



United States Department of the Interior



BUREAU OF LAND MANAGEMENT

El Centro Field Office
1661 So. 4th Street
El Centro, CA 92243

May 1, 2009

Dear Friends of the Imperial Sand Dunes Recreation Area:

An Environmental Assessment (EA) has been prepared for proposed construction of a new Wash Road adjacent to the Union Pacific Railroad in the Imperial Sand Dunes Recreation Area, and can be reviewed on the BLM El Centro website at www.blm.gov/elcentro.

The proposed construction would maintain access for visitors, law enforcement, and emergency medical services personnel to the camping areas along Wash Road.

The 30-day public comment period will end on Monday, June 1, 2009. All written comments should be postmarked by June 1, 2009 in order to be given consideration.

Useful comments are:

- Within the geographic scope of the proposed Wash Road project.
- Not opinions, assertions, or unsubstantiated claims.
- Written to alert BLM to missing data sources, flaws in analysis, or additional alternatives not considered.
- Written and delivered by hand, e-mail, U.S. mail, or fax.

Written comments should be addressed to Erin Dreyfuss, BLM Environmental Protection Specialist, 1661 S. 4th Street, El Centro, CA 92243. Comments delivered by e-mail should be addressed to edreyfus@ca.blm.gov. Please be sure to include "Wash Road EA Comments" in the subject line of the e-mail. Faxed comments should be sent to (760) 337-4490, Attn: Erin Dreyfuss.

Should you have any questions, please contact Erin Dreyfuss at (760) 337-4436.

Sincerely,

Vicki L. Wood
Field Manager



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
El Centro Field Office
1661 So. 4th Street
El Centro, CA 92243

**Environmental Assessment
CA-670-2009-64**

ISDRA Wash Road Construction

April, 2009

ISDRA Wash Road Construction ENVIRONMENTAL ASSESSMENT

EA# CA- 670-2009-64

CHAPTER 1

Purpose and Need for Proposed Action:

The Imperial Sand Dunes Recreation Area (ISDRA) represents one of the most popular off-highway vehicle (OHV) areas in the western United States and is a well-known landmark to the thousands who visit each year. The 159,000-acre ISDRA contains the largest mass of sand dunes in California and is the most heavily and intensively used OHV recreation area in the California Desert District with an estimated 8,536,000 OHV Visitor Use Days per year (BLM, 2008). About 27 percent of this use (2,325,000 use days) occurs on the public lands situated to the south of Glamis, California, and to the west of the Union Pacific Railroad (UPRR) right-of-way where visitors camp on flat, hard pan areas between the railroad tracks and the higher sand dunes (see attached map). Public land users who use the ISDRA for off-highway vehicle recreation are required to a purchase special recreation permit.

The public lands in this portion of the ISDRA are currently accessible via a maintenance road (Wash Road) that is situated within the UPRR right-of-way on the west side of, and parallel to the train tracks. UPRR officials recently announced their intent to close about six miles of the existing Wash Road to public access beginning May 31, 2009, citing concerns that the current use contributes to the deposition of sand along the tracks and otherwise creates unwanted risk and liability. A drift fence has already been constructed along the west edge of the UPRR right-of-way to reduce or prevent blowing sand from accumulating on the tracks. According to UPRR officials, the accumulation of sand on the tracks can weaken track stability and increase the risk of a train derailment. Public use of the existing wash road in such close proximity to the tracks increases the risk of accidents, particularly during busy holiday weekends.

Gaps left in the fence to provide the public continued access during the 2008-2009 use season will be closed during the upcoming summer. This will leave no way for visitors to access the public lands and camping area previously accessible from the existing Wash Road when the 2009-2010 use season begins next fall.

The purpose of the proposed project is to enhance public health and safety while providing for continued access to the public lands and popular camping areas in the vicinity of Glamis without utilizing the existing Wash Road. The need for the proposed action is to enable legal and physical access to the public lands and popular camping areas in this portion of the ISDRA by public land visitors driving recreational and other street-legal vehicles, Law Enforcement and Emergency Medical service vehicles, and maintenance vehicles used to pump and clean existing vault toilets in the area. Continued access to the public lands and popular camping areas near Glamis is necessary to avoid displacement of public land visitors to other portions of the ISDRA

where higher concentrations of use could result in reduced public health and safety. It is also necessary that Law Enforcement and Emergency Medical service vehicles have unimpeded physical access to this portion of the off-highway vehicle open area, and that existing vault toilets continue to be accessible by maintenance vehicles.

Land Use Plan Conformance:

The proposed action and alternatives are in conformance with the following approved land use plans, as required by 43 CFR 1610.5:

- California Desert Conservation Area Plan, 1980, as amended.
- Final Environmental Impact Statement for the Imperial Sand Dunes Recreation Area Management Plan and Proposed Amendment to the California Desert Conservation Plan, 1987.
- Imperial Sand Dunes Recreation Area Management Plan, May, 2003.
- Northern and Eastern Colorado Desert Coordinated Management Plan (NECO), July 2002.

CHAPTER 2

Proposed Actions and Alternatives

Description of Alternatives

Alternative A – Proposed Action

BLM proposes to develop a new 32 foot wide, six-mile long road parallel to the current Wash Road in order to preserve access for the public and BLM to wash 25. The road would maintain street legal vehicle access to the eastern half of the ISDRA for camping associated with OHV recreation. All of the proposed project will occur in the OHV Open area, as designated in the California Desert Conservation Area Plan (1980, as amended), and is in heavily disturbed camping areas. This road would traverse hard pan desert, active sand dunes, and ephemeral streams (dry washes).

Construction of the new road would involve:

- Grading a new road from SR78 to wash 25 in the existing natural material.
- Excavating soft sand at dry sand wash crossings and refill with class II road base material.
- Laying a geo-textile fabric over natural material then import, distribute, water, level, and compact a minimum of nine inches of road base material over the geo-textile material.

