

**UNITED STATES ARMY AND NATIONAL  
TRAINING CENTER (NTC) FORT IRWIN,  
CALIFORNIA 92310**

**ENVIRONMENTAL ASSESSMENT (EA)**

**For the  
EXPANSION OF GOLDSTONE  
ROUTE-B**

**4 September 2008**




**Prepared by the  
Directorate of Public Works,  
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Fort Irwin, CA**


U.S ARMY AND NTC EXPANSION OF GOLDSTONE ROUTE B

ENVIRONMENTAL ASSESSMENT (EA)


U.S. DEPARTMENT OF THE ARMY, NATIONAL TRAINING CENTER, FORT  
IRWIN, CALIFORNIA,

4 September 2008

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## **1 PURPOSE ANED NEED**

This section summarizes the purpose and need for the action and provides relevant information, such as background, purpose, and authority.

### **1.1 Background**

The training at Fort Irwin is designed to provide soldiers the experience needed to excel at their missions. Today's Army can drive faster, operate in wider ranges, and shoot farther. The advancements in military technology and the need to address those advancements are driving factors for this project. Route B will bisect the Goldstone Deep Space Communication Complex (GDSCC), a federal facility controlled by NASA. Within the NTC, through agreements with the Department of the Army, NASA operates GDSCC, on permitted property, which is a part of the Global Deep Space Network responsibility for communicating with spacecraft.

### **1.2 Purpose and Need**

The Fort Irwin National Training Center (NTC) requires two full East-West Corridors (see Appendix D – Map Route B) to effectively train Forces Command (FORSCOM) Maneuver Brigades in Brigade level combat training proficiency per Army Training Land Analysis Model (ATLAM) recommendations. The implementation of the proposed Route B would provide a second full East-West corridor, in addition to the existing East-West Corridor now used to conduct Force-on-Force exercises with Rotational Task Forces. The proposed Route B would provide more realistic zones of operation and would support the establishment of normal combat lines of communications. This project would provide a new route for tactical vehicles directly accessing training zones through current Goldstone operational areas.

### **1.3 Relevant laws, regulations, and other documents**

The relevant laws and regulations include, but are not limited to, the National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] 4321 et seq.), the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508). Department of Interior Regulations at 516 DM 11 require consideration of environmental consequences of federal actions on public lands, and applicable published Army documents; the Supplemental Final Environmental Impact Statement (SFEIS) for the Proposed Addition of Maneuver Training Lands at Fort Irwin (dated August 2005), the Integrated Cultural Resources Management Plan (ICRMP) and the Integrated Natural Resources Management Plan (INRMP).

### **1.4 Decision to be made**

The objective of this Environmental Assessment (EA) is to provide Army decision makers with the information and analyses necessary to determine what, if any, impacts to the environment would occur due to this project. Based on that information the decision



makers should determine whether to prepare a Finding of No Significant Impact (FNSI) or an Environmental Impact Statement (EIS) (40 CFR 1508.9) for the construction of the proposed Route B through NASA's Goldstone Deep Space Communication Complex (GDSCC) and into the Western Expansion Area (WEA).

## **2.0 Description of Proposed Action and Alternatives**

This section describes the location and description of the proposed action and alternatives that are being evaluated.

### **2.1 Location**

The proposed location for the placement of the Route B is entirely within the NTC and Fort Irwin, which is managed by the Department of the Army (DA) and will bisect the Goldstone Deep Space Communication Complex (GDSCC), a federal facility controlled by NASA. The NTC and Fort Irwin are located in the central Mojave Desert in Southern California. The installation is located approximately halfway between Las Vegas, Nevada and Los Angeles, California in the County of San Bernardino, California, and approximately 50 kilometers (31 miles) north of Interstate 15. The post currently occupies an area of approximately 752,000 acres.

### **2.2 Proposed Action**

Fort Irwin NTC needs access to the Western Expansion/Superior Valley areas to conduct training as indicated in the Land Expansion Supplemental Final Environmental Impact Statement (SFEIS) (dated August 2005). This EA is "tiered" from the SFEIS in order to study the environmental impacts of transiting through NASA's GDSCC.

The proposed Route B (Preferred Alternative) intersects Goldstone Road to the NW of the GDSCC (HQ) building and moves SW toward the expansion area. The route follows an improved/graded road, and may approach sensitive areas. The route provides unlimited access to the Western Expansion/Superior Valley area, which crosses multiple fiber optic and utility lines and links up with the existing tank trail which runs from southeast to northwest along the eastern boundary of Goldstone (see appendix E – Map Route B).

A transit route is required to be constructed through the Goldstone Deep Space Communication Complex (GDSCC) on an existing graded dirt road. This transit route (proposed Route B) would be used to transport troops and equipment between the cantonment area and the Superior Valley parcel. The 9 meter (30-foot) wide dirt road would be surfaced with existing sub-grade compacted gravel. The road would require 4 meter (12-foot) wide graded shoulders on each side and numerous culverts to provide adequate drainage. The proposed Route B would have a total maximum width of 54 feet from shoulder to shoulder and be approximately 3.5 miles long. The improved access route would typically be used for a maximum of five (5) days per rotation with an expected 12 rotations per year. The heaviest use of the route would be when soldiers and

equipment move to the Superior valley parcel before and after the training phase is completed.

The biological assessment notes that 12 rotations per year are expected to utilize the transit route (Route B). For two of the five days, approximately 500 vehicles would drive the access road per day. On the remaining 3 days, approximately 100 vehicles would use the route in a 24-hour period. The speed limit on the transit route would be 40 kilometers per hour (25 miles per hour).

### **2.3 Alternatives Eliminated from Consideration**

**Route - A** Runs along the southern boundary of Goldstone, and is characterized by rough terrain and a large population of Lane Mountain Milk-vetch that would restrict movement along this route. NTC needs a secondary route in the general area and will explore routes off Goldstone in the general area to meet future needs.

**Route - C** Would be located south of Goldstone Lakebed in close proximity to several antennae, fiber optics, and the Goldstone Lakebed which is used for air operations. Therefore Route C would not be a viable alternative at this time.

**Route - D** Would be adjacent to Mars Lakebed, passes South of Hill 1102, and continues to the South East. This route would eventually link up with the existing tank trail that passes to the west of the Pioneer Antenna Site and east of the Goldstone boundary. This route would not be feasible, since the NTC does not train units in the China Lake area at this time.

**No Action** The no-action alternative would be to not modify existing trails and roads. This “no action” Alternative would not meet U.S. Army mission requirements.

**Note:** Route B is the Preferred Alternative.

## **3.0 Affected Environment**

### **3.1 Introduction**

The following sections summarize the existing condition of the environmental resources and factors that would affect or would be affected by implementing any of the proposed action. The Bureau of Land Management (BLM) guidance provides that all critical elements of the environment be considered in environmental analyses. The critical elements that are being analyzed are discussed in section 3.1.1. Certain elements have been considered and dismissed from further discussion because they are either not present or not affected.



### 3.1.1 Critical Elements of the Human Environment

The following elements of the human environment are subject to requirements specified in statute, regulation, or executive order and must be considered in all EA's and EIS's. If the resource or value is not present or is not affected by the proposed action or alternatives, this may be documented in the EA or EIS as a negative declaration.

<b>Element</b>	<b>Relevant Authority</b>	<b>Potentially Affected</b>
Adverse Energy Impacts	E.O. 13211, as amended, 5/22/01 Energy Policy Act of 2005 (42 USC 13201)	No – not pertinent to non-energy projects
Air Quality	The Clean Air Act as amended (42 USC 7401 et seq.); MS 7000	Yes, see Section 4.2
Areas of Critical Environmental Concern	Federal Land Policy and Management Act of 1976 (43 USC 1701 et seq.): MS 1617	No – no ACEC within the project area
Cultural Resources	National Historic Preservation Act as amended (16 USC 470): MS 8100	NO –No petroglyphs impacted due to road
Environmental Justice	E.O. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 2/11/94	No – all access is on federal lands away from populated areas, no disproportionately high/adverse effects on minority or low-income populations
Farm Lands (prime or unique)	Surface Mining Control and Reclamation Act of 1977 (30 USC 1201 et seq.)	No – not present in the potentially affected area
Flood Plain	E.O. 11988, as amended, Floodplain Management, 5/24/77; MS 7260	No – road not in flood plain
Invasive, Nonnative Species	Lacey Act, as amended Federal Noxious Weed Act of 1974, as amended Endangered Species Act of 1973, as amended E.O. 13112, Invasive Species, 2/3/99; MS 1745 MS 6840 MS 9011 MS 9014 MS 9015	No
Migratory Birds	Executive Order 13186, 1/10/01	No – not affected by the proposed action
Native American Religious Concerns	American Indian Religious Freedom Act of 1978 (42 USC 1996); MS 8100	NO – see mitigation measures to avoid Desert Tortoise impact

