

Memorandum

To: CHAIR AND COMMISSIONERS

CTC Meeting: April 2-3, 2003

Reference No.: 2.2c.(1)
Action Item

From: ROBERT L. GARCIA
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Ref: **APPROVAL OF PROJECT FOR FUTURE CONSIDERATION OF FUNDING AND CONSIDERATION OF ROUTE ADOPTION, 11-IMP-78 KP R14.6/R24.8 (PM R09.1/R15.4), AND 11-IMP-111 KP R33.0/R39.7 (PM R20.5/R24.7), RESOLUTION NUMBER E-03-09**

ISSUE:

The attached resolution proposes to approve for future consideration of funding and consideration of route adoption, the following project for which a Final Environmental Impact Report has been completed:

- Route adoption on Routes 78 and 111 near the City of Brawley in Imperial County, 11-IMP-78 KP R14.6/R24.8 (PM 09.1/R15.4), and 11-IMP-111 KP R33.0/R39.7 (PM R20.5/R24.7).

The project is programmed in the 2002 State Transportation Improvement Program (STIP), with \$40,740,000 from the Interregional Improvement Program (IIP), \$15,000,000 Regional Improvement Program (RIP) funds, and \$34,454,000 Grandfathered RIP. The total project cost is \$108,900,000 for the preferred alternative, exceeding the total amount of funding currently programmed for this project. Approximately \$18,000,000 would be needed in the Fiscal Year (FY) 2005/06 to fund construction of Stage 3 of the preferred alternative. The Regional Transportation Planning Agency was informed of the additional funding needs on October 24, 2001, and agreed that the additional funding would be programmed in the 2004 STIP. Construction for stage 1 is scheduled for FY 2002/03, stage 2 in FY 2004/05.

The Final Environmental Impact Report, Executive Summary and Findings have been transmitted to California Transportation Commission staff.

The Department of Transportation has approved the project for construction. This approval and the resulting filing of the Notice of Determination with the Office of Planning and Research will satisfy the environmental requirements for this stage of the project planning process.

RECOMMENDATION:

The Department recommends that the California Transportation Commission, as a responsible agency, approve the attached Resolution E-03-09.

Attachment(s)

CALIFORNIA TRANSPORTATION COMMISSION

Resolution for Future Consideration of Funding and Consideration of Route Adoption 11-IMP-78 KP R14.6/R24.8 (PM R09.1/R15.4), and 11-IMP-111 KP R33.0/R39.7 (PM R20.5/R24.7)

Resolution E-03-09

- 1.1 **WHEREAS**, the California Department of Transportation (Department) has completed a Final Environmental Impact Report in compliance with the California Environmental Quality Act and the CEQA Guidelines for the following project:
 - Routes 78 and 111 in Imperial County – Route adoption near the City of Brawley, 11-IMP-78 KP R14.6/R24.8 (PM R09.1/R15.4), and 11-IMP-111 KP R33.0/R39.7 (PM R20.5/R24.7).
- 1.2 **WHEREAS**, the Department has certified that the Final Environmental Impact Report has been completed in compliance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines for its implementation; and
- 1.3 **WHEREAS**, the California Transportation Commission, as a responsible agency, has considered the information contained in the Environmental Impact Report; and
- 1.4 **WHEREAS**, written Findings indicate that specific economic, legal, social, technological, or other considerations make it infeasible to avoid or fully mitigate to a level less than significant the effect associated with impacts to agricultural land and biological resources as a result of the project; and
- 1.5 **WHEREAS**, the above significant effects are acceptable when balanced against the facts as set forth in the Statement of Overriding Considerations;
- 2.1 **NOW, THEREFORE, BE IT RESOLVED** that the California Transportation Commission does hereby adopt the Final Environmental Impact Report that supports approval of this recommended project to allow for future consideration of funding and consideration of route adoption.

SUMMARY

This Final Environmental Impact Statement/ Final Environmental Impact Report (FEIS/FEIR) was prepared to inform the public and decision-makers about the potential environmental impacts of the proposed project and of the identification of the Preferred Alternative. This FEIS/FEIR is based on the completed technical studies and public review. This document has been prepared in conformance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) requirements to address potential effects of the proposed State Route (SR) 78/111 Brawley Bypass project. This document provides dimensions of features in metric, followed by English units. Figures are placed at the end of each chapter for the reader's convenience. While CEQA requires that a determination of significant impacts be stated in the FEIS/FEIR, NEPA does not. Chapter 5 provides discussion of significance of impacts according to CEQA. A line in the margin indicates a substantive change in text from the Draft Environmental Impact Statement/ Draft Environmental Impact Report (DEIS/DEIR), which was circulated publicly. Chapter 6 contains responses to comments received on the DEIS/DEIR. Please note that the California Department of Transportation, known commonly as "Caltrans," is, in this FEIS/FEIR, referred to as the "Department."

The proposed action would adopt a new alignment and construct a four-lane expressway in Imperial County, California, from State Route 86 (SR-86) northwest of the city of Brawley, to State Route 111 (SR-111), southeast of the city of Brawley (Figure 1-1 and 1-2). The proposed SR-78/111 expressway, up to about 16 km (10 miles) in length, would supersede the existing state route segments of 78 and 111 in the city of Brawley, and thus is referred to as the Brawley Bypass. The project would adopt a new alignment for SR-78 from either approximately 0.8 km (0.5 miles) south of Baughman Road or Fredricks Road on SR-86 to approximately 0.7 km (0.4 miles) east of the existing east junction of SR-111. The project would also adopt a new alignment for SR-111 from existing SR-111, north of the city of Brawley, to 0.5 km (0.3 miles) north of Mead Road on existing SR-111, south of the city of Brawley (Figure 1-2).

PURPOSE OF AND NEED FOR ACTION

The purpose of the Brawley Bypass is to reduce accidents, traffic congestion, and time delays on SR-78 and SR-111 within the city of Brawley. This project is also needed to accommodate increased regional and international traffic due to the North American Free Trade Agreement (NAFTA) and the General Agreement on Tariffs and Trade (GATT). The project is essential in providing transportation continuity between the International border with Mexico and Riverside County.

IDENTIFICATION AND DESCRIPTION OF THE PREFERRED ALTERNATIVE

The Notice of Intent to prepare an EIS was published in the Federal Register on November 1, 1996. Environmental studies were begun in 1996 and lead to the circulation of the DEIS/DEIR on July 13, 2001. A Public Hearing was held (07/18/01) during the public comment period to solicit comment from Federal, State and local agencies, interested organizations, and the public. The public comment period extended until August 27, 2001. The Environmental Protection Agency, city of Brawley, Imperial County Planning/Building Department, Imperial County Public Works, and the city of Brawley Chamber of Commerce favor Fredricks Alternative (Variation 2).

Upon consideration of the comments received as a result of the DEIS/DEIR circulation, the Project Development Team (PDT) identified Fredricks Alternative (Variation 2) as the Preferred Alternative. The Preferred Alternative best balances the stated project purpose and need with a minimization of environmental impacts.

The Preferred Alternative would begin at the intersection of SR-86 and Fredricks Road and then continue easterly following the course of the existing Fredricks Road. It would cross the New River south of the privately owned Del Rio Country Club golf course and proceed to the south connecting with SR-111, south of SR-78. An interchange will be constructed at the existing SR-111, near Shank Road. The total estimated project cost for this alternative is approximately \$108,900,000. This cost includes roadway, structure items, right-of-way, and support costs.

