 East Broadway, Suite 300
Salt Lake City, UT 84111

December 2011
LSD Technical Report No.: 115081
ABSTRACT AND MANAGEMENT SUMMARY

Report Title A Cultural Resources Inventory within the Ogden Canyon Waterline EA Area, Weber County, Utah

Agencies Involved Utah Department of Transportation; Environmental Protection Agency; Utah Department of Environmental Quality, Division of Drinking Water

Utah State Project Authorization No. U-11-LI-0827s

LSD Project No. 115081

Report Date December 2011

Project Description Ogden City is planning to replace an existing water pipeline within Ogden Canyon, Weber County, Utah. The Environmental Protection Agency (EPA) is the lead agency for this project, though the Utah Department of Environmental Quality, Division of Drinking Water (DDW) has authority to act on their behalf for this project. The existing pipeline is located within the Utah Department of Transportation (UDOT)-right-of-way (ROW) along State Road 39. UDOT will act as a consulting party. Permits to be within the UDOT ROW require that the applicant ensures that all environmental compliance is obtained. Because the project is partially federally funded, an Environmental Assessment (EA) study is required prior to the commencement of project activities. The EPA designated DDW as the lead agency for Section 106 oversight. The contractor for the EA, Horrocks Engineers, Inc., has requested that Logan Simpson Design Inc. (LSD) conduct a Class III cultural resources inventory of the project corridor in compliance with Section 106 of the National Historic Preservation Act and Utah Code Annotated 9-8-404.

Project Location Within a portion of sections 22, 23, 24, 26, and 27, T6N, R1W and sections 16, 17, 18, and 19, T6N, R1E Salt Lake City Meridian (USGS 7.5’ Quadrangle Ogden, Utah, 1998; USGS 7.5 Quadrangle Huntsville, Utah 1998)

Land Ownership State of Utah

Methods Pedestrian inventory spaced at 15 m intervals

Acres Inventoried 51 acres

Number of Sites 3

Register-eligible Sites Total: 1 42 WB300

Ineligible Sites Total: 2 42 WB299, 42 WB483

Summary The Class III cultural resources Inventory of the Ogden Canyon Waterline EA Inventory area resulted in the update of Site 42 WB299, the update of a segment of Site 42 WB300, one newly recorded site (42 WB483), and one Isolated Occurrence (IO). The IO is not eligible for the National Register of Historic Places (NRHP) and preservation is not required. Site 42 WB299 and 42 WB483 are recommended not eligible for the NRHP and do not require avoidance. Site 42 WB300 is recommended eligible for the NRHP under Criterion A and LSD recommends that this segment of the site be avoided by project activities. If avoidance of the site is not possible, the site should be subjected to an appropriate form of mitigation (to be determined by UDOT, DDW, and SHPO).
Two sites (42WB298 and 42WB301) are also located within the inventory area/APE. Both sites are active bridges, architectural resources, and should not have originally been recorded as archaeological sites. LSD therefore did not update these previously recorded sites. Horrocks has instead documented these architectural resources as part of a Reconnaissance Level Architectural Inventory for this project and is reporting them separately (Calkins 2011).

One other site (42WB329) is located near the project area. Site 42WB329 is the abandoned Ogden Rapid Transit grade. A previously recorded segment of the site is located outside but near the north edge of the inventory area; no segments were observed within the inventory area and it is probable that the site has been removed, buried, or is otherwise no longer recognizable within the inventory area. It is also possible, however, that buried segments of the site may be located within the inventory area and could be encountered during construction activities. In the event that sub-surface portions of Site 42WB329 or any other previously unrecorded subsurface cultural resources are encountered during project activities, these activities must be discontinued in the immediate vicinity of the discovery. Personnel shall then follow procedures stipulated in the 2008 UDOT Standard Specification Section 01355, Part 1.13.
**INTRODUCTION**

Ogden City is planning to replace and upgrade an existing water pipeline within Ogden Canyon, Weber County, Utah. The Environmental Protection Agency is the lead agency for this project, though the Utah Department of Environmental Quality, Division of Drinking Water (DDW) has authority to act on their behalf for this project. The existing pipeline is located within the Utah Department of Transportation (UDOT)-right-of-way along State Road 39 (SR-39). Because the project is partially federally funded, an Environmental Assessment (EA) study is required prior to the commencement of project activities. As part of the EA, a cultural resources inventory is required under 36 CFR § 800 (as revised in 2004), the regulations implementing Section 106 of the National Historic Preservation Act. The EPA designated DDW as the lead agency for Section 106 oversight. The contractor for the EA, Horrocks Engineers, Inc., has requested that Logan Simpson Design Inc. (LSD) conduct a Class III cultural resources inventory of the project area of potential effects (APE) in compliance with Section 106 of the National Historic Preservation Act and Utah Code Annotated 9-8-404. The proposed work will require ground disturbing construction activities, which may potentially impact cultural resources within the project area/APE. An evaluation of Traditional Cultural Properties was not undertaken by LSD as part of this investigation.

