# NEPA Final Programmatic Environmental

# Assessment

Proposed New Southern Colorado National Cemetery El Paso County, Colorado July 2012 Terracon Project No. 23127708

> Prepared for: Department of Veteran Affairs

Prepared by: Terracon Consultants, Inc. Colorado Springs, Colorado



# **EXECUTIVE SUMMARY**

This Programmatic Environmental Assessment (PEA) has been prepared to identify, analyze, and document the potential physical, environmental, cultural, and socioeconomic effects associated with the Department of Veterans Affairs' (VA's) selection and acquisition of a site for establishing a national cemetery in Southern Colorado. Preparation of this PEA is required in accordance with the National Environmental Policy Act of 1969 ([NEPA]; 42 United States Code [USC] 4321 et seq.), the President's Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and 38 CFR Part 26 (Environmental Effects of the Department of Veterans Affairs Actions). This PEA also has been prepared in accordance with VA's NEPA Interim Guidance for Projects (2010).

In the State of Colorado, there are currently two national cemeteries open to full burial options. Fort Lyon National Cemetery in Las Animas, Colorado serves the southeast portion of the state and Fort Logan National Cemetery in Denver, Colorado serves the central portion of the state. These two cemeteries are separated by over 200 miles. Fort Lyon National Cemetery started as an Army Post Cemetery in 1867 and is estimated to have sufficient full burial option capacity beyond the year 2030.

The purpose of the Proposed Action is to select and acquire a suitable site for the proposed future construction and operation of a National Cemetery within El Paso County, Colorado that will provide interment facilities for eligible veterans in the Southern Colorado area in accordance with the Veterans Benefit Act of 2010 (Public Law 111-275). VA identified El Paso County as the preferred location. The proposed project will develop the first phase of the cemetery by constructing 10 years of interment capacity including full-casket and cremains gravesites, administration and maintenance facilities and associated infrastructure such as roadways, utility systems, irrigation, signage and landscaping. The proposed cemetery will provide interment services to a large veteran population in the Southern Colorado area not currently served by an open national cemetery and must be of sufficient size and capacity to serve the projected needs of VA in this region for at least the next 100 years.

The Proposed Action will develop approximately 4,000 gravesites for casket interments, 3,500 columbarium niches and 1,500 in-ground sites for cremated remains, for a total of 9,000 interment sites.

After identifying the need for a new National Cemetery in southern Colorado, VA published a solicitation for an appropriate new site. In accordance with VA's requirements, the site should include at least a minimum of 200 contiguous, developable acres and convey water rights, located within El Paso County, Colorado. In order to be considered as a reasonable site, VA also required that the site be easily accessible via existing major roadways.

Numerous responses to this solicitation (i.e., offering of sites) were received by VA. VA then created a Site Selection Board (SSB) to further evaluate each site. The SSB visited each site and ranked each site based on specific (selection) criteria. Through this screening process, VA selected four sites for further analysis in accordance with the PEA process as described in this document. Following conclusion of the public comment period and further evaluation, these four sites have been narrowed to two for this proposed new National Cemetery: Bradley Heights or Rolling Hills.

A master plan will be prepared which addresses development of the entire site and design development will be accomplished focusing upon the first phase of construction. Construction of an early turnover burial area will be completed in late 2015 in order to allow for burials prior to completion of the permanent Phase I facilities in early 2017. The VA Program Guide (PG-18-15, Volume D), A/E Submission Instructions for National Cemetery Projects will be followed, as well as the National Cemetery Administration (NCA) Facilities Design Guide. The design will culminate in the preparation of contract documents to be used for competitive bidding purposes.

This PEA evaluated possible effects to aesthetics; air quality; cultural resources; geology and soils; hydrology and water quality; wildlife and habitat, including threatened and endangered species; noise; land use; floodplains, wetlands, and coastal zone management; socioeconomics; community services; solid and hazardous materials; transportation and parking; utilities; and Environmental Justice (Executive Order [EO] 12898). This PEA concludes there would be no significant adverse impact, either individually or cumulatively, to the local environment or quality of life associated with implementing either of the identified alternative site locations, provided that the mitigation and management measures and best management practices identified in this PEA are implemented.

Site-specific impacts would be further evaluated in a subsequent, tiered EA (Site-Specific EA) once a site has been selected, acquired, and the proposed design process has been initiated. The mitigation, avoidance, and management measures identified in this PEA would be incorporated into that future process and analysis. Therefore, this PEA concludes that a Finding of No Significant Impact (FONSI) is appropriate, and that an Environmental Impact Statement (EIS) is not required.

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# NEPA PROGRAMMATIC ENVIRONMENTAL ASSESSMENT

PROPOSED NEW SOUTHERN COLORADO NATIONAL CEMETERY EL PASO COUNTY, COLORADO

### 1.0 INTRODUCTION

#### 1.1 Introduction

This Programmatic Environmental Assessment (PEA) has been prepared to identify, analyze, and document the potential physical, environmental, cultural, and socioeconomic effects associated with the Department of Veterans Affairs (VA) selection and acquisition of a site for establishing a national cemetery in Southern Colorado. Preparation of this PEA is required by the National Environmental Policy Act of 1969 ([NEPA]; 42 United States Code [USC] 4321 et seq.), the President's Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and 38 CFR Part 26 (Environmental Effects of the Department of Veterans Affairs Actions). This PEA also has been prepared in accordance with VA's NEPA Interim Guidance for Projects (2010).

Once a site is selected and acquired through this PEA process, VA will prepare a subsequent, site-specific, "tiered" EA (Site-Specific EA or SEA) to more precisely analyze and evaluate the potential effects of the construction and operation of the proposed VA National Cemetery. At this latter point in time, additional design information would be available upon which to conduct this future environmental effects analysis. VA would incorporate the avoidance and management measures identified in this PEA into that future design process and tiered NEPA analysis to minimize potential environmental effects.

This approach is fully consistent with the NEPA and CEQ Regulations. In cases such as these, the CEQ Regulations establish and recommend a "tiered" approach to the environmental impact analysis process: "Agencies are encouraged to tier their environmental (documents)...to focus on the actual issues ripe for decision at each level of environmental review.... Tiering may also be appropriate for different stages of actions" (40 CFR Part 1502.20). These regulations specify that such potentialities (i.e., the ultimate construction and operation of the VA National Cemetery) should be introduced, but can be deferred to future analyses and documentation when they have "ripened," or when more complete information becomes available.

As such, this PEA assesses the potential effects of selecting and acquiring a site for the future development of the proposed VA National Cemetery (i.e., direct effects), and broadly

assesses the effects of the future proposed construction and operation of the cemetery (i.e., indirect effects) under each alternative considered. Again, site-specific effects would be more thoroughly analyzed and evaluated in a subsequent, tiered EA, once this programmatic NEPA process is complete and an alternative (i.e., site) has been selected and acquired by VA.

#### 1.2 Purpose

The purpose of the Proposed Action is to select and acquire a suitable site for the proposed future construction and operation of a National Cemetery within El Paso County, Colorado that will provide interment facilities for eligible veterans in the Southern Colorado area in accordance with the Veterans Benefit Act of 2010 (Public Law 111-275). VA identified El Paso County as the preferred location. The proposed project will develop the first phase of the cemetery by constructing 10 years of interment capacity including full-casket and cremains gravesites, administration and maintenance facilities and associated infrastructure such as roadways, utility systems, irrigation, signage and landscaping. The proposed cemetery will provide interment services to a large veteran population in the Southern Colorado area not currently served by an open national cemetery and must be of sufficient size and capacity to serve the projected needs of VA in this region for at least the next 100 years.

A master plan will be prepared which addresses development concepts of the entire site for the operational life of the cemetery. Design development will focus on the first phase. VA program Guide (PG-18-15, Volume D), A/E Submission Instructions for National Cemetery Projects will be followed, as well as the National Cemetery Administration (NCA) Facilities Design Guide. The design will culminate in the preparation of contract documents to be used for competitive bidding purposes.

The Proposed Action will develop approximately 4,000 gravesites for casket interments, 3,500 columbarium niches and 1,500 in-ground sites for cremated remains, for a total of 9,000 interment sites. The project will also include memorial walls to commemorate those whose remains are not available for interment. To optimize the use of available land for gravesites, the project will install 4,000 pre-placed concrete crypts. Phase 1 of the Proposed Action will include development of approximately 50 acres to provide for about ten years of burial capacity and an early-turnover burial area, with temporary administrative and maintenance facilities, temporary committal shelters, minimal roads, and utilities. Construction of an early turnover burial area will be completed in late 2015 in order to allow for burials prior to completion of the permanent Phase I facilities in early 2017. In addition to the gravesite development, the construction includes access roads; an entrance area; flag/assembly area; two permanent committal shelters; an administration building/public information center with electronic gravesite locator and public restrooms; memorial walkway/donations area; maintenance complex; road system; utilities; signage; site

furnishings; fencing; irrigation system as needed consistent with water-wise landscaping principles; utility distribution system; environmental (including historical and cultural resources) preservation and mitigation.

#### 1.3 Need

VA has established three objectives that define outcomes for VA burial programs. One of these objectives is to ensure that burial needs of Veterans and eligible family members are met. NCA further defines this objective on the assumption that the burial needs of a Veteran are met if they have reasonable access to a burial option, where reasonable access to a burial option is defined as "...a first interment option (whether for casketed remains or cremated remains, either in-ground or in columbaria) in a National or State Veterans Cemetery...available within 75 miles of the Veteran's place of residence." VA established a 75-mile service area standard because NCA data show that more than 80 percent of persons interred in National Cemeteries resided within 75 miles of the cemetery at the time of death.

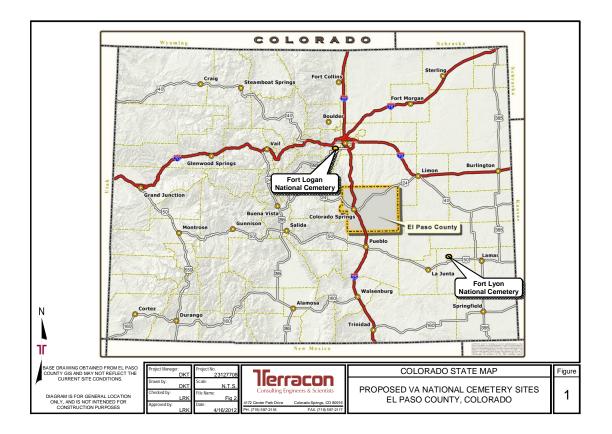
In the independent <u>Evaluation of the VA Burial Benefits Program</u> (August 2008), NCA reviewed where it has been and reflected on future burial strategy to continue meeting the needs of our Nation's Veterans. This evaluation also noted that there is a gap between the size of population centers served by a National Cemetery and state cemeteries. Hence, based upon that study, NCA established a new Veteran population threshold to increase access to a burial option where the unserved Veteran population is at least 80,000.

A new National Cemetery is needed to better serve the needs of Veterans and their families in southern Colorado. The new cemetery would provide additional capacity, as well as improved access to Veterans and their families (i.e., reduced travel time to a National Cemetery), and would balance the currently unequal geographic distribution of VA National Cemeteries within the State of Colorado. There are currently two National Cemeteries located in Colorado; a new cemetery in El Paso County would help equalize the distribution of National Cemeteries within the state. The NCA estimated a FY 2010 unserved veteran population of approximately 95,000 living within the southern Colorado area included in the 75-mile radius for this proposed national cemetery

In accordance with the Servicemembers Civil Relief Act, also known as the Veteran's Benefit Act of 2010, Public Law 111-275, Sec. 503, Reports on Selection of New National Cemeteries (38 USC 2400), VA was directed to establish five new National Cemeteries, including a cemetery in southern Colorado.

In the State of Colorado, there are currently two national cemeteries open to full burial options (see Figure 1). Fort Lyon National Cemetery in Las Animas, Colorado serves the southeast portion of the state and Fort Logan National Cemetery in Denver, Colorado

serves the central portion of the state. These two cemeteries are separated by over 200 miles. Fort Lyon National Cemetery (51.9 acres) started as an Army Post Cemetery in 1867 and is estimated to have sufficient full burial option capacity beyond the year 2030.



Fort Logan National Cemetery is 214 acres in size and has been operational since 1889. Based upon VA actuarial forecasts and remaining capacity, Fort Logan National Cemetery is expected to close to first interment casketed burials by FY 2028 and slightly longer for cremation inurnments. There are no viable alternatives to acquire adjacent land to expand the Fort Logan National Cemetery.

Once the need is identified, NCA follows a multi-step process for building new national cemeteries:

- Site selection process including a Programmatic Environmental Assessment (PEA)
- Land acquisition
- Master planning and design development
- Construction documents preparation
- Construction award/completion

## 2.0 ALTERNATIVES TO THE PROPOSED ACTION

#### 2.1 Introduction

The alternatives considered for this Proposed Action (acquisition of a site to establish and operate a national cemetery) in this PEA are four potential site locations and the No Action Alternative. The screening criteria and process developed and applied by VA are described below.

#### 2.2 Proposed Action

As stated in Section 1.0, the proposed action is to establish a national cemetery for eligible veterans in the Southern Colorado area. Two primary criteria for site selection include:

- Location
- Site Characteristics

These criteria are further described below.

#### 2.2.1 Site Criteria

#### Location

The site should be located as close as possible to the densest veteran population in the area under consideration. The focal point identification was El Paso County, Colorado. In addition, the sites are evaluated according to size, shape, accessibility, utilities, water availability, surrounding land use, and environmental concerns.

Sufficient acreage must be available to provide sufficient gravesites for several decades. Interment rates are projected based upon veteran population within a 75-mile radius of a proposed site. The number and mix of required full-casket gravesites, cremains sites, and columbarium niches are used to determine acreage requirements. Irregularly shaped sites are generally more difficult to access and less efficient to layout and develop. The NCA has determined that an ideal site would consist of approximately 200 developable and contiguous acres.

The selected site should be readily accessible via highways and major public roadways. Close proximity to highway interchanges and public transportation is ideal. Public utilities (electricity, water, sewer), if immediately available to the site, are also desirable. However, on-site septic systems and on-site water wells may be acceptable. An adequate water supply, whatever the source, is also very important. Sites adjacent to visually objectionable, loud noise, high traffic, or other nuisance elements are avoided to maintain the desired decorum for the ceremonies. Preferably, the site would be free of public easements and rights-of-way.

#### Site Characteristics

The inherent qualities of the site, including soils, topography, and aesthetics, should be such that it is conducive to cemetery development. Soils should be of a quality which will provide adequate topsoil for growing turf as well as adequate stability for constructing roads and buildings. Shallow depth to groundwater may require additional site preparation. An ideal site would be free of subsurface obstructions and hazardous waste.

Comparatively level to rolling terrain is desirable for areas to be developed. The grade of burial areas should be in the 2 to 15 percent range. There should be sufficient slope to enable proper drainage of the site. Ravines, wetlands, and sinkholes are avoided wherever feasible. Existing site amenities such as pleasant views and quality vegetative cover are desirable. The presence of man-made elements such as cultural/historic/archaeological elements, utility easements, rights-of-way, or mineral rights can hamper or legally prevent development.

#### 2.2.2 VA Acquisition Process

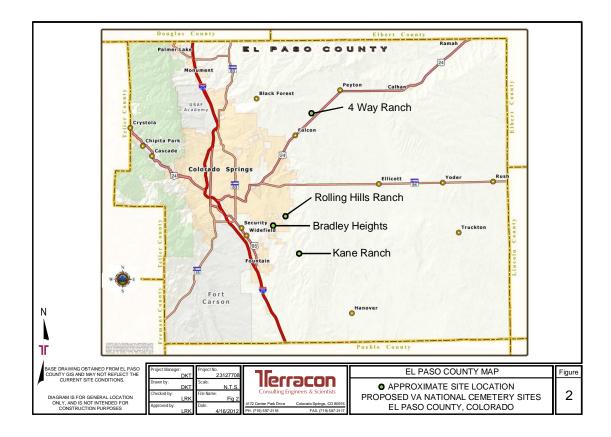
After identifying the need for a new National Cemetery in southern Colorado, VA published a solicitation for an appropriate new site. In accordance with VA's requirements, the site should include at least a minimum of 200 contiguous, developable acres and convey water rights, located within El Paso County, Colorado. In order to be considered as a reasonable site, VA also required that the site be easily accessible via existing major roadways.