Modifications made to the proposed Brawley Bypass project since the public distribution of the DEIS/DEIR include:

- ❖ An underpass, which consists of two bridges 58 m (190 ft) in length, has been added to maintain access from two large parcels (previously annexed by the city of Brawley: the Beef Processing Plant and adjacent 65 ha [160-acre] agricultural parcel) to Shank Road (Figure 2-3D). No new environmental impacts are associated with the addition of the underpass since additional right-of-way was not needed to incorporate into project design.
- ❖ The project will be constructed in three stages. This provides the Department with the opportunity to focus on and construct individual stages, thereby accelerating project delivery. No new environmental impacts are associated with this proposed action.
- ❖ The proposed acquisition of additional right-of-way for a redesign of the frontage road at the southern end of the project and the intersection of the Bypass with SR-78 (Figure 2-3E). The additional area impacted is farmland and totals 3 ha (8 acres). The farmland impact was identified as substantial in the DEIS/DEIR. The extra 3 ha (8 acres) impacted does not change this and do not cause a substantial increase in the severity of the previously identified impacts.
- ❖ The Department will offset impacts to ACOE wetlands/waters and CDFG regulated areas in one of two ways: funding for habitat creation or on-site preservation and enhancement. In the former case, the Department will provide the Citizens Congressional Task Force on the New River with monies to create wetlands within the New River floodplain. In the latter case, two parcels, situated between SR-111 and the proposed New River Bridge, would be purchased by the Department (due to terminated access) and used as a mitigation area. The additional area impacted lies within the confines of the New River and it's associated wetlands and woodlands and totals 5.17 ha (12.77 acres). The only additional environmental impact associated with the proposed acquisition was the discovery that there may be hazardous concentrations of lead and zinc present in debris piles that are located on these parcels. Subject to right-of-way negotiations, these debris piles will be remediated by the Department prior to acquisition. The extra 5.17 ha (12.77 acres) impacted does not cause a substantial increase in the severity of the previously identified impacts.
- ❖ To offset the loss of mountain plover and burrowing owl habitat, the Department/FHWA will establish a 97 ha (240 ac) mitigation bank at the intersection of Walker Road and Baker Road

in Imperial County, California. This parcel, which is entirely agricultural in nature, is currently owned by the Department and leased to, and managed by, the FWS Sonny Bono Wildlife Refuge to support burrowing owls and snow geese. The Sonny Bono National Wildlife refuge has agreed to modify their management practices to encourage the use of the agricultural fields by the mountain plover. Studies by Department environmental specialists failed to identify additional environmental impacts associated with the mitigation bank.

OTHER ALTERNATIVES EVALUATED

In addition to the Preferred Alternative, three other build alternatives were evaluated in the DEIS/DEIR for applicability in meeting the project's purpose and need and are shown on Figures 2-2 through 2-3E. A No-Build Alternative was also evaluated. None of these alternatives were identified as the Preferred Alternative. The alternatives withdrawn from consideration before the DEIS/DEIR were found to be unable to meet the project objectives and/or would have had greater environmental impacts. These alternatives are discussed in Section 2.4 in this FEIS/FEIR.

Fredricks Alternative (Variation 1)

This alternative would begin at the intersection of SR-86 and Fredricks Road and then continue easterly following the course of the existing Fredricks Road. It would cross the New River south of the privately owned Del Rio Country Club golf course and proceed to the south connecting with SR-111, south of SR-78. Fredricks Alternative (Variation 1) includes a signalized at-grade intersection at existing SR-111, near Shank Road.

Del Rio Alternative

This alternative would begin at the intersection of SR-86, approximately 0.8 kilometers (one half mile) north of and parallel to Andre Road, and continue easterly. It would cross the New River between the Del Rio Country Club golf course and the sewage treatment plant, and then continue south connecting with SR-111, south of SR-78.

Del Rio North Alternative

This alternative would cross the New River just north of the sewage treatment plant, and then continue south connecting with SR-111, south of SR-78.

No Build Alternative

This alternative would leave SR-78 and SR-111 in its existing condition.

SUMMARY OF ENVIRONMENTAL IMPACTS

Table S-1 at the end of this summary identifies project impacts for all alternatives. For more detailed information regarding the impacts of the project, please see Chapter Four of the FEIS/FEIR and the technical study reports. During the preparation of the studies for the proposed project, five categories of impact were identified as requiring special focus: land use, farmland, social/economic, biological resources, and visual.

LAND USE AND GROWTH

Land Use Impacts

The Preferred Alternative and Fredricks Alternative (Variation 1) would cross the northernmost industrial area within the city of Brawley. By utilizing primarily vacant industrial land, each minimizes the anticipated direct impact of industrial improvements to a full acquisition of one business and partial acquisitions of several other businesses. The majority of these businesses are agricultural support businesses. However, the Preferred Alternative and Fredricks Alternative (Variation 1) would have the potential to affect Imperial County's agricultural economic sector should some of the businesses require full acquisition or relocation. The Del Rio Alternative impacts a feedlot as a partial acquisition and an equestrian center/residence as a full acquisition. It also impacts a portion of the privately owned Del Rio Country Club that is used as an agricultural field. The Del Rio North Alternative also impacts the feedlot as a partial acquisition and one farm residence as a full acquisition. The primary land use impact of all the alternatives is to agricultural land.

Each of the project alternatives would impact the canals, drains and access roads associated with agricultural operations, but would ensure their continued operation. Impacts to farmland and the farm economy/ support businesses are addressed below.

Local Plan Consistency

A corridor for the 78/111 Brawley Bypass Expressway Project is shown in the Imperial County General Plan Circulation Element. There are minor conflicts and inconsistencies between the County General Plan Agricultural Element and the build alternatives. Each of the build alternatives would sever agricultural fields, remove high quality farmland, and create crossing difficulties for agricultural vehicles and equipment. Another conflict is a County General Plan stipulation that agriculturally zoned parcels must be at least 16 hectares (40 acres) in size. This limits a property owner's ability to sell a remainder agricultural parcel that has been split by the expressway to another agricultural property owner.

The proposed project is consistent with the city of Brawley's amended General Plan (amended on 7/18/00 through approval of the Luckey Ranch development) for both the Fredricks and the Del Rio alternatives. On July 18, 2000, the city of Brawley amended their General Plan to show the Preferred Alternative for the Brawley Bypass as the Fredricks Alternative (they did not distinguish between (Variation 1 or Variation 2 however), and adopted the Fredricks Alternative Land Use Plan for the Luckey Ranch Specific Plan. The general plan amendment and approval of the Luckey Ranch Specific Plan included reclassifying Shank Road as a secondary arterial between the Union Pacific railroad crossing and Best Road and as a major arterial east of Best Road. Shank Road currently operates as a collector.

All of the alternatives are compatible with the 1998 Final Draft Brawley Municipal Airport Master Plan. The Preferred Alternative and Fredricks Alternative (Variation 1) impact the proposed future Runway Protection Zone (RPZ) as shown on Figure 3-8. To ensure that the Brawley Bypass project would not interfere with future expansion of the airport, the Department sent plans from the 1998 Final Draft Brawley Municipal Airport Master Plan to the Federal

Aviation Administration (FAA). This plan depicted the proposed Fredricks Alternative (Preferred and Variation 1) encroachment into the RPZ that would correspond to the Plan's expanded runway. On January 29, 2001, and again on July 25, 2002, the FAA determined that the Brawley Bypass Fredricks Alternative "would not be a hazard to air navigation" (Case No 00-AWP-3003-OE) (see Appendix R for a copy of the determinations). The Fredricks Alternative does not preclude future expansion of the airport and it would not be a hazard to air navigation if that expansion should occur. The California Department of Transportation (Department) would continue to coordinate with the Imperial County Airport Land Use Commission (ALUC) and FAA.

Mitigation Measures

The Department will continue to coordinate with City and County officials throughout the life of the project to address local concerns.

Growth

All of the build alternatives would have similar growth impacts on a regional basis. Residential growth rates are moderate and the industrial/ commercial sectors growth rates have been slow. Please refer to Section 4.3 for additional information. At the local level, there are sections of Prime Farmland located north of the City that could be affected by unplanned development due to the access provided by the proposed project. All three of the build alternatives cross through this Prime Farmland. However, urban development is more likely to occur within a city's Sphere of Influence. The Del Rio and Del Rio North alternatives would allow for a greater area of urban development outside the City's Sphere of Influence as shown on Figures 3-7 and 3-11. This area is primarily Prime and Statewide Important Farmland.

Due to the slow growth of commercial and industrial uses in Imperial County, adverse growth impacts to public services, natural and cultural resources, noise, air, and water quality are not anticipated. Furthermore, there are alternative local routes available that provide access. However, given the strong potential for the growing international market and the sensitivity and importance of the agricultural impacts on a national scale, the build alternatives would potentially cause growth impacts to agricultural land.

Because the timing and scale of secondary growth impacts are subject to the control of the local jurisdictions and economic factors beyond the direct control of the Department and Federal Highway Administration (FHWA), this project does not bear mitigation responsibility for these secondary impacts. At this point growth inducement is speculative and for most of the area there is no planned or permitted development.

AGRICULTURAL/FARMLAND IMPACTS

All of the build alternatives would impact a large agricultural area. In addition to the direct and indirect acreage impacts, all the build alternatives would bisect some agricultural fields. Bisecting the fields leads to impacts to irrigation systems and farm operations.

