ATTACHMENT N

Mitigated Negative Declaration ND 08-766

AGENDA ITEM NO. _____

1 Civic Center Drive
San Marcos, CA 92069-2918

PHONE: 760.744.1050
FAX: 760.591.4135

NOTICE OF INTENT
TO ADOPT A MITIGATED NEGATIVE DECLARATION

The City of San Marcos intends to adopt ND 07-764. A Negative Declaration* has been prepared for this project and is available for review at the City of San Marcos, Development Services Department, 1 Civic Center Drive, San Marcos, CA 92069-2949.

CASE NO.: ND 08-766 / CUP 06-708

APPLICANT: M&M Telecom, LLC for T-Mobile USA, Inc.

DESCRIPTION OF THE PROJECT: The proposed project is a request for a Conditional Use Permit to allow the construction and operation of an unmanned cellular communication facility on a 10-acre rural residential property. The facility will include twelve antennas on three sectors with four antennas mounted on a 30-foot faux pine tree on the south, northwest and northeast elevations, as well as one GPS antenna mounted on the south elevation of the equipment structure roof. In addition, a 250 square foot equipment structure is proposed to be constructed to match the existing barn located to the south of an existing corral and stable. The proposed wireless facility will require a new underground electric connection (Telco, etc.) to tie into an existing on-site electric meter. Access to the wireless facility can be provided via an existing private access road; a T-Mobile proposed access easement is to be granted by the owner. The project will also include the planting of additional natural trees to blend with the proposed faux tree.

LOCATION: The project site is located at 2080 Golden Eagle Trail in the Questhaven/La Costa Community; Assessor Parcel Number 679-040-01-00.

REVIEW PERIOD: January 24, 2008 - February 13, 2008.

The purpose of this notice is to give interested persons an opportunity to be informed of the environmental determination prior to action by the City. If you have questions about this Notice, you may contact Susan Vandrew Rodrigez, Associate Planner, 744-1050, Extension 3237.

COUNTY CLERK: Please post until **February 13, 2008** per Section 21092.3 of the Public Resources Code.

*Negative Declaration means a written statement/analysis briefly describing the reasons why a proposed project will not have a significant effect on the environment.

AGENDA ITEM

CITY OF SAN MARCOS
NEGATIVE DECLARATION 08-766

CASE NO.:	CUP 06-708
APPLICANT:	M&M Telecom, LLC for T-Mobile USA, Inc.
LEAD AGENCY:	City of San Marcos
DATE:	January 24, 2008

A. DESCRIPTION OF PROJECT:

The proposed project is a request for a Conditional Use Permit to allow the construction and operation of an unmanned cellular communication facility on a 10-acre rural residential property. The facility will include twelve antennas in three sectors with four antennas on each sector mounted on a 30-foot faux pine tree on the south, northwest and northeast elevations as well as one GPS antenna mounted on the south elevation of the equipment structure roof. In addition, a 250 square foot equipment structure is proposed to be constructed to match the existing barn located to the south of an existing corral and stable. The proposed wireless facility will require a new underground electric connection (Telco, etc.) to tie into an existing on-site electric meter. Access to the wireless facility can be provided via an existing private access road; a T-Mobile proposed access easement is to be granted by the owner. The project will also include the planting of three additional natural trees to blend with the proposed faux tree.

B. LOCATION OF PROJECT:

The project site is located at 2080 Golden Eagle Trail in the Questhaven/La Costa Community; Assessor Parcel Number 679-040-01-00.

C. SURROUNDING LAND USES AND SETTING:

The project site is zoned A-1 agricultural residential and designated Rural Residential (.125-1 due/acre) in the Questhaven/La Costa Community Plan and is currently developed as a low density, 10-acre, residential property with an existing single-family residence, horse corral, barn, and landscape. The topography of the overall property site varies from 1105 to 1158 msl (mean sea level) with the existing residence at 1140 msl, and the area of the proposed wireless facility varying from 1125 to 1150 msl. The project site is surrounding by rural residential development to the east, north and south. Homes in Village I2 of the San Elijo Hills Development are located ± 350 feet west of the proposed faux tree with elevations that range from 1060 to 1140 msl.

D. MITIGATION MEASURES:

- The project shall implement a fugitive dust emissions control plan during construction. This plan shall include the watering of the site for dust control, isolating excavated soil onsite until it is hauled away.
- The applicant shall be subject to the payment of Public Facilities Fees in accordance with the Public Facilities Financing Plan Ordinance.
- Annexation to Community Facilities Districts 98-01, 98-02 and 2001-01 payment for Fire, Paramedic, Police and Lighting/Landscaping or an in-lieu fee as requested by the City.
- The applicant/developer shall pay school impact mitigation as authorized by law.
- The proposed GPS antenna(s) shall be appropriately located to minimize a signal view of any nearby residences.
- Submit a post-construction RF emissions report prior to reliance on use.
- The user shall submit noise readings of the wireless facility in operation to the City Planning Division to verify the facility compliance with City Noise standards.

- The site design shall include the addition of three large speciment trees adjacent to the proposed facility as required by the Planning Division.
- The equipment structure shall be designed to match the existing barn.
- To further ensure that a significant impact will not occur, the proposed GPS antennas shall be appropriately located to minimize a view by nearby residences.
- Prior to project implementation and upon further project review by the City Planning Division, the applicant shall provide habitat-based mitigation at a set ratio for impacts to Southern Mixed Chaparral habitat that contains wart-stemmed ceanothus. Habitat based mitigation shall be mitigated for at a ratio of 1:1 (i.e. 1.0 acre of mitigation credits for every 1.0 acre of habitat impacted). Habitat-based mitigation shall be executed according to policy set forth by the City of San Marcos. Onsite mitigation is preferred however offsite purchase of mitigation credits from an approved mitigation bank may also be approved. If required, proof of execution of mitigation will likely be conditioned by the City of San Marcos during project review.
- As an avoidance and minimization measure, prior to construction, a qualified biologist should conduct a survey to identify and physically mark all wart-stemmed ceanothus individuals on and in the immediate vicinity of the proposed impact area. The biologist should confirm the locations of all wart-stemmed ceanothus individuals on and in the immediate vicinity of the proposed impact area with construction personnel for the proposed project. Construction activities should be executed in a method to avoid all wart-stemmed ceanothus specimens to the maximum extent feasible. A monitoring biologist should be present during construction to ensure that direct removal and mortality of wart-stemmed ceanothus individuals is reduced, if feasible, and that no additional individuals outside the proposed impact area are impacted. Construction methods should be low-impact and non-intrusive, and should be conducted by hand-trench or low-impact drilling equipment where feasible.
- To avoid any direct or indirect impacts to nesting birds, removal of any suitable nesting habitat, including any brushing, clearing, and/or grading activities of habitat that may support active nests shall be restricted to periods outside of the breeding season, which is defined as occurring between February 1 and August 31. If the removal of habitat that may support active nests must occur during the breeding season, the applicant shall retain a City-approved biologist to conduct a pre-construction survey for the presence of nesting birds on and within an approximately 500-foot buffer surrounding the construction area. The pre-construction survey must be conducted within 10 calendar days prior to initiating any construction activities, or a set number of days prior according to the City. If nesting birds are detected by the City-approved biologist, a bio-monitor should be present on-site during construction to minimize construction impacts and ensure that no nest is removed or disturbed until all young have fledged.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages:

- ■ Aesthetics
- □ Agriculture Resources
- □ Air Quality
- ■ Biological Resources
- □ Cultural Resources
- □ Geology/Soils
- ■ Hazards & Hazardous Materials
- □ Hydrology/Water Quality
- ■ Land Use/Planning
- □ Mineral Resources
- ■ Noise
- □ Population/Housing
- ■ Public Services
- □ Recreation
- □ Transportation/Traffic
- □ Utilities/Service Systems
- □ Mandatory Findings of Significance

DETERMINATION:

On the basis of this initial evaluation:

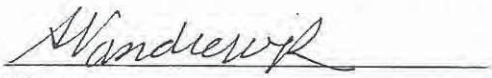
□ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

□ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

□ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

□ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

January 24, 2008
Date

Susan Vandrew Rodriguez
Printed Name

Associate Planner
Title

ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
I. **AESTHETICS:** *Would the proposal:*				
a) Have a substantial adverse effect on a scenic view?	□	□	□	■
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	□	□	□	■
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	□	■	□	□

The proposed unmanned cellular communication facility is proposed on the existing agricultural residential property that contains an existing rural residential single-family residence with accessory structures that include a barn, corrals. The site is not located within a designated ridgeline area. Homes in Village I2 of the San Elijo Hills Development are located ± 350 feet west of the proposed faux tree with elevations that range from 1060 to 1140 msl compared to the subject site, the equipment shelter at 1125 msl and the faux tree at 1150 msl. Large specimen trees shall be planted as a condition of the project adjacent to the proposed pine tree to provide blending of the faux tree to the existing natural landscape. The equipment structure shall be designed to match the existing barn. The blending of the trees with the existing landscape and the matching of the equipment structure with the existing barn structure on-site will serve to mitigate a potentially significant visual impact to a level below significance.

To further ensure that a significant impact will not occur, the proposed GPS antennas shall be appropriately located to minimize view by nearby residences.

The proposed facility will not result in the obstruction of any scenic vistas.

Mitigation Measure:

- The site design shall include the addition of three large specimen trees adjacent to the proposed facility as required by the Planning Division.
- The equipment structure shall be designed to match the existing barn.
- To further ensure that a significant impact will not occur, the proposed GPS antennas shall be appropriately located to minimize view by nearby residences.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
II. **AGRICULTURE RESOURCES**: In *determining Whether impacts to agricultural resources are significant Environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation As an optional model to use in assessing impacts on Agriculture and farmland. Would the project:*				

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) As shown on the maps prepared pursuant to The Farmland Mapping and Monitoring Program of the California Resources Agency, To non-agricultural use? ☐ ☐ ☐ ■

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract ☐ ☐ ☐ ■

c) Involve other changes in the existing environment which, Due to their location or nature, could result in conversion of Farmland, to non-agricultural use? ☐ ☐ ☐ ■

The proposed project will have no impacts regarding Agricultural Resources, as the site is not designated agricultural land and will be located on a ten acre Rural Residential lot.

	Potentially Potentially Significant Impact	Less Significant Unless Mitigated	Than Significant Impact	No Impact
III. AIR QUALITY. *Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the proposal:*				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	■
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	■	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	■
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	■
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	■

The proposed project involves use of an existing 10-acre low-density rural residential property for the construction of a faux tree wireless facility. Two maintenance trips per month will be required to service the facility, which is considered a nominal increase to 28,206 (City 2006 Count) daily trips on Attebury and Questhaven.

Recent studies of the air quality in the project vicinity have determined that the project site, located in the western-central portion of the San Diego Air Basin, is in attainment of federal standards for air quality levels and also state standards except for 10-micro particulate matter and Ozone.

As a matter of course, any development activity on the project site will be subject to all Federal and State air quality standards. Therefore, no significant long-term impacts to air quality are anticipated as a result of the proposed project. During site preparation, dust will be emanating from the project site, however this will be a short-term effect. Prior to any facility construction onsite, a detailed site preparation plan shall be submitted to the City Engineering Division for review and approval. All grading will be required to provide watering to suppress dust.

The proposed project will not violate any air quality plan or standards; nor will the construction result in the creation of objectionable odors. Therefore, no significant impacts to air quality are anticipated as a result of the proposed project and the project will not contribute significantly to the deterioration of ambient air quality.

Mitigation Measure:

- The project shall implement a fugitive dust emissions control plan during construction. This plan shall include the watering of the site for dust control, isolating excavated soil onsite until it is hauled away.

	Potentially Potentially Significant Impact	Less Significant Unless Mitigated	Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES: Would *the project:*				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special statue species in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	☐	■	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	■
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pools, coastal, etc.) through direct removal, filling, hydrological				

interruption, or other means?	□	□	□	■
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	□	■	□	□
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	□	□	□	■
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	□	□	□	■

A biological resources impact analysis (Appendix A) was conducted for the proposed T-Mobile facility. As planned, the proposed project will result in a total of approximately 0.27 acres of temporary and permanent impacts. Permanent impacts resulting from the proposed project will be limited to approximately 0.02 acres of previously disturbed land containing low quality Southern Mixed Chaparral, in addition to approximately 0.02 acres of impacts to disturbed bare earth and land containing existing developments. Temporary impacts resulting from construction access, staging,, and storage will be limited to approximately 0.23 acres of impacts to disturbed bare earth and land containing existing developments. Permanent impacts to disturbed Southern Mixed Chaparral are considered significant under the Draft City of San Marcos Subarea Plan of the Multiple Species Conservation Program (MSCP). Habitat-based mitigation at a 1:1 ration is herein proposed to reduce impacts to disturbed Southern Mixed Chaparral to less than significant, in accordance with the habitat mitigation ratios set forth in the Draft City of San Marcos Subarea Plan of the MHCP.

A single sensitive plant species, wart-stemmed ceanothus (*Ceanothus verrucosus*), was determined to occupy portions of the proposed impact area. This sensitive plant species is not federally- or State-listed as threatened or endangered, however is narrowly distributed in the region and considered rare by the California Native Plant Society (CNPS) and under the Draft City of San Marcos Subarea Plan of the MHCP. Impacts to wart-stemmed ceanothus are considered significant under the Draft City of San Marcos Subarea Plan of the Multiple Habitat Conservation Program MHCP. Impacts to wart-stemmed ceanothus would be reduced to less than significant through implementation of the recommended avoidance and minimization measures during the construction phase of development, and the proposed habitat-based mitigation.

No additional sensitive plant or wildlife species are present or presumed present, and no additional sensitive plant or wildlife species have a high potential to occur within the proposed impact area; therefore, no direct impacts are expected to occur to any additional sensitive plant or wildlife species. Six sensitive wildlife species have a low or moderate potential to use portions of the proposed impact area for foraging habitat, and there is a potential for the proposed project to result in significant impacts to these species habitat. Habitat-based mitigation would reduce potential project impacts to foraging habitat for the six sensitive wildlife species to less than significant.

The project site and immediate vicinity also provide suitable habitat for nesting bird species protected under California Fish and Game Code (CFG Code) and the federal Migratory Bird Treaty Act (MBTA). Potential project impacts to nesting birds protected under CFG Code and the MBTA would be reduced to less than significant with the proposed breeding season avoidance and pre-construction survey measure.

During the biological resources field survey, the site was evaluated according to the guidelines provided in the USACE *Jurisdictional Determination Form Instructional Guidebook* (USACE 2007) and the *Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest* (USACE 2001). The project site does not contain any jurisdictional areas. Waters of the U.S. are absent from the site; no water bodies having a perceptible ordinary high water mark were identified on site or adjacent to the site.

No impacts to any waters of the U.S. are expected to occur as a result of the proposed project; therefore, no mitigation is required.

The following is a list of recommended mitigation measures that will reduce potential project-related impacts to biological resources to less than significant.

The proposed project will result in approximately 0.02 acres of permanent impacts to disturbed Southern Mixed Chaparral. The following will reduce impacts to disturbed Southern Mixed Chaparral to less than significant.

MM-1 Prior to project implementation and upon further project review by the City Planning Division, the applicant shall provide habitat-based mitigation at a set ratio for impacts to Southern Mixed Chaparral habitat that contains wart-stemmed ceanothus. Habitat based mitigation shall be mitigated for at a ratio of 1:1 (i.e. 1.0 acre of mitigation credits for every 1.0 acre of habitat impacted). Habitat-based mitigation shall be executed according to policy set forth by the City of San Marcos. Onsite mitigation is preferred however offsite purchase of mitigation credits from an approved mitigation bank may also be approved. If required, proof of execution of mitigation will likely be conditioned by the City of San Marcos during project review.

