# 11. ENVIRONMENTAL ISSUES & MITIGATIONS

The project is currently agricultural land with two drainage areas located on or along the property.

#### GEOLOGY

The project site is located in the Colorado Desert Province of southeast California. The dominant feature of the Colorado Desert is also the Salton Trough. Thick sequences of sedimentary rocks of up to 20,000 feet underlie the alluvial cover of the area.

#### SOILS

Utilizing the <u>Soil Survey of Imperial County</u>, published by the U.S. Department of Agriculture Soil Conservation Service (SCS 1981), four differing soil types were identified within the project boundaries. They include: Holtville silty clay, Imperial silty clay, Imperial-Glenbar silty clay loams, and Meloland very fine sand loam. Two types of soils are known to exist on the project site.

**The Holtville soil:** This is most commonly found on the project site. The Holtville silty clay is a very deep, stratified soil is on flood plains and alluvial basin floors. The soil formed in water-laid sediment from mixed sources. Permeability is slow in the clayey layer and moderately rapid in the underlying material. Available water capacity is high to very high and the Holtville soil is no saline to slightly saline. In addition, surface run-off is slow, and the hazard of erosion is slight.

**Imperial Silty Clay:** This very deep soil is on flood plains and in basins and lakebeds. It is formed in clayey sediment from mixed sources. Typically, the Imperial silty clay, wet, is pinkish gray and light brown silty clay to a depth of 60 inches or more. Permeability is slow, and available water capacity is very high. The soil is slightly saline. Surface runoff is low, and the hazard of erosion is slight.

#### MITIGATION

- Provide a full soils report for the site and design the foundation systems according to the soil engineer's recommendation prior to construction.
- Provide construction to meet the latest Uniform Codes and provide foundations, roadbeds, and other structures susceptible to expansive soils to the recommendations of the soil report

# CONVERSION OF AGRICULTURE LAND TO URBAN USES

Typically, new development placed contiguous to agricultural land uses creates some major conflicts. The conflicts arise from both the agricultural community fearing restrictions being placed on their operational aspects, which do quite often become reality. On the other side, the urban users, many of whom are not that familiar with the nature of agricultural operations, complain about dust, noise, odor, and traffic due to large equipment and aerial applications of pesticide and herbicide.

The greater the density of commercial uses contiguous to the farming operations, the greater the number of complaints received by County agencies. While some attempts have been made to define the "buffer" distances necessary to be maintained between a commercial use and an agricultural operation, no definitive number has gained popular acceptance. The urban users complain due to the varied mechanical devices and fumigants used by the agricultural operators and in large part due to a lack of understanding.

In this case however there is a significant separation between the eastern boundary of the project site and the western boundary of the adjacent agricultural field. Between the two operations lie the Alder Drain, a fence, and two IID Dirt Roads. The width of these man made structures is between 60 and 75 feet. It is 60 feet near the northern extreme of the boundary, and 75 closer to the southern extreme. The physical features in this case do provide a perceptive separation.

There has been a tremendous amount of pressure to convert agriculture land to urban land uses within the County of Imperial for the last couple of years. The County of Imperial has responded to this pressure and has adopted specific policies regarding this conversion of agriculture land.

#### Right to Farm Ordinance

In 1990, the Agricultural Commissioner's Office prepared and obtained the approval of the Board of Supervisors for the "Right-to-Farm Ordinance". The Agricultural Ordinance states, in part, that "It is the declared policy of this County to enhance and encourage agricultural operations within the County. It is the intent of this Specific Plan to adopt goals and policies that are supportive of Agriculture operations. Appropriate design and mitigation measures will be implemented to prevent any conflict with agriculture land uses and operations.

## Land Use Incompatibility

The project site is located adjacent to the major North/South State Highway within Imperial Valley, State Highway 111. It is also located on Heber Road, a major transportation corridor for the new Imperial Valley Mall. Both of these corridors are heavily traveled by non-agriculture transportation equipment. Therefore, the continued farming of the project site has the potential to create significant impacts between agriculture and non-agriculture land uses surrounding the site. Agriculture related land uses are incompatible with adjacent high volume traffic corridors.

