

# Draft Environmental Assessment CITY OF PUEBLO FIRE STATION #4 September 2010



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#### **Table of Contents**

| SECTION                               | N 1: INTRODUCTION  | 4   |  |
|---------------------------------------|--|-----|--|
| 1.1                                   | BACKGROUND AND OVERVIEW  | 4   |  |
| 1.2                                   | PURPOSE AND NEED   | 5   |  |
| SECTION                               | N 2: ALTERNATIVES  | 7   |  |
| 2.1                                   | ALTERNATIVE NO. 1 - NO ACTION ALTERNATIVE                                      | 8   |  |
| 2.2                                   | ALTERNATIVE NO. 2 – NEW FIRE STATION NO. 4 AT LAKE AVE./AQUA AVE. (PROPOSED    |     |  |
|                                       | ACTION)  |     |  |
| 2.3                                   | ALTERNATIVE NO. 3 - REHABILITATION OF EXISTING FIRE STATION AT 1201 E. EVANS . | 9   |  |
| 2.4                                   | ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD                                | 9   |  |
| 2.4.1                                 | 1 ALTERNATIVE NO. 4 – NEW FIRE STATION NO. 4 AT 200 BLOCK OF CANAL STREET      |     |  |
|                                       | (BAYSTATE AND ABRIENDO AVE.)   | 9   |  |
| SECTION                               | N 3: AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS                                | .11 |  |
| 3.1                                   | PHYSICAL ENVIRONMENT   |     |  |
| 3.1.1                                 | 1 GEOLOGY, SEISMICITY AND SOILS  | .11 |  |
| 3.1.2                                 |  |     |  |
| 3.1.3                                 | 3 FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988)                                | .15 |  |
| 3.1.4                                 | 4 AIR QUALITY  | .16 |  |
| 3.2                                   | BIOLOGICAL ENVIRONMENT   | .18 |  |
| 3.2.1                                 | 1 TERRESTRIAL AND AQUATIC ENVIRONMENT  | .18 |  |
| 3.2.2                                 | 2 WETLANDS   | .21 |  |
| 3.2.3                                 | 3 VEGETATION   | .22 |  |
| 3.3                                   | HAZARDOUS MATERIALS  | .24 |  |
| 3.4                                   | SOCIOECONOMICS   | .26 |  |
| 3.4.1                                 | 1 ZONING AND LAND USE  | .26 |  |
| 3.4.2                                 | 2 VISUAL RESOURCES   | .27 |  |
| 3.4.3                                 |  |     |  |
| 3.4.4                                 | 4 PUBLIC SERVICES AND UTILITIES  | .30 |  |
| 3.4.5                                 |  |     |  |
| 3.4.0                                 | 6 ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER 12898)                                | .33 |  |
| 3.4.7                                 |  |     |  |
| 3.5                                   | HISTORIC AND CULTURAL RESOURCES  | .36 |  |
| 3.5.1                                 |  |     |  |
| <b>3.6</b> COMPARISON OF ALTERNATIVES |  |     |  |
| SECTION                               | N 8: LIST OF PREPARERS   | .48 |  |

| Appendix A | FIGURES                  |
|------------|--------------------------|
| Appendix B | SUPPORTING DOCUMENTATION |
| Appendix C | AGENCY CORRESPONDENCE    |
| Appendix D | NOISE STUDY              |
| Appendix E | TRAFFIC STUDY            |
| Appendix F | PUBLIC COMMENTS          |
| Appendix G | PUBLIC NOTICE            |
| Appendix H | SITE PHOTOGRAPHS         |

#### LIST OF ACRONYMS AND ABBREVIATIONS

| ARRA                     | American Recovery and Reinvestment Act               |  |  |
|--------------------------|--|--|--|
| BMP                      | Best Management Practices                            |  |  |
| CAA                      | Clean Air Act  |  |  |
| CDPHE                    | Colorado Department of Public Health and Environment |  |  |
| CEQ                      | Council on Environmental Quality                     |  |  |
| CFR                      | Code of Federal Regulations                          |  |  |
| CLOMR                    | Conditional Letter of Map Revision                   |  |  |
| CWA                      | Clean Water Act                                      |  |  |
| dB                       | decibels   |  |  |
| EA                       | Environmental Assessment                             |  |  |
| EDR                      | Environmental Data Resources                         |  |  |
| EPA                      | Environmental Protection Agency                      |  |  |
| FEMA                     | Federal Emergency Management Agency                  |  |  |
| FIRM                     | Flood Insurance Rate Map                             |  |  |
| FONSI                    | Finding of No Significant Impact                     |  |  |
| LOMR                     | Letter of Map Revision                               |  |  |
| NEPA                     | National Environmental Policy Act                    |  |  |
| NFPA                     | National Fire Protection Agency                      |  |  |
| NPDES                    | National Pollutant Discharge Elimination System      |  |  |
| OSHA                     | Occupational Safety and Health Administration        |  |  |
| $PM_{10}$ and $PM_{2.5}$ | Particulate Matter less than 10 or 2.5 microns       |  |  |
| RCRA                     | Resource Conservation and Recovery Act               |  |  |
| SHPO                     | State Historic Preservation Office                   |  |  |
| USACE                    | United States Army Corp of Engineers                 |  |  |
| USEPA                    | United States Environmental Protection Agency        |  |  |
| USDA                     | United States Department of Agriculture              |  |  |
| USFWS                    | United States Fish and Wildlife Service              |  |  |
| USGS                     | United States Geological Survey                      |  |  |
|                          |  |  |  |

# **SECTION 1: INTRODUCTION**

#### **1.1 BACKGROUND AND OVERVIEW**

The Department of Homeland Security (DHS) Federal Emergency Management Agency (FEMA) is proposing to support The City of Pueblo, Colorado by providing American Recovery and Reinvestment Act (ARRA) Fire Station Construction Grant (SCG) funding for the Pueblo Fire Station # 4 Fire/Training Facility. The Department of Homeland Security's Assistance to Firefighters Fire Station Construction Grants (SCG) provides federal financial assistance directly to fire departments on a competitive basis in accordance with 44 CFR Part 152. The City of Pueblo has applied for and been selected to receive a fiscal year (FY) 2009 American Recovery and Reinvestment Act (ARRA) Fire Station Construction Grant (SCG) for work involving Fire Station #4.

The purpose of the FY 2009 ARRA SCG program is to jumpstart the U.S. economy, create or save millions of jobs, and put a down payment on addressing long-neglected challenges nationally. Specifically, the purpose of this grant program is to focus on these goals, and the goals of the Assistance to Firefighters Grant (AFG) program, (i.e. - assisting fire departments in improving their basic response capability and capacity, and improving firefighter safety). Public Law 111-5 (The American Recovery and Reinvestment Act of 2009) provides funding for this program. The goal of the grants is to build new or modify existing fire stations in order for departments to enhance response capabilities and protect the community from fire and fire-related hazards.

This environmental assessment (EA) has been prepared to analyze the potential consequences to the natural and human environment associated with the proposed action, the no action alternative, and other potential alternatives in accordance with the *National Environmental Policy Act* (NEPA) (42 *United States Code* [USC] 55 parts 4321 et seq., 2000), the Council on Environmental Quality (CEQ) implementing regulations (40 *Code of Federal Regulations* [CFR] 30 parts 1500 et seq., 2004), and 44 CFR Emergency Management and Assistance Ch. I Part 10. This EA is designed to meet FEMA's responsibilities under NEPA and to determine whether to prepare a Finding of No Significant Impact (FONSI) or a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for the proposed project.

## 1.2 PURPOSE AND NEED

The purpose of the proposed project is utilize SCG grant monies to provide City of Pueblo Fire Department (FD) Station No. 4 facilities that safely, continuously, and cost-effectively meet the fire protection needs of residents within City of Pueblo Fire Depart (FD) Station No. 4 service area. The current location of Station No. 4, at 1201 E. Evans, is not centrally located and thus provides significantly longer response times to certain portions of the district. The current location is plotted on *Figure 1: Vicinity Map – Existing Fire Station No.4 Territory* in Appendix A. The City of Pueblo Fire Department (FD) Station No. 4 will service the area within the city limits of Pueblo as shown schematically on the *Figure 2: Vicinity Map – Proposed New Fire Station No.4 Territory* in Appendix A, as well as the territory south of town. The service territory limits primarily encompass the Lake Minnequa area, including the Bessemer neighborhood. Additionally, the fire station responds to calls at the Comanche Power Plant. The fire department currently has ten fire stations within the Pueblo City limits.

The transformation from a small, outdated facility to a modern full service, combination department prompted a review of the current alignment of stations within the City of Pueblo. This study, Matrix 2006, found that the Fire Station No.4 could significantly reduce response times in a growing district by relocating in a more centralized location, close to other emergency services. An internal review of the station found the following deficiencies:

- 1. The current configuration of the station allows for exhaust emissions to enter every part of the station including living quarters, offices, restrooms and the kitchen.
- 2. The current station does not allow for a pull-thru type of station, thus the fire trucks must back up into the station from a busy street intersection. This causes congestion and there is an increased potential for accidents.
- 3. There are not equal living accommodations for both genders. The current living accommodations are makeshift at best. The only restroom near the living quarters is a urinal.
- 4. The living quarters are on the second floor of the building, directly over the apparatus bays. All doors open in to the apparatus bay allowing exhaust emissions to penetrate all areas of the building. Additionally, the stairs are steep and have a 180 degree turn, making it difficult to reach the trucks in a hurried state. There is an increased incidence of falls and injuries from the current configuration.
- 5. Despite numerous and on-going repairs, the aging flat roof structure continues to leak
- 6. Due to persistent roof leaks and age degradation of the block and mortar, as well as the stucco, seeping moisture causes reoccurring mold and incrustations on interior walls and ceilings in several areas of the station, including the bunkroom.

- 7. Placement of the station at a busy residential/commercial intersection limits safe departure from the station and severely hampers safe and rapid access to primary roads and the interstate.
- 8. Inadequate dorm and bathroom facilities prevent the department from increasing station staffing for peak periods and for special events.
- 9. Numerous plumbing deficiencies exist and are re-occurring.

The City of Pueblo Fire Department (FD) is in need of a fire station that provides effective and timely fire protection and emergency services to Fire District #4 in Pueblo, Colorado. The existing fire station (#4) located at 1201 E. Evans Ave. in Pueblo, Colorado is proposed for replacement. The building (nearly 70 years old) has been structurally damaged from years of water intrusion through the roof, basement and foundation. Water intrusion has resulted in extensive growth of mold and mildew, resulting in a building that is unfit to inhabit. Although the station is inhabited and functioning, it is not up to current building code standards, as stated there are concerns over proper ventilation, there are makeshift but not equal gender accommodations and there is an on-going termite problem. In summary, the building is functionally obsolete. Expansion and upgrades to this station are not possible due to physical site restrictions, such as adjacent property purchases. Additionally, the station is not centrally located in the proposed new district and accessibility to major traffic intersections is limited. The structural deterioration of the building, potential increases in respiratory problems and illnesses in firefighters attributed to poor indoor air quality in the building, the inability to house modern apparatus and increased response time due to increased call volume and a larger response area has degraded the FD's ability to respond to calls in a timely manner.

# **SECTION 2: ALTERNATIVES**

NEPA requires the investigation and evaluation of reasonable project alternatives, including impacts to the natural and human environment as part of the planning process. This EA addresses four alternatives, Alternative #1 – No Action Alternative; Alternative #2 – Construction of a new Fire Station #4 located at Lake Ave. and Aqua Ave. in Pueblo, Colorado; Alternative #3 – Rehabilitation of the existing Fire Station #4 located at 1201 E. Evans in Pueblo, Colorado; and Alternative #4 – Construction of a new Fire Station #. 4 on the 200 block of Canal Street in Pueblo, Colorado, is an alternative that was considered but not carried forward.

