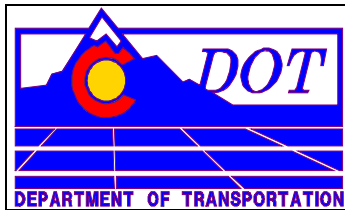


REPORT ON  
PHASE I  
ENVIRONMENTAL SITE ASSESSMENT  
for  
SH 96A (4<sup>TH</sup> STREET) BRIDGE OVER THE ARKANSAS RIVER

Project STA 0961-008

Subaccount 13141

Prepared for



COLORADO DEPARTMENT OF TRANSPORTATION  
DENVER, COLORADO

Prepared by

**HWT**

***HazWaste Technologies® Corporation***

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## I. INTRODUCTION

### A. Purpose

A Phase I Environmental Site Assessment (ESA) was performed by HWT HazWaste Technologies® Corporation for the area encompassing the CDOT right of way corridor approximately 200 feet on either side of the existing SH 96A (4<sup>th</sup> St.) Bridge over the Arkansas River in Pueblo, Colorado.

This report provides a review of historical records and readily available files and databases maintained by regulatory agencies, information obtained through interviews with knowledgeable persons and results of a field reconnaissance of the subject property. The field reconnaissance was performed at various times starting on June 6, 2001 and ending on July 2, 2001.

### B. Site Description

The area of interest is a 400 foot wide right of way corridor along 4<sup>th</sup> Street (SH96A) from Abriendo Avenue to Elizabeth Street, including the existing bridge over the Arkansas River and the rail yard. Properties to the east of the bridge include the Midtown Shopping Center which is bordered on the east by Midtown Circle. Properties between Midtown Circle and Elizabeth Street are commercial buildings and consist of businesses and gas stations. A vacant gas station as well as an operational gas station are located in this area along 4<sup>th</sup> Street in addition to a laundry. The area to the west of the bridge is a combination of commercial and residential properties. A gas station is located at the corner of Abriendo and 4<sup>th</sup> Street. A auto repair shop is located further east at the corner of Corona and 4<sup>th</sup> Street. The area beneath the bridge is zoned "heavy industrial" and has been occupied by rail yards since the late 1800s. Rail tracks for the BNSF and Union Pacific railroads (ie. the railroad right of way) are located directly beneath the 4<sup>th</sup> Street bridge. The bridge also spans the Arkansas River, a concrete flood control levee along the northeast bank of the river and a pedestrian/bike path along the southwest bank of the river.

## II. SITE CHARACTERISTICS

### A. Topography

The rail yard beneath the bridge is located on the river bed that was the Arkansas River until the flood of 1921. The Arkansas river is separated from this property by a concrete flood wall.

## **B. Surface Water**

The nearest surface water is the Arkansas River which runs from the northwest to the southeast beneath the 4<sup>th</sup> Street bridge.

## **C. Geology and Hydrogeology**

Four soil borings were conducted by Goodson & Associates, Inc. In order to determine soil characteristics for structural engineering design. One of these borings was conducted on Union Pacific property. A representative from HWT was present when the borings were performed. Soil cuttings were monitored with a Photoionization Detector (PID). No PID readings above background levels were detected. No signs of visible contamination were found. The soil in the area generally consists of sand underlain by claystone shale. Boring logs prepared by Goodson & Associates are included in Appendix D.

No monitoring wells were installed and subsurface drainage information is not available.

## **III. SITE HISTORY**

A review of historical information consisting of Sanborn maps, aerial photographs and interviews with persons familiar with the area of interest revealed the past uses of the properties in the vicinity. This historical information is discussed in detail in the sections that follow.

### **A. Local Agency Records**

The Pueblo Fire Department has no records of past spills or incidents involving hazardous materials for the area of interest. The Pueblo Department of Zoning Administration also had little knowledge of any incidents in the area adjacent to the 4<sup>th</sup> Street bridge. The rail yard beneath the bridge has been zoned I-3 (heavy industrial use) since before 1968.

