



Placentia Planning Commission  
Agenda

Regular Meeting  
**December 11, 2012**  
**6:30 p.m.**

**Michael Ebenhoch**  
Chairman

**Vic Tomazic**  
Vice Chairman

**Dana Hill**  
Commissioner

**Frank Perez**  
Commissioner

**Christine Schaefer**  
Commissioner

**John Scull**  
Commissioner

**Thomas Solomonson**  
Commissioner

**City of Placentia**  
401 E Chapman Avenue  
Placentia, CA 92870

**Phone: (714) 993-8124**  
**Fax: (714) 961-0283**  
**Website: [www.placentia.org](http://www.placentia.org)**

**Procedures for Addressing the Commission**

Any person who wishes to speak regarding an item on the agenda or on a subject within the Planning Commission's jurisdiction during the "Oral Communications" portion of the agenda should fill out a "Speaker Request Form" and give it to the Commission Secretary BEFORE that portion of the agenda is called. Testimony for Public Hearings will only be taken at the time of the hearing. Any person who wishes to speak on a Public Hearing item should fill out a "Speaker Request Form" and give it to the Commission Secretary BEFORE the item is called.

The Commission encourages free expression of all points of view. To allow all persons the opportunity to speak, please keep your remarks brief. If others have already expressed your position, you may simply indicate that you agree with a previous speaker. If appropriate, a spokesperson may present the views of an entire group. To encourage all views, the Commission discourages clapping, booing or shouts of approval or disagreement from the audience.

**PLEASE SILENCE CELL PHONES AND OTHER ELECTRONIC  
EQUIPMENT WHILE THE COMMISSION IS IN SESSION.**

**Special Accommodations**

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk's Office at (714) 993-8231. Notification 48 hours prior to the meeting will generally enable City staff to make reasonable arrangements to ensure accessibility.  
(28 CFR 35.102.35.104 ADA Title II)

Copies of all agenda materials are available for public review in the Office of the City Clerk, City Planning Division Counter, Placentia Library Reference Desk and the internet at [www.placentia.org](http://www.placentia.org) under the Planning Commission page. Persons who have questions concerning any agenda item may call the City Planning Division at (714) 993-8124 to make inquiry concerning the nature of the item described on the agenda.

In compliance California Government Code Section 54957.5, any writings or documents provided to a majority of the Planning Commission regarding any item on this agenda that are not exempt from disclosure under the Public Records Act will be made available for public inspection at the City Clerk's Office at City Hall, 401 East Chapman Avenue, Placentia, during normal business hours.

Study Sessions are open to the public and held in the City Council Chambers or City Hall Community Room.

**City of Placentia  
Community Room  
401 E. Chapman Avenue  
December 11, 2012**

**REGULAR MEETING  
6:30 p.m. – Community Room**

---

**MEETING CALLED TO ORDER**

**ROLL CALL:** Chairman Ebenhoch  
Vice Chairman Tomazic  
Commissioner Hill  
Commissioner Perez  
Commissioner Schaefer  
Commissioner Scull  
Commissioner Solomonson

**PLEDGE OF ALLEGIANCE:**

**MINUTES:**

November 13, 2012

**ELECTION OF CHAIRMAN:**

**ELECTION OF VICE CHAIRMAN:**

**ORAL COMMUNICATIONS:**

At this time, the public is invited to address the Planning Commission concerning any items on the agenda, which are not public hearings, or other items under the jurisdiction of the Placentia Planning Commission

---

**PUBLIC HEARINGS**

**OLD BUSINESS**

1. **Applicant: Sprint C/O SAC Wireless: Mark Berlin**  
**Location: 506 S. Fee Ana Street**

**Use Permit (UP) 2012-11:**

Request to modify a Sprint wireless communication facility on an existing +/- 65 foot high freestanding “monopine” and related ground equipment located at 506 S. Fee Ana Street in the Manufacturing (M) District.

**Recommended Action:**

Adopt Resolution No. PC-2012-19 approving Use Permit 2012-11, subject to all Special Conditions of Approval and Standard Development Requirements.

**NEW BUSINESS**

2. **Applicant: T-Mobile C/O Reliant Land Services: Tom Mundl**  
**Location: 506 S. Fee Ana Street**

**Use Permit (UP) 2012-12:**

Request to modify a T-Mobile wireless communication facility on an existing +/- 65 foot high freestanding "monopine" and related ground equipment located at 506 S. Fee Ana Street in the Manufacturing (M) District.

**Recommended Action:**

Adopt Resolution No. PC-2012-20 approving Use Permit 2012-12, subject to all Special Conditions of Approval and Standard Development Requirements.

3. **Applicant: Golden State Water Company: Daniel Flores**  
**Location: 202 Wilson Avenue**

**Development Plan Review 2012-03:**

To permit the construction of a +/- 600 square foot pump house structure to enclose a new Golden State Water Company 1,500-2,500 gallon per minute domestic water well, +/- 900 LF of 12 inch diameter distribution water line and +/- 900 LF of 16 inch diameter drain line connecting to the public storm drain, as well as associated water well facilities for the purpose of improving fire flow and water quality in the existing Placentia water system. and other related on site improvements on a +/- 9,100 square foot site at 202 Wilson Avenue in the Single Family Residential (R-1) District.

**Recommended Action:**

Adopt Resolution No. PC-2012-21 approving Development Plan Review (DPR) 2012-03, subject to the Special Conditions of Approval and Standard Development Requirements set forth therein and approve Mitigated Negative Declaration 2012-02 including mitigation measures prepared by RBF Consulting.

## STUDY SESSION

4. **Applicant: The Olson Company**  
**Location: 1049 Golden Avenue**

Study Session on a proposed 33 unit paired and detached small lot residential community on a 2.63 acre parcel for a net density not to exceed 12.5 dwelling units per acre. The City Council will consider the development through a Development Agreement to provide for flexibility in the City's R-3 high density zoning district related to development standards. When single family residences are developed in the R-3 district the Placentia Municipal Code requires R-1 development standards. The proposed development exceeds the R-1 standards for density and setback standards.

## DEVELOPMENT REPORT

Development Project List

## PLANNING COMMISSION REQUESTS

Commission members may make requests or ask questions of staff. If a Commission member would like to have formal action taken on a requested matter, it will be placed on a future Commission Agenda.

---

## ADJOURNMENT

The Planning Commissioners ADJOURN to a Regular meeting on Tuesday, January 8, 2013 at 6:30 p.m. in the City Council Chambers at 401 East Chapman Avenue, Placentia.

---

## CERTIFICATION OF POSTING

I, Kenneth A. Domer, Secretary to the Planning Commission of the City of Placentia, hereby certify that the Agenda for the December 11, 2012 Regular meeting of the Planning Commission of the City of Placentia was posted on December 6, 2012.

---

Kenneth A. Domer

**PLACENTIA PLANNING COMMISSION  
MINUTES OF THE REGULAR MEETING**

November 13, 2012

The regular meeting of the Placentia Planning Commission of November 13, 2012 was called to order at 6:33 p.m. in the City Council Chambers, 401 East Chapman Avenue, Placentia, by Chairman Ebenhoch.

**ROLL CALL:** Present: Michael Ebenhoch, Chairman  
Vic Tomazic, Vice Chairman  
Christine Schaefer, Commissioner  
Tom Solomonson, Commissioner  
John Scull, Commissioner

Absent Excused: Dana Hill, Commissioner  
Frank Perez, Commissioner

**PLEDGE OF ALLEGIANCE:** Led by Commissioner Schaefer

Others Present: Ken Domer, Assistant City Administrator  
Andrew V. Arczynski, City Attorney  
Monique Schwartz, Associate Planner  
Cathy Carranza, Clerical Aide

**Motion by Commissioner Schaefer, seconded by Commissioner Solomonson, to approve the minutes of October 9, 2012. Passed by a 4-0-2-1 vote. Commissioner Hill and Commissioner Perez absent. Chairman Ebenhoch abstained.**

**ORAL COMMUNICATIONS:** The Chair invited the public to make oral comments on matters not on the agenda and none were offered.

**ELECTION OF CHAIRMAN:**

**ELECTION OF VICE CHAIRMAN:**

**Motion by Commissioner Schaefer, seconded by Commissioner Solomonson, Election will be continued to December 11, 2012 Planning Commission meeting with potential full representation of the commission.**

**Public Hearings:**

1. **Applicant:** Golden State Water Company: Daniel Flores

**Location:** 202 Wilson Avenue

**Development Plan Review 2012-03:**

To permit the construction of a +/- 600 square foot pump house structure to enclose a

new Golden State Water Company 1,500-2,500 gallon per minute domestic water well, +/- 900 LF of 12 inch diameter distribution water line and +/- 900 LF of 16 inch diameter drain line connecting to the public storm drain, as well as associated water well facilities for the purpose of improving fire flow and water quality I the existing Placentia water system. And other related on site improvements on a +/- 9,100 square foot site at 202 Wilson Avenue in the Single Family Residential (R-1) District.

Ms. Schwartz stated, that the applicant is working on public outreach. Item 1 to be continued on agenda to a date not certain.

**2. Applicant: Sprint C/O SAC Wireless: Mark Berlin**

**Location: 506 S. Fee Ana Street**

**Use Permit (UP) 2012-11:**

Request to modify a wireless communication facility of an existing +/- 65 foot high freestanding "monopine" and related ground equipment located at 506 S. Fee Ana Street in the Manufacturing (M) District.

Mr. Domer stated at the request of the applicant, Sprint SAC Wireless, the item be continued to the December 11, 2012 meeting.

Chairman Ebenhoch opened the public hearing.

No comments were received.

With a unanimous voice vote, the commission agreed to continue the item on the December 11, 2012 Planning Commission meeting.

**3. Applicant: City of Placentia**

**Amendment 2012-01:**

Amendment to Chapter 23.90 of Title 23 (Zoning Ordinance) of the Placentia Municipal Code adding a new § 23.90.045 requiring specified signs utilizing non-Latin/Roman alphabet characters to provide a generic description of the business in English and requires applications for such signs to include a certified English translation thereof.

Mr. Domer presented the staff report to the commission. This is an amendment to the sign code requiring any building that has non Latin/non Roman language be required to have some type of English translation in the signage. This is for public safety purposes and identification.

Vice Chairman Tomazic asked if surrounding communities were contacted to see how they would address this type of issue. Mr. Domer stated that other communities that have such an ordinance are handled similar to this one.

Commissioner Schaefer expressed concern in commercial or retail areas being able to identify businesses.

Commissioner Scull asked if every sign in a business overall sign program need to have the translation, or just the primary visible signage. City Attorney Andrew V. Arczynski stated that this would be aimed at primary signs larger than 4 square feet.

Chairman Ebenhoch stated that as a consumer, one needs to be sure when entering an appropriate business in other communities.

Chairman Ebenhoch opened the public hearing.

No comments were received.

Chairman Ebenhoch closed the public hearing.

**MOTION BY VICE CHAIRMAN TOMAZIC SECONDED BY COMMISSIONER SCULL TO RECOMMEND APPROVAL OF AMMENDMENT 2012-01 AND TRANSMIT THE FINDING AND RECOMMENDATION TO THE CITY COUNCIL. SUBJECT TO THE SPECIAL CONDITIONS OF APPROVAL AND STANDARD DEVELOPMENT REQUIREMENTS SET FORTH THEREIN. Passed by a 5-0 vote.**

---

## **DEVELOPMENT REPORT**

### Electronic Message Boards

Ms. Schwartz stated that two different churches have requested installation of electronic message boards. She is recommending staff to research and amend our code. Planning Commission agrees with her recommendation.

### Development Project List

Ms. Schwartz presented the Commission with the Development Projects List. Commissioner Schaefer asked if the Use Permit 2011-14, a cell site project at Samp Park with a November 08, 2012 expiration date can no longer be worked on. Ms. Schwartz stated that no work has been done and she has not received an extension letter for this project. Mr. Domer stated that no plans were ever submitted.

## **PLANNING COMMISSION REQUESTS:**

Vice Chairman Tomazic, seconded by Commissioner Scull adjourned the Planning Commission meeting at 7:05 p.m. to the next regularly scheduled meeting on December 11, 2012 in the City Council Chambers at 401 East Chapman Avenue, Placentia.

Submitted by,

Ken Domer  
Assistant City Administrator



# Placentia Planning Commission Agenda Staff Report

<b>AGENDA ITEM NO.:</b> 1	<b>DATE:</b> December 11, 2012	<b>PUBLIC HEARING:</b> Yes
<b>APPLICATION:</b> Use Permit (UP) 2012-11 (Modification to Use Permit 05/10)		
<b>DESCRIPTION:</b> Request to modify a wireless communication facility on an existing +/- 65 foot high freestanding "monopine" and related ground equipment located at 506 S. Fee Ana Street.		
<b>RELATED ITEMS:</b> None		
<b>APPLICANT:</b> SPRINT C/O SAC Wireless (Mr. Mark Berlin)		
<b>PROPERTY OWNER:</b> Mr. Robert Sackett		
<b>LOCATION:</b> 506 S. Fee Ana Street		
<b>CEQA DETERMINATION:</b> Categorically Exempt, Class 3, Section 15303		
<b>ZONING:</b> M – Manufacturing	<b>APN(S):</b> 346-241-13	
<b>GENERAL PLAN:</b> Industrial	<b>CITY COUNCIL ACTION REQUIRED:</b> No	
<b>PREPARED BY:</b> Kenneth A. Domer, Assistant City Administrator		
<b>REVIEWED BY:</b> Monique B. Schwartz, Associate Planner		

## **REQUEST:**

To permit the modification of a wireless communication facility on an existing +/- 65 foot high freestanding "monopine" and related ground equipment located at 506 S. Fee Ana Street within the Manufacturing (M) District.

## **INTRODUCTION:**

This item was continued from the November 13, 2012 meeting at the request of the applicant due to another application for a separate set of antennas on the same wireless facility to be heard at the December 11, 2012 meeting. The Public Hearing was opened, no testimony was received, and then continued.

On September 13, 2005 the Planning Commission approved the co-location of a wireless communications facility on an existing pole located at 506 S. Fee Ana Street. At the time, the applicant, Nextel Communications (now Sprint), applied for and was granted Use Permit 05/10 to allow for the installation of their antennas and ground mounted equipment. A Special Condition (No. 5) was included and reads: "No expansion or modification of the wireless communications facility shall occur at any time without first obtaining Planning Commission review and approval." Therefore this modification requires Planning Commission approval.

Pursuant to § 23.82.070 of the Placentia Municipal Code, all major wireless communication facilities established in the City are required to obtain Planning Commission approval of a Use Permit application. The proposed modification of an existing co-location is required because of the above mentioned Special Condition.

The existing “monopine” cell tower and related ground-mounted equipment at the site was first approved by the Planning Commission on June 11, 2002 for Cingular Wireless. The existing “monopine” wireless communication facility is now owned and operated by T-Mobile, which has an existing ground lease with Mr. and Mrs. Robert Sackett (property owners of 506 Fee Ana Street). This Sprint set of wireless antennas is one of three sets co-located on this wireless communication facility. Sprint proposes to modify the existing facilities to include removing and replacing panel antennas, adding remote radio head (RRH) units and retrofitting the current ground equipment area.

**RECOMMENDATION:**

The Planning Division recommends approval of Use Permit 2012-11, which is a modification of a wireless communication facility on an existing +/- 65 foot high freestanding “monopine” and related ground equipment, located at 506 S. Fee Ana Street within the Manufacturing District.

**DISCUSSION:**

**Subject Site and Surrounding Land Uses:**

The subject property is a 30,576 square foot (.702 acres) parcel that is located south of Orangethorpe Avenue, south of the Burlington Northern Santa Fe Railroad, and north of the Orange County Flood Control Channel with access from Fee Ana Street. The property is owned by Mr. and Mrs. Robert Sackett and is currently improved with a 720 square foot house that is being used as an office and a 2,500 square foot fenced area for a “monopine” wireless communication facility and related ground-mounted equipment that is leased to T-Mobile. The remainder of the parcel is being used as a construction storage yard and for storage of vehicles and equipment.

	<b>Existing Land Use</b>	<b>Land Use Element General Plan Designation</b>	<b>Zoning Map Designation</b>
<b>Existing</b>	Manufacturing Storage Yard and wireless facility	Industrial	Manufacturing (M) District
<b>Proposed</b>	Manufacturing Storage Yard and wireless facility	Industrial	Manufacturing (M) District
<b>North</b>	Residential (210 feet across Orangethorpe Ave.)	PUD 3	Medium Density Residential
<b>South</b>	Orange County Flood Control Channel	Industrial	Manufacturing (M) District
<b>East</b>	Orange County Flood Control Vacant Land	Industrial	Manufacturing (M) District
<b>West</b>	Contractor’s Storage Yard	Industrial	Manufacturing (M) District

## **LOCATION:**

The existing sixty-five (65) foot high “monopine” and adjacent equipment building are located within a 2,500 square foot area with a six (6) foot high chain link with barbed wire fence along the north-east property line. The submittal site plan indicates the proposed ground lease area will remain the same. Sprint is proposing to keep nine (9) current antennas (three (3) per sector) and install six (6) 1900 mhz remote radio head units (two (2) per sector) and three (3) 1900 mhz antennas (one (1) per sector) at approximately 49’-6” (measured to center) above the finish grade. Sprint will also install new conduit and equipment within the existing cabinet that measures 20’-0” L x11’-6” W x 11’-0” H within the existing fenced area and parallel to the eastern property line.

## **Height:**

Per Manufacturing (M) District regulations, the maximum permitted height for structures in this district is fifty-four (54) feet. The existing “monopine” is sixty-five (65) feet tall, taller than the maximum allowable height in this district; however, the cell tower “monopine” design is also regulated by Placentia Municipal Code § 23.81.090 (Height limits-Generally) which states that “chimneys, silos, cupolas, flag poles, monuments, gas storage holders, radio and other towers, water tanks, church steeples and similar structures and mechanical appurtenances may be permitted in excess of height limits provided a use permit is first obtained in each case.” Use Permit 02/05 was approved by the Placentia Planning Commission for the existing “monopine” wireless communication facility on June 11, 2002.

The new or modified antennas for Sprint will be mounted on the existing “monopine” approximately 49’-6” at center antennas above the finish grade.

## **Antennas/Operational Characteristics:**

Sprint is proposing to keep nine (9) current antennas (three per sector) and install six (6) 1900 mhz remote radio head units (two per sector) and three (3) 1900 mhz antennas (one per sector) at approximately 49’-6” (measured to center) above the finish grade. Sprint is also installing new conduit and equipment within the existing cabinet that measures 20’-0” L x11’-6” W x 11’-0” H within the existing fenced area and parallel to the eastern property line.

The proposed wireless communication facility will provide twenty-four (24) hour service to Sprint customers, seven (7) days a week. A Sprint technician will service the facility on a periodic basis; with routine maintenance/inspections of the facility occurring once a month, during normal working hours. Sprint requires twenty-four (24) hour access to the facility to ensure that technical support is immediately available if warranted. They will have keys to access the gate that surrounds the property and the gate that houses the “monopine” and related equipment cabinets.

## **Aesthetics:**

The City's wireless communication facility ordinance specifically requires operators to consider visual impacts when locating and constructing a major wireless communication facility; therefore, the current facility was designed to blend into the surrounding environment. However, the existing "monopine" was approved in 2002 and does not meet the standards set forth by the City as evidenced by recent approvals of similar "monopine" facilities. As now required, the trunk and branches of a "monopine" are to be painted brown and the needles are to be multi-shades of green to resemble a living pine tree. The colors are to be subdued and non-reflective to blend with materials and colors in the surrounding area. Review of the existing "monopine" facility shows a facility which is over ten years of age and one that actually stands out in a negative way when viewed from adjacent areas, including Orangethorpe Avenue. As a condition to this Use Permit, it is required that the applicant work with the pole owner to upgrade the aesthetics of the facility, per what is shown on the submitted elevations, pages A-5 through A-8. That is, the facility shall include faux branches down to a level no higher than twelve (12) feet from the ground in a manner that provides a general pine tree appearance (at least 2.25 branches per foot) up to the existing branches. Further, all antenna units are to be painted green or green/brown patterns and shall be covered with panel covers (socks) with matching branch material.

The existing ground leased fenced area is not visible to cars or to the general public. The perimeter of the site is surrounded by a screened chain link fence and the ground leased fenced area is located within the existing construction storage yard. Staff determined that no further screening of the ground-mounted equipment is necessary because it is situated within a contractor's storage yard that is completely screened from public view. A Special Condition of Approval was included with the original Use Permit to require that all cable/utility runs be placed underground.

## **Safety:**

Wireless communication facilities are regulated by the Federal Communications Commission (FCC) and must receive a federal license before transmission can begin. Providers must comply with the American National Standards Institute (ANSI) and Institute of Electrical and Electronic Engineers (IEEE) standards for safe human exposure to radio electromagnetic fields. ANSI and IEEE standards are considered the most appropriate health and safety guidelines for this type of industry. If a wireless communications facility does not maintain ANSI/IEEE mandated standards, their FCC license will be revoked and any authorized use permit would be declared null and void.

FCC rules require transmitting facilities (including wireless) to comply with Radio Frequency (RF) exposure guidelines. The rules have been clarified in several FCC rulemakings but are most conveniently grouped and discussed in the FCC's Office of Engineering and Technology Bulletin 65, titled, "*Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields.*" The limits established in the guidelines are designed to protect the public health with a very large margin of safety. The limits set forth by the FCC have been endorsed by the Environmental Protection Agency

and the Food and Drug Administration. As stated below, the proposed facility, like most facilities, create maximum exposures that are only a small fraction of the limits set by the FCC. Moreover, the limits themselves are many times below levels that are generally accepted as having the potential to cause adverse health effects. Nonetheless, it is recognized that any instance of noncompliance with the guidelines is potentially very serious, and the FCC has therefore implemented procedures to enforce compliance with its rules.

Section 332(c)(7) of the Communications Act (which is identical to § 704(a) of the Telecommunications Act of 1996) does not limit local government authority over siting wireless facilities, but it does set forth specific limitations on local governments. Specifically, 47 U.S.C. § 332(c)(7) (B) (iv) states: “No State or local government or instrumentality thereof may regulate the placement, construction, or modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission’s regulations concerning such emissions.”

Therefore, the authority of the Planning Commission with regard to RF emissions is limited to reviewing the proposed project for planned compliance with the FCC RF emissions safety rules, and to ensure that any special conditions of approval approved with the Use Permit maintain that compliance.

Based on material submitted by SPRINT Wireless, to include the Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report, the proposed wireless telecommunication facility will operate at the lowest possible power levels and is below the established standards used by the FCC for safe human exposure to radio frequency electromagnetic fields. These standards have been tested and are considered safe by the American National Standards Institute (ANSI) and the Institute of Electrical Electronics Engineers (IEEE). The attached Special Conditions of Approval (Attachment B) address continued compliance with ground level RF emissions as set forth in Bulletin 65.

EBI Consulting, a retained consulting Engineering firm, evaluated the proposed facility for compliance with appropriate guidelines limiting human exposure to radio frequency electromagnetic fields. A copy of Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report has been included as an exhibit to this staff report.

Finally, the applicant indicates that the equipment operates quietly or almost noise free. The equipment does not emit fumes, smoke or objectionable odors.

### **Environmental Review**

The proposed use is not expected to create a negative impact on the physical environment. It is City Staff’s opinion that the use is categorically exempt pursuant to the California Environmental Quality Act (CEQA) Guideline § 15303 and City Environmental Guidelines.