The City of Pueblo Fire Department considered several criteria to determine which alternative was the best fit for their needs. The City of Pueblo Fire Department also applied several criteria to determine the best location for the new proposed fire station. These criteria included:

- Central location in the southeastern district, District 4, in order to minimize emergency response time to the area.
- Move further away from Station 3 so that their territories can be more evenly distributed.
- Locate Station 4 centrally in its "new" district.
- Building site of sufficient size to house a Southside headquarters station consisting of 3 bays, living quarters for 9 firefighters, a hose tower and a classroom.
- Lot must accommodate a pull-through truck bay.
- Lot must be of sufficient size to accommodate several additional apparatus while they are involved in training.
- Lot must be large enough to allow for multi-company training evolutions.
- Room for future expansion is desirable.
- Easy access to the East/West and North/South thoroughfares, particularly Interstate 25, again in order to minimize response times to the service area and other outlying areas of the City.
- Location, if possible, to provide a reasonable noise "buffer" between the fire station and nearby residential properties to minimize disturbance due to the occasional sirens that occur during an emergency call.
- Property should be available for procurement without having to utilize eminent domain.
- Site, if possible, should be immediately adjacent to a public access area, to allow common sharing of parking and encourage citizen visits to the fire station.
- Cost is a major consideration

#### 2.1 ALTERNATIVE NO. 1 - NO ACTION ALTERNATIVE

Under this alternative, the fire department would continue to run its operations out of the existing 70-year old station without any alteration or changes to the station. Under Alternative No. 1, FEMA would not provide federal funds to the City of Pueblo to update fire protection facilities. The existing station is located at 1201 E. Evans in Pueblo, CO, *See Figure 1 – Existing Fire Station Vicinity Map in Appendix A*.

# 2.2 ALTERNATIVE NO. 2 – NEW FIRE STATION NO. 4 AT LAKE AVE./AQUA AVE. (PROPOSED ACTION)

In 2006, Matrix Consulting Group conducted a study to determine the effectiveness of the current layout of fire stations in Pueblo. Based on their study it was determined that a new fire station was needed on the southwest corner of the district in order to address long response times. Due to the current layout of stations the study suggested relocation of two of the existing stations. The recommendation was to move Station 9 and Station 4 in order to provide more even coverage. To be effective both stations would have to be moved to provide even coverage. To date, Station 9 has been re-located now creating a hole in the coverage of the district until Station 4 can also be relocated. The proposed location for this station is at the corner of Lake Ave. and Aqua Ave. *Figure 2: Vicinity Map – Proposed New Fire Station No.4 Territory – Appendix A*.

The proposed new station will significantly reduce overall response time to the community as well as enhance the FD's ability to respond to crises involving critical infrastructure. Based on an assessment conducted by the fire department, a need was determined to grow the current fire department by adding a battalion for the south side of Pueblo. In order to accomplish the recommendation of adding a battalion, the station would need to house an engine company a truck company, a training facility and a battalion chief.

The concept station will consist of 13, 359 square feet. Because the station will provide 24 hour coverage there will be full living accommodations, including individual rooms and gender specific shower and bathroom facilities. The apparatus room will consist of three bays that will be equipped with a state of the art vehicle exhaust removal system that is NFPA 1500 compliant. There will be a decontamination room and a workshop room will be provided for maintenance and repair of station equipment. A storage area for gas-powered equipment will be provided with an outside entrance to isolate any possible hazardous fumes from the station. A 600 square foot classroom with storage for teaching materials, as well as two offices, one for the Caption and one for the Battalion Chief are part of the proposed design. The station will be ADA Compliant for personnel and visitors. Additionally, the new fire station will be LEED certified, utilizing several energy efficient features, such as geothermal heat, photovoltaic solar panels to supplement the building electrical needs and Smart lighting.

The property has been zoned (S-1) for construction of the fire station. The legal description of the property is:

PART OF SEC 11,12,13, + 14-21-65 W OF THE 6TH PRINCIPAL MERIDIAN, MORE PARTICULARLY DESC AS FOLLOWS: BEG AT A PT ON THE W SIDE OF THE PUEBLO/WALSENBURG HWY 181.75 FT W FROM THE SW COR OF BLK 1, EAST LAKE ADD; TH ALG THE W LINE THE PUEBLO/WALSENBURG HWY, S 2 DEG 17 MIN W 182.00 FT TO A PT; TH ALG THE W LINE OF THE PUEBLO/WALSENBURG HWY, S 16 DEG 22 MIN W 426.30 FT TO A PT; TH ALG THE W LINE OF THE PUEBLO/WALSENBURG HWY S 26 DEG 29 MIN W 158.90 FT TO A PT; TH ALG THE W LINE OF THE PUEBLO/WALSENBURG HWY,S 38 DEG 47 MIN W 506.00 FT TO A PT; TH ALG THE W LINE OF THE PUEBLO/WALSENBUG HWY S 40 DEG 29 MIN W 60.90 FT TO A PT; TH N 42 DEG 50 MIN W 50.60 FT TO A PT ON THE E SHORE LINE OF LAKE MINNEQUA; TH ALG SAID E SHORE LINE OF LAKE MINNEQUA N 28 DEG 53 MIN E 119.50 FT TO A PT; TH ALG SAID E SHORE LINE OF LAKE MINNEQUA N 0 DEG 20 MIN E 102.00 FT TO PT; TH ALG SD E SHORE LINE OF LAKE MINNEQUA N 19 DEG 24 MIN E 71.80 FT TO A PT; TH ALG SD E SHORE LINE OF LAKE MINNEQUA N 80 DEG 23 MIN E 53.80 FT TO A PT; TH ALG SAID E SHORE LINE OF LAKE MINNEQUA N 22 DEG 12 MIN E 160.80 FT TO A PT; TH ALG SAID E SHORE LINE OF LAKE MINNEQUA N 20 DEG 3 MIN E 227.00 FT TO A PT; TH ALG SAID E SHORE LINE OF LAKE MINNEQUA N 22 DEG 37 MIN E 123.00 FT TO A PT; TH ALG THE SAID E SHORE LINE OF LAKE MINNEQUA N 62 DEG 3 MIN E 53.40 FT TO A PT; TH ALG SAID EAST SHORE LINE OF LAKE MINNEQUA N 4 DEG 2 MIN W 302.00 FT TO A PT; TH ALG THE E SHORE LINE OF LAKE MINNEQUA N 77 DEG 20 MIN E 77.50 FT TO A PT; TH ALG THE E SHORE LINE OF LAKE MINNEQUA N 53 DEG 43 MIN E 47.20 FT TO A PT; TH ALG THE E SHORE LINE OF LAKE MINNEQUA N 8 DEG 37 MIN E 179.90 FT TO A PT;TH N 76 DEG 31 MIN E 38.50 FT TO A PT; TH N 81 DEG 55 MIN E 71.13 FT TO A PT ON THE W LINE OF THE PUEBLO/ WALSENBURG HWY S 2 DEG 17 MIN W 189.60 FT TO THE PLACE OF BEGINNING, BEING PART OF TR MARKED "LAKE MINNEQUA" ON "LAKE MINNEQUA RESERVATION, 2ND FILING" LESS POR BY SWD#1802269 TO CITY OF PUEBLO FORMERLY #15-114-00-006.

#### 2.3 ALTERNATIVE NO. 3 – REHABILITATION OF EXISTING FIRE STATION AT 1201 E. EVANS

This alternative explored the feasibility of renovating the existing station, located at 1201 E. Evans, to comply with current standards and properly house the required apparatus and personnel assigned to the station.

#### 2.4 ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD

# 2.4.1 ALTERNATIVE NO. 4 – NEW FIRE STATION NO. 4 AT 200 BLOCK OF CANAL STREET (BAYSTATE AND ABRIENDO AVE.)

The City of Pueblo determined a target area in the southeastern portion of the city due to proximity to other fire stations and to neighboring communities to help with mutual aid response when necessary. Additionally, a Fire Station Location Study was conducted in June of 2006 by Matrix Consulting Group, and the data from this study was also used in determining location based on response times. Within this target area, several possible undeveloped sites were considered. Acquisition of a developed property and demolishing existing structures was not an option due to costs. One possible site located at Baystate and Abriendo Ave. was identified in the eastern portion of the target area. However, due to the following this location was not deemed favorable as a future location of the fire station:

- Distance from the center of the desired target area site is on eastern edge and is bound on the east by Interstate 25.
- Site is located in a 100-year floodplain.

- Large Corporation currently owns the lot. Timely acquisition for the time frame of the grant is questionable.
- Cost constraints site is currently not owned by the City of Pueblo
- Response times are not ideal.

Due to the flaws identified above and because this location doesn't meet the criterion identified as favorable, this alternative was not carried forward.

#### SECTION 3: AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

#### 3.1 PHYSICAL ENVIRONMENT

This section describes baseline environmental, cultural, and socioeconomic conditions at the locations of the alternatives as well as the general vicinity, with emphasis on those resources potentially impacted by the alternatives.

#### 3.1.1 GEOLOGY, SEISMICITY AND SOILS

Per the United States Geological Survey (USGS), Pueblo, Colorado Quadrangle, the physical setting for the Pueblo Area includes two natural physiographic areas. About 95 percent is gently rolling plains of the upper Arkansas River Valley. Elevation of this physiographic area ranges from 4,400 to 5,800, increasing gradually from east to west. About 5 percent of the survey area is foothills of the southern Rocky Mountains. Elevation ranges from 5,800 to 8,000 feet. Additionally, the Pueblo Area is underlain by beds of limestone, shale and sandstone. The limestone and shale contain no water. The best source of water is the Dakota Formation, but water is not obtained in this formation in all areas. Within these two formations there consist four main types of parent material, the weathered rock or unconsolidated material in which soils form. These types are alluvium, eolian deposits, soft to hard sedimentary rocks of Cretaceous age and Precambrian granite. Specifically at the preferred location, the stream deposits, called alluvium, vary in age from the earliest Pleistocene to Holocene. There are eolian deposits of Quaternary Age also included in the area.

<u>Alternative 1: No Action</u> – Under this alternative, no impacts to the geology or soils of the existing site would occur.

<u>Alternative 2: New Fire Station #4 (Lake Ave. location)(Proposed Action)</u> – This location is located in two main soil complexes. The Manvel silt loam, 1 to 5 percent slopes (MaB) and the Manvel silt loam, wet (Mn). The Otero sandy loam, 1 to 5 percent slopes (OoC) soils are just adjacent to the location to the north and may intersect the location in some areas. The MaB soil makes up about 28% of the survey area. The slope is mostly 3 percent or less. This soil has the profile described as representative of the series. This soil has moderate runoff and the hazard of erosion is moderate. The Mn soil is a moderately well drained, loamy soil. This slope is mostly 0 to 1 percent. This soil has a profile similar to the one described as representative of the series, but it is saturated with water below a depth of 55 inches. It also has a low to high concentration of salts at the surface and small threads and seams of salts in the upper 16 inches. Included with this soil in mapping are areas of Minnequa soils. These areas have water perched on the underlying bedrock that is within a depth of 40 inches. They make up about 5 percent of the series.

acreage. The OoC soils are found on high terraces along the Arkansas River and on uplands in the northeastern part of Pueblo County. This soil has a profile similar to the one described as representative of the series, but in places gravel is at a depth of about 3 feet. Runoff is slow and the hazard of erosion is high.