The Fredricks Alternative (Variation 1) affects 160 ha (394 acres) of farmland, 66 ha (162 acres) listed as Prime Farmland and 94 ha (232 acres) of Statewide Important Farmland. The Preferred

Alternative impacts 66 ha (162 acres) of Prime Farmland and 113 ha (280 acres) of Statewide Important Farmland. The Preferred Alternative and Fredricks Alternative (Variation 1) potentially impact agricultural support businesses within the city of Brawley which provide essential services to the surrounding agricultural economy. The possible loss or relocation of these businesses may be of greater importance to agricultural production than the direct loss of farmland.

The Del Rio Alternative impacts 57 ha (140 acres) of Prime Farmland and 120 ha (297 acres) of Statewide Important Farmland. The Del Rio North Alternative removes 57 ha (140 acres) of Prime Farmland and 132 ha (327 acres) of Statewide Important Farmland.

The Department began early coordination regarding farmland in July 1997 with the Imperial County Natural Resource Conservation Service Office. A completed form AD 1006 is attached in Appendix D. Since the build alternatives all exceed the criteria threshold of 160 points, minimization and mitigation measures are considered.

Mitigation Measures

The Imperial County General Plan has goals supporting farmland preservation and measures to protect farmers. In accordance with the General Plan guidelines, the Department will coordinate with Imperial County and appropriate state and federal agencies with an objective to establish conservation easements on viable agricultural parcels for farmland lost. An objective of the program will be an acreage ratio of 1:1. Conservation easements will be purchased from willing sellers in the area. Details for implementation of agricultural conservation easements are expected to result from discussions between the County of Imperial, the Department, and the Natural Resource Conservation Service. At this time, the FHWA has not agreed to this mitigation as being eligible for federal aid funding; however, discussions are ongoing with the Department to determine its acceptability. If not eligible for federal-aid funding, the Department still plans on funding the mitigation from other sources.

The implementation of such a plan for agricultural land preservation in of the nation's prime agricultural regions will reduce the farmland impact of the project though it would remain substantial for both direct and cumulative impacts. Direct impacts to farmland in Imperial County will not be reduced with mitigation measures: a net substantial impact to farmland and the farming community will still result. The amount of farmland which will be lost in perpetuity is large (over 400 acres), and Form 1006 (Appendix D) indicates a rating of over 160. However, the use of "in perpetuity" agricultural conservation easements as mitigation will reduce, to a degree equal to the direct impacts of the project, the development pressures to other important farmland in Imperial County. This mitigation will constitute an investment by the State of California in the continued viability of agriculture as an important part of the County economy and character. No other "in perpetuity" measures have been implemented in Imperial County to ensure farmland protection, to date. The easement measure is being proposed because it has been used successfully throughout the nation to preserve farmland and is widely accepted.

SOCIAL AND ECONOMIC IMPACTS

Local Accessibility

All of the build alternatives would affect local farm and farm service access from one side of the project to another, because the expressway is a controlled access facility. Access across the expressway would only be provided at the intersections. Legal access to each parcel would be maintained during construction and after the expressway is opened (via frontage roads), and therefore access impacts are not considered substantial. Both the Preferred Alternative and Fredricks Alternative (Variation 1) would create access changes, which are discussed in Sections 2.2.1, 2.2.2, and 4.5.1, causing potential economic impacts to businesses in the industrial area near Shank Road.

Public Safety

The build alternatives would improve traffic safety within the project area. The No Build Alternative would not improve traffic safety along the SR-78, SR-111, and SR-86 corridors and on local roads.

Economic Impacts

Business owners in the industrial area along Shank Road and SR-111 and the Del Rio Country Club have expressed concerns over the local access impacts associated with the Preferred Alternative and Fredricks Alternative (Variation 1). During ongoing coordination with the city of Brawley and property owners, the Department has revised project plans to minimize these potential access impacts and allowed for design exceptions to accommodate the local access. Nevertheless access impacts in the area may impact businesses. If the railroad crossing were not left open at Shank Road, business would be affected in that more time would be required to access these businesses from the local street network.

Under the Preferred Alternative and Fredricks Alternative (Variation 1), Imperial Grain Growers (IGG) would lose the primarily vacant storage area in front of the grain warehouses. One office trailer and paved parking is located in this area. IGG has indicated that this loss of land would preclude planned expansion of their operations and has requested relocation. At this time, relocation of IGG is not anticipated. IGG processes 19.6 % of the wheat produced in the Imperial Valley. Every effort would be made during the design and construction phases of the project to minimize access impacts to individual businesses.

The current expected relocations and business disruption is not considered substantial.

From a regional perspective, the proposed project could have generally beneficial economic effects. Although all of the build alternatives would remove a small number of jobs from the agricultural sector, new permanent jobs in trade and industry should outweigh this impact. The project would directly create between \$13,500,000 to \$22,000,000 in wage income. These wages would have an additional multiplier effect on service and support jobs resulting in indirect wages of approximately \$27,000,000 to \$44,000,000.

Based on the acreage impacted, the value of the farmland acquired would be about \$1,275,000 for the Fredricks Alternative (Variation 1), \$1,400,000 for the Preferred Alternative, \$1,370,000 for the Del Rio Alternative, and \$1,500,000 for the Del Rio North Alternative. These values are estimates in year 2000 dollars. This acreage used for highway right-of-way would be removed from the property tax rolls. The property tax lost to Imperial County would be 0.14 % of the annual total property tax revenues of over \$10,000,000.

Bypass Impacts

There are potential bypass impacts whenever a highway is moved from the center of a community. Highway-oriented businesses may relocate to take advantage of new business locations adjacent to the new facility. Other businesses may seek to relocate to take advantage of improved highway access. Bypass effects can cause either adverse or beneficial impacts to local businesses, land owners, and the city bypassed.

There is a proposed 16 ha (46 acre) commercial area designated within the Luckey Ranch Specific Plan at the intersection of existing SR-78 and the proposed expressway as shown in Figure 3-9. This area would allow new businesses wishing to relocate near the proposed project the opportunity to remain within the city of Brawley. Annexation of the active phase of Luckey Ranch into the City occurred in September 2001. All of the alternatives would allow for new businesses within the City's Sphere of Influence northeast of existing SR-111, as shown in Figures 3-7 and 3-11. Therefore, while all of the build alternatives may encourage planned growth development on Prime and Statewide Important Farmland that is currently designated for agricultural use within the Brawley Sphere of Influence, because of its closer proximity to the developed portions of Brawley, both the Preferred Alternative and Fredricks Alternative (Variation 1) encourage planned growth and do so without as many impacts to the Prime and Statewide Important Farmland.

Mitigation Measures

Business designation signs (for services such as gas, food, and lodging) will be placed at appropriate intersections of the proposed project, as well as SR-78 (southeast of Brawley), and SR-78/86 (northeast of Brawley), to direct appropriate traffic into the center of the city. By informing drivers of specific facilities (e.g. restaurants, hotels, gas stations, etc.) available in Brawley through signage, there may be less of a detrimental impact on the local community's economy caused by the detour around the city. Further, the Department will fund the construction of an aesthetically pleasing "City of Brawley" community entry element or feature, which would include landscape and perhaps a monument at the intersection of the SR-78/111 Bypass and SR-78 in the southeast section of Brawley to help mitigate for bypass impacts.

Community Cohesion/Character

The build alternatives would move a substantial portion of the truck traffic out of the city of Brawley's downtown shopping and civic center. This would improve the community cohesion and the character of the City. Nearly 70% of the truck traffic is expected to use the proposed Bypass. With the exception of the industrial area on the Preferred Alternative and Fredricks Alternative (Variation 1), and impacts to the Del Rio Country Club by the Del Rio and Fredricks alternatives, the build alternatives avoid direct impacts to existing communities. The clubhouse

area of the Del Rio Country Club would be largely unaffected by either of these alternatives. Therefore, potential impacts to community events held in this location should be of minimal concern.

Homes adjacent to the expressway would experience an adverse change in character. Each build alternative causes visual and noise impacts to isolated residences farther north of the city of Brawley. These noise and visual impacts represent a change in the rural character for the affected residents and for patrons of the Del Rio Country Club Golf Course. The number of homes affected are few and isolated.