The proposed project will result in impacts to approximately 0.02 acres of disturbed Southern Mixed Chaparral that is occupied by the non-listed sensitive plant species, wart-stemmed ceanothus, and provides potential foraging habitat for six non-listed sensitive wildlife species. The following would reduce impacts to sensitive species and their habitat to less than significant.

MM-2 Implementation of MM-1 would reduce direct impacts to wart-stemmed ceanothus, and indirect impacts to foraging habitat for Bell's sage sparrow, blue-gray gnatcatcher, coast western whiptail, northern red-diamond rattlesnake, San Diego horned lizard, and southern California rufous-crowned sparrow to less than significant through habitat-based mitigation.

As an avoidance and minimization measure, prior to construction, a qualified biologist should conduct a survey to identify and physically mark all wart-stemmed ceanothus individuals on and in the immediate vicinity of the proposed impact area. The biologist should confirm the locations of all wart-stemmed ceanothus individuals on and in the immediate vicinity of the proposed impact area with construction personnel for the proposed project. Construction activities should be executed in a method to avoid all wart-stemmed ceanothus specimens to the maximum extent feasible. A monitoring biologist should be present during construction to ensure that direct removal and mortality of wart-stemmed ceanothus individuals is reduced, if

feasible, and that no additional individuals outside the proposed impact area are impacted. Construction methods should be low-impact and non-intrusive, and should be conducted by hand-trench or low-impact drilling equipment where feasible.

The following will reduce impacts to nesting birds pursuant to CFG Code and the MBTA to less than significant.

MM-3 To avoid any direct or indirect impacts to nesting birds, removal of any suitable nesting habitat, including any brushing, clearing, and/or grading activities of habitat that may support active nests shall be restricted to periods outside of the breeding season, which is defined as occurring between February 1 and August 31. If the removal of habitat that may support active nests must occur during the breeding season, the applicant shall retain a City-approved biologist to conduct a pre-construction survey for the presence of nesting birds on and within an approximately 500-foot buffer surrounding the construction area. The pre-construction survey must be conducted within 10 calendar days prior to initiating any construction activities, or a set number of days prior according to the City. If nesting birds are detected by the City-approved biologist, a bio-monitor should be present on-site during construction to minimize construction impacts and ensure that no nest is removed or disturbed until all young have fledged.

The proposed project will be limited in overall direct and indirect impacts during the construction and operational phases, and will result in the loss of approximately 0.02 acres of disturbed Southern Mixed Chaparral habitat containing wart-stemmed ceanothus, and potential foraging habitat for six non-listed sensitive wildlife species. Habitat-based mitigation described above is proposed to reduce project-related impacts to less than significant. This habitat is locally disturbed and relatively extensive, and extends further to the general north, south, and east of the project site. When considered relative to unmanned cellular wireless facility projects that currently exist or are proposed are considerable, however would be reduced to a level of less than significant with habitat-based mitigation incorporated.

The **Mitigation Measures** (MM 1-3) listed above will serve to mitigate the project impacts to a level below significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES: Would *the proposal:*				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	□	□	□	■
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	□	□	□	■
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic features?	□	□	□	■

d) Disturb any human remains, including those interred outside of formal cemeteries? ☐ ☐ ☐ ■

The proposed project will have no impacts regarding Cultural Resources, as the site project site in within an existing residential area on an existing rural residential property that has been disturbed and is not known to contain any cultural resources as per the General Plan Conservation Element.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS: Would *the project:*				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	■
ii) Strong seismic ground shaking?	☐	☐	☐	■
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	■
iv) Landslides?	☐	☐	☐	■
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	■
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	■
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	■

e) Have soils incapable of adequately supporting the use

of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	□	□	□	■

The proposed project will require 15 cubic yards of soil movement and the construction of a retaining wall at the base of the new equipment structure. An amount less than 50 cubic yards does not require a grading permit and further discretionary review in the City Grading Ordinance. Therefore, the project will not have significant impacts regarding Geology and Soils, as the proposed facility will require a nominal amount of soil movement, and the construction of the retaining wall shall be reviewed and approved by the Engineering Division prior to building permit issuance and installation.

Mitigation Measure:

- Construction of the retaining wall design shall be submitted for review and approval by the Engineering Division prior to building permit issuance and installation.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
VII. HAZARDS AND HAZARDOUS MATERIALS: Would *the project:*				
a) Create a significant hazard to the public or the environment through the routine transport, use of disposal of hazardous materials?	□	□	□	■
b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	□	□	■	□
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	□	□	□	■
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	□	□	□	■
e) For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people				

residing or working in the project area?	□	□	□	■
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	□	□	□	■
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	□	□	□	■
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	□	□	□	■

With regard to the release of hazardous materials as discussed in b) above, a Radio Frequency analysis (Appendix B) was conducted for the project area where the subject wireless facility is proposed. The analysis evaluated the consideration of possible exposure of humans to radio-frequency radiation using the Federal Communication Commission Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields. The study concluded that the proposed operation at the project site would not result in exposure of the Public to excessive levels of radio-frequency as defined by the FCC Rules and Regulations, specifically 47 CFR 1.1307 and that T-Mobile's proposed operation is completely complaint. Upon installation of the facility, the City will require submittal of an RF Analysis verifying operational compliance with FCC guidelines. Should the results of the study show any non-compliance with Federal Standards, the site shall be modified to comply with FCC standards. This will serve to mitigate for any potential RF impact that could result from the site.

The proposed project is not anticipated interfere with any adopted emergency plan and will not omit any hazards or create any hazards as discussed under a) and b) through h) above.

The proposed project will generate a less than significant impact regarding Hazards and Hazardous Materials.

Mitigation Measure:

- Submit a post-construction RF emissions report prior to reliance on use and modify the facility if necessary, to verify compliance with FCC RF emission standards.

	Potentially Significant Mitigated	Potentially Significant Unless Impact	Less Than Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY . *Would the project:*				
a) Violate any water quality standards or waste discharge requirements?	□	□	□	■

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted. ☐ ☐ ☐ ■

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site? ☐ ☐ ☐ ■

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site? ☐ ☐ ☐ ■

e) Create or contribute runoff water which would exceed the capacity of existing or planner stormwater drainage systems or provide substantial additional sources of polluted runoff? ☐ ☐ ☐ ■

f) Otherwise substantially degrade water quality? ☐ ☐ ☐ ■

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? ☐ ☐ ☐ ■

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? ☐ ☐ ☐ ■

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? ☐ ☐ ☐ ■

j) Inundation by seiche, tsunami, or mudflow? ☐ ☐ ☐ ■

k) Be tributary to an already impaired water body as listed on the Clean Water Act Section 303(d) list. If so, can it result in an increase in any pollutant for which the water body is already impaired? ☐ ☐ ☐ ■

l) Be tributary to environmentally sensitive areas (e.g. MSCP, RARE, Areas of Special Biological Significance, etc.)? If

so, can it exacerbate already existing sensitive conditions?	□	□	□	■
m) Have a potentially significant environmental impact on surface water quality, to either marine, fresh or wetland waters?				
n) Otherwise substantially degrade water quality?	□	□	■	□
o) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	□	□	□	■
p) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	□	□	□	■
q) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	□	□	□	■
r) Inundation by seiche, tsunami, or mudflow?	□	□	□	■

The proposed project will have no impacts regarding Hydrology and Water Quality; the project will include minor modifications to the existing hillside to provide the addition of the equipment building pad area and the faux tree. This small modification on the existing 10-acre single-family residence will not significantly impact existing drainage and hydrology on the subject site. The nominal increase in runoff generated by the new equipment structure and the faux tree will be accommodated within existing site drainage facilities.

	Potentially Significant Mitigated	Potentially Significant Unless Impact	Less Than Significant Impact	No Impact
IX. LAND USE AND PLANNING. *Would the project:*				
a) Physically divide an established community?	□	□	□	■
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	□	□	■	□
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	□	□	□	■

The project site is zoned A-1 agricultural residential and designated Rural Residential (.125-1 du/acre) in the Questhaven/La Costa Community Plan and is currently developed as a low density, 10-acre, residential property with an existing single-family residence, horse corral, barn, and landscape.

Chapter 20.126.060 of the Zoning Ordinance requires that a Conditional Use Permit shall be required for any Telecommunications facility that would be placed in a location other than those specifically enumerated in Section 20.126.030; a residential property is not listed. Approval of the Conditional Use Permit will required findings for compliance with the Zoning Ordinance and General Plan.

Mitigation Measures:

- Approval of a Conditional Use Permit to allow the installation and operation of the proposed project.

	Potentially Significant Mitigated	Potentially Significant Unless Impact	Less Than Significant Impact	No Impact
X. MINERAL RESOURCES: Would *the project:*				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	□	□	□	■
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	□	□	□	■

The proposed project will have no impacts regarding Mineral Resources, as the site is not identified as containing mineral resources in the General Plan Conservation Element.

	Potentially Significant Mitigated	Potentially Significant Unless Impact	Less Than Significant Impact	No Impact
XI. NOISE. *Would the project result in:*				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	□	□	■	□
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	□	□	□	■
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	□	□	□	■
d) A substantial temporary or periodic increase in				

ambient noise levels in the project vicinity above levels existing without the project?	□	□	□	■
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	□	□	□	■
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	□	□	□	■

The proposed project will have no impacts regarding noise. Any short term construction noise during the site preparation and construction will be mitigated to a level of insignificance with the routine implementation of the Grading Ordinance and Municipal Code, which limit the hours of construction. The wireless communications equipment facility will include four equipment cabinets and a backup generator unit. This equipment will be enclosed on four sides with a roof to match the barn and located 220 feet from the residence on the property. Village I2 is located ± 350 feet west of the proposed. Given the existing low-density residential noise levels in the area, and the location of the wireless equipment building in relation to existing residences, it is anticipated that the project will not generate a significant noise impact.

The project will be subject to the Noise Ordinance, and prior to final facility inspection, the user shall submit noise readings of the wireless facility in operation to the City Planning Division to verify compliance with City Noise standards for noise levels to on-site residents and off-site residents.

Mitigation Measure:

- Prior to final facility inspection, the user shall submit noise readings of the wireless facility in operation to the City Planning Division to verify the facility compliance with City Noise standards.

	Potentially Significant Mitigated	Potentially Significant Unless Impact	Less Than Significant Impact	No Impact
XII. POPULATION AND HOUSING: Would *the project:*				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	□	□	□	■
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	□	□	□	■

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? ☐ ☐ ☐ ■

The proposed project will have no impacts regarding population and housing due the nature of the proposed facility

	Potentially Significant Mitigated	Potentially Significant Unless Impact	Less Than Significant Impact	No Impact

XIII. PUBLIC SERVICES:

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objective for any of the public services:

Fire protection?	☐	☐	■	☐
Police protection?	☐	☐	■	☐
Schools?	☐	☐	☐	■
Parks?	☐	☐	☐	■
other public facilities?	☐	☐	■	☐

The proposed project will impact Public Services, but at a level below significant given the addition of the facility to an existing single-family residence. Any expansion or remodeling of existing facilities may require the payment of school fees, public facilities fees and/or building permit and inspection fees prior to the issuance of permits. The limited amount of impact that the proposed facility may pose to police, fire, lighting and landscaping services are mitigated by an in-lieu fee for the City Community Facilities Districts that are used to fund these services. These fees will further ensure that impacts are less than significant and not cumulatively significant.

Mitigation Measures:

- The applicant shall be subject to the payment of Public Facilities Fees in accordance with the Public Facilities Financing Plan Ordinance.
- Annexation to Community Facilities Districts 98-01, 98-02 and 2001-01 for Fire, Paramedic, Police and Lighting/Landscaping.
- The applicant/developer shall pay school impact mitigation as authorized by law.

	Potentially	Potentially Significant	Less Than

	Significant Mitigated	Unless Impact	Significant Impact	No Impact
XIV. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	□	□	□	■
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	□	□	□	■

The proposed wireless facility will not impact public recreation facilities. The proposed location of the facility is within an existing low-density residential area and is not anticipated to impact recreational activities in the project site area.

	Potentially Significant Mitigated	Potentially Significant Unless Impact	Less Than Significant Impact	No Impact
XV. TRANSPORTATION/TRAFFIC: *Would the project:*				
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?_	□	□	□	■
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	□	□	□	■
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	□	□	□	■
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	□	□	□	■
e) Result in inadequate emergency access?	□	□	□	■

f) Result in inadequate parking capacity?	□	□	□	■
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	□	□	□	■

The proposed project involves use of an existing 10-acre low-density rural residential property for the construction of a faux tree wireless facility. Two maintenance trips per month will be required to service the facility, which is considered a nominal increase to 28,206 (City 2006 Count) daily trips on Attebury and Questhaven, and therefore, less than significant.

	Potentially Significant Mitigated	Potentially Significant Unless Impact	Less Than Significant Impact	No Impact
XVI. **UTILITIES AND SERVICE SYSTEMS:** *Would the project:*				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	□	□	□	■
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	□	□	□	■
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	□	□	□	■
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	□	□	□	■
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers' existing commitments?	□	□	□	■

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? ☐ ☐ ☐ ■

The proposed project will require connection to existing electric services, but will not require an upgrade to existing service systems to provide service to the facility via the new connection, therefore the proposed project is not anticipated to have a significant impact to Utilities and Service Systems.

	Potentially Significant Mitigated	Potentially Significant Unless Impact	Less Than Significant Impact	No Impact
XVII. **MANDATORY FINDINGS OF SIGNIFICANCE:**				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	■

The subject property is zoned A-1 agricultural residential and designated Rural Residential (.125-1 du/acre) in the Questhaven/La Costa Community Plan. The project site is small in size and would be constructed on a 10-acre residential property 220 feet from the residence nearby an existing accessory barn and horse corrals. Habitat-based mitigation described above is proposed to reduce project-related impacts to less than significant. This habitat is locally disturbed and relatively extensive, and extends further to the general north, south, and east of the project site. When considered relative to unmanned cellular wireless facility projects that currently exist or are proposed are considerable, however would be reduced to a level of less than significant with habitat-based mitigation incorporated. Therefore, the proposed project lacks the potential to degrade the quality of the environment, and therefore will not result in the alteration or diversity of plant or animal species, number of endangered species, or introduce new species of plants or habitat.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects)? ☐ ☐ ☐ ■

The project does not have impacts that are individually limited, but cumulatively considerable, as the project site will involve a nominal amount of construction including a 250 square feet of equipment structure area, the faux tree installation and trenching for Telco/utility lines, on an existing low-density

residential property. Although the Negative Declaration analysis does identify less than significant impacts that could result from the project, any such impact will be mitigated to below a level of significance thereby ensuring that impacts are not cumulatively considerable.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ☐ ☐ ☐ ■

The project will be mitigated and conditioned to ensure that impact areas of concern such as noise, aesthetics, and public services are fully mitigated to below a level of significance and will not cause a substantial adverse effects on human beings, either directly or indirectly.