Section 15303 allows for exemptions for small new construction projects which do not result in any changes in land use or density. The proposed project involves a minor alteration to an

existing site involving a negligible expansion of use beyond that presently existing, and will not result in an increase of more than 50 percent of the floor area, nor more than 2,500 square feet. As a result, City Staff recommends that the Planning Commission find that the use is categorically exempt from CEQA.

**Actions:**

Adopt Resolution No. PC-2012-19 approving Use Permit (UP) 2012-11, subject to the Special Conditions of Approval and Standard Development Requirements set forth therein.

Prepared and submitted by:

Reviewed and approved by:

\_\_\_\_\_  
Kenneth A. Domer  
Assistant City Administrator



\_\_\_\_\_  
Monique B. Schwartz  
Associate Planner

**Attachments:**

Resolution No. PC-2012-19  
Attachment A: Special Conditions of Approval and Standard Development Requirements

**Exhibits:**

- Exhibit 1: Vicinity Map and Photo Simulations
- Exhibit 2: Sprint Plan Sheets
- Exhibit 3: Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report

**RESOLUTION NO. PC-2012-19**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PLACENTIA APPROVING USE PERMIT NO. 2012-11 PERTAINING TO MODIFICATIONS TO A SPRINT WIRELESS COMMUNICATION FACILITY AT PROPERTY LOCATED AT 506 S. FEE ANA STREET AND MAKING FINDINGS IN SUPPORT THEREOF.**

**A. Recitals.**

(i). SAC Wireless, ("Applicant" hereinafter) and Mr. Robert Sackett, the property owner, have filed an application for approval of Use Permit No. 2012-11 to be located at 506 S. Fee Ana Street, as described in the title of this Resolution. Hereinafter, in this Resolution, the subject Use Permit request is referred to as the "Application".

(ii). On November 13, 2012 this Commission conducted a duly noticed public hearing, as required by law, and concluded said hearing prior to the adoption of this Resolution.

(iii). All legal prerequisites to the adoption of this Resolution have occurred.

**B. Resolution.**

NOW, THEREFORE, it is hereby found, determined and resolved by the Planning Commission of the City of Placentia as follows:

1. The Commission hereby specifically finds that all of the facts set forth in the Recitals, Part A., of this Resolution are true and correct.

2. Based upon substantial evidence presented to this Commission during the public hearing conducted with regard to the Application, including written staff reports, verbal testimony and development plans, this Commission hereby specifically finds as follows:

a. The proposed use will not be: (1) detrimental to the health, safety or general welfare of the persons residing or working within the neighborhood of the proposed use or within the city, or (2) injurious to the property or improvements within the neighborhood or within the city. Subject to compliance with the attached Special Conditions of Approval and Standard Development Requirements (Attachment "A"), this use complies with all applicable code requirements and development standards of the "M" Manufacturing

District and Placentia Municipal Code Chapter 23.82, Wireless Communication Facilities.

b. According to the submitted Radio Frequency - Electromagnetic Energy (RF-EME) Compliance Report, the proposed Sprint modifications are regulated by the Federal Communications Commission (FCC) and will operate within the frequencies established for Specialized Mobile Radio operators. The Sprint wireless telecommunication facility will operate at the lowest possible power levels that are below established standards used by the FCC for safe human exposure to radio frequency electromagnetic fields. These standards have been tested and considered safe by the American National Standards Institute (ANSI) and the Institute of Electrical and Electronics Engineers (IEEE). Included with the application is a Report of Compliance with FCC/FAA from Richard A. Tell of Richard Tell Associates, Inc., Consulting Engineer concluding that the facility will comply with the prevailing standards for limiting public exposure to radio frequency energy and will not cause a significant impact on the environment.

c. With adherence to the Conditions of Approval related to aesthetic improvements, the wireless communication facility will not have a visual or aesthetic impact on the property or in the immediate vicinity. The facility shall include faux branches down to a level no higher than twelve (12) feet from the ground in a manner that provides a general pine tree appearance (at least 2.25 branches per foot) up to the existing branches. Further, all antenna units are to be painted green or green/brown patterns and shall be covered with panel covers (socks) with matching branch material. Special Conditions of Approval have been included to require that all new cable/utility runs are to be placed underground. New equipment shall be placed within an existing equipment room. The applicant has indicated that the Sprint equipment operates quietly or almost noise free. The equipment does not emit fumes, smoke or objectionable odors.

d. The proposed use is consistent with the City's General Plan. The General Plan Land Use designation for the subject site is "Industrial", and the proposed use does not involve any change in the land use of the subject site. Wireless communications facilities are permitted in the "M" Manufacturing.

e. The proposed use, activity or improvements, subject to the attached Special Conditions of Approval and Standard Development Requirements (Attachment "A"), is consistent with the provisions of the Zoning Ordinance or regulations applicable to the

property. The proposed use is a permitted use in the "M" Manufacturing District in the City of Placentia.

f. Conditions necessary to secure the purposes of this section, including guarantees and evidence of compliance with conditions are made part of the Use Permit approval. Attachment "A" contains Special Conditions of Approval and Standard Development Requirements specific to Use Permit 2012-11 to ensure compliance with the Placentia Municipal Code.

3. The Planning Commission specifically finds that the Application is Categorically Exempt pursuant to the California Environmental Quality Act of 1970, as amended, the Guidelines promulgated thereunder (14 CCR § 15303) and Placentia Environmental Guidelines.

4. The Planning Commission hereby directs that, upon approval of Use Permit 2012-11, a Notice of Exemption be filed with the Orange County Clerk/Recorder.

5. Based upon the findings and conclusions set forth herein, this Planning Commission hereby approves Use Permit 2012-11 as modified herein, and specifically subject to the conditions set forth in Attachment "A" attached hereto and by this reference incorporated herein.

6. The Secretary to the Planning Commission shall:

- a. Certify to the adoption of this Resolution; and
- b. Forthwith transmit a certified copy of this Resolution, by certified mail, to the Applicant at the address of record set forth in the Application.

[[[[[[ SIGNATURES ON FOLLOWING PAGE ]]]]]]

ADOPTED AND APPROVED this 13th day of November, 2012.

---

Chairman

I, Kenneth A. Domer, Secretary to the Planning Commission of the City of Placentia, do hereby certify that the foregoing Resolution was introduced at a regular meeting of the Planning Commission of the City of Placentia held on the 13<sup>th</sup> day of November, 2012, and was passed at this regular meeting of the Planning Commission of the City of Placentia held on the 13<sup>th</sup> day of November, 2012, by the following vote:

AYES:	COMMISSION MEMBERS:
NOES:	COMMISSION MEMBERS:
ABSENT:	COMMISSION MEMBERS:
ABSTAINED:	COMMISSION MEMBERS:

ATTEST:

---

Secretary to the Planning Commission

APPROVED AS TO FORM:

---

Andrew V. Arczynski,  
City Attorney

**Attachment "A"**  
**Special Conditions of Approval and Standard Development Requirements for  
Use Permit (UP) 2012-11**

**SPECIAL CONDITIONS**

If the above referenced application is approved, applicant and/or property owner shall comply with the Special Conditions listed below and the Standard Development Requirements attached.

**ALL OF THE FOLLOWING SPECIAL CONDITIONS OF APPROVAL AND STANDARD DEVELOPMENT REQUIREMENTS SHALL BE FULLY COMPLIED WITH FOR THE USE PERMIT TO CONTINUE IN GOOD STANDING.**

**CITY PLANNING DIVISION:**

1. Use Permit (UP) 2012-11 is valid for a period of twelve (12) months from the date of final determination. If the use approved by this action is not established within such a period of time, this approval shall be terminated and shall be null and void.
2. Use Permit (UP) 2012-11 shall expire and be of no further force or effect if the use is discontinued or abandoned for a period of one (1) year.
3. The applicant shall, as a condition of project approval, at its sole expense, defend, indemnify and hold harmless the City, its officers, employees, agents and consultants from any claim, action, proceeding, liability or judgment against the City, its officers, employees, agents and/or consultants, which action seeks to set aside, void, annul or otherwise challenge any approval by the City Council, Planning Commission, or other City decision-making body or City staff action concerning applicant's project. The applicant shall pay the City's defense costs, including attorney fees and all other litigation-related expenses, and shall reimburse the City for any and all court costs, which the City may be required to pay as a result of such defense. The applicant shall further pay any adverse financial award which may issue against the City including but not limited to any award of attorney fees to a party challenging such project approval. The City shall retain the right to select its counsel of choice in any action referred to herein, subject to notice to the applicant. The City agrees to promptly notify the applicant of any such claim filed against the City and to fully cooperate in the defense of any such action.
4. Prior to any modifications to the plans that would affect the location or visibility of the wireless communication facility and/or the ground installation; the applicant shall obtain prior written approval from the Development Services Department.
5. No expansion or modification of the wireless communications facility shall occur at any time without first obtaining approval from the Development Services Department.

The Director, or designee, may require that an expansion or future modification of the use permit requires Planning Commission discretionary review.

6. Applicant shall obtain approval of a Building and Zoning Compliance Application and shall obtain a valid Business License prior to the issuance of any building permits. Business Licenses for all sub-contractors shall be obtained.
7. Applicant shall provide to the Development Services Department a preliminary report and field report, both prepared by a licensed engineer, indicating that the operation of the facility is in full conformance with the standards established by the American National Standards Institute (ANSI) and the Institute of Electrical and Electronics Engineers (IEEE) for safe human exposure to electromagnetic fields (EMF) and radio frequency radiation (RFR). These reports are due within ninety (90) days after the start of operations.
8. Applicant shall receive and maintain a license by the Federal Communications Commission (FCC) to operate a wireless communication facility in this location. A copy of this FCC license shall be submitted to the Development Services Department prior to the issuance of any building permits.
9. The major wireless communications facility shall be approved for a period not to exceed the term of the lease. A copy of the lease shall be submitted to the Development Services Department prior to the issuance of a building permit for the new wireless communication facility.
10. If the lease is extended or terminated, notice and evidence thereof shall be provided to the Development Services Department.
11. Use Permit (UP) 2012-11 shall be reviewed by the Development Services Department ten (10) years from the date of approval to ensure compliance with all Special Conditions of Approval and Standard Development Requirements.
12. Applicant shall place all cable/utility runs underground.
13. The applicant's new ground-mounted equipment shall be located within the existing ground lease area. Applicant shall cooperate with the pole owner to maintain the "Monopine" and its ground lease and related enclosure in good visual and physical condition at all times.
14. Wireless communication facilities shall not bear any signs or advertising devices other than certification, warnings or other required seals or signage at any time.
15. The applicant shall maintain its wireless telecommunication equipment in good condition and shall make repairs and replacements of equipment, stealth and structural components, due to damage caused by outdoor exposure and/or inclement weather. Under this condition, working with the pole owner, if the faux branch attachments and/or trunk bark features, among others, fade in color due to outdoor exposure, the applicant shall replace such components within 60 days of written notice by the Director of Development Services or his/her designee. If the work cannot be completed within 60 days, the applicant shall provide the City with a bond

or certification of deposit in the amount of the valuation of the requested repair and completion timeline to guarantee the work. The applicant shall be responsible for maintaining the leased property, including any applicable landscaped areas, walkways and all paved surfaces, free from graffiti, debris and litter at all times.

16. The applicant shall comply with all provisions of the Placentia Municipal Code, including Chapter 23.76, Noise Control.
17. Prior to issuance of building permit, the applicant is required to provide the City with a letter and timeline from the pole owner regarding installation of new branch and antenna sock material. The applicant shall either install or work with the pole owner to install new branch foliage which shall vary in density, spacing, size and angle to avoid rigid symmetry; overall tree shape shall integrate with the context of the site; colors of the faux trunk and branches shall be non-reflective; green leaves/needles shall be interspersed with brown to provide more natural appearance, and the exterior surface of the faux trunk shall emulate the texture of a real tree; all antennas (panels, microwave and GPS), mounting brackets, and coaxial cables shall be completely screened from public view by the faux foliage and painted to match; branch foliage shall continue down the faux trunk so as to fully conceal the trunk from prominent public vantage points; and the overall design shall substantially conform to and implement the visual effect of an actual pine tree. The branches at the top of the "Monopine" shall form a natural peak and not appear to have a flat top. Branches shall be at least 2.25 per foot from a level no higher than twelve (12) feet above ground level. All aesthetic design shall be approved by the Director of Development Services prior to issuance of building permits.
18. The property owner shall not at any time rent the existing house as a residence at anytime.

#### **CITY BUILDING DIVISION:**

19. The building plans shall be prepared by a California licensed structural/civil engineer, with structural details and calculations regarding wind and seismic loads. Each page of plans shall be wet-signed.
20. Structural plans and calculations for the new antennas shall consider the extra weight that applies to the existing monopine structure.
21. Building and electrical permits shall be required for the new antennas, remote radio heads and other equipment to include, but not limited to: microwave dishes, lighting and related ground-mounted equipment related to this project.
22. All contractors and sub-contractors shall obtain a city business license. Applicant and/or contractor shall request a standard sub-contractor form from the City Building Division prior to issuance of a building permit. This standard form shall be completed and submitted to the City Business License Division prior to the issuance of any building permits.

**CITY POLICE DEPARTMENT:**

23. Burglary resistant material shall be used:
  - (1) Products intended for use shall be permanently labeled as such.
  - (2) Materials used shall meet UL 972 Standards for Safety Burglary Resistant Glazing Materials.
  - (3) Only materials approved by ICBO shall be used.
  
24. Address numbers shall be mounted near the front entry of any building or other conspicuous location and be no less than six (6) inches high. They shall be mounted on a contrasting background and easily visible from the street or walkway. If rear-vehicular access, the same numbers, no less than six (6) inches high shall be displayed on the rear of the building. Numerals of the street address shall be displayed on the uppermost roof, in luminous paint or other material capable of being read from the air. Minimum numeral size shall be twenty-four (24) inches. The building designation, if within a complex (such as "A" or "B" etc) shall accompany displayed street address.
  
25. Exterior lighting of an intensity of at least twenty-five hundredths (.25) foot-candles shall be provided adjacent to doors and windows. Exterior bulbs shall be protected by polycarbonate or other weather and vandal resistant globe or cover. Light(s) shall be operated during hours of darkness through either photovoltaic sensors or appropriate timers. Parking lots for use by the general public and/or employees shall be provided with exterior lighting of an intensity of at least one (1) foot-candle of light on the parking surface and operated from dusk until at least one-half (1/2) hour after the termination of business.

**ORANGE COUNTY FIRE AUTHORITY:**

24. No conditions specified by OCFA.



# Placentia Planning Commission Agenda Staff Report

<b>AGENDA ITEM NO.:</b> 2	<b>DATE:</b> November 13, 2012
<b>APPLICATION:</b> Use Permit (UP) 2012-11 (Modification)	
<b>DESCRIPTION:</b> Request to modify a wireless communication facility +/- 65 foot high freestanding "monopine" and related ground equipment located at 506 S. Fee Ana Street	
<b>RELATED ITEMS:</b> None	
<b>APPLICANT:</b> SPRINT C/O SAC Wireless (Mr. Mark Berlin)	
<b>PROPERTY OWNER:</b> Mr. Robert Sackett	
<b>LOCATION:</b> 506 S. Fee Ana Street	
<b>CEQA DETERMINATION:</b> Categorically Exempt, Class 3, Section 15303	
<b>ZONING:</b> M – Manufacturing	<b>APN(S):</b> 346-241-13
<b>GENERAL PLAN:</b> Industrial	<b>CITY COUNCIL ACTION REQUIRED:</b> No
<b>PREPARED BY:</b> Kenneth A. Domer, Assistant City Administrator	
<b>REVIEWED BY:</b> Monique B. Schwartz, Associate Planner	

Staff Report from  
November 13, 2012  
Continued.

## REQUEST:

To permit the modification of a wireless communication facility on an existing +/- 65 foot high freestanding "monopine" and related ground equipment located at 506 S. Fee Ana Street within the Manufacturing (M) District.

## INTRODUCTION:

On September 13, 2005 the Planning Commission approved the co-location of a wireless communications facility on an existing pole located at 506 S. Fee Ana Street. At the time, the applicant, Nextel Communications (now Sprint), applied for and was granted Use Permit 05/10 to allow for the installation of their antennas and ground mounted equipment. A Special Condition (No. 5) was included and reads: "No expansion or modification of the wireless communications facility shall occur at any time without first obtaining Planning Commission review and approval." Therefore this modification requires Planning Commission approval.

Pursuant to § 23.82.070 of the Placentia Municipal Code, all major wireless communication facilities established in the City are required to obtain Planning Commission approval of a Use Permit application. The proposed modification of an existing co-location is required because of the above mentioned Special Condition.

The existing "monopine" cell tower and related ground-mounted equipment at the site was first approved by the Planning Commission on June 11, 2002 for Cingular Wireless. The existing "monopine" wireless communication facility is now owned and operated by T-Mobile, which has an existing ground lease with Mr. and Mrs. Robert Sackett (property owners of 506 Fee Ana Street). This Sprint set of wireless antennas is one of three sets co-

located on this wireless communication facility. Sprint facilities to include removing and replacing panel antenna (RRH) units and retrofitting the current ground equipment area.

**RECOMMENDATION:**

The Planning Division recommends approval of Use Permit 2012-11, which is a modification of a wireless communication facility on an existing +/- 65 foot high freestanding “monopine” and related ground equipment, located at 506 S. Fee Ana Street within the Manufacturing District.

**DISCUSSION:**

**Subject Site and Surrounding Land Uses:**

The subject property is a 30,576 square foot (.702 acres) parcel that is located south of Orangethorpe Avenue, south of the Burlington Northern Santa Fe Railroad, and north of the Orange County Flood Control Channel with access from Fee Ana Street. The property is owned by Mr. and Mrs. Robert Sackett and is currently improved with a 720 square foot house that is being used as an office and a 2,500 square foot fenced area for a “monopine” wireless communication facility and related ground-mounted equipment that is leased to T-Mobile. The remainder of the parcel is being used as a construction storage yard and for storage of vehicles and equipment.

	<b>Existing Land Use</b>	<b>Land Use Element General Plan Designation</b>	<b>Zoning Map Designation</b>
<b>Existing</b>	Manufacturing Storage Yard and wireless facility	Industrial	Manufacturing (M) District
<b>Proposed</b>	Manufacturing Storage Yard and wireless facility	Industrial	Manufacturing (M) District
<b>North</b>	Residential (210 feet across Orangethorpe Ave.)	PUD 3	Medium Density Residential
<b>South</b>	Orange County Flood Control Channel	Industrial	Manufacturing (M) District
<b>East</b>	Orange County Flood Control Vacant Land	Industrial	Manufacturing (M) District
<b>West</b>	Contractor’s Storage Yard	Industrial	Manufacturing (M) District

**LOCATION:**

The existing sixty-five (65) foot high “monopine” and adjacent equipment building are located within a 2,500 square foot area with a six (6) foot high chain link with barbed wire fence along the north-east property line. The submittal site plan indicates the proposed ground lease area will remain the same. Sprint is proposing to keep nine (9) current antennas (three (3) per sector) and install six (6) 1900 mhz remote radio head units (two (2) per sector) and three (3) 1900 mhz antennas (one (1) per sector) at approximately 49’-6” (measured to center) above the finish grade. Sprint will also install new conduit and equipment within the existing cabinet that measures 20’-0” L x 11’-6” W x 11’-0” H within the existing fenced area and parallel to the eastern property line.

**Height:**

Per Manufacturing (M) District regulations, the maximum permitted height for structures in this district is fifty-four (54) feet. The existing “monopine” is sixty-five (65) feet tall, taller than the maximum allowable height in this district; however, the cell tower “monopine” design is also regulated by Placentia Municipal Code § 23.81.090 (Height limits-Generally) which states that “chimneys, silos, cupolas, flag poles, monuments, gas storage holders, radio and other towers, water tanks, church steeples and similar structures and mechanical appurtenances may be permitted in excess of height limits provided a use permit is first obtained in each case.” Use Permit 02/05 was approved by the Placentia Planning Commission for the existing “monopine” wireless communication facility on June 11, 2002.

The new or modified antennas for Sprint will be mounted on the existing “monopine” approximately 49’-6” at center antennas above the finish grade.

**Antennas/Operational Characteristics:**

Sprint is proposing to keep nine (9) current antennas (three per sector) and install six (6) 1900 mhz remote radio head units (two per sector) and three (3) 1900 mhz antennas (one per sector) at approximately 49’-6” (measured to center) above the finish grade. Sprint is also installing new conduit and equipment within the existing cabinet that measures 20’-0” L x 11’-6” W x 11’-0” H within the existing fenced area and parallel to the eastern property line.

The proposed wireless communication facility will provide twenty-four (24) hour service to Sprint customers, seven (7) days a week. A Sprint technician will service the facility on a periodic basis; with routine maintenance/inspections of the facility occurring once a month, during normal working hours. Sprint requires twenty-four (24) hour access to the facility to ensure that technical support is immediately available if warranted. They will have keys to access the gate that surrounds the property and the gate that houses the “monopine” and related equipment cabinets.

# Staff Report from November 13, 2012 Continued.

## **Aesthetics:**

The City's wireless communication facility ordinance specifically requires operators to consider visual impacts when locating and constructing a major wireless communication facility; therefore, the current facility was designed to blend into the surrounding environment. However, the existing "monopine" was approved in 2002 and does not meet the standards set forth by the City as evidenced by recent approvals of similar "monopine" facilities. As now required, the trunk and branches of a "monopine" are to be painted brown and the needles are to be multi-shades of green to resemble a living pine tree. The colors are to be subdued and non-reflective to blend with materials and colors in the surrounding area. Review of the existing "monopine" facility shows a facility which is over ten years of age and one that actually stands out in a negative way when viewed from adjacent areas, including Orangethorpe Avenue. As a condition to this Use Permit, it is required that the applicant work with the pole owner to upgrade the aesthetics of the facility, per what is shown on the submitted elevations, pages A-5 through A-8. That is, the facility shall include faux branches down to a level no higher than twelve (12) feet from the ground in a manner that provides a general pine tree appearance (at least 2.25 branches per foot) up to the existing branches. Further, all antenna units are to be painted green or green/brown patterns and shall be covered with panel covers (socks) with matching branch material.

The existing ground leased fenced area is not visible to cars or to the general public. The perimeter of the site is surrounded by a screened chain link fence and the ground leased fenced area is located within the existing construction storage yard. Staff determined that no further screening of the ground-mounted equipment is necessary because it is situated within a contractor's storage yard that is completely screened from public view. A Special Condition of Approval was included with the original Use Permit to require that all cable/utility runs be placed underground.

## **Safety:**

Wireless communication facilities are regulated by the Federal Communications Commission (FCC) and must receive a federal license before transmission can begin. Providers must comply with the American National Standards Institute (ANSI) and Institute of Electrical and Electronic Engineers (IEEE) standards for safe human exposure to radio electromagnetic fields. ANSI and IEEE standards are considered the most appropriate health and safety guidelines for this type of industry. If a wireless communications facility does not maintain ANSI/IEEE mandated standards, their FCC license will be revoked and any authorized use permit would be declared null and void.

FCC rules require transmitting facilities (including wireless) to comply with Radio Frequency (RF) exposure guidelines. The rules have been clarified in several FCC rulemakings but are most conveniently grouped and discussed in the FCC's Office of Engineering and Technology Bulletin 65, titled, "*Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields.*" The limits established in the guidelines are designed to protect the public health with a very large margin of safety. The limits set forth by the FCC have been endorsed by the Environmental Protection Agency

and the Food and Drug Administration. As stated below, wireless facilities, create maximum exposures that are only a small fraction of the FCC. Moreover, the limits themselves are many times below levels that are generally accepted as having the potential to cause adverse health effects. Nonetheless, it is recognized that any instance of noncompliance with the guidelines is potentially very serious, and the FCC has therefore implemented procedures to enforce compliance with its rules.