The development of the road would require the use of heavy equipment. The agency intends to use graders, water tanker trucks, dump trucks, rollers, dozers, loaders, and other administrative vehicles to complete the project. The main project site would be the 4.1 mile by 32 foot wide road, however, the larger trucks would need approximately 100 feet adjacent to the project to turn around and exit the area. If approved, the agency would be utilizing natural material imported from a local gravel pit approximately two miles from the project location. Spoils from the project site would be deposited no farther than 100 feet away from the new road edge and either downstream or downwind whenever possible. Spoils would be evenly distributed to blend in with the natural environment, would not noticeably alter ephemeral stream course, and would not pose a measurable safety risk to OHV recreationists in the area.

After and during all phases of development, the agency will need to perform frequent maintenance of the road. Maintenance would include rebuilding damaged road sections, moving windblown sand, watering, and compacting. Levels of maintenance will be dependent upon the level of development on the road. Generally, less development will require more maintenance. Conversely, higher levels of development will require less maintenance.

Signs would also be installed along the road shoulder. They would indicate a speed limit to increase safety and reduce dust. Additional signs could be placed intermittently to advise visitors of other rules, regulations, and information in the ISDRA. Signs would consist of single fiberglass posts or metal "C"-channel posts and are either pounded into the ground by hand or hydraulic hammer. A two leg informational kiosk would be installed at the north end of the road. The kiosk would require two cement foundations, two feet in diameter, and three feet deep. The kiosk would have information about the dunes, including safety and resource conservation information.

In addition to the proposed road, BLM proposes to develop trash collection facilities in the form of additional hard-packed pull-through areas adjacent to the proposed road. The proposed trash collection facility would be at the north end of the road to facilitate safe ingress and egress for visitors disposing of trash. The proposed facility would be south of the easement across private property.

A separate fee collection area is also proposed for the area south of the private land, and south of the BLM easement. The proposed fee collection facility would be in the form of additional hard-packed pull-through areas (up to 5 lanes) about 100 feet wide. The proposed fee collection facility would also facilitate safe ingress and egress for visitors paying fees, as well as the staff involved in fee collection. In order to control the flow of traffic, in the future BLM could install traffic control devices along the private property boundary.

In addition to the grading of a new road, BLM proposes to issue a right-of-way to itself in order to keep a record of the road alignment, legal descriptions and to secure the BLM management of the road for the future.

Alternative B

Under this alternative, BLM would propose to construct only to wash 10 using the same materials and methods as in the proposed action. Under this alternative, BLM would still provide for trash collection and fee collection areas along the north end of the road. The road would require similar levels of maintenance under this alternative, only a shorter length. Under this alternative, BLM would also issue a right-of-way to itself in order to keep a record of the road alignment, legal descriptions and to secure the BLM management of the road for the future.

Alternative C

Under this alternative, BLM would propose to construct only to wash 18 using the same materials and methods as in the proposed action. Under this alternative, BLM would still provide for trash collection and fee collection areas along the north end of the road. The road would require similar levels of maintenance under this alternative, only a shorter length. Under this alternative, BLM would also issue a right-of-way to itself in order to keep a record of the road alignment, legal descriptions and to secure the BLM management of the road for the future.

Alternative D (No Action)

Under this alternative, no road improvements would be made.

Table 1 – Acreages disturbed by alternative

Alternative	A	B	C	D
	Wash 25	Wash 10	Wash 18	No Action
Road and Shoulder Area Acreage	23.27	3.06	6.71	0
Total Project Area (Maximum Disturbed Area)*	72.72	12.12	23.03	0

* - Please see Appendix A for mathematical calculations used for completion of this table.

CHAPTER 3

Environmental Impacts

The following table summarizes potential impacts to various elements of the human environment, including the “critical elements” (*) listed in BLM Manual H-1790-1, Appendix 5, as amended. These elements are further discussed below:

Critical Element	Not Present	Not Affected	Possibly Affected
Air Quality			x
Areas of Environmental Concern	x		
Cultural Resources			x
Native American Concerns		x	
Environmental Justice		x	

Critical Element	Not Present	Not Affected	Possibly Affected
Energy (Executive Orders 13211 and 13212)		x	
Prime or Unique Farmlands	x		
Floodplains	x		
Botany			x
Invasive, non-native species			x
Threatened or Endangered Species			x
Wildlife including Migratory Birds			x
Wild Horses and Burros	x		
Waste, Hazardous or Solid		x	
Water Quality (Surface and Ground)		x	
Wetlands and Riparian Zones	x		
Wild and Scenic Rivers	x		
Wilderness			x
Recreation			x
Visual Resource Management		x	
Climate Change		x	

Elements of the Environment

BLM considers elements of the environment to fall into 3 categories.

1. Uses of or resources that are not affected by the proposed action;
2. Uses of or resources that are present and that may or may not be affected by the proposed action;
3. Uses or resources not present and not affected by the proposed action.

Areas of Critical Environmental Concern (ACEC)

The proposed project (Alternative A, B or C) would not be situated within an ACEC. These alternatives would be located within the ISDRA. This area is classified as Class I – Intensive Multiple use; the management objective is to enhance opportunities for OHV recreation, camping areas and other facilities.

Because the proposed project and the alternatives would not take place in any designated or proposed ACECs and is listed as a Class I in the CDCA Plan which allows for multiple uses, this element will not be considered further.

Native American Religious Concerns

The proposed project (Alternative A, B or C) would not take place on any traditional cultural properties. The Imperial Sand Dunes have limited value as a cultural landscape for Native Americans. BLM contracted a report on the ISDRA's importance to Native Americans for the 2003 ISDRA RAMP (For detailed information on this study, see EDAW 2002). Informal consultation on this project was conducted with the Quechan and Cocopah cultural resource representatives.