MITIGATION MONITORING PROGRAM
FOR NEGATIVE DECLARATION 08-766

MITIGATION MEASURES	TIMING	RESPONSIBILITY
The project shall implement a fugitive dust emissions control plan during construction. This plan shall include the watering of the site for dust control, isolating excavated soil onsite until it is hauled away.	During Construction	Applicant
Submit a post-construction RF emissions report prior to reliance on use.	Post-Construction	Applicant
To avoid any direct or indirect impacts to nesting birds, removal of any suitable nesting habitat, including any brushing, clearing, and/or grading activities of habitat that may support active nests shall be restricted to periods outside of the breeding season, which is defined as occurring between February 1 and August 31. If the removal of habitat that may support active nests must occur during the breeding season, the applicant shall retain a City-approved biologist to conduct a pre-construction survey for the presence of nesting birds on and within an approximately 500-foot buffer surrounding the construction area. The pre-construction survey must be conducted within 10 calendar days prior to initiating any construction activities, or a set number of days prior according to the City. If nesting birds are detected by the City-approved biologist, a bio-monitor should be present on-site during construction to minimize construction impacts and ensure that no nest is removed or disturbed until all young have fledged.	During Construction	Applicant
Prior to project implementation and upon further project review by the City Planning Division, the applicant shall provide habitat-based mitigation at a set ratio for impacts to Southern Mixed Chaparral habitat that contains wart-stemmed ceanothus. Habitat based mitigation shall be mitigated for at a ratio of 1:1 (i.e. 1.0 acre of mitigation credits for every 1.0 acre of habitat impacted). Habitat-based mitigation shall be executed according to policy set forth by the City of San Marcos. Onsite mitigation is preferred however offsite purchase of mitigation credits from an approved mitigation bank may also be approved. If required, proof of execution of mitigation will likely be conditioned by the City of San Marcos during project review.	Prior to Grading Permit Issuance	Applicant
As an avoidance and minimization measure, prior to construction, a qualified biologist should conduct a survey to identify and physically mark all wart-stemmed ceanothus individuals on and in the immediate vicinity of the proposed impact area. The biologist should confirm the locations of all wart-stemmed ceanothus individuals on and in the immediate vicinity of the proposed impact area with construction personnel for the proposed project. Construction activities should be executed in a method to avoid all wart-stemmed ceanothus specimens to the maximum extent feasible. A	During Construction	Applicant

MITIGATION MEASURES	TIMING	RESPONSIBILITY
monitoring biologist should be present during construction to ensure that direct removal and mortality of wart-stemmed ceanothus individuals is reduced, if feasible, and that no additional individuals outside the proposed impact area are impacted. Construction methods should be low-impact and non-intrusive, and should be conducted by hand-trench or low-impact drilling equipment where feasible.		
Prior to final facility inspection, the user shall submit noise readings of the wireless facility in operation to the City Planning Division to verify the facility compliance with City Noise standards.	Prior to final inspection	Applicant
The equipment structure shall be designed to match the existing barn.	Building Plan shall reflect this design Prior to Building Permit Issuance	Applicant
The site design shall include the addition of three large specimen trees adjacent to the proposed facility as required by the Planning Division.	During Construction	Applicant
To further ensure that a significant impact will not occur, the proposed GPS antennas shall be appropriately located to minimize a view by nearby residences.	Prior to Building Permit Issuance	Applicant
The applicant shall be subject to the payment of Public Facilities Fees in accordance with the Public Facilities Financing Plan Ordinance.	Prior to building permit issuance	Applicant
The applicant/developer shall pay school impact mitigation as authorized by law.	Prior to Building Permit Issuance	Applicant
Annexation to Community Facilities Districts 98-01, 98-02 and 2001-01 for Fire, Paramedic, Police and Lighting/Landscaping.	Prior to Building Permit Issuance	Applicant

APPENDIX A

RF EMISSIONS COMPLIANCE REPORT

T-Mobile

Site: SD06391C - Golden Eagle Residence
2080 Golden Eagle Trail
San Marcos, CA
4/23/2007

Report Status:

T-Mobile Is Under 5% Threshold

Prepared By:

Sitesafe, Inc.

200 North Glebe Road, Suite 1000 Arlington, VA 22203

Voice 703-276-1100
Fax 703-276-1169

Engineering Statement in Re:
Electromagnetic Energy Analysis
T-Mobile
San Marcos, CA

Upon penalty of perjury, I, Klaus Bender, state:

That I am registered as a Professional Engineer in the Commonwealth of Virginia and

That I have extensive professional experience in the wireless communications engineering industry; and

That I am an employee of Sitesafe, Inc. in Arlington, Virginia; and

That I am thoroughly familiar with the Rules and Regulations of the Federal Communications Commission ("the FCC" and "the FCC Rules") both in general and specifically as they apply to the FCC's Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; and

That the technical information serving as the basis for this report was supplied by T-Mobile (See attached Site Summary and Carrier documents), and that T-Mobile's installations involve communications equipment, antennas and associated technical equipment at a location referred to as the "SD06391C - Golden Eagle Residence" ("the site"); and

That T-Mobile proposes to operate at the site with transmit antennas listed in the carrier summary and with a maximum effective radiated power as specified by T-Mobile and shown on the worksheet, and that worst-case 100% duty cycle have been assumed; and

That this analysis has been performed with the assumption that the ground immediately surrounding the tower is primarily flat or falling; and

That at this time, the FCC requires that certain licensees address specific levels of radio-frequency energy to which workers or members of the public might possibly be exposed (at §1.1307(b) of the FCC Rules); and

That such consideration of possible exposure of humans to radio-frequency radiation must utilize the standards set by the FCC, which is the Federal Agency having jurisdiction over communications facilities; and

That the FCC rules define two tiers of permissible exposure guidelines: 1) "uncontrolled environments," defined as situations in which persons may not be aware of (the "general public"), or may not be able to control their exposure to a transmission facility; and (2) "controlled environments," which defines situations in which persons are aware of their potential for exposure (industry personnel); and

That this statement specifically addresses the uncontrolled environment (which is more conservative than the controlled environment) and the limit set forth in the FCC rules for licensees of T-Mobile's operating frequency as shown on the attached antenna worksheet; and

That when applying the uncontrolled environment standards, the predicted Maximum Power Density at two meters above ground level from the proposed T-Mobile operation is no more than 2.67% of the maximum in any accessible area on the ground and

That it is understood per FCC Guidelines and OET65 Appendix A, that regardless of the existent radio-frequency environment, only those licenses whose contributions exceed five percent of the exposure limit pertinent to their operation(s) bear any responsibility for bringing any non-compliant area(s) into compliance; and

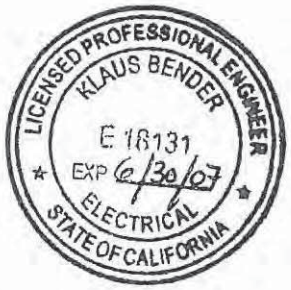
That the calculations provided in this report are based on data provided by the client and antenna pattern data supplied by the antenna manufacturer, in accordance with FCC guidelines listed in OET-65. Horizontal and vertical antenna patterns are combined for modeling purposes to accurately reflect the energy two meters above ground level where on-axis energy refers to maximum energy two meters above the ground along the azimuth of the antenna and where area energy refers to the maximum energy anywhere two meters above the ground regardless of the antenna azimuth, accounting for cumulative energy from multiple antennas for the carrier and frequency range indicated; and

That the Occupational Safety and Health Administration has policies in place which address worker safety in and around communications sites, thus individual companies will be responsible for their employees' training regarding Radio Frequency Safety.

In summary, it is stated here that the proposed operation at the site would not result in exposure of the Public to excessive levels of radio-frequency energy as defined in the FCC Rules and Regulations, specifically 47 CFR 1.1307 and that T-Mobile's proposed operation is completely compliant.

Finally, it is stated that access to the tower should be restricted to communication industry professionals, and approved contractor personnel trained in radio-frequency safety; and that the instant analysis addresses exposure levels at two meters above ground level and does not address exposure levels on the tower, or in the immediate proximity of the antennas.

Date: April 25, 2007



Klaus Bender, P.E.
Licensed Professional Engineer
California License No. 18131

T-Mobile
SD06391C - Golden Eagle Residence
Site Summary

Carrier	Area Maximum Percentage MPE
T-Mobile	2.67 %
Composite Site MPE:	2.67 %

T-Mobile
SD06391C - Golden Eagle Residence
Carrier Summary

Frequency:	1950	MHz
Maximum Permissible Exposure (MPE):	1000	µW/cm^2
Maximum power density at ground level:	26.69713	µW/cm^2
Highest percentage of Maximum Permissible Exposure:	2.66971	%

					On Axis		Area	
Antenna Make	**Model**	**Height (feet)**	**Orientation (degrees true)**	**ERP (Watts)**	**Max Power Density (µW/cm^2)**	**Percent of MPE**	**Max Power Density (µW/cm^2)**	**Percent of MPE**
Andrew	UMWD-06516	22	0	1200	21.147743	2.114774	21.217091	2.121709
Andrew	UMWD-06516	22	120	1200	21.147741	2.114774	21.217089	2.121709
Andrew	UMWD-06516	22	240	1200	21.147741	2.114774	21.217089	2.121709

T-Mobile
SD06391C - Golden Eagle Residence
Andrew:UMWD-06516 Antenna Worksheet (0 Sector)

Maximum Permissible Exposure (MPE): 1000

ERP (Watts):	1200	Height (feet):	22	Frequency (MHz):	1950	Downtilt (Degrees):	0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density (µW/cm^2)	Percent of MPE	Times Below MPE
0.1	-0.03	0.9931	2696.12	2696.12	0.005505	0.000550	181665
1.0	-0.30	0.9333	269.63	269.58	0.550408	0.055041	1816
2.0	-1.10	0.7762	134.83	134.75	2.200963	0.220096	454
3.0	-2.50	0.5623	89.91	89.79	4.949653	0.494965	202
4.0	-4.60	0.3467	67.46	67.29	8.793130	0.879313	113
5.0	-7.40	0.1820	53.99	53.79	13.726710	1.372671	72
6.0	-10.60	0.0871	45.02	44.77	18.501923	1.850192	54
7.0	-13.10	0.0490	38.61	38.32	21.147743	2.114774	47
8.0	-13.80	0.0417	33.81	33.48	20.363623	2.036362	49
9.0	-13.90	0.0407	30.08	29.71	16.302507	1.630251	61
10.0	-14.80	0.0331	27.10	26.69	10.950963	1.095096	91
12.0	-21.30	0.0074	22.63	22.14	4.559410	0.455941	219
14.0	-26.50	0.0022	19.45	18.87	5.183122	0.518312	192
16.0	-20.00	0.0100	17.07	16.41	2.642658	0.264266	378
18.0	-20.00	0.0100	15.23	14.48	2.448399	0.244840	408
20.0	-20.60	0.0087	13.76	12.93	2.990634	0.299063	334
22.0	-21.30	0.0074	12.56	11.65	3.577174	0.357717	279
24.0	-25.60	0.0028	11.57	10.57	3.459418	0.345942	289
26.0	-39.40	0.0001	10.73	9.65	3.831537	0.383154	260
28.0	-27.90	0.0016	10.02	8.85	2.778737	0.277874	359
30.0	-29.00	0.0013	9.41	8.15	1.182718	0.118272	845
32.0	-40.00	0.0001	8.88	7.53	1.506295	0.150630	663
34.0	-29.20	0.0012	8.42	6.98	1.669739	0.166974	598
36.0	-26.70	0.0021	8.01	6.48	1.836488	0.183649	544
38.0	-31.00	0.0008	7.64	6.02	2.005640	0.200564	498
40.0	-37.90	0.0002	7.32	5.61	2.173518	0.217352	460
42.0	-31.00	0.0008	7.03	5.23	1.656783	0.165678	603
44.0	-29.80	0.0010	6.77	4.87	1.368073	0.136807	730
46.0	-32.60	0.0005	6.54	4.54	1.458313	0.145831	685
48.0	-34.90	0.0003	6.33	4.24	1.547201	0.154720	646
50.0	-31.50	0.0007	6.14	3.95	1.498335	0.149834	667
52.0	-29.90	0.0010	5.97	3.68	1.576102	0.157610	634
54.0	-30.10	0.0010	5.82	3.42	1.651432	0.165143	605
56.0	-33.50	0.0004	5.68	3.17	1.723959	0.172396	580
58.0	-36.10	0.0002	5.55	2.94	1.754801	0.175480	569
60.0	-35.80	0.0003	5.43	2.72	1.430731	0.143073	698
62.0	-31.30	0.0007	5.33	2.50	1.446721	0.144672	691
64.0	-31.20	0.0008	5.24	2.30	1.488505	0.148850	671
66.0	-32.20	0.0006	5.15	2.10	1.528888	0.152889	654
68.0	-36.10	0.0002	5.08	1.90	1.563857	0.156386	639
70.0	-39.70	0.0001	5.01	1.71	1.597204	0.159720	626
72.0	-34.70	0.0003	4.95	1.53	2.155387	0.215539	463
74.0	-32.20	0.0006	4.90	1.35	2.189634	0.218963	456
76.0	-29.90	0.0010	4.85	1.17	2.314330	0.231433	432
78.0	-30.00	0.0010	4.81	1.00	2.339095	0.233910	427
80.0	-30.10	0.0010	4.78	0.83	2.358240	0.235824	424
82.0	-31.10	0.0008	4.75	0.66	2.368687	0.236869	422
84.0	-31.9	0.0006	4.73	0.49	2.373412	0.237341	421
86.0	-32	0.0006	4.72	0.33	1.749741	0.174974	571
88.0	-34.7	0.0003	4.71	0.16	1.744837	0.174484	573
90.0	-36.1	0.0002	4.71	0	1.427266	0.142727	700

T-Mobile
SD06391C - Golden Eagle Residence
Andrew:UMWD-06516 Antenna Worksheet (120 Sector)