Numerous responses to this solicitation (i.e., offering of sites) were received by VA. VA then created a Site Selection Board (SSB) to further evaluate each site. The SSB visited each site and ranked each site based on specific (selection) criteria. Through this screening process, VA selected four sites for further analysis in accordance with the PEA process as described in this document.

These sites are:

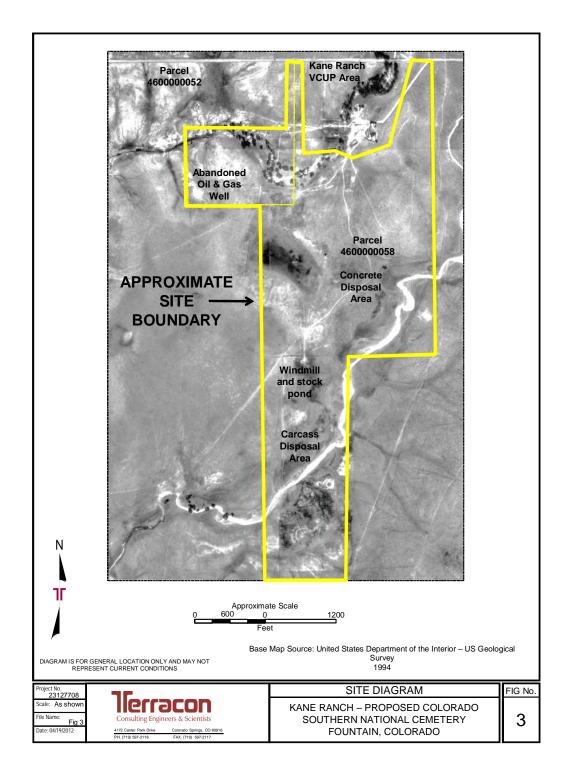
- Kane Ranch: located east of Fountain, Colorado on Squirrel Creek Road
- 4-Way Ranch: located northeast of Falcon, Colorado on State Highway 24
- Rolling Hills Ranch: located east of Colorado Springs, Colorado near the intersection of Bradley and South Meridian Roads
- Bradley Heights: located east of Colorado Springs, Colorado near the intersection of Bradley and South Marksheffel Roads

The general locations of each site are shown on Figure 2.



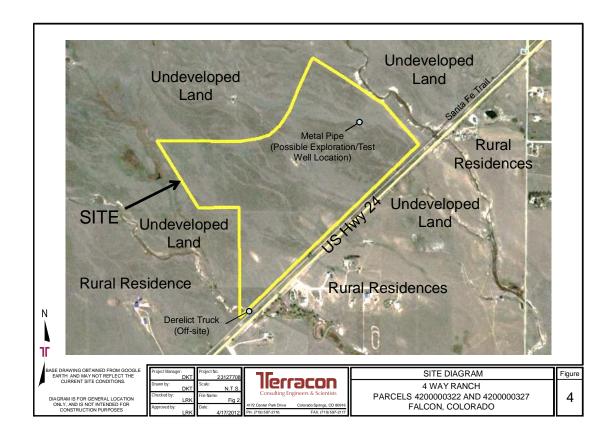
#### 2.2.3 Alternative 1: Kane Ranch

NCA would acquire and develop the approximately 493.6-acre site for a new national cemetery. The site is currently owned by El Paso County and is located 4 miles east of the Fountain city limits. The approximate coordinates of the site are 38° 40' 43.98" north and 104° 35' 47.14" west and is identified by the El Paso County Assessor's Office as Schedule No. 4600000058. It is approximately 7 miles east of the I-25 interchange with Highway 16 at Fort Carson near the southern end of Colorado Springs. It lies south of Squirrel Creek Road and is accessed by Andy Kane Road. The site diagram for the Kane Ranch is shown on Figure 3.



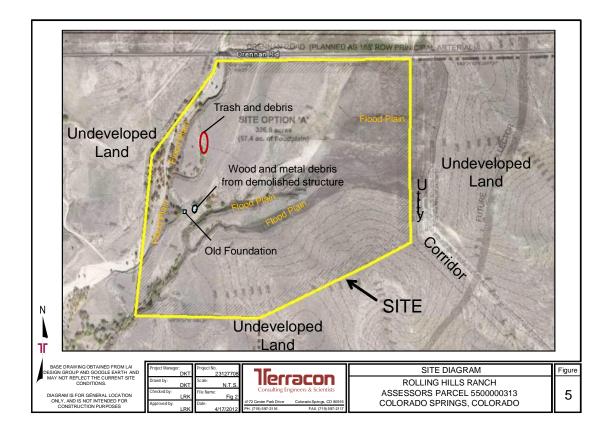
#### 2.2.4 Alternative 2: 4-Way Ranch

The 4-Way Ranch site is a 200 acre parcel located within the 8,100-acre 4-Way Ranch. The site is located in the Falcon area of El Paso County, Colorado. The approximate coordinates of the site are 38° 58' 53.76" north and 104° 32' 49.92" west and is identified by the El Paso County Assessor's Office as Schedule Nos. 4200000322 and 4200000327. The site is relatively flat, sloping from northwest to southeast with an average grade of 2 to 5%. The site is currently used for grazing of cattle. There are no structures or developed roads on the site. The site diagram for 4-Way Ranch is shown on Figure 4.



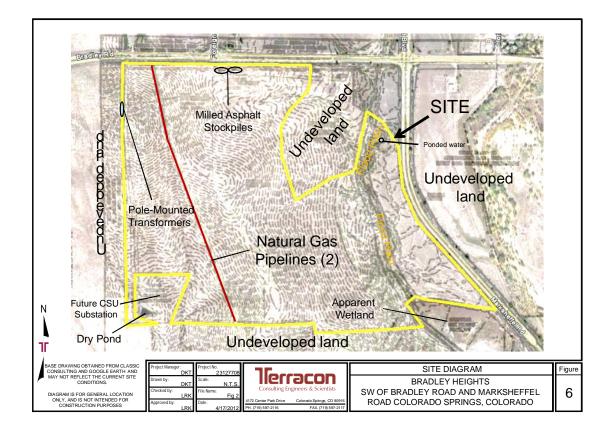
#### 2.2.5 Alternative 3: Rolling Hills Ranch

Rolling Hills Ranch is located in the southeast portion of the City of Colorado Springs, generally east of Marksheffel Road between Bradley and Drennan Roads. The approximate coordinates of the site are 38° 46' 36.8" north and 104° 38' 10.3" west and is identified by the El Paso County Assessor's Office as Schedule No. 5500000313. Rolling Hills Ranch is approximately 1,182 acres in size but would be subdivided to create an approximately 326 acre parcel. The site diagram for Rolling Hills Ranch is shown on Figure 5.



#### 2.2.6 Alternative 4: Bradley Heights

The Bradley Heights site is an approximately 490-acre parcel which is located southwest of the intersection of Bradley Road and Marksheffel Road. The approximate coordinates of the site are 38° 45' 23.40" north and 104° 39' 54.72" west and is identified by the El Paso County Assessor's Office as Schedule Nos. 55000-22-360, -362, -363, -364, -365, and 55091-00-006, -009, -010. The land consists of rolling hills sloping to the north and east from the southwest portion of the site. Bradley Road, a four-lane road, is located along the northern site boundary. Marksheffel Road, a four-lane road, is located along the eastern site boundary. The land is primarily rangeland and used for livestock grazing. The site diagram for Bradley Heights is shown on Figure 6.



#### 2.2.7 Alternative 5: No Action

Under the No Action Alternative, the NCA would not develop a new national cemetery in the southern Colorado. No new construction would occur, and none of the alternative sites being considered would be affected by VA action. Veterans would be forced to use Fort Logan National Cemetery or Fort Lyon Nation Cemetery as their only choice for a national cemetery until such time as they reach capacity. This alternative does not meet the congressional mandate of providing appropriate burial options to our nation's veterans and the 95,000 veterans residing in the region would be underserved.

### 3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES OF THE ALTERNATIVES

#### 3.1 Introduction

This Section describes the baseline (existing) environmental, cultural, and socioeconomic conditions for each alternative and the general vicinity, with emphasis on those resources potentially affected by the Proposed Action at each site. Appendix C provides photographs of each site and the surrounding area. Under each resource area, the potential direct and indirect effects of implementing the Proposed Action at each of the Action Alternative sites and the No Action Alternative are identified. Cumulative effects are also discussed. In this PEA, impacts are identified as either significant, less than significant (i.e., common impacts that would not be of the context or intensity to be considered significant under the NEPA or Council on Environmental Quality (CEQ) Regulations), or no impact. As used in this PEA, the terms "effects" and "impacts" are synonymous. Where appropriate and clearly discernible, each impact is identified as either adverse or positive.

The CEQ Regulations specify that in determining the significance of effects, consideration must be given to both "context" and "intensity" (40 CFR Part 1508.27):

- Context refers to the significance of an effect to society as a whole (human and national), to an affected region, to affected interests, or to just the locality. In other words, the context measures how far the effect would be "felt"
- Intensity refers to the magnitude or severity of the effect, whether it is beneficial or adverse

In this PEA, the significance of potential direct, indirect, and cumulative effects has been evaluated using 16 criteria described below.

- Aesthetics: The effect on visual resources and changes to the complexity of the landscape and skyline (i.e., in terms of vegetation, topography, or structures) when viewed from points readily accessible by the public
- Air Quality: The effect to air quality effect if it would result in substantially higher air pollutant emissions or cause established air quality standards to be exceeded
- Cultural Resources: An alternative could have a significant effect on cultural resources if it would: result in damage, destruction, or demolition to an archaeological site or building that is eligible for or listed on the National Register of Historic Places; promote neglect of such a resource, resulting in resource deterioration or destruction; introduce audio or visual intrusion to such a resource; or decrease access to resources of value to federally recognized Native American tribes. The impact assessment for cultural resources focuses on properties that are listed in or considered eligible for the National Register of Historic Places or are National Historic Landmarks

- Geology and Soils: Actions which would result in an increased geologic hazard or a change in the availability of a geologic resource, it could have a significant effect. Geologic and soil hazards would include seismic vibration, land subsidence, and slope instability
- Hydrology and Water Quality: This criterion evaluates the effect to the quantity or quality of water resources for existing or potential future use
- Wildlife and Habitat: The effect of an alternative on biological resources and ecosystems particularly with regard to endangered or threatened species or its designated critical habitat. The loss of a substantial number of individuals of any plant or animal species (sensitive or non-sensitive species) that could affect the abundance or diversity of that species beyond normal variability could also be considered significant. The degradation of sensitive habitats, particularly wetlands, could also be significant
- Noise: The effect new sources of substantial noise, increase the intensity or duration of noise levels to sensitive receptors, or result in exposure of more people to unacceptable levels of noise
- Land Use: An alternative could significant direct effect if it would conflict with adopted plans and goals of the affected community or if it would result in a substantial alteration to the present or planned land use of an area, it could have a. If an alternative would result in substantial new development or prevent such development elsewhere, it could also have a significant indirect effect
- Floodplains, Wetlands, and Coastal Zone Management: This criteria evaluates the significant effect on water resources if it would cause substantial flooding or erosion or adversely affect a significant water body, such as a stream or lake
- Socioeconomic/Environmental Justice Issues: An alternative would have a significant adverse effect if it substantially altered the location and distribution of the population near the project, cause the population to exceed historical growth rates, or substantially affected the local housing market and vacancy rates. Significant effects could also occur if an alternative caused disproportionate risks to children that resulted from environmental health risks or safety risks. In addition, an alternative could have a significant effect if it would create a need for new or increased fire or police protection, or medical services, beyond the current capability of the local community, or would decrease public service capacities so as to jeopardize public safety
- Community Services: An alternative could have a significant effect on community services, such as fire protection, water, sewage, stormwater, police services, if it would increase demand over capacity, requiring a substantial system expansion or upgrade, or if it would result in substantial system deterioration over the current condition
- Solid and Hazardous Materials: An alternative could have a significant effect if it would result in a substantial increase in the generation of hazardous substances, increase the exposure of persons to hazardous or toxic substances,

increase the presence of hazardous or toxic materials in the environment, or place substantial restrictions on property use due to hazardous waste, materials, or site remediation. Data provided in the site-specific environmental site assessments (ESAs) and other prior studies helps to identify these potential impacts, as well as their significance

- Transportation and Parking: An alternative could have a significant effect on infrastructure if it would increase demand over capacity, requiring a substantial system expansion or upgrade, or if it would result in substantial system deterioration over the current condition. For instance, an alternative could have a significant effect on traffic if it would increase the volume of traffic beyond the existing road capacity, cause parking availability to fall below minimum local standards, or require new or substantially improved roadways or traffic control systems
- Utilities: This criterion evaluates the impact of the alternative on existing utilities. An alternative could have a significant effect on infrastructure if it would increase demand over capacity, requiring a substantial system expansion or upgrade, or if it would result in substantial system deterioration over the current condition
- Cumulative Impacts: This criterion evaluates the relationship between the proposed action and other known, or underway, actions either on the site or within close proximity to the site
- Potential for Generating Substantial Controversy: This criterion assesses the perception or public opinion of the potential action. Input from the general public, focus groups, local government, and media are used to evaluate this criterion

A summary of the identified environmental effects and consequences of the proposed action for each alternative is presented in Table 3.1.

Affected Environment and Consequences	Alternative 1: Kane Ranch	Alternative 2: 4-Way Ranch	Alternative 3: Rolling Hills Ranch	Alternative 4: Bradley Heights
Aesthetics	The terrain of the site generally consists of native grasses. The site is currently used for grazing of cattle. A regional landfill is located within 1-mile from the site and would be visible from various vantage points. This alternative is not expected to have significant impact with regard to aesthetics.	The terrain of the site generally	The terrain of the site generally consists of native grasses with the exception of Cottonwood riparian woodland in the western portion of the site. The site is currently used for grazing of cattle. A utility corridor including overhead electric lines and a natural gas pipeline is located along the eastern property boundary. This alternative is not expected to have significant impact with regard to aesthetics.	The terrain of the site generally consists of native grasses. The site is currently used for grazing of cattle. A proposed Colorado Springs Utilities electrical substation is located adjacent to the southwest corner of the site. This alternative is not expected to have significant impact with regard to aesthetics.
Air Quality	Air quality in El Paso County meets state air quality standards. Air quality (odors) may occasionally be impacted by the regional landfill. This alternative is not expected to significantly impact air quality.	Air quality in El Paso County meets state air quality standards. This alternative is not expected to significantly impact air quality.	Air quality in El Paso County meets state air quality standards. This alternative is not expected to significantly impact air quality.	Air quality in El Paso County meets state air quality standards. This alternative is not expected to significantly impact air quality.
Cultural Resources	160 Group recommended an intensive (Class III) archaeological survey to identify historical and architectural resources to determine if the project may impact resources that may be eligible for listing in the NRHP. If construction proceeds and any artifacts are observed, work will stop, and a qualified archaeologist will need evaluate the findings.	The former Chicago, Rock Island, and Pacific Rail line along US Rt 24 is eligible for NRHP listing; remainder of site has low to moderate potential for cultural resources. A Class III cultural inventory of the site is recommended.	Previous cultural resource surveys have been conducted on the site. Previously reported NRHP-eligible historic or cultural resources on the site should be verified.	Both prehistoric and historic cultural resources are likely to occur within the area. Jimmy Camp Creek runs alongside the proposed site location within the study area and marks an important travel corridor for both prehistoric and historic peoples. The Jimmy Camp Trail is shown to cross the study area on the USGS Historic Trails map.