Relocation

The project would relocate one home for both the Del Rio Alternative and the Del Rio North Alternative. No homes would be relocated as a result of the Preferred Alternative or Fredricks Alternative (Variation 1). A total of six non-residential parcels would be impacted by both the Preferred Alternative and Fredricks Alternative (Variation 1); however, only two, one industrial, the other nonprofit, would be relocated. Three businesses would be impacted by the Del Rio Alternative and one business by the Del Rio North Alternative. The Relocation Assistance Program, in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, would minimize relocation impacts (further details are provided in Appendix C).

BIOLOGICAL RESOURCES

Sensitive Wildlife

Direct impacts would occur to the breeding and foraging habitat of the western burrowing owl regardless of the build alternative selected. The impact is considered important because of the sensitivity of the species, the size of the population impacted, and the regional significance of this population. There would be no direct impacts to Yuma clapper rail breeding habitat for any of the alternatives, however, indirect impacts to foraging habitat are likely during construction and regular use of the Preferred Alternative and Fredricks Alternative (Variation 1), which would cross sensitive woodland and wetland habitat adjacent to the New River. Direct impacts to breeding southwestern willow flycatchers and their nesting habitat would not occur for any of the alternatives, however, foraging habitat would likely be affected by each of the alternatives. Additionally, there are potential direct impacts to the mountain plover, a winter migrant visitor, foraging habitat for all build alternatives.

Mitigation Measures

To offset the loss of mountain plover and burrowing owl habitat, the Department will establish a 97 ha (240 acre) mitigation bank at the intersection of Walker Road and Baker Road in Imperial County, California. Administration and oversight of the property will be deeded to the Sonny Bono National Wildlife Refuge, which will actively maintain the parcel to benefit the survival/persistence of both species. In general, the mitigation bank will be used to address impacts associated with the Brawley Bypass and other Department projects that result in potential habitat losses to the mountain plover and/or burrowing owl. Final mitigation ratios have not yet been established, so the exact amount of acreage needed is still to be determined.

A qualified biologist will survey for the Yuma clapper rail and the southwestern willow flycatcher during the spring/summer prior to any surface-disturbing activities at the New River. Should either of the listed birds be observed within or near the Preferred Alternative's footprint, the United States Fish and Wildlife Service (FWS) will be contacted immediately. In addition, coordination will be undertaken to assess the likelihood of impacts and any further measures that will serve to avoid and minimize species impacts, including the possibility of initiating formal section 7 consultation.

To avoid direct and indirect impacts to the Yuma Clapper rail, staging areas in proximity of the New River will be located east of the bridge and away from potential habitat.

To reduce indirect noise effects to nesting and/or breeding birds (including the Yuma clapper rail and southwestern willow flycatcher) within the project vicinity, pile driving associated with construction of the New River crossing will only occur between September 1st and February 14th. In addition, pile driving activities will not be conducted continuously, but intermittently during that timeframe.

To reduce direct impacts to nesting burrowing owls, and all other migratory breeding birds, a construction window, that would prohibit work during the breeding season of the burrowing owl (February 1st to August 31st), will be established. To avoid impacts to the burrowing owl, during the non-breeding portion of the year, a qualified biologist will survey for, and excavate, owl burrows prior to roadway construction and drain relocation.

If a construction window is not practicable and work is expected during part of the breeding season, then, prior to February 1st, a qualified biologist will survey and excavate all potential owl burrows within and beyond the impact zone (a 50 m [164 ft] buffer) to discourage and prevent nesting on-site. Additional surveys under the supervision of a qualified biologist will be performed on a weekly basis until roadwork begins to ensure that new burrows are not created or occupied. If owls are still found nesting within the right-of-way during construction, the nest shall be designated an Environmentally Sensitive Area (ESA) and no construction activities will be allowed within a 75 m (246 ft) radius of the site until nesting is complete.

To avoid direct impacts to those burrowing owls which may be utilizing or inhabiting the banks of canals and drains which will not be directly affected by the Brawley Bypass project, all those canals and drains which parallel the Preferred Alternative will be designated ESAs.

To direct wildlife movement under the New River bridge and reduce and/or eliminate the possibility of highway crossings, a 2 m (6 ft) chain-link fence will be installed within the New River floodplain.

A series of bat boxes will be attached to the girders of the New River bridge to provide available roost sites to the locally occurring populations. Final design plans will be based on existing structures and practices that have proven successful under conditions similar to that of the Brawley Bypass.

Vegetation Impact and Mitigation Measures

All build alternatives will impact salt cedar dominated woodland adjacent to the New River, canals, and drains (details are shown in Table 4-4). No sensitive plants will be impacted by any alternative. Table 4-4 shows the impacts to Waters of the U.S for the build alternatives. Wetland impacts are: zero for the Del Rio North Alternative; 0.004 ha (0.01 acre) for the Del Rio Alternative; and 0.15ha (0.37 acre) for both the Preferred Alternative and Fredricks Alternative (Variation 1). A Wetlands Assessment (see Appendix N) was prepared in accordance with Executive Order 11990, Protection of Wetlands.

An area of the artificial drainage ditch containing some wetland vegetation would be impacted by the Del Rio Alternative. This area is regularly disturbed by the Imperial County Irrigation District during routine channel maintenance and is not within the Army Corps of Engineers (ACOE) Section 404 CWA jurisdictions. Eight mature eucalyptus trees would be removed on the Preferred Alternative and Fredricks Alternative (Variation 1) and would be mitigated by planting 15-gallon native trees at a 7:1 ratio. Sixteen date palm trees also impacted by the Preferred Alternative and Fredricks Alternatives (Variation 1) would be mitigated by planting native trees or palms at a 2:1 ratio. Planted trees would have permanent irrigation, if feasible. Most of the canals and drains that run parallel to the proposed project would not be directly impacted, and will be protected from any construction work as ESAs. Those that are impacted will be relocated. The majority of the canals and drains that will be impacted by the project run perpendicular to the proposed project and will be piped beneath the new highway.

All vegetation within the construction zone will be cleared outside of the breeding season (February 1 to July 31) to avoid impacts to migratory birds and raptors nesting within the project area. If this is not possible, a pre-construction survey will be required to ensure that birds are not nesting in any of the vegetation to be cleared. If birds are nesting, the nest and tree must be designated an ESA and no construction will occur within a radius of 50 m (164 ft) until nesting is complete.

The Department will offset impacts to ACOE wetlands and Waters of the U.S. and California Department of Fish and Game (CDFG) regulated areas through either habitat creation (an in-lieu fee arrangement) or on-site preservation and enhancement. In the former case, the Department will be providing the Citizens Congressional Task Force on the New River with monies to create wetlands within the New River/Alamo River floodplain. Approximately \$50,000-\$125,000 will be provided for every acre of habitat displaced by the Brawley Bypass. Details concerning the logistics and endorsement of the mitigation site will be coordinated with the ACOE, CDFG, and FWS. In the latter case, two parcels situated between SR-111 and the proposed New River Bridge would be purchased by the Department and used as a compensation area. Following bridge construction, a total of 4.93 ha (12.18 acre) of jurisdictional wetlands and woodlands will remain on-site. All such areas will be preserved in perpetuity and a portion of the drainage will be revegetated with dense, native plantings (mesquite, willows, cottonwoods) to improve potential foraging habitat for the southwestern willow flycatcher. A mitigation plan, outlining the details of the enhancement effort, will be determined and finalized in conjunction with the ACOE, CDFG, and FWS during Stage 1 of the Brawley Bypass project.

The Preferred, Fredricks (Variation 1), Del Rio, and Del Rio North alternatives each impact less than 0.2 ha (0.5 acres) of wetlands. As such, these alternatives qualify for Nationwide Permit 14, *Linear Transportation Crossings*.

VISUAL IMPACTS

Adverse visual impacts would result primarily from blocked views, changes in land use patterns, bridges, highway appurtenances, removal or obstruction of existing vertical features in the landscape such as trees, the elevation of the roadway, abutment fills and alteration of the existing north-south rectilinear landscape patterns.

Mitigation Measures

Mitigation will include plantings and design measures for the following concerns:

- ◆ Maintaining visual orientation for the viewer
- ◆ View blockage and loss of existing landscaping features
- ◆ Highway appurtenances such as traffic barriers, signage, and lighting

Mitigation measures will include aesthetic treatment of highway appurtenances and planting of trees and shrubs (including native species) with irrigation. Mitigation is discussed in more detail in Section 4.8, Visual Resources.

All visual mitigation features will be implemented with the Department's District Landscape Architect's advice and consent.

