

SECTION 1.0
INTRODUCTION AND PURPOSE AND NEED



1.0 INTRODUCTION AND PURPOSE AND NEED

1.1 Introduction

This Environmental Assessment (EA) addresses the potential effects, beneficial and adverse, of the placement of up to 50 portable lights, as needed, within 60 feet of the United States (U.S.)-Mexico border from the Pacific Crest Trail (PCT) to the Imperial County line; the construction of three night vision scope pads and access roads; the installation or repair of four drainage structures; the installation of an approximately 300-foot long bollard fence section near Jacumba; blasting activities; and the installation of two water wells and holding tanks by the U.S. Border Patrol (USBP). All construction activities would take place between Canyon City, California and the Imperial County line in San Diego County. These improvements have been proposed by USBP in an effort to enhance the USBP's capability to gain, maintain, and extend control of the U.S.-Mexico border.

This EA will address new actions and update alternatives addressed in previous National Environmental Policy Act (NEPA) documents and evaluate additional alternatives selected for this project. Therefore, this document is tiered from the Final Supplemental Programmatic Environmental Impact Statement (EIS) for the Immigration and Naturalization Service (INS) and Joint Task Force-Six (JTF-6) Activities (INS 2001) and supplements the Final EA for Border Road Maintenance and Construction, Tecate to Campo, San Diego County, California (USACE 1997); the Final EA for Border Road and Fence: Construction and Repair from Campo to Jacumba, San Diego County, California (USACE 1994); and the Final EA for Border Road and Fence: Construction and Repair from Tecate to Canyon City, San Diego County, California (USACE 1993).

1.2 Background and History

1.2.1 INS Organization

The INS has the responsibility to regulate and control immigration into the United States. In 1924, the U.S. Congress created the USBP to be the law enforcement arm of the INS. The USBP's primary function is to detect and deter the unlawful entry of undocumented aliens (UDAs) and smuggling along the United States' land borders and between the

ports-of-entry (POEs). With the increase in illegal drug trafficking, the USBP also has become the leader for drug interdiction between land POEs. Since 1980, an average of 150,000 immigrants have been naturalized every year. At the same time, however, illegal aliens have become a significant issue. Apprehension rates for INS are currently averaging more than 1.5 million illegal aliens throughout the country per year. At present, the INS estimates that there are seven to nine million illegal aliens in the United States.

The INS has reported that the U.S.-Mexico border is breached more than any other international border in the world. It is a large, diverse, and difficult boundary to effectively enforce without the use of dedicated tactical infrastructure (fences, lights, roads, cameras and scopes, etc.).

Prior to the early 1990s, there was less awareness of southwest border issues and less national attention was given to illegal trans-boundary activity. As a result, the USBP's growth was nominal, funding for enforcement efforts fell short, and the USBP functioned under severe constraints. Events over the last decade, however, related to illegal immigration and smuggling have increased the Nation's awareness and generated substantial interest in controlling the U.S.-Mexico border. This has resulted in increased funding and staffing and created new opportunities in the development of proactive border control strategies as demonstrated in patrol and enforcement operations throughout the southwest border area (e.g., Operations Gatekeeper, Hold-the-Line, Safeguard, and Rio Grande).

The anti-terrorism role of the INS is an important function of the agency; however, since the September 11, 2001 attack, this role has increased and is now more important than ever. This increased function to fight terrorism requires more vigilance along the borders. All enforcement activities, subsequent infrastructure, and technological improvements such as roads, fencing, remote video surveillance (RVS) systems, and lighting, are necessary elements in securing our borders.

Past enforcement strategies were reactive, and little emphasis was placed on the importance of infrastructure (e.g., lights and fences) along the U.S.-Mexico border. As illicit trafficking increased, the area that the USBP patrols has also increased. The

USBP's inability to deter or contain illegal migration resulted in an increase in the geographic footprint and their subsequent potential for environmental impacts.

In recent years, the USBP significantly increased its emphasis on deterrence. Deterrence is achieved only when the USBP has the ability to create the immediate, credible, and absolute certainty of detection and apprehension. Tactical infrastructure components, such as fences, scope sites, RVS, and lighting, are a critical element in the current enforcement strategy. The continued urbanization and industrialization of the immediate border, the recognition of environmental preservation concerns, the movement of illegal activities as a result of other border infrastructure projects along the southwest border, and the increase of criminal trans-boundary activities (including trafficking in people and drugs) and counter terrorism efforts continue to pose a border enforcement challenge and compound the need for tactical infrastructure.

1.2.2 Regulatory Authority

The primary sources of authority granted to officers of the INS are the Immigration and Nationality Act (INA), found in Title 8 of the United States Code (USC), and other statutes relating to the immigration and naturalization of aliens. Secondary sources of authority are administrative regulations implementing those statutes, primarily those found in Title 8 of the Code of Federal Regulations (8 [CFR] Section 287), judicial decisions, and administrative decisions of the Board of Immigration Appeals. In addition, the Illegal Immigration Reform and Immigrant Responsibility Act mandates INS to acquire and/or improve equipment and technology along the border, hire and train new agents for the border region, and develop effective border enforcement strategies.

Subject to constitutional limitations, INS officers may exercise the authority granted to them in the INA. The statutory provisions related to enforcement authority are found in Sections 287(a), 287(b), 287(c), and 287(e) [8 USC § 1357(a,b,c,e)]; Section 235(a) [8 USC § 1225]; Sections 274(b) and 274(c) [8 USC § 1324(b,c)]; Section 274(a) [8 USC § 1324(a)]; and Section 274(c) [8 USC § 1324(c)] of the INA. Other statutory sources of authority are Title 18 of the United States Code (18 USC), which has several provisions that specifically relate to enforcement of the immigration and nationality laws; Title 19 [19 USC § 1401(i)], relating to U.S. Customs Service cross-designation of INS officers; and Title 21 [21 USC § 878], relating to Drug Enforcement Agency cross-designation of INS

officers. Effective 1 March 2003, the USBP and INS were transferred to the Department of Homeland Security.

1.2.3 San Diego Sector

The mission of the USBP San Diego Sector is to protect the U.S.-Mexico border through the detection and prevention of smuggling and illegal entry of aliens into the U.S. The San Diego Sector is responsible for approximately 7,000 square miles and more than 66 linear miles along the U.S.-Mexico border. Although geographically the San Diego Sector is the smallest of the USBP sectors, it is responsible for approximately 40% of all apprehensions nationwide. The San Diego Sector consists of seven USBP stations: Brown Field, Campo, Chula Vista, El Cajon, Imperial Beach, San Clemente, and Temecula. The proposed project would occur within the Campo Station's Area of Operation (AO).

The San Diego Sector uses a variety of methods to detect and deter UDAs and smugglers. Deterrence is accomplished through the presence (24 hours per day, seven days per week) of the USBP agents on the border, fences, and other physical barriers (natural and man-made), lighting, and the knowledge that the illegal entrants will be detected and apprehended. Detection of the UDAs and illegal traffickers is accomplished through a variety of low and high technology resources. These include observing physical signs of illegal entry (vehicle tracks and footprints, clothes, etc.), visual observation of the illegal entries from the ground or from aerial reconnaissance, information provided by private landowners or the general public, ground sensors, and RVS systems and other night vision scope sites.

The San Diego Sector is currently employing a border enforcement program called Operation Gatekeeper. Operation Gatekeeper is a complex and diverse program that uses increased surveillance, remote sensing methods and technologies, search and rescue missions, personnel deployment, and other related tasks to detect and deter UDAs and smugglers from entering the U.S. Since the inception of Operation Gatekeeper 7 years ago, record numbers of smugglers have been prosecuted, alien traffic has been deterred from the area, and the border enforcement strategy has disrupted smuggling operations.

Table 1-1 shows the total number of apprehensions from fiscal year (FY) 1996 through December 17, 2002. This table shows the number of apprehensions decreasing due, in part, to continuous improvements to the border enforcement programs.

Table 1-1: San Diego Sector Apprehensions from FY 1996 through December 2002

Fiscal Year	Total Number of Apprehensions in the San Diego Sector
FY 1996	441,541
FY 1997	258,777
FY 1998	246,871
FY 1999	176,201
FY 2000	147,865
FY 2001	102,138
Oct 01, 2002 - Dec 02, 2002	104,903

Source: USBP 2002a

1.2.4 Campo Station

The Campo Station is responsible for approximately 32.5 miles of international border between the U.S. and Mexico and has an AO that encompasses over 1,061 square miles. The AO extends from just east of Tecate, California, and continues east to the Imperial County line. The northern boundaries for the AO run from Mount Laguna, California, west to Alpine, California (USBP 2002b).