Maximum Permissible Exposure (MPE): 1000

ERP (Watts):	1200	Height (feet):	22	Frequency (MHz):	1950	Downtilt (Degrees):	0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density (μW/cm^2)	Percent of MPE	Times Below MPE
0.1	-0.03	0.9931	2696.12	2696.12	0.005505	0.000550	181665
1.0	-0.30	0.9333	269.63	269.58	0.550408	0.055041	1816
2.0	-1.10	0.7762	134.83	134.75	2.200963	0.220096	454
3.0	-2.50	0.5623	89.91	89.79	4.949653	0.494965	202
4.0	-4.60	0.3467	67.46	67.29	8.793129	0.879313	113
5.0	-7.40	0.1820	53.99	53.79	13.726711	1.372671	72
6.0	-10.60	0.0871	45.02	44.77	18.501923	1.850192	54
7.0	-13.10	0.0490	38.61	38.32	21.147741	2.114774	47
8.0	-13.80	0.0417	33.81	33.48	20.337694	2.033769	49
9.0	-13.90	0.0407	30.08	29.71	16.302509	1.630251	61
10.0	-14.80	0.0331	27.10	26.69	10.950963	1.095096	91
12.0	-21.30	0.0074	22.63	22.14	4.559412	0.455941	219
14.0	-26.50	0.0022	19.45	18.87	5.183123	0.518312	192
16.0	-20.00	0.0100	17.07	16.41	2.646030	0.264603	377
18.0	-20.00	0.0100	15.23	14.48	2.448399	0.244840	408
20.0	-20.60	0.0087	13.76	12.93	2.994448	0.299445	333
22.0	-21.30	0.0074	12.56	11.65	3.581737	0.358174	279
24.0	-25.60	0.0028	11.57	10.57	3.463830	0.346383	288
26.0	-39.40	0.0001	10.73	9.65	3.831537	0.383154	260
28.0	-27.90	0.0016	10.02	8.85	2.782280	0.278228	359
30.0	-29.00	0.0013	9.41	8.15	1.184227	0.118423	844
32.0	-40.00	0.0001	8.88	7.53	1.508216	0.150822	663
34.0	-29.20	0.0012	8.42	6.98	1.671868	0.167187	598
36.0	-26.70	0.0021	8.01	6.48	1.836489	0.183649	544
38.0	-31.00	0.0008	7.64	6.02	2.005641	0.200564	498
40.0	-37.90	0.0002	7.32	5.61	2.176289	0.217629	459
42.0	-31.00	0.0008	7.03	5.23	1.658896	0.165890	602
44.0	-29.80	0.0010	6.77	4.87	1.369817	0.136982	730
46.0	-32.60	0.0005	6.54	4.54	1.458313	0.145831	685
48.0	-34.90	0.0003	6.33	4.24	1.551149	0.155115	644
50.0	-31.50	0.0007	6.14	3.95	1.502159	0.150216	665
52.0	-29.90	0.0010	5.97	3.68	1.580124	0.158012	632
54.0	-30.10	0.0010	5.82	3.42	1.651432	0.165143	605
56.0	-33.50	0.0004	5.68	3.17	1.728358	0.172836	578
58.0	-36.10	0.0002	5.55	2.94	1.754801	0.175480	569
60.0	-35.80	0.0003	5.43	2.72	1.430731	0.143073	698
62.0	-31.30	0.0007	5.33	2.50	1.450413	0.145041	689
64.0	-31.20	0.0008	5.24	2.30	1.488505	0.148851	671
66.0	-32.20	0.0006	5.15	2.10	1.528888	0.152889	654
68.0	-36.10	0.0002	5.08	1.90	1.563857	0.156386	639
70.0	-39.70	0.0001	5.01	1.71	1.605366	0.160537	622
72.0	-34.70	0.0003	4.95	1.53	2.166401	0.216640	461
74.0	-32.20	0.0006	4.90	1.35	2.200823	0.220082	454
76.0	-29.90	0.0010	4.85	1.17	2.329123	0.232912	429
78.0	-30.00	0.0010	4.81	1.00	2.339095	0.233910	427
80.0	-30.10	0.0010	4.78	0.83	2.358240	0.235824	424
82.0	-31.10	0.0008	4.75	0.66	2.386868	0.238687	418
84.0	-31.9	0.0006	4.73	0.49	2.391628	0.239163	418
86.0	-32	0.0006	4.72	0.33	1.763171	0.176317	567
88.0	-34.7	0.0003	4.71	0.16	1.744837	0.174484	573
90.0	-36.1	0.0002	4.71	0	1.426519	0.142652	701

T-Mobile
SD06391C - Golden Eagle Residence
Andrew:UMWD-06516 Antenna Worksheet (240 Sector)

Maximum Permissible Exposure (MPE):				1000			
ERP (Watts):	1200	Height (feet):	22	Frequency (MHz):	1950	Downtilt (Degrees):	0.0

Depression Angle (degrees)	Relative dB	Relative Gain	Slant Distance (meters)	Dist From Structure (meters)	Power Density (µW/cm^2)	Percent of MPE	Times Below MPE
0.1	-0.03	0.9931	2696.12	2696.12	0.005505	0.000550	181665
1.0	-0.30	0.9333	269.63	269.58	0.550408	0.055041	1816
2.0	-1.10	0.7762	134.83	134.75	2.200963	0.220096	454
3.0	-2.50	0.5623	89.91	89.79	4.949653	0.494965	202
4.0	-4.60	0.3467	67.46	67.29	8.793129	0.879313	113
5.0	-7.40	0.1820	53.99	53.79	13.726711	1.372671	72
6.0	-10.60	0.0871	45.02	44.77	18.501923	1.850192	54
7.0	-13.10	0.0490	38.61	38.32	21.147741	2.114774	47
8.0	-13.80	0.0417	33.81	33.48	20.363628	2.036363	49
9.0	-13.90	0.0407	30.08	29.71	16.302509	1.630251	61
10.0	-14.80	0.0331	27.10	26.69	10.950963	1.095096	91
12.0	-21.30	0.0074	22.63	22.14	4.559413	0.455941	219
14.0	-26.50	0.0022	19.45	18.87	5.183122	0.518312	192
16.0	-20.00	0.0100	17.07	16.41	2.642659	0.264266	378
18.0	-20.00	0.0100	15.23	14.48	2.448399	0.244840	408
20.0	-20.60	0.0087	13.76	12.93	2.990634	0.299063	334
22.0	-21.30	0.0074	12.56	11.65	3.577174	0.357717	279
24.0	-25.60	0.0028	11.57	10.57	3.459419	0.345942	289
26.0	-39.40	0.0001	10.73	9.65	3.841315	0.384131	260
28.0	-27.90	0.0016	10.02	8.85	2.778737	0.277874	359
30.0	-29.00	0.0013	9.41	8.15	1.182718	0.118272	845
32.0	-40.00	0.0001	8.88	7.53	1.506295	0.150630	663
34.0	-29.20	0.0012	8.42	6.98	1.669739	0.166974	598
36.0	-26.70	0.0021	8.01	6.48	1.838830	0.183883	543
38.0	-31.00	0.0008	7.64	6.02	2.008198	0.200820	497
40.0	-37.90	0.0002	7.32	5.61	2.173518	0.217352	460
42.0	-31.00	0.0008	7.03	5.23	1.656783	0.165678	603
44.0	-29.80	0.0010	6.77	4.87	1.368073	0.136807	730
46.0	-32.60	0.0005	6.54	4.54	1.460173	0.146017	684
48.0	-34.90	0.0003	6.33	4.24	1.547201	0.154720	646
50.0	-31.50	0.0007	6.14	3.95	1.498335	0.149834	667
52.0	-29.90	0.0010	5.97	3.68	1.576102	0.157610	634
54.0	-30.10	0.0010	5.82	3.42	1.655646	0.165565	603
56.0	-33.50	0.0004	5.68	3.17	1.723959	0.172396	580
58.0	-36.10	0.0002	5.55	2.94	1.759279	0.175928	568
60.0	-35.80	0.0003	5.43	2.72	1.436212	0.143621	696
62.0	-31.30	0.0007	5.33	2.50	1.446721	0.144672	691
64.0	-31.20	0.0008	5.24	2.30	1.494206	0.149421	669
66.0	-32.20	0.0006	5.15	2.10	1.534744	0.153474	651
68.0	-36.10	0.0002	5.08	1.90	1.571850	0.157185	636
70.0	-39.70	0.0001	5.01	1.71	1.597204	0.159720	626
72.0	-34.70	0.0003	4.95	1.53	2.155387	0.215539	463
74.0	-32.20	0.0006	4.90	1.35	2.189634	0.218963	456
76.0	-29.90	0.0010	4.85	1.17	2.314330	0.231433	432
78.0	-30.00	0.0010	4.81	1.00	2.354047	0.235405	424
80.0	-30.10	0.0010	4.78	0.83	2.373314	0.237331	421
82.0	-31.10	0.0008	4.75	0.66	2.368687	0.236869	422
84.0	-31.9	0.0006	4.73	0.49	2.373412	0.237341	421
86.0	-32	0.0006	4.72	0.33	1.749741	0.174974	571
88.0	-34.7	0.0003	4.71	0.16	1.760471	0.176047	568
90.0	-36.1	0.0002	4.71	0	1.4375	0.14375	695

APPENDIX B

Michael Brandman Associates

Bakersfield
661.334.2755

Fresno
559.497.0310

Irvine
714.508.4100

Palm Springs
760.322.8847

Sacramento
916.383.0934

San Bernardino
909.884.2255

San Ramon
925.830.2733

November 19, 2007

Ryan Leaver
Environmental Assessment Specialists, Inc
15224 Clymer Street
Mission Hills, CA. 91345

Subject: Biological Resources Letter Report
T-Mobile Cellular Facility SD06391C, Golden Eagle Residence
Conditional Use Permit No. 06-708
City of San Marcos, San Diego County, California

Dear Mr. Leaver:

At the request of T-Mobile and the City of San Marcos (City), Michael Brandman Associates (MBA) has completed a Biological Resources Letter Report for T-Mobile cellular facility SD06391C (Golden Eagle Residence), herein referred to as project site or site, located in of the City of San Marcos, San Diego County, California.

The subject letter report addresses the findings of a literature review and reconnaissance-level survey conducted as part of a biological resources impact analysis of the project site and surrounding area. The report also details the potential for sensitive biological resources to occur on the site, and analyzes the proposed project against relevant local, State, and/or federal policies as they pertain to biological resources. Recommended mitigation measures according to these policies are provided herein.

If you have any questions or concerns regarding this report, please do not hesitate to contact Karl Osmundson at 714.508.4100.

Sincerely,

Karl L. Osmundson
Project Manager/Biologist
Michael Brandman Associates
220 Commerce, Suite 200
Irvine, CA 92602

Enclosures: Exhibit 1: Regional Location Map
Exhibit 2: Local Vicinity USGS Map
Exhibit 3: Local Vicinity Aerial Map
Exhibit 4: Soils Map
Exhibit 5: Biological Resources Map
Attachment A: Species Compendium
Attachment B-1: Sensitive Plant Species Table
Attachment B-2: Sensitive Wildlife Species Table

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SECTION 1: SUMMARY

A biological resources impact analysis was conducted for the proposed T-Mobile cellular facility, SD06391C (Golden Eagle Residence), as required by the City of San Marcos Planning Division in application for Conditional Use Permit (CUP) 06-708. The proposed project is a small unmanned cellular facility located at 2080 Golden Eagle Trail, San Marcos, California.

As currently planned, the proposed project will result in a total of approximately 0.27 acres of temporary and permanent impacts. Permanent impacts resulting from the proposed project will be limited to approximately 0.02 acres of previously disturbed land containing low quality Southern Mixed Chaparral, in addition to approximately 0.02 acres of impacts to disturbed bare earth and land containing existing developments. Temporary impacts resulting from construction access, staging, and storage will be limited to approximately 0.23 acres of impacts to disturbed bare earth and land containing existing developments. Permanent impacts to disturbed Southern Mixed Chaparral are considered significant under the Draft City of San Marcos Subarea Plan of the Multiple Habitat Conservation Program (MHCP). Habitat-based mitigation at a 1:1 ratio is herein proposed to reduce permanent impacts to disturbed Southern Mixed Chaparral to less than significant, in accordance with the habitat mitigation ratios set forth in the Draft City of San Marcos Subarea Plan of the MHCP.

A single sensitive plant species, wart-stemmed ceanothus (*Ceanothus verrucosus*), was determined to occupy portions of the proposed impact area. This sensitive plant species is not federally- or State-listed as threatened or endangered, however is narrowly distributed in the region and considered rare by the California Native Plant Society (CNPS) and under the Draft City of San Marcos Subarea Plan of the MHCP. Impacts to wart-stemmed ceanothus are considered significant under the Draft City of San Marcos Subarea Plan of the Multiple Habitat Conservation Program MHCP. Impacts to wart-stemmed ceanothus would be reduced to less than significant through implementation of the recommended avoidance and minimization measures during the construction phased of development, and the proposed habitat-based mitigation.

No additional sensitive plant or wildlife species are present or presumed present, and no additional sensitive plant or wildlife species have a high potential to occur within the proposed impact area; therefore, no direct impacts are expected to occur to any additional sensitive plant or wildlife species. Six sensitive wildlife species have a low or moderate potential to use portions of the proposed impact area for foraging habitat, and there is a potential for the proposed project to result in significant impacts to these species habitat. Habitat-based mitigation would reduce potential project impacts to foraging habitat for the six sensitive wildlife species to less than significant.

The project site and immediate vicinity also provide suitable habitat for nesting bird species protected under California Fish and Game Code (CFG Code) and the federal Migratory Bird Treaty Act (MBTA). Potential project impacts to nesting birds protected under CFG Code and the MBTA would be reduced to less than significant with the proposed breeding season avoidance and pre-construction survey measure.

SECTION 2: INTRODUCTION

The proposed project is a Conditional Use Permit in application with the City of San Marcos Planning Division and thus is required to provide a thorough analysis of all potential on and offsite impacts through preparation of a Californian Environmental Quality Act (CEQA) level biological resources assessment. Per the request of the City of San Marcos Planning Division, a Biological Resources Letter Report was prepared to address any potential project impacts to biological resources.

2.1 - Project Site Location

The project site is generally located north of Elfin Forest Road, south of State Route 78, east of Rancho Santa Fe Road, and west of Interstate 15 in the southwestern portions of the City of San Marcos, San Diego County, California (Exhibit 1). The site can be found on the *Rancho Santa Fe, California* United States Geological Survey (USGS) 7.5-minute topographic map, and is specifically located within previously disturbed portions of a rural residential property at 2080 Golden Eagle Trail, San Marcos, California, (Exhibit 2 and Exhibit 3). The lease area for the project site is contained within Assessor's Parcel Number (APN) 679-040-01.

2.2 - Project Description

The proposed project is a Conditional Use Permit for an unmanned wireless communications facility. The project consists of a new 20-feet by 10-feet equipment enclosure, 12 panel antennas mounted at 22 feet high onto a new 30-feet tall mono broadleaf tree, and underground coaxial, electrical and telecommunications utility line trenching. New redwood access stairs are proposed adjacent to the equipment enclosure to provide access from an existing bare earth access trail. The coaxial underground hand trench will run between the proposed equipment enclosure to the north and the mono broadleaf tree to the south for approximately 170 feet. The proposed electrical and telecommunications underground hand trench will run approximately 50 feet to the east from the equipment enclosure to existing services.

Construction equipment access, storage, and staging will be provided through existing disturbed and/or developed portions of the private residential property, including a paved private driveway, bare earth access trail, and two bare earth clearings on the property.

SECTION 3: METHODOLOGY

Analysis of the biological resources associated with the project site began with a thorough review of relevant literature followed by a reconnaissance-level survey of the site and immediate vicinity.

3.1 - Literature Review

Prior to the reconnaissance-level survey of the project site, a literature review was conducted of the environmental setting of the project site and vicinity. The literature review provides a baseline from which to evaluate the biological resources potentially occurring on the project site, as well as the surrounding area. Aerial photographs of the project site and vicinity, and topographic electronic and hard copies of the *Rancho Santa Fe, California* USGS 7.5-minute topographic quadrangle map were thoroughly reviewed.

A compilation of sensitive plant and wildlife species and their habitats that have been recorded in the vicinity of the project site was derived from the Sensitive Plant and Animal Species Lists for the Draft City of San Marcos Subarea Plan of the MHCP. The list was cross-referenced with the California Department of Fish and Game's (CDFG) California Natural Diversity Database (CNDDB), a sensitive species and plant community account database. MBA conducted a query of the CNDDB for the *Rancho Santa Fe, California* USGS 7.5-minute topographic quadrangle. The California Native Plant Society (CNPS) online inventory database and Consortium of California Herbaria (Consortium) were also queried for the project site and vicinity. The CNPS online inventory and Consortium database provided additional sensitive species information for many species that have not been reported to the CNDDB database.

Other references used extensively for the subject analysis include *Rare Plants of San Diego County* by Craig Rieser, posted for the San Diego Chapter of the Sierra Club's website (http://sandiego.sierraclub.org/rareplants/), *San Diego Native Plants* (Lightner 2006), *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986), *Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions* (Oberbauer 1996), and *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995).