Threatened or Endangered Species	Endangered Species Act of 1973, as amended; MS 6840	No – NTC will follow BO issued by USFWS for SFEIS
Wastes, Hazardous or Solid	Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.) Comprehensive Environmental Response, Compensation, and Liability Act of 1980 as amended (42 USC 9615); MS 9180 MS 9183	No
Water Quality Drinking/Ground	Clean Water Act of 1987 Safe Drinking Water Act Amendments of 1996 E.O. 12088, Federal Compliance with Pollution Control Standards (Amended by E.O. 12580, Superfund Implementation), 10/13/78, 2/23/87 E.O. 12372, Intergovernmental Review of Federal Programs, 7/14/82; MS 7240	No
Wetlands/Riparian Zones	E.O. 11990, Protection of Wetlands, 5/24/77; MS 1737	No
Wild and Scenic Rivers	Wild and Scenic Rivers Act as amended (16 USC 1271); MS 8351	No – not present in potentially affected area
Wilderness	Federal Land Policy and Management Act of 1976 (43 USC 1701 et seq.) Wilderness Act of 1964 (16 USC 1131 et seq.); MS 8500	No – not present in potentially affected area

**TABLE 1:**

### **3.2 Air Quality**

The air quality throughout rural San Bernardino County is generally good to fair. There are, however, times that the area does not meet air quality standards due to locally generated and/or wind transported pollutants. The vicinity in which the proposed action is located is currently classified as a State non-attainment area for ozone and Federal and State nonattainment area for PM 10 (particulate matter under 10 microns in size, a portion of which is comprised of fugitive dust) under national and state standards. Fugitive dust from vehicle travel is currently generated along open routes associated with vehicle travel, and in some cases, road maintenance. All Region of Influence (ROI) areas under the control of the Department of Army (DA) are disturbed surfaces and therefore are subject to substantial amounts of wind-blown fugitive dust under the right climatic conditions. Army would mitigate any dust impacts to GDSCC operations.



### **3.3 Cultural Resources**

The DA sponsored archaeological investigations within the current ROI and previously considered areas. The studies were completed to ensure compliance with federal historic preservation laws and regulations regarding the transfer and management of cultural properties. Investigations were also conducted to gain a more refined understanding of the cultural resources located in the project area and the roles these resources might have played within past human behavioral systems.

#### **3.3.1 The National Register of Historic Places**

Cultural resource inventories often provide valuable archaeological data and provide clues for interpreting the age, cultural affiliation, function, and overall condition of archaeological sites. Those sites determined eligible for the National Registry of Historic Places (NRHP) in consultation with the State Historic Preservation Office (SHPO) are considered significant.

### **3.4 Biological Resources**

The Programmatic Environmental Impact Statement (PEIS) defines concerns and guidelines for biological resources set by the Federal Government, specifically Army responsibilities under the Endangered Species Act (ESA). Fort Irwin is discussed on the Ecoregion level in the SFEIS and is described as “American Semi desert” and “Desert” (USACE 2002). Appendix C of the FSEIS lists two federally listed species found at Fort Irwin: Endangered Lane Mountain Milk Vetch (LMMV) (*Astragalus jaegerianus*) and Threatened Desert Tortoise (DT) (*Gopherus agassizii*) (USACE 2002).

#### **3.4.1 Fauna**

No fish or amphibian species are likely to inhabit the project site because there is no permanent water source. Common reptiles in the project area include the desert tortoise (*Gopherus agassizii*), zebra-tailed lizard (*Callisaurus draconoides*), side-blotched lizard (*Uta stansburiana*), western whiptail (*Cnemidophorus tigris*), Mohave rattlesnake, leopard lizard, and sidewinder (*Crotalus cerastes*). Birds common in the area that may occasionally use the project site include the desert quail, ground nesting owls (*Athene cunicularia*), common raven (*Corvus corax*), thrashers, white-crowned sparrow (*Zonotrichia leucophrys*), and mourning dove (*Zenaida macroura*). Common small mammals in the area that may use or cross the project area include the Mohave Ground Squirrel (*Spermophilus mohavensis*), kangaroo rats (*Dipodomys* sp.), California ground squirrel (*Otospermophilus beecheyi*), round-tailed ground squirrel (*Spermophilus tereticaudus*), cottontail rabbit (*Sylvilagus audubonii*), and black-tailed jackrabbit (*Lepus californicus*). Larger mammals like the Kit Fox (*Vulpes macrotis*), Gray Fox (*Urocyon cinereoargenteus*), Cougar (*Felis concolor*), Lynx, Bobcat (*Felis rufus*), and coyotes (*Canis latrans*) are also known in the area. Although these species are known to exist on Fort Irwin, large mammals are not likely to use the project site with the exception of occasional coyotes.

### **3.4.2 Flora**

The project area contains a relatively high diversity of plants with the most common perennial shrubs being creosote (*Larrea tridentate*), bursage (*Ambrosia dumosa*), cheesebush (*Hymenoclea salsola*), and boxthorn (*Lycium cooperi*). Military and construction activities are known to cause soil compaction and erosion - harming the vegetation and decreased establishment of seedlings. Biologists from the Fort Irwin Environmental Office conducted a field survey on 26 April 2003 and concluded that the proposed project sites are pre-disturbed. No sensitive species were found. (Hessing 2003).

### **3.5 Hazardous Materials and Solid Waste**

The proposed project site is currently permitted property managed by NASA for deep space communication operations. The ROI under the control of DA may contain motor oil, hydraulic fluid, anti-freeze, battery acid, and other vehicle fluids that do not readily dissipate and require special management upon disposal under state or federal law. All rotating training units are responsible for having appropriate standard operating procedures (SOP's) to handle hazardous material, hazardous waste, solid waste and human waste in accordance with Army, local, state, federal regulations. The NTC will ensure that all rotating training units have these SOP's before using Route B.

### **3.6 Health and Safety**

An elevated risk is always present during training activities. The more people and vehicles that are added the more potential for an accident to occur. The NTC and Fort Irwin take precautions to keep the soldiers and civilians as safe as possible when within the installation boundary. These precautions limit the amount of risk to acceptable levels. All rotating training units are responsible for having appropriate SOP's to minimize risk in accordance with Army, state, federal regulations dealing with civilian health and safety. The NTC will ensure that all rotating training units have these SOP's and the unit's have conducted a safety risk assessment before using Route B.

### **3.7 Transportation**

The transportation system serving Fort Irwin consists of two segments, the off-post system, and the on-post system. The off-post system is comprised of those roads, trails, rail lines and highways serving Fort Irwin. All rotating training units are responsible for having appropriate SOP's dealing with military transportation in accordance with Army, state, and federal regulations. Vehicle convoys shall follow standard operating procedures (SOPS) identified in the NTC Rules of Engagement.

All rotating training units are responsible for maintaining appropriate SOP's dealing with military transportation in accordance with Army, state, federal regulations. Vehicle

convoys shall follow standard operating procedures (SOPS) identified in the NTC Rules of Engagement.

### **3.8 Noise**

The Region of Influence (ROI) is in the vicinity of the NASA Goldstone Complex, which also serves as a main corridor for Fort Irwin travel. Any and all complaints regarding noise would be forwarded to the appropriate NTC representative. In the event that increases in noise are observed, mitigation would be initiated.

### **3.9 Land Use**

The proposed project site is currently permitted property managed by NASA for deep space communication operations. The land use in the proposed project site will not be changed due to this project. Development will be in accordance with the proposed land use designation in the area (NASA deep space communication operations) and it will match existing NTC training uses on adjacent sites. No significant impacts are expected.

### **3.10 Socioeconomics and Environmental Justice**

#### **3.10.1 Socioeconomics**

The general criteria used in evaluation of socioeconomic effects include the degree to which area employment would be affected by changes to the regional labor force as a result of the proposed project, and the degree to which program related changes in population would occur as a result of increased employment opportunities.

#### **3.10.2 Environmental Justice**

Executive Order 12989 – Federal Actions to Address Environment Justice in Minority Populations and Low-Income Population(s) require federal agencies to identify and address disproportionately high and adverse human health or environmental effects of its policies, programs and activities. The general criteria used in evaluation of environmental effects include assessing the existence of minority and/or low-income groups potentially affected by the proposed action or alternatives, and assessing the magnitude and scope of any potential effect(s) to the identified groups.

## **4.0 Environmental Effects**

### **4.1 Introduction**

The following sections summarize the effects the proposed project is expected to have on the proposed project site.

### **4.2 Air Quality**



#### **4.2.1 Proposed Action**

For activities proposed within Clean Air Act non-attainment areas, a determination is required of whether new emissions exceed *de minimis* levels established by the regional air quality management board. The following are estimates of increased traffic use on the proposed Route B that may contribute to air quality impacts on Fort Irwin NTC. Air quality issues from the use of the proposed Route B for military training were examined in the Supplemental Final Environmental Impact Statement (SFEIS) for *Proposed Addition of Maneuver Land at Fort Irwin, California* (dated August 2005).

Fugitive dust can be created by driving on the surface, operation of the construction equipment, and the wind. Water trucks and “dust suppressant materials would be used to mitigate these effects as much as possible without creating an environment problem.