The transportation of heavy agriculture machinery will become increasing more difficult with the increased growth expected in Imperial Valley. Removal of the project site from agriculture production will decrease the probability of non-agriculture related conflicts within Imperial Valley.

## Employment Creating Land Uses

The conversion of agriculture land within the project site is done with the specific goal of replacing this land use with employment and tax revenue producing land uses. It is recognized that agriculture land is a very important economic generator within Imperial Valley. Therefore, it is the intent of this Specific Plan to replace the agriculture use with a land use that is also a very strong economic generator. The outlet mall, hotel, restaurants and other uses allowed within the project site will provide many jobs and a strong revenue source to the residents of Imperial Valley. This is consistent with the County of Imperial General Plan.

The ground has been in field crop production for the past 10 years. Therefore aerial application of pesticides has not been required thereby minimizing the impact to the land. The only other viable agricultural land is located to the north and east of the project site, and is outside of the urban designated area.

#### MITIGATION

- Maintain a minimum 200 feet buffer zone to mitigate any potential significant impact upon agricultural land northerly of the project site and install a 6 foot solid block wall along the easterly property line.\*
- \* Per the Imperial County Agricultural Commissioners Office

#### CIRCULATION

A comprehensive traffic Study was prepared for this project by Dahl, Robbins & Associates, (see Volume Two, Appendix B). Linscott, Law & Greenspan, Engineers prepared the Traffic Impact Analysis Addendum for this project. The following mitigations (identified within the Traffic Study Addendum, Appendix J) as determined necessary by the Dept of Public Works of the County of Imperial, Heber Public Utility District and CALTRANS are proposed to become conditions of approval of the project Tentative Map (please see the Traffic Study Addendum, Appendix J for more detailed and specific mitigation measures).

# MITIGATION

- Developer will make all improvements recommended by the traffic study along SR 111, and will re-locate Yourman Road, as determined necessary by the Dept of Public Works of the County and the Heber Public Utility District.
- Developer will install internal traffic systems as designated within the plan and as required by the County's Dept. of Public Works and the Heber Public Utility District.
- The project will contribute its fair share to the improvements of Highway 111, as this Highway is impacted by several other projects both in and outside the Heber Public Utility District's Sphere of Influence.

Heber Road

• It is recommended that Heber Road be widened to five lanes prior to Phase D (2010-

15) from Scaroni Road on the west to the east edge of the project. This will provide the necessary capacity at the Highway 111 intersection and the project driveways. An additional southbound left turn lane and a northbound right turn lane will be needed to accommodate 2010 traffic.

Jasper Road and Highway 111

- Currently, this intersection is closed. As indicated earlier, CALTRANS has plans to reopen this intersection as soon as a stoplight is constructed. They have indicated that they expect the stoplight to be constructed within the near future. Because of the impacts to this intersection that the Imperial Center will cause, the Imperial Center will not be developed until the Jasper & 111 intersection is reopened.
- To be inserted

McCabe Road and Highway 111

- Currently, this intersection is closed. As indicated earlier, CALTRANS has plans to reopen this intersection as soon as a stoplight is constructed. They have indicated that they expect the stoplight to be constructed within the near future. Because of the impacts to this intersection that the Imperial Center will cause, the Imperial Center will not be developed until the McCabe Road & 111 intersection is reopened.
- To be inserted

Yourman Road and Heber Road

• In addition to the previously described improvements to Heber Road, a traffic signal will be needed at this intersection

with the addition of Phase D (2010-15) traffic. The Level of Service calculations shows a northbound Level of Service of D in 2006, but if the roadway is realigned as proposed, this will not be the case. Since the need for this signal is due almost entirely to project generated traffic, the entire cost for this signal would be assigned to the developer. It will be important to coordinate this signal with the signal on Highway 111 so that backups do not occur along Heber.

Heber Road and Highway 111

- At project build-out, dual southbound left turn lanes will be required, as well as northbound right turn land.
- Based on existing accident data, it is recommended that some form of advance notice be given to Highway 111 traffic of impending signal changes. This will help to reduce the number of rear end accidents occurring at this location. Since this is a pre-existing condition, it would not be the responsibility of this development.