There are currently about 250 agents and staff assigned to the Campo Station and it is projected to have 350 agents by the end of FY 2003. The station is also responsible for the sub-station located in Boulevard, California with approximately 59 agents staffed there.

1.2.5 Bureau of Land Management (BLM)

The Bureau of Land Management (BLM) is a Federal agency within the Department of the Interior and manages approximately 262 million acres of land in the western U.S. The primary law by which the BLM manages public lands, or land set aside by the Federal government for natural resource management and recreation, is through the Federal Land Policy and Management Act (FLPMA) of 1976. This law grants the BLM authority to give permission to the USBP to maintain roads on public lands.

Revised

The California Desert Conservation Area (CDCA), a 25 million-acre area in southern California, was set aside through the FLPMA for the protection and use of the desert. The BLM manages approximately 10 million acres of this conservation area. The CDCA has been divided into five resource areas. Several of the proposed project components fall within the South Coast Resource Area.

1.3 Location of the Proposed Action

Revised

The project area covers various sites between Canyon City, just east of Tecate, California and the Imperial County line (Figure 1-1). Some of the actions (i.e., portable lights and blasting) addressed in this document would occur within the 60-foot Roosevelt Easement along the international border. Other items such as the construction of night vision scope pads and access roads would occur within one mile north of the international border. Two of the proposed drainage structures, five blasting sites, one scope pad and approximately 211 feet of access road construction at Airport Mesa, and the two water well and concrete holding tank sites would be located on public land managed by the BLM; the rest of the proposed actions would occur on private landholdings.

1.4 Purpose and Need

The USBP are charged with the responsibility of protecting the sovereign borders of the U.S. The USBP has reported that the U.S.-Mexico border is breached more than any other international border in the world. It is a large, diverse, and difficult boundary to effectively enforce without the use of dedicated tactical infrastructure (fences, lights, roads, scope sites, etc.).

The purpose of these proposed actions is to create safer working conditions for the USBP and in so doing, deter UDA activities. These UDAs pass through the border areas, threaten public lands, historical structures, and Federal and state protected species and habitat. Vehicles used by smugglers are continuously abandoned in National Parks and other natural and sensitive areas. Dealing with the detrimental effects of UDAs is becoming an ever-increasing burden on Federal and state land managers, private



Figure 1-1: Vicinity Map

landowners, as well as the USBP. UDAs have trampled vegetation, started wildland fires, left litter, and abandoned vehicles throughout the entire border region.

Furthermore, many UDAs attempt to enter the U.S. through harsh environments with dangerous conditions. Many areas of the border are vast, undeveloped areas that represent a danger to the UDAs from exposure to high temperatures in the summer and below freezing temperatures in the winter. The USBP agents are increasingly responsible for rescuing UDAs from heatstroke, snakebites, dehydration, hypothermia, or from being lost. Detection of UDAs before they access these harsh environments will reduce injuries and help prevent the loss of life.

- Night Vision Scope Pad and Access Road Construction

There is a need to provide surveillance capabilities that would allow the USBP to quickly and effectively detect and apprehend illegal aliens and drug traffickers. The purpose of the proposed night vision scope pads, and associated access road construction, is to provide necessary, more effective surveillance to a larger area, improve response time, and enhance the safety of the USBP agents. This is especially important at night when illegal entry attempts are highest. These night vision scope pads allow one agent to monitor an area with a much-improved field of vision. The scope pads and access roads also facilitate the USBP's mission to better gain and maintain control of the U.S.-Mexico border.

The need for the proposed scope pads and access roads is based on increased border activity and the limited manpower available to the USBP. Sites selected for scope pads provide a high-ground lookout in remote, hilly areas for the USBP to monitor larger areas.

- Drainage Structures

The USBP agents patrol hundreds of border road miles each day using 4-wheel drive vehicles, all-terrain vehicles, horses, and on foot. Most roads have wind and water erosion that has resulted in long, impassable stretches. The current conditions of some drainage structures do not allow efficient use of the roads by the USBP. Drainage structures proposed for installation or repair would reduce erosion and provide a safer, more environmentally sound drainage crossing. These drainage structures would provide safer

driving conditions for the USBP agents, improve their response time, and reduce vehicle maintenance downtime resulting from poor road conditions. Drainage structures will also enhance the stability of the local environment.

- Portable Lights

It is critical to integrate lights with the current deployment of agents within the proposed action area to maximize the deterrent enforcement capability and facilitate border control by affecting a permanent state of deterrence through certainty of detection and apprehension. The lights will:

1. deny illegal entrants the cover of darkness,
2. create a safer environment during the hours of darkness for both the agents and illegal entrants,
3. improve the efficiency of agents to patrol the same area during hours of darkness, allowing the USBP maximum patrol flexibility and efficiency, and,
4. substantially aid in the protection of neighborhoods, business districts, and sensitive environmental areas that are north of the light's location through deterrence and consequent reduction in illegal traffic.

Illegal entries are often accomplished using the cover of darkness. While night vision capability and RVS systems greatly aid in detecting nighttime border activity, these technologies alone are not as effective as lighting in the creation of a credible sense of deterrence. Lighting immediately and visibly alters the operational environment and effectively communicates to migrants/smugglers the continuous presence of law enforcement agents.

The use of lighting immediately facilitates a safer border environment in four ways:

1. it allows agents to better observe changing and dangerous terrain,
2. it helps agents prevent aliens from reaching the remote, unsafe areas of the desert where deaths are common by deterring illegal entries and facilitating apprehension,
3. it creates a sense of deterrence, it denies border bandits, who prey upon migrants, the cover of darkness, and
4. it creates a safer working environment for USBP agents.

- Bollard Fence

A combination of landing mat fence and vehicle barriers was constructed at Jacumba in the mid-1990s. The eastern end of the existing landing mat fence is located in an area that affords ample concealment opportunities and quick access to public roads. Thus, UDAs can quickly escape from USBP agents by running around the end of this fence. By extending the fence using the bollard style fencing, USBP would have an enhanced response time to apprehend the UDAs. The use of the bollard style fence would ensure that sheet water flow would not be impeded during major storm events.

- Blasting

Several road projects covered under previous NEPA documents have not been completed due to large rocks and boulders that occur in the road rights-of-way (ROWS). Other roadways that have been constructed were built around boulders resulting in sharp turns, large humps in the road, or blocked routes. These meanders provide many areas for UDAs to hide and opportunities to avoid apprehension. Detours around these boulders typically result in the use of private landholdings. The purpose for blasting activities is to realign or smooth out roads that have required USBP agents to patrol on private land and allow for the completion of road projects. Realigning the road along the border gives the USBP agents a more direct route to observe UDA activities, greatly improves response time, provides safer driving conditions, and reduces the amount of concealment opportunities for UDAs. The blasting will be minimal and only enough to fracture the rocks and boulders for later removal.

- Water Wells and Concrete Holding Tanks

Areas along the border have limited water access, especially outside of developed or urban areas near the POEs. This limited access forces water trucks to travel two to three times the distance necessary to find a water source. Water sources are needed for the project to provide water for equipment uses and dust control activities. Several water truck accidents occur every year in the east San Diego County area, resulting in additional costs for repairs or truck replacements and the loss of productive work time. Most accidents are vehicle rollovers (no one has been killed or seriously injured yet); however, there is always the potential for loss of life or serious injury in an accident of this type. The proposed water wells and holding tanks would serve as non-potable water

sources for construction efforts within the project area. This would eliminate the need to travel miles from the project sites to obtain water from existing wells. By having an on-site or nearby source of water, and the ability to store large quantities of water and quickly fill water trucks, large vehicles and equipment would be able to remain in or near the staging areas and would greatly reduce the potential for accidents.

The creation of the water wells and holding tanks would also benefit the BLM and the California Department of Forestry (CDF) in their efforts to suppress wildland fire. The opportunity to have a nearby water supply would greatly enhance the agencies' abilities to react in an emergency fire situation.

1.5 Environmental Regulations

The work outlined in this report is to be conducted in accordance with and in partial fulfillment of the USBP and U.S. Army Corps of Engineers (USACE) obligations under the National Historical Preservation Act of 1966, as amended (PL-96-515); the Archaeological and Historical Preservation Act of 1974, as amended (PL-93-291); Executive Order #11593, "Protection and Enhancement of the Cultural Environment"; and the Endangered Species Act of 1973, as amended. This EA was prepared in accordance with the NEPA of 1969 (PL-90-190), the President's Council on Environmental Quality (CEQ) Regulations for the Implementation of the NEPA, and the INS's Procedures for Implementing NEPA (28 CFR 61). Table 1-2 summarizes the pertinent environmental requirements that guided the development of this EA.