The APE includes areas affected by the removal of existing pipe, installation of new pipe, construction of water tanks, creation and use of access roads, and the establishment of several construction staging areas within Ogden Canyon. The APE and the inventory area are the same. The Inventory area is located within portions of Sections 23, 24, 26, and 27, T6N, R1W and Sections 16, 17, 18, and 19, T6N, R1E (USGS 7.5’ Quadrangle Ogden, Utah 1998; see Figure 2).

**PHYSICAL SETTING**

The inventory area is located within Ogden Canyon and ranges in elevation from 4,400 to 4,800 feet above mean sea level. It is located within the Northern Wasatch portion of the Wasatch Range section of the Middle Rocky Mountains physiographic region (Stokes 1986:242). The Wasatch Range is a thin northerly trending mountain range with few foothills and sharp peaks resulting from the upward movement of the Wasatch Fault (Stokes 1986:242, 252–253). Geologically, the Northern Wasatch portion of the Wasatch Range consists of Paleozoic rocks that have been brought to their current position by thrust faults (Stokes 1986: 242). Prominent topographic landmarks surrounding the inventory area include the Promontory Mountains to the west, Mount Ogden to the south, Lewis Peak to the North, and Ogden Valley to the east.

Ogden Canyon is generally narrow and rough. Topography consists of a gradual easterly increase in elevation along the canyon floor. The area immediately surrounding the canyon floor is comprised of rugged peaks and steep cliffs that rise from the canyon bottom. Sediments consist of a silty loam that is mixed with a moderate percentage of sub-rounded gravels. Deposition is a mix of alluvial and colluvial deposits and residual weathering of local materials. Vegetation within the area is generally dense and consistent with the Upper Sonoran lifezone for a riparian community. It includes willow, cottonwood, Russian olive, ponderosa pine, scrub oak, sagebrush, cheatgrass, and various other grasses and forbs. Historically, this region has supported a variety of animal species, including elk, rabbit, and mule deer. The nearest source of permanent water is the Ogden River, which runs across a majority of the inventory area.
Figure 1. State location.
Figure 2. Land jurisdiction.

Key
- Survey area/APE
- Private
- Wasatch-Cache National Forest
- State Wildlife Reserves
- Pineview Reservoir
CULTURE HISTORY

A cultural history of the project area has been prepared to provide a context in which the significance of historic properties found during cultural resources inventory work can be evaluated relative to the National Register of Historic Places (NRHP) eligibility criteria. This overview is intended only as a general historical outline and to allow for an association of any cultural resources to periods of historical significance.

The area that would become Weber County was occupied by indigenous populations as far back as 10,000 B.C. The archaeological record suggests that prehistoric occupation of the area was especially common during the Late Archaic (5000 B.C. to A.D. 300), Formative (A.D. 300 to 1200), and Proto-Historic (A.D. 1200 to 1776) periods. Native groups are also known to have used Ogden Canyon as a travel corridor between the Salt Lake Valley and higher elevations areas to the east, within the Wasatch Range. At the time of Euro-American contact, Native American groups frequenting the area include the Ute and Shoshoni (Roberts and Saddler 1997:14–17).

Euro-American visitation of Utah and Weber County began in the early 1800s, when American and British trappers began visiting the area. Well-known trapper and trader Peter Skene Ogden frequented the area’s canyons, rivers, and streams, and many landmarks in the area—including Ogden Canyon—are named in after him. In 1843, trapper and trader Miles Goodyear constructed a fort and trading post, named Fort Buenaventura, near the confluence of the Weber and Ogden rivers. This fort became the area’s first permanent Euro-American settlement. Large-scale Euro-American occupation of the region began in 1847, when members of the Church of Jesus Christ of Latter-day Saints (L.D.S., or Mormons) immigrated to the Salt Lake Valley (Roberts and Saddler 1997:19, 23, 51).
The State of Deseret (later Utah) was formed in 1849 and Weber County in 1850; intensive settlement of the Weber County area began not long after. The L.D.S. Church purchased Goodyear’s fort in 1847; other permanent towns were established in the area during the early 1850s. Agricultural development intensified after the establishment of settlements. As development intensified, settlers used nearby mountains and Weber and Ogden Canyons as a source of building supplies, including lumber and hard-rock. A lime kiln was built in Ogden Canyon in 1865 to produce lime mortar from limestone that was quarried in the canyon. The kiln was abandoned by the late 1800s and, in 2008, a replica was built on the foundation of the original kiln (Utah Heritage Foundation 2011).

Settlement of the area also included the establishment of a transportation infrastructure. The first road through Ogden Canyon was built during the late 1850s by Lorin Farr and Isaac Goodale. A toll gate was established near the mouth of the canyon in 1860, and between 1865 and 1882 the gate was operated by the Ogden Canyon Road Company. The road was sold to Weber County and became public in 1882 (Roberts and Saddler 1997:93–94). The road, known as the Ogden to Huntsville Road, was added to the state highway system in 1911 and, in 1919, the state extended the road further east to Randolph. Construction of the road was a significant event; the new road made travel through the canyon easier and linked Ogden with the communities of Huntsville and Randolph. In 1921, a series of improvements were conducted along seven miles of the road beginning at the mouth of the canyon. Improvements included road widening, the addition of pavement to the road surface, and the construction of numerous rock retaining walls to prevent erosion (Ogden Standard Examiner 1921). In 1927, the state defined the Ogden to Huntsville (Randolph) Road as SR-39 (UDOT 2011).