Section 332(c)(7) of the Communications Act (which is identical to § 704(a) of the Telecommunications Act of 1996) does not limit local government authority over siting wireless facilities, but it does set forth specific limitations on local governments. Specifically, 47 U.S.C. § 332(c)(7) (B) (iv) states: “No State or local government or instrumentality thereof may regulate the placement, construction, or modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission’s regulations concerning such emissions.”

Therefore, the authority of the Planning Commission with regard to RF emissions is limited to reviewing the proposed project for planned compliance with the FCC RF emissions safety rules, and to ensure that any special conditions of approval approved with the Use Permit maintain that compliance.

Based on material submitted by SPRINT Wireless, to include the Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report, the proposed wireless telecommunication facility will operate at the lowest possible power levels and is below the established standards used by the FCC for safe human exposure to radio frequency electromagnetic fields. These standards have been tested and are considered safe by the American National Standards Institute (ANSI) and the Institute of Electrical Electronics Engineers (IEEE). The attached Special Conditions of Approval (Attachment B) address continued compliance with ground level RF emissions as set forth in Bulletin 65.

EBI Consulting, a retained consulting Engineering firm, evaluated the proposed facility for compliance with appropriate guidelines limiting human exposure to radio frequency electromagnetic fields. A copy of Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report has been included as an exhibit to this staff report.

Finally, the applicant indicates that the equipment operates quietly or almost noise free. The equipment does not emit fumes, smoke or objectionable odors.

### **Environmental Review**

The proposed use is not expected to create a negative impact on the physical environment. It is City Staff’s opinion that the use is categorically exempt pursuant to the California Environmental Quality Act (CEQA) Guideline § 15303 and City Environmental Guidelines.

Section 15303 allows for exemptions for small new construction projects which do not result in any changes in land use or density. The proposed project involves a minor alteration to an

**Staff Report from  
November 13, 2012  
Continued.**

existing site involving a negligible expansion of use beyond the site boundaries. The use is not expected to result in an increase of more than 50 percent of the total area of the site in square feet. As a result, City Staff recommends that the Planning Commission find that the use is categorically exempt from CEQA.

**Actions:**

Adopt Resolution No. PC-2012-19 approving Use Permit (UP) 2012-11, subject to the Special Conditions of Approval and Standard Development Requirements set forth therein.

Prepared and submitted by:

Reviewed and approved by:

\_\_\_\_\_  
Kenneth A. Domer  
Assistant City Administrator

**ELECTRONIC COPY**  
SIGNATURES ON ORIGINALS WITH  
PLANNING COMMISSION SECRETARY

\_\_\_\_\_  
Daphne B. Schwartz  
Associate Planner

**Attachments:**

Resolution No. PC-2012-19

Attachment A: Special Conditions of Approval and Standard Development Requirements

**Exhibits:**

Exhibit 1: Vicinity Map and Photo Simulations

Exhibit 2: Sprint Plan Sheets

Exhibit 3: Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report

# VICINITY MAP

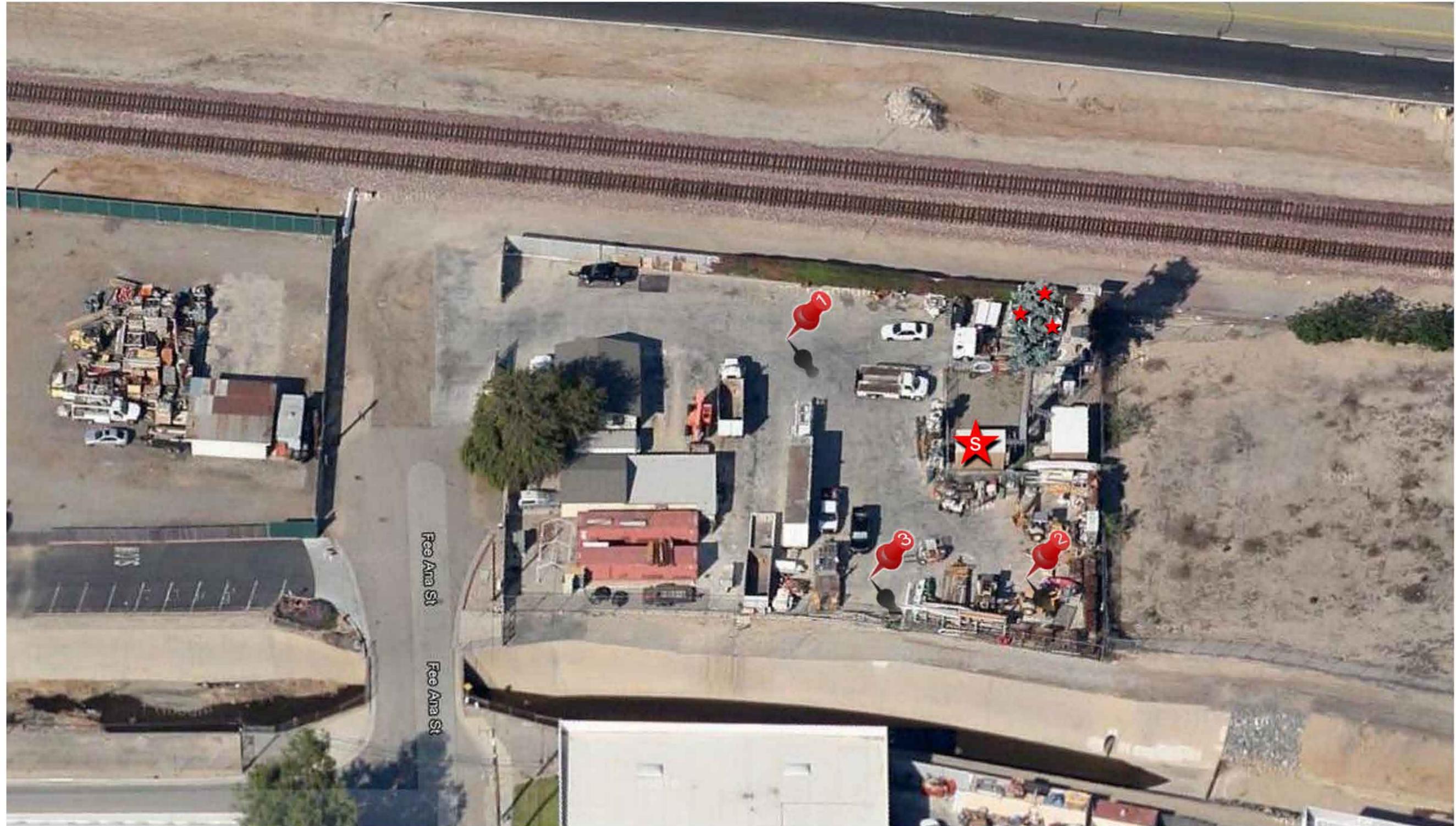
## PHOTOSIMULATION VIEWPOINTS



CASH  
OG73XC760  
506 SOUTH FEE ANA  
PLACENTIA, CA 92870



5865 AVENIDA ENCINAS, STE. 142B  
CARLSBAD, CA 92008  
OFFICE: (858) 229-6828





CASH  
OG73XC760  
506 SOUTH FEE ANA  
PLACENTIA, CA 92870



5865 AVENIDA ENCINAS, STE. 142B  
CARLSBAD, CA 92008  
OFFICE: (858) 229-6828

# PHOTOSIMULATION VIEW 1



# PHOTOSIMULATION VIEW 2



CASH  
OG73XC760  
506 SOUTH FEE ANA  
PLACENTIA, CA 92870



5865 AVENIDA ENCINAS, STE. 142B  
CARLSBAD, CA 92008  
OFFICE: (858) 229-6828



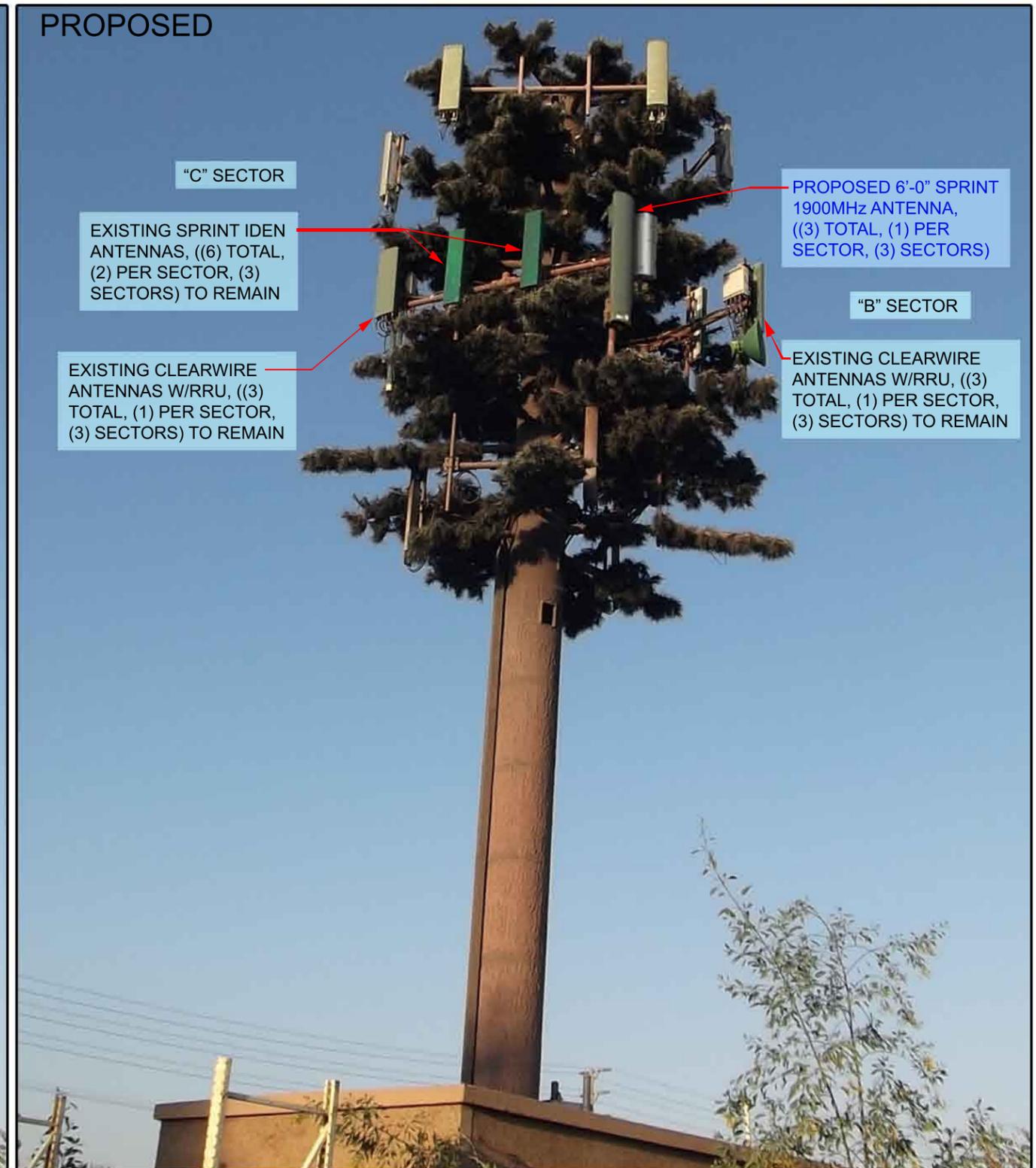
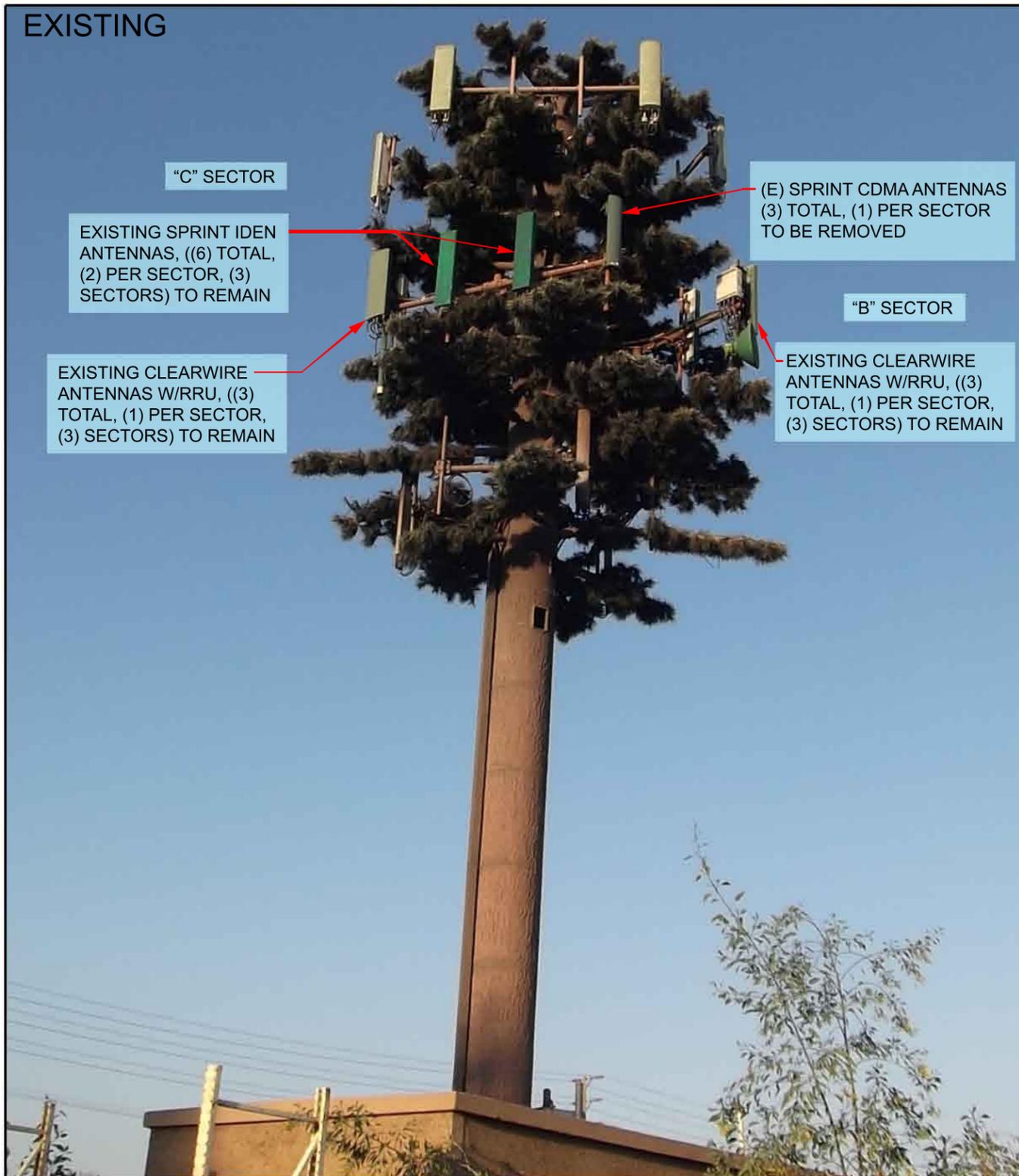
# PHOTOSIMULATION VIEW 3