Emissions from the vehicles also affect air quality. The number of vehicles being used for the construction and the hours of operation would not cause the emissions to exceed regulatory levels. The Fort Irwin Air Quality Manager has examined the details of this project and evaluated general conformity under the Clean Air Act, Section 1.76. The requirements of 40 CFR 93, subpart B are not applicable to this project because the total direct and indirect emissions caused by this project are below the conformity threshold values established in 40 CFR 93.1 53 (b) and this project is not considered regionally significant under 40 CFR 93.1 53 (i). Therefore, there would be no significant effects expected to air quality.

To ensure reduced PM 10, the route would be monitored and proper dust suppressant would be applied as required on an on-going bases.

Estimated proposed Route B (3.5 miles long) use per year:

Up to 12 Rotations per year, vehicle traffic for 5 days per rotation (500 vehicles per day for 2 days, 100 vehicles per day for 3 days).

1. 6,500 vehicles per year
2. 5,500 wheeled vehicles per year
3. 4,125 vehicles at 2.5 tons max (HMMWV or COB-V)
4. 1,100 vehicles at 25 tons max (cargo trucks or M939A2)
5. 275 vehicles at 77 tons max (loaded HET)
6. 1000 tracked vehicles per year:
  - a) 800 vehicles at 14 tons max (OSVS)
  - b) 200 vehicles at 60 tons max (Bradley, M1A1)

#### **4.2.2 No Action**

The “no action alternative” would not change current levels of dust emissions on public lands. Continued dust emissions would occur because of casual use on open routes and wind-related emissions on all routes until flora is reestablished.

### **4.3 Cultural Resources**

#### **4.3.1 Proposed Action**

The proposed action would involve travel only on existing roads and approved trails (Route B) within the NTC. Although surveys reveal the presence of cultural artifacts within the ROI, mitigation and due diligence would be implemented to protect all cultural resources.

#### **4.3.2 No Action**

There would be no affect to known cultural resources on public lands from the No Action alternative.

### **4.4 Biological Resources**

#### **4.4.1 Proposed Action**

See Section 4.12 for Desert Tortoise Mitigation of the Proposed Action. There is no evidence of Lane Mountain Milk-vetch (LMMV) within the proposed project area.

#### **4.4.2 No Action**

There would be no affect to biological resources on DA lands from the No Action alternative.

### **4.5 Hazardous Materials and Solid Waste**

#### **4.5.1 Proposed Action**

Hazardous materials that may be produced on-site or introduced to the proposed project site include motor oil, hydraulic fluid, anti-freeze, battery acid, and other vehicle fluids. Vehicle operation and potential maintenance could generate or release materials containing petroleum, oil, and lubricants (POL's) into the soil. However, existing rotation training unit standard operating procedures (SOP's), DA protocols, and Fort Irwin spill plans would be followed and therefore no significant effects are expected from convoy spills or accidents involving hazardous materials, hazardous waste, solid waste, and human waste released.

#### **4.5.2 No Action**

There would be no impacts from hazardous materials on public lands. Some potential for a hazardous material spill or the dumping of solid waste still exists from the casual use that would occur. Any spill that may potentially occur on Army lands would be handled in accordance with the Fort Irwin Hazardous Materials and Waste Management Plan.

#### **4.6 Health and Safety**

An elevated risk is always present during training activities. The more people and vehicles that are added the more potential there is an accident could occur. The NTC and Fort Irwin take precautions to keep the soldiers and civilians as safe as possible within the installation boundary. The use of Siber stakes (metal stakes in the ground to control the direction of vehicles along a dirt trail) on applicable roads would minimize the possibility of lost vehicles. Movement along the trails would be administrative; use of white light is permitted. Vehicle convoys would follow standard operating procedures (SOPS) identified in the NTC Rules of Engagement, and the unit safety risk assessment. These precautions limit the amount of risk to acceptable levels.

#### **4.7 Transportation**

The proposed Route B would be used for training operations and construction activities only.

Up to 12 Rotations per year, vehicle traffic for 5 days per rotation (500 vehicles per day for 2 days, 100 vehicles per day for 3 days).

1. 6,500 vehicles per year
2. 5,500 wheeled vehicles per year
3. 4,125 vehicles at 2.5 tons max (HMMWV or COB-V)
4. 1,100 vehicles at 25 tons max (cargo trucks or M939A2)
5. 275 vehicles at 77 tons max (loaded HET)
6. 1000 tracked vehicles per year:
  - a) 800 vehicles at 14 tons max (OSVS)
  - b) 200 vehicles at 60 tons max (Bradley, M1A1)

This project would not have any effect on other roads and highways within the Fort Irwin NTC. To mitigate potential damage caused by heavy vehicle traffic crossing over Goldstone fiber optic lines, communication lines, drinking water pipelines and electrical utility lines; the Army shall harden these underground utility crossings to minimize potential danger due to vehicle convoys.

#### **4.8 Noise**

The proposed project potentially may cause an increase in noise levels around the Goldstone Deep Space Communication Complex (GSDSCC) during the construction phase. Route B is approximately 3.5 miles in length and intersects the Goldstone main roadway know as the NASA Road to the NW of the GDSCC HQ buildings and moves SW to the Western Expansion/Superior Valley area.

The nearest Goldstone antenna in relation to the proposed Route B is approximately one mile away. This represents the closest area that a slow moving convoy would approach the NASA Goldstone Complex.



Any complaints about noise would be directed to the appropriate NTC representative. In the event that increases in noise are observed, mitigation would be initiated.

#### **4.9 Land Use**

The proposed site is currently within approved training areas. The land use in the area would not be changed due to this project. Development would be in accordance with the proposed land use designation in the area and it would match existing uses on adjacent sites. Any developments or redesigned use of Fort Irwin lands would be subject to military regulations, as well as applicable state and federal regulations. Currently, Fort Irwin has an Integrated Cultural Resources Management Plan (ICRMP) and the Integrated Natural Resources Management Plan (INRMP) that assists in properly managing resources.

#### **4.10 Socioeconomic and Environmental Justice**

No minority and/or low-income groups were found to exist that would be directly or indirectly affected by this project. No minority and/or low-income groups were found to exist that would be directly or indirectly affected by the project alternatives.

#### **4.11 Cumulative Effects**

No significant cumulative impacts were identified.

#### **4.12 Mitigation – Per Land Expansion SFEIS**

To avoid or lessen the impacts to the Desert Tortoise from the upgrade and use of the proposed route through the Goldstone Deep Space Communications Complex, the Army will implement the following measures:

- The NTC and U.S. Army have Installation Services Support Agreement (ISSA) procedures to address the needs of NASA regarding the use of Route B to ensure that we don't adversely impact operations or safety of GDSCC.
- Road shoulders will be graded so Desert Tortoises would not be trapped in the road or be impeded in their movements.
- All vehicle movement on the road will be restricted to the road itself; no cross country travel will be permitted. Stopping for short periods of time will be allowed on the road's shoulders; the shoulders will not be used for driving.
- If any vehicle stops on the road or the shoulders, the area beneath the vehicle must be thoroughly inspected for the presence of Desert Tortoises before it can be moved.

- Military personnel driving on the road and stopping on the shoulders will take precautions not to disturb or injure Desert Tortoises. If a Desert Tortoise is in harm's way, biologists from the Department of Public Works will be immediately notified; these biologists will relocate the Desert Tortoise to a safe location.
- Before any use, all military personnel using the road will be fully briefed on rules regarding safety, the presence of Desert Tortoises, and the required precautions in Desert Tortoise habitat. This briefing will be included in the standard briefing regarding environmental considerations in which each soldier must participate.

#### **4.13 Mitigation – Per US Army, NTC and NASA GSDSCC.**

- Communication procedures for maneuvering convoys will be established by dialogue between the U.S. Army mission and NASA personnel.
- The NTC will install traffic signals at the Route B crossing with the NASA Road and would maintain traffic and convoy safety while transitioning across Goldstone property to the Western Expansion/Superior Valley Area. Vehicle convoys shall follow standard operating procedures (SOPS) identified in the NTC Rules of Engagement.
- Goldstone entrance and exit signs would be posted to indicate presence on NASA Goldstone Complex property.
- If culverts are constructed they will be designed to accommodate potential use by Desert Tortoises.
- The road will be improved with the existing sub-grade compacted gravel to reduce potential dust impacts to sensitive wildlife and plant species.
- Dust Suppressants will be used to reduce PM10 as required. Other mitigation measures have been discussed in paragraphs 4.12 and 4.13.

### **5.0: Conclusions**

Upon review of this environmental assessment and other project information, the Fort Irwin National Training Center (NTC) has determined that the effects of the proposed action are not significant and will not adversely affect the quality of the environment. The NTC and Fort Irwin will implement all necessary measures to insure compliance with all federal, state, regional, and local regulations and guidelines. Therefore, an Environmental Impact Statement (EIS) will not be required. In support of this Environmental Assessment, a Finding of No Significant Impact should be issued.

### **6.0 References**

Department of Defense (DoD). 32 CFR Part 651, Environmental Analysis of Army Actions, Washington, DC. March 29, 2002.