In 1869, the westbound Union Pacific transcontinental railroad (UPRR) constructed its mainline through Weber Canyon to Ogden; the line continued around the north side of the Great Salt Lake before linking with the Central Pacific Railroad at Promontory, Utah. The UPRR led to the establishment of several railroad towns in the county, including Ogden, Corrine, and Easton. Additional heavy rail lines spurred from the mainline and soon extended across the state. The development of interurban rail lines (usually horse-drawn or electric-powered) followed the heavy lines, and in 1883 the Ogden City Railway Company began construction of a light rail system within Ogden City. Around 1890, construction began on a light rail line up the north side of Ogden Canyon to Huntsville. The Ogden Canyon line (also known as the Ogden Rapid Transit) was complete in 1913. Declining ridership, however, led to the demise of the interurban lines, and by 1935 the lines were abandoned and dismantled (Roberts and Saddler 1997:108–117, 141).

Recreation was also a big part of Ogden Canyon’s history. During the 1880s, the Old Hermitage Camp was established in Ogden Canyon. The camp provided lodging for workers and travelers. In 1904, the manager for the Hermitage Camp, Billie Wilson, began construction of a forty-room hotel and resort near the camp’s location. The Hermitage Hotel was operational by 1905. The hotel included amenities like fine dining, a merry-go-round, modern plumbing, and a dance hall. Wilson died in 1918 and the hotel went into decline. Two 300-gallon stills and barrels of mash and whiskey were found at the site during a 1920s, prohibition-era raid, gaining the hotel notoriety as the county’s largest illicit moonshine operation. A small explosion and fire completely destroyed the hotel in 1939 (Roberts and Saddler 1997:155; Schvaneveldt 1996:6E).
By the early-1900s, a stable economic base had been established in Weber County. Agriculture, ranching, and railroading continued to be the primary economic activities, and population growth, though moderate, continued to increase. The entry of the United States into World War I in 1917 furthered the county’s economy by increasing demand within the agricultural, ranching, and mining sectors. However, at the end of World War I in 1918, the demand for war-related materials declined, causing an economic downturn in the national and local economies. The post-war economic slump gradually led to economic difficulties on a national scale, and with the stock market crash of 1929, the country entered the Great Depression.

In Weber County, the effects of the Great Depression were not immediately felt. By the mid-1930s, though, the area was hard-hit and unemployment levels were high. In late 1933, the government began aid efforts as part of President Roosevelt’s New Deal. Several work relief programs were implemented—most notably the Works Progress Administration (WPA) and Civilian Conservation Corps (CCC). The goal of these programs was to provide work for the unemployed thereby stimulating the country’s economy.

Various government make-work projects were conducted in Weber County. Between 1935 and 1937, workers from the CCC worked on the Ogden River Project, construction of the Pineview Reservoir and Dam, and assisted construction of a 4.7-mile long water line from Pineview Reservoir to east Ogden (Stene 1993:7). The line, known as the Ogden Canyon Conduit, was built along the rugged north side of the canyon wall and, in several places, near the canyon floor. The line was constructed of tongue-and-groove wood-stave pipe banded with 12-gauge metal tongues and type rods. Construction work was often a difficult and arduous task. The line passed through seven tunnels carved from bedrock and over six constructed support structures; other sections of the line were buried, where feasible. Government relief programs and make-work organizations like the CCC began to gradually improve Weber County’s economy (Roberts and Saddler 1997:262–264).

The beginning of World War II in 1941 further accelerated the nation’s recovery from the Great Depression. As occurred during World War I, the new war effort led to production increases in mining and agriculture. Several military installations were also established in the area, which provided numerous jobs to area residents and has helped support the county’s economy. In the decades after the end of World War II, the importance of agriculture and railroading has declined significantly within the county. Ogden Canyon has continued as a popular recreation area, though, and activities include hiking, biking, camping, rock climbing, and fishing (Roberts and Saddler 1997:310–321).

PREVIOUS RESEARCH
Prior to field inventory, archaeological site files and inventory reports were checked at Utah Division of State History, records office. The search was conducted on September 13, 2011, and the parameters of the record search included the inventory area and the surrounding one-mile radius. The search found that six inventories have been conducted within the inventory area and six inventories have been completed within one mile of the project area (Appendix A, Table 1).
Table 1. Previous investigations in the inventory area vicinity.