CASH  
OG73XC760  
506 SOUTH FEE ANA  
PLACENTIA, CA 92870



5865 AVENIDA ENCINAS, STE. 142B  
CARLSBAD, CA 92008  
OFFICE: (858) 229-6828





**GENERAL NOTES:**

- THE CONTRACTOR SHALL NOTIFY CARRIER OF ANY ERRORS, OMISSIONS, OR INCONSISTENCIES AS THEY MAY BE DISCOVERED IN PLANS, DOCUMENTS, NOTES, OR SPECIFICATIONS PRIOR TO STARTING CONSTRUCTION INCLUDING, BUT NOT LIMITED BY, DEMOTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY ERRORS, OMISSIONS, OR INCONSISTENCY AFTER THE START OF CONSTRUCTION WHICH HAS NOT BEEN BROUGHT TO THE ATTENTION OF CARRIER CONSTRUCTION PROJECT MANAGER AND SHALL INCUR ANY EXPENSES TO RECTIFY THE SITUATION. THE METHOD OF CORRECTING ANY ERROR SHALL FIRST BE APPROVED BY CARRIER CONSTRUCTION PROJECT MANAGER.
- PRIOR TO THE SUBMISSION OF BIDS, CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE (B) PROJECT. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR HAVING BEEN AWARDED THIS PROJECT SHALL VISIT THE CONSTRUCTION SITE WITH THE CONSTRUCTION/CONTRACT DOCUMENTS TO VERIFY FIELD CONDITIONS AND CONDITIONS THAT THE PROJECT WILL BE ACCOMPLISHED AS SHOWN, PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY ERRORS, OMISSIONS, OR DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT VERBALLY AND IN WRITING.
- FOR COLLOCATION SITES: CONTACT TOWER OWNER REPRESENTATIVE FOR PARTICIPATION IN BID WALK.
- THE ARCHITECTS HAS MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE HEREBY CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND/OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (OR WRITING) THE ARCHITECT/ENGINEER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.
- OWNER, CONTRACTOR, AND CARRIER CONSTRUCTION PROJECT MANAGER SHALL MEET JOINTLY TO VERIFY ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL PERFORM WORK DURING PROPERTY OWNER'S PREFERRED HOURS TO AVOID DISTURBING NORMAL BUSINESS.
- THE CONTRACTOR SHALL PROVIDE CARRIER PROPER INSURANCE CERTIFICATES NAMING CARRIER AS ADDITIONAL INSURED, AND CARRIER PROOF OF LICENSE(S) AND PE & PB INSURANCE.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S/VEHICLE'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL WORK PERFORMED ON THE PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LOCAL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK.
- THE CONTRACTOR SHALL STUDY THE STRUCTURAL, ELECTRICAL, AND MECHANICAL PLANS AND CROSS CHECK THEIR DETAILS, NOTES, DIMENSIONS, AND ALL REQUIREMENTS PRIOR TO THE START OF ANY WORK.
- THE REFERENCES ON THE DRAWINGS ARE FOR CONVENIENCE ONLY AND SHALL NOT LIMIT THE APPLICATION OF ANY DRAWING OR DETAIL.
- ALL (E) CONSTRUCTION, EQUIPMENT, AND FINISHES NOTED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND WILL BE REMOVED FROM THE SITE WITH THE FOLLOWING EXCEPTIONS:
  - PROPERTY NOTED IN WRITING TO BE RETURNED TO THE OWNER.
  - PROPERTY NOTED IN WRITING TO BE REMOVED BY THE OWNER.
- PRIOR TO THE POURING OF ANY NEW SLAB UNDER AN (E) SLAB THE CONTRACTOR SHALL VERIFY LOCATIONS AT ALL OPENINGS, CHASES, AND EQUIPMENT WHICH ARE TO BE INCORPORATED INTO THE NEW WORK. ALL ITEMS DESIGNATED TO BE ABANDONED SHALL BE NOTED AND DISCUSSED WITH ARCHITECT AND CARRIER CONSTRUCTION MANAGER AS PART OF THE AS-BUILT DRAWING PACKAGE.
- SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF APPLICABLE TO THIS PROJECT SITE.
- BUILDING INSPECTORS AND/OR OTHER BUILDING OFFICIALS ARE TO BE NOTIFIED PRIOR TO ANY GRADING, CONSTRUCTION, AND ANY OTHER PROJECT EFFORT AS MANDATED BY THE GOVERNING AGENCY.
- THE COMPLETED PROJECT SHALL COMPLY WITH LOCAL SECURITY CODES AND TITLE-24 ENERGY CONSERVATION REQUIREMENTS. (TITLE-24 WHEN APPLICABLE)
- CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT (E) SITE IMPROVEMENTS, HARDSCAPING, EXISTENCES, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK THE CONTRACTOR SHALL REPAIR ALL DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION OR DEBRIE THE PROPERTY.
- CONTRACTOR SHALL KEEP GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION. CONTRACTOR SHALL REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OR PREMISES. SITE SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMOGUES OF ANY NATURE.
- THE CONTRACTOR IS TO PROVIDE PROTECTION FOR ADJACENT PROPERTIES FROM PHYSICAL HARM, NOISE, DUST, FIRE, AND FALLING OBJECTS AS REQUIRED BY THE GOVERNING AGENCIES.
- THE CONTRACTOR IS RESPONSIBLE FOR THE STORAGE OF ALL BUILDING MATERIALS AND SHALL NOT DO SO ON PUBLIC PROPERTY WITHOUT A PERMIT FROM THE GOVERNING AGENCIES.
- GENERAL NOTES AND STANDARD DETAILS ARE THE MINIMUM REQUIREMENTS TO BE USED IN CONDITIONS WHICH ARE NOT SPECIFICALLY SHOWN OTHERWISE.
- CARRIER DOES NOT GUARANTEE ANY PRODUCTS, FIXTURES, AND/OR ANY EQUIPMENT NAMED BY A TRADE OR MANUFACTURER. GUARANTEE WARRANTY THAT MAY BE IN EFFECT IS DONE SO THROUGH THE COMPANY OR MANUFACTURER PROVIDING THE PRODUCT, FIXTURE, AND/OR EQUIPMENT ONLY. UNLESS SPECIFIC RESPONSIBILITY IS ALSO PROVIDED BY THE CONTRACTOR/SUBCONTRACTOR IN WRITTEN FORM.
- CONTRACTOR TO REPORT ANY (E) UNDERGROUND UTILITIES ENCOUNTERED DURING TRENCHING AND GENERAL CONSTRUCTION.
- CONTRACTOR TO REPLACE AND/OR REROUTE ANY (E) UNDERGROUND UTILITIES ENCOUNTERED DURING TRENCHING AND GENERAL CONSTRUCTION.
- WHEN APPLICABLE, CONTRACTOR IS RESPONSIBLE TO CALL, CORRELATE AND/OR MAKE ARRANGEMENTS FOR RIGHT-OF-WAY AND/OR PRIVATE PROPERTY ACROSS BASED ON SPECIFIC SITE REQUIREMENTS.
- CONTRACTORS TO DOCUMENT ALL WORK PERFORMED WITH PHOTOGRAPHS AND SUBMIT TO CARRIER ALONG WITH REDUCED CONSTRUCTION SET.
- CONTRACTOR SHALL DOCUMENT ALL CHANGES MADE IN THE FIELD BY MARKING UP (PRELIMINARY) THE APPROVED CONSTRUCTION SET AND SUBMITTING THE REDUCED ALONG WITH PHOTOGRAPHS PER CARRIER REQUIREMENTS.
- GENERAL CONTRACTOR IS TO COORDINATE ALL POWER INSTALLATION WITH POWER COMPANY AS REQUIRED. CONTRACTOR TO REPORT POWER INSTALLATION COORDINATION SOLUTIONS TO NETWORK CARRIER REPRESENTATIVE, PROJECT CONSTRUCTION MANAGER AND ARCHITECT.
- ANY SUBSTITUTIONS OF MATERIALS AND/OR EQUIPMENT, MUST BE APPROVED BY CARRIER CONSTRUCTION MANAGER.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REMEADY ALL FAULTY, DEFECTIVE, AND/OR DEFERRED MAINTENANCE AND DEFERRED MAINTENANCE WORKMANSHIP FOR ONE (1) YEAR AFTER THE PROJECT IS COMPLETE AND ACCEPTED UNDER THIS CONTRACT; UNLESS NOTED OTHERWISE IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR. THE GENERAL CONTRACTOR SHALL MAINTAIN AND FURNISH A MAINTENANCE AGREEMENT FOR ALL WORK DONE, COVERED BY THE GENERAL CONTRACTOR, TO MAINTAIN THE ROOFING IN A WATERIGHT CONDITION FOR A PERIOD OF TWO (2) YEARS STARTING AFTER THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT, UNLESS OTHERWISE WRITTEN IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR THE SAFETY OF THE OWNER'S EMPLOYEES AT ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT.
- CARRIER WILL REVIEW AND APPROVE SHOP DRAWINGS AND SAMPLES FOR CONFORMANCE WITH DESIGN CONCEPT. CARRIER CARRIER APPROVAL OF A SEPARATE ITEM SHALL NOT INCLUDE APPROVAL OF AN ASSEMBLY IN WHICH THE ITEM FUNCTIONS.
- CONTRACTOR TO PROVIDE TRENCH AS REQUIRED TO INSTALL BOTH ELECTRICAL AND TELEPHONE UNDERGROUND CONDUITS (#40 PVC) PER S.C.E. WORKORDER, BACKFILL WITH CLEAN SAND AND COMPACT WITH COMPACTOR. THE BEST PRACTICE INSPECTOR REPLACE FINISH GRADE WITH MATCHING MATERIALS (GRASS, ASPHALT, CONCRETE, ETC.)
- CONTRACTOR TO PROVIDE HEAVY STEEL PLATES AT OPEN TRENCHES FOR SAFETY AND TO PROTECT (E) GROUND SURFACES FROM HEAVY EQUIPMENT UTILIZED DURING CONSTRUCTION.
- CONTRACTOR TO REPAIR ALL GROUND SURFACES WITHIN THE CONSTRUCTION AREA AS NECESSARY TO PROVIDE A UNIFORM SURFACE AND MAINTAIN (E) SURFACE DRAINAGE SLOPES.
- CONTRACTOR TO REPLACE LANDSCAPE VEGETATION THAT WAS DAMAGED DUE TO CONSTRUCTION, AND TO MAINTAIN LINES TO OPERATING CONDITION, PROVIDING FULL COVERAGE TO IMPACTED AREAS.
- THIS FACILITY IS AN UNMANNED CELLULAR TELEPHONE EQUIPMENT FACILITY. THE OCCUPANCY CLASSIFICATION IS B [2007 CBC, TITLE 24, PART 2, VOLUME 1, SECTION 311.2, AND SECTION 301.1] EXEMPTION #1).
- THIS FACILITY IS EXEMPT FROM DISABLED ACCESSIBILITY REQUIREMENTS PER 2007 CBC SECTION 1108B.4 EXCEPT FOR INCORPORATING ACCESSIBLE ENTRANCES AND ENTERED ONLY BY SERVICE PERSONNEL. THIS SPACE IS NOT FOR HUMAN OCCUPANCY.
- THE CONTRACTOR SHALL VERIFY ALL (E) CONDITIONS AND DIMENSIONS PRIOR TO SUBMITTING THEIR BID. ANY DISCREPANCIES, CONFLICTS OR OMISSIONS SHALL BE REFERRED TO THE ARCHITECT PRIOR TO SUBMITTING BIDS, AND PROCEEDING WITH ANY WORK.
- THE CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY ERRORS, OMISSIONS, OR DISCREPANCIES AS THEY MAY BE DISCOVERED IN THE PLANS, SPECIFICATIONS, & NOTES PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY ERRORS, OMISSIONS, OR INCONSISTENCY AFTER THE START OF CONSTRUCTION WHICH HAS NOT BEEN BROUGHT TO THE ATTENTION OF THE ARCHITECT. THE CONTRACTOR SHALL INCUR ANY EXPENSES TO RECTIFY THE SITUATION. THE METHOD OF CORRECTION SHALL BE APPROVED BY THE ARCHITECT OR THE ENGINEER RESPONSIBLE OF THE PROJECT.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR HAS THE RESPONSIBILITY TO LOCATE ALL (E) UTILITIES WHETHER OR NOT PLANNED TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR OR SUBCONTRACTOR SHALL BEAR THE EXPENSE OF REPAIRING OR REPLACING ANY DAMAGE TO THE UTILITIES CAUSED DURING THE EXECUTION OF THE WORK. CONTACT 1208 DO ALERT @ 400-227-2800
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL PROTECT ALL AREAS FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION, ANY DAMAGE TO NEW OR (E) SURFACES, STRUCTURES OR EQUIPMENT SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF THE PROPERTY OWNER. THE CONTRACTOR SHALL BEAR THE EXPENSE OF REPAIRING OR REPLACING ANY DAMAGED AREAS.
- A COPY OF THE APPROVED PLANS SHALL BE KEPT IN A PLACE SPECIFIED BY THE GOVERNING AGENCY, AND BY LAW SHALL BE AVAILABLE FOR INSPECTION AT ALL TIMES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE CONSTRUCTION SET REFLECTS THE SAME INFORMATION AS THE APPROVED PLANS. THE CONTRACTOR SHALL ALSO MAINTAIN ONE SET OF PLANS AND SET OF DOCUMENTS FOR ALL AS-BUILT CHANGES, REVISIONS, ADDENDA, OR CHANGE ORDERS. THE CONTRACTOR SHALL FORWARD THE AS-BUILT/REVISED DRAWINGS TO THE ARCHITECT OR THE ENGINEER RESPONSIBLE OF THE PROJECT AT THE CLOSE OF THE PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE SITE WHILE THE WORK IS IN PROGRESS UNTIL THE JOB IS COMPLETE.
- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY POWER, WATER, AND TOILET FACILITIES AS REQUIRED BY THE PROPERTY OWNER OR GOVERNING AGENCY.
- ALL CONSTRUCTION THROUGH THE PROJECT SHALL CONFORM TO THE LATEST C.B.C. AND ALL OTHER GOVERNING CODES, INCLUDING THE CALIFORNIA ADMINISTRATIVE CODES TITLE 6, 19, AND 24. THE MOST RESTRICTIVE CODE SHALL GOVERN.
- THE CONTRACTOR AND SUBCONTRACTOR SHALL COMPLY WITH ALL LOCAL AND STATE REGULATIONS INCLUDING ALL OSHA REQUIREMENTS.
- WHEN REQUIRED STORAGE OF MATERIALS OCCURS, THEY SHALL BE EVENLY DISTRIBUTED OVER THE SITE. TEMPORARY STORING OR BRACING SHALL BE PROVIDED WHERE THE SOIL DOES NOT HAVE THE DESIGN STRENGTH FOR THE CONDITIONS PRESENT.
- THE CONTRACTOR SHALL SUPERVISE AND COORDINATE ALL WORK. USING HIS PROFESSIONAL KNOWLEDGE AND SKILLS, IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES AND SEQUENCING AND COORDINATING ALL PORTIONS OF THE WORK UNDER THE PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN AND PAY FOR ALL PERMITS, LICENSES, FEES AND INSPECTIONS WITH RESPECT TO THE WORK TO COMPLETE THE PROJECT. HE/SHE MUST PROVIDE 1911 ADDRESS TO SPRINT WIRELESS. BUILDING PERMIT APPLICATIONS SHALL BE SUBMITTED TO THE APPLICANT COUNTY OF PLACEMENT CONTRACTOR SHALL OBTAIN THE PERMIT AND HAVE FINAL PWD SAID DOCUMENT.
- ALL DIMENSIONS TAKE PRECEDENCE OVER SCALE DRAWINGS ARE NOT TO BE SCALED UNDER ANY CIRCUMSTANCES.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING, BRACING, FRAMING, HANGERS OR SUPPORTS FOR INSTALLATION OF ITEMS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR IS TO PROVIDE PORTABLE FIRE EXTINGUISHERS HAVING A MINIMUM 2A:10-B:C RATING WITHIN 75FT. OF TRAVEL TO ALL PORTIONS OF THE CONSTRUCTION AREA. [2007 CFC SECTION 906-1-1 & 7 AND SECTION 906.3(1)]
- THE CONTRACTOR IS TO PROVIDE PORTABLE FIRE EXTINGUISHERS HAVING A MINIMUM 2A:10-B:C RATING WITHIN 75FT. OF TRAVEL TO ALL PORTIONS OF THE CONSTRUCTION AREA. [2007 CFC SECTION 906-1-1 & 7 AND SECTION 906.3(1)]
- MATERIALS TESTING SHALL BE TO THE LATEST STANDARD AVAILABLE AS REQUIRED BY THE LOCAL GOVERNING AGENCY RESPONSIBLE FOR APPROVING THE RESULTS.
- ALL GENERAL NOTES AND STANDARD DETAILS ARE THE MINIMUM REQUIREMENTS TO BE USED IN CONDITIONS WHICH ARE NOT SPECIFICALLY SHOWN OTHERWISE.
- ALL DEBRIS AND REFUSE IS TO BE REMOVED FROM THE PROJECT CONTINUOUSLY AND PREMISES SHALL BE LEFT IN A CLEAN BROOM FINISHED CONDITION AT ALL TIMES.
- BUILDING INSPECTORS AND/OR OTHER BUILDING OFFICIALS ARE TO BE NOTIFIED PRIOR TO ANY GRADING AND CONSTRUCTION AS MANDATED BY THE GOVERNING AGENCY.
- ALL SYMBOLS AND ABBREVIATIONS ARE CONSIDERED CONSTRUCTION INDUSTRY STANDARDS. IF CONTRACTOR HAS A QUESTION REGARDING THEIR EXACT MEANING THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NECESSARY CLARIFICATION.
- IT IS THE INTENTION OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, BRACING, 115, FORM WORK, ETC. IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL ORDINANCES TO SAFELY EXECUTE ALL WORK AND SHALL BE RESPONSIBLE FOR SAME. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.
- THE CONTRACTOR SHALL USE ADEQUATE NUMBER OF SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK.
- CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY THAT RESULTS FROM ANY DECISIONS MADE BY CONTRACTOR AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO NORMALLY HOLD DESIGN ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.
- SITE GRADING SHALL COMPLY WITH SPRINT/NEXTEL GRADING STANDARDS, LATEST EDITION AND COMPLY WITH SPRINT/NEXTEL GRADING CHECKLIST, LATEST VERSION. OTHER NATIONAL AND LOCAL GRADING CODES ARE MORE STRINGENT, THEY SHALL GOVERN. GRADING SHALL BE COMPLETED BEFORE ERECTION OF A NEW TOWER.
- ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION. IF TEMPORARY LIGHTING AND MARKING ARE REQUIRED BY THE FEDERAL AVIATION ADMINISTRATION (FAA), IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE NECESSARY LIGHTS AND NOTIFY THE PROPER AUTHORITIES IN THE EVENT OF A PROBLEM.
- ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL CODES OR ORDINANCES. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS.
- ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE NOTICE TO THE BUILDING INSPECTION DEPARTMENT TO SCHEDULE THE REQUIRED INSPECTIONS. A MINIMUM OF 24 HOURS OF NOTICE SHOULD BE GIVEN AND THE BUILDING INSPECTION DEPARTMENT HAS REQUESTED THAT GROUPS OF TWO OR THREE SITES BE SCHEDULED AT ONE TIME IF POSSIBLE.
- THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS AND TOWER DRAWINGS/ANALYSIS. CONTRACTOR IS RESPONSIBLE FOR REVIEW OF THE TOTAL BID PACKAGE PRIOR TO BID SUBMITTAL.
- THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIMES. SILT AND EROSION CONTROL SHALL BE MAINTAINED ON THE DOWNSTREAM SIDE OF THE SITE AT ALL TIMES; ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- CLEARING OF TREES AND VEGETATION ON THE SITE SHOULD BE KEPT TO A MINIMUM. ONLY THE TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED. ANY DAMAGE TO TREES AND VEGETATION OUTSIDE THE LEASED PROPERTY SHALL BE REPAIRED BY THE CONTRACTOR.
- ALL SUITABLE BORROW MATERIAL FOR BACKFILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES PRIOR TO DISPOSAL.
- SEEDING AND MULCHING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE SITE DEVELOPMENT. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING AN ADEQUATE COVER OF VEGETATION OVER THE SITE FOR A ONE YEAR PERIOD.
- RECORD DRAWINGS MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS, ETC., BETWEEN THE WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT DRAWINGS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT.
- THE CONSTRUCTION SHALL NOT RESTRICT A FIVE-FOOT CLEAR AND UNOBSTRUCTED ACCESS TO WATER OR POWER DISTRIBUTION FACILITIES (POWER POLES, PULL BOXES, TRANSFORMERS, VAULTS, PUMP, VALVES, METERS, APPURTENANCES, ETC.) OR TO THE LOCATION OF THE HOOR-UP. THE CONSTRUCTION SHALL NOT BE WITHIN TEN FEET OF ANY POWER LINES-WHETHER OR NOT THE LINES ARE LOCATED ON THE PROPERTY. FAILURE TO COMPLY MAY CAUSE CONSTRUCTION DELAYS AND/OR ADDITIONAL EXPENSES.

**SYMBOLS:**

- GRID REFERENCE
- DETAIL REFERENCE
- ELEVATION REFERENCE
- SECTION REFERENCE
- CENTERLINE
- PROPERTY/LEASE LINE
- MATCH LINE
- WORK POINT
- GROUND CONDUCTOR
- TELEPHONE CONDUIT
- ELECTRICAL CONDUIT
- OVERHEAD CABLE
- OVERHEAD SERVICE CONDUCTORS
- GROUT OR PLASTER
- BRICK
- MASONSRY
- CONCRETE
- EARTH
- GRAVEL
- PLYWOOD
- SAND
- WOOD CONTINUOUSLY
- WOOD BLOCKING
- STEEL
- NEW ANTENNA
- ANTENNA
- GROUND ROD
- GROUND BUS BAR
- MECHANICAL DRWG. COMM.
- CADDWELL
- DRAINAGE ACCESS WELL
- ELECTRIC BOX
- TELEPHONE BOX
- LIGHT POLE
- ENG. MONUMENT
- SPOT ELEVATION
- SET POINT
- REVISION

**PROJECT INFORMATION:**

NETWORK VISION MBMTS LAUNCH

**CASH**  
OG73XC760

506 SOUTH FEE ANA  
PLACENTIA, CA 92870  
CITY OF PLACENTIA

**ISSUE DATE:** 7/25/2012

**ISSUED FOR:** 90% CD

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	3/28/12	ISSUED FOR BIDDING CD REVIEW	DC
B	5/11/12	90% CD	JB
C	7/25/12	90% CD	JB

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

**LICENSURE:**

**SHEET TITLE:** GENERAL NOTES & SYMBOLS

<b>SHEET NUMBER:</b> T-2	<b>REVISION:</b> C
--------------------------	--------------------

**TABLE OF CONTENTS**

1.0 GENERAL REQUIREMENTS  
 1.1 PURPOSE AND INTENT  
 1.2 CONFLICTS  
 1.3 CLEANING  
 1.4 CODES  
 1.5 LICENSING  
 1.6 OSHA  
 1.7 PHOTOS  
 1.8 BUILDING PERMITS  
 1.9 ZONING REGULATIONS & CONDITIONAL USE PERMITS  
 1.10 FAA PERMIT AND TOWER LIGHTING  
 1.11 TOWER SECURITY  
 1.12 SITE CONTROL  
 2.0 SITE PREPARATION  
 3.0 GRAVEL RE-SURFACING  
 4.0 TRENDING  
 4.1 MATERIALS  
 4.2 PIPE DETECTION AND IDENTIFICATION  
 4.3 TRENCH EXCAVATION  
 4.4 TRENCH PROTECTION  
 4.5 BACKFILLING  
 4.6 COMPACTION  
 5.0 CHAIN LINK FENCES AND GATES  
 5.1 GENERAL  
 5.2 PRODUCTS AND MATERIALS  
 6.0 LANDSCAPING  
 7.0 CONCRETE EDGEMOBS  
 8.0 CONCRETE REINFORCEMENT  
 9.0 CAST-IN PLACE CONCRETE

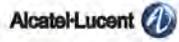
**COMPLY WITH THESE STANDARDS UNLESS OTHERWISE REQUIRED BY APPLICABLE CODES**

**\*GENERAL CONTRACTOR SHALL COMPLY WITH OSHA AND SPRINT STANDARD SAFETY AND CONSTRUCTION PROCEDURES.**

**1.0 CONSTRUCTION TO CONFORM TO SPRINT NEXTEL INTEGRATED CONSTRUCTION STANDARDS**

- 1.1 PURPOSE AND INTENT  
 A. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY. HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED IN BOTH. SHOULD THERE BE ANY DISCREPANCIES BETWEEN REQUIREMENTS SHOWN IN BOTH, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.  
 B. THE INTENTION OF THE DOCUMENTS IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.  
 C. THE PURPOSE OF THE SPRINT WIRELESS CONSTRUCTION SPECIFICATIONS IS TO INTERPRET THE INTENT OF THE DRAWINGS AND TO DESIGNATE THE METHOD OF THE PROCEDURE, TYPE AND QUALITY OF MATERIALS REQUIRED TO COMPLETE THE WORK.
- 1.2 CONFLICTS  
 A. VERIFY ALL MEASUREMENTS AT THE SITE BEFORE ORDERING MATERIAL OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED DUE TO DISCREPANCIES OR DIMENSIONS SHOWN ON PLANS. SUBMIT NOTICE OF ANY DISCREPANCY IN DIMENSIONS OR OTHERWISE TO SPRINT WIRELESS FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.  
 B. NO PLEA OF IGNORANCE OF CONDITIONS THAT EXIST OR OF DIFFICULTIES OF CONDITIONS THAT MAY BE ENCOUNTERED, OR OF ANY OTHER RELEVANT MATTER CONCERNING THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL EVERY DETAIL OF ALL THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS GOVERNING THE WORK.
- 1.3 CLEANING  
 KEEP THE SITE FREE FROM ACCUMULATION OF WASTE AND RUBBISH CAUSED BY EMPLOYEES AT THE COMPLETION OF THE WORK. REMOVE ALL WASTE AND NON-CONSTRUCTION MATERIAL INCLUDING ALL CONTRACTOR TOOLS, SCAFFOLDING AND SURPLUS MATERIAL AND LEAVE SITE CLEAN AND READY FOR USE.
- 1.4 CODES  
 CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL LAWS, REGULATIONS AND RULES PROMULGATED BY FEDERAL, STATE AND LOCAL AUTHORITIES WITH JURISDICTION OVER THE SITE. THIS RESPONSIBILITY IS IN EFFECT REGARDLESS OF WHETHER THE LAW, ORDINANCE, REGULATION OR RULE IS MENTIONED IN THESE SPECIFICATIONS.
- 1.5 LICENSING  
 HAVE AND MAINTAIN A VALID CONTRACTORS LICENSE FOR THE LOCATION IN WHICH THE WORK IS TO BE PERFORMED. FOR THAT LICENSE INDIVIDUAL TRADES, THE TRADESMAN OR SUBCONTRACTORS PERFORMING THOSE TRADES SHALL BE LICENSED. RESEARCH AND COMPLY WITH LICENSING LAWS, PAY LICENSE FEES, AND SELECT AND INFORM SUBCONTRACTORS REGARDING THESE LAWS.
- 1.6 OSHA  
 FOLLOW ALL APPLICABLE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIONS, AND STATE LAWS BASED IN THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT. THESE REGULATIONS INCLUDE, BUT ARE NOT LIMITED TO REGULATIONS DEALING WITH TOWER CONSTRUCTION AND SAFETY, EXCAVATIONS AND TRENDING, AND WORK IN CONFINED SPACES. ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AT ALL TIMES DURING CONSTRUCTION.
- 1.7 PHOTOS  
 PROVIDE PHOTOGRAPHIC EVIDENCE OF ALL FOUNDATION INSTALLATION, GROUNDING AND TRENCHING AFTER PLACEMENT OF UTILITIES PRIOR TO BACKFILL.
- 1.8 BUILDING PERMITS  
 SPRINT WIRELESS WILL SUBMIT CONSTRUCTION DOCUMENTS TO THE JURISDICTIONAL AUTHORITY FOR PLAN CHECK AND REVIEW. CONTRACTOR WILL SUBMIT LICENSING AND WORKMAN'S COMPENSATION INFORMATION TO THE JURISDICTION AS REQUIRED TO OBTAIN THE BUILDING PERMIT. CONTRACTOR SHALL COORDINATE AND SCHEDULE REQUIRED INSPECTIONS AND POST REQUIRED NOTICES. CONTRACTOR SHALL SPECIFICALLY REQUEST AND FOLLOW ANY SUGGESTIONS MADE BY BUILDING INSPECTOR AND INFORM CONSTRUCTION MANAGER OF ANY SUCH WORK THAT MAY BE BEYOND THE SCOPE OF THE CONTRACT OR DEVIATE FROM THE CONSTRUCTION DOCUMENTS. SPRINT WIRELESS WILL REIMBURSE THE CONTRACTOR FOR FEES FOR PLAN REVIEW, BUILDING PERMIT, CONNECTIONS AND INSPECTION.
- 1.9 ZONING REGULATIONS AND CONDITIONAL USE PERMITS  
 SPRINT WIRELESS WILL SUBMIT FOR AND OBTAIN ALL ZONING AND CONDITIONAL USE PERMITS. SOME USE PERMITS MAY HAVE SPECIFIC REQUIREMENTS RELATED TO THE CONSTRUCTION SUCH AS NOISE REGULATIONS, HOURS OF WORK, ACCESS LIMITATIONS, ETC. THE CONSTRUCTION MANAGER WILL INFORM THE CONTRACTOR OF THESE REQUIREMENTS AT THE PRE-BID MEETING OR AS SHOWN IN CONSTRUCTION DOCUMENTS.
- 1.10 FAA PERMIT AND TOWER LIGHTING  
 REFER TO CONSTRUCTION DOCUMENTS AND CONSTRUCTION MANAGER FOR FAA AND STATE LICENSING REQUIREMENTS. CONTRACTOR SHALL PROVIDE TEMPORARY FAA APPROVED LIGHTING UNITS. PERMANENT LIGHTING IS OPERATIONAL.
- 1.11 TOWER SECURITY  
 TOWER MUST BE FENCED, TEMPORARILY OR PERMANENTLY WITHIN 24 HOURS OF ERECTION. DO NOT ALLOW THE GATE ACCESSING THE TOWER AREA TO REMAIN OPEN OR UNATTENDED AT ANY TIME FOR ANY REASON. KEEP THE GATE CLOSED AND LOCKED WHEN NOT IN USE.
- 1.12 SITE CONTROL  
 A. THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR CONTAINMENT OF SEDIMENT AND CONTROL OF EROSION AT THE SITE. ANY DAMAGE TO ADJACENT OR DOWNSTREAM PROPERTIES WILL BE CORRECTED BY THE CONTRACTOR AT NO EXPENSE TO SPRINT WIRELESS.  
 B. THE CONTRACTOR IS TO MAINTAIN ADEQUATE DRAINAGE AT ALL TIMES. DO NOT ALLOW WATER TO STAND OR POOL ANY DAMAGE TO STRUCTURES OR WORK ON THE SITE CAUSED BY INADEQUATE MAINTENANCE OF DRAINAGE PROVISIONS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND ANY COST ASSOCIATED WITH REPAIRS FOR SUCH DAMAGE WILL BE AT THE CONTRACTOR'S EXPENSE.  
 C. ALL WASTE MATERIAL SHALL BE PROPERLY DISPOSED OF OFF-SITE OR AS DIRECTED BY THE CONSTRUCTION MANAGER AND IN ACCORDANCE WITH JURISDICTIONAL AUTHORITIES.
- 2.0 SITE PREPARATION  
 2.1 SCOPE OF WORK INCLUDES:  
 A. PROTECTION OF EXISTING TREES, VEGETATION AND LANDSCAPING MATERIALS WHICH MIGHT BE DAMAGED BY CONSTRUCTION ACTIVITIES.  
 B. TRIMMING OF EXISTING TREES AND VEGETATION AS REQUIRED FOR PROTECTION DURING CONSTRUCTION ACTIVITIES.  
 C. CLEANING AND GRUBBING OF STUMPS, VEGETATION, DEBRIS, RUBBISH, DESIGNATED TREES, AND SITE IMPROVEMENTS.  
 D. TOPSOIL, STRIPPING AND STOCKPILING.  
 E. TEMPORARY EROSION CONTROL, SILTATION CONTROL, AND DUST CONTROL CONFORMING TO LOCAL REQUIREMENTS AS APPLICABLE.  
 F. TEMPORARY PROTECTION OF ADJACENT PROPERTY, STRUCTURES, BENCHMARKS AND MONUMENTS.  
 G. PROTECTION AND TEMPORARY RELOCATION, STORAGE AND RE-INSTALLATION OF EXISTING FENCING AND OTHER SITE IMPROVEMENTS SCHEDULED FOR REUSE.  
 H. REMOVAL AND LEGAL DISPOSAL OF CLEARED MATERIALS.  
 2.2 PRODUCTS AND MATERIALS (AS APPROVED BY CONSTRUCTION MANAGER OR AS NOTED IN CONSTRUCTION DOCUMENTS)  
 A. MATERIALS USED FOR TREE PROTECTION, EROSION CONTROL, SILTATION CONTROL AND DUST CONTROL AS SUITABLE FOR SPECIFIC SITE CONDITIONS.
- 3.0 GRAVEL RE-SURFACING  
 A. RESURFACE DRIVEWAY AREAS USING CRUSHED AGGREGATE BASE AND FINISH COURSES AS SPECIFIED BY CONSTRUCTION MANAGER OR CONSTRUCTION DOCUMENTS.  
 B. SPREAD GRAVEL AND RAKE TO OBTAIN A UNIFORM SURFACE AREA.
- 4.0 TRENDING  
 CALL LOCAL UNDERGROUND UTILITY LOCATING SERVICE BEFORE ANY EXCAVATION OR TRENDING.
- 4.1 MATERIALS  
 FILL MATERIAL SHALL BE OBTAINED, WHEN POSSIBLE, FROM MATERIALS EXCAVATED FROM TRENCHES. ON-SITE STRUCTURAL FILL SAND OR GRAVEL SHALL BE APPROVED BY THE CONSTRUCTION MANAGER AND SHALL CONFORM TO LOCAL GOVERNING JURISDICTIONS AND UTILITY COMPANY REQUIREMENTS. THE FILL MATERIAL SHALL CONTAIN NO ORGANIC MATERIAL OR ROCKS, NOR SHALL CONTAIN OBJECTIONABLE MATERIALS AND/OR MATERIALS DESIGNATED AS HAZARDOUS OR INDUSTRIAL BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). THE FILL MATERIAL SHALL CONTAIN FINESS SUFFICIENT TO FILL ALL VOIDS IN THE MATERIAL. COMPACTION OF BACKFILL OR BORROW SOIL SHALL BE PLACED IN 12 INCH LOOSE LIFTS WHEN UTILIZING HEAVY COMPACTION EQUIPMENT OR 8 INCH LOOSE LIFTS WHEN UTILIZING HAND OPERATED TAMPERS.