NOISE

For the build alternatives, all receptors would experience varying degrees of impacts. For the build alternatives, all 24 noise receptor sites would have Leq(h) levels ranging from 59 dBA to 69 dBA. For any of the three alternatives, a maximum of three receptor sites would approach or exceed 67 dBA, which is the noise abatement criteria (NAC) for category B receptors and a maximum of seven receptors will have increases of 12 dBA (substantial increase) or more. Receptors 16, 17, 18 and 19 were selected to investigate changes in the noise levels along SR-78/86 for the build and No Build alternatives. These four receptors are expected to increase by 2 dBA for the build alternatives, with a 3 dBA increase for the no build alternative. The number of homes with noise impacts is low since homes are dispersed throughout this rural area.

Preferred Alternative and Fredricks Alternative (Variation 1)

The Preferred and Fredricks (Variation 1) alternatives affect a total of ten receptors (1a, 1b, 2, 3, 4, 5, 6, 20, 21, and 22). Three receptors would experience a 12 dBA or more increase (1a, 1b & 2), and none of these receptors would approach or exceed the Noise Abatement Criteria (NAC) of 67 dBA.

Del Rio Alternative

This alternative would affect a total of twelve receptors (1a, 1b, 2, 8, 9, 10, 12, 13, 14a, 14b, 15, and 22). Six of these receptors would experience an increase of 12 dBA or more and two of these receptors (14a and 14b) would approach or exceed the NAC of 67 dBA.

Del Rio North Alternative

This alternative would affect a total of ten receptors (1a, 1b, 2, 8, 11, 12, 13, 14a, 14b, 15, and 22). Five of these receptors (1a, 1b, 2, 12, 14a, and 14b,) would experience an increase of 12 decibels or more and two of these receptors (14a and 14b) would approach or exceed the NAC of 67 dBA.

Abatement Measures

The Noise Abatement Decision Report (Appendix O) demonstrated that, for the Preferred Alternative, no reasonable abatement measures exist for the predicted traffic noise. The abatement measures considered included constructing berms or walls within the State right-of-way or on private property. The length of the berms or walls necessary to abate the traffic noise impacts showed they were too costly (not reasonable). Results of this noise analysis are included in Section 4.9 and Appendix O of this FEIS/FEIR.

Construction Noise Mitigation

Construction noise control will be implemented as follows:

1. Minimize night time and weekend work.
2. Place maintenance yards, batch plants, haul roads, and other construction-oriented operations in locations that would be the least disruptive to the community.
3. Hold community meetings to explain to the area residents about the construction work, time involved, and the control measures to be taken to reduce the impact of the construction work.
4. No pile driving at night and on weekends.
5. At the New River Bridge location, no pile driving allowed at any time between February 15th and August 31st.
6. Use of portable noise screens to provide shielding for jack hammering or other similar type activities when work is close to noise-sensitive areas.
7. Compliance with Standard Specifications 7-1.01I (January 1999) "Sound Control Requirements." - The contractor shall comply with all local sound control and noise level rules, regulations and ordinances which apply to any work performed pursuant to the contract. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler.

AIR QUALITY

The project lies within Imperial County, which forms part of the Salton Sea Air Basin. Imperial County is in an ozone and PM₁₀ nonattainment area for both state and federal standards. The city of Brawley is located within an attainment area for the state carbon monoxide standard.

The project would affect carbon monoxide concentrations due to its re-distribution of traffic volumes in the vicinity. The project would divert traffic from the congested route through the city of Brawley onto the proposed project. The study analysis methodology used the Transportation Project-Level Carbon Monoxide Protocol (referenced to as the CO Protocol, dated December 1997) Detailed Analyses (CALINE4, CT-EMFAC7) in estimating carbon monoxide (CO) concentrations. According to the results from the CALINE 4 modeling, carbon monoxide concentrations resulting from the project would increase the background concentration of carbon monoxide only 0.1 to 0.2 ppm and remain below the established State and Federal numerical carbon monoxide standards.

The proposed project is included in the Southern California Association of Governments (SCAG) 2000/2001-2005/2006 Regional Transportation Improvement Program (RTIP). The FHWA and the Federal Transit Administration (FTA) made a conformity determination on the SCAG 2000/2001-2005/2006 RTIP on August 16, 2001 and the Regional Transportation Plan (RTP) on June 8, 2001. The regional emissions analyses for Imperial County are based on the build/no-build test for both PM₁₀ and ozone. The design concept and scope of the proposed project has not changed from what is included in the RTP and TIP and therefore the proposed project comes from a conforming transportation plan and program. The proposed project fully conforms to the implementation plan's purpose of attaining and maintaining national ambient air quality standards. Pursuant to 23 USC 135(f)(2) and 23 USC 134(h)(3), this project is included in the financially constrained federal metropolitan and statewide transportation improvement programs and full funding can reasonably be anticipated to be available for the project within the time period contemplated for completion of the project.

The long-term operational effects of the proposed project on PM-10 emissions are also considered minor, since the PM-10 contributions from on-road motor vehicle sources on one of the emission inventories conducted by the California Air Resources Board constitutes only 5 % of the Imperial County Emissions Inventory.

The project-level analysis contained in this document demonstrates that the "Build" scenario does not cause or contribute to any new localized PM₁₀ or CO violations or increase the frequency and severity of any existing PM₁₀ or CO violations. The PM₁₀ and CO qualitative considerations indicate that none of the build alternatives would exceed federal or state standards or adversely impact any of the sensitive receptors evaluated. The assumptions used in the project-level analysis are consistent with the assumptions used in the regional emissions analysis. Therefore this project is found to be in conformity with the State Implementation Plan (SIP) and is consistent with the requirements of the federal transportation conformity rule.

HYDROLOGY AND WATER QUALITY IMPACTS

Potential impacts include both short-term (construction) and long-term (operational) effects such as erosion/sedimentation, hazardous materials spills, vegetation removal, disposal of

groundwater, generation of contaminants and roadway maintenance. Each alternative would have short-term impacts to fresh water within canals. These impacts would potentially occur during canal relocation and reconstruction, however no substantial effect on water quality, or beneficial uses of surface waters or ground water, are expected from project construction or long-term facility operation. The proposed project would be designed to direct drainage away from fresh water supply canals. No inconsistencies with Federal, State or local water quality standards or the Clean Water Act requirements are anticipated. The proposed project (both construction and operation) would not violate any State-adopted or U.S. Environmental Protection Agency (EPA) approved water quality standards, nor would it impair any protected uses for the Salton Sea or any other surface or groundwater. The three build alternatives present negligible differences in level of impacts.

Construction activities would extend into areas previously used for agricultural activities. These areas may contain chemical residues from the use of pesticides, herbicides and/or fertilizers. Any release of hazardous materials could impact beneficial uses of downstream waters and groundwater.

Mitigation Measures

Construction related erosion will be mitigated using Best Management Practices (BMPs) as outlined in the Department's Storm Water Management Plan and Quality Handbooks, the Contractors Guide and Specifications, and the use of applicable BMPs such as:

- Use soft bottom drainage channels and detention basins wherever possible.
- Maximize erosion control during construction and the ultimate project condition.
- Revegetate slopes with native plants, where appropriate.

FLOODPLAIN ASSESSMENT

The proposed project would result in crossings of the New River for all build alternatives (see Appendix Q). The 100-year floodplain is located within the channel which encompasses the New River. This channel includes a series of agricultural fields, drains, access roads, open space, and the Brawley Sewage Treatment Plant.

For each build alternative, the river crossings would include short-span bridges elevated above the river flood elevations. The Preferred Alternative encroaches upon 4.4 ha (11 acres) of the base 100-year Floodplain, Fredricks Alternative (Variation 1) encroaches upon 4.4 ha (11 acres), the Del Rio Alternative encroaches on 4.6 ha (11.5 acres), and the Del Rio North Alternative encroaches on 8.3 ha (20.5 acres). All three alternatives present low flooding risk. The low risk assessment is based on the fact that no measurable increase in the flooding potential for disruption of services or flood related cost is anticipated.

Direct physical effects of the project on the 100-year Floodplain at the New River crossing locations would be limited to temporary construction impacts and the permanent, but not substantial, effects of the placement of fill and supporting piers within the 100-year Floodplain.