<table>
<thead>
<tr>
<th>Utah state project number</th>
<th>Author and year</th>
<th>Location relative to project area</th>
</tr>
</thead>
<tbody>
<tr>
<td>U-85-FS-0146f</td>
<td>Mlazousky 1985</td>
<td>Outside</td>
</tr>
<tr>
<td>U-85-SJ-0728i</td>
<td>Polk 1985</td>
<td>Within/outside</td>
</tr>
<tr>
<td>U-89-BC-0204p</td>
<td>Billat and Christensen 1989</td>
<td>Within/outside</td>
</tr>
<tr>
<td>U-91-BC-0524ps</td>
<td>Southworth 1991</td>
<td>Within</td>
</tr>
<tr>
<td>U-94-FS-0144f</td>
<td>Scott 1994</td>
<td>Outside</td>
</tr>
<tr>
<td>U-94-SJ-0699ps</td>
<td>Bolk and Murray 1997</td>
<td>Outside</td>
</tr>
<tr>
<td>U-94-SJ-0782fps</td>
<td>Johnson 1994</td>
<td>Within/outside</td>
</tr>
<tr>
<td>U-95-SJ-0861s</td>
<td>Johnson 1997</td>
<td>Outside</td>
</tr>
<tr>
<td>U-00-FS-0378f</td>
<td>Nelson 2001</td>
<td>Outside</td>
</tr>
<tr>
<td>U-02-SJ-0549pw</td>
<td>Simmons 2002</td>
<td>Outside</td>
</tr>
<tr>
<td>U-05-FS-0488f</td>
<td>Flanigan 2005</td>
<td>Within/outside</td>
</tr>
<tr>
<td>U-05-FS-0489f</td>
<td>Flanigan 2005</td>
<td>Within/outside</td>
</tr>
</tbody>
</table>

As a result of these inventories, 10 sites have been recorded within one mile of the inventory area and sites include prehistoric lithic scatters, rock art, prehistoric artifact scatters, an abandoned railroad grade, historic artifact scatters, and a pipeline and reservoir (Table 2). Four sites (42WB298, 42WB301, 42WB299, and 42WB300) are located within the inventory area.

Site 42WB298 is an NRHP-eligible historic steel span bridge constructed in 1920 over the Ogden River recorded by Christensen in 1989. Site 42WB301 is an NRHP-eligible historic inverted Queen Post Truss bridge constructed around 1920 and recorded by Billat and Christensen 1989. Sites 42WB298 and 42WB301 are both active bridges, architectural resources, and should not have originally been recorded as archaeological sites. LSD therefore did not update these previously recorded sites; Horrocks Engineers has instead documented these architectural resources as part of a Reconnaissance Level Architectural Inventory for this project and is reporting them separately (Calkins 2011).

Site 42WB299 is the remnants of the Hermitage Hotel; the site was recommended not eligible for the NRHP by Billat and Christensen in 1989. LSD revisited and updated the site as part of this project. Site 42WB300 is the NRHP-eligible Ogden Canyon Conduit recorded by Billat and Christensen in 1989. One segment of the site was within the inventory area and this segment was revisited and updated. Several exposed sections of Site 42WB300 were visible in close proximity to the eastern end of the inventory area; these segments were outside the inventory area, however, and were not revisited. Other buried segments could be located within the inventory area, though no obvious indicators of buried segments were noted during inventory.

Site 42WB329 is the abandoned Ogden Rapid Transit grade that extended from Ogden to Huntsville. A previously recorded segment of the site is located outside but very near the north edge of the inventory area. No segments of the site were observed during fieldwork and it is probable that it has been disassembled and removed, buried, or is otherwise no longer recognizable within the inventory area.
The available historic General Land Office (GLO) maps for T6N, R1W and T6N, R1E were reviewed online through the Bureau of Land Management’s website. The GLO maps showed several potential resources near the current inventory area. The GLO map for T6N, R1E (filed on June 24, 1893) depicts a road “Road Between Huntsville and La Plata” and “Pipeline” running parallel to the Ogden River in Section 16, 17, 18, and 19. Section 16 shows “Zenith Placer Claim” in the southwestern part of the section. Section 18 has “Copper Mine” and “W. G. Wilson” depicted in the southeastern part of the section. The GLO map for T6N, R1W (filed on October 28, 1879) shows an “Ogden Canyon Company’s Toll Road,” “North Ogden Canal,” and “Ogden Bench Canal” in Sections 22 and 23. Section 22 shows “Carl Sorensen House” in the southeastern part of the section. The GLO map for T6N, R1W (filed on August 6, 1884) shows a “Woolen Mill” in the central western part of Section 22. Section 24 shows “W. G. Wilson,” “J. W. Taylor,” “Hotel,” and “Electriclight” near the Ogden River. No evidence of the features was observed within the inventory area and it is likely that most of them were removed by modern development, road construction, or other modern impacts.

**INVENTORY METHODS**

Field work was conducted on October 22 and November 2, 2011. Danny Mullins, M.S., RPA, served as Principal Investigator. Nate Nelson functioned as Field Director and Michael Ligman, Mike Eichorn, Patrick London, and Garrett Webb assisted as crew members. Fieldwork was conducted under Utah Public Lands Policy Coordination Office Archaeological Inventory Permit No. 24 (maintained by Danny Mullins) and Utah State Antiquities Project No. U-11-LI-0827s. Fieldwork was conducted using a differentially corrected, handheld global positioning system (GPS) units (Trimble GeoXT or GeoXM) using datum and projection UTM Zone 12N NAD-83.

---

Table 2. Previously recorded sites within one mile of inventory area.