- 4.2 PIPE DETECTION AND IDENTIFICATION  
 A. UTILIZING WARNING TAPE: ALL ELECTRIC SERVICE TRENCHES SHALL BE MARKED WITH WARNING TAPE.
- 4.3 TRENCH EXCAVATION  
 A. DO NOT TRENCH TO LINES AND DIMENS SHOWN ON THE PLANS OR AS DIRECTED BY CONSTRUCTION MANAGER.  
 B. TRENCH LENGTH SHALL BE SUFFICIENT TO ALLOW FOR SATISFACTORY CONSTRUCTION AND INSPECTION OF THE PROJECT WITHOUT ENDANGERING OTHER CONSTRUCTION WORK OR ADJACENT FACILITIES.  
 C. PROUSE OF EXCESS AND UNNECESSARY EXCAVATION MATERIAL PROPERTY, AS DIRECTED BY CONSTRUCTION MANAGER.  
 D. USE HAND METHODS FOR EXCAVATION THAT CANNOT BE ACCOMPLISHED WITHOUT ENDANGERING EXISTING OR NEW STRUCTURES OR OTHER FACILITIES.
- 4.4 TRENCH PROTECTION  
 A. PROVIDE MATERIALS, LABOR AND EQUIPMENT NECESSARY TO PROTECT TRENCHES AT ALL TIMES.  
 B. SHEETING AND BRACING MEET OR EXCEED OSHA REQUIREMENTS.
- 4.5 BACKFILLING  
 A. NOTIFY THE CONSTRUCTION MANAGER AT LEAST 24 HOURS IN ADVANCE OF BACKFILLING.  
 B. BACKFILL TRENCH WITH LIFTS UP TO 12 INCHES LOOSE MEASURE.  
 C. PROTECT CONDUIT FROM LATERAL MOVEMENT, DAMAGE FROM IMPACT OR UNBALANCED LOADING TO AVOID DISPLACEMENT OF CONDUIT AND/OR STRUCTURES; DO NOT FREE FALL BACKFILL INTO TRENCH UNTIL AT LEAST 12 INCHES OF COVER IS OVER THE CONDUIT.
- 4.6 COMPACTION  
 A. COMPACT BACKFILL TO A 95 PERCENT COMPACTION AT A MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 OR WITHIN PLUS OR MINUS 3 PERCENT OF OPTIMUM MOISTURE CONTENT.  
 B. IF REQUIRED COMPACTION DENSITY HAS NOT BEEN OBTAINED, REMOVE THE BACKFILL FROM THE TRENCH OR STRUCTURE, REPLACE WITH APPROVED BACKFILL AND RECOMPACT AS SPECIFIED.  
 C. ANY SUBSEQUENT SETTLEMENT OF TRENCH OR STRUCTURE BACKFILL DURING MAINTENANCE PERIOD SHALL BE CONSIDERED THE RESULT OF IMPROPER COMPACTION AND SHALL BE PROMPTLY CORRECTED.
- 5.0 CHAIN LINK FENCES AND GATES  
 5.1 GENERAL  
 A. PROVIDE CHAIN LINK FENCES AND GATES AS COMPLETE UNITS BY A SINGLE SUPPLY SOURCE INCLUDING NECESSARY ERECTION ACCESSORIES AND EXISTING.  
 5.2 PRODUCTS AND MATERIALS (AS APPROVED BY CONSTRUCTION MANAGER OR AS WITHIN CONSTRUCTION DOCUMENTS)  
 A. COMPOUND FABRIC 84 INCHES HIGH AND OVER WITH 2-INCH MESH SHALL BE HANGKULATED AT ONE END, SALVAGE AND TWISTED AT THE OTHER.  
 B. STEEL FABRIC:  
 1. COMPLY WITH CHAIN LINK FENCE MANUFACTURERS INSTITUTE (CLFMI) PRODUCT MANUAL, FURNISH ONE PIECE OF FABRIC WIDTHS, WIRE SIZE INCLUDES ZINC OR ALUMINUM COATING.  
 2. SIZE 2-HIGH MESH 9 GAUGE, (1.48-INCH DIAMETER) WIRE.  
 3. GALVANIZED STEEL FINISH: ASTM A 392, CLASS 2, WITH A MINIMUM 2.0 OZ. ZINC PER SQ. FT. OF UNCOATED WIRE SURFACE.  
 C. FRAMEWORK AND ACCESSORIES:  
 1. GENERAL REQUIREMENTS: EXCEPT AS INDICATED OTHERWISE CONFORM TO THE CHAIN LINK FENCE MANUFACTURERS INSTITUTE (CLFMI) PRODUCT MANUAL, INDUSTRIAL STEEL GUIDE FOR FENCE RAILS, POSTS, GATES AND ACCESSORIES INCLUDING TABLE #.  
 2. STRENGTH REQUIREMENTS FOR POSTS AND RAILS CONFORMING TO ASTM F 1043.  
 3. THE POST: HOT-DIPPED GALVANIZED STEEL PIPE CONFORMING TO ASTM F 1065, PLANE ENDS, STANDARD WEIGHT (SCHEDULE 40) WITH NOT LESS THAN 18 OZ. ZINC PER SQ. FT. OF SURFACE AREA COATED.  
 4. FILLERS: COMPLY WITH ASTM F 526 MILL FINISHED ALUMINUM OR GALVANIZED ROH STEEL TO COMPLY WITH MANUFACTURER'S REQUIREMENTS.  
 5. TOP RAIL: MANUFACTURERS LONGEST LENGTHS WITH EXPANSION TYPE COUPLINGS, APPROXIMATELY 6 INCHES LONG, FOR EACH JOINT. PROVIDE MEANS FOR ATTACHING TOP RAIL SECURELY TO EACH GATE CORNER, PULL AND END POST.  
 D. GALVANIZED STEEL 1 1/4 INCH DIA (1.60 INCH OD) TYPE I OR II STEEL PIPE OR 1.625 INCH x 1.25 INCH ROLL-FORMED C SECTIONS WEIGHING 1.55 LBS. PER FT.  
 E. SWING GATES:  
 COMPLY WITH ASTM F 900, PROVIDE HARDWARE AND ACCESSORIES FOR EACH GATE GALVANIZED PER ASTM A 153, AND IN ACCORDANCE WITH THE FOLLOWING:  
 1. HINGES: NON LIFT-OFF TYPE, OFFSET TO PERMIT 90 DEG. GATE OPENING.  
 2. LATCH: W/5 MULTI-LOCKING DEVICE W/1-5/16" X 1/2" APPROVED EQUAL.  
 3. KEEPER: PROVIDE KEEPER FOR VEHICLE GATES, WHICH AUTOMATICALLY ENGAGES GATE LEAF AND HOLDS IT IN OPEN POSITION UNTIL MANUALLY RELEASED.  
 F. CONCRETE:  
 PROVIDE CONCRETE CONSISTING OF PORTLAND CEMENT, ASTM C 150, AGGREGATES ASTM C 33, AND CLEAN WATER. MAX MATERIALS TO OBTAIN CONCRETE WITH A MINIMUM OF 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.
- 6.0 LANDSCAPING  
 A. FURNISH, INSTALL AND MAINTAIN LANDSCAPE WORK AS SHOWN AND/OR REQUIRED WITHIN THE CONSTRUCTION DOCUMENTS OR AS SPECIFIED IN THE SPRINT WIRELESS CONSTRUCTION SPECIFICATIONS.
- 7.0 CONCRETE EDGEMOBS  
 A. FORMS: SMOOTH AND FREE OF SURFACE IRREGULARITIES. UTILIZE FORM RELEASE AGENTS.  
 B. CHAMFER: EXPOSED EDGES OF ALL TOWER FOUNDATIONS SHALL RECEIVE A 3/4" BY 3/4" 45 DEGREE CHAMFER. OTHER EXPOSED EDGES SHALL RECEIVE A TOOLED RADIUS FINISH.  
 C. UPON COMPLETION, REMOVE ALL FORMS, INCLUDING THOSE CONCEALED OR BLINDED.  
 D. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- 8.0 CONCRETE REINFORCEMENT  
 REFER TO STRUCTURAL DRAWINGS FOR ALL REQUIREMENTS.
- 9.0 CAST-IN PLACE CONCRETE  
 FOR STRUCTURAL CONCRETE (FOOTINGS, FOUNDATIONS, ETC.), REFER TO STRUCTURAL DRAWINGS FOR REQUIREMENTS; FOR ANY MISCELLANEOUS CONCRETE, REFER TO SPECIFICATION BOOK OR OBTAIN REQUIREMENTS FROM CONSTRUCTION MANAGER.  
 A. ALL CONCRETE SHALL COMPLY WITH ASTM C94 UNLESS NOTED OTHERWISE.  
 B. MINIMUM COMPRESSIVE STRENGTH (F'c) AT 28 DAYS: 4000 PSI FOR TOWER FOUNDATION AND 3500 PSI FOR ALL OTHER CONCRETE UNLESS SPECIFIED IN CONSTRUCTION DOCUMENTS.  
 C. AIR ENTRAINMENT: PROVIDE 4 TO 8% AIR ENTRAINMENT FOR ALL CONCRETE SUBJECT TO FREEZE-THAW CYCLES.  
 D. CONCRETE TESTING: ALL FOUNDATION CONCRETE SHALL BE TESTED BY AN INDEPENDENT TESTING AGENCY APPROVED BY THE CONSTRUCTION MANAGER. ALL STRUCTURAL, TOWER FOUNDATION CONCRETE MUST BE TESTED. EQUIPMENT OR BUILDING PADS ARE NOT REQUIRED TO BE TESTED, UNLESS OTHERWISE NOTED BY CONSTRUCTION MANAGER. PROVIDE A MINIMUM OF 3 CYLINDERS (2-7-DAY, 28-DAY, 1-SPRING) FOR EACH BAYS FOUR, OR FOR EVERY 50 YARDS PLACED, WHICHEVER IS GREATER. ADDITIONAL TESTS ON CYLINDERS MAY BE REQUIRED BY CONSTRUCTION MANAGER. A SLUMP, AIR, AND TEMPERATURE TEST SHALL BE PERFORMED FOR EACH SET OF CYLINDERS CAST. PREFERENTIAL TESTS SHALL BE PERFORMED AT THE LOCATION OF ANCHOR BOLTS (PIERS - FOR MAT & PIERS, CAISSONS - TOP 1/3 OF CAISSON). TESTS SHALL ALSO BE REQUIRED FOR CONCRETE BEING LESS THAN DESIRABLE BY CONCRETE SPECIFICATION STANDARDS. THE TESTING AGENCY HAS THE AUTHORITY TO NOT ACCEPT CONCRETE MEETING THESE SPECIFICATIONS FOR SPRINT WIRELESS. THE CONTRACTOR IS RESPONSIBLE FOR ANY CONCRETE NOT MEETING THESE STANDARDS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE TESTING AGENCY A MINIMUM OF 24 HOURS IN ADVANCE OF EACH FOUNDATION POUR. TEST REPORTS SHALL BE FORWARDED TO SPRINT CONSTRUCTION MANAGER WITHIN 24 HOURS OF LAB TEST.



**PROJECT INFORMATION:**

NETWORK VISION MMBTS LAUNCH

**CASH**  
 OG73XC760  
 506 SOUTH FEE AVE  
 PLACENTIA, CA 92870  
 CITY OF PLACENTIA

**ISSUE DATE:**

7/25/2012

**ISSUED FOR:**

90% CD

REVISIONS				
REV.	DATE	DESCRIPTION	REVISED BY	DATE
A	3/28/12	ISSUED FOR 90% CD REVIEW	DC	
B	6/11/12	90% CD	JB	
C	7/25/12	90% CD	JB	
NOT FOR CONSTRUCTION UNLESS LABELLED AS CONSTRUCTION SET				

**LICENSURE:**

**SHEET TITLE:**

GENERAL NOTES

**SHEET NUMBER:**

T-3

**REVISION:**

C





**PAINT NOTES:**  
 1. (E) AND (N) SPRINT EXPOSED ANTENNAS AND MOUNTING HARDWARE TO BE PAINTED TO MATCH (E) SITE CONDITIONS PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.  
 2. (E) AND (N) SPRINT EXPOSED ANTENNA SUPPORT EQUIPMENT AND MOUNTING HARDWARE TO BE PAINTED TO MATCH (E) SITE CONDITIONS PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.

**NOTES:**  
 1. ALL (E) SPRINT COAX CABLES AND TO BE REMOVED FROM THE SITE.  
 2. IF PRESENT, ALL (E) CLEARWIRE ANTENNAS, MICROWAVE DISHES AND COAX CABLES TO REMAIN.

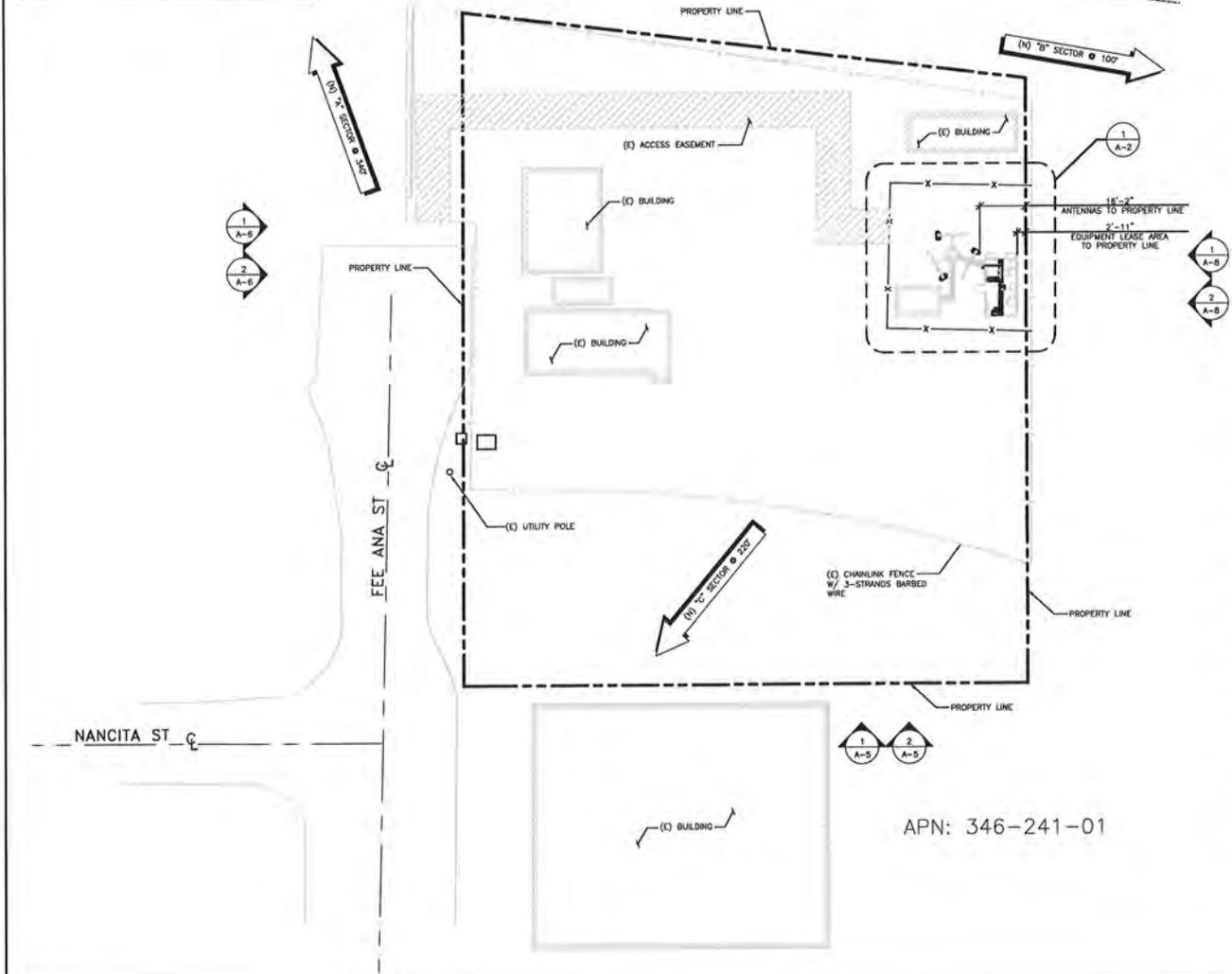
**DISCLAIMER**  
 THESE DRAWINGS WERE PRODUCED WITHOUT THE BENEFIT OF A CURRENT LAND SURVEY. ALL PROPERTY LINES, EASEMENTS, AND SETBACKS SHALL BE VERIFIED PRIOR TO START OF CONSTRUCTION. SAC WIRELESS DOES NOT GUARANTEE THE ACCURACY OF SAID PROPERTY LINES, EASEMENTS AND SETBACKS.

**LEGEND**

---	SUBJECT BOUNDARY LINE
- - - -	RIGHT-OF-WAY CENTERLINE
- - - -	RIGHT-OF-WAY LINE
- - - -	ADJACENT BOUNDARY LINE
- - - -	SECTIONAL BREAKDOWN LINE
(N)	FIBER LINE
LF	(N) POWER/FIBER LINE
OP	OVERHEAD POWER LINE
BP	BURIED POWER LINE
GL	BURIED GAS LINE
OTL	OVERHEAD TELEPHONE LINE
BT	BURIED TELEPHONE LINE
WL	BURIED WATER LINE
SS	BURIED SANITARY SEWER
SD	BURIED STORM DRAIN
DL	DITCH LINE/FLOW LINE
VL	VEGETATION LINE
CF	CHAIN LINK FENCE
WF	WOOD FENCE
BB	BARBED WIRE/WIRE FENCE
TR	TRANSFORMER
LS	LIGHT STANDARD
PV	POWER VAULT
UB	UTILITY BOX
UP	UTILITY POLE
GLW	POLE GUY WIRE
GV	GAS VALVE
CM	GAS METER
TV	TELEPHONE VAULT
TR	TELEPHONE RISER
FR	FIRE HYDRANT
GV	GATE VALVE
WM	WATER METER
FS	FIRE STAND PIPE
CB	CATCH BASIN, TYPE I
CS	CATCH BASIN, TYPE II
SI	SIGN
R	ROLLARD
MB	MAIL BOX
234.21	SPOT ELEVATION

**ABBREVIATIONS**

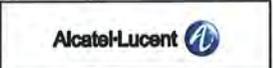
A/C	AIR CONDITIONING	LBS	POUNDS
AGL	ABOVE GRADE LEVEL	MAX	MAXIMUM
APPROX	APPROXIMATELY	MECH	MECHANICAL
BLDG	BUILDING	MTL	METAL
BLK	BLOCKING	MFR	MANUFACTURE
CLG	CEILING	MGR	MANAGER
CLR	CLEAR	MIN	MINIMUM
CONC	CONCRETE	MISC	MISCELLANEOUS
CONST	CONSTRUCTION	NA	NOT APPLICABLE
CONT	CONTINUOUS	NIC	NOT IN CONTRACT
		NTS	NOT TO SCALE
DBL	DOUBLE	OC	ON CENTER
DIA	DIAMETER	OD	OUTSIDE DIAMETER
DIAG	DIAGONAL	PLYWD	PLYWOOD
DN	DOWN	PROJ	PROJECT
DET	DETAIL	PROP	PROPERTY
DWG	DRAWING	PT	PRESSURE TREATED
EA	EACH	REQ	REQUIRED
EL	ELEVATION	RM	ROOM
ELEC	ELECTRICAL	RO	ROUGH OPENING
EQ	EQUAL	RHM	RADIO REMOTE HEAD
EQUIP	EQUIPMENT	SHT	SHEET
EXT	EXTERIOR	SM	SMALLER
FIN	FINISH	SPEC	SPECIFICATION
FLOR	FLOURESCENT FLOOR	SQ	SQUARE FOOT
FT	FOOT	SS	STAINLESS STEEL
GA	GALVANIZED	STL	STEEL
GUY	GENERAL	STRUCT	STRUCTURAL
OC	OVERHEAD	STD	STUD
CONTR	CONTRACTOR	SUSP	SUSPENDED
GRND	GROUND	THRU	THROUGH
GYP BD	GYP-SUM WALL BOARD	TMA	TOWER MOUNT AMPLIFIER
		TRNG	TINNED TYPICAL
		TYP	TYPICAL
HORZ	HORIZONTAL	UNO	UNLESS NOTED OTHERWISE
HR	HOUR	VERT	VERTICAL
HT	HEIGHT	VF	VERIFY IN FIELD
HMC	HEATING VENTILATION AIR CONDITIONING	W/	WITH
		W/O	WITHOUT
		WP	WEATHER PROOF
ID	INSIDE DIAMETER		
INCH	INCH		
INFO	INFORMATION		
INSUL	INSULATION		
INT	INTERIOR		
INT	INTERNATIONAL BUILDING CODE		