The National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] 4321 et seq.)

The Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508)

Department of Interior Regulations at 516 DM 11 requires consideration of environmental consequences of federal actions on public lands.

Department of Defense, American Indian and Alaskan Native Policy (DoD 1998)

Army Regulation 200-1, Environmental Protection and Enhancement (DA 1997a)

Army Regulation 200-4, Cultural Resources Management (DA 1998)

Department of Defense Instruction 4715-3, Environmental Conservation Program, Under Secretary of Defense for Acquisition and Technology (DoD 1996).

Army Growth and Force Structure Realignment Programmatic Environmental Impact Statement (PEIS) 2002.

Burns, Mark. Air Quality Manager, Directorate of Public Works, Fort Irwin, California. *Record of Non-Applicability (RONA)*, April 1, 2008

### **Statutes**

- American Indian Religious Freedom Act of 1978 (42 U.S.C. §1996)
- American Antiquities Act of 1906 (16 U.S.C. § 431-433; 36 C.F.R. § 79)
- Archaeological and Historic Data Preservation Act of 1974 (16 U.S.C. § 469-469c)
- Archaeological Resources Protection Act of 1979 (16 U.S.C. § 470aa-470II; 36 C.F.R. § 79)
- Historic Sites, Buildings and Antiquities Act of 1935 (16 U.S.C. 461 *et seq.*)
- National Environmental Policy Act (42 U.S.C. § 4321 *et seq.*)
- National Historic Preservation Act of 1966 (16 U.S.C. § 470-470w)
- Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. § 3001-3013)
- Public Building Cooperative Use Act of 1976 (40 U.S.C. § 601-619)

### **Executive Orders**



- EO 11593 – Protection and Enhancement of the Cultural Environment
- EO 13007 – Indian Sacred Sites
- EO 13175 – Consultation and Coordination with Indian Tribal Governments
- EO 13327 – Federal Real Property Management

### **Presidential Memoranda**

- Government-to-Government Relations with Native American Tribal Governments

### **Federal Regulations and Guidance**

- Advisory Council on Historic Preservation (ACHP), Protection of Historic Properties, (36 C.F.R. § 800)
- Council on Environmental Quality, Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, (40 C.F.R. §§ 1500-1517)
- Department of the Interior, Curation of Federally-owned and Administered Archaeological Collections, (36 C.F.R. § 79)
- Department of the Interior, Determinations of Eligibility for Inclusion in the National Register of Historic Places, (36 C.F.R. § 63)
- Department of the Interior, National Historic Landmark Program, (36 C.F.R. § 65)
- Department of the Interior, National Register of Historic Places, (36 C.F.R. § 60)
- Department of the Interior, Preservation of American Antiquities, (43 C.F.R. § 3)
- Department of the Interior, Supplemental Regulations [per ARPA], (43 C.F.R. § 7)
- Department of the Interior, Waiver of Federal Agency Responsibility under Section 110 of the National Historic Preservation Act, (36 C.F.R. § 78)
- Department of the Interior, The Secretary of the Interior's Standards for the Treatment of Historic Properties, (36 C.F.R. § 68)

### **Military Regulations and Guidance**

- Department of Defense, Protection of Archaeological Resources, (32 C.F.R. § 229)
- *Supplemental Final Environmental Impact Statement*
- *National Training Center, Fort Irwin, CA August 2005, Page 3 - 84 Section 3 – Affected Environment*
- Department of Defense, American Indian and Alaskan Native Policy (DoD 1998)
- Army Regulation 200-1, Environmental Protection and Enhancement (DA 1997a)
- Army Regulation 200-4, Cultural Resources Management (DA 1998)
- Department of Defense Instruction 4715-3, Environmental Conservation Program, Under Secretary of Defense for Acquisition and Technology (DoD 1996).

## **7.0 Contributors and Preparers**

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Thies, Paul S. U.S. Army Environmental Command (USAEC), Aberdeen Proving Grounds, Maryland

### **8.0 List of Acronyms/Abbreviations**

ACR	Armored Calvary Regiment
AR	Army regulations
BCT	Brigade Combat Team
BO	Biological Opinion
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
DAR	Defense Access Road

DA	Department of the Army
DoD	Department of Defense
EA	Environmental Assessment
EIS	Environmental Impact Statement
FNSI	Finding of No Significant Impact
HBCT	Heavy Brigade Combat Team
HET	Heavy Equipment Transport
JPL	Jet Propulsion Laboratory
LURS	Land Use Requirement Study
MFR	Memorandum for Record
MOUT	Military Operations in Urban Terrain
MSR	Main Supply Route
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NTC	National Training Center
PAO	Public Affairs Office
PEIS	Programmatic Environmental Impact Statement
PM <sub>10</sub>	Particulate Matter 10
POL's	Petroleum, Oil, Lubricant's
ROD	Record of Decision
RONA	Record of Non-Applicability
ROI	Region of Influence
SFEIS	Supplemental Final Environmental Impact Statement
US	United States
USC	United States Code
UTM	Universal Transverse Mercator

## 9.0 QUESTIONS AND ANSWERS

Q1. What is the total increase of military vehicular traffic to the installation as a result of these actions?

*A1. The activating action will not result in a net increase of the post military traffic.*

Q2. Why is the Army expanding this road?

*A2. The proposed Route B Road Expansion is being established to provide the Army with the necessary training capabilities to meet Brigade Combat Team training requirements required by the Army Force Generation (ARFORGEN) process.*

Q3. Are there adequate lands available at Fort Irwin for this project?

*A3. Yes. Fort Irwin has the availability to expand the current road in order to gain access to the Western Expansion Area (WEA).*

Q4. Would this action impact the local environment?



*A4. Environmental Impact is minimal. Construction will be limited to grounds already disturbed within Fort Irwin training areas.*

Q5. Would road improvements in the Goldstone Route B area have an impact on local communities in and around Fort Irwin?

*A5. No, there will be no impact to surrounding communities as a result of this action.*

Q6. Would this action save the Army any money?

*A6. No. This action is designed to ensure the Army has the necessary training capabilities to meet current and future operational requirements.*

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# 10.0 Appendices

## Appendix A:

### Mach Memo



DEPARTMENT OF THE ARMY  
HEADQUARTERS, NATIONAL TRAINING CENTER AND FORT IRWIN  
FORT IRWIN, CA 92310-5000

REPLY TO  
ATTENTION OF:

Directorate of Public Works  
2008

3 June

MEMORANDUM FOR Muhammad Bari, Director of Natural Resources

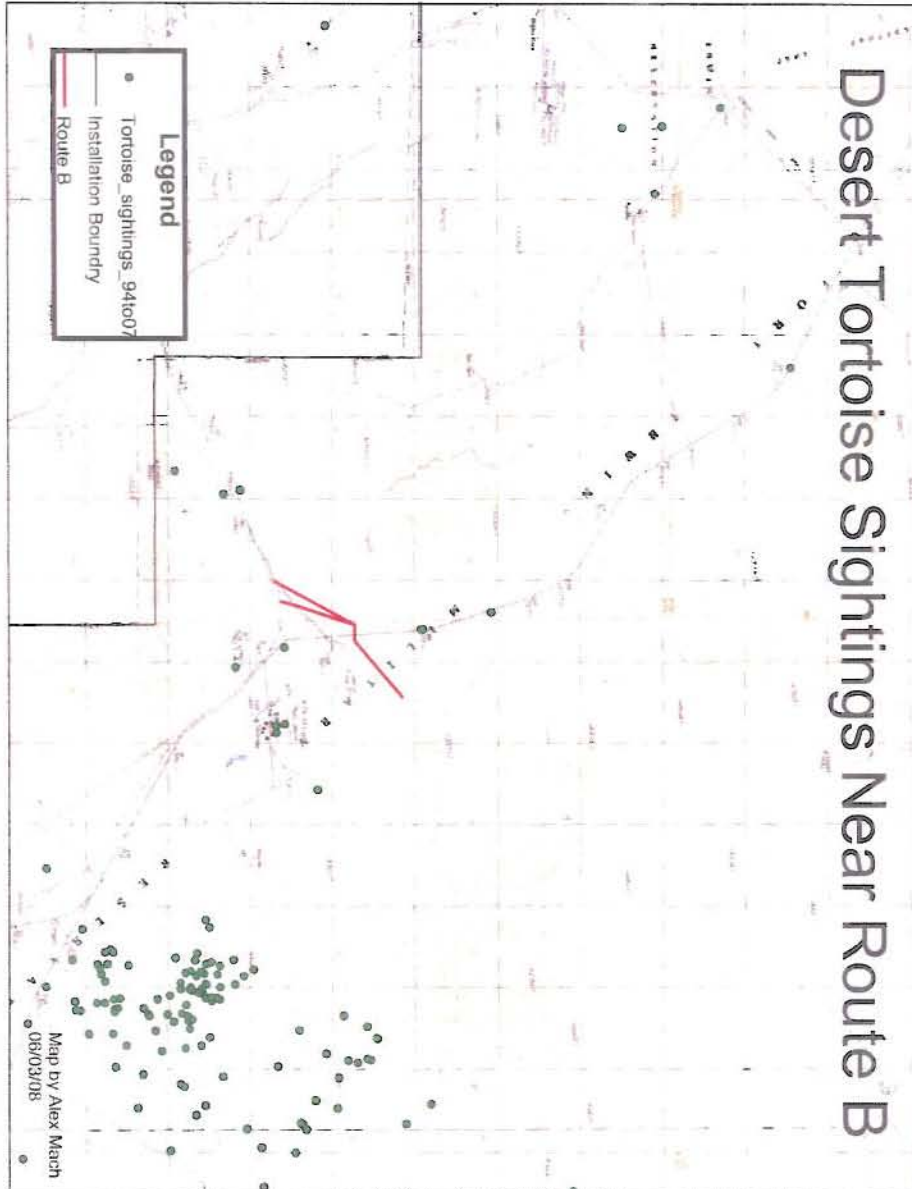
SUBJECT: Preliminary Route B Desert Tortoise/Sensitive Species survey