<table>
<thead>
<tr>
<th>Site number</th>
<th>Locationa</th>
<th>Site type</th>
<th>Affiliation and age</th>
<th>Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>42WB11</td>
<td>T6N, R1W, Sec 24</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>42WB92</td>
<td>T6N, R1W, Sec 22 and 23</td>
<td>Artifact Scatter</td>
<td>Unknown, prehistoric</td>
<td>Unevaluated</td>
</tr>
<tr>
<td>42WB191</td>
<td>T6N, R1W, Sec 24</td>
<td>Lithic scatter</td>
<td>Unknown, prehistoric</td>
<td>Unevaluated</td>
</tr>
<tr>
<td>42WB265</td>
<td>T6N, R1W, Sec 34</td>
<td>Lithic scatter</td>
<td>Archaic, prehistoric</td>
<td>Unevaluated</td>
</tr>
<tr>
<td>42WB266</td>
<td>T6N, R1W, Sec 26</td>
<td>Petroglyph</td>
<td>Euro-American, historic</td>
<td>Unevaluated</td>
</tr>
<tr>
<td>42WB281</td>
<td>T6N, R1W, Sec 35</td>
<td>Pictograph</td>
<td>Unknown, prehistoric</td>
<td>Unevaluated</td>
</tr>
<tr>
<td>42WB290</td>
<td>T6N, R1W, Sec 23</td>
<td>Lithic scatter</td>
<td>Unknown, prehistoric</td>
<td>Unevaluated</td>
</tr>
<tr>
<td>42WB298</td>
<td>T6N, R1W, Sec 24</td>
<td>Bridge</td>
<td>Euro-American, historic</td>
<td>Eligible</td>
</tr>
<tr>
<td>42WB299</td>
<td>T6N, R1E, Sec 18</td>
<td>Structure</td>
<td>Euro-American, historic</td>
<td>Not eligible</td>
</tr>
<tr>
<td>42WB300</td>
<td>T6N, R1E, Sec 16, 17, 18, 19, 23, and 24</td>
<td>Ogden Conduit</td>
<td>Euro-American, historic</td>
<td>Eligible</td>
</tr>
<tr>
<td>42WB301</td>
<td>T6N, R1W, Sec 24</td>
<td>Bridge</td>
<td>Euro-American, historic</td>
<td>Eligible</td>
</tr>
<tr>
<td>42WB329</td>
<td>T6N, R1W, Sec 19 and 24</td>
<td>Railroad grade</td>
<td>Euro-American, historic</td>
<td>Not eligible</td>
</tr>
<tr>
<td>42WB362</td>
<td>T6N, R1W, Sec 27</td>
<td>Pipeline/Reservoir</td>
<td>Euro-American, historic</td>
<td>Eligible</td>
</tr>
<tr>
<td>42WB423</td>
<td>T6N, R1W, Sec 24</td>
<td>Artifact scatter</td>
<td>Euro-American, historic</td>
<td>Not eligible</td>
</tr>
</tbody>
</table>

*USGS 7.5' Ogden, Utah 1998, USGS 7.5' Huntsville, Utah 1998*
Prior to inventory, background shape files of the inventory areas were uploaded into multiple GPS units, allowing for an accurate determination of the inventory locations while in the field. SR-39 and other private and public roads crossed much of the inventory area and the Ogden River extends parallel along the majority of the inventory area. The line locations meandered in and out of the SR-39 roadway. Line locations were inventoried by two evenly spaced archaeologists following the line locations. Inventory stopped where the lines converged with the SR-39 roadway, but the lines were paralleled until they were no longer located within SR-39, where inventory again commenced. Linear inventory, in other words, was conducted along the US-39 UDOT right-of-way with archaeologists spaced at 15 meters, where conditions permitted.

Staging areas, access roads, and water tower locations were inventoried using compass- and GPS-oriented parallel transects spaced no more than 15 m apart, resulting in 100 percent coverage. Sections of the inventory area crossed under roadway bridges and were not inventoried because they were located within the flow line of the Ogden River. River cut-banks and other sub-surface exposures were examined for buried cultural resources as they were encountered. When cultural resources were encountered, they were assigned a temporary field number, described in written notes, photographed when possible and point-located with the Trimble GPS unit.

Sites were defined as the remains of past human activity that is at least 45 years old and contains 10 or more artifacts of a single class within a 10-m diameter area, except when all pieces appeared to originate from a single source (i.e., one broken bottle); 15 or more artifacts that include at least two classes within a 10-m diameter area; multiple archaeological features; a single feature for which sufficient information exists to suggest that it may be significant; or one or more archaeological features in association with any number of artifacts. A site must also display integrity of location and be potentially interpretable in terms of past human behavior. All other cultural materials were recorded as isolated occurrences (IOs).

Linear cultural resources were documented following the Utah Professional Archaeological Council (UPAC) guidance on linear sites (UPAC 2008). Linear sites were defined as any human made feature that is substantially longer than it is wide. Short segments of a linear feature that cannot clearly be tied into larger networks (pipelines, ditches, fence lines etc.) can be documented as isolates (UPAC 2008). Physical data points were not established for linear sites. Several segments of Site 42WB483 were located at the edge of SR-39 and, because of safety issues associated with the narrow road, these segments were not measured and dimensions (usually height) were instead estimated from a distance. Two site overview photographs were taken at sites with an 8-megapixel digital camera; all features and IOs were also photographed.