APN: 346-241-01



SCALE: 1" = 30'-0" (24x36)  
 (OR) 1/2" = 20'-0" (11x17)



**PROJECT INFORMATION:**

NETWORK VISION MMBTS LAUNCH  
**CASH**  
 OG73XC760  
 506 SOUTH FEE ANA  
 PLACENTIA, CA 92870  
 CITY OF PLACENTIA

ISSUE DATE:  
 7/25/2012

ISSUED FOR:  
 90% CD

**REVISIONS**

REV.	DATE	DESCRIPTION	INITIALS
A	3/28/12	ISSUED FOR BOX CD REVIEW	DC
B	6/17/12	90% CD	JB
C	7/25/12	90% CD	JB

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

**LICENSURE:**

SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:      REVISION:

**A-1**      C

**OVERALL SITE PLAN**

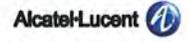
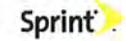
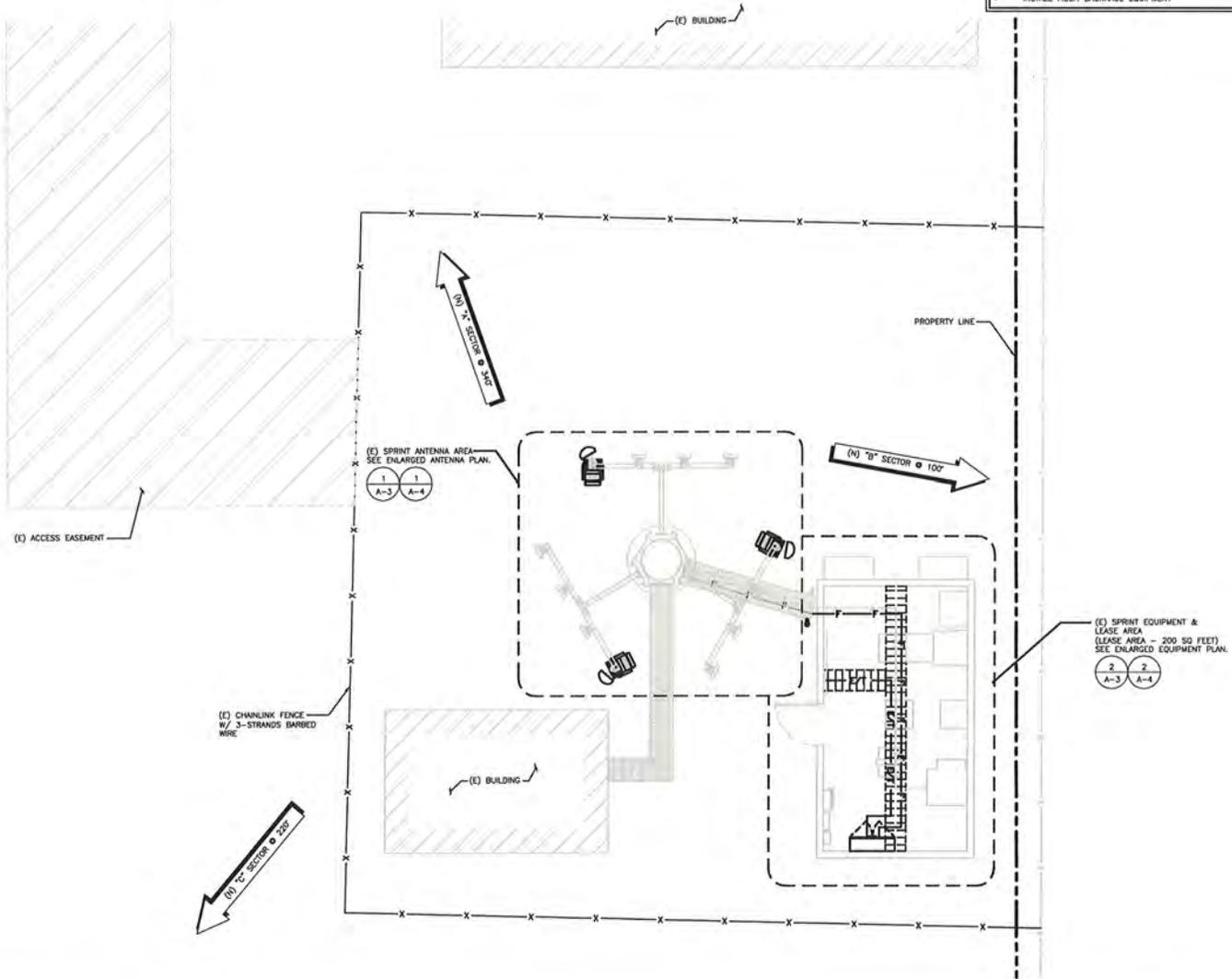
THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.

**PAINT NOTES:**  
 1. (E) AND (N) SPRINT EXPOSED ANTENNAS AND MOUNTING HARDWARE TO BE PAINTED TO MATCH (E) SITE CONDITIONS PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.  
 2. (E) AND (N) SPRINT EXPOSED ANTENNA SUPPORT EQUIPMENT AND MOUNTING HARDWARE TO BE PAINTED TO MATCH (E) SITE CONDITIONS PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.

**NOTES:**  
 1. ALL (E) SPRINT COAX CABLES AND TO BE REMOVED FROM THE SITE.  
 2. IF PRESENT, ALL (E) CLEARWIRE ANTENNAS, MICROWAVE DISHES AND COAX CABLES TO REMAIN.

**SPRINT PROPOSES TO MODIFY AN (E) UNMANNED TELECOMMUNICATIONS FACILITY**

- REMOVE (3) (E) PANEL ANTENNAS
- INSTALL (2) (N) PANEL ANTENNAS
- REMOVE ALL (E) ANTENNA COAX
- INSTALL (3) (N) HYBRID COAX CABLES USING (E) COAX ROUTE
- RETROFIT (E) MODELL 4.0 EQUIPMENT CABINET WITH (N) RADIO HARDWARE
- INSTALL (1) (N) FIBER JUNCTION BOX
- REMOVE (1) (E) GPS ANTENNA
- INSTALL (1) (N) GPS ANTENNA
- INSTALL (6) (N) RSJ
- INSTALL FIBER BACKHAUL EQUIPMENT



**PROJECT INFORMATION:**

NETWORK VISION MMBTS LAUNCH

**CASH**  
**OG73XC760**

506 SOUTH FEE ANA  
 PLACENTIA, CA 92870  
 CITY OF PLACENTIA

ISSUE DATE:  
 7/25/2012

ISSUED FOR:  
 90% CD

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	3/28/12	ISSUED FOR 90% CD REVIEW	DC
B	6/17/12	90% CD	JB
C	7/25/12	90% CD	JB

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE:

SHEET TITLE:  
 ROOFTOP PLAN

SHEET NUMBER: **A-2**      REVISION: **C**

**ROOFTOP PLAN**

SCALE: 1/4" = 1'-0" (24x36)  
 (OR) 1/8" = 1'-0" (11x17)

1

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.

PROJECT INFORMATION

NETWORK VISION MMBTS LAUNCH

**CASH**  
OG73XC760  
506 SOUTH FEE ANA  
PLACENTIA, CA 92870  
CITY OF PLACENTIA

ISSUE DATE:

7/25/2012

ISSUED FOR:

90% CD

1

TRUE NORTH

SCALE: 3/8" = 1'-0" (22x34)  
(OR) 3/16" = 1'-0" (11x17)

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	3/28/12	ISSUED FOR 90% CD REVIEW	DC
B	6/17/12	90% CD	JB
C	7/25/12	90% CD	JB

NOT FOR CONSTRUCTION UNLESS  
LABELED AS CONSTRUCTION SET

LICENSURE:

SHEET TITLE:

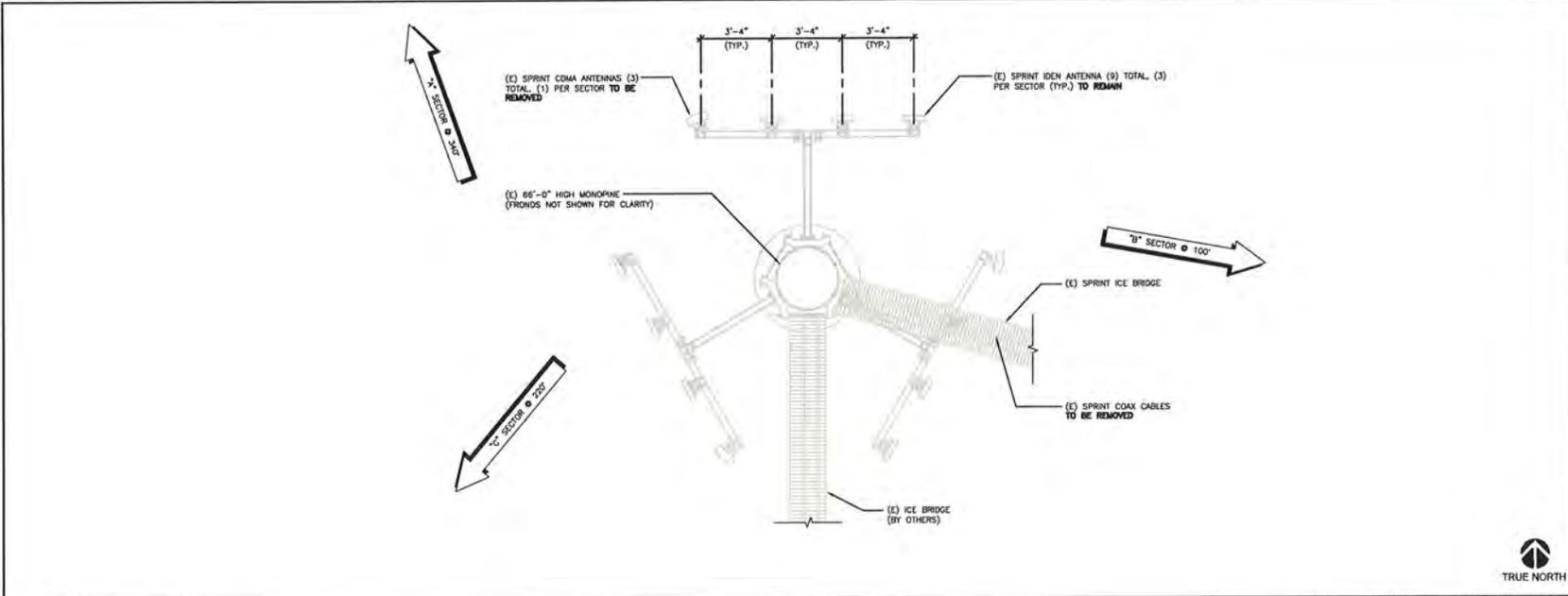
ENLARGED ANTENNA &  
EQUIPMENT PLANS (E)

SHEET NUMBER:

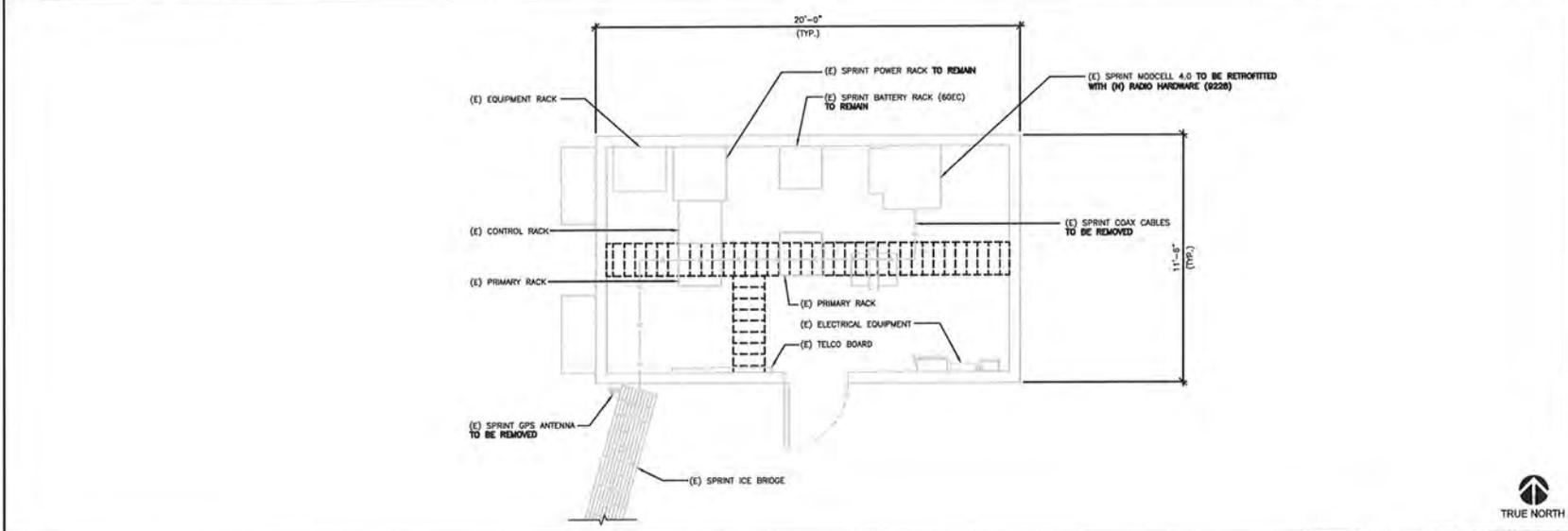
A-3

REVISION:

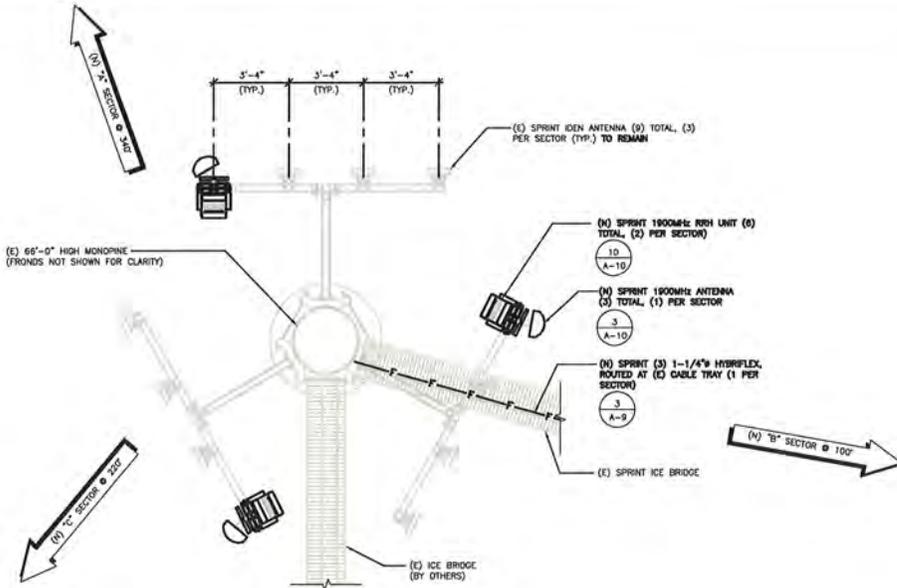
C



ENLARGED ANTENNA PLAN (E) SCALE: 3/8" = 1'-0" (22x34) (OR) 3/16" = 1'-0" (11x17) 1 TRUE NORTH



ENLARGED EQUIPMENT PLAN (E) SCALE: 3/8" = 1'-0" (22x34) (OR) 3/16" = 1'-0" (11x17) 2 TRUE NORTH



NOTE TO CONTRACTOR:  
ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE, AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.

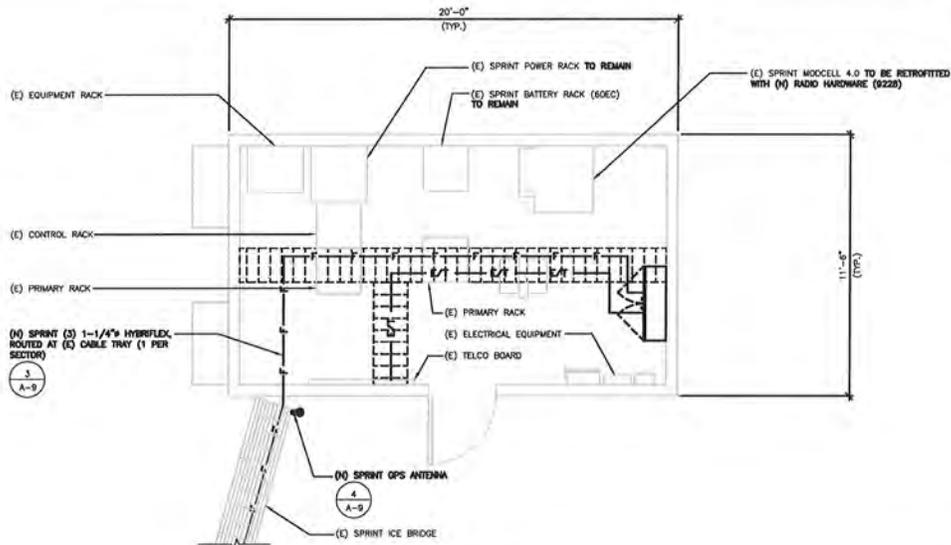
NOTE:  
SEE DETAIL 1/A-10 FOR ANTENNA CONFIGURATION & SCHEDULE.



ENLARGED ANTENNA PLAN (N)

SCALE: 3/8" = 1'-0" (22x34)  
(OR) 3/16" = 1'-0" (11x17)

1



NOTE TO CONTRACTOR:  
MAIN PANEL IS TO REMAIN & BE UTILIZED BY NEW SPRINT EQUIPMENT. NEW 9227 EQUIPMENT CABINET WILL USE THE SAME 100A/72P BREAKER THAT WAS USED BY THE REMOVED EQUIPMENT. PANEL SCHEDULE WILL REMAIN UNCHANGED.

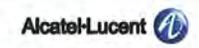
NOTE: ALL LEGACY EQUIPMENT WILL BE PHYSICALLY REMOVED UPON CUTOVER. ANY ADDITIONAL CDMA ANTENNAS SHOWN ON FINAL DESIGN ARE SHOWN SOLELY FOR THE PURPOSES OF PLACE HOLDERS. FINAL DESIGN WILL BE BY ONLY, UNLESS OTHERWISE AND/OR IDEN IS CURRENTLY INSTALLED ON THE SITE.



ENLARGED EQUIPMENT PLAN (N)

SCALE: 3/8" = 1'-0" (22x34)  
(OR) 3/16" = 1'-0" (11x17)

2



PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH

**CASH**  
OG73XC760

506 SOUTH FEE ANA  
PLACENTIA, CA 92870  
CITY OF PLACENTIA

ISSUE DATE:

7/25/2012

ISSUED FOR:

90% CD

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	3/28/12	ISSUED FOR 90% CD REVIEW	DC
B	6/17/12	90% CD	JB
C	7/25/12	90% CD	JB

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE:

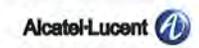
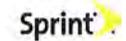
SHEET TITLE:

ENLARGED ANTENNA & EQUIPMENT PLANS (N)

SHEET NUMBER: REVISION:

A-4

C



PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH  
**CASH**  
OG73XC760  
506 SOUTH FEE ANA  
PLACENTIA, CA 92870  
CITY OF PLACENTIA

ISSUE DATE:  
7/25/2012

ISSUED FOR:  
90% CD

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	3/28/12	ISSUED FOR 90% CD REVIEW	DC
B	6/17/12	90% CD	JB
C	7/25/12	90% CD	JB

NOT FOR CONSTRUCTION UNLESS  
LABELED AS CONSTRUCTION SET

LICENSURE:

SHEET TITLE:  
**(E) & (N) SOUTH ELEVATIONS**

SHEET NUMBER: **A-5**      REVISION: **C**

NOTES TO CONTRACTOR  
1. REMOVE ALL EXISTING COAX FROM SITE

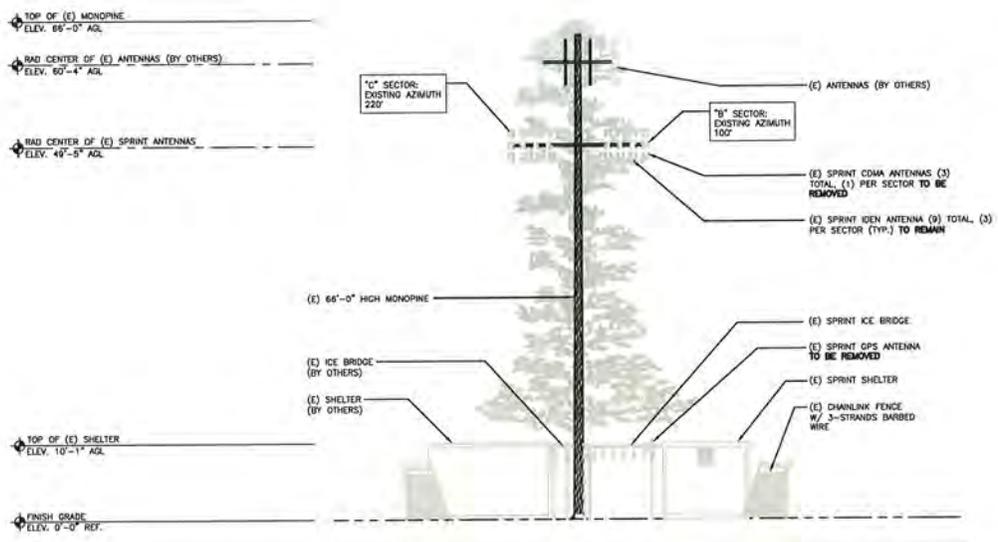
- NOTES:
- CONTRACTOR TO FIELD VERIFY ANTENNA CABLE LENGTHS.
  - ALL MAIN CABLES WILL BE COLOR CODED AT THREE (3) LOCATIONS.
  - COLOR CODE ALL ANTENNA AND COAX WITH 2" WIDE BANDS OF COLORED TAPE WITH 1" SEPARATION BETWEEN BANDS
  - COLOR CODE ALL TOP AND BOTTOM GROUND KITS WITH 1" WIDE BANDS OF COLORED TAPE WITH 1/2" SEPARATION BETWEEN BANDS.
  - START COLOR BANDS 2' BEYOND WEATHERPROOFING.
  - START SECTOR COLOR NEXT TO END CONNECTOR.
  - ALL MAIN CABLES WILL BE GROUNDING W/ COAXIAL CABLE GROUND KITS AS:
    - THE ANTENNA LEVEL
    - MID LEVEL IF MONOPINE IS OVER 200'
  - ALL NEW GROUND BAR DOWNLEADS ARE TO BE CADWELDED TO THE EXISTING ADJACENT GROUND BAR DOWNLEADS A MINIMUM DISTANCE OF 4FT BELOW GROUND BAR
  - PROVIDE BUSS BAR NEAR BTS FOR ATTACHMENT OF W/MAX COAX GROUND KITS

- HYBRIFLEX CABLE NOTES:
- THE HYBRIFLEX CABLE INSTALLER SHALL BE RESPONSIBLE FOR PERFORMING AND SUPPLYING SPRINT WITH 3 TYPED WRITTEN SWEEP TESTS (ANTENNA RETURN LOSS TEST). THIS TEST SHALL BE PERFORMED TO THE SPECIFICATIONS AND PARAMETERS OUTLINED BY THE SPRINT RADIO FREQUENCY (RF) ENGINEER. THIS TEST SHALL BE PERFORMED PRIOR TO FINAL ACCEPTANCE OF THE SITE.
  - THE HYBRIFLEX CABLE INSTALLER SHALL BE RESPONSIBLE FOR PERFORMING AND SUPPLYING SPRINT WITH 3 TYPED WRITTEN TIME DOMAIN REFLECTOMETER (TDR) TESTS TO VERIFY CABLE LENGTH AND TO CHECK FOR WATER DAMAGE.
  - VAPOR SEAL WILL BE USED TO SEAL ALL CONNECTIONS.
  - ALL JUMPERS TO THE ANTENNAS FROM THE MAIN TRANSMISSION LINE WILL BE 1/2" JUMPERS AND SHALL NOT EXCEED 6'-0". MAXIMUM LENGTH FOR THE JUMPERS AT W/MAX BTS UNITS WILL BE 6'-0".
  - IF COAXIAL CABLE IS BEING RE-USED FOR THIS INSTALLATION, PRE AND POST ANTENNA LINE SWEEPS ARE REQUIRED.