The literature review also included a thorough review of the regulatory setting for the proposed project, including all relevant federal, State, and local policy pertaining to biological resources and pursuant to CEQA review. The City of San Marcos Zoning Ordinance and General Plan were reviewed, in addition to the Draft City of San Marcos Subarea Plan of the MHCP.

3.2 - Habitat Assessment Survey

MBA biologist Karl Osmundson conducted an initial reconnaissance-level survey of the project site on November 5, 2007. The survey area, which includes the site and an approximate 100-foot buffer surrounding the project site, was surveyed on foot and by focal observations in order to document existing conditions, identify suitable habitat for sensitive plant and wildlife species, and analyze potential impacts to sensitive biological resources based on current project plans. Special attention was directed to portions of the survey area that may contain native vegetation, suitable habitat for sensitive plant and wildlife species, and potential waters and wetlands subject to regulatory agency jurisdiction.

Parameters assessed regarding the habitat requirements for sensitive plant and wildlife species potentially occurring in the area include the presence of suitable physical characteristics in topography, soils, and plant community and habitat compositions. The presence of suitable nesting, foraging, and dispersing habitat, or any other potential habitat suitability elements were noted. Any evidence of previous disturbance on the project site was carefully documented.

The locations of previously recorded and documented observations for sensitive plant and wildlife species potentially occurring in the area were identified and plotted onto aerial and topographic maps to determine connectivity of suitable habitat and/or likely dispersing routes between the locations of observations and the project site. A complete list of plant and wildlife species observed, and the corresponding plant community or habitat types they were observed within during the survey were recorded and are provided in a Species Compendium for the subject report (Attachment A).

SECTION 4: HABITAT ASSESSMENT RESULTS

4.1 - Weather Conditions

An initial reconnaissance-level survey of the survey area was conducted on November 5, 2007, by qualified MBA biologist Karl Osmundson between the hours of 1400 and 1600. Weather conditions during this survey included partly cloudy skies and a temperature of approximately 65 degrees Fahrenheit, with winds ranging from approximately 1 to 3 miles per hour.

4.2 - Existing Conditions

Investigation of the project site confirmed that the proposed project will be constructed within an approximately 0.27-acre disturbed area located within the northwestern portions of the residential property located at 2080 Golden Eagle Trail, San Marcos, California. Disturbed land characterized by existing developments, bare earth, and sparse previously disturbed native and non-native vegetation generally occupies the project site and immediate vicinity. The project site occurs immediately adjacent to existing developments associated with the private residence, including housing and barn structures, horse corral and cleared recreational areas, and various landscape elements. Land use beyond the immediate vicinity of the site generally includes rural residential development and constrained undeveloped land to the north, south, and east, and residential development to the west. Recent and ongoing development for the San Elijo Hills community occurs to the general west and north of the project site.

4.2.1 - Topography and Soils

The area that encompasses the site occurs at an elevation of approximately 1,130 feet above mean sea level south of Double Peak and Mt. Whitney, and north of San Elijo Canyon, as depicted on the *Rancho Santa Fe, California* USGS 7.5-minute topographic quadrangle map. The surrounding topography in the immediate vicinity of the project site generally consists of higher elevation steeper slopes and small mountain peaks to the north, lower elevation shallow slopes, rolling hills, and small canyon features to the south, and rolling hills to the east and west.

The project site is mapped as containing a single soil map unit belonging to the San Miguel and Exchequer soil series (Exhibit 4). A soil series is a group of soils with similar profiles. These profiles include major horizons with similar thickness, arrangement, and other important characteristics, which may promote favorable conditions for certain biological resources. The soil present on the project site is San Miguel-Exchequer rocky silt loam (9 to 70 percent slopes). San Miguel-Exchequer soils are generally associated with mountains slopes and are well-drained. In the San Marcos area, these soils are associated with mixed chaparrals with wart-stemmed ceanothus as a primary constituent species. The existing surface horizons of the soils observed on and in the immediate vicinity of the project site are very rocky and portions contain evidence of previous disturbance and alteration from their natural composition. Portions of the site and immediate vicinity contain evidence of previous excavation and compaction activities presumably resulting from previous construction and maintenance activities by the resident.

4.2.2 - Disturbance

In addition to those disturbances described above including those that have resulted in changes to the surface soils that exist on the project site, other significant disturbances to the site include trampling and vegetation removal as a result of property maintenance and human activity, prevalence of bare ground, and prevalence of low quality non-native herbaceous species. Previous fire disturbance and vegetation thinning and clearing are evident on and in the immediate vicinity of the project site. The project site and immediate vicinity also contain evidence of frequent use by domestic pets including domestic dog (*Canis familiaris*) and horse (*Equus caballus*).

4.2.3 - Habitats/Vegetation Communities

Installation of the proposed project will occur within portions of four plant community or habitat types from the formal list of *Terrestrial Vegetation Communities in San Diego County* from Holland and Oberbauer; Urban/Developed, Ornamental, Disturbed Habitat, and Southern Mixed Chaparral. Exhibit 5 provides detailed mapping of these communities in relation to the project site. A complete description of each community based on Holland and Oberbauer, and extent to which it occurs on and in the immediate vicinity of the project site, is provided below. The respective Holland codes for each community are provided in parenthesis below following each community section name.

A complete list of plant species observed on and in the immediate vicinity of the project site during the survey is provided in Attachment A.

Urban/Developed (12000)

Urban/Developed includes land that has been constructed upon or otherwise covered with a permanent unnatural surface. Areas where no natural land is evident due to a large amount of debris or other materials being places upon it may also be considered.

Less than 0.01 acres of permanent impacts and 0.08 acres of temporary impacts are proposed within this community (Exhibit 5). Urban/Developed areas were observed within the paved driveway for the residence, landscape developments, and horse stable structures that exist to the immediate north and east of the proposed equipment location. Urban/Developed areas were also observed to the immediate east and south of the proposed mono broadleaf tree, specifically associated with access trail and landscape developments, and an existing two-story house and associated landscape developments. No vegetation was observed within this area. No suitable habitat for any sensitive plant or wildlife species occurs within this area.

Disturbed Habitat (11300)

Disturbed Habitat includes areas in which the vegetative cover comprises less than 10 percent of the surface area (disregarding natural rock outcrops) and where there is evidence of soil surface disturbance and compaction from previous legal human activity; or where the vegetative cover is greater than 10 percent, there is soils surface compaction, in addition to the presence of building foundations and debris (e.g. irrigation piping, fencing, old wells, abandoned farming or mining equipment) resulting from legal activities (as apposed to illegal dumping). Vegetation within disturbed land will have a high predominance of non-native or weedy species that are indicators of soil disturbance, such as Russian thistle (*Salsola tragus*), telegraph weed (*Heterotheca grandiflora*), horehound (*Marrubium vulgare*), and sow thistle (*Sonchus oleraceus*), and a sub-dominance of non-native grasses.

Less than 0.01 acres of permanent impacts and 0.15 acres of temporary impacts are proposed within this community (Exhibit 5). These areas are associated with a previously cleared, graded, and compacted land that occurs in the immediate vicinity of an existing horse corral for the property. The area is maintained for weed abatement and no plant species were observed within the Disturbed Habitat that occurs onsite. Plant species observed within offsite Disturbed Habitat were limited to a few isolated non-native annual herbs including red brome (*Bromus madritensis* ssp. *rubens*), Russian thistle, and sow-thistle. No suitable habitat for any sensitive plant or wildlife species occurs within this area

Ornamental (11100)

Ornamental or Eucalyptus Woodland/Ornamental is a non-native vegetation community characterized by a mix of non-native ornamental trees, shrubs, and groundcover species, often dominated by ornamental gum trees (*Eucalyptus* sp.). Physical structure and canopy ranges from low growing to tall, sparse to dense, often with a high species diversity. This community is associated with previously cultivated areas including parks, agricultural windrows, residential properties, and other urban landscapes.

No impacts are proposed within this community (Exhibit 5). This community was observed east of the project site within landscaped portions of the residential property, and included a dominance of ornamental trees, shrubs and ground cover species including ornamental palm and red apple iceplant (*Aptenia cordifolia*). No suitable habitat for any sensitive plant or wildlife species occurs within this area.

Southern Mixed Chaparral (37120)

Southern mixed chaparral is typically defined as a chaparral-type vegetation community that is similar to northern mixed chaparral, but not as tall or dense (Holland 1986). This chaparral-type occurs throughout southern California and northern Baja, California typically below 3,000 feet in elevation, and is found on all slope-aspects, and most often on granitic or mafic substrates (Holland 1986, Sawyer and Keeler-Wolf 1995). Vegetation structure is open compared to northern mixed chaparral with an abundance of canopy breaks often characterized by transitional scrubs such as coastal sage scrub. Common shrub species include manzanita (*Xylococcus* sp. *Arctostaphylos* sp.), scrub oak (*Quercus berberidifolia*), ceanothus (*Ceanothus* sp.), Spanish bayonet *(Yucca whipplei*), laurel sumac (*Malosma laurina*), sugar-bush (*Rhus ovata*), toyon (*Heteromeles arbutifolia*), and chaparral beard-tongue (*Keckiella antirrhinoides*). This community often supports low cover of subshrubs characteristic of sage scrub vegetation communities, including black sage (*Salvia mellifera*), California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), and saw-toothed goldenbush (*Hazardia squarrosa*). Understory herbaceous species may include cudweed (*Gnaphalium* spp.) and other post-burn or gap specialist annuals such as deerweed (*Lotus scoparia*), phacelia (*Phacelia* spp.), borages (*Cryptantha* spp.), popcorn flower (*Plagiobothrys* spp.), spineflower (*Chorizanthe* spp.), sun cups (*Camissonia* spp.), and native and non-native grasses, among others.

The project site occurs within approximately 0.02 acres of disturbed Southern Mixed Chaparral associated with the west-facing slope located immediately west of the existing paved driveway and two-story house developments on the residential property (Exhibit 5). Disturbed Southern Mixed Chaparral continues further to the immediate north and south of the site, and within previously cleared and thinned areas surrounding the eastern portions of the private residence. Dominant native shrub species observed within the disturbed Southern Mixed Chaparral onsite include laurel sumac, wart-stemmed ceanothus, and mission manzanita. Other native shrubs observed include chamise (*Adenostoma fasciculatum*) and black sage (*Salvia mellifera*). Non-native annual grasses and forbs dominated the understory and canopy openings including red brome (*Bromus madritensis* ssp. *rubens*), slender oats (*Avena fatua*), and sow-thistle.

4.2.4 - General Wildlife

The project site and surrounding area provide habitat for wildlife species that commonly occur in chaparral and scrub-type plant communities, and disturbed urban settings. Avian species observed or otherwise detected on or in the vicinity of the site include yellow-rumped warbler (*Dendroica coronata*), American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), California towhee (*Pipilo crissalis*), common raven (*Corvus corax*), wrentit (*Chamaea fasciata*), and bushtit (*Psaltriparus minimus*). Two mammalian species were detected on the project site; domestic dog, domestic horse, and desert cottontail (*Sylvilagis audubonii*). No other wildlife species were observed or otherwise detected during the assessment.

A complete list of wildlife species observed on and in the immediate vicinity of the project site during the survey is provided in Attachment A.

SECTION 5: SPECIAL STATUS SPECIES

A comprehensive list of 40 sensitive plant and wildlife species was compiled for the subject analysis. Two sensitive species tables have been prepared (Attachments B-1 and B-2) that detail the 40 sensitive plant and wildlife species, their legal status under endangered species acts, preferred habitat, detection results onsite, and potential for occurrence.

A single sensitive plant species was observed on the project site and is considered present. No other sensitive plant or wildlife species were observed or otherwise detected during the reconnaissance-level survey. Based on the existing conditions observed on and in the immediate vicinity of the project site during the reconnaissance-level survey, no additional sensitive plant or wildlife species have a high potential to occur on the project site. A total of six sensitive wildlife species have a moderate potential to occur on the project site.

The following provides a list and discussion of the species determined to be present, or have a high potential, moderate potential, or low potential to occur on the project site.

The sensitive plant species observed and considered to be present on the project site is:

- Wart-stemmed ceanothus (*Ceanothus verrucosus*)

Wart-stemmed ceanothus was observed as the co-dominant plant species along with laurel sumac within the disturbed southern mixed chaparral supported by San Miguel-Exchequer rocky silt loam soils that occupies the project site and immediate vicinity. Approximately 10 to 15 individuals occur along the proposed coaxial trench route and mono broadleaf tree locations. This species was observed in relatively high numbers offsite within the undisturbed high quality chaparral that occupies the slopes further to the north, south, and east of the site.

The six sensitive wildlife species that have a moderate potential to occur on the project site include:

- Bell's sage sparrow (*Amphispiza belli belli*)
- blue-gray gnatcatcher (*Polioptila caerulea*)
- coastal western whiptail (*Cnemidophorus tigris multiscutatus*)
- northern red diamond rattlesnake (*Crotalus ruber ruber*)
- San Diego horned lizard (*Phryosoma coronatum blainvillii*)
- southern California rufous-crowned sparrow (*Aimophila rufiaps canescens*)

Due to existing disturbances, lack of preferred habitat, lack of preferred vegetation composition and physiognomy, and unsuitable soil substrate observed on the project site, the above-listed six sensitive wildlife species are not likely to utilize the project site or immediate vicinity as nesting habitat. The southern mixed chaparral supported by rocky soil substrate that occurs within the project site provides potential foraging opportunities for these six sensitive wildlife species.

5.1 - Nesting Birds

The MBTA protects all common wild birds found in the United States except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. Resident game birds are managed separately by each state. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird including feathers, parts, nests, or eggs.

Section 3503 of the CFG Code makes it illegal to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Section 3503.5 further protects all birds in the orders Falconiformes and Strigiformes, birds of prey, such as hawks and owls, and their eggs and nests from any form of take.

The project site and immediate vicinity contain native shrubs and ornamental vegetation that provide suitable nesting habitat for common and sensitive bird species protected under the MBTA and CFG Code. Common bird species with the potential to nest on and in the immediate vicinity of the project site include California towhee, house finch (*Carpodacus mexicanus*), and wrentit.

SECTION 6:JURISDICTIONAL WETLANDS AND WATERWAYS

The United States Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into waters of the United States. These waters include wetlands and non-wetland bodies of water that meet specific criteria. USACE regulatory jurisdiction pursuant to Section 404 of the federal Clean Water Act (CWA) is founded on a connection or nexus between the water body in question and interstate commerce. This connection may be direct; through a tributary system, linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the USACE regulations.

6.1 - Waters of the U.S.

USACE jurisdiction over non-tidal waters of the United States extends laterally to the ordinary high water mark (OHWM) or beyond the OHWM to the limit of any adjacent wetlands, if present (33 CFR 328.4). The OHWM is defined as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area" (33 CFR 329.11(a) (1)). Jurisdiction typically extends upstream to the point where the OHWM is no longer perceptible. Recently, the federal courts have restricted USACE jurisdiction over waters that are not directly connected to traditional navigable waters (isolated waters), thereby increasing the focus on clearly establishing the physical connection between the subject water body(ies) as a tributary to traditional navigable waters or otherwise by directly establishing the nexus with interstate commerce.

During the biological resources field survey, the site was evaluated according to the guidelines provided in the USACE *Jurisdictional Determination Form Instructional Guidebook* (USACE 2007) and the *Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest* (USACE 2001). The project site does not contain any jurisdictional areas. Waters of the U.S. are absent from the site; no water bodies having a perceptible OHWM were identified on site or adjacent to the site.