### **B. Interviews**

Interviews were conducted with persons familiar with the properties adjacent to the 4<sup>th</sup> Street bridge. These properties include those along 4<sup>th</sup> Street between Abriendo Avenue to the west and Elizabeth Street to the east. Those properties within 3 blocks to the north and south of 4<sup>th</sup> Street were also considered to be within the area of interest. Interviews with current and former employees of BNSF railroad were also conducted. Details are included in Appendix A.

Roxanne Nichols, an employee of the Midtown Paint and Body Shop located at 824 West 4<sup>th</sup> Street, was interviewed on June 6, 2001. Ms. Nichols has worked for this company since 1973 and is not aware of any spills, dumping or other hazardous waste activities on this property. Prior to 1973, a boat shop occupied this building. The building to the west of this site, within the Midtown Loop, is now vacant but was previously used as a storage facility for Sears, Roebuck and Company. Ms. Nichols also mentioned the possibility of a UST in the parking lot of this property but did not have any further information. She referred HWT to the property manager for additional information.

The property manager for the Midtown Shopping Center property, Cheryl Fitch, was interviewed on June 6, 2001. She is quite knowledgeable with regards to the property that occupies approximately 30 acres to the east of the 4<sup>th</sup> Street bridge. This property extends from the fence line, that demarcates the beginning of BNSF property beneath the 4<sup>th</sup> Street bridge, east to Midtown Circle. It also consists of the properties that are located on the south side of 4<sup>th</sup> Street, including the Midtown Paint and Body Shop, north to 8<sup>th</sup> Street. Ms. Fitch has knowledge of this area since approximately 1956. She is not aware of any spills, dumping or other hazardous waste activities on this property. Her knowledge is based on two Phase I reports and one Phase II report involving the Midtown Shopping Center property. All three reports were completed within the past two years. According to Ms. Fitch, these reports indicate that UST's were located or used on the property, but they have been removed and the sites closed. HWT requested copies of these reports from the Property Manager. However, the management of the Midtown Shopping Center has refused to provide them to HWT and are therefore not available.

The BNSF Roadmaster, Lawrence Guerrero, was interviewed on June 21, 2001. He has knowledge of the West 4<sup>th</sup> Street Yard that is located beneath the 4<sup>th</sup> Street bridge. Mr. Guerrero has worked on the railroad since 1974 and left Pueblo in the early 1980's. He returned to Pueblo in 1995 and became the Roadmaster for BNSF in January 2001. When asked about previous activities that were performed on this site, Mr. Guerrero mentioned a fueling facility that was located on this property between the 4<sup>th</sup> Street bridge and the terminal building. This large tank contained diesel fuel and was used to provide fuel for the engines during the early 1970s. The exact size of the tank is unknown. Mr. Guerrero is not aware of any spills, dumping or other hazardous waste activities on this property.

### **C. Aerial Photographs**

Aerial Photographs for the area of interest in Pueblo, CO were reviewed on June 21, 2001. The photographs reviewed included those from 1987, 1978, 1970, 1959 and 1939. All photographs, except for 1939, were provided by the Planning Department. The 1939 photograph was displayed on the wall of the Public Works and Engineering Department. A detailed description of the aerial

photograph review is discussed below. Aerial photographs are included in the Appendix.

1987 photograph (scale: 1" = 100')

The terminal building and the maintenance buildings are the only major structures in the BNSF rail yard. The building adjacent to the Midtown Paint and Body Shop, within the Midtown Loop on the south side of 4<sup>th</sup> Street, appears to be vacant.

1978 photograph (scale: 1" = 600')

An additional structure is visible on BNSF property between the 4<sup>th</sup> Street bridge and the terminal building. The structure is at the approximate location of the fueling facility that Mr. Guerrero described during an interview with HWT.

1970 photograph (scale: 1" = 400')

The "fueling facility" is visible between the 4<sup>th</sup> Street bridge and the terminal building.

1959 photograph (scale: 1" = 500')

An above ground tank is visible at the location believed to be the fueling facility on BNSF property. This tank is located between the 4<sup>th</sup> Street bridge and the terminal building. The building adjacent to the Midtown Paint and Body Shop, within the Midtown Loop on the south side of 4<sup>th</sup> Street, appears to be occupied. A driveway connects the building to the Midtown Loop and an area that looks like a scrap pile is located on the property to the west of the building.

