

# Cultural Resources Survey Addendum No. 1 for LEC Natural Gas Line Survey

PREPARED FOR: Northern California Power Agency (NCPA)  
 PREPARED BY: Clint Helton/CH2M HILL  
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## Introduction

As requested by California Energy Commission (CEC) staff, CH2M HILL conducted an environmental review to specifically address potential impacts to cultural resources for the proposed natural gas pipeline for the Lodi Energy Center (LEC). An amendment addressing the revised natural gas pipeline route, laydown area, and launcher site was submitted to the California Energy Commission CEC Staff on July 19, 2011. PG&E requested authorization to use a revised gas line route and widened construction easement than what was approved in the CEC Final Decision. PG&E, in its final design of the gas line, has adjusted the alignment of approximately 2,471 feet of the natural gas line route, shortened the overall length of the gas line route, moved the temporary gas pipe construction laydown area, added a launcher site, and increased the width of the construction easement.

This technical memorandum has been prepared by CH2M HILL to augment previous surveys provided in the Application for Certification (submitted in September 2008), Supplement C (submitted in March 2009), and the Final Decision (April 2010). This technical memorandum documents the cultural resources survey of approximately 2,471 feet of the new proposed natural gas pipeline, a 0.34 acre laydown area, and an 0.05 acre launcher site. The proposed natural gas pipeline is located approximately 600 feet north of the permitted gas line (from the Final Decision) and 100 feet south of the proposed gas line from the AFC. It is located approximately 1 mile east of the LEC project area and heads generally east-west before tying into Pacific Gas & Electric (PG&E) High Pressure Gas Line 108.

The project site is located in the City of Lodi, San Joaquin County, California, on land owned and incorporated by the City of Lodi and is approximately 6 miles west of the Lodi city center. The site is on a parcel adjacent to the City of Lodi's White Slough Water Pollution Control Facility (WPCF) to the east, treatment and holding ponds associated with the WPCF to the north, the existing 49-MW NCPA Combustion Turbine Project #2 (STIG plant) to the west, and the San Joaquin County Mosquito and Vector Control facility to the south.

A field survey by Phil Reid M.A., RPA Cultural Resources Specialist from CH2M HILL, was conducted on August 5, 2011. The archaeological sensitivity of this proposed natural gas pipeline is considered low based on the high degree of ground disturbance from agricultural activities and the lack of any previously recorded cultural resource sites within 0.5 miles of the Project. A summary of findings for archaeological resources is presented below and this technical memorandum has been prepared. Figure 1 depicts the area

surveyed for prehistoric and historic cultural resources. Appendix A contains representative project area photographs.

## Previous Work

In 2008 CH2M HILL conducted a cultural resources field survey which included the plant site and four temporary laydown and parking areas, and the proposed gas line for an Application for Certification (AFC) filed with the California Energy Commission (CEC) to construct and operate a natural gas generating facility on land owned by the City of Lodi (CH2M HILL, 2008). A complete project description and cultural history of the project area can be found in that document.

The survey used linear pedestrian transects spaced at 10 meters and opportunistic examination of exposed soils to examine the survey areas to determine whether archaeological deposits might be present. Exposed soils, consisting mainly of previously disturbed agricultural sediments and road bed material, were inspected carefully, and no evidence of cultural materials was noted. Cultural sensitivity is considered low to moderate within the LEC area as the Union Pacific Railroad, historically the Western Pacific Railroad, runs through the eastern end of the proposed natural gas line corridor. Given the local topography, distance to major stream drainages or other archaeologically sensitive features, and the scale and scope of previous ground disturbance in the area, archaeological sensitivity of the surface soils of the LEC site and appurtenant proposed facilities is considered low. The sensitivity of the underlying soils is considered moderate to low, given that the possibility exists for intact cultural deposits to be present beneath the plow zone.

A new pedestrian survey was conducted in February 2009 by CH2M HILL to review the route of the revised natural gas pipeline presented in Supplement C. This proposed corridor was included in the literature search area for the LEC, but had not been previously surveyed. The revised gas line corridor, as well as a 50-foot buffer on either side of the corridor, was covered during this pedestrian survey. Although some areas of the revised gas line were covered by dense grass and other ground cover vegetation, visibility was fair at approximately 40 to 70 percent. Visibility in the vineyard was approximately 90 percent. Observed sediment is loamy sand. Minimal modern trash was observed during this survey, including plastic, modern glass fragments, and aluminum cans. The remains of concrete pipes were also observed within the newly surveyed area. No cultural resources were observed or recorded during this additional survey.