1. On 2 June 3, 2008 Ft. Irwin Natural Resource Specialist, Alex Mach, and NEPA Coordinator, Marco Garcia, conducted a preliminary survey of the habitat around the proposed Route B for desert tortoise (*Gopherus agassizii*), and lane mountain milkvetch (*Astragalus jaegerianus*).
2. The proposed Route B is in desert tortoise critical habitat. There have been several sightings in the project area (see attachment 1).
  - a. A desert tortoise presence/absence survey must be conducted by a qualified desert tortoise biologist just prior to the construction of Route B. The Directorate of Public Works (DPW) must be contacted at least two weeks prior to the construction start date to conduct the presence/absence survey (Alex Mach @ 4674).
  - b. Additionally, a qualified desert tortoise biologist must be present during construction of Route B following the presence/absence survey in the event of additional desert tortoise sightings.
3. It is not likely that Route B is in Lane Mountain milkvetch (LMMV) habitat. There have been several walking transects conducted in the area and no LMMV were found (see attachment 2).
4. If you have any questions or comments please contact me at X-4674 or at [alex.mach@us.army.mil](mailto:alex.mach@us.army.mil).

2 Attachments  
1. Desert tortoise sightings near Rt. B  
2. Lane mountain milkvetch transects

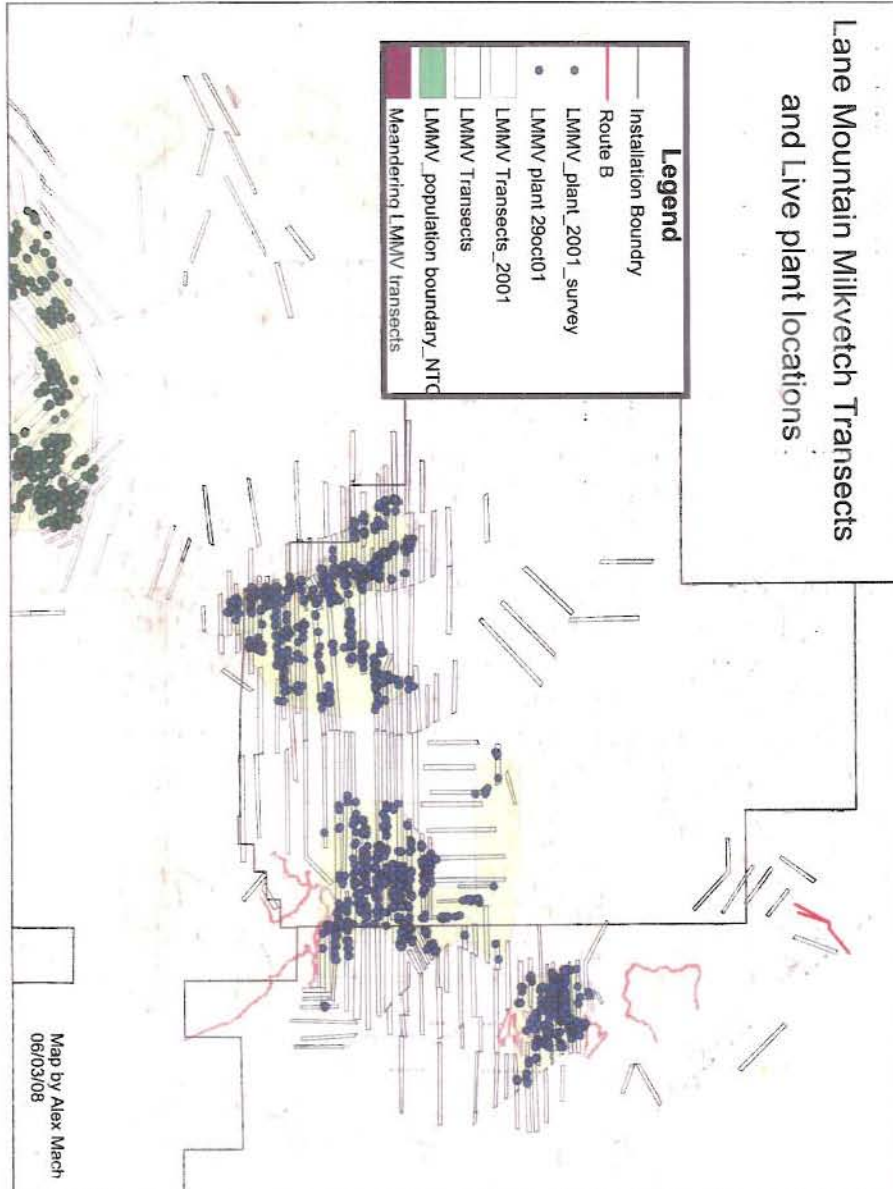
Alex Mach  
Directorate of Public Works  
Natural Resource Specialist