# Table 3-1 Summary of Affected Environment

Affected Environment and Consequences	Alternative 1: Kane Ranch	Alternative 2: 4-Way Ranch	Alternative 3: Rolling Hills Ranch	Alternative 4: Bradley Heights
Geology and Soils	Deep and moderately deep, moderately well and well drained soils with moderately coarse textures	Deep and moderately deep, moderately well and well drained soils with moderately coarse textures	Deep and moderately deep, moderately well and well drained soils with moderately coarse textures	Deep and moderately deep, moderately well and well drained soils with moderately coarse textures
Hydrology and Water Quality	Site is above the Dakota- Cheyenne aquifer. Yield not expected to provide necessary quantity of water required to meet all irrigation needs. Williams Creek and tributaries are present on the site.	Laramie-Fox Hills and Arapahoe aquifers are located from 1,660 feet to 2,300 deep. Water quality and yield is good but may need treatment for manganese for potable uses.	Jimmy Camp Creek and tributaries located on the site. Jimmy Camp Creek alluvium provides a potable groundwater source but may require augmentation.	Jimmy Camp Creek and tributaries located on the site. Jimmy Camp Creek alluvium provides a potable groundwater source but may require augmentation.
Wildlife and Habitat	No federally listed threatened or endangered species identified on the site. Imperiled (but not regulated) habitat identified by CNHP present. Similar habitat surrounds the site, so relocation of wildlife species would naturally occur. Potential impacts to the existing wildlife are expected to be temporary and minimal.	Potential for Preble's Meadow Jumping Mouse (federal-listed endangered specie) to be present on site. Avoidance of critical habitat would be required if present. Potential impacts to the existing wildlife are expected to be temporary and minimal.	No federally listed threatened or endangered species identified on the site. Imperiled (but not regulated) habitat identified by CNHP present. Potential impacts to the existing wildlife are expected to be temporary and minimal. Similar habitat surrounds the site, so relocation of wildlife species would naturally occur.	No federally listed threatened or endangered species identified on the site. Imperiled (but not regulated) habitat identified by CNHP present. Potential impacts to the existing wildlife are expected to be temporary and minimal. Similar habitat surrounds the site, so relocation of wildlife species would naturally occur.
Noise	Existing noise is generally limited to road traffic and agricultural activities.	Existing noise is generally limited to road traffic and agricultural activities.	Existing noise is generally limited to road traffic, agricultural activities, and aircraft operations from Colorado Springs airport and Peterson Air Force Base.	Existing noise is generally limited to road traffic, agricultural activities, and aircraft operations from Colorado Springs airport and Peterson Air Force Base.
Land Use	Undeveloped rangeland	Undeveloped rangeland	Undeveloped rangeland	Undeveloped rangeland
Floodplains, Wetlands, and Coastal Zone Management	Approx. 14% (68 acres) of the site lies within a 100-year flood plain (tributaries to Williams Creek); one small (0.2 acre) isolated wetland present.	Approx. 11% (22 acres) of the site lies within a 100-year flood plain (tributaries to Squirrel Creek). Approximately 2 acre isolated wetland present.	Approx. 30% of the site (97acres) lies within a 100-year flood plain in two separate areas (tributaries to Jimmy Camp Creek); some wetlands likely present.	Approx. 7% of the site (22 acres) lies within a 100-year flood plain (tributaries to Jimmy Camp Creek); no wetlands observed.

Affected Environment and Consequences	Alternative 1: Kane Ranch	Alternative 2: 4-Way Ranch	Alternative 3: Rolling Hills Ranch	Alternative 4: Bradley Heights
Socioeconomics	Visitors to the national cemetery would add a minor economic benefit to the local economy.	Visitors to the national cemetery would add a minor economic benefit to the local economy.	Visitors to the national cemetery would add a minor economic benefit to the local economy.	Visitors to the national cemetery would add a minor economic benefit to the local economy.
Community Services	Construction would cause no change in use of community services. Community services are not regularly used in existing cemeteries; therefore, no changes in community services would occur as a result of the development of the considered alternatives.	Construction would cause no change in use of community services. Community services are not regularly used in existing cemeteries; therefore, no changes in community services would occur as a result of the development of the considered alternatives.	Construction would cause no change in use of community services. Community services are not regularly used in existing cemeteries; therefore, no changes in community services would occur as a result of the development of the considered alternatives.	Construction would cause no change in use of community services. Community services are not regularly used in existing cemeteries; therefore, no changes in community services would occur as a result of the development of the considered alternatives.
Solid and Hazardous Materials	The Kane Ranch homestead (upgradient) was identified as a REC to the site as a result of a release from a petroleum UST and a former livestock dip tank containing pesticides.	No reported hazardous or solid waste on the site. Construction activities expected to generate a small amount of non-hazardous solid waste.	No reported hazardous or solid waste on the site. Construction activities expected to generate a small amount of non-hazardous solid waste.	No reported hazardous or solid waste on the site. Construction activities expected to generate a small amount of non-hazardous solid waste.
Transportation and Parking	Proposed action would result in a slight but insignificant increase of traffic from visitors and workers.	Proposed action would result in a slight but insignificant increase of traffic from visitors and workers.	Proposed action would result in a slight but insignificant increase of traffic from visitors and workers.	Proposed action would result in a slight but insignificant increase of traffic from visitors and workers.
Utilities	Kane Ranch homestead has electrical service. Public water and wastewater services not currently available. Natural gas service not available in the site area.	Utilities not present on site however 4-Way Ranch Metropolitan District (water and sewer) is present in the area.	There are currently no utilities servicing the site. Colorado Centre and Widefield Water District lines are located nearby. Natural gas and electrical services available in the area.	Utilities not present on site however water, sewer, natural gas and electric are available from Colorado Springs Utilities.
Environmental Justice	The proposed alternatives project would not result in any relocation of existing homesteads. There would not be any action that would create disproportionately adverse impacts on minority or low-income populations.	The proposed alternatives project would not result in any relocation of existing homesteads. There would not be any action that would create disproportionately adverse impacts on minority or low-income populations.	The proposed alternatives project would not result in any relocation of existing homesteads. There would not be any action that would create disproportionately adverse impacts on minority or low-income populations.	The proposed alternatives project would not result in any relocation of existing homesteads. There would not be any action that would create disproportionately adverse impacts on minority or low-income populations.

Affected				
Environment and			Alternative 3: Rolling Hills	Alternative 4: Bradley
Consequences	Alternative 1: Kane Ranch	Alternative 2: 4-Way Ranch	Ranch	Heights
Cumulative Impacts	The propose project is not			
	expected to generate additional			
	significant changes in natural			
	resources or anthropogenic	resources or anthropogenic	resources or anthropogenic	resources or anthropogenic
	development.	development.	development.	development.
Potential for	Although the development of the			
Generating	new national cemetery is not			
Substantial	expected to generate controversy,			
Controversy	the site selection process and			
	outcome may generate some			
	controversy.	controversy.	controversy.	controversy.

#### 3.2 Aesthetics

#### 3.2.1 Alternative 1: Kane Ranch

#### Exiting Conditions

The land is flat to gently rolling and characterized as a shortgrass prairie underlain by shale and sandstone. Along the northern boundary lies Williams Creek, an ephemeral arroyo that flows from the northeast corner of the site, slightly south and the west, eventually discharging into Fountain Creek several miles downstream. The southeast corner of the site contains a second unnamed arroyo that meets with Williams Creek approximately 3 miles downstream. The land is primarily rangeland and used for livestock grazing. Kane's Ranch also includes an equestrian facility, located to the north of the site along the northern site boundary. A landfill, operated by Waste Connection of Colorado, is located approximately less than 1 mile from the western property boundary and is visible from higher vantage points on the Kane Ranch property. The Front Range Mountains, including Pikes Peak, are visibly to the west.

#### **Consequences of the Alternative**

This alternative would result in change from open grass prairie rangeland to a managed landscape with a sustainable mix of turf and native grasses and shrubs. Several small support structures would need to be erected and would include; an information center and restroom, administration office, a committal shelter, memorial walls, maintenance building, walkways, and flagpole event assembly area. Infrastructure improvements would include an irrigation system, internal roadways, above ground grave markers, utilities, and site landscaping. The large size of the parcel with rolling topography would allow for context sensitive design reducing aesthetic impacts of the operations on the landscape. Although different than existing conditions, a new cemetery would generally be consistent with the surrounding landscape.

#### 3.2.2 Alternative 2: 4-Way Ranch

#### **Exiting Conditions**

The land is flat to gently rolling and characterized as a shortgrass prairie underlain by alluvium. Along the northeast boundary lies an unnamed, ephemeral arroyo that flows along the northeast portion of the site, eventually discharging into Black Squirrel Creek several miles downstream. The southern corner of the site contains a second unnamed arroyo that meets with the northeast arroyo approximately 1-1/2 miles downstream. US Highway 24, a two-lane road, is located along the southeast site boundary. The land is primarily rangeland and is used for livestock grazing.

#### **Consequences of the Alternative**

The consequences of the alterative are similar to the other alternatives considered, with the exception of the No Action alternative. A new cemetery would generally be consistent with the surrounding landscape and proposed land uses.

#### 3.2.3 Alternative 3: Rolling Hills Ranch

#### **Exiting Conditions**

The land is flat to gently rolling in the north-central portion of the site and characterized as a shortgrass prairie underlain by alluvium. A hill, also characterized as a shortgrass prairie, is present in the southeast corner of the site and slopes to the north, northwest, and west. The hill is underlain by alluvium and shale and meets the generally flat north-central portion of the site at an unnamed, ephemeral arroyo that flows to the southwest within the site, eventually discharging into Jimmy Camp Creek approximately 1,200 feet downstream. The western portion of the site consists of an unnamed ephemeral arroyo which flows into Jimmy Camp Creek approximately 500 feet downstream. The arroyos in the central and western portion of the site, along with a generally flat shortgrass prairie in the northeast portion of the site, are characterized as flood plains and encompass approximately 97.4 acres of the 326 acre site. Drennan Road, a rural two-lane road, is present along the northern site boundary. A utility corridor including overhead electrical lines and a natural gas pipeline is located along the eastern site boundary. The land is primarily rangeland and is used for livestock grazing.

#### **Consequences of the Alternative**

The consequences of the alterative are similar to the other alternatives considered, with the exception of the No Action alternative. A new cemetery would generally be consistent with the surrounding landscape and proposed land uses.

#### 3.2.4 Alternative 4: Bradley Heights

#### **Exiting Conditions**

The land consists of rolling hills sloping to the north and east from the southwest portion of the site and is characterized as a shortgrass prairie underlain by shale and alluvium. An unnamed, ephemeral arroyo lies in the eastern portion of the site flowing to the south, eventually discharging into Jimmy Camp Creek approximately 2,000 feet downstream. A dry pond and a graded, gravel-covered area slated for development as a Colorado Springs Utilities electrical substation, is located adjacent to the southwest corner of the site. Bradley road, a four-lane road, is located along the northern site boundary. Marksheffel Road, a four-lane road, is located along the eastern site boundary. The land is primarily rangeland and is used for livestock grazing.

#### **Consequences of the Alternative**

The consequences of the alterative are similar to the other alternatives considered, with the exception of the No Action alternative. A new cemetery would generally be consistent with the surrounding landscape and proposed land uses.

#### 3.2.5 Alternative 5: No Action

Under the No-Action alternative, no impacts to the environment would occur resulting from new cemetery development.

#### 3.3 Air Quality

#### 3.3.1 Alternative 1: Kane Ranch

#### **Existing Conditions**

The Kane Ranch is within an area of generally undeveloped rangeland. There are no air emission sources or permits associated with the property.

#### **Consequences of the Alternative**

Use of the proposed project and related operations are consistent with activities in the surrounding area are not anticipated to result in air emissions of significant quantity to degrade general air quality in the surrounding area nor to require air permitting from CDPHE. Some temporary impact on air quality is anticipated during the construction phase of the project due to dust generated from earthwork and construction.

#### 3.3.2 Alternative 2: 4-Way Ranch

#### **Existing Conditions**

The 4-Way Ranch is within an area of generally undeveloped rangeland. There are no air emission sources or permits associated with the property.

#### Consequences of the Alternative

Use of the proposed project and related operations are consistent with activities in the surrounding area are not anticipated to result in air emissions of significant quantity to degrade general air quality in the surrounding area nor to require air permitting from CDPHE. Some temporary impact on air quality is anticipated during the construction phase of the project due to dust generated from earthwork and construction.

#### 3.3.4 Alternative 3: Rolling Hills Ranch

#### **Existing Conditions**

The Rolling Hills Ranch is within an area of generally undeveloped rangeland. There are no air emission sources or permits associated with the property.

#### **Consequences of the Alternative**

Use of the proposed project and related operations are consistent with activities in the surrounding area are not anticipated to result in air emissions of significant quantity to degrade general air quality in the surrounding area nor to require air permitting from CDPHE. Some temporary impact on air quality is anticipated during the construction phase of the project due to dust generated from earthwork and construction.

#### 3.3.5 Alternative 4: Bradley Heights

#### **Existing Conditions**

The Bradley Heights is within an area of generally undeveloped rangeland. There are no air emission sources or permits associated with the property.

#### **Consequences of the Alternative**

Use of the proposed project and related operations are consistent with activities in the surrounding area are not anticipated to result in air emissions of significant quantity to degrade general air quality in the surrounding area nor to require air permitting from CDPHE. Some temporary impact on air quality is anticipated during the construction phase of the project due to dust generated from earthwork and construction

#### 3.3.6 Alternative 5: No Action

#### **Existing Conditions**

Air quality in El Paso County is regulated by the Colorado Department of Public Health and Environment - Air Pollution Control Division (CDPHE - APCD), which administers federal and state air quality standards. Under these standards, a geographic location with pollutant levels meeting air quality standards is said to be in "attainment," while higher levels are in "non-attainment". According to CDPHE - APCD, the Colorado Springs region is designated as an attainment/maintenance area for carbon monoxide (CO) but is in attainment of all other criteria pollutants. According to the CO maintenance plan for the Colorado Springs attainment/maintenance area, mobile source (motor vehicle) emissions of CO resulting from the regional transportation system must not exceed the regional CO emissions budget of 531 tons per day. Projected CO emissions from the Pikes Peak Area Council of Governments (PPACG) 2030 Regional Transportation Plan and the 2005-2010 Transportation Improvement Program conformity analyses indicate 312.5 tons per day by 2010, 278.2 tons per day by 2020, and 306.8 tons per day by 2030. The study area site is within the Colorado Springs urbanized area. The Colorado Springs urbanized area is in attainment (meeting air quality standards) for the six air quality pollutants.

#### **Consequences of the Alternative**

Under the No-Action alternative there would continue to be no change to existing impacts on air quality.

#### 3.4 Cultural Resources

#### 3.4.1 Alternative 1: Kane Ranch

#### Existing Conditions

As part of an environmental assessment performed on the Kane Ranch in 2010, a cultural survey was performed by The 106 Group Ltd (106 Group) to review potential cultural resources within and surrounding the site. No archaeological sites have been recorded (confirmed) or reported (not field checked) within the project site. However, four archaeological sites, Prehistoric Lithic Scatter and Isolate, have been recorded within one mile site. No architectural history surveys have been conducted within the project site or within one mile of the site.

A field visit by 106 Group in April 2010 indicated that several outbuildings and the Bailey Windmill remains appear to date to the early to mid-twentieth century on their form and materials. Scattered artifacts from the late nineteenth to early twentieth century consisted of amethyst glass, stoneware, earthenware, porcelain and metal fragments were observed. This led to an assumption that the Kane Ranch possesses a high potential to contain previously unrecorded intact historic archaeological resources. Based on background research and a field visit, the project area appears to possess a high potential for containing both prehistoric and historic archaeological resources. As a result, the 106 Group recommended an intensive (Class III) archaeological survey be conducted for the entire archaeological Area of Potential Affect (APE) once defined.

A Class III intensive cultural resources inventory (also called archaeological survey) entails a systematic pedestrian survey of an entire project area (the Area of Potential Effect) by professional archaeologists. All prehistoric and historic cultural resources within this area are fully documented, mapped, and photographed in a manner consistent with standards in the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716), as well as conform to the prevailing professional survey standards for the region involved. The recorded sites are then evaluated according to the eligibility criteria of the National Register of Historic Places (NRHP). Finally, a cultural resource technical report detailing the inventory results and presenting evaluations and

management recommendations is generated for submittal to the lead federal agency and the appropriate State Historic Preservation office.

In addition, the 106 Group recommended that once the APE is defined, that an intensive survey be conducted to identify historical and architectural resources that are eligible for listing in the National Register of Historic Places (NRHP) that may be impacted by the proposed project.

#### **Consequences of the Alternative**

NCA would need to consider the recommendation for an intensive (Class III) archaeological survey to identify historical and architectural resources to determine if the project may impact resources that may be eligible for listing in the NRHP. If construction proceeds and any artifacts are observed, work will stop, and a qualified archaeologist will be engaged to evaluate the findings.