## Results of Pedestrian Survey

The 1.6-mile long gas pipeline, 0.34-acre laydown area, and 0.05 acre launcher site was surveyed for cultural resources by CH2M HILL archaeologist Phil Reid on August 5, 2011. Survey areas are identified in Figure 1. The area was surveyed by walking parallel transects spaced no more than 50 feet apart. A 100 foot wide corridor was surveyed for the pipeline alignment. The east-west portion of the gas pipeline alignment area is currently covered with pasture grass. Visibility was approximately 10 percent, with soils only observable along the current irrigation line route. The proposed laydown area is currently planted in corn limiting visibility to approximately 20 percent with 100 percent visibility around the south and east margins of the easement. Modern trash was visible along the margins of

North Devries Road and agricultural refuse including rusted tools, barbed wire, a set of keys, modern bottle glass and a 55 gallon steel drum fragment were observed on the adjacent farm road. The vicinity of the launcher site is currently under cultivation. Grapes are planted throughout the area and soils visibility was 100 percent.

One historic isolated artifact, a cast iron hand pump, was located during the survey (see Photos 4 and 5 in Appendix A). The pump has a makers mark of "F&W Manufacturing Company." Flint and Walling (F&W) Manufacturing Company began production of hand pumps in 1886 in Kendallville, Indiana. The company is still in business.

No other historic or prehistoric cultural resources were located as a result of this survey.

## Recommendations

One isolated find, a cast iron hand pump, was located during the survey (see Photo. No definitive date could be assigned to the pump, but it likely dates to the early part of the twentieth century. The pump is not a unique archaeological resource and does not meet the criteria to be considered a historical resource under CEQA and no further work is required. No other cultural resources have been located through standard pedestrian inventory efforts throughout the proposed gas line route, laydown area, and launcher area. The sensitivity for cultural resources in this area is considered low due to the lack of any known cultural resources in the immediate area and the high degree of surface disturbance throughout the area due to agricultural use.

As with any ground-disturbing project, there remains a potential for the accidental discovery of buried cultural resources not detected through a surface inventory, or even through shovel testing. If cultural resources or materials are discovered during ground-disturbing activities, the work in the vicinity of the discovery should cease and the area be protected until the find can be evaluated by a qualified archaeologist. Depending on the nature of the find, additional consultation with the State Historic Preservation Officer (SHPO) or Tribal leaders may be necessary before work can resume in the area of the find.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner will notify the NAHC, which will determine and notify a Most Likely Descendent (MLD). The MLD may inspect the site of the discovery with the permission of the landowner, or his or her authorized representative. The MLD shall complete its inspection within 48 hours of its notification by the NAHC. The MLD may recommend scientific removal and analysis of human remains and items associated with Native American burials.

## References

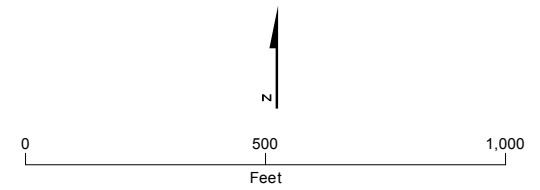
CH2M HILL. 2008. Application for Certification, Lodi Energy Center. September 10.

CH2M HILL. 2009. Application for Certification, Supplement C, Natural Gas Supply Line, Lodi Energy Center. March 19.