Dogwood Road and Heber Road

• To be inserted

Bowker Road and Heber Road

- At project build-out, left turn lanes will be needed for northbound and southbound traffic at this intersection.
- The design of all intersections and roadways shall be in accordance with Caltrans Standard Drawings, Imperial County guidelines, City of Calexico Standards and the latest editions of the MUTCD and AASHTO Green Book.

#### **BIOLOGICAL RESOURCES**

This site has been aggressively disturbed for decades, including deep plowing and other farm practices. There is no known species of plants or in this area that are considered to be on any endangered species list or are otherwise protected. A burrowing owl survey has been completed and is discussed below.

#### **Burrowing Owl Survey**

UltraSystems Environmental, Inc. conducted three diurnal and three nocturnal field surveys for the Burrowing Owl (*Athene cunicularia*) at the 77.64 acre Imperial Center site just east Heber and north of Calexico, Imperial County, California. The project is bordered on the north by Abatti Road, the east by the Alder Canal, the south by Heber Road and the west by Yourman Road and Highway 111. This site can also be described as being located within Section 26 of Township 16 South, Range 14 East.

The Burrowing Owl is a small, pale, buffy-brown owl that is unique in its habit of nesting in subterranean burrows. It occurs in grassland and other open habitats throughout much of the western United States, with a disjunct population in Florida. In California, the species is often found in areas containing California Ground Squirrels (*Spermophilus beecheyi*), whose burrows are used by the owls. It is opportunistic in its use of burrow sites, and can use pipes or other suitable cavities at or below ground level. Burrows can be up to 10 feet long, and enlarged nesting chambers are constructed at the terminus. The entrances to burrows are often decorated with bits of animal dung, feathers, litter, and other objects. Clutches of up to 12 eggs are laid, primarily from February to May.

The Imperial Valley is a stronghold for the Burrowing Owl in southern California, with recent estimates of up to 5,600 pairs. Irrigation canals and drains are commonly used as nesting sites in this area. Prey items identified in the Imperial Valley include insects, spiders, earwigs, windscorpions, isopods, and small rodents. The Burrowing Owl is a California Department of Fish and Game (CDFG) Species of Special Concern, and a Federal Species of Concern. The CDF&G is currently evaluating a petition to have the species listed as either Threatened or Endangered. This species is declining in many portions of its range, but has increased in some areas. The CDFG has issued a staff report addressing survey and mitigation guidelines for the owl (CDFG 1995).

As is characteristic of the topography of this region, the Imperial Center site is flat and has a recent and long history of agriculture. Canals and ditches are used to transport water to fields and are the most frequent nest locations of the burrowing owl in Imperial Valley. Roadside berms are also used regularly. The site is bordered by agricultural fields to the north and east. Properties located to the west and south consist of industrial yards, housing and sewage treatment plants. The entire site was recently harvested for corn. Vegetation was therefore sparse and ranged in height from 0-12 inches.

Ultra Systems biologist Marie Barrett conducted a morning survey on September 13, 2005 of the project site. The weather was clear with no precipitation with the wind approximately 0 to 5 mph during the survey. The temperature ranged from 85 to 89 degrees Fahrenheit.

#### Survey Results

No burrowing owls or active burrows were observed on the Imperial Center site. Five burrowing owls and eight active burrows were observed in the banks of the Alder Drain, within the 500-feet buffer area. Please see the Burrowing Owl Study in Appendix E for more information.

Birds observed on-site included ring-necked pheasant (*Phasianus colchicus*), rock dove (*Columba livia*), mourning dove (*Zenaidura macroura*), burrowing owl (*Athene cunicularia*), red-winged blackbird (*Aeglaius phoeniceus*), great-tailed grackle (*Cassidix mexicanus*), house finch (*Carpodacus mexicanus*), cattle egret (*Bubulcus ibis*), great

egret (*Ardea alba*), killdeer (*Charadrius vociferus*), mallard (*Anas platyrhyncos*), greater roadrunner (*Geococcyx californianus*), meadowlark (*Sturnella neglecta*), American kestrel (*Falco sparverius*), northern mockingbird (*Mimus polyglottos*), northern harrier (*Circus cyaneus*), Cooper's hawk (Accipiter cooperii) and American avocet (*Recurvirostra americana*).