1939 photograph (scale: 1" = 800')

This photograph shows farm land to the east and west of the bridge over the Arkansas River. This farm land occupies the area that is now the Midtown Shopping Center. The bridge that is shown on this photograph is not as large as the current bridge that was built in 1958.

**D. Sanborn Maps**

Sanborn maps from the year 1963 were reviewed at the Planning Department. Additional maps from 1952 were reviewed in the Public Works Department. Sanborn maps from 1941, 1905 and 1904 were found at the Pueblo Public Library. Detailed information from a review of these maps is listed below. Sanborn maps are included in the Appendix.

### 1963 Sanborn Maps

Coverage of the Sanborn map on the east side of the 4<sup>th</sup> Street bridge adjacent to the BNSF rail yard was limited. The Midtown Shopping Center lot was the only area on the east side of the 4<sup>th</sup> Street bridge that was depicted on a Sanborn map. This lot included the Sears, Roebuck & Co. building as well as an additional building to the south. The area to the west of the 4<sup>th</sup> Street bridge from Elmhurst Place to Abriendo was depicted on a separate Sanborn map. This map revealed primarily residences to the north and south of 4<sup>th</sup> Street and some businesses located along 4<sup>th</sup> Street including an auto service center at the corner of 4<sup>th</sup> Street and Abriendo Avenue. An auto repair shop was also located at the corner of Wilson Avenue and 4<sup>th</sup> Street.

### 1952 Sanborn Maps

Coverage of the Sanborn map on the east side of the 4<sup>th</sup> Street bridge was again limited to the Midtown Shopping Center lot. This lot included the Sears, Roebuck & Co. building and a bowling alley. The Sanborn map of the area to the west of the 4<sup>th</sup> Street bridge primarily shows residences. An auto repair shop was located on W. Corona (Josephine Ave.) and a filling station was located on the corner of 4<sup>th</sup> Street and Abriendo Avenue. A dry cleaning facility was also located at the corner of Wilson Avenue and 4<sup>th</sup> Street.

### 1941 Sanborn Maps

The area immediately to the east of the bridge was not covered by a Sanborn map. According to a library employee familiar with the area, celery farms were located along the east side of the bridge. This information agrees with the aerial photographs from 1939. The Sanborn map of the area to the west of the bridge consisted primarily of residences and vacant lots. An auto repair shop was located on West Corona. This map also depicted 4<sup>th</sup> Street (Sneath Avenue) as an unpaved road crossing the Arkansas River.

### 1904/1905 Sanborn Maps

The area immediately to the east of the bridge was not covered by a Sanborn map. The Sanborn map of the area to the west of the bridge reveals Corona Avenue as the street closest to the Arkansas River. The area consists primarily of residences and vacant lots with Sneath Avenue shown crossing the river.

## **E. Title Search**

The parcels immediately to the east and west of the 4<sup>th</sup> Street bridge were reviewed to determine the search areas. The Mapping Department at the Pueblo County Courthouse provided a parcel map of the area of interest. Title information for parcels closest to the bridge was researched based on the

possible alignments being studied. These parcels include the Midtown Center properties N, O, P, R, S, and T that are shown in Figure 3-1.

Chain of title information is shown in Table 3-1. Four parcels on the east side of the bridge and eight parcels on the west side of the bridge were searched and the results are shown in this table.

#### **IV. CURRENT SITE CONDITIONS**

##### **A. Site Reconnaissance**

A site reconnaissance of the area of interest, excluding the rail yard, was conducted on June 6, 2001 and June 12, 2001. An approximately 200 foot wide section of the railroad tracks beneath the 4<sup>th</sup> Street bridge was inspected on July 2, 2001 with a Union Pacific representative. Most of the Union Pacific property beneath the bridge, consisting of 22 tracks, was inspected. However, trains were occupying some of the tracks during this site visit, preventing access to areas in between the trains. The 4 tracks on BNSF property were visually inspected from the edges of the property. No areas of stained soils or stressed vegetation were encountered during these site visits.