Archaeological sites must be evaluated for eligibility to the NRHP in accordance with the criteria guidelines provided in 36 CFR 60.4. Isolated features and IOs are not subject to the same consideration. In conjunction with the criteria listed below, cultural resource sites must be assessed for integrity of location, design, setting, materials, workmanship, feeling, and association. A site may be recommended eligible for the NRHP if it maintains sufficient integrity of the elements listed above and it meets one or more of the following criteria:
A) is associated with events that have made a significant contribution to the broad patterns of history (or possibly prehistory);
B) or is associated with the lives of persons significant in our past;
C) or embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction;
D) or has yielded, or is likely to yield, information important in history or prehistory.

INVENTORY RESULTS
The Ogden Canyon Waterline Class III inventory resulted in the revisit/update of two previously recorded sites (Site 42WB299 and Site 42WB300), one newly recorded site (42WB483), and one IO (Appendix B). Site 42WB299 and 42WB483 are recommended not eligible for the NRHP and Site 42WB300 is recommended eligible. The IO is not eligible for the NRHP.

Previously Recorded Sites
Site 42WB299 – historic hotel ruins, Hermitage Hotel, not eligible
Description:
Site 42WB299 is the ruins of the historic Hermitage Hotel (Photograph 2, see Appendix B). When originally recorded (Billat and Christensen 1989), the site was described as several bulldozed piles of the original foundation debris, several exposed sections of foundation located in the northern portion of the site, a stone retaining wall measuring approximately 15 feet high, and a stone-lined staircase and entryway (Billat and Christensen 1989). When revisited as part of this project, LSD found the site the same as when originally recorded. No additional features or artifacts were noted.

Deposition is the result of residual weathering of parent materials located upslope; river-deposited sediments are also present along the southern margin of the site. Deposition is mostly residual and generally appears limited across the site. Vegetation includes scrub oak, scattered pine and aspen trees, and various grasses. The site’s integrity has been severely impacted by fire, demolition and dismantling, and decay. Because of the impacts, integrity of design, setting, materials, workmanship, feeling, and association is poor. Integrity of location is fair. The site lacks overall integrity, then, and is not readily recognizable as a hotel and resort.

Discussion and Recommendation:
Site 42WB299 was originally recommended not eligible for NRHP because of a near complete loss of integrity (Billat and Christensen 1989). The site currently consists of several rubble piles, a stone and mortar wall, a stone-lined staircase, and several small sections of foundation. Deposition appears limited and buried cultural features that expand the site’s data potential are not likely present. When operational, the hotel contained modern plumbing; privy vaults—which would contain high quantities of artifacts—are also therefore not likely present. The site retains little of its original overall integrity and does not convey its original significance. LSD concurs with the previous NRHP determination and recommends Site 42WB299 not eligible for the NRHP under any potential criteria.
Site 42WB300 – historic waterline, Ogden Canyon Conduit, eligible Criterion A

Description:
Site 42WB300 is the historic Ogden Canyon Conduit (see Appendix A and Appendix B). The conduit was constructed in 1935 by the Barnard-Curtiss Company. CCC laborers from the Huntsville CCC Camp assisted with portions of the construction work (Stene 1993:7). When originally recorded, the site was described as a tongue-and-groove wood-stave pipe line held with metal bands and rods. The stave sections individually measured seven to thirteen feet long and the wood had been coated in creosote. The metal rods were 5/8-inch diameter with threaded ends and rounded heads (Billat and Christensen 1989). One segment of the site was revisited during this project. The segment is located north of the Ogden River and measures approximately 490 feet long, 8 feet tall, and 2 feet wide. The wood pipe is set on top of a rock and mortar wall built into the north slope of the canyon wall; the wood pipe appears to have been encased in concrete since the original recording (Photograph 3), though segments of wood are still visible in several places. Deposition near the site is the result of residual weathering of parent materials and deposition is limited. Vegetation includes scrub oak and various grasses. The site’s integrity has been impacted by upgrades and decay. The site’s integrity of location, setting, feeling, and association is good. Integrity of design, materials, and workmanship is fair. The site’s overall integrity is good.

Discussion and Recommendation:
Site 42WB300 was originally recommended eligible for NRHP, though a detailed justification was not provided. Billat and Christensen (1989) instead note that a previous HAER inventory (HAER No. UT-51) was completed, though, again, the detailed results of this inventory were not discussed.
The segment revisited during this project retains good integrity and LSD recommends the site eligible for the NRHP under Criterion A. Billat and Christensen (1989) note that the site was built entirely by WPA labor. Research conducted during this project, however, found that the site was instead constructed by the Barnard-Curtiss Company as part of the larger Ogden River Project. CCC labor was used during construction of one of the conduit’s tunnels (Stene 1993:7). CCC workers that worked on the conduit were stationed at the Huntsville CCC camp (Camp BR-12), which was managed by the Bureau of Reclamation (Baldridge 1971:365). Workers from the camp cleared the Pineview Reservoir site of buildings, brush, and fences; removed old pipe; cleaned the conduit; and conducted other tasks not specified in the Ogden River Project contracts (Stene 1993:7).