- ANTENNA MOUNTING NOTES:
- ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIPPED GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS OTHERWISE NOTED.
  - ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.
  - DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED BY COLD GALVANIZING IN ACCORDANCE WITH ASTM A780.
  - ALL ANTENNA MOUNTS SHALL BE INSTALLED WITH DOUBLE NUTS AND SHALL BE INSTALLED SNUG TIGHT.
  - MINIMUM HORIZONTAL SPACING SHALL BE 2'-0" BETWEEN ALL ANTENNAS.
  - UPON COMPLETION, PROVIDE A HEIGHT VERIFICATION DEPARTING RAD CENTER AND TOP OF ANTENNA.

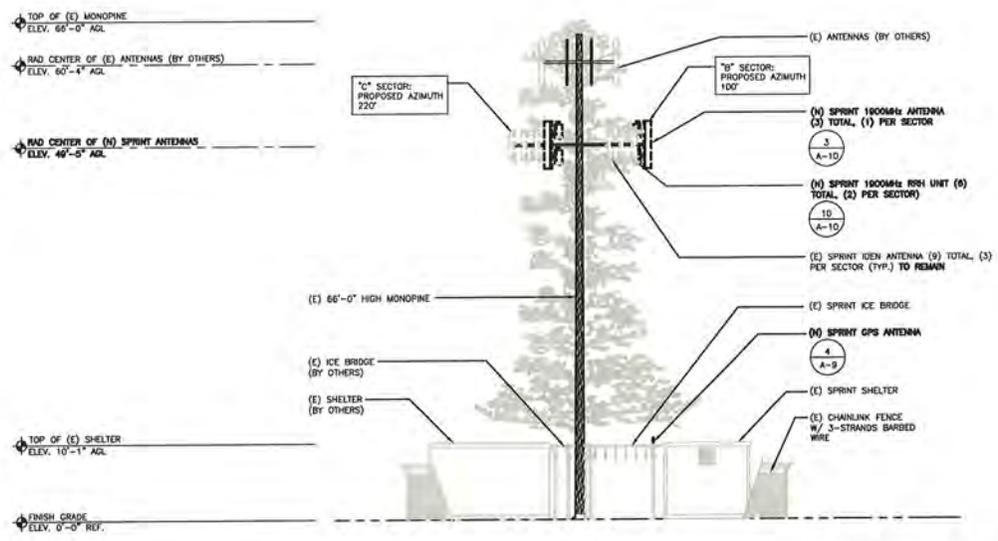
- CONTRACTOR NOTES:
- (N) SPRINT FIBER LINES FROM (E)/(N) EQUIPMENT, TO (N) SPRINT ANTENNAS ARE TO FOLLOW (E) FIBER/COAX ROUTE (FIELD VERIFY).
  - ALL (N) MATERIALS (ANTENNAS, EQUIPMENT /RAYS) AND ALL HARDWARE THAT ARE EXPOSED (NOT BEHIND SCREENING) ARE TO BE PAINTED (PER MANUFACTURERS RECOMMENDATIONS) TO MATCH (E) BUILDING FINISH.
  - PATCH AND REPAIR EXISTING MATERIALS, FINISHES, WALLS, ETC. AS NEEDED TO PROVIDE A SEAMLESS TRANSITION FROM (N) TO (E) SURFACES. (N) CONSTRUCTION MUST MATCH (E) BUILDING COLOR, FINISH AND TEXTURE.

- GENERAL NOTES:
- ALL AZIMUTHS ARE TO BE ESTABLISHED CLOCKWISE FROM THE TRUE NORTH HEADING.
  - CONTRACTOR SHALL VERIFY PROPOSED ANTENNA RAD CENTER AND ORIENTATIONS WITH SPRINT PRIOR TO INSTALLATION OF ANTENNAS.
  - PRIOR TO ATTACHING ANTENNAS AND MOUNTING SECTIONS, EXISTING MONOPINE MUST BE ANALYZED BY A LICENSED STRUCTURAL ENGINEER TO VERIFY MONOPINE IS CAPABLE OF SUPPORTING THE PROPOSED LOADS. REFER TO STRUCTURAL ANALYSIS BY OTHERS.
  - CONTRACTOR SHALL REFER TO MONOPINE STRUCTURAL CALCULATIONS FOR ADDITIONAL LOADS. NO ERECTION OR MODIFICATION OF MONOPINE SHALL BE MADE WITHOUT APPROVAL OF STRUCTURAL ENGINEER.



(E) SOUTH ELEVATION

SCALE: 1/8" = 1'-0" (24x36)  
(OR) 1/16" = 1'-0" (11x17)      1



(N) SOUTH ELEVATION

SCALE: 1/8" = 1'-0" (24x36)  
(OR) 1/16" = 1'-0" (11x17)      2

PROJECT INFORMATION

NETWORK VISION MMBTS LAUNCH

**CASH**  
**OG73XC760**

506 SOUTH FEE AWA  
PLACENTIA, CA 92870  
CITY OF PLACENTIA

ISSUE DATE:

7/25/2012

ISSUED FOR:

90% CD

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	3/28/12	ISSUED FOR 90% CD REVIEW	DC
B	6/17/12	90% CD	JB
C	7/25/12	90% CD	JB

NOT FOR CONSTRUCTION UNLESS  
LABELED AS CONSTRUCTION SET

LICENSURE:

SHEET TITLE:

(E) & (N) WEST ELEVATIONS

SHEET NUMBER:

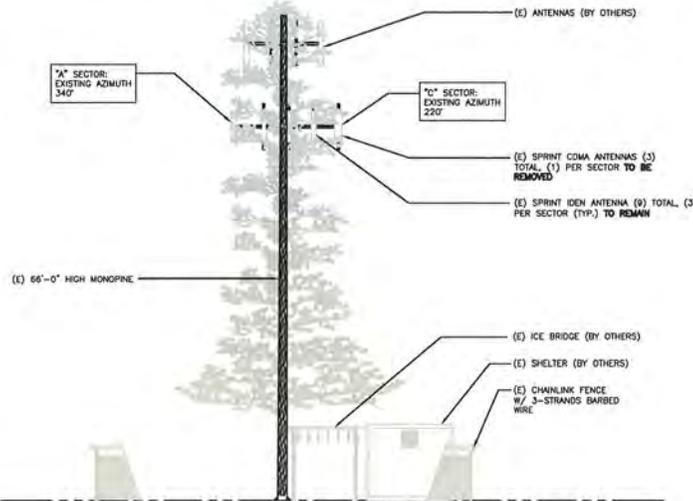
REVISION:

**A-6**

C

NOTES TO CONTRACTOR:  
1. REMOVE ALL EXISTING COAX FROM SITE

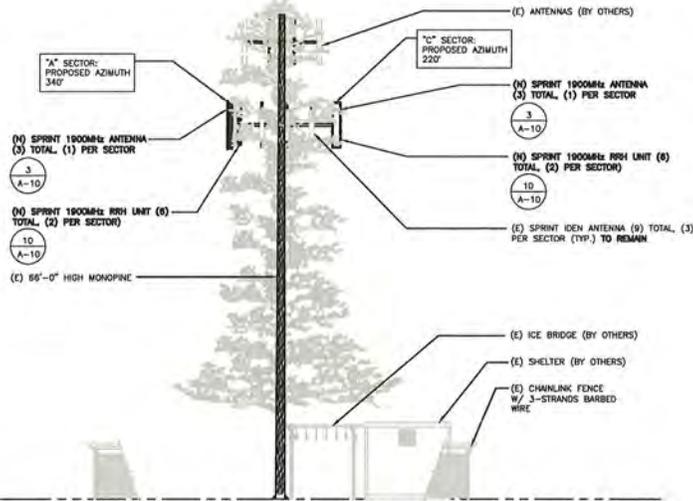
SEE ELEVATION NOTES ON A-5



(E) WEST ELEVATION

SCALE: 1/8" = 1'-0" (24x36)  
(OR) 1/16" = 1'-0" (11x17)

1



(N) WEST ELEVATION

SCALE: 1/8" = 1'-0" (24x36)  
(OR) 1/16" = 1'-0" (11x17)

2

NOTES TO CONTRACTOR:  
 1. REMOVE ALL EXISTING COAX FROM SITE  
 SEE ELEVATION NOTES ON A-5

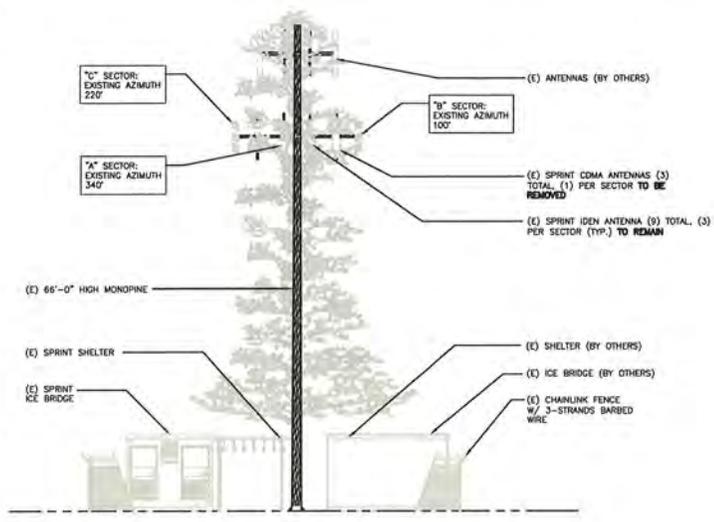
TOP OF (E) MONOPINE  
 ELEV. 66'-0" AGL

RAD CENTER OF (E) ANTENNAS (BY OTHERS)  
 ELEV. 60'-4" AGL

RAD CENTER OF (E) SPRINT ANTENNAS  
 ELEV. 49'-5" AGL

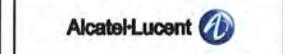
TOP OF (E) SHELTER  
 ELEV. 10'-1" AGL

FINISH GRADE  
 ELEV. 0'-0" REF.



(E) NORTH ELEVATION

SCALE: 1/8" = 1'-0" (24x36)  
 (OR) 1/16" = 1'-0" (11x17) 1



PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH

**CASH**  
 OG73XC760

506 SOUTH FEE ANA  
 PLACENTIA, CA 92870  
 CITY OF PLACENTIA

ISSUE DATE:  
 7/25/2012

ISSUED FOR:  
 90% CD

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	3/28/12	ISSUED FOR 90% CD REVIEW	DC
B	6/17/12	90% CD	JB
C	7/25/12	90% CD	JB

NOT FOR CONSTRUCTION UNLESS  
 LABELED AS CONSTRUCTION SET

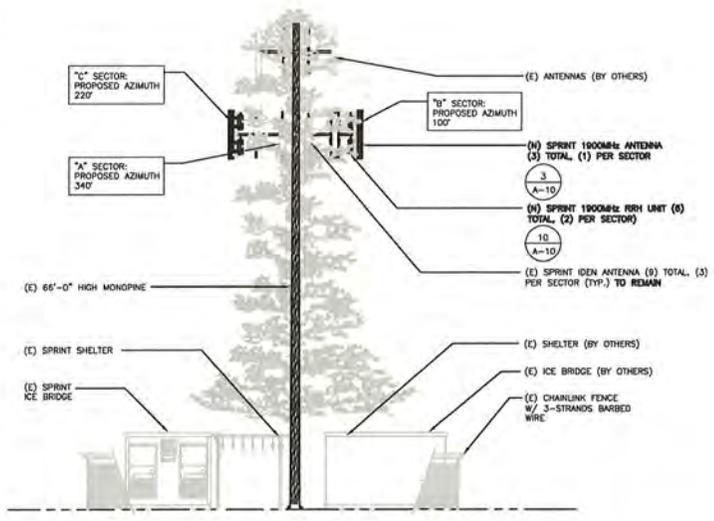
TOP OF (E) MONOPINE  
 ELEV. 66'-0" AGL

RAD CENTER OF (E) ANTENNAS (BY OTHERS)  
 ELEV. 60'-4" AGL

RAD CENTER OF (N) SPRINT ANTENNAS  
 ELEV. 49'-5" AGL

TOP OF (E) SHELTER  
 ELEV. 10'-1" AGL

FINISH GRADE  
 ELEV. 0'-0" REF.



(N) NORTH ELEVATION

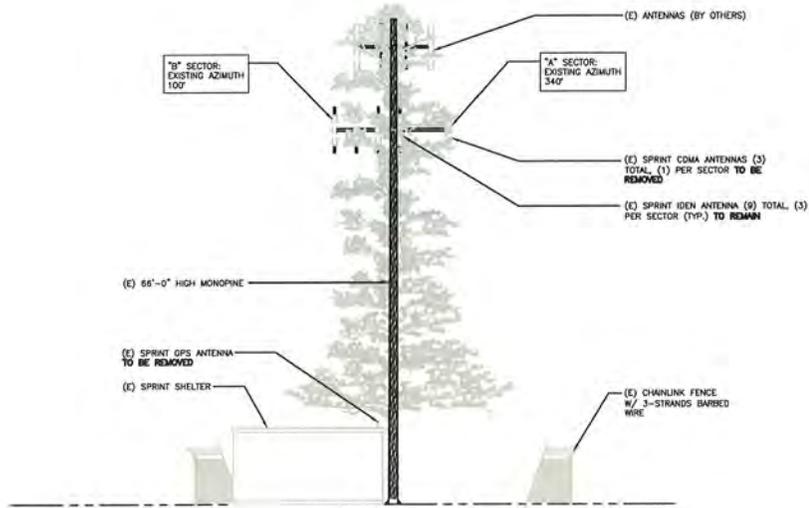
SCALE: 1/8" = 1'-0" (24x36)  
 (OR) 1/16" = 1'-0" (11x17) 2

LICENSURE:

SHEET TITLE:  
 (E) & (N) NORTH ELEVATIONS

SHEET NUMBER: A-7  
 REVISION: C

- TOP OF (E) MONOPINE  
ELEV. 66'-0" AGL
- RAD CENTER OF (E) ANTENNAS (BY OTHERS)  
ELEV. 40'-4" AGL
- RAD CENTER OF (E) SPRINT ANTENNAS  
ELEV. 49'-5" AGL
- TOP OF (E) SHELTER  
ELEV. 10'-1" AGL
- FINISH GRADE  
ELEV. 0'-0" REF.



NOTES TO CONTRACTOR:  
1. REMOVE ALL EXISTING COAX FROM SITE  
SEE ELEVATION NOTES ON A-5

**Sprint**

**Alcatel-Lucent**

**SOC WIRELESS**  
500 AVENUE LINDERO  
CAYLEND, CA 95009  
WWW.ALCAT-SONOS.COM  
916.768.1300

PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH

**CASH**  
OG73XC760

506 SOUTH FEE ANA  
PLACENTIA, CA 92870  
CITY OF PLACENTIA

ISSUE DATE:  
7/25/2012

ISSUED FOR:  
90% CD

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	3/28/12	ISSUED FOR 90% CD REVIEW	DC
B	6/17/12	90% CD	JB
C	7/25/12	90% CD	JB

NOT FOR CONSTRUCTION UNLESS  
LABELED AS CONSTRUCTION SET

LICENSURE:

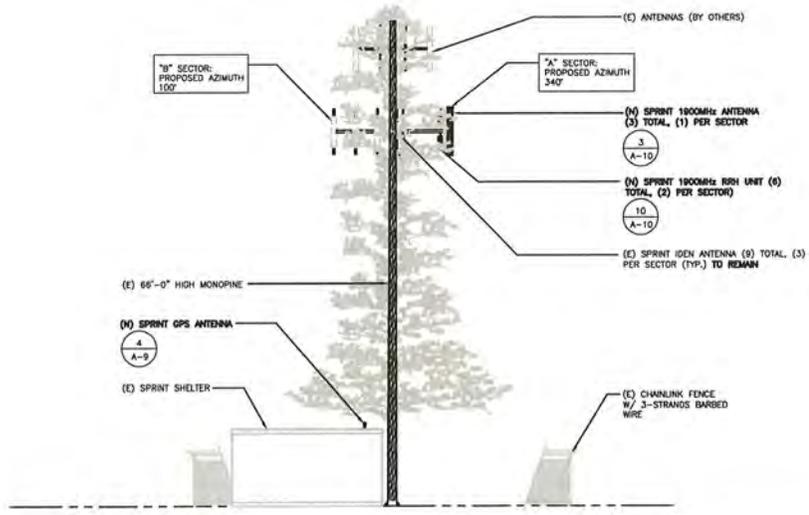
SHEET TITLE:  
**(E) & (N) EAST ELEVATIONS**

SHEET NUMBER: **A-8**      REVISION: **C**

(E) EAST ELEVATION

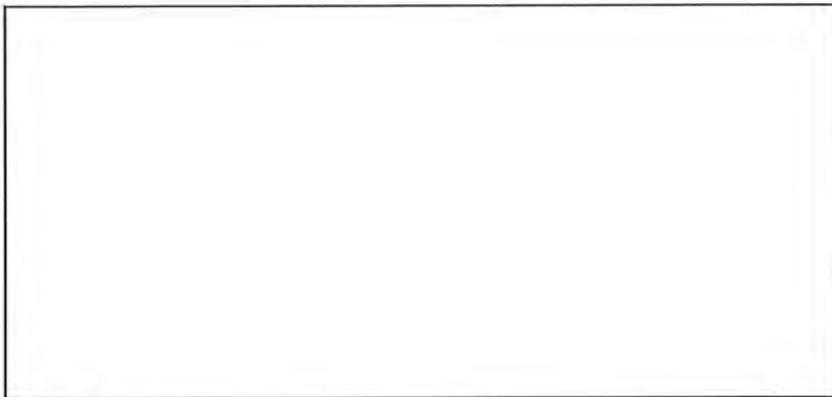
SCALE: 1/8" = 1'-0" (24x36)  
(OR) 1/16" = 1'-0" (11x17)      1

- TOP OF (E) MONOPINE  
ELEV. 66'-0" AGL
- RAD CENTER OF (E) ANTENNAS (BY OTHERS)  
ELEV. 40'-4" AGL
- RAD CENTER OF (N) SPRINT ANTENNAS  
ELEV. 49'-5" AGL
- TOP OF (E) SHELTER  
ELEV. 10'-1" AGL
- FINISH GRADE  
ELEV. 0'-0" REF.



SCALE: 1/8" = 1'-0" (24x36)  
(OR) 1/16" = 1'-0" (11x17)      2

(N) EAST ELEVATION



**NOTES:**

Distribution Box is fitted with 50' of 1/2" Liquid-tight conduit and connectors. This should be:

- split in half (25' per).
- terminated to the Distribution Box as shown.
- run to and coiled as close to where the cabinet is going to be mounted as possible.

Distribution Box is fitted with 26AWG, power cable 15' x 26A. Run red and 26A. Run black. This should be coiled and left inside Distribution Box.

BTS installation team will terminate Liquid tight, run the fiber jumpers and power cables from BTS Cabinet to Distribution Box.

**PROJECT INFORMATION:**

NETWORK VISION MMBTS LAUNCH

**CASH**

**OG73XC760**

506 SOUTH FEE ANA  
PLACENTIA, CA 92870  
CITY OF PLACENTIA

NOT USED

5 (N) FIBER JUNCTION BOX 1

ISSUE DATE:  
7/25/2012

ISSUED FOR:  
90% CD

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	3/28/12	ISSUED FOR 90% CD REVIEW	DC
B	6/17/12	90% CD	JB
C	7/25/12	90% CD	JB

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

NOT USED

6 JUNCTION BOX MOUNTING TO (E) H-FRAME 2

LICENSURE:

MANUFACTURER: PCTEL  
MODEL#: GPS-TMG-HR-26NCH  
DIMENSIONS: 5.0" H x 3.2" D  
WEIGHT: 0.6 LBS.