Table 1-2: Applicable Environmental Statutes and Regulations

Federal Statutes
Archaeological and Historical Preservation Act of 1974
Clean Air Act of 1955, as amended
Clean Water Act of 1977, as amended
Endangered Species Act of 1973, as amended
Farmland Protection Policy Act of 1980
Migratory Bird Treaty Act of 1972
National Historic Preservation Act of 1966, as amended
National Environmental Policy Act of 1969, as amended
Native American Graves Protection and Repatriation Act of 1900
Watershed Protection and Flood Prevention Act of 1954
Wild and Scenic Rivers Act of 1968, as amended
Executive Orders, Memorandums, etc.
Consultation and Coordination with Indian Tribal Governments (E.O. 13175) of 2000
Federal Actions to Address Environmental Justice to Minority Populations and Low-Income Populations (E.O. 12898) of 1994
Floodplain Management (E.O. 11988) of 1977
Government-to-Government Relations with Native American Tribal Governments (Presidential Memorandum) of 1994
Indian Sacred Sites (E.O. 13007) of 1996
Protection of Children from Environmental Health Risks (E.O. 13045) of 1997
Protection of Migratory Birds & Game Mammals (E.O. 11629) of 2001
Protection of Wetlands (E.O. 11990) of 1977

SECTION 2.0
ALTERNATIVES

2.0 ALTERNATIVES

This section describes the alternatives considered in this EA, relative to their ability to satisfy the USBP's purpose, mission, and need. Two alternatives will be addressed:

1. the Proposed Action Alternative; and
2. the No Action Alternative.

These two alternatives are discussed below along with alternatives considered but eliminated from further analysis.

2.1 Proposed Action Alternative

The Proposed Action Alternative consists of the construction of night vision scope pads and access roads, installation or repair of drainage structures, placement of portable lights, installation of bollard style fence, blasting activities, and the installation of water wells and concrete holding tanks between Canyon City, California and the Imperial County line.

2.1.1 Night Vision Scope Pad and Access Road Construction

Two night vision scope pads are proposed on top of Airport Mesa and one near the Mountain Empire Campground off Highway 94 (hereafter referred to as Mountain Empire). Approximately 1.45 total miles of road construction is required to install and operate the three scope pads. Designs for the proposed road construction are included in Appendix A.

2.1.1.1 Airport Mesa

New road construction (approximately 1.2 miles) is proposed to the top of Airport Mesa just east of Jacumba, California (Figure 2-1). This roadwork is planned so USBP can access the top of the mesa for two proposed scope pads. The finished road surface will be approximately 14-feet wide with a 2- to 5-foot ditch/safety berm on either side of the proposed road. Cut and fill activities would be required for these activities; consequently, the permanent impact area would be approximately 50-feet wide. Due to the slope on Airport Mesa, nuisance drainage culverts (i.e., one pipe) would be required

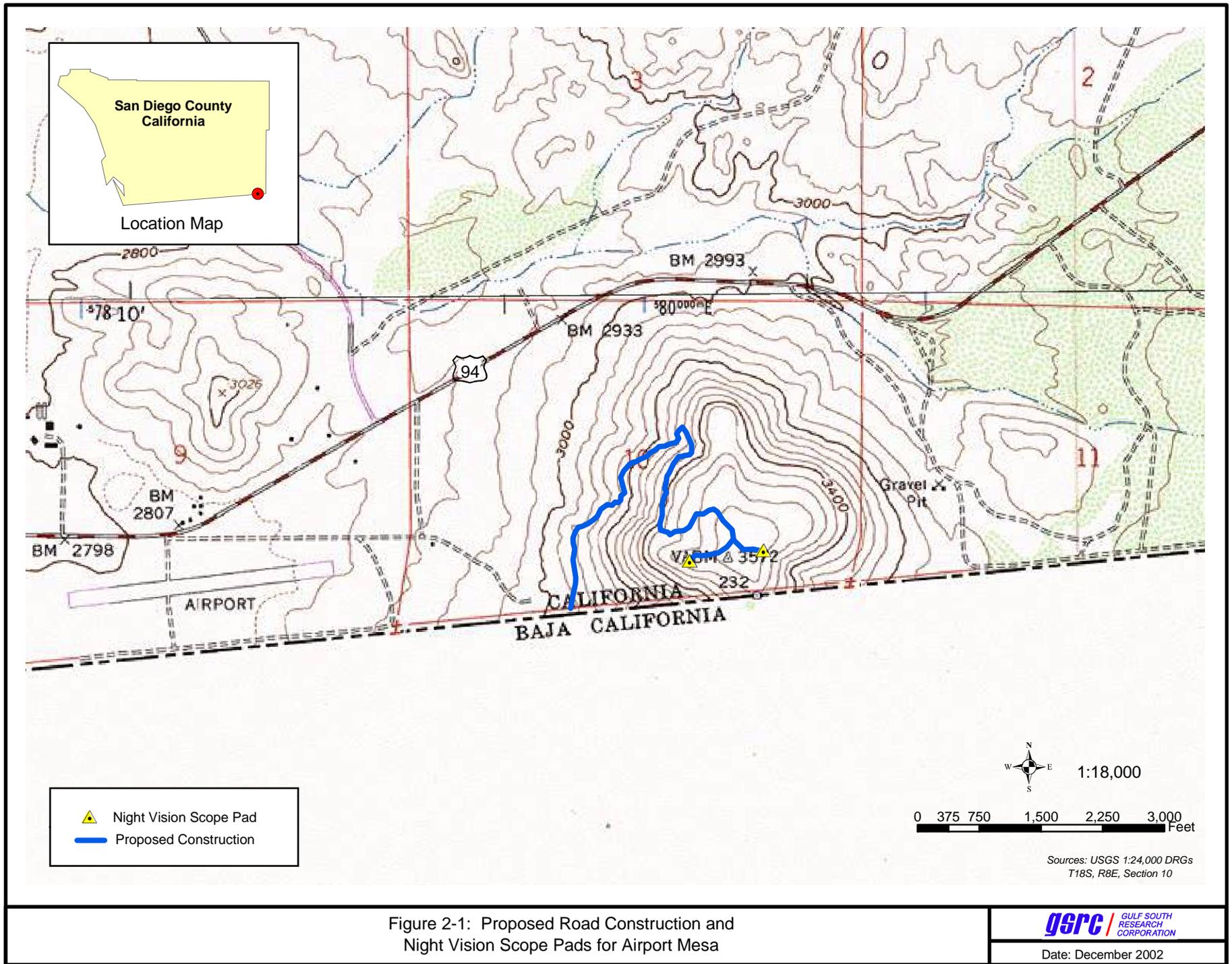


Figure 2-1: Proposed Road Construction and Night Vision Scope Pads for Airport Mesa

approximately every 300-linear feet under the road and would remain within the proposed road's footprint. These culverts would be installed to drain the road surface and to handle small concentrations of stormwater.

Approximately four small, ephemeral drainages would be impacted with the proposed road construction and would require culverts. Approximately 0.02 acre would be affected from the four culverts; however, the effects from installing the four culverts would remain within the proposed roads' footprint. Approximately 7.3 acres would be permanently affected by the road construction on Airport Mesa, including the installation of the four culverts.

The two proposed night vision scope pads would be at the ends of the road and would consist of a 20-foot by 20-foot permanent clearing—the minimal area to turn a USBP vehicle around—with an additional 20-foot by 20-foot temporary impact zone required during construction. Each site would be mechanically and hand cleared of rock, vegetation, and debris to make room for a vehicle. The total area permanently impacted by each scope site would be 400-square feet (ft²).

2.1.1.2 Mountain Empire

Approximately 0.25 mile of road construction is proposed for the Mountain Empire scope pad. This access road would lead to a night vision scope pad at the top of a hill north of the Mountain Empire Campground near Canyon City, California (Figure 2-2). New road construction would begin at the San Diego and Arizona Eastern Railroad, and trend north to the top of the hill. The finished road surface would use the same design as discussed for the Airport Mesa scope pad and access road. Nuisance drainage culverts would also be required approximately every 300 linear feet under the road and would remain within the proposed road's footprint. These culverts would be installed to drain the road surface and to handle small concentrations of storm water from uphill of the road. Approximately 1.5 acres would be permanently impacted from the road construction.