Site 42WB300 is associated with the Great Depression and the CCC. Both themes are significant to local, state, and national histories. The site is also associated with the development of a water supply system to Ogden—a locally significant historic event. Because the site is associated with several significant historical events, it is recommended eligible under Criterion A. Research failed to find a relationship between the site and a person of historical significance and the site is recommended not eligible under Criterion B. Although the site was constructed over ridges and slopes and passes through excavated tunnels at several locations, the site does not appear to have been constructed with any unique methods of construction. The site’s design, method of construction, and materials are also similar to other historic waterlines in the west, and the site does not appear to represent a unique type of waterline. The site is recommended not eligible for the NRHP under Criterion C. Data that might improve our understanding of the site’s relationship to history is not directly connected to the site and would more likely be found through archival research. The site is therefore recommended not eligible for the NRHP under Criterion D.
Newly Recorded Site

Site 42WB483 – historic retaining wall network, not eligible

Site 42WB483 is a series of historic retaining walls associated with SR-39 (see Appendix B). The site consists of seven segments (SG1–SG7) of wall located in Ogden Canyon; the segments begin near the mouth of the canyon and extend intermittently for around five miles to a point near Pineview Reservoir. Additional unrecorded segments are likely located outside this project’s inventory area. The walls were constructed in 1921 as part of an improvement project along Ogden Canyon Road/SR-39 (Figure 3).

Most of the segments were constructed of locally available, rough-cut rock held with a thin layer of sandy mortar. Two segments (SG2 and SG5) consist of dry-stacked rock. All of the segments are one course thick. SG1 is located above the road and is constructed of rock held in place with a thin layer of mortar; the segment measures 15 feet long by 10 feet high. SG2 is also located above the road and includes two segments of wall situated in close proximity; one segment is located along the edge of SR-39 and the second is located on the opposite river bank, less than 15 feet away from the first segment. The segments are constructed of dry-stacked rock and each segment measures 10 feet long by 8 feet tall. SG3 is constructed of rock and mortar and measures 140 feet long by 8 feet tall. SG4 (Photograph 4) consists of rock and mortar and measures 260 feet long by 10 feet high. SG5 is a dry-stacked segment measuring 60 feet long by 8 feet tall; two 3 feet-tall by 9 inch by 9 inch cement posts are located near the wall, one at the wall’s face and one on the river bank immediately opposite the wall. SG6 is constructed of rock and mortar and measures 750 feet long by 8 feet tall. SG7 is constructed of rock and mortar and measures 38 feet long by 4 to 8 feet tall.

Figure 3. Ogden Standard Examiner 1921.
The segments are located in the canyon bottom and near the Ogden River; sediments near the segments are therefore a mix of residual and alluvial deposition. Deposition is generally shallow and includes residual sediments at the backsides of the walls and alluvial, stream-rounded cobbles along the front faces of the walls. Vegetation includes scrub oak, Russian olive and cottonwood trees, and various grasses. All of the segments have been impacted by structural decay and the segments are missing rocks, which presumably have become loose over time and fallen out of the walls. The tops of the retaining walls below the road have been removed during the construction of SR-39 (Nancy Calkins, personal communication, December 2011). Several segments also exhibit large cracks and are leaning outward slightly. Because of these impacts, the site’s integrity of location, design, setting, materials, workmanship, feeling, and association is poor.

Discussion and Recommendation:
Site 42WB483 is recommended not eligible for the NRHP. The site was constructed in 1921 and is associated with Ogden Road/SR-39. The site is associated with a 1920s-era road improvement project that included installation of retaining walls and road widening. The improvements were significant because they improved travel from Ogden to Huntsville and Randolph. Although the SR-39 played a significant role in local transportation, the integrity of the retaining walls is poor and the site is recommended not eligible under Criterion A. Historic research failed to find an association between the site and a historically significant person and the site is recommended not eligible under Criterion B. Despite decay, the site retains integrity of location, setting, design, materials, and construction. However, the methods used to
construct the walls were common for the period and region and do not embody any distinctive traits of retaining wall construction. The site is recommended not eligible under Criterion C. The construction of walls does not typically produce data, such as artifact assemblages, which might better our understanding of the role this site played in local or state histories. Additional data would instead come from documentary sources and would not be physically connected to the wall segments. The site is recommended not eligible under Criterion D.

Isolated Occurrence
In addition to the sites, one IO was recorded (see Appendix B). The IO is a cement box or footing measuring approximately 6 feet tall by 7 feet by 7 feet. The IO is located on the west-facing slope outside the mouth of Ogden Canyon (located at UTMs 422488mE and 4565112mN). The IOs original purpose is unknown. The IO is not eligible for the NRHP and no preservation or additional research is required.

SUMMARY AND RECOMMENDATIONS
The Class III cultural resources inventory of the Ogden Canyon Waterline EA Inventory area resulted in the update of Site 42WB299, the update of a segment of Site 42WB300, one newly recorded site (42WB483), and one IO. The IO is not eligible for the NRHP and preservation is not required. Site 42WB299 and 42WB483 are recommended not eligible for the NRHP and do not require avoidance. Site 42WB300 is recommended eligible for the NRHP under Criterion A and LSD recommends that this segment of the site be avoided by project activities. If avoidance of the site is not possible, the site should be subjected to an appropriate form of mitigation (to be determined by UDOT, DDW, and SHPO).