##### **B. Paint Sampling**

Sampling of the paint beneath the east side of the 4<sup>th</sup> Street bridge was also performed. This sampling was performed on June 6, 2001 and the paint chips collected were analyzed for TCLP metals. The sample collected was a composite of six locations beneath the bridge. Results indicated that the paint contained lead (24.6 mg/L) above the regulatory limit (5 mg/L). The analytical report is included in Appendix B.

##### **C. Description of Surrounding Areas**

The areas of interest located to the east and west of the bridge include both commercial and residential buildings. The area beneath the bridge along the Arkansas River is zoned for heavy industrial use and is primarily occupied by the BNSF and Union Pacific railroads. The bridge also spans the Arkansas River. There is a concrete flood control levee along the northeast bank of the river and a pedestrian/bike path along the southwest bank of the river beneath the bridge.



## V. REVIEW OF AGENCY RECORDS

The following US EPA and State databases were searched as part of this Phase I Environmental Site Assessment:

|               |   |
|---------------|---|
| NPL           | National Priority List  |
| CORRACTS      | RCRA Corrective Actions (w/o TSD)   |
| TSD CORRACTS  | RCRA Corrective Actions and associated TSD  |
| SPL           | State equivalent priority list  |
| CERCLIS/NFRAP | List of Superfund sites currently or formerly under review                        |
| TSD           | RCRA permitted treatment, storage, disposal facilities                            |
| LUST          | State list of leaking UST's   |
| SWLF          | State list of permitted solid waste landfills, incinerators, or transfer stations |
| WATER WELLS   | Federal and State Drinking Water Sources  |
| RCRA Viol     | RCRA violations/enforcement actions   |
| UST/AST       | State list of registered underground or aboveground storage tanks                 |
| ERNS          | Emergency Response Notification System list of spills                             |
| GNRTR         | RCRA registered small or large generators of hazardous waste                      |
| SPILLS        | State list of reported spills   |

A copy of the database search report is included in Appendix C.

Search distances were extended one mile beyond ASTM minimum distances for this report to cover the area of interest. The database search was centered at the midpoint of the 4<sup>th</sup> Street bridge. All sites found during the database search within a radius of 1.25 miles from the center of the bridge, are listed in Tables 5-1 through 5-6. Those sites that were within approximately 3 blocks on either side of the bridge were investigated further as they have the greatest potential for impacting the subject right of way corridor. A 3 block with on each side of the CDOT right of way was used as agreed to with CDOT Region 2 Environmental personnel. These sites are denoted with an asterisk after the name of each location in Tables 5-1 through 5-6. Detailed information is included in Appendix C.

### A. CORRACTS Sites

The only site found on the RCRA CORRACTS list located within one mile of the area of interest is West Plains Energy (Map ID No. 31B). This site is located 0.71 miles east of the area of interest at 11<sup>th</sup> Street (West End). The prioritization assigned to this sites was not reported. This site is located more than three blocks away from the 4<sup>th</sup> Street bridge and is listed on Table 5-1

## **B. TSD CORRACTS Sites**

The only site found on the TSD RCRA CORRACTS list located within 1.25 miles of the area of interest is the Rockwool Plant (Map ID No. 64). This site is located 1.2 miles from the area of interest at 600 Old Smelter Road. It is located more than three blocks away from the bridge and is listed on Table 5-1.

## **C. CERCLIS/NFRAP Sites**

Sites found on the federal CERCLIS and NFRAP lists located within 1.25 miles of the area of interest are shown in Table 5-2. Francisco Lane Pesticides is on the list (according to the CDPHE) due to a one time generation of hazardous waste. The facility is now inactive and no further information is available. In addition to this site, Public Service Pueblo Gas (Xcel Energy) is located within three blocks of the subject site. According to Dan Buckley of Xcel Energy, only an office building is located within three blocks of the 4<sup>th</sup> Street bridge. He has no knowledge of any spills or hazardous waste at this location. The CERCLIS/NFRAP designation is associated with the Xcel Energy power plant that is located in Denver, Colorado. A natural gas facility affiliated with Xcel energy is located just outside of Pueblo and is more than three blocks from the area of interest. The remaining sites on the database list are located more than three blocks away from the 4<sup>th</sup> street bridge.