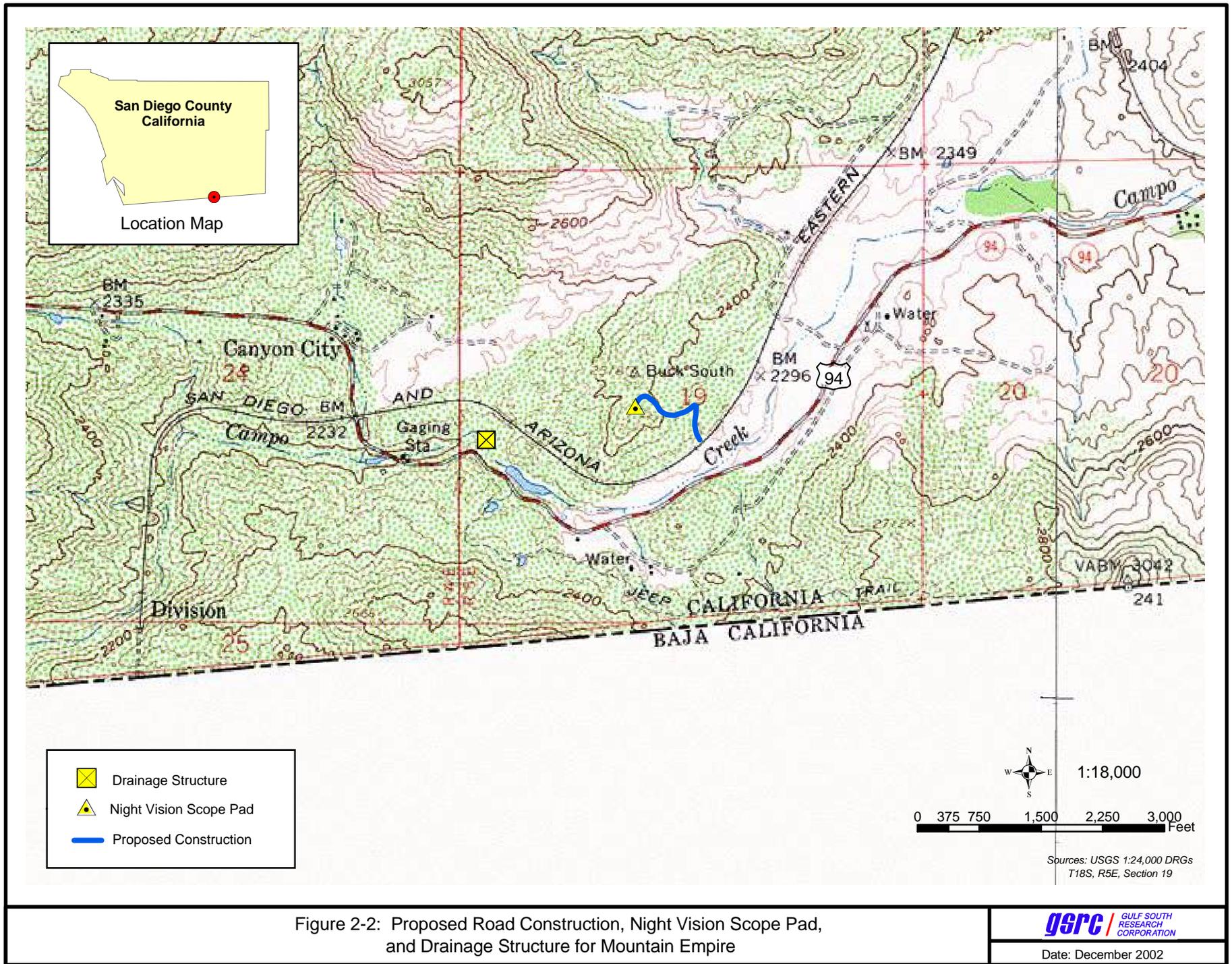


Figure 2-2: Proposed Road Construction, Night Vision Scope Pad, and Drainage Structure for Mountain Empire

A night vision scope pad like the two discussed above for the Airport Mesa road would be placed on top of the hill at Mountain Empire Campground. The total area permanently impacted by the scope site would be 400 ft²; an additional temporary impact zone of 400 ft² would be expected during construction. The existing road, adjacent to the Mountain Empire Campground, which leads to the proposed Mountain Empire scope pad access road, would be gate-restricted.

The Mountain Empire project is dependant on the repair of an existing drainage structure at Campo Creek. The repair of the existing crossing at Campo Creek (Figure 2-2) to access the proposed Mountain Empire scope pad would be a single 6-foot box culvert. The existing structure is used by the owners and visitors of the Mountain Empire Campground on a daily basis. Repair/improvement of the existing structure would allow access by the USBP and prevent an additional crossing further upstream. The repair of this drainage structure would permanently impact approximately 0.03 acre with an additional 0.07 acre temporary impact area. The new drainage structure design would remain within the footprint of the existing crossing. Designs for the drainage structure are included in Appendix A.

In summary, road construction in the two areas would consist of a 14-foot wide roadbed with a 2 to 5 foot ditch or safety berm on each side of the road (18-24 foot total width). With the required cut-and-fill activities along the slopes, the permanent impact area is expected to be 50 feet wide; there is no intent to create major roadways. All culverts placed along the road beds would remain within the proposed road footprint and are included in the impacts. These roads would give the USBP agents sufficient room to safely access the scope sites. The total area permanently impacted by the road construction would be approximately 8.8 acres for the two roads. The total area permanently impacted from the placement of three night vision scope pads would be approximately 1,200 ft² (0.03 acre). An additional 1,200-ft² (0.03 acre) total temporary impact area would be produced; however, this area would be revegetated upon completion of the construction activities.

The night vision scope pads addressed for the proposed action would be created with the idea of converting the scope pads to RVS sites in the future. These future RVS sites would require separate NEPA documentation.

2.1.2 Drainage Structures

Four drainage structures are proposed for repair or installation under this alternative. Three crossings are proposed for installation along existing roadways, while one existing crossing at Campo Creek would be repaired. The repair of the drainage structure at Campo Creek is contingent on the proposed road construction to the top of Mountain Empire, as discussed above in Section 2.1.1. Designs for each of the drainage structures are included in Appendix A.

The basic designs for all-weather drainage crossings at Smith Canyon (Figure 2-3), La Gloria Canyon (Figure 2-3), and Maupins (Figure 2-4) would consist of grading the stream crossings and laying a concrete platform across the drain. Concrete footers would be placed on either side of the stream crossing to support the platform. Due to site-specific hydrology and geomorphology, the proposed drainage structure for Smith Canyon would be more substantial than the other two. This drainage structure would require a 12-foot retaining wall under the center of the platform, as well as the two footers on each end.

Concrete approach ramps would also be installed along the existing roadbed. Environmental design measures (i.e., installing rip-rap) downstream of the drainage structures would be implemented to reduce any erosion or runoff effects from the construction; other mitigation measures and Best Management Practices (BMPs) are discussed in Section 5.0. No additional or new roadwork would be associated with the installation of these three drainage structures. Ongoing road improvements were addressed under previous NEPA documentation identified in Section 1.1. At the time the road improvements were first planned, the need for permanent drainage structures at these crossings was not identified. The improvements to these water crossings would greatly improve the USPB's ability to patrol the border safely and improve water quality in the drainages.

Expected permanent and temporary impacts associated with each of the three proposed drainage structures are shown in Table 2-1.