## Appendix B: Desert Tortoise Survey

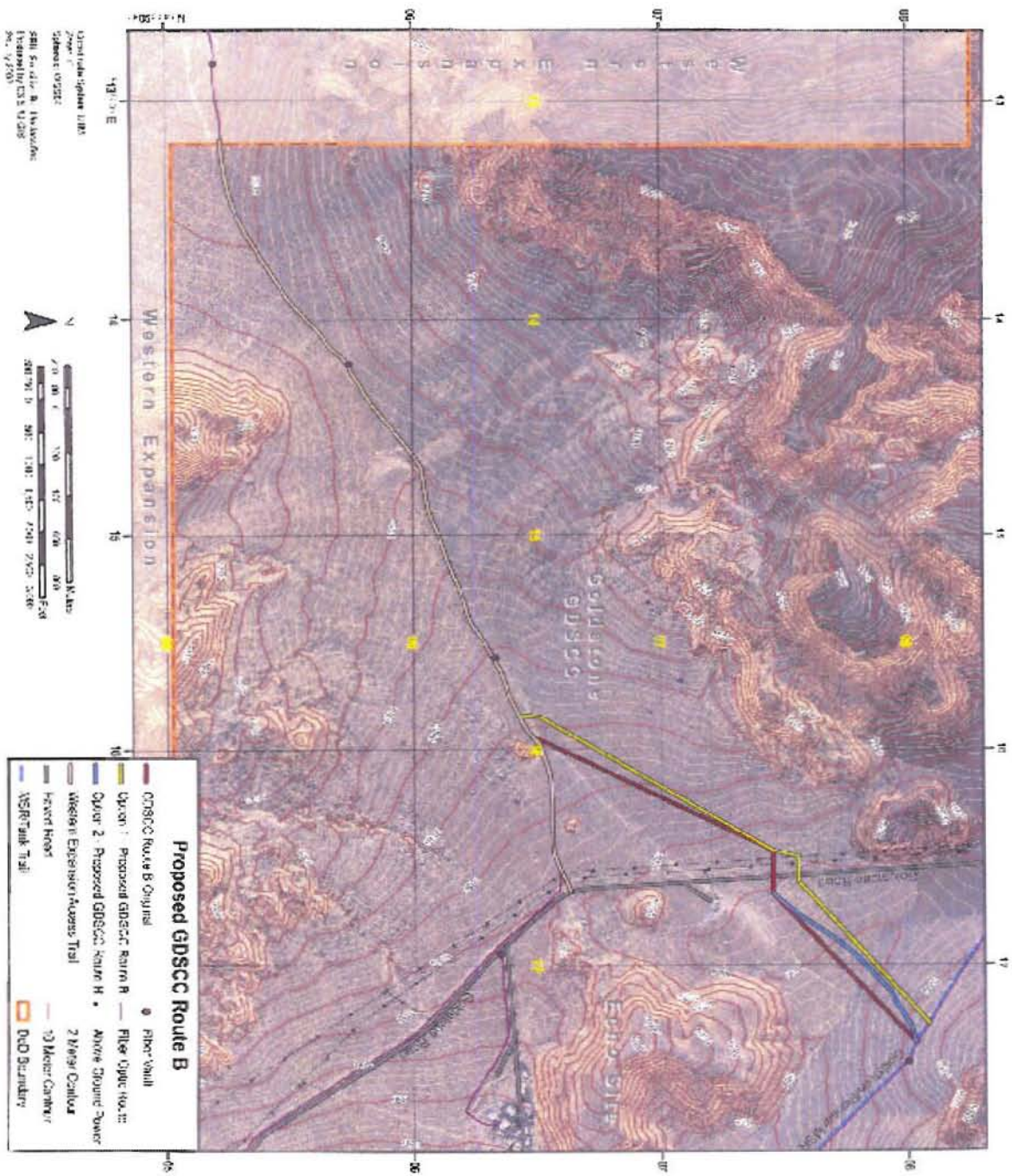




# Appendix C: Lane Mountain Milkvetch Survey



# Appendix D: Route B Map







FLOOD ZONE DESCRIPTIONS

Zone 1000000000 - 1000000000 and 400 Year Flood

1000 A - 50 base flood elevations determined. (100-yr Floodplain)

1000 B - Area flood elevations determined. (100-yr Floodplain)

1000 C - Flood depths of 1 to 3 feet, customary areas of potential base flood elevations determined. (100-yr Floodplain)

1000 D - Flood depths of 1 to 3 feet, customary areas of potential base flood elevations determined. No flood depth of area 100 L, 1000 L, 1000 T or 1000 U also determined. (100-yr)

1000 E-100 - Areas of 100 year flood peak levels elevations and flood hazard factors determined. (100-yr Floodplain)

1000 F - Areas of 100 year flood peak levels elevations and flood hazard factors determined. (100-yr Floodplain)

1000 G - Areas not included or incorporated areas not participating in flood insurance program. (100-yr)

1000 H - Areas between limits of the 100-year flood and 500-year flood in certain areas subject to 100 year flooding with average depths less than 17 feet in which the cost/benefit insurance area is less than 10 square feet or areas protected by levees from the base flood. (500-yr Floodplain)

1000 I - Areas of Special Flooding (e.g. Storage). (100-yr)

1000 J - Areas of unincorporated lot potential flood hazard (nondevelopment of floodplain in Federal Property where flood insurance not necessary but available).

1000 K - Special Flooding with velocity limitations with no base flood elevations determined. (100-yr Floodplain)

1000 L-100 - Areas of 100-year peak flood base elevations flood elevations and flood hazard factors determined. (100-yr Floodplain)

1000 L-500 - Areas of 500-year flood (100-yr) (100-yr)

1000 U-100 - Areas of 100-year flood (100-yr) areas of 100-year flood with average depths less than 17 feet and drainage areas less than 10 square feet. (100-yr Floodplain)

1000 V - Open Water areas near water bodies. (100-yr Floodplain)

† USGS Quads

DFIRM_ID	06071C	06071C
GFID	8A6771D2-8E79-8AA5-352D-C4813DEE5EA6	8A6771D2-8E79-8AA5-352D-C4813DEE5EA6
OBJECTID	17123	17123
QUAD_ID	1532966_198	1532966_198
QUAD_NM	East of Goldstone	East of Goldstone
QUAD_NO	35116-C7	35116-C7
SOURCE_CIT	1532966 BASE2	1532966 BASE2
AREA	0.0156249874086245	0.0156249874086245
LEN	0.499999798538964	0.499999798538964

† Political Jurisdictions

ANI_TF	F	F
CID	06FED	06FED
COMM_NO	FED	FED
COM_NFO_ID		
CO_FIPS	071	071
DFIRM_ID	06071C	06071C
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OBJECTID	33498	33498
POL_AR_ID	1532966_148	1532966_148
POL_NAME1	Fort Irwin National Training Center	Fort Irwin National Training Center
POL_NAME2	San Bernardino County Unincorporated Areas	San Bernardino County Unincorporated Areas
ST_FIPS	06	06
AREA	0.255272581711211	0.255272581711211
LEN	2.24776634697143	2.24776634697143

† DFIRM Panels

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NW_LAT	35 22 30	35 22 30
NW_LONG	116 52 30	116 52 30
OBJECTID	51385	51385
PANEL	2175	2175
PANEL_TYP	COUNTYWIDE, NOT PRINTED	COUNTYWIDE, NOT PRINTED
PCOMH	071C	071C
PNP_REASON	AREA ALL IN ZONE D	AREA ALL IN ZONE D
SCALE	24000	24000
SE_LAT	35 15 00	35 15 00
SE_LONG	116 45 00	116 45 00
SOURCE_CIT	1532966 BASE2	1532966 BASE2
ST_FIPS	06	06
SUFFIX	H	H
AREA	0.0156249874086245	0.0156249874086245
LEN	0.499999798538964	0.499999798538964

† ZIP Code Boundary

AREA	0	0
AVGHHSIZE	3.12	3.12
BUSINESSES	25	25
CITYNAME	BARSTOW	BARSTOW
COUNTY	071	071
EMPLOYEES	25	25
FAMS_90	1445	1445
FAMS_97	1481	1481
FAM_GROWTH	0.3	0.3
HHS_02	1901	1901
HHS_90	1793	1793
HHS_97	1840	1840
HH_GROWTH	0.4	0.4
ID	27382	27382
MDHHINC_02	36261	36261
MDHHINC_97	30988	30988
MEDAGE_90	25.2	25.2
MEDAGE_97	25.4	25.4
MFRATIO_97	144.8	144.8
OBJECTID	3559	3559

PAIDLOSS	0	0
PCAPINC_97	13959	13959
PCTAPOP90	3.8	3.8
PCTAPOP97	4.7	4.7
PCTBPOP90	16.6	16.6
PCTBPOP97	17.8	17.8
PCTHPOP90	12.1	12.1
PCTHPOP97	16.6	16.6
PCTWPOP90	74.4	74.4
PCTWPOP97	71	71
PERCENT_HH	49.6	49.6
PERIMETER	3	3
POPGROWTH	0.4	0.4
POP_02	7179	7179
POP_80	1955	1955
POP_90	6735	6735
POP_97	6922	6922
STATE	CA	CA
STATE_ABB	CA	CA
STATE_CODE	06	06
STCTY_CODE	06071	06071
ST_FIPS	06	06
TOP_ACORN	5C MILITARY PROXIMITY	5C MILITARY PROXIMITY
ZIP	92310	92310
AREA	0.292481144	0.292481144
LEN	2.64911391442388	2.64911391442388

→ National Communities

AUTHORITY	Y	Y
CENSUS_NAM	SAN BERNARDINO COUNTY	SAN BERNARDINO COUNTY
CID	060270	060270
CIS_NAME	SAN BERNARDINO COUNTY	SAN BERNARDINO COUNTY *
COMM_NO	0270	0270
COUNTY_NAM	SAN BERNARDINO	SAN BERNARDINO
CO_FIPS	06071	06071
C_TYPE	CO	CO
DESCRIB	REGULAR	REGULAR
DFIRM_DATA		
EFF_DATE		
FIPS_CITY		
HU_2000	126869	126869
H_DATUM		
MAPPED	Y	Y
MAP_TYPE	CW	CW
MSC_ID		
NUMCOUNTY	1	1
NUM_FBFM	0	0
NUM_MAPS	156	156
NUM_STUDIE	4	4
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PAN_DATA	03/18/1996	03/18/1996
PLACE		
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PRLIM_DATE		
REGION	09	09
STATE_ABBR	CA	CA
STATE_NAME	CALIFORNIA	CALIFORNIA
STATUS_MAP	BAD BASE	BAD BASE
ST_FIPS	06	06
V_DATUM		
AREA	4.91986476062896	4.91986476062896
LEN	19.6804303824637	19.6804303824637

→ PLSS Sections

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PLSS_AR_ID	1532966 17865	1532966 17865
RANGE	01E	01E
SECT_NO	24	24



SOURCE\_CIT1532966 BASE6  
TWP 14N  
AREA 0.000258701263334095  
LEN 0.0648115078846438  
+ National Panels

1532966 BASE6  
14N  
0.000258701263334095  
0.0648115078846438

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**Appendix F:  
NASA GOLDSTONE  
Comments & Responses**

*Route B will bisect the Goldstone Deep Space Communication Complex (GDSCC), a federal facility control by NASA. Within the NTC, through agreements with the Department of the Army, NASA operates GDSCC, on permitted property, which is a part of the Global Deep Space Network responsibility for communicating with spacecraft.*

**RESPONSE: Concur- incorporated the edit**

*1.3: The relevant laws and regulations include, but are not limited to, the National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] 4321 et seq.), the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508), Department of Interior Regulations at 516 DM 11 require consideration of environmental consequences of federal actions on public lands, and applicable published Army documents; the Supplemental Environmental Impact Statement (SFEIS) for the Proposed Addition of Maneuver Training Lands at Fort Irwin (March 3, 2003), the Integrated Cultural Resources Management Plan (ICRMP) and the Integrated Natural Resources Management Plan (INRMP).*

**RESPONSE: Concur-Incorporated the edit**

*General Comment: Recommend including additional authorization base requirements to include the biological opinions, various DOD and Army Regulations concerning safety, security, environmental (e.g. AR 200-2, 32 CFR Part 651, "Environmental Analysis of Army Actions; Department of Defense (DOD) Directive 6050.1, "Environmental Effects in the United States of Department of Defense Actions"; Army Regulation 385-10, The Army Safety Program). It is also recommended that AR 200-1 be referenced for cultural and endangered species factors, and especially with regard to documenting and implementing spill prevention, control, and countermeasures plans for motor marches and convoys*

## **2.0 Affected Environment**

### **2.1 Introduction**

The following sections summarize the existing condition of the environmental resources and factors that would affect or would be affected by implementing any of the proposed action. The Bureau of Land Management (BLM) guidance provides that all critical elements of the environment be considered in environmental analyses. The critical elements that are being analyzed are discussed in section 3.1.1. Certain elements have been considered and dismissed from further discussion because they are either not present or not affected.