No impacts to any waters of the U.S. are expected to occur as a result of the proposed project; therefore, no mitigation is required.

6.2 - USACE Wetlands

The USACE and the Environmental Protection Act (EPA) define "wetlands" as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions." In order to be considered a jurisdictional wetland under Section 404 of the CWA, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met. Several parameters may be analyzed to determine whether the criteria are satisfied.

During the field survey, the site was evaluated in accordance with the USACE *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2006) and the *Wetlands Delineation Manual* (i.e. Environmental Laboratory, 1987).

The project site occurs within a slightly sloping upland area characterized by developed and disturbed land, and chaparral habitat. No natural drainage courses, waterways, and/or wetlands containing hydrophytic plant species were observed on or in the immediate vicinity of the site; therefore, it was not necessary to examine the other two wetland criteria, hydrology and soils, since all three criteria must be met where wetlands are present.

No impacts to any USACE-defined wetlands are expected to occur as a result of the proposed project; therefore, no mitigation is required.

SECTION 7:OTHER UNIQUE FEATURES/RESOURCES

7.1 - Wildlife Corridors and Linkages

The County of San Diego *Guidelines for Determining Significance for Biological Resources* defines wildlife corridors as "a specific route that is used for movement and migration of species. A corridor may be different from a "Linkage" because it represents a smaller or more narrow avenue for movement." A linkage is defined as "an area of land which supports or contributes to the long-term movement of wildlife and genetic exchange by providing live-in habitat that connects to other habitat areas."

The project site occurs within disturbed portions of a residential property, and wildlife in the project vicinity are currently restricted by local physical hindrances associated with the residential property and adjacent residential, rural residential, and infrastructure developments. The proposed project is limited in size and permanent above-ground developments. The operational requirements of the proposed project are minimal as well. Better quality, relatively undisturbed constrained southern mixed chaparral that exists further to the north, south, and east of the project site currently provides the highest quality habitat to support wildlife potentially occupying or moving through the area. The proposed project would not present a significant physical alteration to this adjacent habitat. The project site does not occur within or contribute to any existing or proposed wildlife corridors or linkages. The closest proposed wildlife corridor or linkage occurs approximately 0.5 mile northeast of the project site, as proposed in the Draft City of San Marcos Subarea Plan of the MHCP, depicted on Figure 5 of this plan. No impacts to this proposed wildlife corridor will result from the proposed project.

Due to the fact that the proposed project is primarily restricted within disturbed portions of the existing residential property, and due to the fact that the site is not located within and does not contribute to the assembly of any existing or proposed wildlife corridors and linkages, no significant impacts are expected to occur to any wildlife corridors and linkages.

7.2 - Urban/Wildlands Interface and Adjacency Management Issues

An urban/wildlands interface is generally defined as land that presently contains, or will contain as a result of a proposed action, both elements of an urban setting and raw undeveloped land or protected land. This land is situated as such to present a sharply defined physical contrast between the two, potentially creating an adverse edge effect resulting from direct and/or indirect impacts derived from the urban elements. An urban/wildlands interface may be most recognizable in larger multi-use developments that occur within or immediately adjacent to completely undeveloped and undisturbed land that provides habitat for plant and wildlife species in the area.

No design elements are proposed that would result in any significant noise, lighting, or other indirect impacts to any adjacent land or any wildlife potentially using the project vicinity beyond that which already exists and currently results from the existing residential property. The equipment for the proposed project will be contained within a concrete retaining wall enclosure, and there are no lighting requirements for the proposed project. Due to the limited size and operational requirements of the proposed project, no significant impacts to an urban/wildlands interface are expected to result from the proposed project.

SECTION 8: SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

8.1 - Impact Analysis

This section of the report provides a discussion of potential project-related impacts. Mitigation to reduce these impacts to less than significant is provided in Section 8.2 below.

Approximately 0.04 acres of permanent impacts are expected to result from the proposed project. Approximately 0.02 acres of permanent impacts will occur within disturbed native vegetation, and specifically, within Southern Mixed Chaparral containing the sensitive plant species wart-stemmed ceanothus. This Southern Mixed Chaparral also provides potential foraging habitat for six sensitive wildlife species that have a moderate potential to occur on and in the vicinity of the site, and suitable nesting opportunities for common bird species protected under CFG Code and the MBTA.

Approximately 0.23 acres of temporary impacts are expected to result from the proposed project. Temporary impacts associated with the construction phase of the proposed project, including construction equipment access, storage, and staging, are planned within existing disturbed and developed portions of the residential property. No significant impacts to any biological resources are anticipated to result from construction equipment access, storage, and staging.

8.1.1 - Southern Mixed Chaparral

As currently designed, a total of approximately 0.02 acres of disturbed Southern Mixed Chaparral will be impacted by the proposed project. The disturbed Southern Mixed Chaparral that is proposed to be impacted is characterized by a co-dominance of the sensitive plant wart-stemmed ceanothus, and provides potential foraging habitat for six sensitive wildlife species that have been determined to have a moderate potential to occur on the site. Although Southern Mixed Chaparral habitat is widely distributed in the region and is not considered a sensitive habitat by State and federal resource agencies, this habitat is considered locally sensitive within the City of San Marcos and under the Draft City of San Marcos Subarea Plan of the MHCP, and impacts to this habitat would require habitat-based compensatory mitigation.

Overall, the disturbed Southern Mixed Chaparral on and in the immediate vicinity of the site provides relatively low quality habitat for wildlife species, and does not contain the functions and values that much of the remaining undeveloped chaparral in the local area contains. The association of this habitat with the San Miguel-Exchequer rocky silt loam soils however, does qualify the habitat onsite as having particular value to the plant species wart-stemmed ceanothus, although this species was observed in relatively low density on the project site itself. Previous fire disturbance and vegetation thinning for property maintenance has adversely affected the physical structure, plant species composition, and density of native woody perennials on and in the immediate vicinity of the site. Many of the interstitial canopy openings have been artificially created through previous clearing and thinning, and ground disturbance from trampling, landscaping, and dumping has altered the soils substrate in some areas. Additionally, regular disturbances associated with the private residence present a number of adverse direct and indirect impacts to this habitat. As a result, the disturbed Southern Mixed Chaparral on and in the immediate vicinity of the site could be considered low in terms of overall habitat quality. However, impacts to this habitat are considered significant under the Draft City of San Marcos Subarea Plan of the MHCP, and would require habitat-based compensatory mitigation.

Mitigation Measure MM-1 provided below will reduce impacts to Southern Mixed Chaparral to less than significant.

8.1.2 - Special Status Species

The proposed project will result in approximately 0.02 acres of impacts to disturbed Southern Mixed Chaparral, which was determined to support a single sensitive plant species (wart-stemmed ceanothus), and provide potential foraging habitat for six sensitive wildlife species (Bell's sage sparrow, blue-gray gnatcatcher, coast western whiptail, northern red-diamond rattlesnake, San Diego horned lizard, and southern California rufous-crowned sparrow). None of these species are federally- or State-listed as threatened or endangered.

Wart-stemmed ceanothus is a CNPS List 1B.1 plant species and considered sensitive under the Draft City of San Marcos Subarea Plan of the MHCP. Approximately 10 to 15 individuals of this species occur within the proposed project impact area. Large stands of chaparral dominated by this species occur in the vicinity of the project site, and according to research contributed for the Draft City of San Marcos Subarea Plan of the MHCP, it has been approximated that nearly 2.5 million individuals of this plant occur in the southern portions of the City. Due to the current status and distribution of this species in the area, impacts are considered minimal on a local and regional scale, and implementation of the proposed project is not expected to adversely affect the long-term conservation goals for this species. To further reduce impacts to this species and mortality during the construction phase of development, avoidance and minimization measures are recommended in Section 8.2. With the recommended avoidance and minimization measures and habitat-based mitigation for Southern Mixed Chaparral habitat incorporated, impacts to this species would be considered less than significant.

Bell's sage sparrow, blue-gray gnatcatcher, coast western whiptail, northern red-diamond rattlesnake, San Diego horned lizard, and southern California rufous-crowned sparrow are California State Species of Special Concern and are considered sensitive under the Draft City of San Marcos Subarea Plan of the MHCP. These species were determined to have a moderate potential to occur within the chaparral habitat on and in the immediate vicinity of the project site. The project site itself does not provide highly suitable nesting opportunities for any of these sensitive wildlife species due to existing disturbances, lack of preferred habitat, lack of preferred vegetation composition and physiognomy, and unsuitable soil substrate. Therefore, these six wildlife species would only have a potential to utilize the project site for foraging and/or other non-nesting related activities. Due to the current status and distribution of this species in the area, potential impacts to these species are considered minimal on a local and regional scale, and implementation of the proposed project is not expected to adversely affect the long-term conservation goals for these species. Although no direct impacts to these species are expected to occur as a result of the proposed project, to further avoid or reduce potential impacts to these species during the construction phase of development, a breeding season avoidance measure is recommended in Section 8.2. With the recommended breeding season avoidance measure incorporated, impacts to these species are considered less than significant.

Mitigation Measure MM-2 provided below will reduce project impacts to special status species and their habitat to less than significant.

8.1.3 - Nesting Birds

No nests and no nesting activity were observed on or in the immediate vicinity of the project site during the November 2007 survey. The proposed project will result in the removal and/or trimming of shrub species that provide suitable nesting habitat for common birds that may occur in the project vicinity. Therefore, there is a potential for the proposed project to result in significant impacts to nesting birds pursuant to the MBTA and CFG Code.

Mitigation Measure MM-3 provided below will reduce potential project impacts to nesting bird species to less than significant.

8.2 - Proposed Mitigation

The following is a list of recommended mitigation measures that will reduce potential project-related impacts to biological resources to less than significant.

8.2.1 - Southern Mixed Chaparral

The proposed project will result in approximately 0.02 acres of permanent impacts to disturbed Southern Mixed Chaparral. The following will reduce impacts to disturbed Southern Mixed Chaparral to less than significant.

MM-1 Prior to project implementation and upon further project review by the City Planning Division, the applicant shall provide habitat-based mitigation at a set ratio for impacts to Southern Mixed Chaparral habitat that contains wart-stemmed ceanothus. Habitat based mitigation shall be mitigated for at a ratio of 1:1 (i.e. 1.0 acre of mitigation credits for every 1.0 acre of habitat impacted). Habitat-based mitigation shall be executed according to policy set forth by the City of San Marcos. Onsite mitigation is preferred however offsite purchase of mitigation credits from an approved mitigation bank may also be approved. If required, proof of execution of mitigation will likely be conditioned by the City of San Marcos during project review.

8.2.2 - Special Status Species

The proposed project will result in impacts to approximately 0.02 acres of disturbed Southern Mixed Chaparral that is occupied by the non-listed sensitive plant species, wart-stemmed ceanothus, and provides potential foraging habitat for six non-listed sensitive wildlife species. The following would reduce impacts to sensitive species and their habitat to less than significant.

MM-2 Implementation of MM-1 would reduce direct impacts to wart-stemmed ceanothus, and indirect impacts to foraging habitat for Bell's sage sparrow, blue-gray gnatcatcher, coast western whiptail, northern red-diamond rattlesnake, San Diego horned lizard, and southern California rufous-crowned sparrow to less than significant through habitat-based mitigation.

As an avoidance and minimization measure, prior to construction, a qualified biologist should conduct a survey to identify and physically mark all wart-stemmed ceanothus individuals on and in the immediate vicinity of the proposed impact area. The biologist should confirm the locations of all wart-stemmed ceanothus individuals on and in the immediate vicinity of the proposed impact area with construction personnel for the proposed project. Construction activities should be executed in a method to avoid all wart-stemmed ceanothus specimens to the maximum extent feasible. A monitoring biologist should be present during construction to ensure that direct removal and mortality of wart-stemmed ceanothus individuals is reduced, if feasible, and that no additional individuals outside the proposed impact area are impacted. Construction methods should be low-impact and non-intrusive, and should be conducted by hand-trench or low-impact drilling equipment where feasible.

8.2.3 - Nesting Birds

The following will reduce impacts to nesting birds pursuant to CFG Code and the MBTA to less than significant.

MM-3 To avoid any direct or indirect impacts to nesting birds, removal of any suitable nesting habitat, including any brushing, clearing, and/or grading activities of habitat that may support active nests shall be restricted to periods outside of the breeding season, which is defined as occurring between February 1 and August 31. If the removal of habitat that may support active nests must occur during the breeding season, the applicant shall retain a City-approved biologist to conduct a pre-construction survey for the presence of nesting birds on and within an approximately 500-foot buffer surrounding the construction area. The pre-construction survey must be conducted within 10 calendar days prior to initiating any construction activities, or a set number of days prior according to the City. If nesting birds are detected by the City-approved biologist, a bio-monitor should be present on-site during construction to minimize construction impacts and ensure that no nest is removed or disturbed until all young have fledged.

SECTION 9: CUMULATIVE IMPACTS

The proposed project is a small unmanned cellular wireless facility that will provide service for the local area. Unmanned wireless facility projects are regionally sparse and limited to specific locations to achieve maximum service coverage. Ideal facility locations are often used by multiple carriers and collocations are common. The proposed project will be limited in overall direct and indirect impacts during the construction and operational phases, and will result in the loss of approximately 0.02 acres of disturbed Southern Mixed Chaparral habitat containing wart-stemmed ceanothus, and potential foraging habitat for six non-listed sensitive wildlife species. Habitat-based mitigation is proposed to reduce project-related impacts to less than significant. This habitat is locally distributed and relatively extensive, and extends further to the general north, south, and east of the project site. When considered relative to unmanned cellular wireless facility projects that currently exist or are proposed in the region, cumulative impacts to biological resources resulting from the proposed project are considerable, however would be reduced to a level of less than significant with habitat-based mitigation incorporated.

SECTION 10: REFERENCES

Burt, W. and Grossenheider, R. 1980. *Peterson Field Guides to Mammals*. Houghton Mifflin Company. New York, New York.

Brown, P. 1997. *A Field Guide to the Snakes of California*. Gulf Publishing Company. Houston Texas.

California Department of Fish and Game. 1988. *California's Wildlife. Volume I: Amphibians and Reptiles.* State of California Resources Agency. Sacramento, California.

California Department of Fish and Game. 1990a. *California's Wildlife. Volume II: Birds*. State of California Resources Agency. Sacramento, California.

California Department of Fish and Game. 1990b. *California's Wildlife. Volume III: Mammals.* State of California Resources Agency. Sacramento, California.

California Department of Fish and Game. 1992. *Annual Report on the Status of California's State Listed Threatened and Endangered Plants and Animals*. State of California Resources Agency. Sacramento, California.

California Department of Fish and Game (CDFG), 2007 (October). Endangered and Threatened Animals List. The Resources Agency of California, Department of Fish and Game, Natural Heritage Division, Natural Diversity Data Base. Sacramento, California.

California Department of Fish and Game (CDFG), 2007 (October). Endangered, Threatened, and Rare Plants. The Resources Agency of California, Department of Fish and Game, Natural Heritage Division, Natural Diversity Data Base. Sacramento, California.

California Department of Fish and Game (CDFG), 2007 (October). Special Animals List. The Resources Agency of California, Department of Fish and Game, Natural Heritage Division, Natural Diversity Data Base. Sacramento, California.