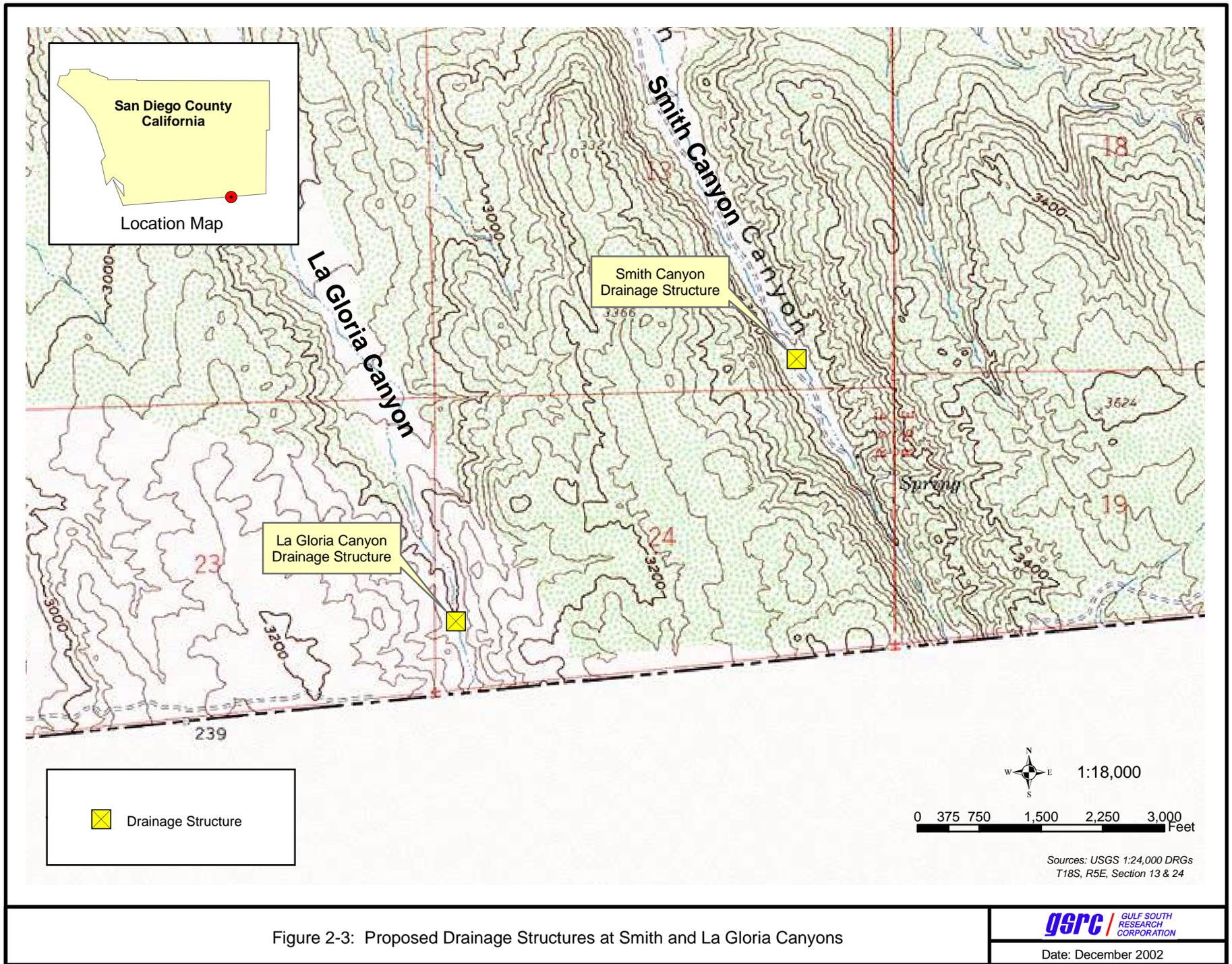


Figure 2-3: Proposed Drainage Structures at Smith and La Gloria Canyons

Table 2-1: Impacts from Drainage Structures (in acres)

	Permanent Impacts	Temporary Impacts	Total
Maupins	0.22		0.22
La Gloria Canyon	0.05	0.03	0.08
Smith Canyon	0.31	0.18	0.49
Total	0.58	0.21	0.79

2.1.3 Portable Lights

The acquisition and operation of up to 50 portable lights along a 20-mile stretch of border road between the PCT to the Imperial County line is proposed under this alternative (Figure 2-5). These lights would remain within the 60-foot Roosevelt Easement and would be placed along existing roadways; no vegetation removal, ground disturbance, or road construction would be required for the placement of these portable lighting systems. No lighting systems would be placed within the Quino checkerspot butterfly (*Euphydryas editha quino*) critical habitat area, which lies just west of Jacumba (see Figure 2-5). The location and duration of light placement would be dependant upon illegal activities in the area. Portable lights would be placed in areas where USBP intelligence indicates increases in UDA and smuggling activities may occur, outside of the designated critical habitat area.

The portable lights are powered by a 6-kilowatt self-contained diesel generator and contain four 1,000-watt, metal halide light bulbs (Photograph 1). The lights would generally operate continuously every night and would require refueling every day prior to the next night’s operation. The portable light systems can be towed to the desired location by USBP vehicles, and are typically spaced approximately 100 to 400 feet apart, depending upon topography and known UDA traffic areas. Placement of the portable lights is estimated to affect no more than 100 ft² per generator, while the area affected by illumination from the lights is expected to be 200



Photograph 1: Portable Light

feet from each light source, mostly in a southerly direction. The lighting systems would have shields placed over the lamps to reduce or eliminate the effects of backlighting.

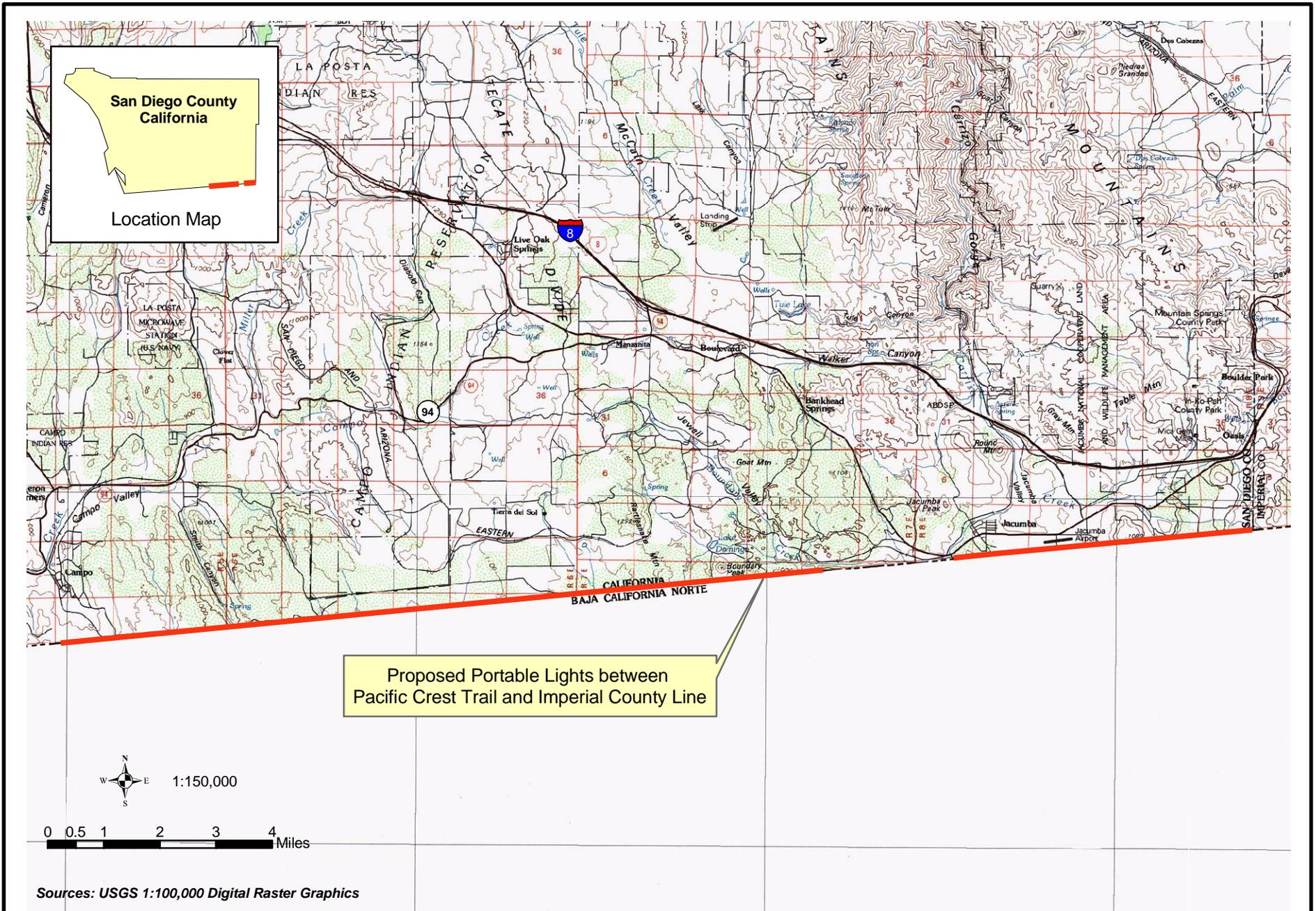


Figure 2-5: Proposed Portable Lights

Effects from the lighting are considered to occur along the entire corridor where they could be placed; however, only part(s) of the corridor would be illuminated at a given time since the portable lights would be periodically relocated to provide the most effective deterrent and enforcement strategy. Illumination from the portable lights would typically not overlap, leaving areas of darkness between them. The use of secondary containment (e.g., catch pans) during installation and regular maintenance of the generators would aid in preventing any accidental diesel fuel or lubricant spills.

2.1.4 Bollard Fence

Approximately 300 feet of bollard fence would be installed to replace vehicle barriers at the end of the existing landing mat fence on the east side of Jacumba (Figure 2-6). A bollard fence consists of a double row of 10- to 15-foot high steel pipe poles, approximately six inches in diameter, placed on 8.5-inch centers (Photograph 2). The pipes would be filled with concrete for added strength and security. The



Photograph 2: Bollard Fence

two rows are offset, such that the gaps between the poles would be filled by the poles of the other row. A concrete footer is required to anchor the poles – approximately 20 inches wide and three feet deep, permanently affecting approximately 0.01 acre. All fence construction would stay within the 60-foot Roosevelt Easement and a temporary impact area would be expected approximately five feet on either side of the fence (approximately 0.06 acre) for a total of 0.07 acre affected from the installation of bollard fence.