Pursuant to 43 CFR 10.4 the holder of this authorization or its contractor must notify the BLM El Centro Field Office (760-337-4400), by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 the holder must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the Field Office. Protective and/or mitigation measures specified by the Field Office may be required.

Farmlands, Prime/Unique

The proposed project or any alternatives would not take place in any designated or proposed Prime or Unique Farmlands. No water sources are available for farming purposes. Therefore, this element will not be discussed further.

Wild and Scenic Rivers

There are no waterways designated under federal Wild and Scenic Rivers Act 1968 as wild and scenic near any of the proposed construction sites of vault toilets. Therefore, this element will not be discussed further.

Flood Plains

While the project area is not generally considered a flood plain, the Wash Road area is prone to intense flash flooding.

Wetlands/Riparian Zones

The location of the proposed project is not associated with riparian or wetlands habitat. Therefore, as this project would not affect wetlands or Desert Riparian plant species, therefore this element will not be considered further.

Environmental Justice

Title VI of the Civil Rights Act of 1964 and Presidential Executive Order 12898 address three major principles of environmental justice:

1. Avoid, minimize or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
2. Ensure the full and fair participation by all potentially affected communities in the transportation decision making process.
3. Prevent the demand of reduction in or significant delay in the receipt of benefits by minority and/or low-income populations.

The proposed project would benefit the visitors to and the communities of Imperial County by:

- Providing access to “Rural” and “Roaded Natural” camping areas.
- Providing a safer area for camping by preserving access to the area for law enforcement and emergency medical services personnel.

All aspects of the proposed project would be beneficial to the community. Therefore, this element will not be considered further.

Energy (Executive Orders 13211 and 13212)

Implementation of the proposed project or alternatives would not adversely affect energy development, production, supply, and/or distribution. Therefore, this element will not be considered further.

Water Quality (Surface or Ground)

The proposed project or alternatives would have a no adverse effect on surface and groundwater because the road construction is not anticipated to contaminate ground water or surface water in any way. There is no surface water located in the project area and groundwater is located approximately 800 feet below the surface in this area. Therefore, this element will not be considered further.

Wastes, Hazardous or Solid

The proposed project (Alternatives A, B or C) is located on undeveloped land in the ISDRA. All hazardous or solid waste generated by construction would be disposed of legally. Typical petroleum products, gasoline, diesel, motor oil would be used to power and service vehicles needed for construction. Any incident spills would be cleaned up and the potentially contaminated soil and spill material would be disposed of legally.

Visual Resources

The 1987 RAMP characterized the proposed project area as a Class II visual resource area. The landscape is composed of gently sloping desert wash habitats, with microphyll woodlands and desert wash vegetation lining the washes. The area is highly disturbed and one of the most highly used areas in the ISDRA. The proposed project is not anticipated to alter the scenic quality of the area.

Climate Change

The proposed action and all alternatives (except the No Action) would result in use of combustion engines during construction and potentially produce GHGs. Once constructed, it is not anticipated there would be an increase in use of the area resulting from the new road. Levels of use along this road would be such a small amount on a global scale that the BLM believes that this activity would have no effect on climate change.

Uses of Resources Considered in Detail

The following critical elements are present, may be affected by the proposed project (Alternative A, B, C or D), and are considered below.

Invasive, Non-native Species

Several invasive, non-native species are known to occur in or near the proposed project area, including: Sahara mustard (*Brassica tournefortii*), Tamarisk/Salt Cedar (*Tamarix spp.*), and Schizmus grass (*Schizmus spp.*).

In years of abundant rainfall, Sahara mustard and schizmus grass are abundant in the project area. Tamarisk can be found along washes in the project area.

Alternative A (Proposed Action)

Road construction may promote the spread of invasive species from contaminated equipment and spreading of soil during grading activities. Road construction may also alter water flow patterns, creating “road effect” communities where soil is disturbed on road shoulders from wash 1 to wash 25.

Alternative B

Road construction may promote the spread of invasive species from contaminated equipment and spreading of soil during grading activities. Road construction may also alter water flow patterns, creating “road effect” communities where soil is disturbed on road shoulders from wash 1 to wash 10.

Alternative C

Road construction may promote the spread of invasive species from contaminated equipment and spreading of soil during grading activities. Road construction may also alter water flow patterns, creating “road effect” communities where soil is disturbed on road shoulders from wash 1 to wash 18.

Alternative D (No Action)

Under this alternative, invasive species would not be spread due to construction/grading activities. Invasive species would continue to persist naturally in the project area.

Recreation

The area in which the proposed project is located is classified as Class I – Intensive Multiple use; the management objective is to enhance opportunities for OHV recreation, camping areas, and other facilities as permitted. The proposed project would support this designation.

Alternative A (Proposed Action)

Health and safety in the ISDRA is expected to be maintained with Alternative A (Proposed Action) since it would provide for the continuation of safe access to the wash road area for law enforcement personnel and emergency medical personnel as well as safe access for visitors. The development of a new road to maintain existing access will maintain and / or improve visitor satisfaction. Visitors will not be displaced and will have safe and legal access to the areas historically visited since OHV recreation began in the ISDRA. BLM and other emergency responders will also have continued access to respond to emergencies in the area. BLM maintenance staff and contractors will have continued access to maintain recreation facilities and prevent serious health and safety issues from occurring in and around public restrooms.

Funneling traffic onto one road allows BLM to mitigate for dust through suppression measures such as watering during high visitation periods. Construction of a fee collection pull through area will facilitate employee safety, increased fee compliance, and traffic reduction. Construction of a trash collection site will reduce the amount of litter in the area, increase employee safety, promote resource protection, and reduce traffic congestion.