Since the project is receiving federal funds, consultation by the NCA with the appropriate federally recognized tribal groups would be required. The NCA is currently in the process of initiating formal consultation with the tribal groups to attempt to identify any concerns the Native American tribes may have with the proposed project. Tribal consultation request letters were mailed to tribal entities identified in the Native American Graves Protection and Repatriation Act (NAGPRA) who may attach religious and cultural significance to Historic Properties that may be affected by the proposed project (see Appendix A). Responses, if received, are also provided in Appendix A.

#### 3.4.2 Alternative 2: 4-Way Ranch

#### **Existing Conditions**

An initial cultural resource impact prediction study of the 4-Way Ranch was performed by Centennial Archeological, Inc. (Centennial) in April 2012 (Centennial, 2012). The study included a cultural resources literature review and file search and a site inspection. The review did not reveal historic structures within the proposed site. The likelihood of finding traces of a homestead or domicile is therefore diminished, although the presence of crockery noted in a deflated area in the southern portion of the proposed site, and the proximity of railroads and historic trails, suggest that historic artifacts may yet be discovered in this area. The former Chicago, Rock Island, and Pacific Railroad, present the length of the property bounded by US Route 24, is eligible for the NRHP. Consequently, impacts to this resource need to be assessed. The presence of at least one prehistoric component in the study area was established during the field inspection by the observation of a chert flake and a piece of fire-altered rock. Prehistoric sites have been discovered in the surrounding areas, and it is likely that some evidence of prehistoric activity exists in the study area.

#### **Consequences of the Alternative**

Since the project is receiving federal funds, consultation by the NCA with the appropriate federally recognized tribal groups and the State Historic Preservation Officer (SHPO) would be required. The NCA is currently in the process of initiating formal consultation with these entities to attempt to identify any concerns related to the proposed project.

The overall potential for cultural resources in the 4 Way Ranch parcel is low to moderate, although the area remains largely unknown due to the limited amount of prior inventory. A Class III intensive cultural inventory of the area of potential effect was recommended to determine the presence of prehistoric and historic cultural resources. If any artifacts are observed during construction, work will need to stop, and a qualified archaeologist will be engaged to evaluate the findings.

#### 3.4.3 Alternative 3: Rolling Hills Ranch

#### **Existing Conditions**

The Rolling Hills Ranch study area has been surveyed in recent years (Centennial, 2012). For this reason, a Class III intensive inventory of the area is not recommended. However, it is recommended that the previously recorded sites be revisited and evaluated for changes in condition.

#### **Consequences of the Alternative**

Since the project is receiving federal funds, consultation by the NCA with the appropriate federally recognized tribal groups and the SHPO would be required. The NCA is currently in the process of initiating formal consultation with these entities to attempt to identify any concerns related to the proposed project.

#### 3.4.4 Alternative 4: Bradley Heights

#### Existing Conditions

A file search revealed that very little of the Bradley Heights study area has been surveyed previously. Both prehistoric and historic cultural resources are likely to occur within the area, and the site potential is considered to be moderate to high. Jimmy Camp Creek runs alongside the proposed site location within the study area and marks an important travel corridor for both prehistoric and historic peoples (Centennial, 2012). Although it was not located during the field inspection, the Jimmy Camp Trail is shown to cross the study area on the USGS Historic Trails map. Additionally, the historic USGS topographic maps show that a network of roads has crossed the study area through time, thereby increasing the likelihood of the presence of historic artifacts. Numerous prehistoric sites have been discovered along Jimmy Camp Creek as well as in the Rolling Hills Ranch study area nearby and are no less likely to occur in the Bradley Heights study area.

#### **Consequences of the Alternative**

Since the project is receiving federal funds, consultation by the NCA with the appropriate federally recognized tribal groups and SHPO would be required. The NCA is currently in the process of initiating formal consultation with these entities to attempt to identify any concerns related to the proposed project.

A Class III intensive cultural inventory of the area of potential effect is recommended to determine the presence and significance of the Jimmy Creek Trail on the property and other prehistoric and historic cultural resources. If any artifacts are observed during construction, work will need to stop, and a qualified archaeologist will be engaged to evaluate the findings.

#### 3.4.5 Alternative 5: No Action

#### Existing Conditions

The No Action Alternative would not have an effect on existing cultural resources.

#### **Consequences of the Alternative**

Under the No-Action alternative there would continue to be no change to existing impacts on cultural resources.

#### 3.5 Geology and Soils

#### 3.5.1 Alternative 1: Kane Ranch

#### **Existing Conditions**

The geology of the region varies greatly from west to east, and changes to a lesser degree from north to south. Ten miles to the west, the geology is dominated by the Pikes Peak Granite of the Rocky Mountains, composed of very old and massive igneous rocks, which have been abruptly uplifted to their present position. Along this uplift, the younger layers of sedimentary strata associated with the Denver Basin formation has been tilted at high angles. Further east, sedimentary units lie in a more horizontal orientation. Generally, the underlying geologic units in the region become younger as one moves north and east. However, the underlying strata are buried by more recent unconsolidated alluvial (stream-deposited) and colluvial (gravity and sheet-deposited) materials. The varied geology of the area gives rise to many different landscape features and soil types, each supporting distinctive combinations of flora and fauna and have different physical characteristics that could impact development. The site is characterized by flat to gently rolling landscape underlain by shale and sandstone and covered primarily with shortgrass prairie grasses and used as rangeland.

There are 13 different soil units represented across the Kane Ranch site. The Wiley silt loam is the most prevalent covering 190 acres (39%); followed by Fort Collins loam (15%); Wigton loamy sand (12%) and Ustic Torrifluvents loam (12%). The remaining 20% coverage include Ellicot loamy course sand, Heldt clay loam, Keith clay loam, Manzanola clay loam, Razor midway complex, Stoneham sandy loam, and the Vona sandy loam.

#### **Consequences of the Alternative**

It is assumed that construction of the project would occur primarily in Wiley soil. This silt loam soil type is consistent with requirements for cemetery development. Due to the area being essentially a broad rolling plain, no significant major earth-moving operations would be required. The existing topography would be altered slightly by grading for roads, construction of buildings, and burial sites. During construction a variety of methods would be used to control soil erosion including phasing the project into small areas of disturbance and implementing an approved soil erosion and sedimentation plan. Immediately following construction, exposed areas would be seeded with grasses that would stabilize the soil and minimize erosion. The site is basically level, with gentle sloping to the southeast and southwest. There would be no adverse impacts on the existing geologic features.

#### 3.5.2 Alternative 2: 4-Way Ranch

#### **Existing Conditions**

Three soil units were identified on the 4-Way Ranch site. Columbine gravelly sandy loam type covers approximately 139 acres or 65% of the site. In order of prevalence, this unit is followed by Stapleton sandy loams (27%), and Blakeland loamy sand (8%).

#### **Consequences of the Alternative**

The soil types are generally consistent with requirements for cemetery development. Due to the area being essentially a broad rolling plain, no significant major earth-moving operations would be required. The existing topography would be altered slightly by grading for roads, construction of buildings, and burial sites. During construction a variety of methods would be used to control soil erosion including phasing the project into small areas of disturbance and implementing an approved soil erosion and sedimentation plan. Immediately following construction, exposed areas would be seeded with grasses that would stabilize the soil and minimize erosion. There would be no adverse impacts on the existing geologic features.

#### 3.5.3 Alternative 3: Rolling Hills Ranch

#### **Existing Conditions**

Five soil units were identified on the Rolling Hills Ranch site. Manzanola clay loam soil type covers 160 acres or 48% of the site. In order of prevalence, this unit is followed by Nelson-Tassel fine sandy loams (23%), Ustic Torrifluvents loam (19%), Ellicot loamy course sand (5%), and Vona- Unit sandy loam (5%).

#### **Consequences of the Alternative**

The loam soil types are generally consistent with requirements for cemetery development. Due to the area being essentially a broad rolling plain, no significant major earth-moving operations would be required. The existing topography would be altered slightly by grading for roads, construction of buildings, and burial sites. During construction a variety of methods would be used to control soil erosion including phasing the project into small areas of disturbance and implementing an approved soil erosion and sedimentation plan. Immediately following construction, exposed areas would be seeded with grasses that would stabilize the soil and minimize erosion. There would be no adverse impacts on the existing geologic features.

#### 3.5.4 Alternative 4: Bradley Heights

#### Existing Conditions

Seven soil units were identified on the Bradley Heights site. The Razor-Midway complex covers approximately 193 acres or 52% of the site. In order of prevalence, this unit is followed by Nelson-Tassel fine sandy loams (20%), Stoneham Sandy loam (9%), Manzanola clay loam, 3 to 9 percent slopes (8%), Fort Collins loam (6%), Ascalon sandy loam (5%), and Manzanola clay loam, 1 to 3 percent slopes (<1%).

#### **Consequences of the Alternative**

The loam soil types are consistent with requirements for cemetery development. No significant major earth-moving operations would be required for the site. The existing topography would be altered slightly by grading for roads, construction of buildings, and burial sites. During construction a variety of methods would be used to control soil erosion including phasing the project into small areas of disturbance and implementing an approved soil erosion and sedimentation plan. Immediately following construction, exposed areas would be seeded with grasses that would stabilize the soil and minimize erosion. There would be no adverse impacts on the existing geologic features.

#### 3.5.5 Alternative 5: No Action

#### **Existing Conditions**

The No Action Alternative would not have an effect on existing soils and geology.

#### **Consequences of the Alternative**

Under the No-Action alternative there would be no change to existing soils and geology

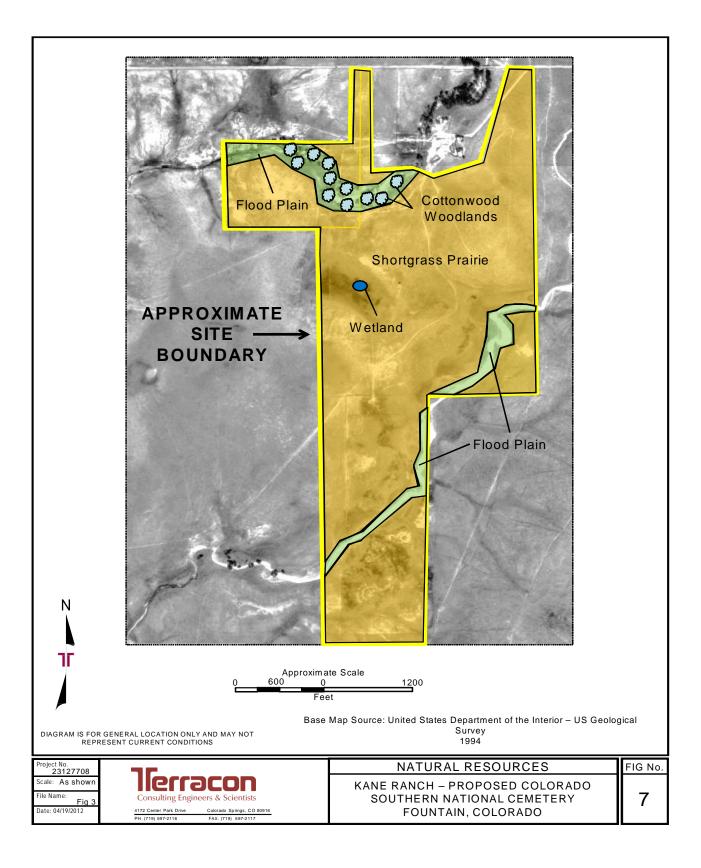
#### 3.6 Hydrology and Water Quality

#### 3.6.1 Alternative 1: Kane Ranch

#### **Existing Conditions**

The Kane Ranch site sits above the Pierre shale and Dakota/Cheyenne sandstone aquifers. The uppermost aquifer is within sands of the sedimentary bedrock of the Pierre shale. The groundwater yield from this formation is typically less than 15 gallons per minute.

Two surface water drainage systems on the site: Williams Creek and an unnamed arroyo that is a tributary to Williams Creek (Figure 7). Williams Creek, an ephemeral arroyo, begins several miles north. It enters at the northeast corner flowing westerly until leaving the site, then southwesterly to discharge into the Lower Fountain Creek. This dry gulch ranges from 50- to 100-feet wide, with eroded banks ranging from 1 to 15-feet high. Mature cottonwoods are scattered along the banks of the gulch across most of the site. The bottomlands are dry with unconsolidated sand and grassed covered riparian edges. There is one small (0.1-acre) wetland pond within a meander of Williams Creek that is hydrologically supported by a minor groundwater seep. The second surface water feature is an unnamed arroyo that is a tributary to Williams Creek. This arroyo flows westerly across the south end of the site and joins Williams Creek approximately 3 miles downstream. This unnamed arroyo has eroded banks ranging from 1- to 15-feet high and 30 to 50-feet wide. Its bottomlands are primarily unconsolidated sands with no evidence of standing water or wetlands. There are no other open water bodies, natural or made-made, on the site.



#### **Consequences of the Alternative**

To the extent practical, on-site surface water features should be avoided during design and construction. Primary and service roads constructed for the proposed cemetery may require crossing Williams Creek and its tributary. The majority of the proposed cemetery would be open space and pervious to precipitation although development of paved roads would result in an increases to the existing stormwater flow system. The Energy Independence and Security Act of 2007 (Section 438) requires stormwater management to include retention of the original pre-development hydrology or 95 percentile rain event.

The low yield of the Pierre shale is not likely to provide the water necessary to meet all the irrigation needs for the proposed cemetery project. Water necessary is anticipated to be brought in from the City of Fountain (see Utilities 3.15).

## 3.6.2 Alternative 2: 4-Way Ranch

### **Existing Conditions**

4-Way Ranch site sits above the Dawson aquifer, the shallowest of the four aquifers that underlie the Denver Basin. The Dawson Aquifer lies above the Denver Aquifer, the Arapahoe Aquifer and the Laramie-Fox Hills Aquifer. The bedrock aquifer system consists of Cretaceous and Tertiary age sedimentary formations that overlie a nearly impermeable formation, the Pierre Shale. The Pierre Shale is considered to be the base of the Denver Basin aquifer system due to its thickness and limited permeability. Because of the nature of the strata, the confining units between the saturated beds, the aquifers found in the Denver Basin are not considered to be a long-range, renewable source of water. The bedrock aquifers are subject to depletion if withdrawals exceed the natural recharge rate, which is very slow, given that the water within these aquifers has accumulated over thousands of years. The negligible rate of natural recharge, the considerable increase in water withdrawal, and the semi-arid climate of the region have led to a situation where the amount of withdrawal from the aquifers may be exceeding the amount of recharge.

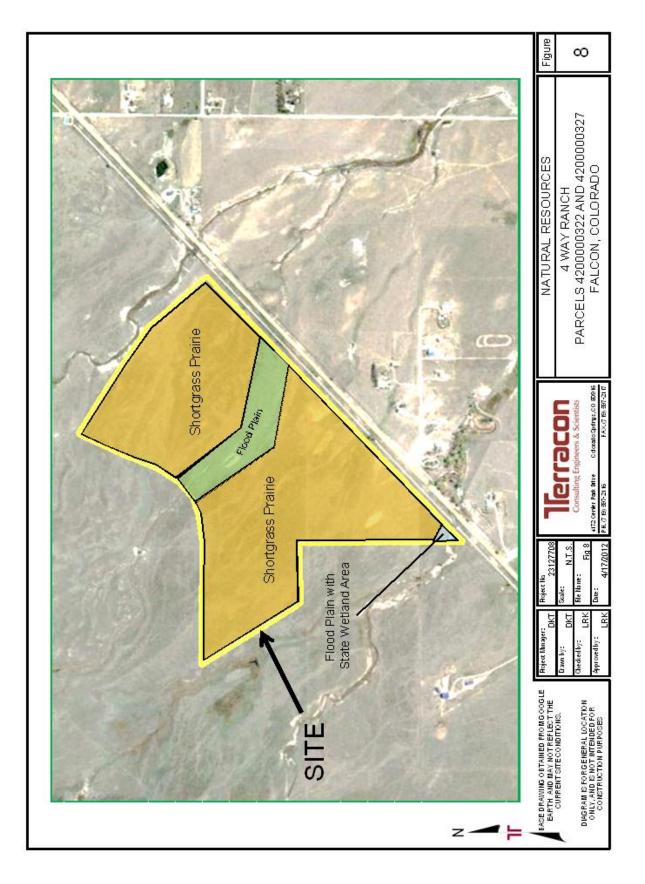
Laramie-Fox Hills and Arapahoe aquifers located from 1,660 feet to 2,300 feet deep. Water quality and yield from these aquifers is relatively good but may need treatment for manganese for potable uses.