## **D. SPL Sites**

Sites found on the State Priority List located within one mile of the area of interest are shown in Table 5-3. All of these sites except Public Service Pueblo Gas (Xcel Energy) are located more than three blocks away from the 4<sup>th</sup> Street bridge. As stated in the previous section, the CERCLIS/NFRAP as well as the SPL designation are not associated with the Xcel office building in the vicinity of the 4<sup>th</sup> Street bridge.

## **E. SWLF Sites**

Sites found on the State list of Solid Waste Landfills located within 1.25 miles of the area of interest are shown in Table 5-4. The only site listed, Board of Water Works, is located more than three blocks away from the 4<sup>th</sup> Street bridge.

## **F. LUST Sites**

Sites found on the list of Leaking USTs located within 1.25 miles of the area of interest are shown in Table 5-5. The sites within three blocks of the 4<sup>th</sup> Street bridge are denoted with an asterisk. According to the Oil Inspection Section, all of these sites have been closed. Files at the Oil Inspection Section on those sites within three blocks of 4<sup>th</sup> Street were reviewed. Information from this file review is shown in Table 5-5a. There were no records of contamination from any of these sites extending beyond the respective property boundaries.

## **G. Water Wells**

Numerous wells were located in the vicinity of the area of interest. The information on these wells that was supplied by the USGS indicates that these wells have not been sampled for environmental contaminants.

## **H. RCRA Violation/Enforcement Actions Sites**

Sites found on the RCRA Violation/Enforcement Actions list located within 1.25 miles of the area of interest are shown in Table 5-6. Pueblo Brake Clutch Inc. is on the list (according to the CDPHE) due to a warning letter that was issued. The site was closed out on 9/14/89. The remaining sites are located more than three blocks away from the 4<sup>th</sup> street bridge.

## **VI. CONCLUSION**

Record searches on properties within the area of interest did not indicate any particular location where contamination is evident. However, since some of the properties belong to railroads and other industrial users and have been in operation for several decades, subsurface contamination may still exist in the CDOT right of way. Additional soil borings to be conducted in the next phase of the project should be monitored visually and with a PID in order to ensure that no contamination exists. Although the search of OIS records indicated a number of leaking UST sites near 4<sup>th</sup> Street, these sites have all been closed by the OIS and additional review of OIS records showed no signs that contamination from any of these sites have as yet impacted the CDOT right of way corridor. The limited number of soil borings in the area of the bridge showed no signs of soil contamination. Site reconnaissance showed no visible signs of contaminated soil or stressed vegetation. However, the paint on the 4<sup>th</sup> Street bridge does contain lead and will have to be disposed of properly if the bridge is removed. A notification will have to be provided to a contractor who intends to perform cutting or grinding operations on the metal structure of the bridge and handrails. Sampling of the soil beneath the bridge on BNSF/UP property will need to be

considered in order to determine if contaminated soils and/or groundwater are present.

## VII. LIMITATIONS

This report has been prepared for the exclusive use of CDOT. Services performed were in a manner consistent with the level of care and skill ordinarily exercised by members of the environmental risk assessment profession practicing contemporaneously under similar conditions in the area of the project. This includes, but is not limited to, preliminary investigation and inquiry about previous ownership and uses of the property and review of existing city, county and state records noted herein. The information provided herein is prepared to be responsive to the requirements of CERCLA (42 U.S. 9601, et. seq.) and reflects conditions as of the dates of the site visits. No other warranty, expressed or implied, is made.

Our assessment was limited strictly to identifying potential environmental issues.

This report is based on existing site conditions and observations made during the site visit. Other data were obtained from public files of governmental agencies. HazWaste Technologies Corporation accepts no liabilities for data obtained from these sources.

## **APPENDIX A**

### Interview Information

## **APPENDIX B**

### Paint Sampling Analytical Report

## **APPENDIX C**

### Database Search Report

## **APPENDIX D**

### Soil Boring Logs



Additional detailed information for each of the sites is included in a diskette enclosed separately.