Alternative B

Alternative B is expected to decrease visitor health and safety, since access would end at wash 10. Facilities located south of wash 10 would no longer be accessible under this alternative. Camping areas at washes 1 through 10 and vault toilets at wash 4 and wash 6 would remain accessible. Visitor satisfaction in the wash road area, and adjacent areas, could be decrease due to overcrowding and displacement. BLM and other emergency responders will also have continued access to respond to emergencies in the area to wash six, but less access south of that point. BLM maintenance staff and contractors will have continued access to maintain recreation facilities and prevent serious health and safety issues from occurring in and around public restrooms at wash four and six. Funneling traffic onto one road allows the agency to mitigate for dust up to wash six through suppression measures such as watering during high visitation periods. Failure to construct a fee collection pull through area will not facilitate employee safety, will decrease potential fee compliance and would not facilitate traffic reduction. Failure to construct a trash collection site would not improve employee safety or reduce traffic congestion.

Alternative C

Alternative C is expected to decrease visitor health and safety, since access would end at wash 18. Facilities located south of wash 18 would no longer be accessible under this alternative. Camping areas at washes 1 through 18 and vault toilets at washes 4, 6 and 10 would remain accessible. Visitor satisfaction in the wash road area, and adjacent areas, could decrease due to overcrowding and displacement. BLM and other emergency responders will also have continued access to respond to emergencies in the area to wash 18, but less access south of that point. BLM maintenance staff and contractors will have continued access to maintain recreation facilities and prevent serious health and safety issues from occurring in and around public restrooms. Funneling traffic onto one road allows the agency to mitigate for dust through suppression measures such as watering during high visitation periods. Failure to construct a fee collection pull through area will not facilitate employee safety, will decrease potential fee compliance and would not facilitate traffic reduction. Failure to construct a trash collection site would not improve employee safety or reduce traffic congestion.

Alternative D (No Action)

The No Action alternative would have the most negative impact on visitor health and safety and access, since it would not provide for safe, legal ingress and egress for visitors or BLM law enforcement and emergency medical personnel. Visitors would continue to access the site even without a road, thus risking personal safety in cross country travel. Visitor satisfaction in the wash road area, and adjacent areas, could be decrease due to overcrowding and displacement. BLM and other emergency responders will not have safe access to respond to emergencies in the area. BLM maintenance staff and contractor will not have access or be able to maintain recreation facilities and prevent serious health and safety issues from occurring in and around public restrooms at wash four, six, and 10. Dust suppression measures will not be as feasible as other alternatives. Failure to construct a fee collection pull through area will not facilitate employee safety, will decrease potential fee compliance and would not facilitate traffic reduction. Failure to construct a trash collection site would not improve employee safety or reduce traffic congestion.

Air Quality

The proposed project (Alternatives A, B, or C) would be implemented within the Imperial County Air Pollution Control District (ICAPCD). The proposed road would be located in an area that is designated as out of attainment for Federal Ozone and Inhalable Particulate Matter (PM10) Standards. Construction activity would generate low levels of emissions associated with usage of gasoline and diesel equipment. All equipment that would be used conforms to California emission standards. Fugitive PM10s would be controlled by approved ICAPCD methods. The following guidelines would be followed:

- Mobile equipment will meet California standards.
- Dust will be controlled during construction.
- Any water used will be obtained from an approved source.

Following the above guidelines, this project (Alternative A, B or C) would have negligible adverse effects on air quality.

Alternative A (Proposed Action)

The impacts may have a temporary short term negative effect on air quality during construction, but would have a long term positive effect by funneling traffic onto one road, which would allow the agency to apply dust control measures along the road.

Alternative B

Alternative B would have short term negative effects on air quality during construction and would have a long-term positive effect beyond the road terminus at wash 10, since it will be inaccessible to most street legal vehicles. However, congestion and extensive dispersed recreational activities could decrease air quality in the remaining open areas.

Alternative C

Alternative C would have short term negative effects on air quality during construction and would have a long-term positive effect beyond the road terminus at wash 18, since it will be inaccessible to most street legal vehicles. However, congestion and extensive dispersed recreational activities could decrease air quality in the remaining open areas.

Alternative D (No Action)

Similarly, the no action alternative could have an indirect effect on air quality, since the road would not be built and traffic would not be funneled into one area. Air quality could be impacted through dispersed use in the area, for which dust suppression activities would be unfeasible, thereby producing greater amounts of fugitive dust.

Biological Resources

Botany

Several species of endemic plants occur in or near the proposed project area. A few of the more common species include, but are not limited to: Creosote (*Larrea tridentata*), Colorado Desert Buckwheat (*Eriogonum deserticola*), Emory Indigo Bush (*Psoralea emoryi*), Ironwood (*Olneya testata*) and Blue Palo Verde (*Parkinsonia florida*).

Four special status species also occur near the proposed project area. Peirson's Milkvetch (*Astragalus magdalena* var. *peirsonii*) is currently listed as Threatened under the Endangered Species Act. Algodones Dunes Sunflower (*Helianthus niveus* ssp. *tephrodes*) is listed as State Endangered. Giant Spanish Needle (*Palafoxia arida* var. *arida*) is listed as a Bureau of Land Management Sensitive Species. Wiggin's Croton (*Croton wigginsii*) is listed as a State Rare.

Although all of the species described above occur near the proposed road site, the length of the proposed road is already highly disturbed. Construction of the proposed road is not expected to result in the loss of any special status plants, however, a minimal loss of Creosote (*Larrea tridentate*), Ironwood (*Olneya testola*) or Blue Palo Verde (*Parkinsonia floridiana*) could occur.

Alternative A (Proposed Action)

The proposed action would decrease available habitat for native botanical species by 23.27 acres, from wash 1 to wash 25. By maintaining access to wash 25 and areas beyond, botanical resources could be indirectly impacted by camping and OHV recreation activities. Recreation levels are not expected to increase due to the new road, so it is not expected that any noticeable increase in recreational pressure would occur.

Alternative B

Alternative B would decrease available habitat for native botanical species by 7.75 acres, from wash 1 to wash 10. By maintaining access to wash 10, botanical resources could be indirectly impacted by camping and OHV recreation activities, but to a lesser extent than in Alternative A.