One surface water drainage system is located on the site, consisting of an unnamed, ephemeral arroyo that flows in the southern corner of the site, eventually discharging into Black Squirrel Creek several miles downstream (Figure 8). An additional unnamed ephemeral arroyo flows along the northeast portion of the site that meets with the southern arroyo approximately 1.5 miles downstream: This dry gulch ranges from 5- to 10-feet wide, with eroded banks ranging from 1 to 5-feet high. The bottomlands are dry with unconsolidated sand and grassed covered riparian edges.

#### **Consequences of the Alternative**

To the extent practical, on-site surface water features should be avoided during design and construction. The majority of the proposed cemetery would be open space and pervious to precipitation although development of paved roads would result in increases to the existing stormwater flow system. The Energy Independence and Security Act of 2007 (Section 438) requires stormwater management to include retention of the original pre-development hydrology or 95 percentile rain event.

Water necessary is anticipated to be brought in from the 4-Way Ranch Metropolitan District (see Utilities 3.15).

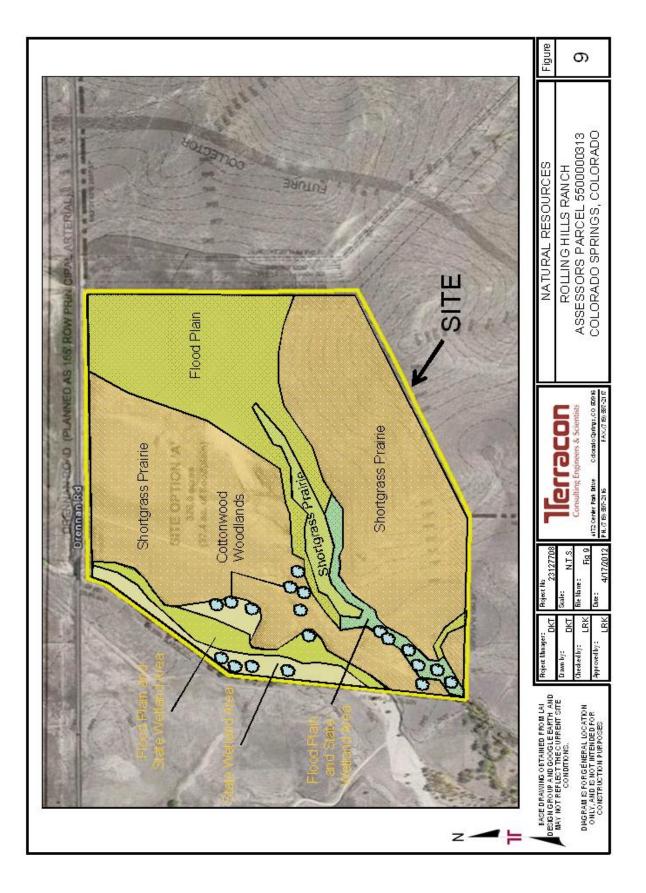


## 3.6.3 Alternative 3: Rolling Hills Ranch

### **Existing Conditions**

The Rolling Hills Ranch site sits above the Pierre shale and Dakota/Cheyenne sandstone aquifers. The uppermost aquifer is within sands of the sedimentary bedrock of the Pierre shale. The groundwater yield from this formation is typically less than 15 gallons per minute.

Two surface water drainage systems are located on the site including an unnamed tributary to Jimmy Camp Creek and two unnamed arroyos that converge in the southwest portion of the site that are tributaries to Jimmy Camp Creek (Figure 9). The unnamed tributary to Jimmy Camp Creek is an ephemeral arroyo that begins several miles north of the site. It enters at the northwest corner flowing southerly until leaving the site, then southwesterly to discharge into Jimmy Camp Creek approximately 1,200 feet downstream of the property. This dry gulch ranges from 50- to 100-feet wide, with eroded banks ranging from 1 to 15-feet high. Mature cottonwoods are scattered along the banks of the gulch across most of the site. The bottomlands are dry with unconsolidated sand and grassed covered riparian edges.



The second surface water feature consists of two unnamed arroyos that converge in the southwest portion of the site that are tributaries to Jimmy Camp Creek. These arroyos flow southwesterly across the central portion of the site and join Jimmy Camp Creek approximately 500 feet downstream of the property. The unnamed arroyos have eroded banks ranging from 1- to 15-feet high and 10 to 20-feet wide. Its bottomlands are primarily unconsolidated sands with no indications of standing water or wetlands. There are no other open water bodies, natural or made-made, on the site.

The arroyos in the central and western portion of the site, along with a generally flat shortgrass prairie in the northeast portion of the site, are characterized as flood plains and encompass approximately 97.4 acres of the 326 acre site.

#### **Consequences of the Alternative**

To the extent practical, on-site surface water features should be avoided during design and construction. Primary and service roads constructed for the proposed cemetery may require crossing the tributaries to Jimmy Camp Creek. The majority of the proposed cemetery would be open space and pervious to precipitation although development of paved roads would result in increases to the existing stormwater flow system. The Energy Independence and Security Act of 2007 (Section 438) requires stormwater management to include retention of the original pre-development hydrology or 95 percentile rain event.

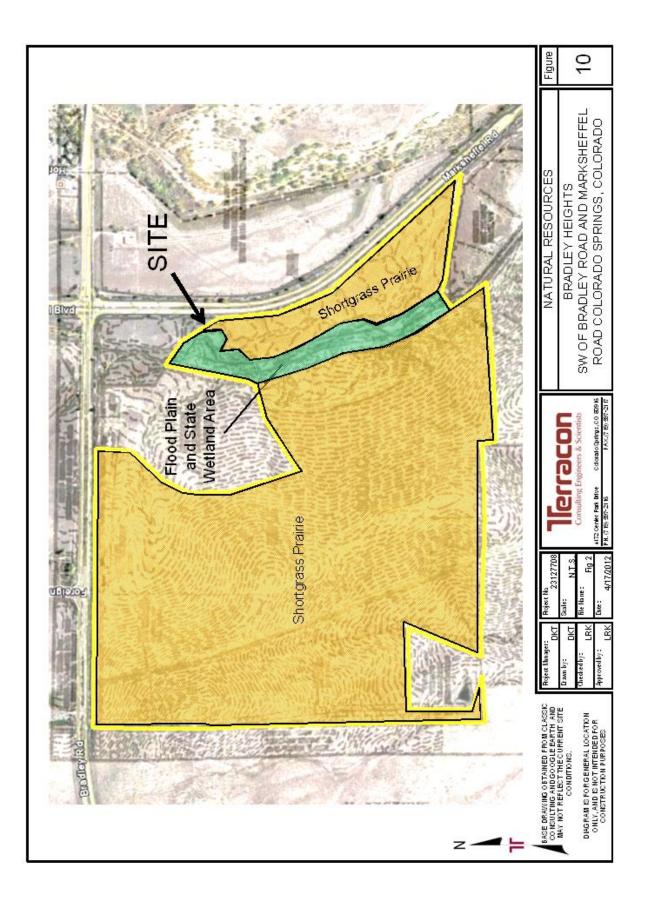
Water necessary is anticipated to be provided by CSU through "groundwater with augmentation" until potable water lines are extended to the property (see Utilities 3.15). The CSU proposal includes installation of new groundwater wells in the Jimmy Camp Creek alluvium located near the western edge of the site.

## 3.6.4 Alternative 4: Bradley Heights

#### **Existing Conditions**

The Bradley Heights site sits above the Pierre shale and Dakota/Cheyenne sandstone aquifers. The uppermost aquifer is within sands of the sedimentary bedrock of the Pierre shale. The groundwater yield from this formation is typically less than 15 gallons per minute.

A surface water drainage system is located on the site consisting of an unnamed tributary to Jimmy Camp Creek (Figure 10). The unnamed tributary is an ephemeral arroyo that begins several miles north of the site. It enters at the northeast corner of the site flowing southerly until leaving the site, then southeasterly to discharge into Jimmy Camp Creek approximately 2,000 feet downstream of the property. The unnamed tributary has eroded banks ranging from 1- to 10-feet high and 1 to 5-feet wide. Its bottomlands are primarily unconsolidated sands with one area of standing water in the northeast portion of the site and no indications wetlands. There are no other open water bodies, natural or made-made, on the site.



#### **Consequences of the Alternative**

To the extent practical, on-site surface water features should be avoided during design and construction. Primary and service roads constructed for the proposed cemetery may require crossing the tributary to Jimmy Camp Creek. The majority of the proposed cemetery would be open space and pervious to precipitation although development of paved roads would result in increases to the existing stormwater flow system. The Energy Independence and Security Act of 2007 (Section 438) requires stormwater management to include retention of the original pre-development hydrology or 95 percentile rain event.

Water necessary is anticipated to be provided by CSU through "groundwater with augmentation" until potable water lines are extended to the property (see Utilities 3.15). The CSU proposal includes installation of new groundwater wells in the Jimmy Camp Creek alluvium located approximately 1,000 feet east of the site.

### 3.6.5 Alternative 5: No Action

#### **Existing Conditions**

The No Action Alternative would not have an effect on existing soils and geology.

#### **Consequences of the Alternative**

Under the No-Action alternative there would be no change to existing hydrology or water quality conditions.

#### 3.7 Wildlife and Habitat

## 3.7.1 Alternative 1: Kane Ranch

#### **Existing Conditions**

The loamy plains soil type on the site supports a variety of native vegetation including shortgrass prairie species, including buffalograss, blue grama, western wheatgrass, gallita, broom snakeweed, red threeawn, alkali sacaton, sand dropseed, sideoats grama and yucca. These plants are common to the plains of eastern Colorado and are not classified as threatened, endangered, or rare. The site does not have reported habitat for federally listed species and no state rare plants are known or identified. The plains cottonwood riparian woodland is considered to be imperiled in the State of Colorado by Colorado Natural Heritage Program (CNHP). In addition, the western wheatgrass–spikerush mixed grass prairie, or playa grassland community, is considered to be critically imperiled by CNHP and may provide an important site of ecological diversity especially during periods of inundation. Not all of the imperiled flora identified by CNHP are on the federal Threatened and Endangered Species list. The CNHP database did not identify reported observations of

federal-listed threatened or endangered species on the Kane Ranch property nor were these observed during the site visits.

#### Consequences of the Alternative

The development of the Kane Ranch site would result in a change of the existing vegetation as the proposed cemetery site is converted from a shortgrass prairie to a mix of grasses required for "water wise" landscape. The construction of the cemetery would occur in phases with the first phase developing 35 acres of the site over 10 years. Potential impacts to the existing wildlife are expected to be temporary and minimal. Similar habitat surrounds the Kane Ranch, so relocation of wildlife species would naturally occur. The U.S. Fish and Wildlife Service (USFWS) and CNHP database indicated that no threatened or endangered species were identified at the Kane Ranch property. Efforts should be made to preserve the cottonwood riparian woodland.

## 3.7.2 Alternative 2: 4-Way Ranch

### **Existing Conditions**

The loamy plains soil type on the site supports a variety of native vegetation including shortgrass prairie species, including buffalograss, blue grama, western wheatgrass, gallita, broom snakeweed, red threeawn, alkali sacaton, sand dropseed, sideoats grama and yucca.

The CNHP database identified the Preble's Meadow Jumping Mouse and Small-Head Rush as being observed within 1 mile of the site. Preble's Meadow Jumping Mouse inhabits well developed riparian habitat with adjacent, relatively undisturbed grassland communities, and a nearby water source. This type of habitat was observed on the property however neither the Preble's Meadow Jumping Mouse or Small-Head Rush were observed during the site visit. The Preble's Meadow Jumping Mouse is state and federally-listed threatened species. The Small-Head Rush is identified in the CNHP database as critically imperiled but is not a federal or state-listed threatened or endangered species.

#### **Consequences of the Alternative**

Similar to the Kane Ranch alternative, development of the 4-Way Ranch site would result in a change of the existing vegetation as the proposed cemetery site is converted from a shortgrass prairie to a mix of grasses required for "water wise" landscape, i.e., an approach to landscaping that focuses on water conservation, uses designs that address the desired aesthetics, and incorporates the use of drought tolerant native or introduced plants. Potential impacts to the existing wildlife are expected to be temporary and minimal. Similar habitat surrounds the 4-Way Ranch, so relocation of wildlife species would naturally occur.

## 3.7.3 Alternative 3: Rolling Hills Ranch

### **Existing Conditions**

Existing conditions at the Rolling Hills Ranch site are similar to the 4-Way Ranch and Kane Ranch sites and include shortgrass prairie species and cottonwood riparian woodland. Although these habitats are considered to be critically imperiled by the State of Colorado, they are not regulated. The CNHP database did not identify reported observations of threatened or endangered species on the Rolling Hills Ranch property.

### **Consequences of the Alternative**

Similar to Kane Ranch alternative, development of the Rolling Hills Ranch site would result in a change of the existing vegetation as the proposed cemetery site is converted from a shortgrass prairie to a mix of grasses required for "water wise" landscape. Potential impacts to the existing wildlife are expected to be temporary and minimal. Similar habitat surrounds the Rolling Hills Ranch, so relocation of wildlife species would naturally occur.

## 3.7.4 Alternative 4: Bradley Heights

### **Existing Conditions**

Existing conditions at the Bradley Heights site are similar to the other alternatives considered and include shortgrass prairie species and cottonwood riparian woodland. Although these habitats are considered to be critically imperiled by CNHP however they are not regulated. The CNHP database did not identify reported observations of threatened or endangered species on the Bradley Heights property.

#### **Consequences of the Alternative**

Similar to the other alternatives considered, development of the Bradley Heights site would result in a change of the existing vegetation as the proposed cemetery site is converted from a shortgrass prairie to a mix of grasses required for "water wise" landscape. Potential impacts to the existing wildlife are expected to be temporary and minimal. Similar habitat surrounds the Bradley Heights site, so relocation of wildlife species would naturally occur.

## 3.7.5 Alternative 5: No Action

#### **Existing Conditions**

The No Action Alternative would not have an effect on existing wildlife and habitat.

#### Consequences of the Alternative

Under the No-Action alternative there would be no change to existing wildlife and habitat.

#### 3.8 Noise

## 3.8.1 Alternative 1: Kane Ranch

#### **Existing Conditions**

The Kane Ranch site is in a vast open grass prairie landscape that is more than 4 miles from an urban area. The site is quiet with an occasional distant sound from the ranching operation. Only a small rural two-lane road (Squirrel Creek Road) provides access along the north boundary.

#### **Consequences of the Alternative**

The area around the cemetery site would experience a slight, temporary and intermittent increase in noise levels during construction. The development of the property could cause short-term elevated noise levels during the construction phase. As with any major construction project, areas around the construction site would likely experience varied periods and degrees of noise impact if the alternative was constructed. Under normal circumstances, construction activity is typically confined to the hours between 7:00 a.m. and 6:00 p.m. on weekdays. Therefore, critical time periods in which sleep or outdoor recreation would occur would not be subject to noise intrusion from construction activities. Following construction the site would generate noise levels associated with a cemetery similar to the existing ranch operations. Normal cemetery activity generates some intermittent noise as a result of cemetery operations. Sources of noise include preparations for burials, performance of military honors during funeral services, automobile traffic associated with funeral services, and landscape maintenance. Most of these activities occur during regular business hours and cause only a minimal adverse impact on the surrounding area.

## 3.8.2 Alternative 2: 4-Way Ranch

#### **Existing Conditions**

The 4-Way Ranch site is in a vast open grass prairie landscape that is approximately 5 miles northeast of the town of Falcon, Colorado. The site is generally quiet with an occasional traffic noise near the southeast boundary. Colorado State Highway 24 is a two-lane road and borders the southeast property boundary.

#### **Consequences of the Alternative**

Similar to the other alternatives considered, the area around the cemetery site would experience a slight, temporary and intermittent increase in noise levels during construction. Following construction the site would generate intermittent noise levels associated with a cemetery similar to the existing ranch operations.