Mammals observed on-site included Audubon's cottontail (*Sylvilagus auduboni*), round-tailed ground squirrel (*Spermophilus tereticaudus*) and antelope ground squirrel (*Ammospermophilus leucurus*). No amphibians or reptiles were detected.

Burrowing owls are colonial species and can nest in extremely high densities when conditions are good. The conditions at the Heber Subdivision site are good for burrowing owls. Alfalfa fields provide suitable nesting and foraging habitats where rodents and arthropods are abundant. The canals and roadside berms provide the topography and substrate, and squirrels and irrigation pipes provide nesting habitat.

#### DISCUSSION

Currently, project construction is not expected to occur for several years. Because burrowing owl may nest on the site in the future, burrowing owl surveys should be conducted prior to detailed project planning and construction to assess owl status. Additionally, preconstruction owl surveys will be required.

Mitigation requirements for impacts to burrowing owls are currently under review by USFWS and CDFG. A regional Habitat Conservation Plan (HCP) that would include mitigation requirements for impacts to burrowing owls is being planned. It is recommended that mitigation requirements be reviewed during project planning.

The burrowing owl is a migratory species protected by international treaty under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it

unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers, or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R. 21). Sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs. Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered take and is potentially punishable by fines or imprisonment (CDFG 1995). Project-related disturbance at active nesting territories must be reduced or eliminated during the nesting cycle (February 1 to August 31) to avoid violation of the take provisions of these laws.

- No construction is allowed within 75 meters (250') of an active burrowing owl nest between February 1 and August 31. However, recent studies of the burrowing owl in California have revealed some late season nesting attempts in the fall. Prior to any earth moving, any on-site burrows need to be evaluated by an experienced burrowing owl biologist and confirmed as unoccupied by owls before being graded. This can be accomplished by a combination of behavioral observations, ecological clues at the burrow entrances and fiber optic scope observation of the burrow. Currently closure nest burrows of ("passive relocation") is not permitted at any time. Active relocation is very rarely permitted by USFWS and CDFG.
- Purchasing mitigation lands or conservation easements, swapping land, and providing artificial nest burrows may be required.
- Pre-construction surveys must be undertaken not more than 30 days before earth disturbance (grading) to assess whether owls are nesting on the site. The surveys should be conducted as close to the actual construction initiation date as possible. A biological monitor may need to be present until the entire site has been graded.
- A 75-meter (250') no construction buffer between onsite construction and peripheral nesting pairs with

burrows on adjacent properties is currently required from February 1 to August 31.

#### CEQA AND SPECIFIC PLANS

Adoption of a specific plan is a project subject to the California Environmental Quality Act (CEQA). As such, the specific plan may require the preparation and consideration of a Negative Declaration or an Environmental Impact Report (EIR) disclosing the potential significant environmental effects of the plan, plan alternatives, and the means by which possible environmental damage may be reduced or avoided. Revisions to an existing specific plan may also require CEQA analysis through a subsequent, supplemental, or tiered EIR, or a negative declaration. The environmental information in provides decision makers with the insight necessary to guide policy development, thereby ensuring the plan's policies will address and provide the means by which to avoid potential impacts to the environment.

#### **CEQA Alternatives**

CEQA and the State CEQA Guidelines include provisions for streamlined approaches to environmental review commonly referred to as "tiering" (CEQA Guidelines §15152). Tiering is commonly used to simplify the environmental review required for projects, which follow specific plans and general plans. The result is a limited review of those project-specific effects, which either were not examined or not fully examined, in the specific plan EIR.

#### Tiering

When tiering is used, the later EIRs or negative declarations must refer to the prior EIR and state where a copy of the prior EIR may be examined. The later EIR or negative declaration should state that the lead agency is using the tiering concept and that the EIR or negative declaration is being tiered from the earlier specific plan EIR (CEQA Guidelines §15152(e).