Alternative C

Alternative C would decrease available habitat for native botanical species by 15.51 acres, from wash 1 to wash 18. By maintaining access to wash 18, botanical resources could be indirectly impacted by camping and OHV recreation activities, but to a lesser extent than in Alternative A, but to a greater extent than Alternative B.

Alternative D (No Action)

The no action alternative could have an indirect effect on native botanical species. While no native botanical species would be directly affected, since no road would be built, and no construction would occur, indirect effects may occur. If the no action is implemented and no road is constructed, route proliferation could occur, which would decrease available habitat for native botanical species through soil compaction and direct mortality due to vehicle use.

Table 1 – Acreages disturbed by alternative

Alternative	A	B	C	E
	(Proposed Action Wash 25)	(Wash 10)	(Wash 18)	(No Action)
Road and Shoulder Area Acreage	23.27	7.75	15.51	0
Total Project Area (Maximum Disturbed Area)*	72.72	24.24	48.48	0

* - Please see Appendix A for mathematical calculations used for completion of this table.

Wildlife

The habitat along the proposed road route consists mostly of hard packed sand, transitioning in a few areas to active desert dunes. The Wash Road area also consists of highly disturbed creosote scrub and microphyll woodlands. The project area is subject to intense off-highway vehicle use which has severely impacted the soils and vegetation, thus little annual vegetation or wildlife activity has been observed.

The Imperial Sand Dunes are home to two BLM sensitive species, the Colorado Fringe-toed Lizard (*Uma notata*) and the Flat-tailed Horned Lizard (*Phrynosoma mcalii*). Presence of these species is assumed in the area.

Alternative A (Proposed Action)

The proposed action would decrease available habitat for wildlife by 23.27 acres, from wash 1 to wash 25. Construction of the road is not expected to increase use of the area. By maintaining access to wash 25 and areas beyond, wildlife resources could be indirectly impacted by camping and OHV recreation activities. Mortality associated with traffic traveling on the road could impact wildlife such as lizards and small mammals. Indirect impacts from camping and OHV recreation could include: alteration of habitat, disruptions in foraging and breeding activities and/or mortality for species in adjacent habitats. Maintaining access along the road south of wash 20 could continue to allow OHV and camping activity in proximity to sensitive microphyll woodland habitat. The direct and indirect impacts of construction and maintenance of this road would not result in any additional impacts to this area than are currently occurring.

Alternative B

Alternative B would decrease available habitat for wildlife species by 7.75 acres, from wash 1 to wash 10. By maintaining access to wash 10, wildlife resources could be indirectly impacted by camping and OHV recreation activities, but to a lesser extent than in Alternative A. Alternative B would reduce the impacts to wildlife in sensitive microphyll woodland habitat by limiting access to areas beyond wash 10; however, it would increase the level of impacts from wash 1 to wash 10 and adjacent areas by concentrating and/or redirecting visitor use.

Alternative C

Alternative C would decrease available habitat for wildlife species by 15.51 acres, from wash 1 to wash 18. By maintaining access to wash 18, wildlife resources could be indirectly impacted by camping and OHV recreation activities, but to a lesser extent than in Alternative A, but to a greater extent than Alternative B. Alternative C would reduce the impacts to wildlife in sensitive microphyll woodland habitat by limiting access to areas beyond wash 18; however, it would increase the level of impacts from wash 1 to wash 18 and adjacent areas by concentrating and/or redirecting visitor use.

Alternative D (No Action)

The no action alternative could have an indirect effect on wildlife species. While no wildlife species would be directly affected, since no road would be built, and no construction would occur, indirect effects may occur. If the no action is implemented and no road is constructed, habitat disturbance could be spread over a broad area, instead of concentrated onto a road.

Threatened and Endangered Species

The Federally threatened Desert Tortoise occurs in the vicinity of wash road. However, the proposed project (Alternative A, B or C) is not likely to adversely affect desert tortoise because:

1. The project area is already heavily disturbed.
2. Minimal vegetation will be damaged or destroyed as a result of this project.
3. The tortoise density in this area is extremely low.
4. All BLM personnel working at the job site have been trained by the BLM biologist on proper practices for working in tortoise habitat.
5. The proposed project footprint of 23.27 acres is 1.46% of the 159,000 acre ISDRA, and linear in nature.
6. A biological monitor will be on site during construction of the road.

Federally threatened Pierson's Milkvetch (*Astragalus magdalenae* var. *peirsonii*) inhabits much of the Imperial Sand Dunes. None were located within the project area presumably due to the high level of existing human impact, the lack of active dune habitat and the season in which the work is proposed to take place (June/July). The BLM has determined that this project (Alternative A, B, C or D) will not affect this species. BLM initiated informal consultation with the United States Fish and Wildlife Service on April 10, 2009. BLM asserted that the project may affect, but is not likely to adversely affect desert tortoise and that the project will not affect Pierson's milkvetch.

The United States Fish and Wildlife Service concurred with the BLM's determinations for Desert Tortoise and Pierson's Milkvetch on April 27, 2009.

Alternative A (Proposed Action)

The proposed action would impact habitat for desert tortoise by 23.27 acres, from wash 1 to wash 25. The area is already heavily impacted by the utilization of Off-Highway Vehicles. Impacts to PMV would primarily result from indirect impacts as most of the road construction would be on hard desert floor and not dunes. Because this area has always been accessible to campers along the existing Wash Road, construction of the new road would not be expected to increase use of the area. By maintaining access to wash 25 and areas beyond, tortoise and PMV could be indirectly impacted by camping and OHV recreation activities. Mortality associated with traffic traveling on the road could impact tortoise. Indirect impacts from camping and OHV recreation could include: alteration of habitat, disruptions in foraging and breeding activities and/or mortality for tortoise and PMV. Maintaining access along the road south of wash 20

could continue to allow OHV and camping activity in proximity to sensitive microphyll woodland habitat used by tortoise.