## 3.8.3 Alternative 3: Rolling Hills Ranch

## **Existing Conditions**

The Rolling Hills Ranch site is in a vast open grass prairie landscape that is approximately 1 mile east of the Colorado Spring Airport and Peterson Air Force Base. The site is bound on the north by Drennan Road (a two-lane road). The site is generally quiet with occasional traffic noise near the north property boundary and aircraft fly-over operations from Peterson Air Force Base and the Colorado Springs Airport.

### **Consequences of the Alternative**

Similar to the other alternatives considered, the area around the cemetery site would experience a slight, temporary and intermittent increase in noise levels during construction. Following construction the site would generate intermittent noise levels associated with a cemetery similar to the existing ranch operations.

## 3.8.4 Alternative 4: Bradley Heights

### **Existing Conditions**

The Bradley Heights site is in a vast open grass prairie landscape that is approximately 1 mile southeast of the Colorado Spring Airport and Peterson Air Force Base. The site is bound on the north by Bradley Road (a two-lane road) and to the east by Marksheffel road (a two-lane road). The site is generally quiet with an occasional traffic noise near the north property boundary and aircraft fly-over operations from Peterson Air Force Base and the Colorado Springs Airport.

#### **Consequences of the Alternative**

Similar to the other alternatives considered, the area around the cemetery site would experience a slight, temporary and intermittent increase in noise levels during construction. Following construction the site would generate intermittent noise levels associated with a cemetery similar to the existing ranch operations.

## 3.8.5 Alternative 5: No Action

#### **Existing Conditions**

The considered alternatives are generally quiet rural areas with occasional sounds from agricultural operations.

#### Consequences of the Alternative

The No Action Alternative would not have an effect on existing noise levels.

## 3.9 Land Use

### 3.9.1 Alternative 1: Kane Ranch

#### Existing Conditions

The Kane Ranch site is undeveloped land used for livestock grazing and is zoned as Residential/Rural. A dry oil well site, located in the western edge of the property, has been abandoned and legally capped. The MM Ranch & Equestrian Center is horse ranch and boarding facility for thoroughbred horses that occupies approximately 60 acres of land between Squirrel Creek Road and the north property line.

#### **Consequences of the Alternative**

The proposed cemetery project is generally consistent with the existing land use.

### 3.9.2 Alternative 2: 4-Way Ranch

#### **Existing Conditions**

The 4-Way Ranch site and surrounding area are undeveloped and are zoned as Residential/Rural.

#### **Consequences of the Alternative**

The proposed cemetery project is generally consistent with the existing land use.

#### 3.9.3 Alternative 3: Rolling Hills Ranch

#### **Existing Conditions**

The Rolling Hills Ranch site is undeveloped but has been planned as a residential master plan for future development and is currently zoned as PUD, Planned Unit Development.

#### **Consequences of the Alternative**

The proposed cemetery project is generally consistent with the existing land use.

## 3.9.4 Alternative 4: Bradley Heights

#### **Existing Conditions**

The Bradley Heights site is undeveloped but has been zoned as PUD, Planned Unit Development.

#### **Consequences of the Alternative**

The proposed cemetery project is generally consistent with the existing land use.

## 3.9.5 Alternative 5: No Action

### **Existing Conditions**

The considered alternatives are undeveloped parcels/vacant land generally used for livestock grazing.

#### **Consequences of the Alternative**

The No Action Alternative would not have an effect on the existing land use.

## 3.10 Floodplains, Wetlands, and Coastal Zone Management

## 3.10.1 Alternative 1: Kane Ranch

### **Existing Conditions**

Two wetlands are reported on the Kane Ranch site. One wetland is reported within the Williams Creek ephemeral stream channel, which is classified as a water of the U.S. (see Figure 7) A smaller wetland is centrally located in the playa near the windmill. This wetland is not tributary to any stream and is "isolated," and hence not regulated by USACE or State of Colorado. The floodplains of Williams Creek and the unnamed tributary have been mapped through Federal Emergency Management Administration (FEMA) Countywide Flood Insurance Rate Map (March 1997) (FIRM). The map identifies both a Zone A (100-year Flood) adjacent to the streams and Zone X (500-year flood). The Kane Ranch area is not subject to the Coastal Zone Management Act.

#### **Consequences of the Alternative**

Access to the Kane Ranch site would include construction of an entrance road across Williams Creek, but outside of the regulated wetland area. Hydraulic studies of the existing and future flow conditions at any other minor road crossings at the arroyos would be required. An engineering design for the installation of the road culverts would be necessary to avoid placement fill within the floodplain. If any fill is required within the Zone A, floodplain a permit would be required along with compensatory mitigation.

## 3.10.2 Alternative 2: 4-Way Ranch

## **Existing Conditions**

Wetlands were not identified on the 4-Way Ranch site. Two floodplains associated with the Black Squirrel Creek tributaries have been mapped through FEMA FIRM maps (see Figure 8). The floodplains are identified as Zone A (100-year Flood) adjacent to the streams. The 4-Way Ranch area is not subject to the Coastal Zone Management Act.

#### **Consequences of the Alternative**

The site can be accessed without crossing the identified floodplains. Hydraulic studies of the existing and future flow conditions at road crossings at the arroyos would be required. An engineering design for the installation of the road culverts would be necessary to avoid placement fill within the floodplain. If any fill is required within the Zone A floodplain, a permit would be required along with compensatory mitigation.

## 3.10.3 Alternative 3: Rolling Hills Ranch

### **Existing Conditions**

Wetlands were not identified on the Rolling Hills Ranch site. Four floodplains associated with the Jimmy Camp Creek tributaries have been mapped through FEMA FIRM maps (see Figure 9). The floodplains are identified as Zone A (100-year Flood) adjacent to the streams. The Rolling Hills Ranch area is not subject to the Coastal Zone Management Act.

#### **Consequences of the Alternative**

The site can be accessed from Drennan Road without crossing the identified floodplains. Hydraulic studies of the existing and future flow conditions at road crossings at the arroyos would be required to access the southern portion of the site. An engineering design for the installation of the road culverts would be necessary to avoid placement fill within the floodplain. Placement of fill within the Zone A floodplain would require a permit and compensatory mitigation.

## 3.10.4 Alternative 4: Bradley Heights

#### **Existing Conditions**

One floodplain was identified on the Bradley Heights site (see Figure 10). The wetland areas are identified near the northern boundary and along the eastern property boundary. One floodplain associated with the Jimmy Camp Creek tributary has been mapped through FEMA FIRM maps. The floodplain is identified as Zone A (100-year Flood) adjacent to the streams. The Bradley Heights area is not subject to the Coastal Zone Management Act.

#### **Consequences of the Alternative**

The site can be accessed from Bradley Road without crossing the identified floodplains. Access to the site from Marksheffel Road would require crossing the floodplain along the eastern site boundary and would require hydraulic studies and crossing designs. Placement of fill within the Zone A floodplain would require a permit and compensatory mitigation.

## 3.10.5 Alternative 5: No Action

#### Existing Conditions

Existing conditions for the considered alternatives are discussed in the following sections.

### **Consequences of the Alternative**

The No Action Alternative would not have an effect on the existing floodplains, wetlands, and coastal zone management.

## 3.11 Socioeconomics

## 3.11.1 Existing Conditions

The US Census Bureau 2010 American Community Survey reported the population of El Paso County as 622,263. The median household income was reported to be \$52,268. Approximately 11% of the population in El Paso County was reported to be the poverty level.

## 3.11.2 Consequences of the Alternatives

The consequences of the alternative on socioeconomic condition are similar for each alternative considered. Development of the proposed project would create temporary construction jobs activities. Maintenance activities associated with operations of the cemetery would create additional permanent jobs. However, the number of permanent jobs created is expected to be low and would not have a significant impact on the local economy. The NCA estimates 700 grave sites used on an annual basis would bring family members and visitors to the region. These visitors would add a minor economic benefit to the local economy.

## 3.12 Community Services

## 3.12.1 Existing Conditions

Community services refer to services provided by the police department, fire department, and ambulance services. These services are provided to the study area through the City of Fountain, El Paso County, Colorado Springs, and local volunteer emergency services.

## 3.12.2 Consequences of the Alternatives

Construction would cause no change in use of community services. Community services are not regularly used in existing cemeteries; therefore, no changes in community services would occur as a result of the development of the considered alternatives. No additional community services would be required.

## 3.13 Solid and Hazardous Materials

## 3.13.1 Alternative 1: Kane Ranch

#### Existing Conditions

A Phase I Environmental Site Assessment (ESA) for the Kane Ranch was completed in April 2010 in accordance ASTM E-1527-05 standards. The site was not identified as a concern on the regulatory databases reviewed. There were no indications that the past or present uses of the site have created recognized negative environmental conditions. The Phase I ESA indicated that there were no solid and hazardous materials on-site, with the exception of some historic disposal of concrete debris, silt fencing and livestock carcasses. The adjoining property to the north, Kane Ranch homestead, has been involved in a Voluntary Cleanup Program (VCP) as a result of a release from a petroleum underground storage tank (UST) and a former livestock dip tank containing pesticides. The Kane Ranch proper was identified as a Recognized Environmental Condition (REC) to the site and active VCP because it is located upgradient from the site.

#### **Consequences of the Alternative**

Construction activities would generate a relatively small quantity of solid waste. All solid waste generated through construction would be disposed of at a permitted landfill according to regulatory primarily fuel for equipment. The operation of the cemetery will not result in a significant change in amount and/or type of solid waste generated. All solid waste will be disposed by a local commercial disposal firm at a regional landfill. As standard practice, flowers and evergreen materials left as grave decorations and tree trimmings would be mulched and/or placed on-site in areas that will later be reclaimed for future cemetery development.

#### 3.13.2 Alternative 2: 4-Way Ranch

#### **Existing Conditions**

A Phase I ESA for the 4-Way Ranch was completed in April 2012. The site was not identified as a concern on the regulatory databases reviewed. There were no indications that the past or present uses of the site have created recognized negative environmental conditions. Apparent test wells for oil and gas exploration are present however further oil and gas development has not occurred on the property.

#### **Consequences of the Alternative**

The consequences of this alternative are similar to Alternative 1: Kane Ranch.

## 3.13.3 Alternative 3: Rolling Hills Ranch

### **Existing Conditions**

A Phase I ESA for the Rolling Hills Ranch was completed in April 2012. The site was not identified as a concern on the regulatory databases reviewed. There were no indications that the past or present uses of the site have created recognized negative environmental conditions. The Phase I ESA indicated that there were no solid and hazardous materials on-site except for some historic disposal of plastic, metal, and concrete debris.

#### **Consequences of the Alternative**

The consequences of this alternative are similar to Alternative 1: Kane Ranch.

## 3.13.4 Alternative 4: Bradley Heights

### **Existing Conditions**

A Phase I ESA for the Bradley Heights site was completed in April 2012. The site was not identified as a concern on the regulatory databases reviewed. There were no indications that the past or present uses of the site have created recognized negative environmental conditions. The Phase I ESA indicated that there were no solid and hazardous materials on-site except for some milled asphalt stockpiles apparently used as road base.

#### **Consequences of the Alternative**

The consequences of this alternative are similar to Alternative 1: Kane Ranch

## 3.13.5 Alternative 5: No Action

## **Existing Conditions**

Existing conditions for the considered alternatives are discussed in the following sections.

#### **Consequences of the Alternative**

The No Action Alternative would not have an effect on the existing conditions relative to solid and hazardous waste.

## 3.14 Transportation and Parking

## 3.14.1 Alternative 1: Kane Ranch

#### Existing Conditions

The site is currently serviced by Squirrel Creek Road, a minor arterial county east-west road that is two-lane bituminous with no shoulders. This road is rural providing access to widely spaced ranches and rangeland. Direct access into the site is by Andy Kane Road, a two-

lane gravel road that intersects Squirrel Creek Road at the northeast corner of the site. Andy Kane Road primarily services the Kane Ranch homestead. The road runs through the center of the ranch and enters the site at the midpoint of its northern boundary.

#### **Consequences of the Alternative**

Access to the new cemetery through the Kane Ranch homestead is not prudent or feasible. The physical layout of Andy Kane Road does not meet minimum requirements for cemetery operations. Any improvements to Andy Kane Road with an increase in traffic would negatively impact and conflict with the Kane Ranch operations. Therefore, a new entrance road into the proposed cemetery would be required. The new entrance road would cross Williams Creek west of the Kane Ranch and would include a bridge that spans the Williams Creek streambed and its defined floodplain. The access road would require a minimum two-lane paved Class A road meeting county and state standards. Construction impacts to natural resources would be expected to be minor as the design of the bridge would avoid direct impacts to the streambed, floodplain and the plains cottonwood riparian woodland along the creek. The development of the property would not cause a significant increase in traffic beyond existing levels generated by existing uses.

Normal cemetery operations do not generate significant traffic. Typically employee traffic is expected to result in 10 to 15 vehicles per day. Interments and other occasional special events may generate larger number of vehicles, up to 20 cars per event with an expected maximum of three to five interments per day, but the proposed Class A road system would be capable of handling the increased traffic. On-site employee and visitor parking would be provided.

## 3.14.2 Alternative 2: 4-Way Ranch

## **Existing Conditions**

There are currently no paved roads or permanent access to the site. However, Colorado State Highway 24 is adjacent to the southeast boundary of the property.

#### **Consequences of the Alternative**

Access to the site would require construction of a new road which would be a minimum twolane paved Class A road meeting county and state standards. Construction impacts to natural resources would be expected to be minor as the design of the road would avoid direct impacts to the streambed, floodplain and the plains cottonwood riparian woodland along the creek. The development of the property would not cause a significant increase in traffic beyond existing levels generated by existing uses.

Normal cemetery operations do not generate significant traffic. Typically employee traffic is expected to result in 10 to 15 vehicles per day. Interments and other occasional special events may generate larger number of vehicles, up to 20 cars per event with an expected maximum of three to five interments per day, but the proposed Class A road system would

be capable of handling the increased traffic. On-site employee and visitor parking would be provided.

## 3.14.3 Alternative 3: Rolling Hills Ranch

### Existing Conditions

There are currently no paved roads or permanent access to the site. However, Drennan Road is adjacent to the northern boundary of the property. Drennan Road is a planned principal arterial.

### **Consequences of the Alternative**

Access to the site would require construction of a new road which would be a minimum twolane paved Class A road meeting county and state standards. Construction impacts to natural resources would be expected to be minor as the design of the road would avoid direct impacts to the streambed, floodplain and the plains cottonwood riparian woodland along the creek. The development of the property would not cause a significant increase in traffic beyond existing levels generated by existing uses. The proposed roadways would be utilized except for additional parking areas and an access road.

Normal cemetery operations do not generate significant traffic. Typically employee traffic is expected to result in 10 to 15 vehicles per day. Interments and other occasional special events may generate larger number of vehicles, up to 20 cars per event with an expected maximum of three to five interments per day, but the proposed Class A road system would be capable of handling the increased traffic. On-site employee and visitor parking would be provided.

## 3.14.4 Alternative 4: Bradley Heights

#### Existing Conditions

There are currently no paved roads or permanent access to the site. However, Bradley Road is adjacent to the northern boundary of the property and Marksheffel Road is adjacent to the eastern property boundary.

#### **Consequences of the Alternative**

The consequences of this alternative are similar to Alternative 4: Rolling Hills Ranch.

## 3.14.5 Alternative 5: No Action

#### **Existing Conditions**

Existing conditions for the considered alternatives are discussed in the following sections.

#### Consequences of the Alternative

The No Action Alternative would not have an effect on the existing conditions relative to transportation and parking.

## 3.15 Utilities

## 3.15.1 Alternative 1: Kane Ranch

## **Existing Conditions**

The Kane ranch site is serviced by Mountain View Rural Electric Association (MVREA). Potable water is available from the City of Fountain although a 2.4-mile extension of an existing waterline and easement would be required (SmithGroupJJR, 2012). Four major water pipelines are located in the City of Fountain approximately 5 miles southwest of the site. The site lies outside of the Fountain Sanitation District. The Colorado Center Force Main sanitary sewer line runs along Link Road at Squirrel Creek Road, which lies approximately 3 miles east of the site. Public sanitary systems are not available for the site, the closest sanitary sewer lines are located approximately 3.5 miles west of the site. MVREA electric service lines are located along Squirrel road adjacent to the site. Gas service is not available in the area.