According to Environmental Database Report (EDR #2367112.2s) that was included with the Phase I Environmental Site Assessment conducted in 2008, the general elevation at the subject site in is 4,802 feet above mean sea level (North American Vertical Datum, NAVD 88). Surface topography generally slopes from the west to the northwest according to the <u>Southwest Pueblo,</u> <u>CO (1998)</u> and <u>Southeast Pueblo, CO (1960)</u> 7.5-minute quadrangle maps (Appendix B). As a part of site development, soil borings were performed on the subject site by CTL Thompson in 2007. A second geotechnical study was conducted in September of 2009. This study was done by Kumar and Associates, attached in Appendix B.

#### SEISMIC DESIGN CRITERIA (excerpt from Kumar & Assoc., 2009)

The Colorado Front Range is located in an area of low seismic activity. Three of the borings encountered bedrock at depths between approximately 22 and 27 feet. Based on these conditions and the estimated shear wave velocities of the overburden soils and bedrock, a Site Class C is recommended and should be assumed for the structure per the 2003 International Building Code. Based on the subsurface conditions encountered, the potential for liquefaction is low.

Under this proposed alternative, construction activities would not be deep enough to impact underlying geological resources. Short-term impacts to soils may occur during construction activities related to the disturbance of soils. Appropriate soil erosion best management practices (BMPs) such as silt fence, inlet filters and mud tracking mats and restoration work would be implemented to minimize storm water runoff. Any stockpiles of topsoil or clean fill material will be surrounded by silt fence and covered as necessary to prevent fugitive dust and soil erosion. Additionally, the *Standard Construction Specifications and Standard Details for City of Pueblo, Colorado, version March 28, 2005* will be implemented. Specifically, Article 9, Earthwork: 9.3.02 Dust Prevention and 9.3.03 Erosion and Sediment Control. The construction of the proposed fire station and the water quality pond will require the removal and/or displacement of surface and subsurface soils, which will be used on-site to construct screening berms and raise the proposed building pad elevations to plan.

<u>Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.)</u> – This location is located in the Kim Series of soils, specifically Kim fine sandy loam. The Kim series consists of deep, well-drained soils. These soils formed on alluvial fans in loamy allumvium. The slope is 0 to 5 percent and the elevation ranges from 4,600 to 5,000 feet. The Kim fine sandy loam soils are described as typical of the series, but he surface and subsurface layers are fine sandy loam and in most places limy gravelly sand is at a depth of about 5 feet. Runoff is slow and the hazard of erosion is slight to moderate.

According to the **Southeast Pueblo, CO (1960)**, the general elevation at the subject site is 4,750 feet above mean sea level (North American Vertical Datum, NAVD 88). Surface topography generally slopes from the west to the northeast. Topography Map is included in Appendix B.

Under this proposed alternative, construction activities would not be deep enough to impact underlying geological resources. Short-term impacts to soils may occur during construction activities related to the disturbance of soils. Appropriate soil erosion best management practices (BMPs) such as silt fence, inlet filters and mud tracking mats and restoration work would be implemented to minimize storm water runoff. Any stockpiles of topsoil or clean fill material will be surrounded by silt fence and covered as necessary to prevent fugitive dust and soil erosion. Additionally, the *Standard Construction Specifications and Standard Details for City of Pueblo, Colorado, version March 28, 2005* will be implemented. Specifically, Article 9, Earthwork: 9.3.02 Dust Prevention and 9.3.03 Erosion and Sediment Control. The construction of the proposed fire station and the water quality pond will require the removal and/or displacement of surface and subsurface soils, which will be used on-site to construct screening berms and raise the proposed building pad elevations to plan.

#### 3.1.2 WATER RESOURCES AND WATER QUALITY

The Clean Water Act (CWA), as amended in 1977, established the basic framework for regulating discharges of pollutants into waters of the United States. Pueblo, Colorado is situated at the confluence of the Arkansas River and Fountain Creek 103 miles (166 km) south of the Colorado State Capitol in Denver. The area is considered to be semi-arid with approximately 14 inches (355.60 mm) of precipitation annually; however with its location in the "banana belt", Pueblo tends to get less snow than the other major cities in Colorado. The Historic Arkansas River Project (HARP) is a river walk in the Union Avenue Historic Commercial District, and shows the history of the Pueblo Flood.

The Fryingpan-Arkansas Project, or "Fry-Ark," is a water diversion, storage and delivery project serving southeastern Colorado. The project was authorized in 1962 by President Kennedy, began construction that same year, and was completed in 1981. It includes five dams and reservoirs, one federal hydro-electric power plant (and a handful of private, FERC regulated plants), 8

tunnels, and 12 conduits. The Bureau of Reclamation, under the Department of the Interior built and manages the project. Pueblo Reservoir, the center piece of Lake Pueblo State Park, is the last reservoir in the project and sits on the Arkansas River just west of Pueblo, CO. The majority of municipal and agricultural deliveries for the project are made out of Pueblo Reservoir before the water continues on east to Kansas via the Arkansas.

The Bessemer Ditch, which runs near the existing station to the east and the proposed location(s), was started in 1873 as a town ditch for South Pueblo. It was owned for a time by Colorado Coal & Iron, but incorporated as a shareholder-owned mutual ditch company in 1894. About 43 miles long, it irrigates nearly 20,000 acres, mostly east of Pueblo, although there are couple laterals west of the city. The Bessemer Ditch has water rights dating back to 1861, and diverts its water directly from Pueblo Dam. It also has some storage rights in Lake Pueblo through the winter water program.

<u>Alternative 1: No Action</u> – Under this alternative, no impacts to the surface water of the existing site would occur.

<u>Alternative 2: New Fire Station #4 (Lake Ave. location)</u> (Proposed Action) – The site topography is shown on the project survey plan, *Figure 3 – Pueblo County Aerial Photo – Proposed New Fire Station #4* in Appendix A. The 2.87-acre project site is currently vacant land that is adjacent to Lake Minnequa. There are no existing structures on the site. Existing drainage on site generally flows from west to northwest. The proposed project consists of the construction of an approximately 13,500 square foot fire station and associated parking on 2.87 acres of currently undeveloped land. The proposed parking facilities shall be constructed of standard and heavy duty asphalt with concrete walks providing ADA compliant connections to the proposed building. Water main and sanitary leads shall be connected to existing facilities along Lake Avenue. The construction of the proposed Fire Station #4 will increase the volume of runoff produced by the site. All storm water runoff shall be collected via a water quality (first-flush) pond on the western edge of the site. The regulated outlet of this pond shall discharge overland and eventually flow to the Minnequa Lake south and west of the site.

Under this proposed alternative, construction activities would increase the amount of impervious land within the subject parcel and therefore increase runoff. However, this increase in runoff would be mitigated by the construction of a water quality pond at the southwestern end of the site. This basin will collect and slowly release the site storm runoff at a level equal to the original site. In addition, temporary soil erosion control measures shall be installed and maintained throughout construction to prevent soil erosion into existing surface runoff. A National Pollution Discharge Elimination System (NPDES) permit is not required for the site; however if over one acre of land will be disturbed a storm water permit for the construction will be required by the Colorado Department of Public Health and Environment.

<u>Alternative 3: Rehabilitation of Existing Fire Station #4 (1201 E. Evans Ave.</u>) – Existing site topography appears to be northwest to southeast. The existing fire station has apparent drainage issues, including surface storm water and the building. This is evident by numerous issues concerning the roof and interior ceiling damage. Additionally, as noted in the site walk conducted on June 23, 2010, there are significant surface water drainage issues. In the Condition Assessment and Design Alternatives Report prepared by HGF Architects in August 2005, they also noted improper drainage that could result in foundation damage.

Under this proposed alternative, proper grading would have to be implemented around the building. However, this would not result in any increase in runoff. There would be no impacts based on the existing infrastructure.

## 3.1.3 FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988)

Executive Order (EO) 11988 requires federal agencies to take action to minimize occupancy and modification of the floodplain. Specifically, EO 11988 prohibits federal agencies from funding construction in the 100-year floodplain unless there are no practicable alternatives. FEMA's regulations for complying with EO 11988 are promulgated in 44 CFR Part 9.

<u>Alternative 1: No Action</u> – The existing Station #4 is located within a 100-yr floodplain as indicated on the FIRM Panel #085077 0010 C. The location in the floodplain leaves the structure open to future flood damages. The FIRM panel is located in Appendix B.

Alternative 2: New Fire Station #4 (Lake Ave. location)(Proposed Action) – The project was located within the 100-year floodplain as indicated in the FIRM (Flood Insurance Rate Map), panel # 085077 0012C for the City of Pueblo, Colorado Pueblo County. However, a CLOMR (Conditional Letter of Map Revision) was submitted in December 2009 to FEMA with updated topographic information of the site (Appendix B). FEMA responded, based on the CLOMR, that a revision to the effective FIRM would be warranted. The basis of the CLOMR is in whole or part, a channel-modification/culvert project. It is the responsibility of the community to maintain the flood-carrying capacity within the altered or relocated portion of the watercourse. A LOMR was issued on August 24, 2010 with an effective date of January 10, 2011. A notice concerning the LOMR will be published in the Pueblo Chieftain on September 3, 2010 and September 10, 2010. There will be a public comment period for 90 days after September 10, 2010. If no valid comments are received the effective date will remain January 10, 2010. Based on the conceptual site plan, Figure 4 – Concept Site Plan in Appendix A – Figures, the driveways and parking lots exit onto Lake Ave., which is outside of the floodplain according to the current FIRM (Appendix B). The revised FIRM, also located in Appendix B, indicates that the entire project area will be located outside of the floodplain.

<u>Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.)</u> – The site is located in a 100-year floodplain according to FIRM panel #085077 0013 C. Under EO 10988: Floodplain Management, if the alterations to the facility constitute substantial improvements an 8-step process review would be required to determine if this is the most practicable alternative. The structure would have to comply with any local floodplain ordinances. The FIRM is located in Appendix B.

#### 3.1.4 AIR QUALITY

The Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment; the Clean Air Act established two types of national air quality standards; primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly; secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation and buildings; current criteria pollutants are: Carbon Monoxide (CO), Nitrogen Dioxide (NO2), Ozone (O3), Lead (Pb), Particulate Matter (PM10), and Sulfur Dioxide (SO2). Emission Data for the Minnequa Area is only currently available from the USEPA for Carbon Monoxide, Nitrogen Oxides, Sulfur Dioxide, Volatile Organic Compounds (VOCs), Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>) and Ammonia. The data is from an emissions station at St. Mary Corwin Hospital, Facility ID 08-104-0027. The emission data is for 2002 and according to this data all values were in attainment. There are two monitoring stations in Pueblo, CO that are located at 101 D. Street and 325 N. Glendale. These monitors currently only monitor PM<sub>2.5</sub> and PM<sub>10</sub>. The data support that Pueblo is in attainment for these parameters.

<u>Alternative 1: No Action</u> – Under this alternative, there would be no impacts to air quality because no construction would occur.

<u>Alternative 2: New Fire Station #4 (Lake Ave. location)(Proposed Action)</u> – Under this alternative and as previously discussed, construction activities would be limited to the footprint of the building; therefore, there would be minor impacts to air quality. These would be mitigated by wetting down areas of disturbance to limit fugitive dust. In addition, emissions from fuelburning engines could also temporarily increase the levels of some criteria pollutants, such as CO, NO2, O3, PM10 and some non-criteria pollutants such as volatile organic compounds (VOCs). To mitigate all of these emissions, fuel-burning equipment run times will be kept to a minimum and equipment would be properly maintained.

<u>Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.)</u> – Under this alternative and as previously discussed, construction activities would be limited to the footprint of the building; therefore, there would be minor impacts to air quality. These would be mitigated by wetting down areas of disturbance to limit fugitive dust. In addition, emissions from fuel-burning engines could also temporarily increase the levels of some criteria pollutants, such as CO, NO2, O3, PM10 and some non-criteria pollutants such as volatile organic compounds (VOCs). To mitigate all of these emissions, fuel-burning equipment run times will be kept to a minimum and equipment would be properly maintained.