Alternative B

Alternative B would impact habitat for tortoise by 7.75 acres, from wash 1 to wash 10. By maintaining access to wash 10, tortoise and PMV could be indirectly impacted by camping and OHV recreation activities, but to a lesser extent than in Alternative A. Alternative B would reduce the impacts to tortoise in sensitive microphyll woodland habitat by limiting access to areas beyond wash 10; however, it would increase the level of impacts from wash 1 to wash 10 and adjacent areas by concentrating and/or redirecting visitor use.

Alternative C

Alternative C would impact habitat for tortoise by 15.51 acres, from wash 1 to wash 18. By maintaining access to wash 18, tortoise and PMV could be indirectly impacted by camping and OHV recreation activities, but to a lesser extent than in Alternative A, but to a greater extent than Alternative B. Alternative C would reduce the impacts to tortoise in sensitive microphyll woodland habitat by limiting access to areas beyond wash 18; however, it would increase the level of impacts from wash 1 to wash 18 and adjacent areas by concentrating and/or redirecting visitor use.

Alternative D (No Action)

The no action alternative could have an indirect effect on tortoise and PMV. While no tortoise or PMV would be directly affected, since no road would be built, and no construction would occur, indirect effects may occur. If the no action is implemented and no road is constructed, habitat disturbance could be spread over a broad area, instead of concentrated onto a road.

Cultural Resources

The cultural context along with identification and evaluation efforts for parts of the project area are described in a report entitled *Class II Archaeological Survey of the Imperial Dunes*, prepared by Jackson Underwood and James Cleland (EDAW, San Diego, California, 2002), and a report entitled *An Assessment of the Imperial Sand Dunes as a Native American Cultural Landscape*, by John Russell, Clyde Woods, and Jackson Underwood (EDAW, San Diego, California, 2002). Historic resources in the project area include the Union Pacific Railroad (UPRR), which is still operational and is located adjacent to the project area, and its associated historic sites, some of which have been identified on UPRR property, and some on BLM owned lands. These associated sites date from the early to mid-twentieth century, and include cans and bottle glass deposited by UPRR workers, and various materials, such as railroad spikes and glass insulators, associated with the construction and maintenance of the railroad and its associated power line. Very few prehistoric resources have been found in or near the project area, due to the unusual deposition environment in the Imperial Sand Dunes.

A Class III cultural resource survey and evaluation for this specific undertaking (either Alternative A, B or C) was carried out by the BLM staff archaeologists Carrie Simmons and Jenny Hagggar on April 13th and 15th 2009 (See Project Evaluation Report Reference CA-670-09-102-PR01). No historic properties were identified. Isolates associated with the UPRR and the associated power line were found; these include railroad spikes, glass insulators, four fragments of amethyst glass, and various sheet and cast iron fragments that could not be specifically dated or identified as to function. Due to the shifting sands in the area, intact deposits are uncommon.

The BLM has determined that the overview and inventory efforts are adequate to identify historic properties on public lands that might be affected by this undertaking. No historic properties were identified within the APE on public lands for this undertaking and the BLM staff archaeologist has recommended that the proposed alternatives, which include possible road construction from SR 78 at Glamis to wash 28 (Alternative A, B or C) would have no effect on historic properties.

Pursuant to the State Protocol Agreement between the California State Director of the Bureau of Land Management and the California State Historic Preservation Officer (2004) (Section V.A and V.B), and in accordance with 36 CFR Part 800, the BLM has reviewed this undertaking, has made a reasonable effort to identify historic properties that may be located within the Area of Potential Effect (APE), and has assessed the effect of this undertaking on historic properties. The BLM has found that there will be no historic properties affected by this undertaking (Alternative A, B or C).

However, during the construction process the following cultural resource stipulations would apply:

- A. Pursuant to 43 CFR 10.4 the holder of this authorization or its contractor must notify the BLM El Centro Field Office (760-337-4400), by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 the holder must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the Field Office. Protective and/or mitigation measures specified by the Field Office may be required.
- B. The holder of this authorization is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts.
- C. Previously undiscovered archaeological remains uncovered during any ground disturbing activities will be managed pursuant to regulations at 36 CFR 800.11. If historic or archaeological materials are uncovered during any project or construction activity, the holder of this authorization or its contractor must stop work in the area of the discovery that might further disturb such materials, and immediately contact the Field Office. These finds may include, but are not limited to, paleontological fossils, stone chips or flakes and other stone artifacts, soil containing shell, faunal remains and/or heat-altered rock, pottery, historic trash dumps, or other cultural features. Within five working days

the Field Office will inform the holder as to the protective and/or mitigation measures the operator will likely have to undertake before the site can be used (assuming in place preservation is not necessary). These measures shall be the responsibility of the holder.

Cumulative Effects

In the future, it is possible that BLM could implement other management actions from the new Imperial Sand Dunes Recreation Area Management Plan (currently in production). The 2003 ISDRA RAMP outlined additional foreseeable developments/improvements that included the installation of interpretive kiosks, grading of roads, and the construction of developed camp sites.

This area receives 2,325,000 visitor use days per year, associated with OHV recreation and camping use. As with the proposed project (Alternative A, B or C), the proposed road would not create more camping areas. The proposed road would, however, preserve access to the existing camping areas. Therefore, the proposed project is not anticipated to result in increased visitor use, including increased OHV use, at ISDRA.

Increased truck traffic on Highway 78 due to the expansion of the Mesquite Regional Landfill (MRL) could increase the likelihood of an accident with OHVs crossing Highway 78.

The proposed construction of a rail spur to transport trash from the Los Angeles area to the MRL near the project area may decrease the area available for OHV recreation and camping.

Union Pacific Railroad's double tracking project will cause OHV visitors to the ISDRA to have to cross two tracks to access camping areas east of the railroad, increasing the likelihood of a train vs. OHV accident.