## **Consequences of the Alternative**

Extension of a water pipeline to the site would be required to provide an adequate source of domestic and irrigation water supply. An on-site septic system would need to be constructed for visitor and employee demands. An extension of the electric service from Squirrel Road would also be required. Because service is not available in the area, an onsite propane tank may be required if gas fired heating equipment is chosen.

## 3.15.2 Alternative 2: 4-Way Ranch

## **Existing Conditions**

There are currently no utilities servicing the site; however 4-Way Ranch Metropolitan District (water and sewer) is located within one-mile of the property.

## **Consequences of the Alternative**

Extension of a water pipeline and sanitary sewer to the site may be required to provide an adequate source of domestic and irrigation water supply and wastewater services.

## 3.15.3 Alternative 3: Rolling Hills Ranch

## **Existing Conditions**

There are currently no utilities servicing the site; however Colorado Centre and Widefield Water District lines are located nearby and to the south and west of the Rolling Hills Ranch site.

#### **Consequences of the Alternative**

Colorado Springs Utilities (CSU) has offered Groundwater with Augmentation service for potable water until CSU waterlines are extended to the site. This would involve installation of groundwater wells on-site and construction of treatment and on-site distribution systems. An on-site septic system would need to be constructed until public sanitary sewer service is extended to the site. In extension of the electric service from Bradley Road would also be required. An existing gas service is located adjacent to the site on Bradley Road.

Extension of a water pipeline to the site may be required to provide an adequate source of domestic and irrigation water supply. An on-site septic system would need to be constructed for visitor and employee demands until public sanitary sewer service is extended to the site.

### 3.15.4 Alternative 4: Bradley Heights

#### **Existing Conditions**

Colorado Springs Utilities water lines are presently available adjacent to the Bradley Heights site. In addition, electric and natural gas services are available from CSU.

#### Consequences of the Alternative

Colorado Springs Utilities has offered Groundwater with Augmentation service for potable water until CSU waterlines are extended to the site. This would involve installation of groundwater wells on city property across Marksheffel Road and construction of water line to site, treatment, and on-site distribution systems. Completion of existing service connections at the Bradley Heights site are expected to have minimal consequences. An on-site septic system would need to be constructed. In extension of the electric service from Bradley Road would also be required. An existing gas service is located adjacent to the site on Bradley Road.

#### 3.15.5 Alternative 5: No Action

#### **Existing Conditions**

Existing conditions for the considered alternatives are discussed in the following sections.

#### Consequences of the Alternative

The No Action Alternative would not have an effect on the existing conditions relative to utilities.

## 3.16 Environmental Justice

## 3.16.1 Existing Conditions

Under the No-Action alternative environmental justice would not change and there would be no adverse impacts to the local population.

## 3.16.2 Consequences of the Alternatives

The proposed alternatives project would not result in any relocation of existing homesteads. There would not be any action that would create disproportionately adverse impacts on minority or low-income populations.

## 3.17 Cumulative Impacts

## 3.17.1 Existing Conditions

There has been very limited development occurring near or around the alternative sites.

## 3.17.2 Consequences of the Alternatives

The Proposed Action is not expected to generate additional significant changes in natural resources or anthropogenic development. BMPs would be implemented during the design and construction of the cemetery that would avoid or limit potential cumulative impacts to the natural resources. Cemetery operations are relatively small scale and no significant increase in area development, maintenance equipment or traffic is expected to create a significant level of adverse cumulative impact on the site or surrounding area.

## 3.18 Potential for Generating Substantial Controversy

## 3.18.1 Existing Conditions

There is broad local and regional support for the project from all levels of government and many non-profit organizations. Significant public controversy is not anticipated for the project.

## 3.18.2 Consequences of the Alternatives

Although the development of the new national cemetery is not expected to generate controversy, the site selection process and outcome may generate some controversy.

## 4.0 PUBLIC INVOLVEMENT

VA invites public participation in decision-making on new proposals through the NEPA process. Public participation with respect to decision-making on the Proposed Action is guided by 38 CFR Part 26, VA's policy for implementing the NEPA. Additional guidance is provided in VA's NEPA Interim Guidance for Projects Manual (VA 2010). Consideration of the views and information of all interested persons promotes open communication and enables better decision-making.

Agencies, organizations, and members of the public with a potential interest in the Proposed Action, such as minority, low-income, and disadvantaged persons, were urged to participate. A record of public involvement and agency coordination associated with this PEA is provided in Appendix A and C.

## 4.1 Public Involvement

VA, as the Federal proponent of the Proposed Action, published and distributed the Draft PEA for a 30-day public comment period as announced by a Notice of Availability (NOA) published in the Pueblo Chieftain, Colorado Springs Independent, and Gazette newspapers. Review copies were also made available for public review at the Ruth Holly and Sand Creek branches of the Pikes Peak Library District. A copy of the PEA was also available for download via the internet through a link on the VA's website at internet website (http://www.cem.va.gov/cem/EA). In addition, VA held a public meeting on June 7, 2012 to discuss the Proposed Action and the Draft PEA, and to accept comments on the Draft PEA. A summary of comments received from the public review and responses are provided in Appendix C.

# 5.0 MITIGATION / BEST MANAGEMENT PRACTICES

No Mitigation Measures have been identified as necessary to reduce impact(s) to less than significant levels.

A series of common design/construction best management practices have been identified for implementation during the construction and operation of the proposed project include the following:

- Maintaining adequate traffic control provisions during construction
- Requiring dust abatement provisions within project specifications related to construction
- Maintaining adequate stormwater and runoff controls and complying with the Stormwater Pollution Prevention Plans (SWPPP) during construction and operation to minimize sediment runoff and hazardous materials releases

- Immediately ceasing construction if historic or cultural resources artifacts are identified in excavations until such time that qualified archaeologists are contacted to identify, catalog and/or remove said artifacts
- Develop and implement construction design plans to minimize impacts sensitive environments and habitats

## 6.0 CONCLUSIONS

This PEA evaluates the potential environmental effects of VA's Proposed Action to select and acquire a site for the construction and operation of a national cemetery in southeast Colorado. Once a site (i.e., alternative) is selected, VA would prepare a subsequent, tiered, SEA to more precisely analyze and evaluate the potential effects of the construction and operation of the proposed cemetery. At that time, additional design information would be available upon which to conduct the future effects analysis.

This PEA evaluated possible effects to aesthetics; air quality; cultural resources; geology and soils; hydrology and water quality; wildlife and habitat, including threatened and endangered species; noise; land use; floodplains, wetlands, and coastal zone management; socioeconomics; community services; solid and hazardous materials; transportation and parking; utilities; and Environmental Justice (Executive Order [EO] 12898).

This PEA concludes there would be no significant adverse impact, either individually or cumulatively, to the local environment or quality of life associated with implementing either of the identified final alternative site locations (Bradley Heights or Rolling Hills), provided that the mitigation and management measures and best management practices identified in this PEA are implemented.

Site-specific impacts would be further evaluated in a subsequent, tiered EA (Site-Specific EA) once a site has been selected, acquired, and the proposed design process has been initiated. The mitigation, avoidance, and management measures identified in this PEA would be incorporated into that future process and analysis. Therefore, this PEA concludes that a Finding of No Significant Impact (FONSI) is appropriate, and that an Environmental Impact Statement (EIS) is not required.

# 7.0 LIST OF PREPARERS

Name	Affiliation	Title	Responsibilities
Lawrence R. Keefe	Terracon Consultants, Inc.	Principal / Office Manager	Report Preparation, Literature Review, Report Review
Dan Taylor	Terracon Consultants, Inc.	Environmental Project Manager	Report Preparation, Site Reconnaissance, Literature Review

# 8.0 REFERENCES CITED

Initial Cultural Resource Impact Prediction for the New Southern Colorado National Cemetery in El Paso County, Colorado. 2012, Centennial Archaeology, Inc.

Colorado Department of Public Health and Environment, Air Pollution Control Division (CDPHE-APCD). 1999.

Colorado Air Quality Control Commission Report to the Public 2004-2005.

Draft Environmental Assessment for New Southern Colorado National Cemetery with El Paso County Park Property, prepared by JJR for Department of Veterans Affairs, July 2010

Environmental Data Resources (EDR), April 2011. EDR NEPA Database Report Numbers 3299580.3, 3299565.3s, and 2982312.3s

Geologic Map of the Colorado Springs-Castle Rock Area, Front Range Urban Corridor, Colorado. United States Geological Survey. Miscellaneous Investigations Series, Map I-857-F. (USGS)

Soil Conservation Service (SCS), Soil Survey of the El Paso County Area, Colorado. June 1981. Trimble, D. E and M. N. Machette. 1979.

U.S. Geological Survey, 1994. Colorado Springs, Colorado and Pikeview Colorado, 7.5minute Quadrangles. Scale 1:24,000. U.S. Department of the Interior.

Water Study for Five Potential Sites for a New National Cemetery in Southern Colorado, April 2012, SmithGroup JJR and Aqua Engineering, Inc.

# 9.0 LIST OF ACRONYMS AND ABBREVIATIONS

amsl APCD AST CDOW CDPHE CEQ CFR CNHP CO dBA EA EIS EPA FEMA FONSI HAZMAT I-25 Ldn mph MSDS NAAQS NEPA NAAQS NEPA NRHP NOX NEPA NAAQS NEPA NRHP NOX NWI PM <sub>10</sub> REC SHPO SIP TNC USACE USEPA USFWS	above mean sea level Air Pollution Control Division aboveground storage tanks Colorado Division of Wildlife Colorado Department of Public Health and Environment Council on Environmental Quality Code of Federal Regulation Colorado Natural Heritage Program carbon monoxide decibels on the A-weighted scale Environmental Impact Statement Environmental Protection Agency Federal Emergency Management Agency Finding of No Significant Impact Hazardous Materials Interstate 25 day-night average noise levels miles per hour material safety data sheets National Ambient Air Quality Standards National Register of Historic Places nitrogen oxides National Wetland Inventory Map particulate matter <10 microns Recognized Environmental Condition State Historic Preservation Office State Implementation Plan The Nature Conservancy U.S. Army Corps of Engineers U.S. Environmental Protection Agency U.S. Fish and Wildlife Service
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tanks

APPENDIX A

NATIVE AMERICAN TRIBE CORRESPONDENCE



May 15, 2012

See Distribution List

Re: Tribal Consultation Request Applicant Name: Department of Veterans Affairs Site Name: Proposed New Southern Colorado National Cemetery El Paso County, Colorado

The Department of Veterans Affairs (VA) is proposing to establish a national cemetery to provide burial facilities for eligible veterans in the Southern Colorado area, Colorado in accordance with the Veterans Benefit Act of 2010 (Public Law 111-275). If approved, this project will develop the first phase of the cemetery by constructing 10 years of burial capacity including full-casket and cremains gravesites; supporting public, administration and maintenance facilities; and associated infrastructure such as roadways, utility systems, irrigation, signage and landscaping. The locations under consideration range from approximately 200 to 400 acres in area. The proposed locations are shown on the attached figures.

The Native American Graves Protection and Repatriation Act (NAGPRA) Native American Consultation Database identified tribal entities listed in the distribution that may attach religious and cultural significance to Historic Properties that may be affected by the proposed project. On behalf of VA, Terracon is requesting your comments on the Proposed Action pursuant to Section 106 of the National Historic Preservation Act, for inclusion in the Programmatic Environmental Assessment that we are conducting.

For your convenience, a suggested response letter is attached. If a response is not received within 30 days of the date of this letter, we will assume that you either have no interest in the project or have determined that the project will not have an effect (or adverse effect) with respect to eligible properties of religious and cultural significance.

Sincerely,

asquelue tot

Jacqueline Post, Esq. Land Management Real Property Service (003C1E) Department of Veterans Affairs

**Distribution List:** 

Kim Harjo Arapahoe Tribe of the Wind River Reservation, Wyoming P.O. Box 396 Fort Washakie, WY 82514

Lela Pedro Cheyenne and Arapahoe Tribes, Oklahoma P.O. Box 41 Concho, OK 73022

Leroy Spang Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation P.O. Box 128 Lame Deer, MT 59043 Terracon Consultants, Inc. 4172 Center Park Drive Colorado Springs, CO 80916

Attn.: Lawrence R. Keefe

Re: Tribal Consultation Response Letter Applicant Name: Department of Veterans Affairs Proposed New Southeast Colorado National Cemetery Terracon Project No. 23127708

I have reviewed your Consultation Request under Section 106 of the National Historic Preservation Act regarding the Proposed Action referenced above and offer the following response as indicated by the box that is checked with my initials.

#### □ NO INTEREST

I have determined that there is not a likelihood of eligible properties of religious and cultural significance in the Proposed Action construction area.

REQUEST ADDITIONAL INFORMATION

I require the following additional information in order to provide a finding of effect for this proposed undertaking: \_\_\_\_\_\_.

#### □ NO EFFECT

I have determined that there are no properties of religious and cultural significance that are listed on the National Register within the area of potential effect or that the proposed project will have no effect on any such properties that may be present.

#### □ NO ADVERSE EFFECT

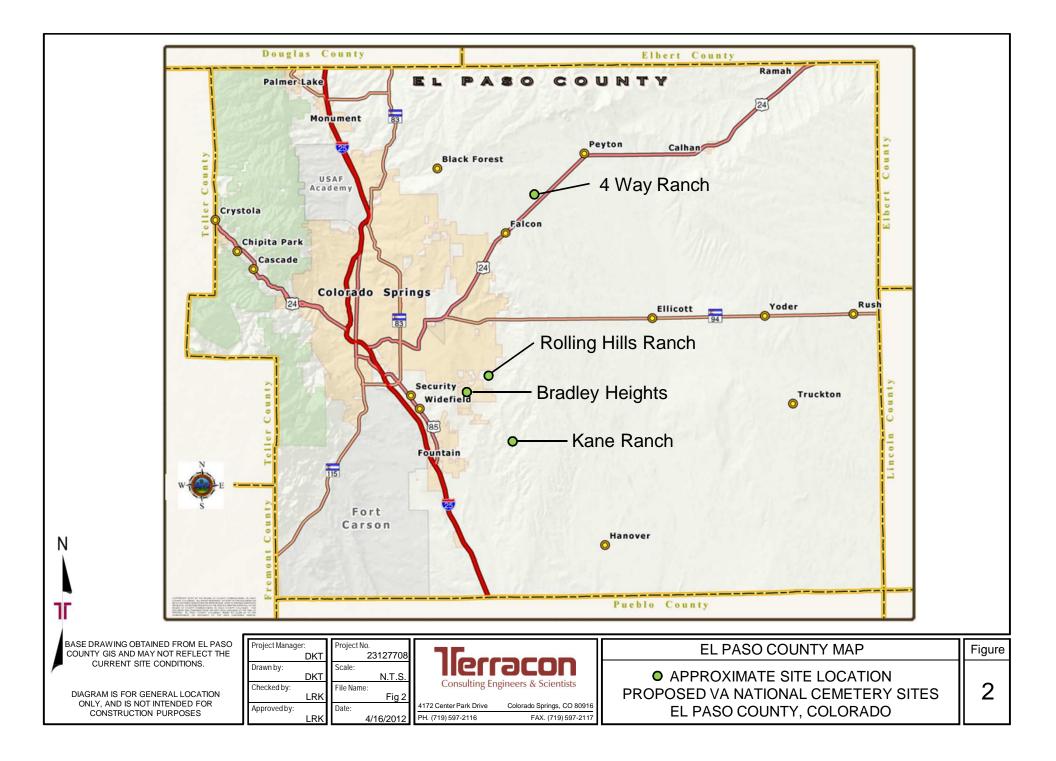
I have identified properties of cultural and religious significance within the area of effect that I believe are eligible for listing in the National Register, for which there would be no adverse effect as a result of the proposed construction project.