The project would not support incompatible 100-year Floodplain development. None of the project alternatives would provide new access or direct access to the New River 100-year

Floodplain. The proposed project is a controlled-access facility and would cross the 100-year Floodplain either on fill or on structures well above the 100-year Floodplain elevation. Currently much of the 100-year Floodplain is in agriculture or undeveloped land and is expected to remain in similar use.

Mitigation Measures

Construction procedures required by the Department for the highway will minimize impacts to the floodplain during construction. These procedures include limiting the area affected by construction, employing BMPs to control erosion and runoff, and prohibiting access to designated ESAs where appropriate. Physical disturbance of the 100-year Floodplain will be minimized by constructing sections of the bridges off-site, and transporting them to the site, rather than by building forms and falsework, casting sections, and removing forms on-site.

GEOLOGIC, SOILS, AND SEISMIC IMPACTS

Each of the proposed project alternatives would encroach on alluvial soils that would be potentially liquefiable during a seismic event. All of the proposed alternatives would potentially be impacted by the Imperial Valley fault (which is approximately 4 kilometers from the project area) or branches thereof. The maximum credible earthquake magnitude is 7.0 with a probability of maximum probable event equal to 0.012/year. Differential settlement and displacement may occur due to soil liquefaction and could result in roadway, bridge crossings, or structure damage. Other areas susceptible to liquefaction and land spreading include drainage ways and canals, especially where the proposed project crosses these facilities. Water retention basins that may be constructed near the proposed project also present a potential surface for land spreading to occur.

Measures to Minimize Risk

The Department routinely incorporates appropriate measures in project design to address seismic risk and soil stability and erosion. Locally excavated material and imported borrow selected by the construction contractor and approved by the Department will be used for the road base and embankments. All environmental approvals and permits for imported fill from material sites will be the responsibility of the construction contractor. Local soils will be amended with imported soils when recommended by the Department geologist to improve their resistance to liquefaction and to minimize soil erosion.

The potential for liquefaction and land spreading due to seismic activity would be addressed through a separate detailed geotechnical investigation of the selected alternative during the final design phase of the project. Potential seismic activity impacts would be addressed by implementing Department standard design and construction procedures. Project-specific recommendations, including specific design measures, would be presented in the project materials, foundation and geotechnical design reports. These reports would be prepared during the final design phase of the project, and recommendations will be based on subsurface exploration, laboratory testing, and engineering analysis.

HISTORIC AND ARCHAEOLOGICAL RESOURCES

The project would have no impact on any archaeological resources in the study area.

On April 16, 1999 the State Historic Preservation Officer (SHPO) concurred in the FHWA determination that: 1) the studies to date have been adequate; 2) no cultural resources that are eligible or potentially eligible for inclusion on the National Register of Historic Places (NRHP) are located within the Area of Potential Effect (proposed right-of-way). The SHPO letter is provided in Appendix E.

HAZARDOUS MATERIALS

An Initial Site Assessment was performed by the Department to evaluate whether any potential hazardous waste sites were present within the project study area. A review was made of historical records and regulatory lists, including federal and state databases, and a visual search of each build alternative corridor was also completed to identify anything not available in the records search. A review of the Del Rio and the Del Rio North alternatives indicated there are no direct hazardous waste impacts. However, there are three potentially hazardous sites on the Preferred Alternative and Fredricks Alternative (Variation 1).

The first site of potential concern includes a parcel within the proposed right-of-way footprint that had both aboveground and underground fuel storage tanks. A preliminary Site Investigation at this site showed considerable ground contamination of both gasoline and diesel fuels.

The second potentially hazardous site revealed two abandoned cars and six abandoned barrels with unknown contents. A site investigation found some minor pesticide contamination but none that exceeded the TTLC (Total Threshold Limit of Concentration) of DDE and DDT. These results are considered normal background levels for an agricultural area.

The third site includes two parcels that are proposed for wetland mitigation. A Preliminary Site Investigation at this site showed that there may be hazardous concentrations of lead and zinc present in the debris piles that are located on the parcels.

Measures to Minimize Harm

With the Preferred Alternative and Fredricks Alternative (Variation 1), the property which had the aboveground and underground fuel storage tanks cannot be avoided. In this area of the project, a northward shift of the proposed alignment would impact numerous packing plants and the Del Rio Country Club golf course and, in addition, necessitate the reconstruction of the existing New River Bridge on SR-111. Any shift to the south would impact multiple businesses and the Imperial Grain Growers. These impacts and their associated costs would be substantial. Therefore, impact to the property is unavoidable.

The owners of the property containing Site A have remediated their property. They received approval of their cleanup proposal from the California Regional Water Quality Control Board - Colorado River Basin Region (CRWQCB) and a "No Further Action" letter.

In coordination with the FWS, it was determined that two parcels situated between SR-111 and the proposed New River Bridge are ideally suited to mitigate for the Project's wetland impacts. Therefore, avoiding the parcels is not possible. These parcels will be fully remediated by the Department prior to acquisition. The debris piles on the parcels will be removed using

excavation methods and disposed at a Class I landfill. Based on the data collected during the preliminary site investigation, the Department's Hazardous Waste Staff estimated that it would cost \$100,000 to clean up these parcels.

All of the three build alternatives would cross the New River, which is contaminated with sewage and industrial waste from Mexico. Elevated levels of fecal coliform exist in the New River and the nearby soils. Once the soils are dry the fecal coliform levels abate within 24 hours. Special health and safety considerations will be required from contractors at the three alternative crossing locations.

Department standard specifications and requirements will be followed regarding hazardous materials. Grading and construction activities will be monitored to identify such materials. If unexpected hazardous materials are discovered during construction, the resident engineer will halt work in the area of concern, flag the area, and notify the Department's District Hazardous Waste Coordinator. When appropriate, the Coordinator will initiate the District's hazardous materials program to notify a HAZMAT team in the region, arrange for waste sampling and identification, and follow established procedures for cleanup. BMPs will be used as applicable. This will include measures to avoid or minimize the potential influx of contaminants into local runoff and surface waters. Such measures may include the use of vegetation-lined retention drainage channels.

CONSTRUCTION IMPACTS

Construction activities can cause temporary impacts with respect to air quality, noise levels, erosion, and access or traffic circulation. These impacts are not considered substantial due to their temporary nature. However, these impacts could be substantial if they occurred during harvest season. The proposed project would temporarily impact local traffic causing some delays and disrupting access. Fredricks Alternative (Variation 1) would require a temporary detour of existing SR-111 during construction. The temporary closure of Best Road for the Del Rio North Alternative would require through traffic to be rerouted. Fire and safety service providers, and local businesses may experience minor delays.

Mitigation Measures

Air Quality

- Compliance with the Department's Standard Specifications (1999) Section 10 "Dust Control."
- Compliance with the Department's Standard Specifications regarding air pollution control.
- Apply water to site and equipment as frequently as necessary to control dust.
- Spread water as a soil binder on unpaved roads, parking areas and on site.
- Wash off trucks / equipment before leaving the site, as necessary.
- Properly tune and maintain equipment.
- Use low-sulfur fuel for equipment.

Noise

- Avoid pile driving at night or on weekends near sensitive receptors.
- At the New River Bridge location, no pile driving allowed at any time between February 15th and August 31st.

Water Quality

- Compliance with the Department's Standard Specifications, and NPDES permit.
- Use of BMPs to minimize erosion and sedimentation.

Traffic Circulation and Access

- Phase construction to minimize traffic impacts.
- Preparation of a traffic management plan, which ensures that clearly identifiable access to and from homes and businesses will be retained.
- Regional circulation will be maintained and local circulation will be accommodated via detours.
- A public awareness program will be developed to inform the public of the upcoming detours and construction schedule.
- Emergency providers (fire, police, and medical) will be informed of all detours. Pedestrian and bicycle access will be maintained.
- Construction signage, signalization, or flagpersons will be used as needed during construction in areas with pedestrian and/or equestrian access.

The duration of the construction period would be approximately 24 months.

CUMULATIVE IMPACTS

Natural Environment/Biological Resources

Adverse impacts resulting from the Brawley Bypass and other related projects could include an increase in urban development throughout the surrounding agricultural areas. As urban development replaces agriculture in the area, many of the species that currently use the agricultural fields and drains would be forced out. Development may also extend out into remaining native areas.

Farmland

The total direct farmland impacts from the Department's projects is over 1012 ha (2500 acres). Impacts from known projects by others and potential induced growth would add to this total. The acreage figures provided above include non-farmable remnants (indirect impacts in the immediate location). Of the 372 ha (920 acres) of farmland impacted on SR-86 Riverside County, 94 ha (232 acres) were under active farming/irrigation. Most of the land held the potential for farming and several high intensity agricultural operations were impacted.