#### **3.2 BIOLOGICAL ENVIRONMENT**

#### 3.2.1 TERRESTRIAL AND AQUATIC ENVIRONMENT

In accordance with Section 7 of the Endangered Species Act (ESA) of 1973, the project area was evaluated for the potential occurrences of federally listed threatened and endangered species. The ESA requires any federal agency that funds, authorizes or carries out an action to ensure that their action is not likely to jeopardize the continued existence of any endangered or threatened species (including plant species) or result in the destruction or adverse modification of designated critical habitats (FEMA 1996). In compliance with Section 7 of the Endangered Species Act, a review of the potential impacts to federally listed endangered, threatened and candidate species has been completed. According to the U.S. Fish and Wildlife technical assistance website, the following federally listed species are known to occur in Pueblo County: Arkansas Darter (Etheostoma cragini), the Black-footed ferret (*Mustela nigripes*), the Canada Lynx (Lynx canadensis), the Greenback Cutthroat Trout (*Oncorhynchus clarki stomias*) and the Mexican Spotted Owl (*Strix occidentalis lucida*).

The U.S. Fish and Wildlife Service (FWS) website, specifically, IPAC (Information, Planning and Conservation System) for Endangered Species Assessment was utilized to determine if there are any known or listed endangered, threatened, or special concern species, high quality natural communities, or other unique natural features known to occur at or near the proposed site. The IPAC printouts are included in Appendix B. In addition, in conformance with Section 7 of the Endangered Species Act, All-Phase contacted the local Division of Wildlife (DOW) office to determine any potential impacts to federally listed threatened, endangered and candidate species. None were noted for any of the alternatives. (See DOW correspondence in Appendix C).

#### Species Descriptions:

The black-footed ferret preys primarily upon prairie dogs and is found exclusively in association with prairie dog colonies. Prairie dog colonies are generally located in open grassland areas. There are no prairie dog colonies located at any of the locations identified by the alternatives. Black-footed ferrets will not be affected by any of the alternatives.

Greenback cutthroat trout are found in a few headwater streams of the South Platte and Arkansas River drainages. They require highly oxygenated waters and gravel substrate for spawning. There are no greenback cutthroat trout in the Arkansas River at Pueblo. If they did occur they would interbreed with rainbow trout and would not be a pure strain of greenbacks. Greenback cutthroat trout will not be affected by any of the alternatives.

Bald eagles can be found in the vicinity of Minnequa Lake as a migrant, winter resident, and/or breeder. Their main diet consists of fish supplemented by carrion. Tree snags appropriate for roosting and/or nesting can be found in the vicinity of Minnequa Lake. According to the Colorado Division of Wildlife, eagles roost throughout the riparian corridor below Pueblo Dam and are distributed based upon stream flows. *The project area isn't located in this corridor*.

The Mexican spotted owl requires large tracts of old-growth coniferous forest and is not found in the area of the proposed project. There is no suitable habitat within the affected area. None of the alternatives would affect the Mexican spotted owl.

The Arkansas darter is a three-inch cousin of the walleye and yellow perch. The back is covered with many fine specks and a dark, vertical bar beneath the eye. In April and May, breeding males are bright orange underneath. The Arkansas darter can be found throughout the Arkansas River drainage, prefers cool, clear, spring-fed pools and creeks with abundant vegetation, and is intolerant of silty accumulations (Colorado Division of Wildlife, 1999). None of this type of habitat will be affected by any of the alternatives therefore the Arkansas darter will not be affected.

The Canada Lynx is found in northern forests across almost all of Canada and Alaska. There are large populations of this lynx in Montana, Vermont, Idaho, Washington, and Oregon and a resident population exists in Yellowstone National Park, Wyoming that extends into the Greater Yellowstone Ecosystem. The Canada Lynx is a threatened species in the contiguous United States. It is also found in the Medicine Bow National Forest. Starting in 1999, the Colorado Division of Wildlife began a program reintroducing a wild lynx population back to Colorado.

<u>Alternative 1: No Action</u> – Under this alternative, there would be no impacts to the terrestrial and aquatic environment because no construction would occur.

<u>Alternative 2: New Fire Station #4 (Lake Ave. location)(Proposed Action)</u> – The proposed project site is approximately a 2.87-acre parcel of land near Lake Minnequa in Pueblo, CO. According to historical data gathered from the Minnequa Lake Park and Master Plan, dated 2005, the historical use of the subject site was an amusement park and the Minnequa Club used for boating and entertainment with use of a boat dock. There is a building foundation on the northern end of the site, most likely from the old boathouse. The proposed site is adjacent to a wetland area, Minnequa Lake, which supports wildlife common to wetland areas, including migratory birds, reptiles, amphibians, small mammals, and waterfowl. Because the site and surrounding area is a designated wetland area, it would be considered to have value for plant and wildlife species.

The US Fish and Wildlife (FWS) and the Colorado Division of Wildlife (DOW) websites were utilized to determine if any Threatened and Endangered (T&E) Species may exist on the site. Additionally, a project site map was sent to the local DOW office along with a request to indicate if any of the T&E species, either federal or state, would be present. In an email received June 7, 2010, Mike Trujillo with the DOW stated "...there are no issues with any species on the location. No wetland issues either." A site walk was conducted on May 10, 2010 and none of the species of concern were observed during the site visit. The species of concern, as identified in Pueblo County, are the Arkansas Darter, the Black-footed ferret, the Canada Lynx, the Greenback Cutthroat Trout and the Mexican Spotted Owl. Upon entering the site location data, the FWS indicated that all of the above species could be impacted by the project. There are cottonwood trees present on the site, which are known to be nesting grounds for migratory birds. No nests were observed during the aforementioned site visit and none of the species of concern were noted during the site visit.

According to a study conducted by Smith Environmental in March 2005 there are several species of birds and other animals that inhabit the lake area, or have the potential to inhabit the area, including both federally and state listed species as well as species that aren't listed. According to the 2005 study, no federally listed species inhabited the study area, although it was suspected that the Bald Eagle may frequent the area. At the time of the study the black-tailed prairie dog was on the state list for threatened species; however they were since removed in December 2009. Best Management Practices should be implemented in order to protect all wildlife habitat, including but not limited to construction during fall, winter and spring months (September to April), relocation of species and nests, and potentially a wildlife survey of the project area prior to construction activity.

Under this proposed alternative, and based on the information supplied by the DOW, the construction of a new Station #4 would not have any significant impacts on existing terrestrial or aquatic environments. Best management practices (BMPs) would be implemented as stated above and care would be taken by construction personnel to cause minimal destruction to potential habitat area. Additionally, if nests were noted DOW would be notified immediately.

<u>Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.)</u> – The location of the existing station is in a residential/commercial neighborhood. There are no terrestrial or aquatic environments located on the site or adjacent to the site. Therefore, under this alternative there would be no impacts to terrestrial or aquatic environments.

#### 3.2.2 WETLANDS

The USACE regulates the discharge of dredged or filled material into waters of the U.S., including wetlands, pursuant to Section 404 of the CWA. Additionally, EO 11990: Protection of Wetlands requires Federal agencies to avoid, to the extent possible, adverse impacts on wetlands that may result from federally funded actions. Regulated wetlands in Colorado are also protected by the Colorado Department of Public Health and the Environment. A map illustration the wetlands and the proximity to the proposed action is included as Figure 6 in Appendix A.

<u>Alternative 1: No Action</u> – Under this alternative, there would be no impacts to existing wetlands because no construction would occur.

<u>Alternative 2: New Fire Station #4 (Lake Ave. location)(Proposed Action)</u> – According to the Smith Environmental study conducted in 2005, The National Wetland Inventory (NWI) Map lists Lake Minnequa as Lacustrine, Limnetic, Open Water, Artificially Flooded, and Intermittently Exposed/Permanent. The NWI map does not list the east shore in a wetland; however the southeast shoreline is listed as a Palustrine Emergent Intermittently Flooded/Temporary area. Based on email correspondence with Army Corp of Engineer, Chief Van Truan, a 404 permit would not be required for this project (Appendix C).

Under this proposed alternative, no impacts to waters of the U.S., including wetlands, would occur because Lake Minnequa and any designated wetlands will not be disturbed as part of the construction. Additionally, the areas of disturbance as part of the project development have, in most cases, already been disturbed previously. *Figure* 6 - Wetland Determination, in Appendix A, indicates that the disturbed areas are outside of the wetland area.

Wetlands closest to the proposed project site are outside of the area to be disturbed by grading or filling and would not be directly or indirectly impacted by construction. During construction, the use of BMPs would minimize erosion at the site and mitigate potential impacts to the nearest water resources. Appropriate BMPs would be required at the construction site, including, but not limited to, the installation of silt fences, track-out pads, and the re-vegetation of bare soils to minimize erosion.

<u>Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.)</u> – The location of the existing station is in a residential/commercial neighborhood. There are no wetland environments located on the site or adjacent to the site. Therefore, under this alternative there would be no impacts to wetlands.

#### 3.2.3 VEGETATION

Habitat characteristic of Pueblo is characterized by shore-grass prairie interspersed with shrubs. Grass species are widely diverse with the most common species being comprised of blue grama, galleta, and side-oats grama. Common shrubs include four-wing saltbush, big sagebrush and rabbitbrush.

The semi-arid climate limits tree survival. Few native tree species are found in Pueblo. Outside of the riparian zone where broadleaf cottonwood and peachleaf willow are common native trees, one-seeded juniper and pinon pine are found in the grassland-shrub community in favorable sites. Non-native trees include white mulberry, hackberry, Siberian elm, honey locust and green ash. The invasive salt cedar is a component of the riparian zone along the Arkansas River and minor drainages and is also common in low areas with sufficient moisture.

Riparian habitat on lands managed by the State of Colorado consists generally of mature cottonwood trees with an understory of native grasses. Salt cedar is becoming more common. The State of Colorado is currently researching the use of biological agents at Pueblo Reservoir to control salt cedar.

<u>Alternative 1: No Action</u> – Under this alternative, there would be no impacts to any existing vegetation because no construction would occur.

<u>Alternative 2: New Fire Station #4 (Lake Ave. location)(Proposed Action)</u> – There are five types of plant communities identified in the Lake Minnequa area: Wetland Grasses, Wetland Shrubs/Grasses, Wetland Trees/Grasses, Upland Grasses and Upland Trees/Grasses. Wetland grasses consist of cattails, sedges, and bulrush and rush species. Wetland shrubs/grasses around the edge of the lake consist of tamarisk, sedges and inland salt grass. Wetland Trees/Grasses just back from the perimeter of the lake consist of Cottonwoods, Russian-olive and inland salt grass.

Upland grasses further from the lake consist mainly of inland salt grass and alkali sacaton. Upland trees and grasses consists of Russian-olive and noxious weeds. Most of the shrubs and trees on site are noxious weeds consisting of tamarisk and Russian-olive. The City of Pueblo has conducted a massive clearing of noxious weeds around the lake and proposes additional clearing of these weeds with both active and passive methods.

Under this proposed alternative, there will be minimal disturbance of the existing vegetation. However, at least one large cottonwood tree will have to be removed. Clearing of noxious weeds will be continued and the landscape of the fire station will be maintained to prevent and inhibit further growth of these species. Additionally, landscaping will be provided that complements the natural landscape of Minnequa Lake and wetland plant species.

<u>Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.)</u> – The location of the existing station is in a residential/commercial neighborhood. There is no native vegetation or large cottonwoods located on the site. Therefore, under this alternative there would be no impacts.