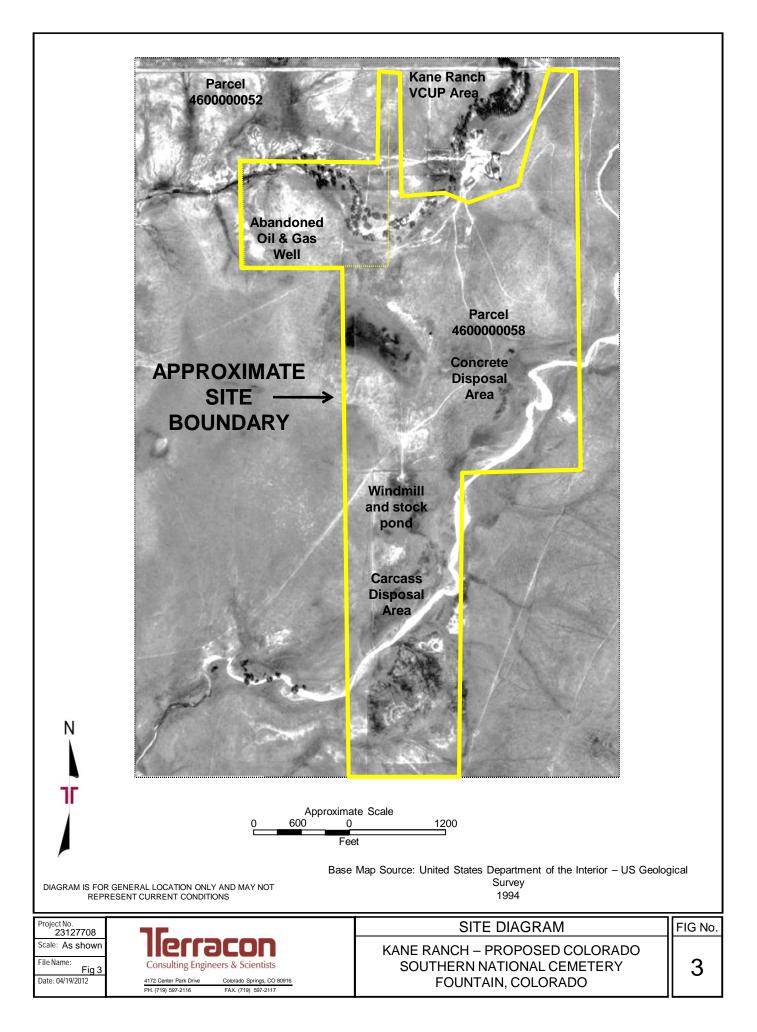
#### □ ADVERSE EFFECT

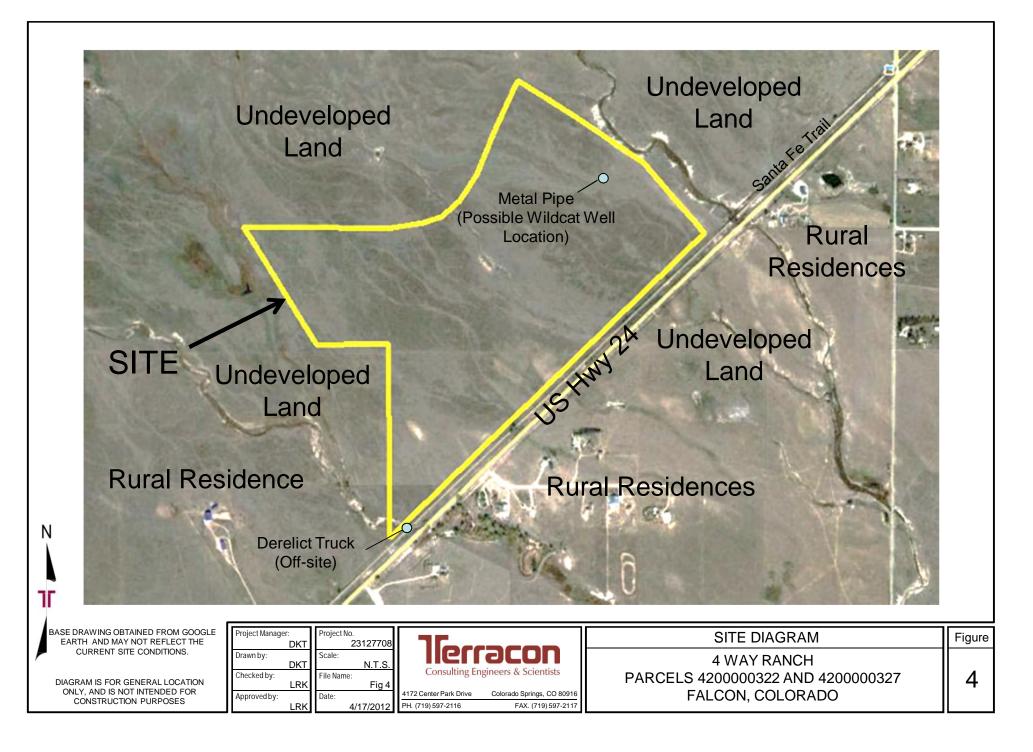
I have identified properties of cultural and religious significance within the area of potential effect that are eligible for listing in the National Register. I believe the proposed construction project would cause an adverse effect on these properties.

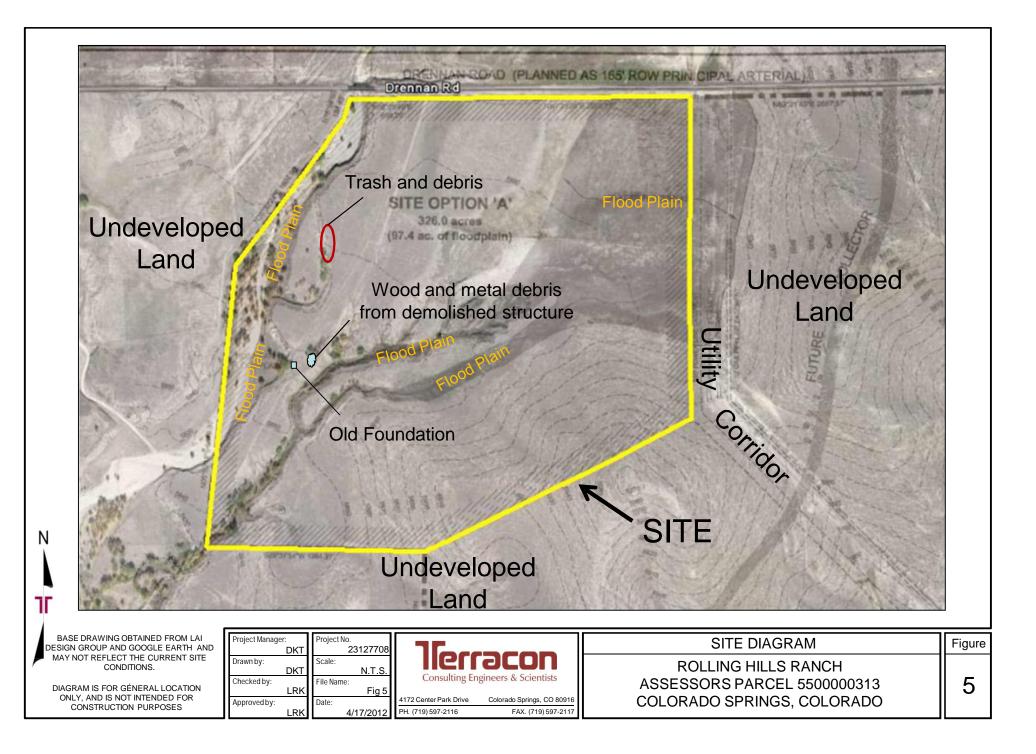
Signature of duly authorized Tribal official / Date

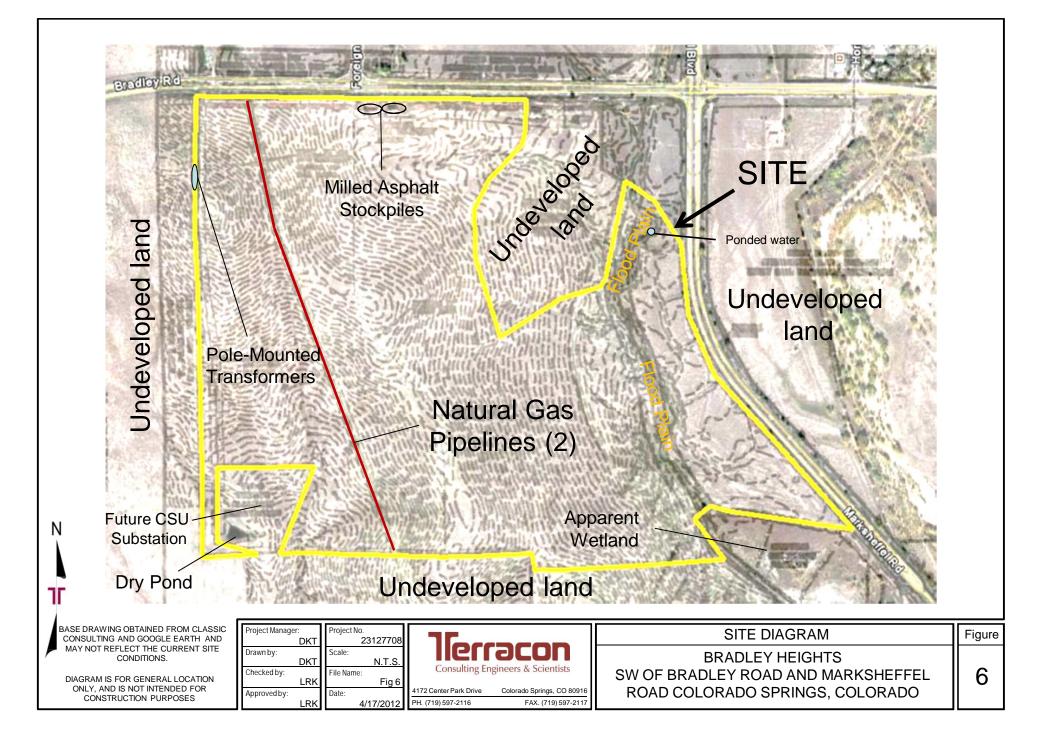
Printed Name/Title











## **APPENDIX B**

## SITE PHOTOGRAPHS

Kane Ranch Project No. 23107712 April 13, 2010



Photo #1 View of the subject site from the northwest facing southwest



Photo #3 View of carcass disposal area



Photo #2 View of the subject site from the northwest facing southeast



Photo #4 View of concrete disposal area



Photo #5 View of west parcel facing west at eastern gate



Photo #6

View of abandoned oil & gas exploration well on west parcel

#### Terracon





Photo #1 View of subject site



Photo #2 View to the north from the subject site



Photo #3 View to the east from the subject site



Photo #5 View to the south from the subject site



Photo #4 View to the west from the subject site



Photo #6 View of a metal pipe in the western portion of the site (possible abandoned oil well)

4 Way Ranch Project No. 23127708 Photo Date: April 12, 2012

Terracon



Photo #7 View of a metal pipe in the western portion of the site (possible abandoned oil well)



Photo #9 View of ephemeral arroyo in the southern portion of the site



Photo #8 View of off-site derelict vehicle near southern boundary



Photo #10 View of a drainage in the northcentral portion of the site





Photo #1 View of subject site



Photo #2 View to the north from the subject site



Photo #3 View to the east from the subject site



Photo #4 View to the west from the subject site



Photo #5 View to the south from the subject site



Photo #6 Vi

View of an old foundation in the western portion of the site

Terracon



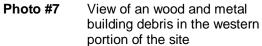




Photo #9 View of a petroleum pipeline marker along the northern site boundary



Photo #11 View of a stream bed along the western portion of the site



Photo #8 View of trash along a slope in the western portion of the site



Photo #10 View of an apparent raptor nest in the western portion of the site



Photo #12 View of an ephemeral arroyo in the central portion of the site

Bradley Heights Project No. 23127708 Photo Date: April 11, 2012

Terracon



Photo #1 View of subject site



Photo #2 View to the north from the subject site



Photo #3 View to the east from the subject site



Photo #5 View to the south from the subject site



Photo #4 View to the west from the subject site



Photo #6

View of three new pole-mounted transformers along the western site boundary



Photo #7 View of a dry pond and graded future CSU electrical substation pad near the southwest corner



Photo #9 View of an ephemeral arroyo in the eastern portion of the site



Photo #11 View of a natural gas pipeline marker in the northern portion of the site



Photo #8 View of apparent milled-asphalt road-base in the northern portion of the site



Photo #10 View of ponded water in the northeast portion of the site



Photo #12 View of concrete pipe debris in an arroyo in the eastern portion of the site

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# APPENDIX C

## PUBLIC INVOLVEMENT

## Summary of Public Comments and Response Programmatic Environmental Assessment for a Proposed New Southern Colorado National Cemetery

Public comments were received during Public Comment period which closed 24 June 2012.

A public meeting was held on June 7, 2012, during this comment period at the Retired Enlisted Association facility in Colorado Springs, Colorado Forty-one registered attendees representing various local veteran organizations; federal, state, and local governmental representatives; and individual interests were present.

One written and numerous oral comments were received during the meeting. Additionally, one written comment was received subsequent to the public meeting by email or letter. All comments were reviewed and those pertinent to the environmental scoping of the project are summarized by subject below. Every attempt has been made to adequately respond to these comments and incorporate them into the Programmatic Environmental Assessment (PEA) as appropriate and applicable.

## Comment Subject: Site Preference

Attendees at the public meeting included nine representatives from the Pikes Peak National Veterans Cemetery Committee. These representatives stated that their preferred site was the Kane Ranch property. Reasons for their preference include proximity to the Pueblo area, their understanding of the availability of utilities and water, and cost of acquisition of the property.

A representative of the Federal Veterans Council stated that they preferred either the Kane Ranch or the Bradley Heights sites. The commenter stated that the 4-Way Ranch was too distant for southern Colorado citizens.

Other comments received during the meeting indicated a preference for either the Bradley Heights or the Kane Ranch property. One commenter rejected the Kane Ranch property due to location, access and proximity to an active municipal landfill.

**Response:** The scope of the PEA is to evaluate possible environmental effects of the Proposed Action, specific areas of evaluation include: aesthetics; air quality; cultural resources; geology and soils; hydrology and water quality; wildlife and habitat, including threatened and endangered species; noise; land use; floodplains, wetlands, and coastal zone management; socioeconomics; community services; solid and hazardous materials; transportation and parking; utilities; and Environmental Justice (Executive Order [EO] 12898). This PEA concludes there would be no significant adverse impact, either individually or cumulatively, to the local environment or quality of life associated with implementing either of the identified alternative site locations, provided that the mitigation and management measures and best management practices identified in this PEA are implemented.

### Comment Subject: Floodplains

Several comments were received regarding the presence of floodplains on the 4-Way Ranch, Rolling Hills Ranch, and Bradley Heights and the impacts to development.

**Response:** The evaluation of floodplain potential impact(s) is discussed in Section 3.10 of the PEA. Site-specific designs would incorporate layout and/or features in consideration of floodplains which will be subject of additional study efforts to delineate floodplain boundaries.

### Comment Subject: Noise

One comment was made regarding the impacts of occasional air traffic noise from Peterson Air Force Base and the Colorado Springs Airport to the Bradley Heights site.

**Response:** The evaluation of noise with respect to the Bradley Heights site is discussed in Section 3.8 of the PEA. The site is characterized as generally quiet with an occasional traffic noise near the north property boundary and aircraft fly-over operations from Peterson Air Force Base and the Colorado Springs Airport. The area around the cemetery site would experience a slight, temporary and intermittent increase in noise levels during construction. Following construction the site would generate intermittent noise levels typically associated with cemetery operations.

### Comment Subject: Site Selection Process

Several oral comments and one written comment were received regarding the VA's site selection process and rationale.

*Response:* The site selection process was described during the public meeting by VA representatives and is also described in Section 2.2.2 of the PEA report.

### Comment Subject: Bradley Heights Site Utilities

One written comment was received regarding the availability of utilities on the Bradley Heights site. The commenter stated that an existing potable water line was present on the site and available for use. The commenter also stated that natural, gas, electric, wastewater and stormwater sewer services are located adjacent to the site.

**Response:** In addition to completion of this PEA document, VA conducted a separate utilities study to evaluate options for acquiring water service for each site. The study included an estimate of water supply infrastructure costs and commodity rates. In addition, the study evaluated the availability and extension costs for sanitary, electric, and natural gas services.