Site 42WB329 is the abandoned Ogden Rapid Transit grade. A previously recorded segment of the site is located outside but near the north edge of the inventory area; no segments were observed within the inventory area and it is probable that the site has been removed, buried, or is otherwise no longer recognizable within the inventory area. It is also possible, however, that buried segments of the site may be located within the inventory area and could be encountered during construction activities. In the event that sub-surface portions of Site 42WB329 or any other previously unrecorded subsurface cultural resources are encountered during project activities, these activities must be discontinued in the immediate vicinity of the discovery. Personnel shall then follow procedures stipulated in the 2008 UDOT Standard Specification Section 01355, Part 1.13.
REFERENCES CITED

Baldridge, Kenneth

Billat, S. and T. Christensen

Calkins, Nancy

Christensen, Teri

Flanigan, T.

Johnson, A.
1994 *A Cultural Resources Inventory of Six Project Areas Ogden City Water Improvements Environmental Assessment Report No. 724*. Sagebrush Archaeological Consultants, Ogden.

Mlazovsky, M.

Nelson, S.

Ogden Standard Examiner
1921 *Crews Working on Ogden Canyon Road*. *Ogden Standard Examiner*, March 3, 1921.

Polk, Michael R.

Polk, Michael and S. Murray

Roberts, Richard and Richard Sadler

Schvaneveldt, Kathy
Scott, T.

Simmons, Johns W.

Southworth, D.

Stene, Eric
1993 Ogden River Project. Bureau of Reclamation, Salt Lake City.

Stokes, William Lee

UDOT

Utah Heritage Foundation
APPENDIX A: FILE SEARCH RESULTS
A Cultural Resources Inventory within the Ogden Canyon Waterline EA Area, Weber County, Utah

Utah Division of State History Project Authorization No.: U-11-LI-0827s
State of Utah Archaeological Inventory Permit No.: 24

APPENDIX B: INVENTORY RESULTS
Addendum to: A Cultural Resources Inventory within the Ogden Canyon Waterline EA Area, Weber County, Utah

Utah Division of State History Project Authorization No.: U-11-LI-0827s
State of Utah Archaeological Inventory Permit No.: 24
LSD Technical Report No.: 115081
March 30, 2012

ADDENDUM LETTER REPORT

Logan Simpson Design Inc.
8 East Broadway, Suite 300
Salt Lake City, UT 84111
INTRODUCTION
Ogden City is planning to replace and upgrade an existing water pipeline within Ogden Canyon, Weber County, Utah. A Class III cultural resources inventory has been previously conducted by Logan Simpson Design Inc. (LSD) as part of the project’s Environmental Assessment (EA). See the original report (Mullins et al. 2011) for a complete discussion of the original inventory project—including a description of the project, Area of Potential Affect, inventory area, agencies, methods, culture history, etc. After the completion of the original inventory, an additional area was identified where ground disturbance was planned. The contractor for the EA, Horrocks Engineers, Inc., requested that LSD conduct a Class III cultural resources inventory of the new area.

The new area totals 8.38 acres and is located at the east end of the project area (Figure 1) within section 16, T6N, R1E (USGS 7.5’ Quadrangle Huntsville, Utah 1978 and Snow Basin, Utah 1979). State Road 39 (SR-39) extends through the middle portion of the inventory area and the Ogden River flows through the north portion of the area. Planned disturbances include placement of a new water tower and associated construction activities. Two modern buildings are located within the inventory area, immediately north of SR-39.

The portion of the inventory area located south of SR-39 is covered in relatively thick vegetation, including scrub oak, and visibility was around 50 percent in this area. The area along the bank of the Ogden River was also covered in relatively thick vegetation. Ground surface visibility in the remainder of the inventory area was good.

METHODS
The additional area was inventoried by Casey Zingg on March 29, 2012. Field work was conducted under Utah Public Lands Policy Coordination Office Archaeological Survey Permit No. 24 (maintained by Danny Mullins). The area was inventoried by maintaining parallel transects spaced no more than 15 meters (50 feet) apart. An electronic shape file outline of the project was uploaded into a Trimble-brand Global Positioning System unit prior to field work, allowing for an accurate determination of the inventory area’s location.

RESULTS AND RECOMMENDATIONS
LSD completed a Class III inventory of the additional area within the Ogden Canyon water pipeline project. No cultural resources were identified as a result of inventory and no historic properties will be affected in this portion of the project area. No further cultural resources investigations are recommended.

In the event that previously unrecorded subsurface cultural resources are encountered during project activities, these activities must be discontinued in the immediate vicinity of the discovery. Personnel shall then follow procedures stipulated in the 2012 UDOT Standard Specification Section 01355, Part 3.8.
Figure 1. Ogden Canyon Addendum Inventory Area.

Source: USGS 7.5' Quadrangles: Snow Basin, UT (1979); Huntsville, UT (1978)