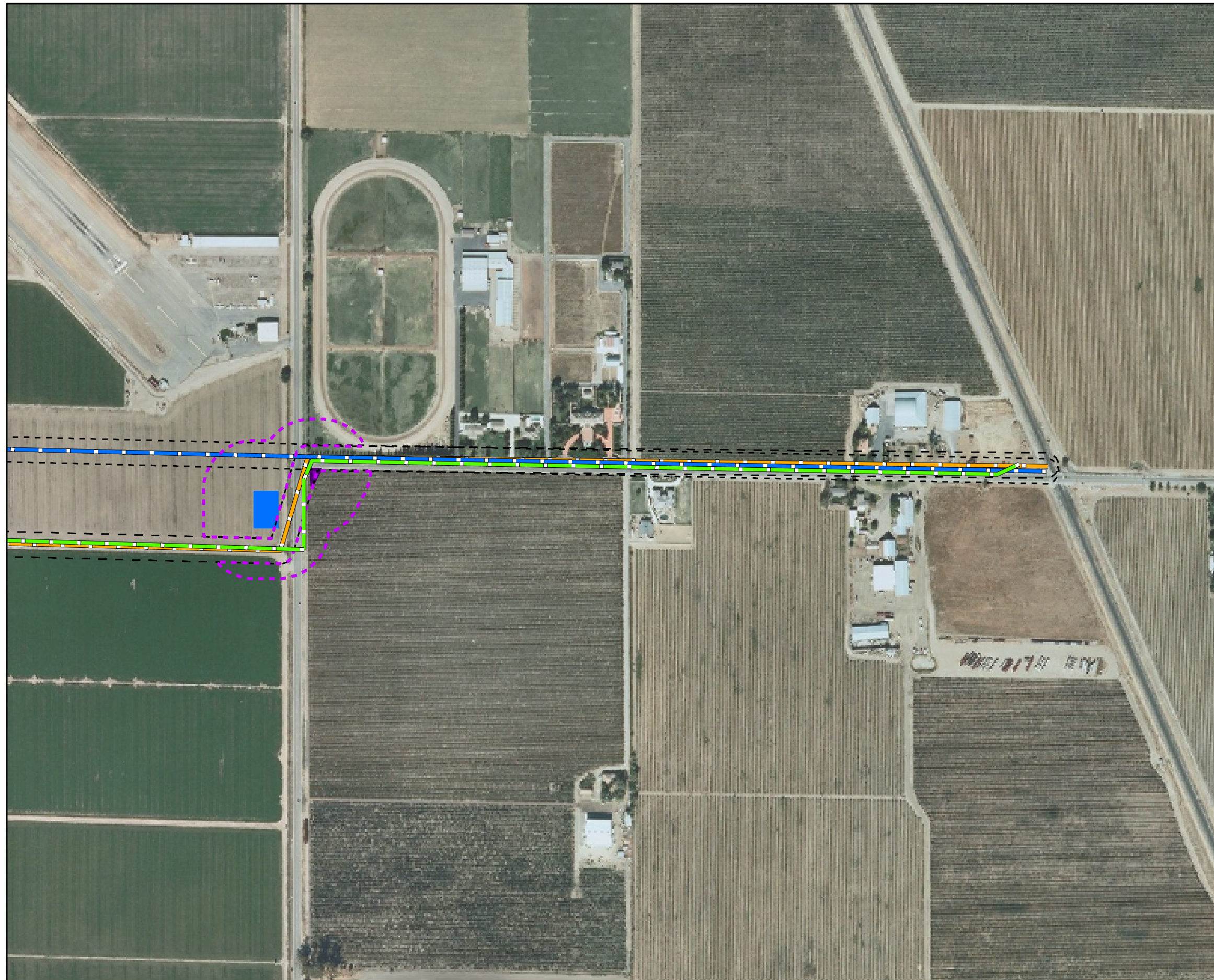


- LEGEND**
- Proposed Gas Line Route
  - Gas Line proposed in AFC
  - Gas Line approved in FD
  - - - Previously Surveyed Areas
  - - - August 2011 Cultural Survey Area
  - Proposed Gas Pipeline Laydown Area
  - Launcher Site

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.

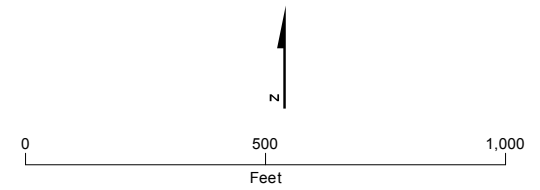


**FIGURE 1a**  
**Proposed and Permitted Gas Lines**  
**and Survey Boundaries**  
 LODI ENERGY CENTER  
 LODI, CALIFORNIA



- LEGEND**
- Proposed Gas Line Route
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**FIGURE 1b**  
**Proposed and Permitted Gas Lines**  
**and Survey Boundaries**  
 LODI ENERGY CENTER  
 LODI, CALIFORNIA

# **Appendix A**

## **Representative Photos of Project Area**





Photo 1. View of proposed Launcher site facing south.



Photo 2. View of proposed gas pipeline laydown area facing west.





Photo 3. Southeastern extent of pipeline survey area facing north.



Photo 4. View of water pump facing north.





Photo 5. Close up view of well pump facing north.



Photo 6. Northwestern extent of survey area facing east.



Photo 7. Western extent of survey area facing west toward LEC plant site.