California Department of Fish and Game (CDFG). 2007 (October). *Natural Communities List.* The Resources Agency of California, Department of Fish and Game, Natural Diversity Data Base. Sacramento, California.

California Department of Fish and Game (CDFG). 2007 (October). *Special Vascular Plants, Bryophytes, and Lichens List.* The Resources Agency of California, Department of Fish and Game, Natural Heritage Division, Natural Diversity Data Base. Sacramento, California.

California Native Plant Society Electronic Inventory (CNPSEI). 2007. Retrieved from http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi. Accessed on 11/2/07

California Natural Diversity Data Base (CNDDB). 2007. RareFind 3 personal computer program. Data Base Record Search for Information on Threatened, Endangered, Rare, or Otherwise Sensitive Species for the *Rancho Santa Fe, California* USGS Topographic Quadrangle. California Department of Fish and Game, Natural Heritage Division. Sacramento, California.

City of San Marcos. 2001 *Draft Natural Community Conservation Plan for the City of San Marcos*. Available for review at the City of San Marcos Planning Division and at http://www.sandag.org/whats_new/publications/environmental/mhcp_sanmarcos_toc.pdf.

City of San Marcos. *City of San Marcos General Plan.* Available at City Hall for review.

City of San Marcos. Zoning Ordinance. Title 20 of City Municipal Code. Available for review at http://www.san-marcos.net/upload/images/City%20Clerk/PDFs/smc-codes.pdf.

Hickman, J. C. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press. Berkeley, California.

Holland, R. F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Non-game Heritage Program. California Department of Fish and Game. Sacramento, California.

Lightner, James 2006. *San Diego County Native Plants.* Second Ed. San Diego Flora. San Diego, California.

Sawyer, J. and Keeler-Wolf, T. 1995. *A Manual of California Vegetation*. California Native Plant Society. Sacramento, California.

Munz, P. A. 1974. *A Flora of Southern California*. University of California Press. Berkeley, California.

Oberbauer, T., 1996, *Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions*, 6p.

Rieser, C.H. *Rare Plants of San Diego.* Web address http://sandiego.sierraclub.org/rareplants/ Accessed 12/2006.

Stebbins, R. C. 2003. *A Field Guide to Western Reptiles and Amphibians*. 3rd ed. Houghton-Mifflin Company. Boston, Massachusetts.

Tibor, D. P. 2001. *California Native Plant Society's Inventory of Rare and Endangered Plants of California*. California Native Plant Society. Special Publication, No. 1, 6th ed.

Udvardy, M.D. 1994. *National Audubon Society Field Guide to North American Birds*. Alfred A. Knopf, Inc. New York, New York.

United States Fish and Wildlife Service (USFWS). 2002. *Birds of conservation concern 2002.* Division of Migratory Bird Management, Arlington, Virginia. 99 pp.

United States Army Corps of Engineers (USACE). 2001. *Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest.* Available for public download at http://www.usace.army.mil/cw/cecwo/reg/reg_supp.htm

United States Army Corps of Engineers (USACE). 2006. *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region.* Available for public download at http://www.usace.army.mil/cw/cecwo/reg/reg_supp.htm

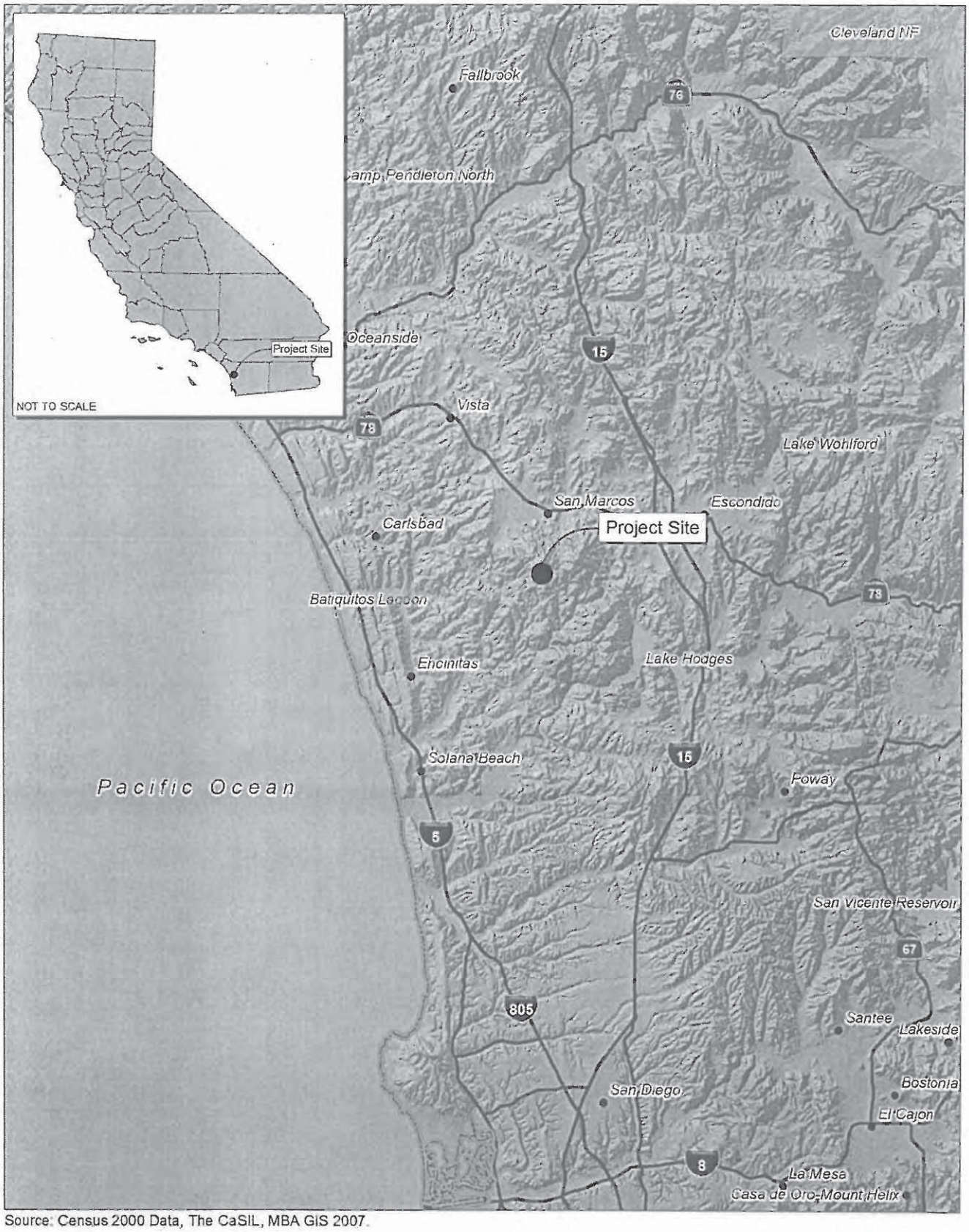
United States Army Corps of Engineers (USACE). 2007. *Jurisdictional Determination Form Instructional Guidebook.* Available for public download at http://www.usace.army.mil/cw/cecwo/reg/reg_supp.htm

Wetland Training Institute. 1995. *Field Guide for Wetland Delineation; 1987 Corps of Engineers Manual*, Glenwood, NM. WTI 02-1 143pp.

SECTION 11: PREPARER AND PERSONS/ORGANIZATIONS CONTACTED

This report has been prepared by qualified MBA Biologist Karl L. Osmundson. The statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and the facts and information presented are true and correct in the professional opinion of MBA.

If you have any questions or concerns regarding this report, please do not hesitate to contact Karl Osmundson at 714.508.4100.



Source: Census 2000 Data, The CaSIL, MBA GIS 2007.

NORTH

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Miles

Michael Brandman Associates

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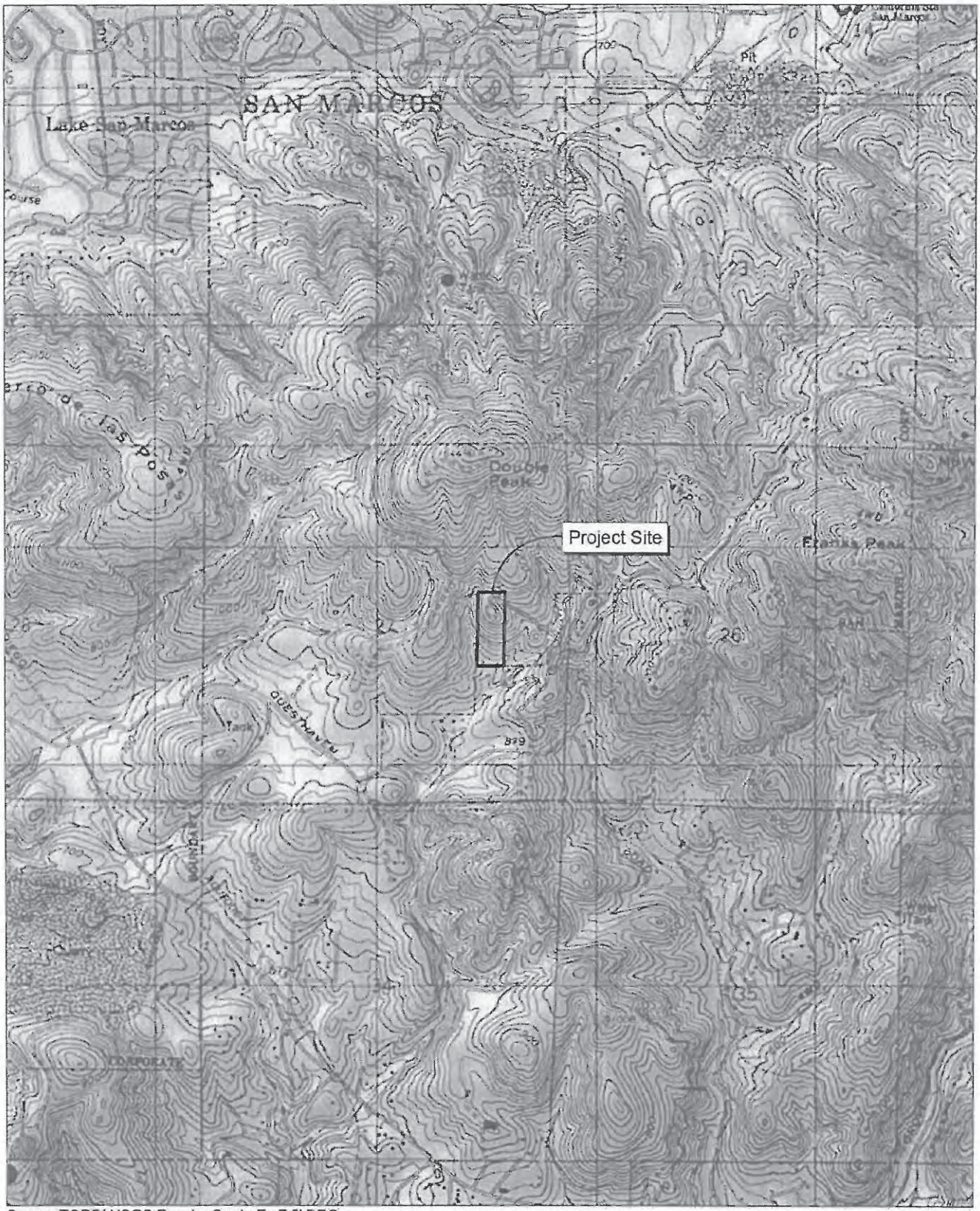
Exhibit 1
Regional Location Map

T-MOBILE • SD06391C
BIOLOGICAL RESOURCES LETTER REPORT



Source: TOPO! USGS Rancho Santa Fe 7.5' DRG

NORTH

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Feet

Michael Brandman Associates

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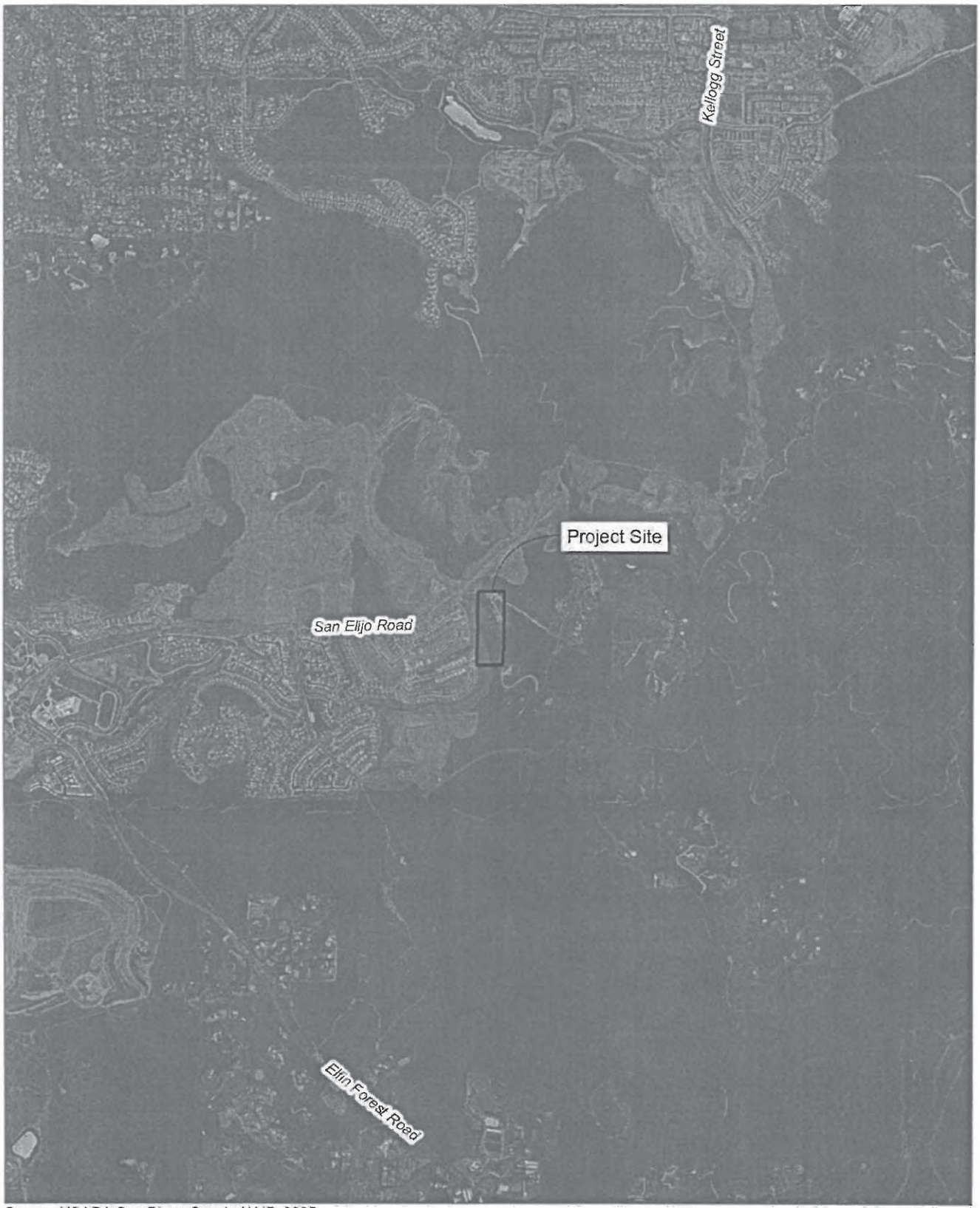
Exhibit 2
Local Vicinity Map
Topographic Base

T-MOBILE • SD06391C
BIOLOGICAL RESOURCES LETTER REPORT



Source: USADA San Diego County NAIP, 2005.