Conflicts with private land owners adjacent to the proposed project may arise if the project is not constructed. These private land owners have plans for a developed campground, expansion of RV storage area and a commercial vending program. Loss of access to these areas would result in decreased visitation and presumed decreased revenues for these businesses.

Cumulative effects on botanical and wildlife resources would be incremental, but likely too small to measure, because the project area (Alternatives A, B or C) and foreseeable future development would all be in areas that are already highly disturbed and that contain only a few common plants and transient animals (reptiles and rodents). None of the federal and state listed species were found in the proposed project area during on-the-ground inspection, and it is likely that none would be found in areas of future development along Wash Road.

It is not anticipated that the proposed alternatives will have any cumulative impacts on cultural resources. No historic properties were found within the APE, and subsurface deposition is unlikely in the sand dune environment. In addition, the proposed project is located in an area of

intensive recreational use, so that the proposed construction will add a minimal amount of surface disturbance to the area.

There would be no cumulative effects on ACECs, Prime or Unique Farmland, Wild and Scenic Rivers or wilderness areas because these elements do not occur in these areas.

The analysis of the proposed project (Alternatives A, B or C) on Areas of Critical Environmental Concern (ACEC), Native American Religious Concerns, hazardous or solid wastes, floodplains, prime/unique farmlands, wetland/riparian zones, environmental justice, water quality (surface or ground), energy, wild and scenic rivers, and visual resources indicates that these elements would not be affected by the proposed action; therefore, cumulative effects would not result.

The analysis of the proposed project (Alternative A, B or C) on air quality indicated a minor, negligible adverse effect during the short period of construction that is anticipated for each alternative. However, the proposed project is in an area designated as non-attainment for state and federal ozone and PM10 standards according to Imperial County Air Pollution Control District. Implementation of the proposed project (Alternative A, B or C) and other foreseeable development could result in incremental cumulative effects for short periods of time during construction. These effects, however, would be very small and of short duration.

Mitigation Measures

The BLM would impose the following mitigation measures for Desert Tortoise:

1. The authorized biologist shall be required on-site during the construction activities. This biologist shall have authority from the BLM to halt any action that might result in harm to a desert tortoise. The authorized biologist shall perform a pre-work clearance of the project area, and shall walk ahead of the equipment being used to ensure that no tortoises are harmed. If a desert tortoise is observed on site, all work will cease until the tortoise has vacated the work site. The authorized biologist is not authorized to handle or relocate desert tortoise as part of this project.
2. The area of disturbance shall be confined to the smallest practical area, considering topography, location of burrows, public health and safety, and other limiting factors. Work area boundaries shall be delimited with flagging or other marking prior to the start of grading activities to minimize surface disturbance associated with vehicle straying. Special habitat features, such as burrows, identified by the qualified biologist shall be avoided.
3. No later than 30 days after completion of the project, the authorized biologist shall prepare a report for the Bureau. The report shall document the effectiveness and practicality of the mitigation measures and the number of desert tortoises and types of desert tortoise sign (e.g., burrows, shell fragments, scat) observed on-site or in the immediate vicinity of the project site. The Bureau shall provide a copy of the final report to the Service's Carlsbad Fish and Wildlife Office within 90 days of completion of the final report.

4. All trash and food items shall be promptly contained within closed, raven-proof containers. These containers shall be regularly removed from the project site during grading activities to reduce the attractiveness of the area to ravens and other desert tortoise predators. All raven-proof containers used during grading activities will be removed after completion or termination of the project.

The BLM would impose the following mitigation measures according to the *Flat-tailed Horned Lizard Rangeland Management Strategy 2003 revision*.

1. A preconstruction worker education program shall be developed and implemented. In addition, wallet-cards shall be provided to all construction and maintenance personnel and shall include information regarding the biology and status of the lizard; the protection measures that are being implemented; the function of the flagging around sensitive resources; reporting procedures if a lizard is found within the construction area; and methods of reducing impacts during commuting to and from construction areas.
2. A field contact representative (FCR) shall be designated prior to the start of construction by BLM. The FCR shall be responsible for ensuring compliance with protective measures for the flat-tailed horned lizard and other sensitive biological resources and shall act as the primary resource agency contact. The FCR shall have the authority to halt construction activities if the project is not in compliance with mitigation required by BLM.
3. The FCR shall coordinate with the construction manager to assure that all surface-disturbing activities are located as much as possible in areas that have been previously disturbed or where habitat quality is lower, and where disturbance to biological resources can be minimized.
4. All work areas shall be clearly flagged or otherwise marked, and all work shall be restricted to these areas. All construction workers shall restrict their activities and vehicles to areas that have been flagged or to clearly recognizable areas, such as access roads, that have been identified as “safe” areas by the FCR.
5. A biological monitor shall be present in each area of active surface disturbance throughout the work day from initial clearing through habitat restoration, except where the project is completely fenced and cleared of FTHLs by a biologist (see measure 11 below). The biological monitor(s) shall meet the requirements set forth in Appendix 6 of the Strategy. The monitor shall ensure that the project complies with all FTHL mitigation measures and shall have the authority and responsibility to halt activities that are in violation. The monitor shall inspect the construction areas periodically for the presence of flat-tailed horned lizards and shall inspect any open trenches or pits prior to backfilling. The monitor shall also work with the construction supervisor to take steps to avoid disturbing the lizards and their habitat. If a lizard is discovered within an affected area, the lizard shall be captured and relocated. The biological monitor shall also

excavate all potential flat-tailed horned lizard burrows within the construction areas and relocate any flat-tailed horned lizards encountered.