Visual

The proposed project would incrementally contribute to cumulative changes within the viewshed from rural to semi-urban. This project, and other regional highway projects including SR-78/86, SR-111, SR-7 and SR-98, would implement the cumulative changes. These projects, along with possible highway-oriented development, would result in a change in visual quality and character in this primarily rural agricultural landscape.

ENERGY

The proposed project would not create additional traffic in the short term, and would improve traffic flow by providing a more direct connection between SR-78 and SR-111. Delays at traffic signals located in the city of Brawley would be avoided. This would result in a more efficient transportation system. The energy requirement of the build alternatives under consideration would be similar and generally greater than the no-build alternative during the time of construction. However, post construction operational requirements of the facility should be less with the build alternative as opposed to the no-build alternative, and the savings in operational energy requirements would more than offset construction energy requirements and thus, in the long term, result in a net savings in energy savings. For example, the levels of service for all of the build alternatives would be at LOS B compared to LOS F for the no build alternative in 2025. As a result, travel using the build alternative would result in improved level of service and a reduction in energy consumption.

CEQA MANDATORY FINDINGS OF SIGNIFICANCE

Chapter Five provides discussion of significance of impacts according to CEQA. Unavoidable impacts of the proposed project which remain substantial after mitigation are farmland and biological resource impacts (wildlife movement, wildlife habitat, and the western burrowing owl). Potentially substantial impacts would occur if agricultural support businesses, such as Imperial Grain Growers (as described in Sections 3.2.1, 3.4, 4.5.1, 4.5.2, and 4.6), would require relocation. According to the Final Relocation Impact Study, this is not expected. A potentially substantial impact would occur if relocation was not possible for the Future Farmers of America barn; this community resource is expected to have a high likelihood of relocation.

AREAS OF CONTROVERSY

There is widespread support for the proposed project and the identified Preferred Alternative, although a few Brawley citizens, the FWS, and the City of Calipatria et al. do show preference for other alternatives (see Section 6.6 for specifics concerning the City of Calipatria et al. letter). Please refer to Chapter 6 for a comprehensive overview of all of the comments received during the comment period and the Department's responses to them. Citizens and their representatives indicate that the project is needed.

DISTRIBUTION OF FEIS/FEIR

The FEIS/FEIR, and technical reports (as shown on page 4-1), will be available at these locations:

Caltrans District Office, 2829 Juan Street, San Diego, California
Brawley Public Library, 400 Main street, Brawley, California.

ISSUES TO BE RESOLVED

Relevant issues to be resolved before implementation of this project are listed below. Impact issues are fully discussed in Chapter Four.

- Detailed drainage design and drainage features, including decisions on size and location of detention basins; consultation with city of Brawley/ Imperial Valley Irrigation District are ongoing.
- Finalize agreement with the railroad to keep open the railroad crossing at Shank Road.
- Specifics regarding farmland mitigation.

PERMITS, REVIEWS, AND APPROVALS REQUIRED

The following permits, reviews, and approvals are pending and required for project construction:

United States Environmental Protection Agency	Review and comment on the Section 404 Permit.
United States Fish and Wildlife Service	Review and Comment on Section 404 Permit
United States Army Corps of Engineers	All of the build alternatives qualify for a Nationwide permit 14, <i>Linear Road Crossings</i> . Issues Section 404 Permit.
California Department of Fish and Game	1601 Streambed Alteration Agreement would be required for impacts to CDFG jurisdictional areas
California Department of Fish and Game	Section 2080.1 certification for threatened and endangered species.
California Transportation Commission	Approve Route Adoption.
Regional Water Quality Control Board	Section 401 certification (or waiver thereof).
State of California Water Resources Control Board	Section 402 Water Discharge Permit/ Notice of New Construction (Form).
Controlled Access Highway Agreement	City of Brawley, County of Imperial

SUMMARY OF PROJECT ALTERNATIVE IMPACTS

Impact Category	Fredericks Alternative (Variation 1)	Preferred Alternative	Del Rio Alternative	Del Rio North Alternative
Farmland				
Prime	66 ha (162 ac)	66 ha (162 ac)	57 ha (140 ac)	57 ha (140 ac)
Statewide	94 ha (232 ac)	113 ha (280 ac)	120 ha (297 ac)	132 ha (327 ac)
Total	160 ha (394 ac)	179 ha (442 ac)	177 ha (437 ac)	189 ha (467 ac)
Species of Concern	12 burrowing owls, *Mountain Plover, Yuma Clapper Rail, Southwestern Willow Flycatcher	12 burrowing owls, *Mountain Plover, Yuma Clapper Rail, Southwestern Willow Flycatcher	6 burrowing owls, *Mountain Plover, Southwestern Willow Flycatcher	14 burrowing owls, *Mountain Plover, Southwestern Willow Flycatcher
Floodplains Encroachment	3 ha (8 ac)	3 ha (8 ac)	4 ha (9 ac)	7 ha (18 ac)
Irrigation Canals	9 canals (1525 m/ 5003 ft)	9 canals (1525 m/ 5003 ft)	6 canals (578 m/ 1896 ft)	6 canals (964 m/ 3162 ft)
Laterals	1 lateral (470.5 m/ 1543 ft)	1 lateral (1180 m/ 3871 ft)	2 laterals (187.5 m/ 615 ft)	2 laterals (187.5 m/ 615 ft)
Drains	6 drains (1898 m/ 6227 ft)	6 drains (1898 m/ 6227 ft)	11 drains (1796.5 m/ 5894 ft)	10 drains (1582.5 m/ 5192 ft)
ACOE Jurisdiction (Wetlands/Waters of the U.S.)	0.02 ha (0.05 ac) Salt Cedar Dominated Wetland 0.13 ha (0.32 ac) Iodine Bush Dominated Wetland	0.02 ha (0.05 ac) Salt Cedar Dominated Wetland 0.13 ha (0.32 ac) Iodine Bush Dominated Wetland	0.004 ha (0.01 ac) Salt Cedar Dominated Wetland 0.00 ha (0.00 ac) Iodine Bush Dominated Wetland	0.00 ha (0.00 ac) Salt Cedar Dominated Wetland 0.00 ha (0.00 ac) Iodine Bush Dominated Wetland
CDFG Jurisdiction	2.60 ha (6.42 ac) Salt Cedar Dominated Wetland 0.02 ha (0.05 ac) Salt Cedar Dominated Wetland 0.13 ha (0.32 ac) Iodine Bush Dominated Wetland 1.12 ha (2.77 ac) Agricultural Drains	2.60 ha (6.42 ac) Salt Cedar Dominated Wetland 0.02 ha (0.05 ac) Salt Cedar Dominated Wetland 0.13 ha (0.32 ac) Iodine Bush Dominated Wetland 1.12 ha (2.77 ac) Agricultural Drains	3.48 ha (8.60 ac) Salt Cedar Dominated Wetland 0.004 ha (0.01 ac) Salt Cedar Dominated Wetland 0.00 ha (0.00 ac) Iodine Bush Dominated Wetland 0.82 ha (2.03 ac) Agricultural Drains	0.83 ha (2.05 ac) Salt Cedar Dominated Wetland 0.00 ha (0.00 ac) Salt Cedar Dominated Wetland 0.00 ha (0.00 ac) Iodine Bush Dominated Wetland 0.56 ha (1.38 ac) Agricultural Drains
Homes Displaced	0	0	1	1
Business Impacted	1.) La Bolsa, Inc. 2.) Del Rio Country Club 3.) Imperial Grain Growers 4.) Lesicka (5 lessees) 5.) ETX 6.) Future Farmers of America (FFA)	1.) La Bolsa, Inc. 2.) Del Rio Country Club 3.) Imperial Grain Growers 4.) Lesicka (5 lessees) 5.) ETX 6.) Future Farmers of America (FFA)	1.) Jerge School of Horsemanship 2.) Triangle Feeders 3.) Del Rio Country Club	1.) Triangle Feeders
Hazardous Waste	Lead and zinc.	Lead and zinc.	No hazardous materials involvement.	No hazardous materials involvement.
Alignment Length	12.4 km (7.7 miles)	12.4 km (7.7 miles)	15.4 km (9.6 miles)	16.6 km (10.3 miles)
Cost:				
Roadway-Structures-Right-of-Way-Support	\$46,000,000 \$12,000,000 \$21,000,000 \$17,000,000	\$55,000,000 \$17,000,000 \$20,000,000 \$16,000,000	\$45,000,000 \$7,000,000 \$17,000,000 \$16,000,000	\$48,000,000 \$8,000,000 \$18,000,000 \$17,000,000
Total Cost	\$96,000,000	\$108,000,000	\$85,000,000	\$91,000,000

*The impact to Mountain Plover, Yuma Clapper Rail, and Southwestern Willow Flycatcher is to their foraging habitat.