2.1.5 Blasting

Fifteen sites are proposed for blasting activities along the U.S.-Mexico border (Figure 2-7). All actions would take place within the existing road ROW and most within the 60-foot Roosevelt Easement. The sites selected have large rocks or boulders in areas where sharp curves or unsafe humps need to be eliminated. Holes would be drilled into the center of the larger rocks and detonating material would be placed in the hole. The detonating material would be activated in order to split or fracture the rock into smaller,

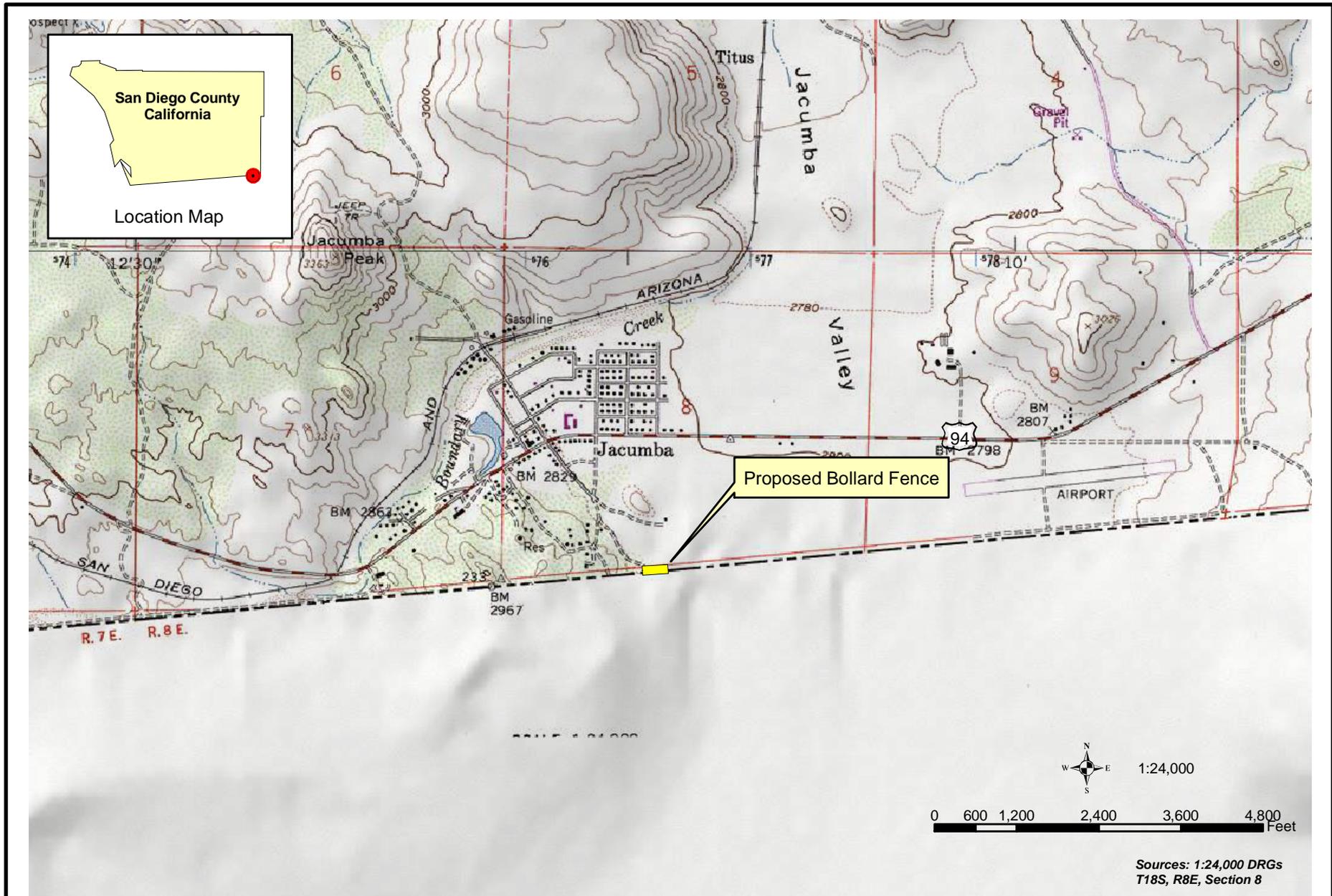
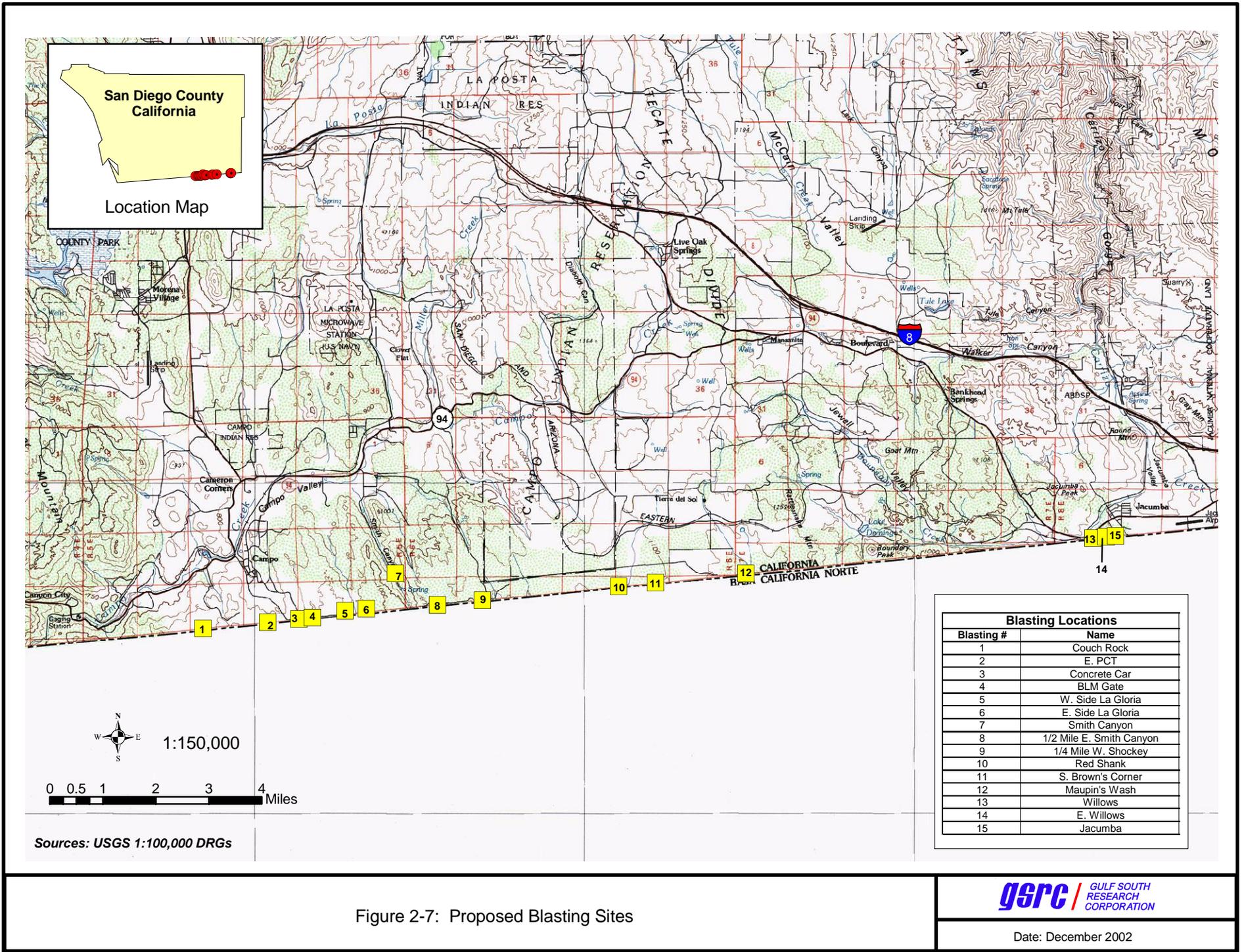


Figure 2-6: Proposed Bollard Fence



**San Diego County
California**

Location Map

Blasting Locations	
Blasting #	Name
1	Couch Rock
2	E. PCT
3	Concrete Car
4	BLM Gate
5	W. Side La Gloria
6	E. Side La Gloria
7	Smith Canyon
8	1/2 Mile E. Smith Canyon
9	1/4 Mile W. Shockey
10	Red Shank
11	S. Brown's Corner
12	Maupin's Wash
13	Willows
14	E. Willows
15	Jacumba

Sources: USGS 1:100,000 DRGs

Figure 2-7: Proposed Blasting Sites

more manageable pieces for removal. This process would create low-level noise. All roadwork associated with the 15 blasting sites has been addressed under previous NEPA documents (INS 2001 and USACE 1997, 1994).