#### **3.3 HAZARDOUS MATERIALS**

<u>Alternative 1: No Action</u> – Under this alternative, there would be no impacts from hazardous materials because no construction would occur.

<u>Alternative 2: New Fire Station #4 (Lake Ave. location)(Proposed Action)</u> – A Phase I environmental study of the subject property was performed in November 2008 by All-Phase Environmental Consultants, Inc. A visual survey of the site was conducted to determine the presence of any hazardous materials. During the site survey, no apparent visual indications (e.g., vent pipes, fill pipes, etc.) of the current presence of underground storage tanks (USTs) or aboveground storage tanks (ASTs) were noted within the subject property. Also, the Colorado Department of Labor and Employment Division of Oil and Public Safety does not identify any registered storage tanks within the subject property. Furthermore, the Pueblo County Building Department or Fire Department does not have records of permits for the installation or removal of storage tanks within the subject property.

No apparent visual indications of the presence of containers with hazardous materials or petroleum products that might represent a REC were observed on the subject property. No apparent olfactory indications of the presence of strong, pungent, or noxious odors were observed within the subject property. No apparent pools of liquid were observed on the subject property. No apparent visual indications of the presence of drums or containers on the subject property that likely contain hazardous substances or petroleum products were observed. No apparent visual indications of the presence of open or damaged containers containing unidentified substances suspected of being hazardous substances or petroleum products were observed were observed.

During the visual survey, the subject property was surveyed for the presence of liquid-cooled electrical units (e.g., transformers, ballasts, etc.). Such units are of possible concern because they may be potential polychlorinated biphenyls (PCB) sources. PCB units may subject the owner/operator to various regulatory requirements under the Toxic Substance Control Act (TSCA). The release of PCB fluids or their combustion products (in case of spill or fire) are potential environmental liabilities and may require remedial actions. No electrical transformers were observed to be associated with the subject property. In addition, no suspect hydraulic equipment was observed to be within the subject property.

No apparent visual indications of the presence of areas, mounds, or depressions that may be filled or graded by non-natural causes or filled with fill of unknown origin suggesting trash or other solid waste disposal were observed on the subject property. There was a significant amount of windblown trash and there were piles of concrete and dirt from grading activities. In addition,

based on review of the Environmental Database Report (EDR #2367112.2s) the subject property is not located at or within the vicinity of a historic solid waste disposal facility.

The assessment did not reveal any evidence of recognized hazardous material conditions in connection with the property at the time the site reconnaissance was conducted in 2008, with the exception of slag located on the Subject Property, used as a base course for the lot.

Under this proposed alternative, there would be minimal impacts from hazardous materials as the slag that is located on site will be encapsulated with fill and/or asphalt from the new parking lot. No slag will be transported or removed from the site.

<u>Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.)</u> – A visual survey of the site was conducted by All-Phase personnel on June 23, 2010, to determine the presence of any hazardous materials. During the site survey, no apparent visual indications (e.g., vent pipes, fill pipes, etc.) of the current presence of underground storage tanks (USTs) or aboveground storage tanks (ASTs) were noted within the subject property. Also, the Colorado Department of Labor and Employment Division of Oil and Public Safety does not identify any registered storage tanks at the property.

No apparent visual indications of the presence of containers with hazardous materials or petroleum products that might represent a REC were observed on the subject property. No apparent olfactory indications of the presence of strong, pungent, or noxious odors were observed within the subject property. No apparent pools of liquid were observed on the subject property. No apparent visual indications of the presence of drums or containers on the subject property that likely contain hazardous substances or petroleum products were observed. No apparent visual indications of the presence of open or damaged containers containing unidentified substances suspected of being hazardous substances or petroleum products were observed on the subject property.

Under this proposed alternative, there would be minimal impacts from hazardous materials as identified at the site. There is compressed oxygen containers located on site, which are labeled and contained properly. These do not constitute a REC. Therefore, under this alternative there would be no impacts.

#### **3.4 SOCIOECONOMICS**

#### 3.4.1 ZONING AND LAND USE

<u>Alternative 1: No Action</u> – Under this alternative, there would be no impacts to existing land use or zoning because no construction would occur.

<u>Alternative 2: New Fire Station #4 (Lake Ave. location)(Proposed Action)</u> – The proposed project site is located off of Lake Ave. near the intersection of Aqua Ave. just east of Lake Minnequa. The Pueblo Regional Building Department assigned the address of 2201 Lake Avenue to the project site. The property is currently zoned S-1, governmental use, as recommended by the Pueblo Planning and Zoning Commission and approved by the Pueblo City Council. This was recently changed from R-6, multiple residential and commercial. The adjacent property to the north is zoned (A-4) Agricultural Four – low density residential; Lake Minnequa is classified as a floodplain and properties immediately adjacent to the south, east and west are all zoned some form of residential or B-3, Highway and Arterial Business.

Under this proposed alternative, there are no anticipated zoning or land use impacts associated with the construction of the proposed Station #4 as the site was recently re-zoned S-1 for government use, as recommended by the Pueblo Planning and Zoning Commission and approved by Pueblo City Council.

<u>Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.)</u> – The existing station is located at 1201 E. Evans avenue at the intersection of Evans and Mesa. This site is zoned S-1, government use.

Under this proposed alternative, there could be potential impacts to zoning and land use(s). In order to meet the criteria for expansion the station most likely would need to be expanded in some form. This would require acquisition of surrounding properties which are zoned R-4, residential use. These properties, if able to be acquired, would have to go through a re-zoning process that could take several months, beyond the time period it would take to acquire said properties. This option could prove to be lengthy and expensive.

# 3.4.2 VISUAL RESOURCES

<u>Alternative 1: No Action</u> – Under this alternative, there would be no impacts to the visual resources of the existing station because no construction would occur.

Alternative 2: New Fire Station #4 (Lake Ave. location)(Proposed Action) – The proposed project site is vacant land, with residual asphalt from a parking lot intermixed among wetland type vegetation. According to area residents, city officials and research conducted during the Phase I ESA the site and surrounding lands have been used as a recreational facility with access to Lake Minnequa from the early 1900's until its closure in 1985. Currently there are no structures on site, with the exception of a remnant foundation. The area south of the site, across Lakeshore Ave. is residences, a liquor store, a tavern and two paint and body shops. The area north of the site is a parking lot utilized by St. Mary Corwin Hospital. To the west is Lake Minnequa and to the east is an automotive repair shop and two hotels. The landscape character of the site is generally flat land, located in a wetland type area with vegetation characteristic of such an area. There are few visual obstructions since no existing buildings or above ground structures are present on site. Standing in the middle of the site, an observer can generally see up to ½ mile to the north, south and east. There is dense vegetation in areas to the west bordering Lake Minnequa. Refer to Appendix H for site photos illustrating the existing visual resources of the site.

Under this proposed alternative, the construction of the proposed Station #4 would become a new obstruction to the existing visual resources of the site and surrounding properties. The architects of the proposed development have designed a building that matches the architectural character of the former CF&I Offices and other structures in the surrounding properties and developments, in the preliminary drawings. The future parks and recreation use of the property surrounding the subject site, will tie into the proposed Station #4 to provide a uniform visual landscape along the west side of Lake Ave.

<u>Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.)</u> – The existing station is located at 1201 E. Evans avenue at the intersection of Evans and Mesa. There is an improvement on the site that consists of 6,267 square feet. All changes to the exterior of the existing building would have to meet historical building guidelines. Due to restrictions in altering the appearance of the building no impacts are anticipated as any construction would be minimal. Any changes would be characteristic of the current surroundings.

# 3.4.3 NOISE

Noise can be considered unwanted sound and sound is typically measured in decibels (dB). An average measure of sound is known as the day-night average sound level (Ldn), and is used by agencies for estimating sound impacts and establishing guidelines for compatible land uses. An EPA document, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA, 1974) provides a basis for State and local governments' judgments in setting standards. The document identifies a 24-hour exposure level of 70 dB as the level of environmental noise that will prevent any measurable hearing loss over a lifetime. Also, levels of 55 dB outdoors and 45 dB indoors are identified as preventing activity interference and annoyance. These levels are considered those which will permit spoken conversation and other activities such as sleeping, working and recreation. The levels are not single event, or "peak" levels, but rather, they represent averages over long periods of time. An occasional higher noise levels would be consistent with a 24-hour average of 70 dB, as long as a sufficient amount of relative quiet is experienced.

The sound level of a typical sound outdoors falls off in level at 6 dB per doubling of distance. In the case of a typical siren, the noise would be 115 dB at a distance of 10 feet from the source, 109 dB 20 feet, 103 dB at 40 feet, 97 dB at 80 feet, 91 dB at 160 feet, 85 dB at 320 feet, 79 dB at 640 feet, 73 dB at 1280 feet, 67 dB at 2560 and approximately 60 dB at a distance of 1 mile. The subject site is located on Lake Ave, with residential and commercial uses to the north, south and east. Additionally, St. Mary Corwin Hospital is less than ½ mile to the northeast and Corwin Middle School is about ½ mile to the north. These neighborhoods would therefore be impacted by the noise of sirens and equipment generated by the proposed station. Due to the proximity of hotels, a hospital and a school (sensitive receptors) to the proposed station, Hankard Environmental, conducted a noise evaluation for the site (Appendix D). This study found the following:

".....As mentioned above, for the purposes of this study, we consider the noise generated by emergency vehicles to be exempt from local and state noise ordinances. However, in the spirit of full disclosure, the noise levels produced from fire truck sirens were predicted at the nearest receptors. Fire trucks are closest to the motels and residences when they are leaving the Station and turning onto Lake Avenue. When the trucks are at this point, predicted siren noise levels are 98 dBA at the motels and 89 dBA at the nearest residences. As the trucks turn onto Lake Avenue, noise levels will drop by about 20 dB due to the directional nature of the sirens. Noise levels will decrease further as the trucks drive away from the area....."

The study also states that the hotels in the area will be effected but most likely for short durations and not at frequent intervals. Additionally, the City of Pueblo has drafted an ordinance amending Section 11-1-607 of Article VI of Chapter 1, Title XI of the Pueblo Municipal Code Relating to Regulations concerning noise and exemption of authorized emergency vehicles therefrom. The ordinance was passed on June 14, 2010 by the Pueblo City Council (Appendix B).

<u>Alternative 1: No Action</u> – Under this alternative, there would be no impact on noise generation because no construction would occur.

<u>New Fire Station #4 (Lake Ave. location)(Proposed Action)</u> – The subject site is located on Lake Ave, with residential and commercial uses to the north, south and east. Additionally, St. Mary Corwin Hospital is less than  $\frac{1}{2}$  mile to the northeast and Corwin Middle School is about  $\frac{1}{2}$  mile to the north. These neighborhoods would therefore be impacted by the noise of sirens and equipment generated by the proposed station. Due to the proximity of hotels, a hospital and a school (sensitive receptors) to the proposed station, Hankard Environmental, conducted a noise evaluation for the site (Appendix D). This study found the following:

".....As mentioned above, for the purposes of this study, we consider the noise generated by emergency vehicles to be exempt from local and state noise ordinances. However, in the spirit of full disclosure, the noise levels produced from fire truck sirens were predicted at the nearest receptors. Fire trucks are closest to the motels and residences when they are leaving the Station and turning onto Lake Avenue. When the trucks are at this point, predicted siren noise levels are 98 dBA at the motels and 89 dBA at the nearest residences. As the trucks turn onto Lake Avenue, noise levels will drop by about 20 dB due to the directional nature of the sirens. Noise levels will decrease further as the trucks drive away from the area....."