### 2.1.1 Critical Elements of the Human Environment

The following elements of the human environment are subject to requirements specified in statute, regulation, or executive order and must be considered in all EA's and EIS's. If the resource or value is not present or is not affected by the proposed action or alternatives, this may be documented in the EA or EIS as a negative declaration.

Element	Relevant Authority	Potentially Affected
Adverse Energy Impacts	E.O. 13211, as amended, 5/22/01 Energy Policy Act of 2005 (42 USC 13201)	No – not pertinent to non-energy projects
Air Quality	The Clean Air Act as amended (42 USC 7401 et seq.); MS 7000	Yes - <b>What is the explanation</b>
Areas of Critical Environmental Concern	Federal Land Policy and Management Act of 1976 (43 USC 1701 et seq.): MS 1617	No – no ACEC within the project area
Cultural Resources	National Historic Preservation Act as amended (16 USC 470): MS 8100	<b>No Yes – present in potentially affect area Non-concur; No petroglyphs impacted due to road.</b>
Environmental Justice	E.O. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 2/11/94	No – all access is on federal lands away from populated areas, no disproportionately high/adverse effects on minority or low-income populations
Farm Lands (prime or unique)	Surface Mining Control and Reclamation Act of 1977 (30 USC 1201 et seq.)	No – not present in the potentially affected area
Floodplains	E.O. 11988, as amended, Floodplain Management, 5/24/77; MS 7260	<b>No – not Yes - present in the potentially affected area Non-concur; Road is not in flood plain.</b>
Invasive, Nonnative Species	Lacey Act, as amended Federal Noxious Weed Act of 1974, as amended Endangered Species Act of 1973, as amended E.O. 13112, Invasive Species, 2/3/99; MS 1745 MS 6840 MS 9011 MS 9014 MS 9015	No <b>What is the explanation?</b>
Migratory Birds	Executive Order 13186, 1/10/01	No – not affected by the proposed action



Native American Religious Concerns	American Indian Religious Freedom Act of 1978 (42 USC 1996); MS 8100	No Yes – Avoiding petroglyphs Non-concur; see mitigation measures to avoid Desert Tortoise impacts
Threatened or Endangered Species	Endangered Species Act of 1973, as amended; MS 6840	No Yes – moving Desert Tortoise in 4.12
Wastes, Hazardous or Solid	Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.) Comprehensive Environmental Response, Compensation, and Liability Act of 1980 as amended (42 USC 9615); MS 9180 MS 9183	Yes  See response section to paragraph 3.5
Water Quality Drinking/Ground	Clean Water Act of 1987 Safe Drinking Water Act Amendments of 1996 E.O. 12088, Federal Compliance with Pollution Control Standards (Amended by E.O. 12580, Superfund Implementation), 10/13/78, 2/23/87 E.O. 12372, Intergovernmental Review of Federal Programs, 7/14/82; MS 7240	No  What is the explanation
Wetlands/Riparian Zones	E.O. 11990, Protection of Wetlands, 5/24/77; MS 1737	No
Wild and Scenic Rivers	Wild and Scenic Rivers Act as amended (16 USC 1271); MS 8351	No – not present in potentially affected area
Wilderness	Federal Land Policy and Management Act of 1976 (43 USC 1701 et seq.) Wilderness Act of 1964 (16 USC 1131 et seq.); MS 8500	No – not present in potentially affected area

### Review comments

3.1.1 Chart, it would very helpful if the supporting back-up documentation (e.g., studies) was readably available to NASA, other agencies, and the public in order to support the conclusions of "no impact" listed in the chart. The "no impact" conclusion on the chart relative to Native American Religious concerns and the ESA is incongruent with actual knowledge about Goldstone since the Route B metes and bounds are being established so as to avoid/mitigate potential impact of the proposed action. Similarly, the draft EA states there is no potential to affect threatened and endangered species, yet in section 4.12, there is a discussion on mitigation and removal of Desert Tortoises.

**RESPONSE:** Chart under paragraph 3.1.1 will be named as “Table-1” and will be mentioned throughout the EA as Table-1. All documents and SFEIS are public documents and all available. This EA tiered from SFEIS and based on the detailed studies conducted during the completion of SFEIS. Fort Irwin complies with all requirements of Biological Opinion issued by USF&WS. All mitigation requirements has been incorporated in this EA.

*3.2: It is unclear what disturbed surfaces mean since it is not defined*

**RESPONSE:** “disturbed areas” means all the training lands within NTC. Reference sentence is self explaining.

*traversing Route B. Furthermore, with regard to the operation and control of motor marches*

**RESPONSE:** Non-concur; are relevant requirements were considered in the SFEIS dated March 2003. This EA is tiered from SFEIS.

*3.4: Comment: Since Route B will be on Goldstone, the discussion on biology should probably be the same as what NASA says it is. Therefore, recommend borrowing language from the Goldstone Environmental Baseline document or any recent Goldstone EA. This will ensure consistency of descriptions and thoroughness of analysis for Section*

**RESPONSE:** This tiered EA is based on SFEIS. The mitigation requirements of Biological Opinion issued on the SFEIS has been incorporated in this EA.

*3.4.1: Missing species: Desert Tortoise, Desert Quail, Lynx, Bobcat, Cougar, Kid and Gray Foxes, Ground Nesting Owls, etc., etc.*

**RESPONSE:** concur-information incorporated.

*3.4: The reference study, given that it is 5 years old, may contain stale data. A refreshed study would be more appropriate. Also, the section seems to be missing the Lane Mountain milk-vetch*

**RESPONSE:** Non-concur. SFEIS and associated documents are the latest available documents. NASA BO and the studies are even older than these documents.

*3.5: The proposed project site is currently permitted property managed training area by NASA for deep space communication operations. The ROI under the control of DA may contain motor oil, hydraulic fluid, anti-freeze, battery acid, and other vehicle fluids that do not readily dissipate and require special management upon disposal under state or federal law. **Illegal dumping sites may potential exist that contain solid waste, however, no sites are currently known to exist along the proposed project site.** All rotating training units are responsible for having appropriate standard operating procedures (SOP's) to handle hazardous material, hazardous waste, solid waste and human waste in*



*accordance with Army, local, state, federal regulations. The NTC will ensure that all rotating training units have these SOP's before using Route B.*

**RESPONSE:** Referenced illegal dumping refers to the illegal dump sites discovered during the survey of expansion lands. These dumps have been cleared. Reference is unnecessary and will be omitted.

*Comment: It is unclear why the highlighted section with its reference to "illegal dumping" is included in the EA. There are no historic release records NASA is aware of suggesting improper disposal location. If, on the other hand, the Army is aware of such practices, NASA would welcome such a disclosure and would invite the Army for a discussion on this topic.*

**RESPONSE:** Reference is unnecessary and will be omitted.

*Examining what sort of "precautions will be taken to keep soldiers and civilians "as safe as possible" is an essential aspect of NASA's review of the EA and concurrence of the proposed action at Goldstone. Specifically, in order for NASA to fulfill its stewardship responsibilities as the executive agency responsible for Goldstone, NASA should review how the Army will handle hazardous materials, hazardous waste, solid waste and human waste generated or released by vehicle convoys using the proposed Route B roadway in the future.*

**RESPONSE:** Non-concur. This document does not cover what kind of safety measures are taken during the Army training mission. The Army does not require any outside agency concurrence on its training scenarios.

*3.6: An elevated risk is always present during training activities. The more people and vehicles that are added the more potential for an accident to occur. The NTC and Fort Irwin take precautions to keep the soldiers and civilians as safe as possible [unclear what "as safety as possible" means?] when within the installation boundary. These precautions limit the amount of risk to acceptable levels. All rotating training units are responsible for having appropriate SOP's to minimize risk in accordance with Army, state, federal regulations dealing with civilian health and safety. The NTC will ensure that all rotating training units have these SOP's and the unit's have conducted a safety risk assessment before using Route B.*

**RESPONSE: Comment incorporated.**

*3.7: All rotating training units are responsible for having appropriate SOP's dealing with military transportation in accordance with Army, state, federal regulations. Vehicle convoys shall follow standard operating procedures (SOPS) identified in the NTC Rules of Engagement.*

### **3.8 Noise**

The Region of Influence (ROI) is in the vicinity of the NASA Goldstone Complex, which also serves as a main corridor for Fort Irwin travel. Any complaints about noise would be directed toward the appropriate NTC representative. In the event that increases in noise are observed, mitigation would be initiated.