2.1.6 Water Wells and Concrete Holding Tanks

Two water well and concrete holding tank sites along the U.S.-Mexico border are proposed for installation (Figure 2-8). Drilling would occur to depths adequate to pump water for project related uses, such as dust prevention activities and construction equipment needs. Water collected from these wells would be non-potable and used for construction purposes only. Concrete holding tanks would be placed near the well sites to collect and hold water, and would be equipped with valve boxes. The holding tanks would be placed on a 20-foot by 20-foot concrete slab and would have a 10,000-gallon capacity. Sides would be made of reinforcing steel and the top would be concrete. Once the water sources are no longer needed, the valve boxes would be covered and locked, but remain functional for future use by the USBP, BLM, or CDF. In addition, each well and holding tank would temporarily impact an area no more than 20 feet by 20 feet around each well and holding tank site.

2.1.7 Summary

In summary, although the Proposed Action Alternative would have some minor impacts, it would significantly enhance the USBP's mission to gain and maintain control of the border. This alternative would also enhance the ability of the USBP to deter and apprehend illegal entrants near the border and therefore result in less trans-border traffic and reduce the amount of enforcement actions that occur outside the immediate border vicinity. The Proposed Action Alternative is comprised of all of the following components/actions. The general locations of each of these actions are depicted in Figure 2-9.

1. Two night vision scope pads on Airport Mesa, and 1.2 miles of access road construction,
2. The construction of one scope pad, repair of one drainage structure at Mountain Empire Campground, and 0.25 mile of access road construction,
3. Installation or repair of three drainage structures: Maupins, La Gloria Canyon, and Smith Canyon,

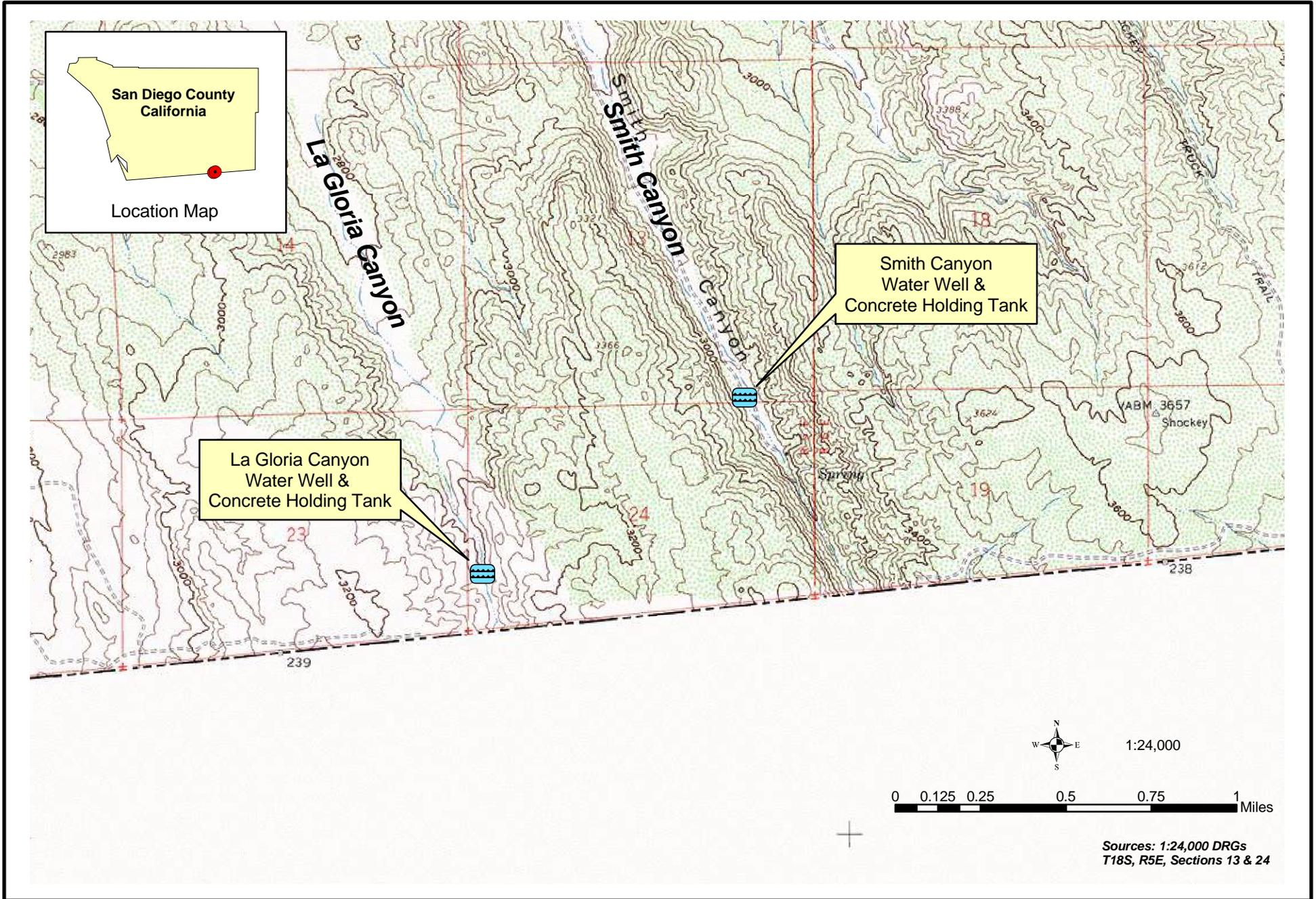


Figure 2-8: Proposed Water Wells and Concrete Holding Tanks

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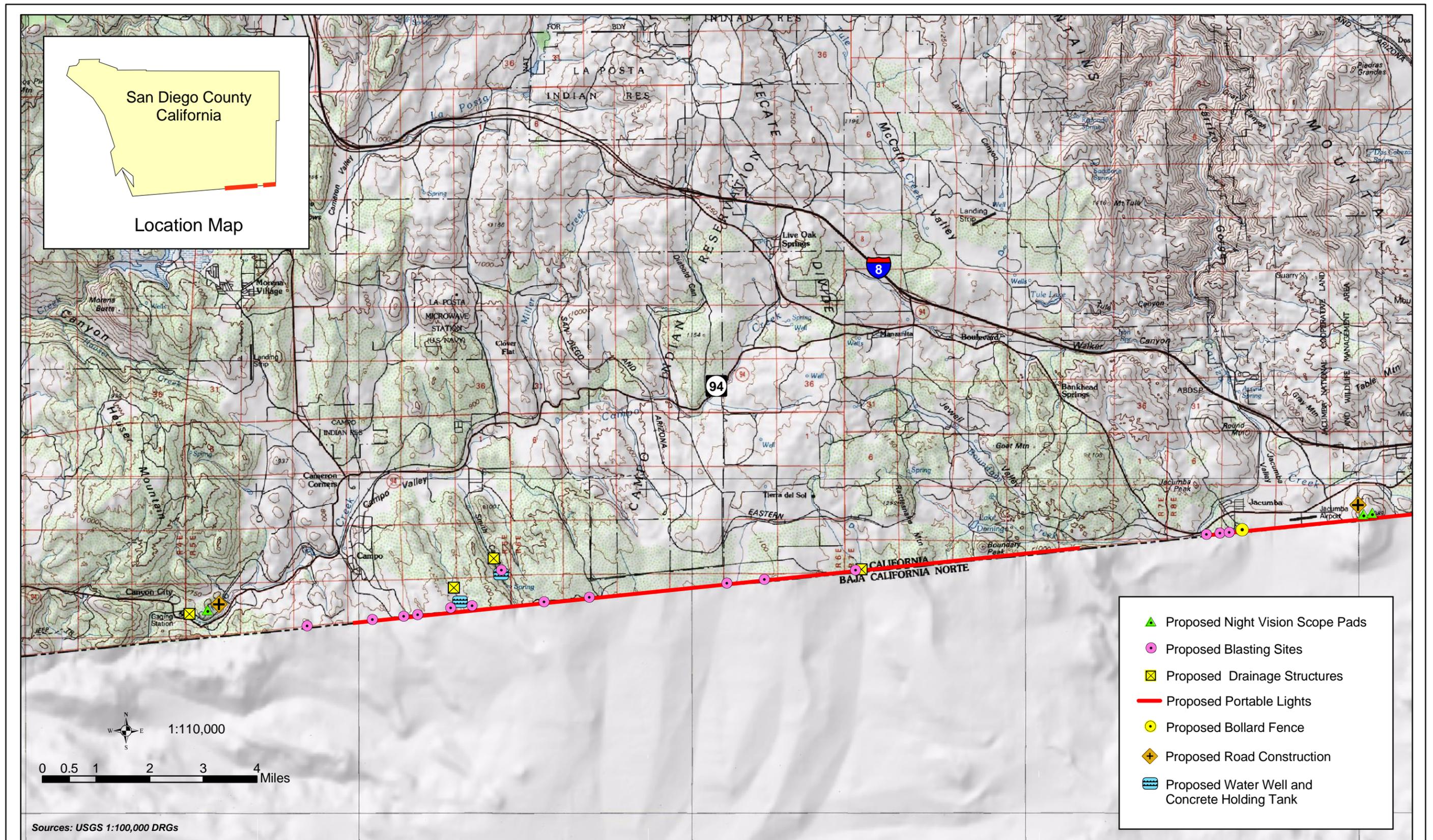


Figure 2-9: All Proposed Activities in the Project Area

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4. Replacement of 300-foot section of vehicle barrier with bollard fence,
5. Two water wells and concrete holding tanks, and
6. 15 blasting sites.