The study also states that the hotels in the area will be effected but most likely for short durations and not at frequent intervals. Additionally, the City of Pueblo has drafted an ordinance amending Section 11-1-607 of Article VI of Chapter 1, Title XI of the Pueblo Municipal Code Relating to Regulations concerning noise and exemption of authorized emergency vehicles therefrom. This ordinance was approved by the Pueblo City Council June 14, 2010.

Under this alternative, only temporary short-term increases in noise levels would be anticipated during construction. To reduce noise levels during that period, construction activities would be restricted to normal daylight business hours. Ultimately, equipment and machinery utilized at the site would meet all local, State, and Federal noise regulations. As suggested in the noise study the selected contractor will have to be mindful of noise and work hours.

Over the long term, vehicle traffic would certainly increase at the proposed project site, primarily when FD personnel are training or responding to traffic accidents, fires, severe weather, or other emergency events. The increased traffic and sirens would increase the noise level, but these increases would be short in duration and would occur somewhat infrequently. It is anticipated that these noise peaks would not cause a violation of the EPA's 24-hour exposure levels.

<u>Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.)</u> – There would be no anticipated impacts to noise as there is currently a fire station on the site. Some additional "normal" vehicular traffic might be anticipated if the station were to grow to incorporate training. This would be characteristic of the surrounding property uses, i.e. commercial use.

#### 3.4.4 PUBLIC SERVICES AND UTILITIES

Public services include: police, fire, sewer and water. They are provided by the City of Pueblo Police Department, City of Pueblo Fire Department, The City of Pueblo Wastewater Division and the Board of Water Works, respectively. Private gas service is provided by Xcel Energy, electricity by Black Hills Energy, cable by Comcast and telephone service by Qwest. The facilities are within the Pueblo School District #60.

Because the City of Pueblo Fire Department provides a public service, there are recognized impacts of relocating and/or renovating a fire station. Specifically, the response times will be significantly impacted by the alternatives. Below is a table that illustrates the response times for each alternative considered, the total coverage area consists of 4,402.13 Acres:

| Alternative Considered                                     | Coverage<br>Area (acres) | Percentage covered in the 6½ minute time benchmark <sup>1</sup> |
|--|--------------------------|---|
| Keep Existing Fire Station at<br>Mesa Ave. and Evans Ave.  | 3,598.31                 | 81.74   |
| Construct New Fire Station at Lake Ave. and Aqua Ave.      | 4,184.38                 | 95.05   |
| Construct New Fire Station at Evans Ave. and Baystate Ave. | 3,884.62                 | 88.24   |
| l  |                          | - 10  |

<sup>1</sup>This includes Stations 3, 7 and 9

<u>Alternative 1: No Action</u> – Under this alternative, there would be significant impacts to the existing public services and utilities because no construction would occur. Based on the Matrix Study (2006) the current response times to a growing district are not optimal. Specifically, the response times are much slower than other districts where the fire station is more aligned in the district and close to major thoroughfares. As indicated above there is a dramatic loss of coverage in the 6½ minute response time. Only about 81.74% of the district is covered in this benchmark timeframe. A figure indicating the current response times and area coverage is located in Appendix B.

<u>Alternative 2: New Fire Station #4 (Lake Ave. location)(Proposed Action)</u> – Under this proposed alternative, the construction of the proposed Fire Station #4 would require the use of all the above public services and utilities. All are available to the site and connections to the proposed building and site have been proposed as a part of the project. All existing utility providers have confirmed that their existing systems can provide service to the proposed project as designed.

The public will benefit greatly from the construction of a new fire station, as this location is more centrally aligned in the district, thus reducing response times significantly. As illustrated above in the response time table, by relocating the fire station to the proposed location, the  $6\frac{1}{2}$  minute response time benchmark is met in over 95% of the district. This is a significant improvement to response times and is greatly beneficial to the public.

<u>Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.)</u> – Another consideration that negatively impacted the alternative to renovate was the need to vacate the station for several months during renovations. Currently there are no suitable properties available to temporarily house the fire department operations during renovation. Therefore, the public would be greatly impacted as another fire station would have to cover Station No.4's territory, thereby not only increasing response times but also the demand on the fire station and personnel.

Because of the location of the current fire station, this action would increase emergency response times to this area of the community and surrounding areas with future population growth and development, particularly since Station No. 9 has been relocated. This alternative would result in a lower level of overall public safety than the other alternatives. (See table above)

There would be no anticipated impacts to utilities as the existing station currently utilizes all of the aforementioned utilities.

## 3.4.5 TRAFFIC AND CIRCULATION

All roads (herein referred to as the local roads) are under the jurisdiction of the Pueblo Public Works Streets Division, which is under the jurisdiction of the Colorado Department of Transportation (CDOT). Public transportation within the City of Pueblo and immediate area is limited to community buses.

<u>Alternative 1: No Action</u> – Under this alternative, there would be no impacts to existing traffic and circulation because no construction would occur.

<u>Alternative 2: New Fire Station #4 (Lake Ave. location)(Proposed Action)</u> – The existing public roads adjacent or near the project site include Lake Ave. (frontage), Aqua Ave. (to the east), Lakeshore Drive (to the south) and Indiana Ave. (to the north and east). All local roads are two lane asphalt roads, with the exception of Lake Ave., which is a four lane asphalt road heading south to Pueblo Blvd. All construction traffic shall enter and exit the site from Lake Ave. or Lakeshore Ave. Mud mats will be installed at these access points to limit tracking of mud and debris onto Lake Ave.

Under this alternative and as previously discussed, construction activities would be limited to the footprint of the building; therefore, there would be limited impacts to traffic and circulation during the construction period. These would be mitigated by preventing parking of any construction equipment or vehicles on city streets during business hours.

An independent traffic analysis was conducted by Drexel, Barrell and Company in May 2010, in order to evaluate the potential impacts of the increase in traffic and the presence of fire trucks in the area. The study concluded that it was not anticipated that the new fire station would negatively impact the average daily traffic volume on Lake Avenue. Short-term impacts may be realized during construction. The new station may result in very short-term disruptions in traffic during fire response times. However, during the course of an average day, the disruptions would be minimal as fire stations typically do not generate a significant amount of traffic. A minor increase in vehicle trips can be expected on Lake Ave. and Lakeshore Drive. In conclusion, the additional traffic volume associated with the construction of a new fire station on Lake Ave. is anticipated to be minimal and can be accommodated by the surrounding roadway system. The study is located in Appendix E.

<u>Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.)</u> – There could be impacts to traffic as there is currently a fire station on the site and if the station were to grow to meet the needs of the community there could be an increase in fire truck traffic. The intersection of Mesa and Evans is a dangerous intersection for entrance and egress of the fire trucks. The trucks currently have to pull into the intersection to leave and make a 45 degree turn in any direction to get to a major street. In order to park in the station, the trucks have to back into the station while occupying the entire intersection. This is a major consideration in evaluation of this alternative.

#### 3.4.6 Environmental Justice (Executive Order 12898)

On February 11, 1994, President Clinton signed Executive Order (EO) 12898, entitled, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations". The EO directs federal agencies, "to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States..." Socioeconomic and demographic data for the project area were analyzed to determine if a disproportionate number of minority or low-income persons have the potential to be adversely affected by the proposed project.

2000 US Census data for City of Pueblo indicates that 76.2% of the population is white, 2.4% African American, 1.7% Native American, 0.7% Asian, 0.1% Pacific Islander, 15.2% from other races and 3.7% from two or more races. 2000 US Census data for zip code 81004 within Pueblo County indicates that 72.9% of the population is white, 3.0% African American, 1.7% Native American, 0.2% Asian, 0.0% Pacific Islander, 18.3% from other races and 3.8% from two or more races. The median income for a household in the city, in 81004 zip code, in 1999 was \$25, 717 and the median income for a family, in 81004 zip code, in 1999 was \$31, 075. About 23.6% of individuals and 19.1% of families are below the poverty level.

<u>Alternative 1: No Action</u> – Under this alternative, there would be no disproportionately high and adverse impacts on minority or low-income populations because no construction would occur.

<u>Alternative 2: New Fire Station #4 (Lake Ave. location)(Proposed Action)</u> – No large concentrations of minority or low income populations were identified in the immediate vicinity of the proposed subject site. Additionally, based on discussions with the City of Pueblo Fire Department, Alternative 2 will result in a significant upgrade to and enhancement of the department's ability to respond quickly and effectively to all residents and establishments of the City of Pueblo's Fire District #4 territories.

Under this alternative, there would be no disproportionably high and adverse impacts on minority or low-income populations. Construction of a new fire station to increase fire response and efficiency would benefit all populations of the City of Pueblo.

<u>Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.)</u> – There would be no anticipated socioeconomic impacts with the exception of increased response times as the fire station will not be centrally aligned in the new territory. There would be no disproportionately high and adverse impacts on minority or low-income populations.

Because Station No. 9 has been moved there is currently a hole in coverage in the district. This is a major issue for the citizens of the City of Pueblo to live in a safe environment.

# 3.4.7 SAFETY AND SECURITY

Improvements to the safety and security are the driving force of the project. After an internal study conducted by the City of Pueblo Fire Department it was concluded that the current response times were not optimal, particularly to outlying areas of the district. The current district is approximately 4,402.13 acres. **Section 3.4.4 Public Services and Utilities**, addressed the specific response times for each alternative considered. As indicated there is a significant hole in coverage, thus compromising the safety and security of the public.

To minimize risks to safety and human health, all construction activities would be performed using qualified personnel trained in the proper use of the appropriate equipment including all appropriate safety precautions; additionally, all activities would be conducted in a safe manner in accordance with the standards specified in Occupational Safety and Health Act (OSHA) regulations. EO 13045, Protection of Children, requires federal agencies to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children.

<u>Alternative 1: No Action</u> – Under this alternative, there would be no construction on site and therefore no risk to the safety and security of the City of Pueblo population, regarding construction safety.

Based on the response times data provided in Section 3.4.4, for emergency response, the public will be impacted, as the location of this station is not centrally aligned in the district thereby increasing response times within the district. The territory is growing as development continues south of Pueblo, thus realignment of the station is imperative to provide coverage.

There are safety issues with the current building. There is evidence of mold from years of water damage. The current configuration of the stairs can present a hazard when awakened in the middle of the night and there is a 180 degree turn to reach the truck bay. There are no restrooms on the  $2^{nd}$  floor where the dorms are located. These hazards cannot only cause significant downtime to the fire fighters should an injury occur, but could also delay response time.

<u>Alternative 2: New Fire Station #4 (Lake Ave. location)(Proposed Action)</u> – Under this alternative, the construction of a new fire station would increase the effectiveness of the City of Pueblo's fire protection and directly increase the safety and security of the City of Pueblo's population. Specifically, response times would be reduced uniformly throughout the district and developments south of Pueblo would be easier accessed via Interstate 25 from the proposed location. Section 3.4.4 above provides the response time data and specifically, indicates the drastic improvement of relocating the station. The 6  $\frac{1}{2}$  minute response time increases to coverage of over 95% of the district vs. less than 82% at the current location.

Construction activities could present safety risks to those performing the activities. Access to the site will be restricted to protect the public and to minimize risks to safety and human health. Appropriate signage and barriers would be in place prior to construction activities to alert pedestrians and motorists of project activities. There would be no disproportionate health and safety risks to children.

<u>Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.)</u> – There would be significant anticipated impacts to safety and/ or the security of the population specifically, the potentially longer response times to portions of the realigned district. Rehabilitation of the existing station would not pose a health risk to the public.

Potential construction activities could present safety risks to those performing the activities. Access to the site will be restricted to protect the public and to minimize risks to safety and human health. Appropriate signage and barriers would be in place prior to construction activities to alert pedestrians and motorists of project activities. There would be no disproportionate health and safety risks to children.