6. Only persons authorized by the California Department of Fish and Game (CDFG) shall conduct surveys and handle FTHLs. Any workers who discover flat-tailed horned lizards shall avoid disturbing the animals and shall immediately notify their construction supervisor and the biological monitor.
7. The area of vegetation and soil disturbance shall be minimized to the greatest extent possible. When possible, the equipment and vehicles will use existing surfaces or previously disturbed areas. When excavation or grading is necessary, the topsoil shall be stockpiled and restored following completion of the work.
8. Existing roads shall be used to the greatest extent possible for travel and staging areas.
9. The FCR and biological monitors shall keep a record of all sightings of flat-tailed horned lizards and fresh flat-tailed horned lizard scat. Sightings shall be reported in writing to BLM on a schedule established by BLM.

Tribes, Individuals, Organizations, or Agencies Consulted:

Tannika Engelhard and Tyler Grant of the U.S. Fish and Wildlife Service in Carlsbad, California, were contacted for informal consultation on desert tortoise and Peirson's milkvetch. In an e-mail sent from Tyler Grant of the USFWS to BLM Planning and Environmental coordinator Erin Dreyfuss on 4/27/09, he stated, "Based on the information provided and information in our files, we concur that the project as described will have no effect on Peirson's milkvetch and may affect, but is not likely to adversely affect, desert tortoise."

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Appendix A

Mathematical Calculations for Table 1

Road Area Including Shoulders

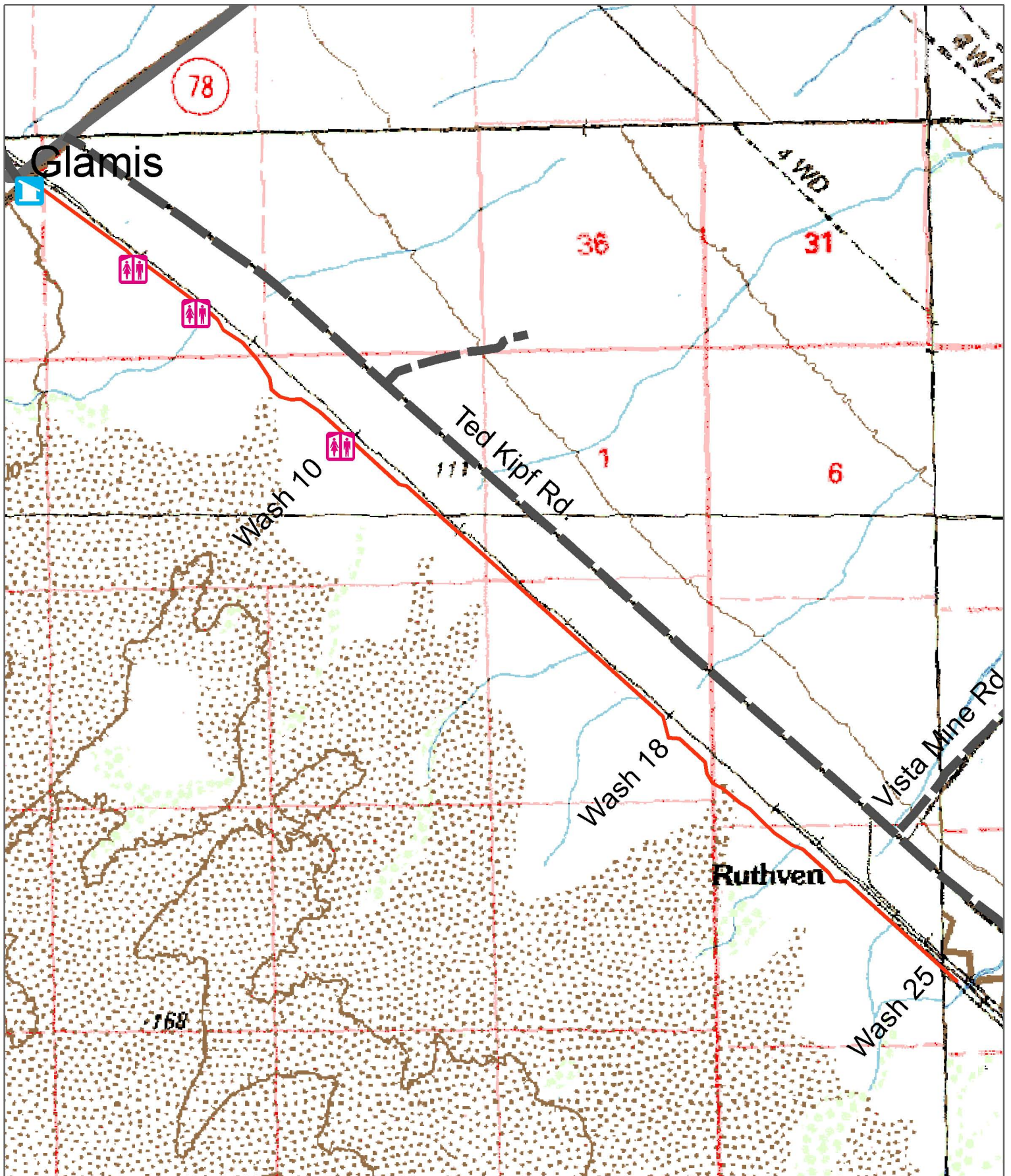
Alternative	Width	Length	Square footage	Square feet in an acre	Total acreage
A	32 ft	31,680 ft	1,013,760 sq. ft.	43,560	23.27 acres
B	32 ft	10,560 ft	337,920 sq. ft.	43,560	7.75 acres
C	32 ft	21,120 ft	675,840 sq. ft.	43,560	15.51 acres

width x length = square footage divided by 1 acre area = total acreage

Total Project Area

Alternative	Width	Length	Square footage	Square feet in an acre	Total acreage
A	100 ft	31,680 ft	3,168,000 sq. ft.	43,560	72.72 acres
B	100 ft	10,560 ft	1,056,000 sq. ft.	43,560	24.24 acres
C	100 ft	21,120 ft	2,112,000 sq. ft.	43,560	48.48 acres

width x length = square footage divided by 1 acre area = total acreage



Legend

— Proposed Wash Road

Proposed Wash Road