2.2 No Action Alternative

The No Action Alternative would not allow for the expansion of USBP operations and would eliminate all proposed actions addressed in this document. This alternative would, however, allow all ongoing infrastructure projects and any normal maintenance and operation requirements associated with existing infrastructure to continue. The No Action Alternative would halt any additional direct impacts that may occur with the implementation of the proposed actions, and would eliminate the potential for future effects, beneficial or adverse, to the natural environment. While this alternative would reduce direct, unavoidable impacts and irretrievable losses of resources, it would greatly hinder the USBP's mission to gain and maintain control of the border.

2.3 Alternatives Considered but Eliminated from Further Analysis

Several other actions were considered as part of the alternative selection process. These were all eliminated from further analysis due to unnecessary environmental impacts, not fulfilling the purpose and need requirements for the project, and/or cost. One of the actions considered was the placement of portable lights outside of the 60-foot Roosevelt Easement. This alternative was eliminated because vegetation would have to be cleared to place the lights. The installation of RVS systems and permanent lights were also considered. While these two options would require the removal of some vegetation and ground disturbance to install poles, the cost of installation is the main limiting factor at this time. Similar actions could be considered at some point in the future since permanent lights have proven to be an effective deterrence to illegal traffic.

Revised

Other lighting alternatives considered for this project include solar powered lights and lower wattage bulbs. The use of solar power to run the portable light systems was eliminated from further consideration due to the potential for vandalism to the solar panels by illegal immigrants and smugglers and the cost of the solar systems. The use of lower wattage light bulbs in the portable light systems was eliminated due to the

lighting systems not covering enough area to allow for the detection of UDAs and smugglers and the safety of the USBP agents.

One other alternative considered was the reconstruction of an existing road near the Mountain Empire Campground and the installation of a new drainage structure in Campo Creek. This alternative was eliminated from the analysis due to the adverse environmental impacts associated with installing a new drainage structure in Campo Creek and the extra cost of reconstructing a road. By using an existing road and repairing an existing drainage structure in Campo Creek, unnecessary environmental impacts and costs would be avoided.

2.4 Summary

Two alternatives were carried forward for analysis: the Proposed Action Alternative and the No Action Alternative. Other alternatives were considered but eliminated due to not fully meeting the purpose and need requirements for the project. A summary of the two alternatives, in comparison to the purpose and need for the action, is presented in Table 2-2.

Table 2-2: Alternative Matrix

Purpose and Need Requirements	Proposed Action Alternative	No Action Alternative
Enhance the detection of illegal activities, and ability to gain and maintain control of the U.S.-Mexico border	Yes	No
Ability to monitor a large area	Yes	No
Deterrence of illegal aliens	Yes	No
Improve USBP access and thus response time	Yes	No
Enhance the safety of USBP agents	Yes	No
Provide flexibility in deployment of field agents	Yes	No
Reduction of erosion at existing water crossings	Yes	No
Reduction of vehicle downtime and maintenance	Yes	No
Protection to neighborhoods, businesses, and environmentally and culturally sensitive areas near the project area	Yes	No
Provide on-site source of water and keep large equipment and vehicles off public roads	Yes	No

Due to the disturbed nature of the project corridor, the fact that the majority of the road network is already in place, and several actions would occur within the 60-foot Roosevelt

Easement or existing road ROWs, negligible impacts to the human and natural environment would occur as a result of the Proposed Action Alternative (Table 2-3). While the proposed road construction, scope pads, and drainage structures would remove some vegetation and potential wildlife habitat, the overall benefits of reducing the numbers of UDAs and drug traffickers trekking through the area and the consequent USBP enforcement actions would be very beneficial.

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Table 2-3: Matrix of Potential Impacts

Affected Environment	Proposed Action Alternative	No Action Alternative
Land Use	New scope pad and access road construction would make Airport Mesa and Mountain Empire active USBP patrol areas	No impacts
Aesthetics	Scope pads would be placed on top of hill at Mountain Empire and Airport Mesa; contours along the border would change with blasting activities; temporary negative effects from on-site construction equipment; long-term effects from the placement of portable lights along the border; placement of a concrete water holding tanks would be along the road	No direct impacts; UDAs would continue to cause long term indirect impacts from the creation of trails, littering, and wildland fires
Soils and Prime Farmland	Scope pad and access road construction would permanently disturb soils; the repair/installation of four drainage structures would temporarily disturb soils; the drainage structures would improve soil conditions in the long-term by replacing/repairing the old culvert and implementing mitigation measures; installation of water wells and a holding tanks would temporarily disturb soils; installation of bollard fence would remove soils; a total of 9.9 acres of soil is expected to be permanently disturbed; no prime farmlands would be impacted	Soil conditions would continue to deteriorate where four drainage structures would be repaired or installed with the Proposed Action; no mitigation measures would be incorporated and soil would continue to erode
Water Resources	Installation of drainage structures and mitigation measures would improve condition of surface water in the long-term; installation of water wells have no impacts to groundwater; blasting activities would remain near the surface and not occur deep enough to have an effect on surface or groundwater resources	Water quality would continue to deteriorate where four drainage structures would be installed or repaired with the Proposed Action; no mitigation measures would be incorporated that would improve stream channel conditions
Vegetation Communities	Approximately 9.8 acres of vegetation would be disturbed with the Proposed Action Alternative: 8.9 acres for road and scope pad construction, 0.89 acre for four drainage structures, and 0.08 acre for two well and concrete holding tank sites; there would be no vegetation disturbance for the placement of portable lights, blasting, or the 300-foot section of bollard fence	No vegetation would be directly disturbed; indirect effects would continue from UDAs

Table 2-3: Matrix of Potential Impacts

Affected Environment	Proposed Action Alternative	No Action Alternative
Wildlife and Aquatic Resources	Actions that require vegetation disturbance would remove wildlife habitat; road and scope pad construction, well sites and holding tanks, and drainage structures would remove 9.8 acres of habitat; drainage structures would improve surface waters for aquatic species; temporary impacts from blasting activities could disrupt wildlife; long-term effects associated with the illumination of portable lights	Surface waters would continue to degrade at the water crossings, potentially effecting aquatic resources; heavy UDA traffic would continue across valuable wildlife habitat
Threatened and Endangered Species and Critical Habitat	No threatened or endangered species or critical habitat would be disturbed; potential habitat for the least Bell's vireo and southwestern willow flycatcher could occur in riparian areas; this habitat is either highly disturbed or would not be altered with the proposed actions; no portable lights, or other proposed actions, would occur along the 2.3 mile corridor of Quino checkerspot butterfly critical habitat just west of Jacumba; no portable lights would be placed in riparian areas capable of supporting the protected vireo and flycatcher	Surface waters would continue to degrade at the water crossings, potentially effecting aquatic resources; heavy UDA traffic would continue across valuable wildlife habitat in which protected species rely on
Air Quality	Short-term degradation in local air quality from construction equipment; however, impacts considered insignificant; indirect beneficial impacts due to reduced number and duration of trips to find water; long-term, minor impacts to air from portable light generators	No additional impacts
Noise	Temporary increase in noise levels due to construction and blasting activities; long-term noise associated with portable light generators	No additional impacts
Cultural Resources	No impacts	Heavy UDA traffic would continue across irreplaceable cultural resource sites
Socioeconomics	Beneficial impacts would be expected to socioeconomics in the project area; increased safety to neighborhoods and surrounding communities	No impacts to housing and income. Adverse impacts to the surrounding border towns and communities will continue
Environmental Justice and Protection of the Children	No impacts	No impacts