#### 3.5 HISTORIC AND CULTURAL RESOURCES

In addition to review under NEPA, consideration of effects to historic properties is mandated under Section 106 of the National Historic Preservation Act (NHPA), as amended, and implemented by 36 CFR Part 800. Requirements include identification of significant historic properties that may be affected by the Proposed Action. Historic properties are defined as archaeological sites, standing structures, or other historic resources listed in or eligible for listing in the National Register of Historic Places (NRHP) (36 CFR 60.4). As defined in 36 CFR Part 800.16(d), the Area of Potential Effect (APE), "is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist."

In addition to identifying historic properties that may exist in the proposed project's APE, FEMA must also determine, in consultation with the appropriate State Historic Preservation Officer (SHPO)/Tribal Historic Preservation Officer (THPO), what effect, if any, the action will have on historic properties. Moreover, if the project would have an adverse effect on these properties, FEMA must consult with SHPO/THPO on ways to avoid, minimize, or mitigate the adverse effect. During construction, ground disturbing activities would be monitored. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site would cease and the coroner's office (in the case of human remains), FEMA, and the Colorado State Historic Preservation Office would be notified immediately.

<u>Alternative 1: No Action</u> – Under this alternative, there would be no construction on site and therefore no impacts to historic or cultural resources.

<u>Alternative 2: New Fire Station #4 (Lake Ave. location)(Proposed Action)</u> – Under this proposed alternative, the construction of a new Station #4 could have potential to impact historic or cultural resources. A third party consultant, RMC Consultant, conducted a cursory review of records of the existence of a boat house foundation (previously the Minnequa Clubhouse) located at the proposed location. (Reference Photo 11 in Appendix H and *Figure 4 – Concept Site Plan* in Appendix A). Because the boathouse is outside of the area of potential disturbance and because the City of Pueblo will take measures to prevent disturbance during construction, i.e. fencing, etc. A complete survey was not conducted. FEMA Regional Environmental Officer, Steven Hardegen, wrote a letter to SHPO (Appendix C) stating that a "reasonable and good faith effort to carry out appropriate identification efforts..." was conducted, thus the project would have "No Effect" as proposed.

Alternative 3: Rehabilitation of Fire Station #4 (1201 E. Evans Ave.) – The existing fire station was constructed in 1941 primarily of the brick from the second Bessemer Town Hall which was adjacent to the structure and built in 1890. The building was approved for the City of Pueblo's Historic Landmark designation in August 2005. Due to the historic landmark designation the renovation of such a structure would have to meet all of the protocol and covenants as described by the Historical Society. Significant renovations would require approval and most likely would be very costly due to the architectural design of the current fire station and due to the fact it is functionally obsolete. Additionally, there are severe limitations due to the needed technology, space, and health and safety requirements that a newly constructed building would require. This alternative would have a dramatic effect on the current fire station and may not be acceptable by the Pueblo Historical Society.

If the Alternative 2 – Construction of the New Fire Station No. 4 is completed, the existing structure would not have any significant changes or alterations; however the City of Pueblo will continue to upkeep the structure and provide maintenance.

#### 3.5.1 HISTORIC STRUCTURES AND ARCHAEOLOGICAL RESOURCES

On June 14, 2010, a letter and supporting documentation was submitted to the SHPO with a Request for SHPO Comment and Consultation on a Federal Undertaking. The request included documentation gathered by All-Phase Environmental Consultants, Inc. and FEMA on historic properties in the area of the proposed project site, as well as the existing fire station located at 1201 E. Evans Ave. The State Historic Preservation Office has not responded to the request. A copy of the FEMA request and associated SHPO consultation letter has been included in Appendix C.

The current fire station is on the historic register in Pueblo County. In order to abide by the strict covenants regarding remodeling of an historic site, renovations would be complex and costly. As mentioned in the letter addressed to SHPO, no changes or alterations are proposed. The City would best be served to preserve this structure, in its current state and provide pest control, roof maintenance and general interior and exterior maintenance. The City of Pueblo would seek a new tenant that would "fit" with the historic significance of the building. The Historic Preservation Commission application and letter of acceptance are located in Appendix B.

#### **3.6** COMPARISON OF ALTERNATIVES

The following table summarizes the impacts and mitigation of Alternatives 1, 2 and 3. Because Alternative 4 was not evaluated it is not included in the table.

| AFECTED           |                        |  |                        |  |  |
|-------------------|------------------------|--|------------------------|--|--|
| AFFECTED          | ALTERNATIVE 1          | ALTERNATIVE 2<br>PROPOSED NEW  | ALTERNATIVE 3          |  |  |
| ENVIRONMENTS      | NO ACTION              |  | <b>REHABILITATE</b>    |  |  |
|                   | <b></b>                | STATION  | EXISTING STATION       |  |  |
| Geology and Soils | No anticipated impacts | Disturbance of shallow soils during construction activities.   | No anticipated impacts |  |  |
|                   |                        | Implement storm water<br>Best Management<br>Practices (BMPs) during<br>construction to minimize<br>erosion; landscape and<br>pave after construction to<br>prevent erosion   |                        |  |  |
| Air Quality       | No anticipated impacts | Minor and temporary<br>impacts from construction<br>vehicle exhaust and<br>fugitive dust during<br>construction activities<br>Air pollution will be<br>minimized through proper<br>equipment maintenance<br>and dust suppression                               | No anticipated impacts |  |  |
|                   |                        | techniques   |                        |  |  |
| Water Quality     | No anticipated impacts | Minor and temporary<br>impacts from soil<br>disturbance (erosion and<br>runoff) during construction<br>activities  | No anticipated impacts |  |  |
|                   |                        | Construction permit will<br>be required from CDPHE<br>if more than 1 acre of land<br>is to be disturbed; BMPs<br>will be implemented<br>during construction to<br>minimize erosion and<br>landscaping and paving<br>after construction will be<br>implemented. |                        |  |  |
| Wetlands          | No anticipated impacts | The proposed action would<br>not impact any wetlands<br>directly. There could be<br>potential indirect impacts;<br>however care will be taken<br>during construction to<br>preserve all habitats or<br>enhance habitat at a<br>minimum of 1:1.                 | No anticipated impacts |  |  |

### **TABLE 1: Comparative Matrix of Alternative Impacts**

| AFFECTED<br>Environments                                | ALTERNATIVE 1<br>NO ACTION   | ALTERNATIVE 2<br>Proposed New<br>Station   | ALTERNATIVE 3<br>Rehabilitate<br>Existing Station   |
|---|--|--|---|
| Floodplains   | The existing station is located<br>in a 100-year floodplain.<br>There are no mitigative<br>measures to raise the grade of<br>the existing structure.   | The proposed location is<br>no longer located in a<br>floodplain; LOMR was<br>issued in August 2010,<br>effective January 2011.<br>Removes building from<br>floodplain                 | The existing station is<br>located in a 100-year<br>floodplain. There are no<br>mitigative measures to raise<br>the grade of the existing<br>structure.   |
| Threatened and<br>Endangered Species<br>Migratory Birds | No anticipated impacts   | No threatened or<br>endangered species or<br>critical habitats are located<br>in the project area; all other<br>areas are previously<br>disturbed areas.                               | No anticipated impacts  |
| Wildlife and Fish                                       | No anticipated impacts   | No critical habitats are<br>located in the area of the<br>proposed action  | No anticipated impacts  |
| Cultural Resources                                      | No anticipated impacts.  | Proposed project would<br>have "No Effect" to<br>historic properties. The<br>boathouse foundation will<br>remain intact and will be<br>protected during<br>construction.               | Remodel of a historic<br>facility is challenging as<br>there are strict covenants<br>regarding preservation of<br>certain aspects of the<br>building. Costly<br>alternatives for renovation<br>to enhance safety, energy<br>consumption, etc. |
| Hazardous Materials                                     | No anticipated impacts   | There is a small amount of<br>slag on the site that was<br>used as a base course for<br>parking.<br>The slag will be buried<br>under fill materials and/or<br>the asphalt parking lot. | No anticipated impacts  |
| Environmental<br>Justice                                | If the new fire station is not<br>constructed there will be a<br>significant "hole" in coverage<br>and thus an increase in<br>response times. This could<br>affect all citizens of the<br>community. | The proposed action would benefit all citizens equally.  | If the new fire station is not<br>constructed there will be a<br>significant "hole" in<br>coverage and thus an<br>increase in response times.<br>This could affect all citizens<br>of the community.  |

| AFFECTED<br>Environments | ALTERNATIVE 1<br>NO ACTION   | ALTERNATIVE 2<br>PROPOSED NEW<br>STATION  | ALTERNATIVE 3<br>Rehabilitate<br>Existing Station   |
|--------------------------|--|---|---|
| Noise                    | Intermittent long-term<br>impacts from emergency<br>equipment sirens | Short-term construction<br>noise impacts and<br>intermittent long-term<br>impacts from emergency<br>equipment sirens<br>Construction activities will<br>be restricted to normal<br>daylight hours and<br>equipment will be properly<br>maintained. Intermittent<br>long-term impacts from<br>emergency equipment<br>sirens. Mitigation not<br>possible for emergency<br>equipment sirens – but are<br>exempt from code. Has<br>ordinance been passed yet? | Short-term construction<br>noise impacts and<br>intermittent long-term<br>impacts from emergency<br>equipment sirens  |
| Traffic                  | No anticipated impacts   | Intermittent increase of<br>emergency equipment on<br>Lake Ave. and Lakeshore<br>Drive.<br>Emergency vehicle<br>warning signs will be<br>considered by the City of<br>Pueblo  | Intermittent increases of<br>emergency equipment on<br>Evans Ave. and Mesa Ave.<br>Emergency vehicle warning<br>signs will be considered by<br>the City of Pueblo   |
| Zoning and Land Use      | The current station is zoned for a fire station.                     | This site was re-zoned for<br>use as a fire station.  | The current station is zoned<br>for a fire station. The<br>property is listed with the<br>City of Pueblo as an historic<br>property, thus significant<br>alterations to the building<br>are not allowed.      |
| Visual Resources         | No anticipated impacts.  | The proposed station<br>would enhance the current<br>adjoining property facades<br>as revitalization to a<br>blighted neighborhood.<br>Greatly enhances public<br>safety.   | The current station is on the<br>City of Pueblo's historic<br>register. Renovations to<br>this structure would have to<br>conform with strict<br>covenants and codes under<br>the historical societies rules. |

| AFFECTED                        | ALTERNATIVE 1  | ALTERNATIVE 2   | ALTERNATIVE 3   |
|---------------------------------|--|---|---|
| <b>ENVIRONMENTS</b>             | NO ACTION  | <b>PROPOSED NEW</b>   | REHABILITATE  |
|                                 |  | STATION   | EXISTING STATION  |
| Safety and Security             | Increased response times in<br>certain areas of the district.<br>Thereby jeopardizing public<br>safety and security.   | This action will<br>significantly reduce<br>response times throughout<br>the realigned district, as<br>well as align the fire station<br>more evenly from outlying<br>areas of the district.  | Increased response times in<br>certain areas of the district.<br>Increased demand on an<br>outdated station. Limited<br>resources, i.e. trucks, etc.<br>No room for expansion due<br>to current adjacent property<br>ownership. |
| Public Service and<br>Utilities | Increased response times in<br>certain areas of the district.<br>Increased demand on an<br>outdated station. Limited<br>resources, i.e. trucks, etc.<br>No room for expansion.   | This action will<br>significantly reduce<br>response times throughout<br>the realigned district, as<br>well as distance the fire<br>station more evenly from<br>outlying areas of the<br>district.<br>The proposed action will<br>not place significant<br>demands on the existing<br>utility infrastructure. | Increased response times in<br>certain areas of the district.<br>Increased demand on an<br>outdated station. Limited<br>resources, i.e. trucks, etc.<br>No room for expansion due<br>to current adjacent property<br>ownership. |
| Cumulative Impacts              | Significant "hole" of<br>coverage and an increase in<br>overall response time; use of<br>a functionally obsolete<br>building that is known to<br>have many structural issues;<br>and issues with health and<br>safety for the occupants. | The new fire station will be<br>constructed on<br>governmental use zoned<br>property and will<br>incorporate safety, training<br>areas and energy efficient<br>design. There will be a<br>significant reduction in<br>overall response time<br>within the district.   | Rehabilitation of a building<br>on the historic register with<br>renovation/restoration<br>restrictions; land acquisition<br>issues; issues with traffic<br>safety; land use restrictions                                       |

### **SECTION 4: CUMULATIVE IMPACTS**

According to CEQ regulations, cumulative impacts represent the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7)." In accordance with NEPA and to the extent reasonable and practical, this EA considered the combined effect of the Proposed Action Alternative and other actions occurring or proposed in the vicinity of the proposed project site; therefore, no cumulative impacts are anticipated.