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Michael Brandman Associates

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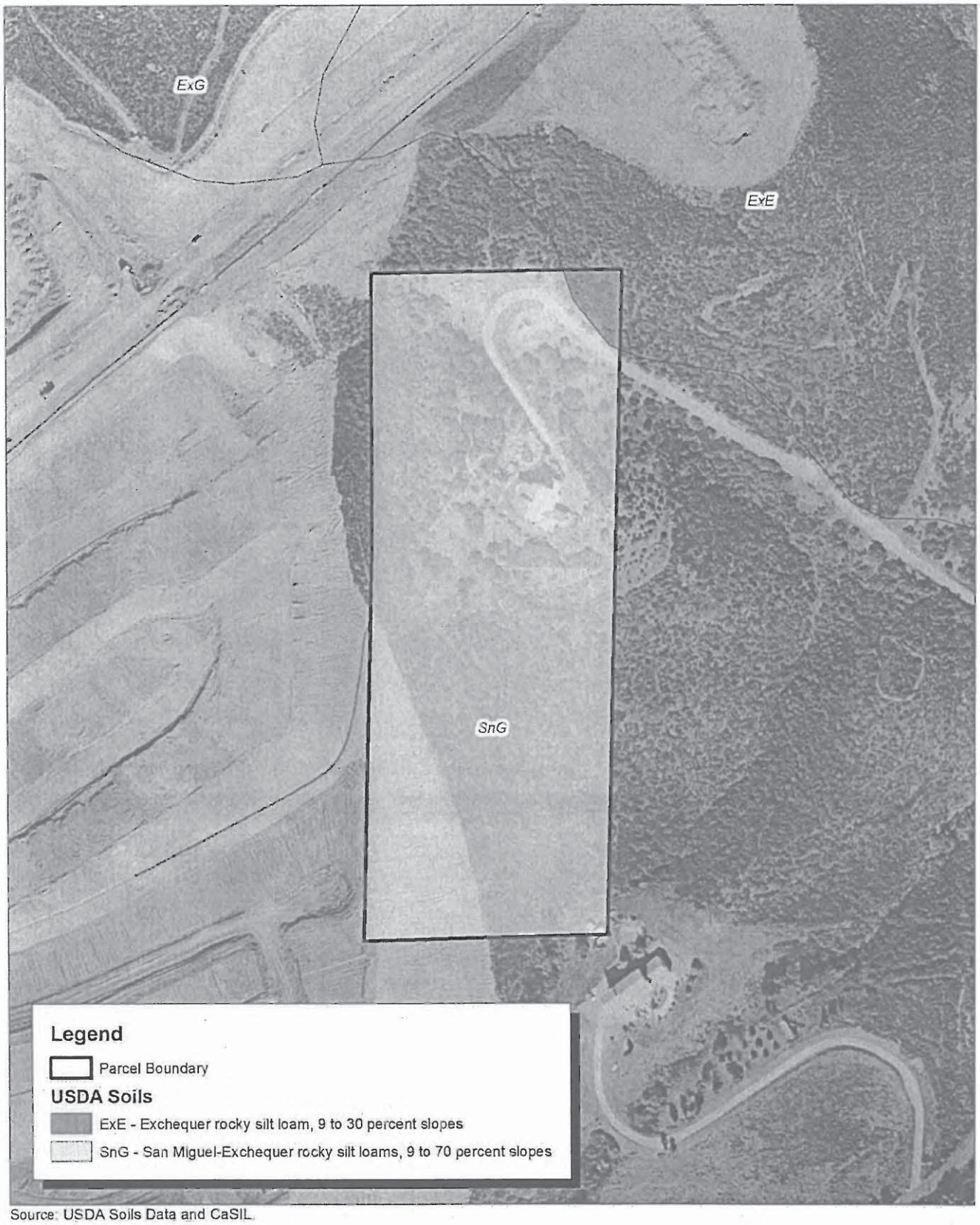
Exhibit 3
Local Vicinity Map
Aerial Base

T-MOBILE • SD06391C
BIOLOGICAL RESOURCES LETTER REPORT



Source: USDA Soils Data and CaSIL

NORTH

220 110 0 220

Feet

Michael Brandman Associates

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Exhibit 4
USDA Soils Map

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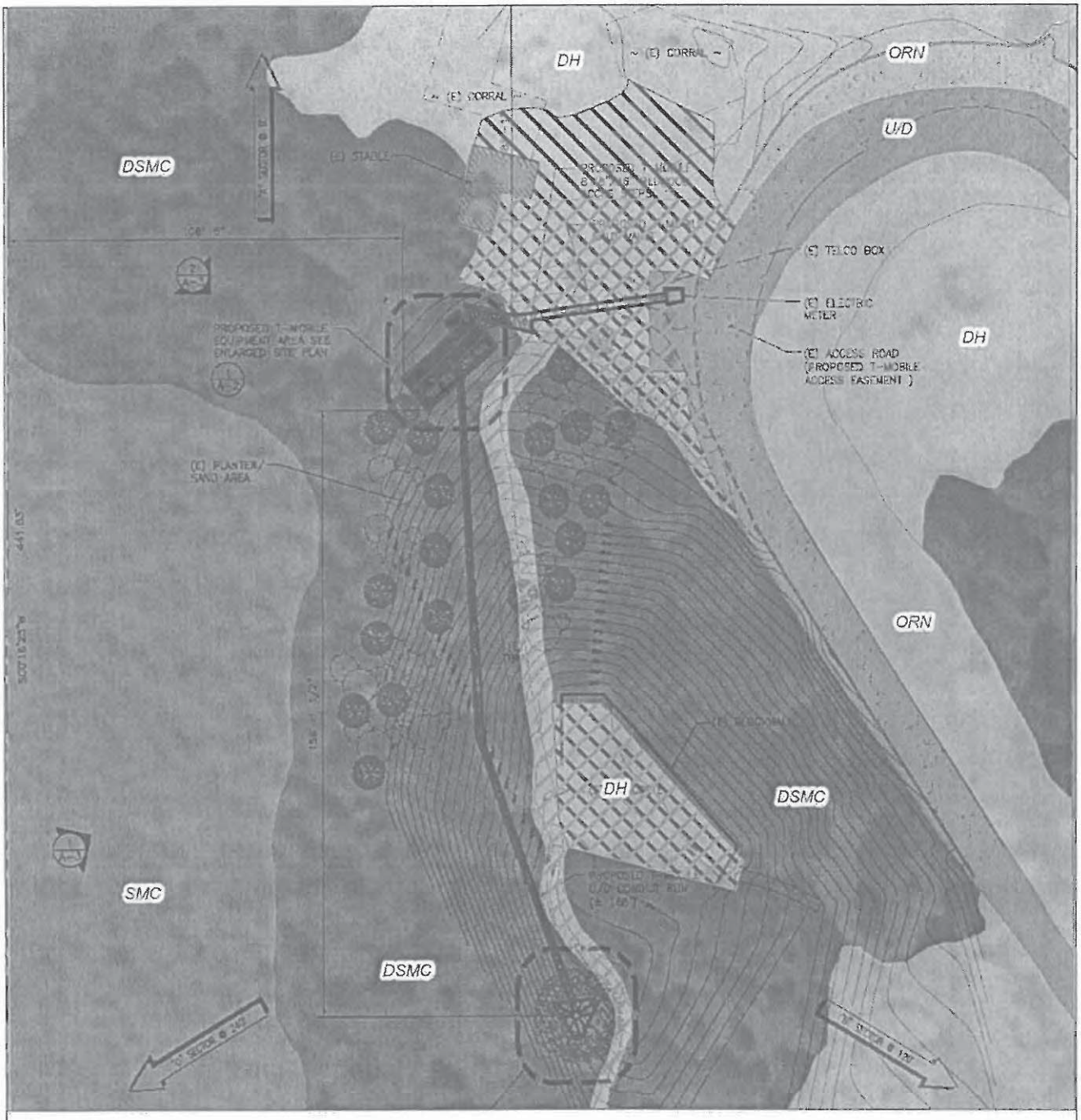

Legend

- Preliminary Construction Access Roads
- Preliminary Construction Storage/Staging Areas
- Project Impact Area

Plant Communities (Holland Code)	Total Acres	Permanent Impacts	Temporary Impacts
Southern Mixed Chaparral (37120)	0.48 acres	0.00 acres	0.00 acres
Disturbed Southern Mixed Chaparral (37120)	1.06 acres	0.02 acres	0.00 acres
Ornamental (11100)	0.16 acres	0.00 acres	0.00 acres
Urban / Developed (12000)	0.13 acres	< 0.01 acres	0.08 acres
Disturbed Habitat (11300)	0.59 acres	< 0.01 acres	0.15 acres

Source: CASil, SANGIS, and MBA Field Survey.

NORTH

40 20 0 40 Feet

Michael Brandman Associates

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Exhibit 5
Biological Resources Map

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BIOLOGICAL RESOURCES LETTER REPORT

Selected Site Photos SD-06931-C

Looking north at Property. T-Mobile proposes a new Antenna Structure and equipment shelter on northern portion of Property; adjacent to barn and horse corral structure.

Looking south at Property. Antenna Structure and equipment shelter to be placed to west.

2080 Golden Eagle Trail
San Marcos, CA 92078

Selected Site Photos SD-06931-C

Looking west at utility origination and trenching route west to equipment shelter.

Looking east at trenching route for utilities from equipment shelter.

2080 Golden Eagle Trail
San Marcos, CA 92078

Selected Site Photos SD-06931-C

Looking north at proposed Antenna Structure location and trenching route north for utilities.

Looking north at equipment shelter location on northern portion of Property.

2080 Golden Eagle Trail
San Marcos, CA 92078

Selected Site Photos SD-06931-C

Looking north at proposed equipment shelter location adjacent to west of barn structure.

Looking west from Site at adjacent vacant lands and residential homes.

2080 Golden Eagle Trail
San Marcos, CA 92078

Karl L. Osmundson

Biologist / Assistant Project Manager

Mr. Osmundson is a wildlife and fish biologist with over 5 years experience in the environmental field. He has conducted research in ecology and the aquatic sciences throughout California as a biologist and ichthyologist for the University of California at Davis, department of Wildlife, Fish, and Conservation Biology, and as a Biologist for Michael Brandman Associates, among others. In addition to conducting ecological research, he has provided various federal, State, local, and private clients with consultation in planning and natural resources management through the execution of CEQA/NEPA compliance biological assessments, including directing and writing technical reports and EIRs, conducting focused surveys for sensitive flora and fauna, habitat assessments, habitat conservation plan compliance surveys, habitat acquisition/conservation strategies, nesting surveys, relocation studies, aquatic species population studies, wetlands delineations, and restoration monitoring surveys for various projects throughout California.

PROFESSIONAL EXPERIENCE

- Project Manager/Biologist for a number of habitat assessments, monitoring surveys, and focused protocol surveys for threatened and endangered aquatic species, including sensitive fish, avian, reptile, and invertebrate species throughout California. Conducted monitoring surveys and focused protocol surveys for Riverside fairy shrimp, vernal pool fairy shrimp, San Diego fairy shrimp, Quino checkerspot butterfly, Santa Ana speckled dace, coastal California gnatcatcher, least Bell's vireo, desert tortoise, and burrowing owl, among others, for projects in Los Angeles, Orange, Riverside, and San Bernardino Counties. The surveys involve overall species accounts, including monitoring behavior and nest locations, and also consisted of an inventory of all plant and wildlife species observed on the sites, vegetation mapping, and habitat assessment.

- Project Manager/Biologist for projects requiring habitat assessments, biological resources impact analyses, and local and regional habitat conservation plan (HCP) compliance and strategic planning. Project processing and specialized HCP experience includes projects within the San Diego Multiple Species Conservation Program (MSCP) and associated City Subarea Plans, the western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and associated City Plans, Metropolitan Bakersfield Habitat Conservation Plan (MBHCP), and various Draft HCPs throughout the State.

- Project Manager/Biologist for wireless telecommunications projects requiring biological resources impact analyses and project processing throughout southern California, specializing in San Diego and Riverside Counties.

- Project Manager/Biologist for Determination of Biological Equivalent or Superior Preservation (DBESP) analyses for projects impacting sensitive riparian/riverine habitat. Executed delineation assessments and impact determinations for habitat loss. Developed avoidance, conservation, and resource enhancement/restoration strategies for project feasibility and compliance with USACE, RWQCB, and CDFG regulations, and compliance with the County Flood Control and the Multiple Species Habitat Conservation Plan in Riverside County.

- Project Manager/Biologist for a number of projects requiring wetlands permitting under USACE, RWQCB, and CDFG jurisdiction. Performed formal wetland delineations throughout the State of California.

- Project Manager/Biologist for sensitive species relocation projects for the California State species of concern burrowing owl within Riverside and San Bernardino Counties. Relocation study included delineating conservation area and exclusion sites within occupied owl habitat, setting one-way doors, monitoring active burrows occupied by owls and artificial burrow creation.

- Project Biologist for a number of restoration projects requiring mitigation monitoring components. Assisted with the management of restoration plan implementation including generation of seed/container plan/cuttings palettes, installation and maintenance, quarterly monitoring, and progress reports.

- Research Biologist, Conducted fish biology and ecological research on the Sacramento/San Joaquin Delta and Cosumnes River watershed in northern California in affiliation with University of California at Davis, John Muir Institute for the Environment, The Nature Conservancy, and California Department of Water Resources. Research conducted for the recovery of native fish populations and eradication of non-native fish species, and included the construction of an ecological food web for an approximately 80 mile stretch of the watershed using stable isotope analysis and various sampling techniques for plant, invertebrate, amphibian, avian, mammal, and fish species inhabiting the watershed, with emphasis on fish and aquatic avian species.

PROFESSIONAL HISTORY

Michael Brandman Associates, Biologist
Jones and Stokes Associates, Biologist
California Waterfowl Association, Waterfowl Research Technician
Hubbs-Sea World Marine Research Institute, Hatchery Technician
John Muir Institute for the Environment, Research Assistance
Yolo Basin Foundation, Wetlands Docent
University of California, Davis, Research Assistant
University of California, Davis, Teachers Assistant

EDUCATION

B.S., Wildlife, Fish, and Conservation Biology, University of California, Davis

TRAINING

AEP CEQA Workshop 11/03
Fairy Shrimp Workshop 4/05
CNPS Vegetation and Habitat Rapid Assessment Method Workshop 8/05
RCIP MSHCP Workshop 9/04, 2/06
Wetlands Training Institute Vernal Pool and Restoration Workshop 4/06
Technologies for Monitoring Habitats Workshop 6/06
Wetlands Training Institute Basic Wetland Delineation Certification 7/06
AIA Project Management Certification 9/06
ACOE Sacramento District Regulatory Branch Training 10/06

PERMITS

Permit Applications in progress:
Federal 10(a)(1)(A) Permit -
Coastal California Gnatcatcher, Vernal Pool Branchiopod Species

SCIENTIFIC PUBLICATIONS

Osmundson, K.L. 2002. The Effects of Environmental Variability on Western Grebe Foraging Success. WFCB Journal of Field Research. 2002 ed. Pgs1-20

PROFESSIONAL AFFILIATIONS

The Wildlife Society – Western Chapter
American Fisheries Society
The Audubon Society - Sea and Sage
Associate of Environmental Professionals