### **3.9 Land Use**

The proposed project site is currently permitted property managed training area by NASA for deep space communication operations. The land use in the area proposed project site will not be changed due to this project. Development will be in accordance with the proposed land use designation in the area (NASA deep space communication operations) and it will match existing NTC training uses on adjacent sites. No significant impacts are expected.

#### **RESPONSE: Comment incorporated**

*3.9 : The proposed project site is currently permitted property managed training area by NASA for deep space communication operations. The land use in the area proposed project site will not be changed due to this project. Development will be in accordance with the proposed land use designation in the area (NASA deep space communication operations) and it will match existing NTC training uses on adjacent sites. No significant impacts are expected.*

*Executive Order 12989 – Federal Actions to Address Environment Justice in Minority Populations and Low-Income Populations*

#### **RESPONSE: Comment incorporated**

*4.0: provides little detail relative to analysis of the Alternatives, especially with regard to why a particular alternative was eliminated from consideration and the Route B alternative selected.]*

**RESPONSE: The alternatives and the commentary are self explaining. The Army has incorporated NASA comments.**

*4.3.1: Given the stewardship and regulatory obligations of both Agencies, protecting cultural resources at Goldstone is a shared responsibility of both the Army and NASA. Therefore, as part of NASA's review and consent for the proposed action, NASA looks forward to reviewing the Army's proposed management controls (e.g., standard operating procedures) that demonstrate how it plans to protect the cultural resources near Route B.*

**RESPONSE: Cultural Resources management has been and is the Army responsibility. The Army is very proud of its Cultural resources management Program. All Cultural Resources are managed according to the MOA between the Army and the SHPO. Within Goldstone Complex all Cultural Resources**



management activities are conducted as per existing MOU between NASA and the Army.

*4.5.1: Hazardous materials that may be produced on-site or introduced to the proposed project site include motor oil, hydraulic fluid, anti-freeze, battery acid, and other vehicle fluids. Vehicle operation and potential maintenance could generate or release soils contaminated with materials containing petroleum, oil, and lubricants (POL's) into the soil. However, existing rotation training unit standard operating procedures (SOP's), DA protocols, and Fort Irwin spill plans would be followed and therefore no significant effects are expected from convoy spills or accidents involving hazardous materials, hazardous waste, and solid waste, and human waste released.*

**RESPONSE:** All home and rotational units are required to comply with RCRA and other local, federal and Army Regulations. Rotational units bring Environmental Cleanup team that works with Fort Irwin Environmental Office to ensure compliance with reporting and cleanup requirements.

*4.7: It is unclear whether Route B will to be used for transporting ammo, training aids, or pyrotechnic devices. A discussion about the Army's risk assessment and risk management procedures for transporting such items would be helpful particularly in light of the various Army regulations associated with motor marches and convoys (e.g., AR 383-55, AR 55-29, AR 55-162, AR 600-55, FM 3-20, FM 55-30, and FM 55-312).*

*While not a part of the EA per se, NASA looks forward to reviewing the Army's proposed management controls (e.g., standard operating procedures) that demonstrate how it plans to protect the soldiers, civilian workers, and the public relative to convoy operations on and around Route B (e.g., safety procedures; spill response and containment).*

**RESPONSE:** The Army adheres to all applicable laws and regulations to ensure soldiers training requirements are met. Adherence to these laws and regulations are not part of this EA. Transportation and logistics are part of scenarios development to meet training needs and are not part of this EA.

#### 4.8 Noise

The proposed project potentially may cause an increase in noise levels around the Goldstone Deep Space Communication Complex (GSDSCC) during the construction phase. The Route B Road is approximately 3.5 miles in length and intersects Goldstone main roadway know as the NASA Road to the NW of the GDSCC HQ buildings and moves SW toward to the Western Expansion/Superior Valley area.

The nearest Goldstone antenna in relation to the proposed Route B is approximately one mile away. This represents the closest area that a slow moving convoy will would approach the NASA Goldstone Complex.

Appendix "NN" includes a map depicting the general metes and bounds for the proposed

Route B. *has been agreed upon by both NASA, and Fort Irwin NTC.* Any complaints about noise *will would* be directed toward the *Fort Irwin Public Affairs Office (PAO)* appropriate NTC representative. In the event that increases in noise are observed, mitigation *will would* be initiated.

Comment: Suggest adding more detail relative what the mitigation measures might be and what standard or requirement these measures would meet.

4.8: *Appendix “NN” includes a map depicting the general metes and bounds for the proposed Route B. has been agreed upon by both NASA, and Fort Irwin NTC.* Any complaints about noise *will would* be directed toward the *Fort Irwin Public Affairs Office (PAO)* appropriate NTC representative. In the event that increases in noise are observed, mitigation *will would* be initiated.

Suggest adding more detail relative what the mitigation measures might be and what standard or requirement these measures would meet.

**RESPONSE: The paragraph is self explanatory**

4.8: *Appendix “NN” includes a map depicting the general metes and bounds for the proposed Route B. has been agreed upon by both NASA, and Fort Irwin NTC.* Any complaints about noise *will would* be directed toward the *Fort Irwin Public Affairs Office (PAO)* appropriate NTC representative. In the event that increases in noise are observed, mitigation *will would* be initiated.

Suggest adding more detail relative what the mitigation measures might be and what standard or requirement these measures would meet.

**RESPONSE: The paragraph is self explanatory**

4.11: *No significant cumulative impacts were identified.*

Comment: *Given the brevity of the draft EA, especially with regard to the identification and analysis of alternatives, the public may find it difficult to see how the Army reaches the “no significant cumulative impact” conclusion. See earlier comments relative to bolstering the alternatives and analysis sections.*

**RESPONSE: Non-concur. This document is tiered from SFEIS. Cumulative impacts has been identified in the SFEIS. Route-B project does not pose any new impacts. Vehicle use and transportation has been covered in the SFEIS.**

4.12 & 4.13: *Including mitigation measures in an EA are often an effective and proactive way to address impacts that would generally not fall into the “significant” category. Given the long term and on-going relationship between the Army and NASA, it may be appropriate to include these mitigation measures in often discussed umbrella interagency support agreement between NASA and the Army.*



- *If culverts are constructed, they will be designed to accommodate potential use by Desert Tortoises.*

- *The road will be improved with the low-dust compacted gravel, resin-impregnated pavement, or concrete to reduce potential dust impacts to sensitive wildlife plants.*

**RESPONSE: Dust Suppressants will be used to reduce PM10 as required. Other mitigation measures has been discussed in paragraphs 4.12 and 4.13.**

**Paragraph will read as “The road will be improved with the existing sub-grade compacted gravel to reduce potential dust impacts to sensitive wildlife and plant species.**

#### **4.13**

- *Army military and civilian personnel will would honor “radio silence” requirements while crossing the Goldstone Complex area. Vehicle convoys shall follow standard operating procedures (SOPS) identified in the NTC Rules of Engagement. [Given the operational and safety concerns associated with spectrum issues, what is the SOP for verifying that spectrum issues are addressed appropriately during convoy movement?*

**RESPONSE:** Comment noted. Spectrum issues will be resolved between G-6 (sepectrum management and NASA officials.

- *It has also been agreed [what agreement?] that the military “road guards” would install traffic signals at the Route B crossing with the NASA Road and will would maintain traffic and convoy safety while transitioning across Goldstone property to the Western Expansion/Superior Valley Area. Vehicle convoys shall follow standard operating procedures (SOPS) identified in the NTC Rules of Engagement.*

**RESPONSE:** Comment noted. The paragraph will be revised to mention that convoys need to follow their convoy movement SOPs.

*EO 12898 – Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*

**RESPONSE: Concur-Comment noted.**

*Appendix A: Total direct and indirect emission from this project/action have been estimated at 16,038 tons of PM10, 73.72 tons of nitrogen oxide emission, 15.06 tons of volatile organic compound emissions a year and are below the conformity threshold value established at 40 CFR 93.153(b) of 100 tons of PM10, 25 tons of nitrogen oxide emissions, 25 tons of volatile organic compound emissions a years. For PM10 and NO, the levels generated are at or below current levels. Thus, the land acquisition itself is exempt from the conformity determination process. AND [While NASA does not have data to verify these estimated emissions, these estimates do not look accurate to us.*

*Please double check the data and estimates] below current levels. Thus, the land acquisition itself is exempt from the conformity determination process. AND [While NASA does not have data to verify these estimated emissions, these estimates do not look accurate to us. Please double check the data and estimates]*

RESPONSE: General Conformity calculations are derived from the cumulative impact of SFEIS. Route-B project does not add any new emissions other than temporary emissions during construction that are *de-minimis* and are below the conformity threshold values.