### **SECTION 5: PUBLIC INVOLVEMENT**

FEMA is the lead Federal agency for conducting the NEPA compliance process for the proposed City of Pueblo Fire Department Station #4 in the City of Pueblo, Pueblo County, Colorado. It is the goal of the lead agency to expedite the preparation and review of NEPA documents and to be responsive to the needs of the community and the purpose and need of the proposed action while meeting the intent of NEPA and complying with all NEPA provisions.

Interagency reviews have been conducted in the form of agency consultation letters and the responses received from the agencies. Applicable agency responses have been provided in Appendix C. The proposed project has been discussed at numerous Pueblo City Council meetings, all of which are open to the public and welcome public comments. In addition, the project was reviewed, discussed and recommended for approval by the Pueblo City Council in a public meeting also with open public comments accepted. No issues of concern were presented by the public or any governmental agency.

The City of Pueblo, Public Works Department held a public meeting to solicit comments, on April 21, 2010 that was published via a public notice in the Pueblo Chieftain, a local newspaper. Additionally the City of Pueblo will notify the public of the availability of the draft EA through publication of a public notice in the Pueblo Chieftain as required. FEMA will conduct a public comment period commencing on the initial date of publication of the public notice to extend for 15 days. Copies of the EA will be placed at the Robert Hoag Rawlings Library located at 100 E. Abriendo Avenue, in Pueblo, Colorado. The EA can be viewed and downloaded from FEMA's website at http://www.fema.gov. If no substantive comments are received, the EA will become final. The EA will then be archived on FEMA's website at http://www.fema.gov.

### SECTION 6: MITIGATION, MEASURES AND PERMITS

Construction of the new fire station will be completed in general accordance with the following mitigation measures to lessen impacts to the local community:

- During construction, the selected contractor will water down construction areas as necessary to prevent fugitive dust emissions that would impact local air quality.
- Construction equipment will be operated with factory-equipped vehicle emissions controls.
- Best management practices (BMPs) to reduce or eliminate runoff impacts during construction will be implemented and following construction, the site will be landscaped and vegetated to reduce the potential for soil erosion.
- BMPs will be implemented during construction in order to minimize disturbance of potential nesting grounds of birds as part of the Migratory Bird Treaty Act. If nests are encountered an ornithologist will be consulted as to the best course of action.
- Noxious weeds will be eliminated in the project area by one of several methods outlined in the Master Plan (2005). Additionally, weed control will be implemented at the fire station.
- Construction noise will be temporary and will be mitigated by limiting construction to normal daylight hours.
- Construction equipment will be operated with factory-equipped vehicle emissions controls including mufflers.
- In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity shall be discontinued, the area secured, and the SHPO and FEMA notified.
- If any hazardous materials are found during construction; these shall be characterized, remediated, and disposed of as appropriate, and otherwise handled in accordance with applicable local, state, and federal laws and regulations.

In accordance with applicable local, State, and Federal regulations, the applicant would be responsible for acquiring any necessary permits prior to commencing construction at the proposed project site. The following permits and approvals may be required prior to construction:

- 1. CDPHE Construction Permit (>1 acre disturbed)
- 2. Pueblo County Public Works Soil Erosion
- 3. City of Pueblo Streets Division
- 4. Building Permit (Pueblo Regional Building Dept.)
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FIGURES

## APPENDIX B

### SUPPORTING DOCUMENTATION

## APPENDIX C

## AGENCY CORRESPONDENCE

## APPENDIX D

# NOISE STUDY – HANKARD ENVIRONMENTAL

### APPENDIX E

## TRAFFIC ANALYSIS – DREXEL, BARRELL & CO.

APPENDIX F

# PUBLIC COMMENTS

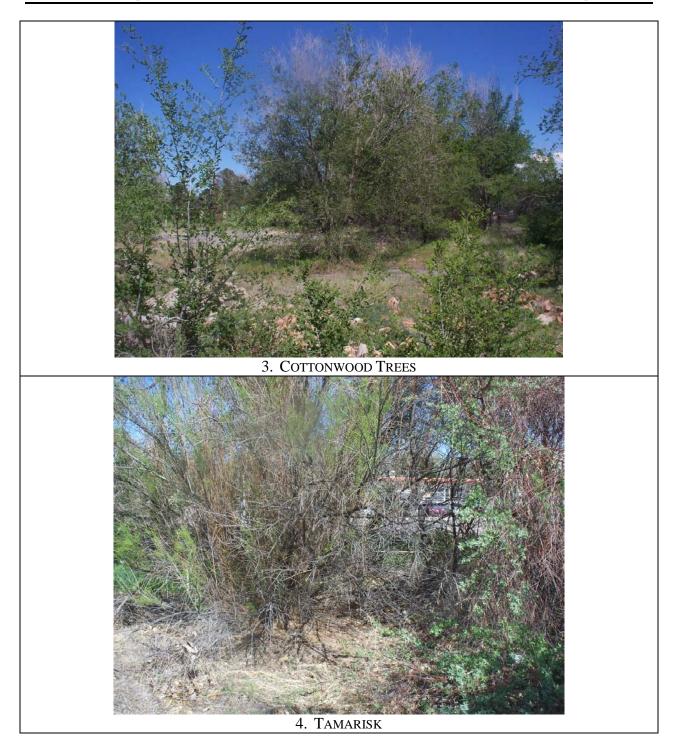
 $\mbox{Appendix}\,G$ 

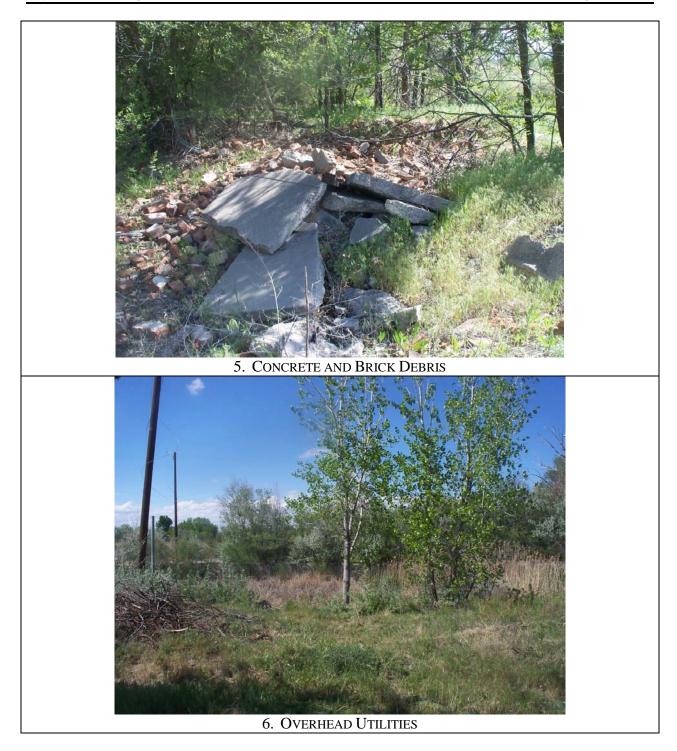
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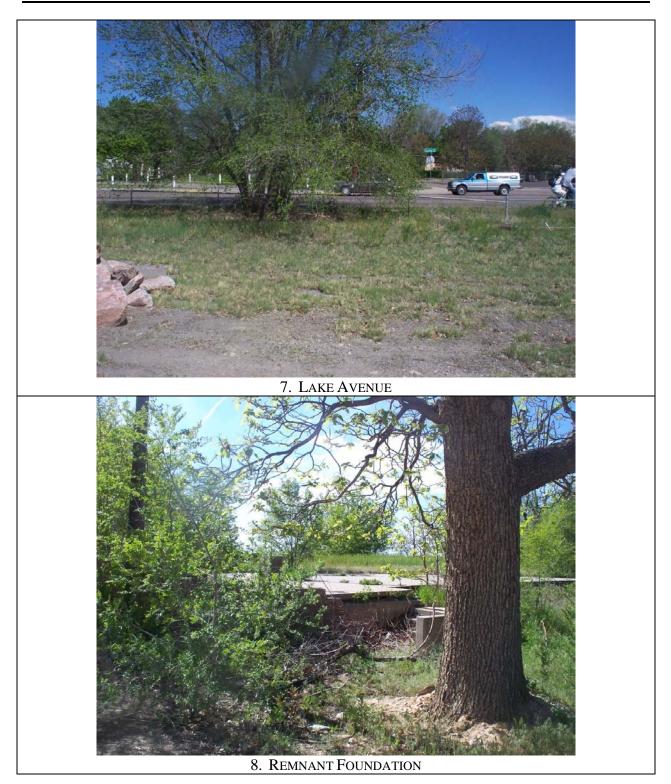
## APPENDIX H

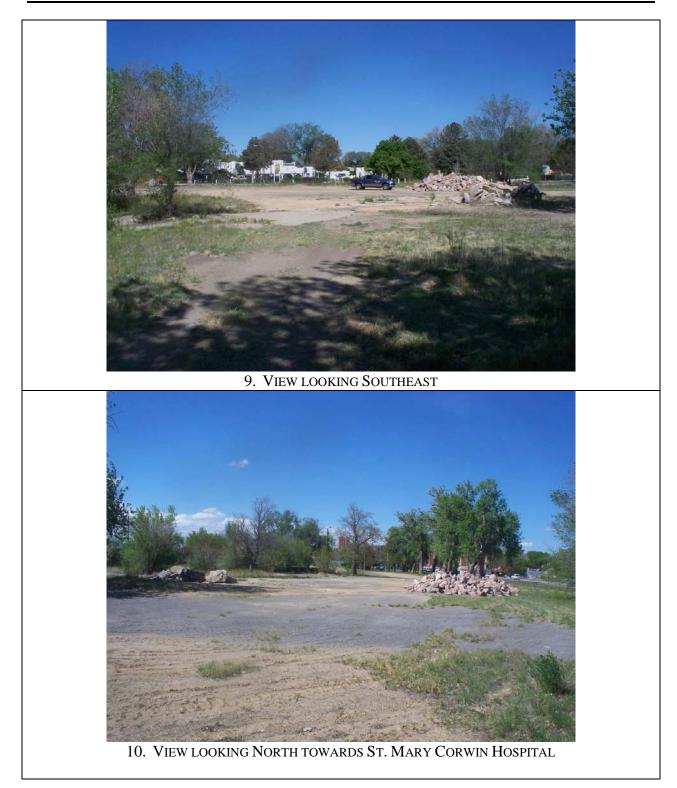
# SITE PHOTOGRAPHS













12. VIEW OF THE FOUNDATION LOOKING WEST TOWARDS THE LAKE MINNEQUA