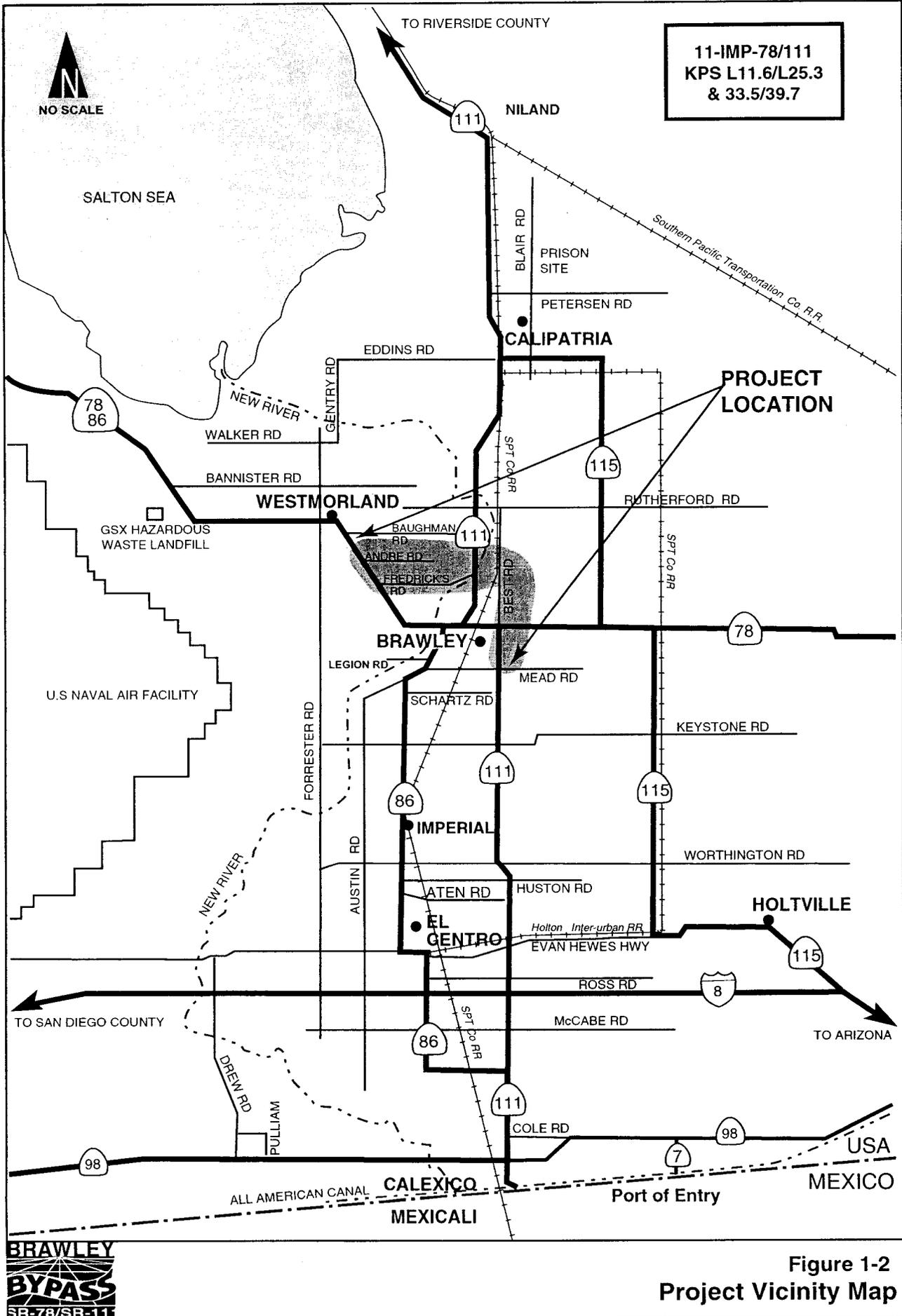


Figure 1-2
Project Vicinity Map

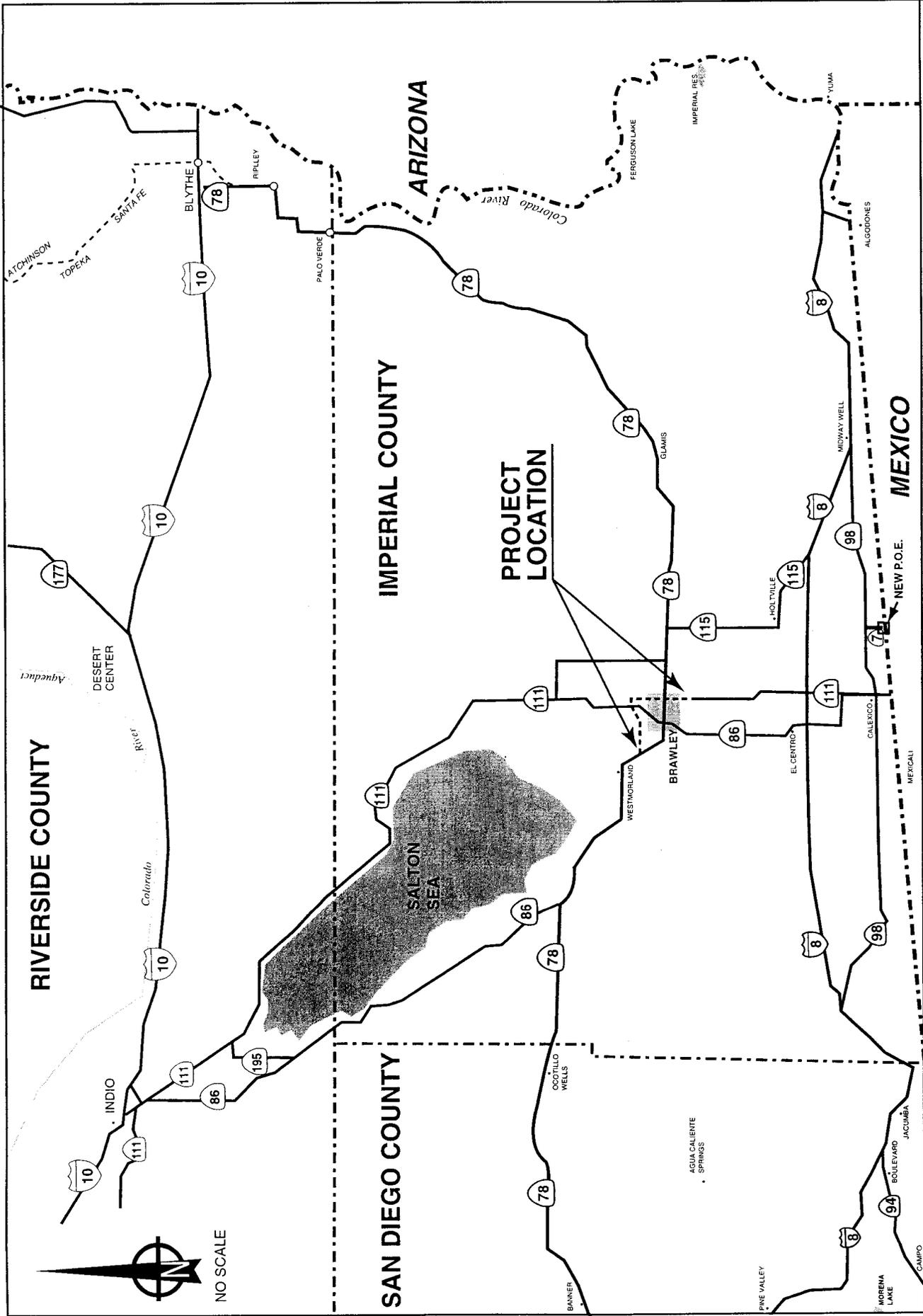


Figure 1-1
Project Location Map



NO SCALE