\*FOR RUNS OVER 201 FT. USE: HB114-1-0813U4-MSF  
PROPERTIES STANDARDS (MEETS OR EXCEEDS):  
FIBER OPTIC: UL94-V0, UL1566  
DC POWER CABLE: UL TYPE XHHW-2, UL 44  
UL-LS LIMITED SMOKE, UL VW1

INDOOR CABLE RUNS:  
MANUFACTURER: RFS  
MODEL: HB114-1-0813U4-MSF  
WEIGHT (LB/FT): 1.08  
MINIMUM BENDING RADIUS  
SINGLE BENDING: 8"  
REPEATED BENDING: 20"  
MAXIMUM CLAMP SPACING: 4.0'  
RECOMMENDED CLAMP SPACING: 3.25'

\*FOR RUNS OVER 201 FT. USE: HB114-1-0813U4-MSJ  
PROPERTIES STANDARDS (MEETS OR EXCEEDS):  
FIBER OPTIC: UL94-V0, UL1566  
DC POWER CABLE: UL TYPE XHHW-2, VW-1

OUTDOOR CABLE RUNS:  
MANUFACTURER: RFS  
MODEL: HB114-1-0813U4-MSJ  
WEIGHT (LB/FT): 1.08  
MINIMUM BENDING RADIUS  
SINGLE BENDING: 8"  
REPEATED BENDING: 20"  
MAXIMUM CLAMP SPACING: 4.0'  
RECOMMENDED CLAMP SPACING: 3.25'

NOT USED

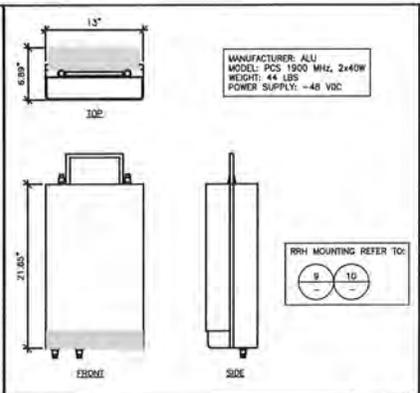
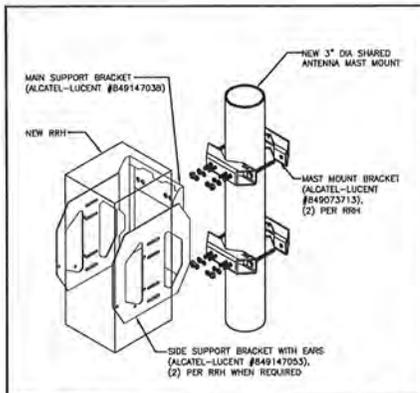
7 GPS ANTENNA 4

SHEET TITLE:  
EQUIPMENT DETAILS

SHEET NUMBER: **A-9** REVISION: **C**

NOT USED

8 NOT USED 7 4 HYBRIFLEX CABLE 3



PROPOSED ANTENNA CONFIGURATION AND SCHEDULE												
SECTOR A	AZMATH	RADCDTR	# OF ANTENNAS	VEHICOR	MODEL	RET	MEDH TLT	E. TLT	COMBER	RRH	FIBER OPTIC	FIBER LENGTH
1900MHz	340	49°-5°	1	RFS	APXVSP18-C-A20	N/A	0	N/A	(1) IBC1900HA-2	(2)	1900MHz	(1) 1-1/4" HYBRIFLEX HB114-1-08U4-MSJ 120'-0"
SECTOR B	AZMATH	RADCDTR	# OF ANTENNAS	VEHICOR	MODEL	RET	MEDH TLT	E. TLT	COMBER	RRH	FIBER OPTIC	FIBER LENGTH
1900MHz	100	49°-5°	1	RFS	APXVSP18-C-A20	N/A	0	N/A	(1) IBC1900HA-2	(2)	1900MHz	(1) 1-1/4" HYBRIFLEX HB114-1-08U4-MSJ 120'-0"
SECTOR C	AZMATH	RADCDTR	# OF ANTENNAS	VEHICOR	MODEL	RET	MEDH TLT	E. TLT	COMBER	RRH	FIBER OPTIC	FIBER LENGTH
1900MHz	220	49°-5°	1	RFS	APXVSP18-C-A20	N/A	0	N/A	(1) IBC1900HA-2	(2)	1900MHz	(1) 1-1/4" HYBRIFLEX HB114-1-08U4-MSJ 120'-0"

DATE OF RFDS: 12-07-11

**Sprint**

**Alcatel-Lucent**

**SDC**  
WIRELESS  
SOLUTIONS GROUP

580 AVENUE ENRIQUE  
CORONA, CA 92608  
WWW.ALCATEL-LUCENT.COM  
180.76.330

PROJECT INFORMATION

NETWORK VISION MMBTS LAUNCH

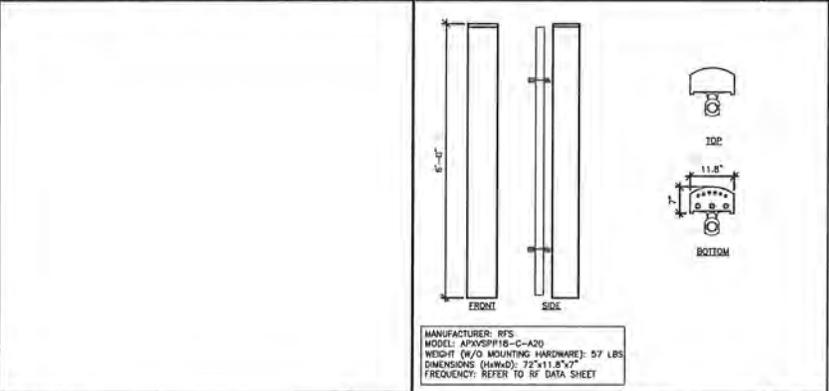
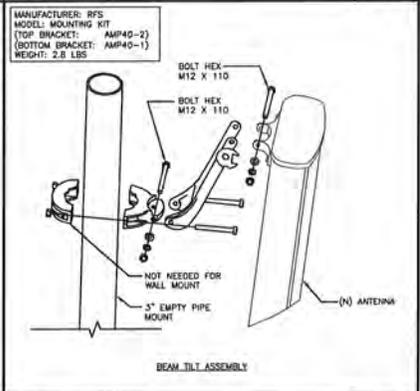
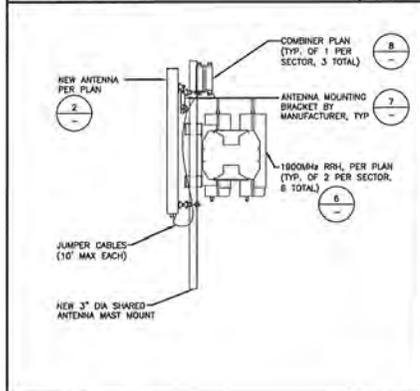
**CASH**  
**OG73XC760**

506 SOUTH FEE AVE  
PLACENTIA, CA 92870  
CITY OF PLACENTIA

RRH MOUNTING 9

1900 MHz RRH 6

(N) ANTENNA CONFIGURATION AND SCHEDULE 1



ISSUE DATE: 7/25/2012

ISSUED FOR: 90% CD

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	3/28/12	ISSUED FOR 90% CD REVIEW	DC
B	6/17/12	90% CD	JB
C	7/25/12	90% CD	JB

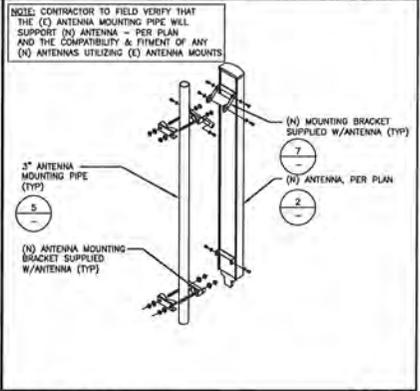
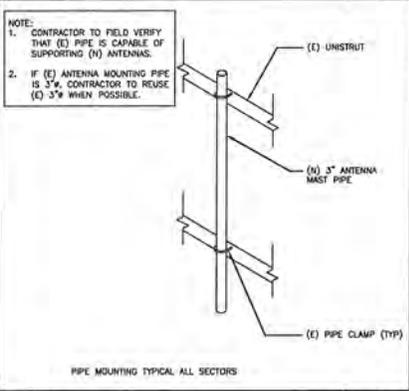
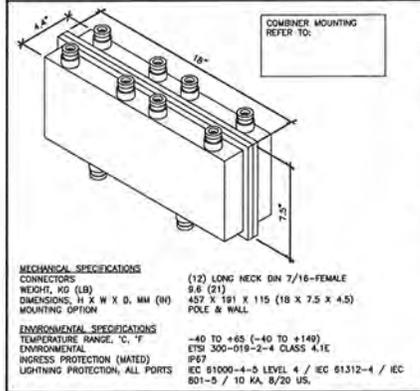
NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

1900MHz MOUNTING 10

MOUNTING KIT 7

NOT USED 4

(N) PANEL ANTENNA (1900MHz) 2



LICENSURE:

SHEET TITLE: CONSTRUCTION DETAILS

SHEET NUMBER: A-10 REVISION: C

COMBINER IBC1900HA-2 8

PIPE MOUNTING 5

ANTENNA MOUNTING 3

ANTENNA MOUNTING 3

PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH

**CASH**  
OG73XC760  
506 SOUTH FEE ANA  
PLACENTIA, CA 92870  
CITY OF PLACENTIA

ISSUE DATE:

7/25/2012

ISSUED FOR:

90% CD

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	5/28/12	ISSUED FOR 90% CD REVIEW	DC
B	6/17/12	90% CD	JB
C	7/25/12	90% CD	JB

NOT FOR CONSTRUCTION UNLESS  
LABELED AS CONSTRUCTION SET

LICENSURE:

SHEET TITLE:

(N) COLOR CODING

SHEET NUMBER:

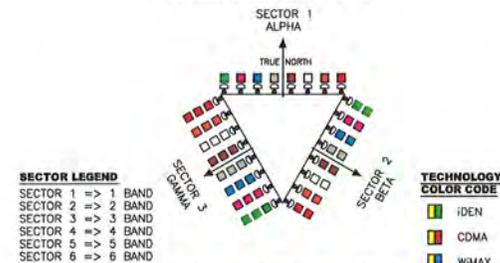
A-11

REVISION:

C

**ANTENNA AND CABLE  
COLOR CODING**

(3 SECTORED / MULTIPLE RF CHANNELS)  
ASSUMING 8 LINES AND ANTENNAS

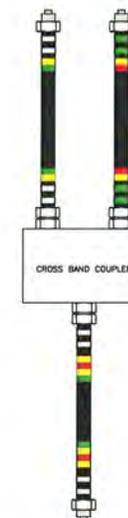


EXAMPLE - SECTOR 2, CABLE 2, 800MHz RADIO #1

EXAMPLE - SECTOR 3, CABLE 1, 1900MHz RADIO #1

EXAMPLE - SECTOR 1, CABLE 4, 800MHz RADIO #1  
AND 1900MHz RADIO #1

- COLOR BAND TO BE 2" WIDE ON MAIN LINE.
- SPACING TO BE 1" BETWEEN BANDS AND 2" BETWEEN LINE AND TECHNOLOGY BANDS. NO SPACE BETWEEN TECHNOLOGY COLOR BANDS.
- COLOR BAND ON JUMPERS 1" WIDE W/ 1" SPACE.
- START COLOR BANDS 2" BEYOND WEATHERPROOFING.
- START SECTOR COLOR NEXT TO END CONNECTOR.



**1 ANTENNA & CABLE COLOR CODE**

SCALE: N.T.S.

**TYPICAL COAX CABLE COLOR CODING SCHEME**

SECTOR	CABLE	FIRST RING	SECOND RING	THIRD RING
1 ALPHA	1	GREEN	NO TAPE	NO TAPE
	2	BLUE	NO TAPE	NO TAPE
	3	BROWN	NO TAPE	NO TAPE
	4	WHITE	NO TAPE	NO TAPE
	5	RED	NO TAPE	NO TAPE
	6	SLATE	NO TAPE	NO TAPE
	7	PURPLE	NO TAPE	NO TAPE
	8	ORANGE	NO TAPE	NO TAPE
2 BETA	1	GREEN	GREEN	NO TAPE
	2	BLUE	BLUE	NO TAPE
	3	BROWN	BROWN	NO TAPE
	4	WHITE	WHITE	NO TAPE
	5	RED	RED	NO TAPE
	6	SLATE	SLATE	NO TAPE
	7	PURPLE	PURPLE	NO TAPE
	8	ORANGE	ORANGE	NO TAPE
3 GAMMA	1	GREEN	GREEN	GREEN
	2	BLUE	BLUE	BLUE
	3	BROWN	BROWN	BROWN
	4	WHITE	WHITE	WHITE
	5	RED	RED	RED
	6	SLATE	SLATE	SLATE
	7	PURPLE	PURPLE	PURPLE
	8	ORANGE	ORANGE	ORANGE

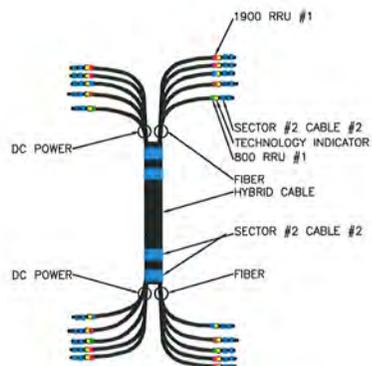
**4 COAXIAL CABLE COLOR CODE**

SCALE: N.T.S.

TECHNOLOGY COLOR CODE	FIRST RING	SECOND RING
800 #1	YELLOW	GREEN
1900 #1	YELLOW	RED
1900 #2	YELLOW	BROWN
RESERVED	YELLOW	BLUE
RESERVED	YELLOW	SLATE
RESERVED	YELLOW	ORANGE
RESERVED	YELLOW	WHITE

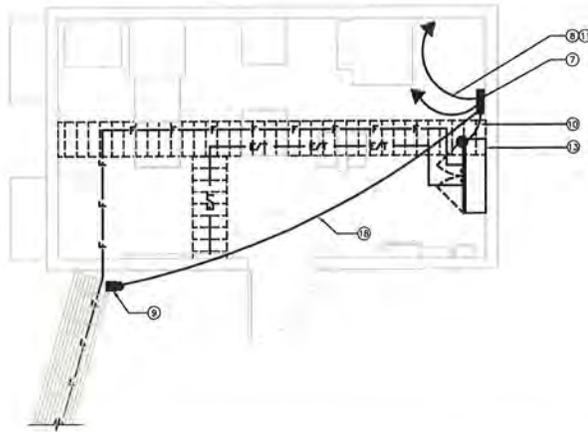
**2 FREQUENCY COLOR CODE**

SCALE: N.T.S.

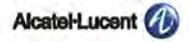


**3 HYBRID CABLE COLOR CODE**

SCALE: N.T.S.



- GROUNDING KEYS/NOTES:**
- ① ANTENNA GROUND BUSS BAR NEAR ANTENNA MOUNTS WITH COAX GROUND KIT. SEE DETAIL 6/G-2 FOR GROUND BAR CONSTRUCTION. SEE DETAIL 6/G-2 FOR GROUND WIRE CONNECTIONS, AND SEE DETAIL 4/G-2 FOR COAX GROUNDING.
  - ② #6 AWG GROUND FROM ANTENNA GROUND BUSS BAR TO TIE INTO (E) ROOF GROUNDING SYSTEM (TYP OF (2) PLACES)
  - ③ #6 AWG ANTENNA MOUNT GROUND TO ANTENNA GROUND BUSS BAR (TYP OF 8)
  - ④ #6 AWG GROUND FROM RRH UNITS TO ANTENNA GROUND BUSS BAR
  - ⑤ #6 AWG GROUND FROM H-FRAME TO TIE INTO (E) GROUND BUSS BAR
  - ⑥ #6 AWG GROUND FROM BSU CABINET TO TIE INTO (E) GROUND BUSS BAR
  - ⑦ (E) GROUND BUSS BAR NEAR EQUIPMENT WITH COAX GROUND KIT. SEE DETAIL 4/G-2 FOR GROUND BAR CONSTRUCTION, SEE DETAIL 3/G-2 FOR GROUND WIRE CONNECTIONS, AND SEE DETAIL 2/G-2 FOR COAX GROUNDING.
  - ⑧ #6 AWG GROUND FROM (E) GROUND BUS BAR TO TIE INTO (E) ROOF GROUNDING SYSTEM (TYP OF (2) PLACES)
  - ⑨ CAD WELD (TYP).
  - ⑩ #6 AWG GROUND FROM FIBER JUNCTION BOX TO TIE INTO (E) GROUND BUSS BAR
  - ⑪ GC SHALL VERIFY (2) #6 AWG THIN GROUND LEADS FROM EACH OF TWO REMOTE INDIVIDUAL BUSES TO BE COLLECTED AT ONE MAIN MCB AND FURTHER ROUTED TO (E) BUILDING STEEL OR OTHER (E) DESIGNATED BUILDING GROUNDING SYSTEM (FINAL DESIGNATED POINT OF GROUNDING TO BE COORDINATED BETWEEN CM, GC AND BUILDING OWNER).
  - ⑫ ALL ROOF TOP GROUND LEADS SHALL BE THERMOPLASTIC HIGH HEAT-RESISTANT NYLON-COATED (THIN).
  - ⑬ (N) SPRINT FIBER JUNCTION BOX MOUNTED ON (N) H-FRAME. CONTRACTOR TO FIELD VERIFY LOCATION DURING CONSTRUCTION
  - ⑭ (N) SPRINT BATTERY CABINET (800C02) TO BE INSTALLED
  - ⑮ (N) SPRINT MOCCELL BITS CABINET (9227) TO BE INSTALLED
  - ⑯ (E) CLEARWIRE RACK
  - ⑰ #6 AWG GROUND FROM MOCCELL CABINET TO TIE INTO (E) GROUND BUSS BAR
  - ⑱ #6 AWG GROUND FROM (N) GPS ANTENNA TO TIE INTO (E) GROUND BUSS BAR



**PROJECT INFORMATION:**

NETWORK VISION MMBTS LAUNCH

**CASH**  
**OG73XC760**  
 505 SOUTH FEE ANA  
 PLACENTIA, CA 92870  
 CITY OF PLACENTIA

ISSUE DATE:

7/25/2012

ISSUED FOR:

90% CD

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	3/26/12	ISSUED FOR 90% CD REVIEW	DC
B	6/17/12	90% CD	JB
C	7/25/12	90% CD	JB

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE:

SHEET TITLE:

SCHEMATIC GROUNDING PLANS

SHEET NUMBER:

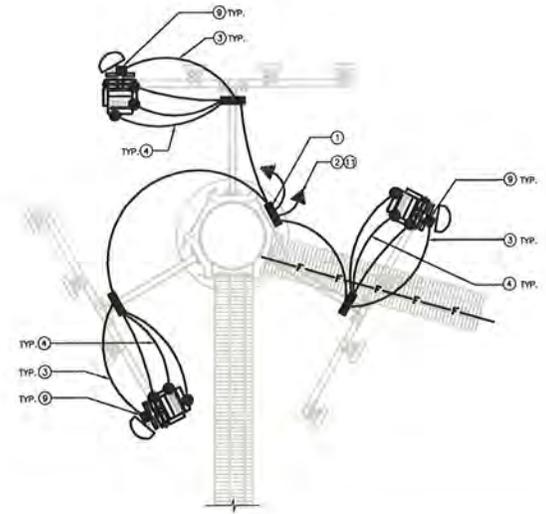
**G-1**

REVISION:

**C**

EQUIPMENT SCHEMATIC GROUNDING PLAN

SCALE: 3/8" = 1'-0" (22x34)  
 (OR) 3/16" = 1'-0" (11x17) 2



SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
⊗	COPPER GROUND ROD	⊗	TEST WELL
●	MECHANICAL CONNECTION	■	GROUND BAR
■	CADWELD CONNECTION	—	
↖	FIELD VERIFY & TIE INTO (E) GROUNDING SYSTEM	—	

**GROUNDING NOTES & LEGEND**

- GENERAL GROUNDING NOTES**
1. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.
  2. GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE MOUNTED BUS BARS. FOLLOW ANTENNA AND BITS MANUFACTURERS PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS AND EXIT FROM TOWER OR POLE USING MFR'S PRACTICES.
  3. ALL GROUND CONNECTIONS SHALL BE CADWELD. ALL WIRES SHALL BE COPPER THIN/THIN. ALL GROUND WIRE SHALL BE GREEN INSULATED WIRE ABOVE GROUND.
  4. CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE. GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY SPRINT WIRELESS, LLC REPRESENTATIVE.
  5. REFER TO DIVISION 16 GENERAL ELECTRIC; GENERAL ELECTRICAL PROVISION AND COMPLY WITH ALL REQUIREMENTS OF GROUNDING STANDARDS.
  6. CONTRACTOR TO ABIDE BY ALL ALL / SPRINT SAFETY STANDARDS DURING SITE CONSTRUCTION.
  7. CONTRACTOR SHALL REFER TO ALL / SPRINT STANDARDS FOR GROUNDING CONNECTIONS & INSTALLATION METHODS.
  8. ELECTRICAL CONTRACTOR TO PROVIDE DETAILED DESIGN OF GROUNDING SYSTEM, AND RECEIVE APPROVAL OF DESIGN BY AUTHORIZED SPRINT MOBILITY REPRESENTATIVE, PRIOR TO INSTALLATION OF GROUNDING SYSTEM. PHOTO DOCUMENT ALL CADWELDS AND GROUND RING.
  9. NOTIFY CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.

**GROUNDING ROD NOTES**  
 (WHERE APPLICABLE)  
 ELECTRICAL CONTRACTOR SHALL ORDER GROUND RESISTANCE TESTING ONCE THE GROUND SYSTEM HAS BEEN INSTALLED. A QUALIFIED INDIVIDUAL, UTILIZING THE FALL OF POTENTIAL METHOD, SHOULD PERFORM THE TEST. THE REPORT WILL SHOW THE LOCATION OF THE TEST AND CONTAIN NO LESS THAN 8 TEST POINTS ALONG THE TESTING LINE, GRIPPED OUT TO SHOW THE PLATEAU.  
 2 POINT GROUND TEST OR 3 POINT 62% TESTS WILL NOT BE ACCEPTED AS ALTERNATIVES TO THE AFORE MENTIONED GROUND TESTS. TEST SHALL BE PERFORMED WHILE THE COUNTERPOISE IS ISOLATED FROM THE A/C SYSTEM GRIDS AND (E) COMMUNICATIONS FACILITY.

ANTENNA SCHEMATIC GROUNDING PLAN

SCALE: 3/8" = 1'-0" (22x34)  
 (OR) 3/16" = 1'-0" (11x17) 1

PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH

**CASH**  
OG73XC760  
506 SOUTH FEE ANA  
PLACENTIA, CA 92870  
CITY OF PLACENTIA

ISSUE DATE:

7/25/2012

ISSUED FOR:

90% CD

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	3/28/12	ISSUED FOR 90% CD REVIEW	DC
B	6/17/12	90% CD	JB
C	7/25/12	90% CD	JB

NOT FOR CONSTRUCTION UNLESS  
LABELED AS CONSTRUCTION SET

LICENSURE:

SHEET TITLE:

**GROUNDING DETAILS**

SHEET NUMBER:

REVISION:

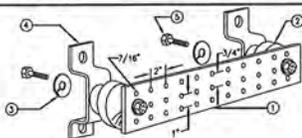
**G-2**

C

NOT USED 8

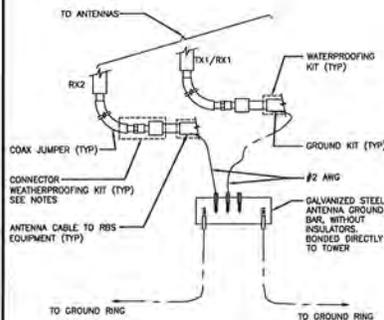
NOT USED 7

NOT USED 2

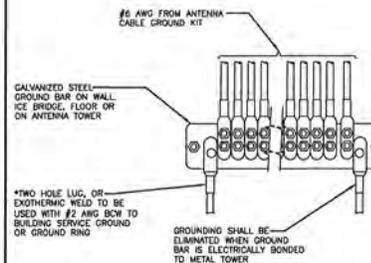


1. GALVANIZED STEEL GROUND BAR, HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION. (ACTUAL GROUND BAR SIZE WILL VARY BASED ON NUMBER OF GROUND CONNECTIONS)
2. INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4 OR APPROVED EQUAL.
3. 5/8" LOCK WASHERS, NEWTON INSTRUMENT CO., CAT. NO. 3015-8 OR APPROVED EQUAL.
4. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO., CAT NO. A-6056 OR APPROVED EQUAL.
5. 5/8-11 X 1" HHCS BOLTS, NEWTON INSTRUMENT CO., CAT NO. 3012-1 OR APPROVED EQUAL.
6. INSULATORS SHALL BE ELIMINATED WHEN BONDING DIRECTLY TO TOWER/MONOPOLE STRUCTURE. CONNECTION TO TOWER/MONOPOLE STRUCTURE SHALL BE PER MANUFACTURERS RECOMMENDATIONS.

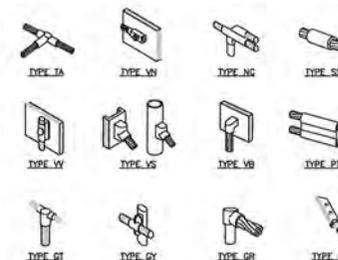
GROUND BAR 6



GROUND CABLE CONNECTION 5



GROUND WIRE INSTALLATION 4



EXOTHERMIC WELD CONNECTIONS 1





(E) HOP/MEET POINT

6



(E) SIGNAGE

5



(E) POINT OF FEED

4



PROJECT INFORMATION:

SPRINT WORK VISION BACKHAUL PROJECT

**CASH**  
OG73XC760  
506 SOUTH FEE ANA  
PLACENTIA, CA 92870  
CITY OF PLACENTIA

ISSUE DATE:

7/23/2012

ISSUED FOR:

90% CD REVIEW

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	7/23/12	ISSUED FOR 90% CD REVIEW	JB
B	9/14/12	ISSUED FOR 90% CD REVIEW	XS

NOT FOR CONSTRUCTION UNLESS  
LABELED AS CONSTRUCTION SET

LICENSURE:

SHEET TITLE:

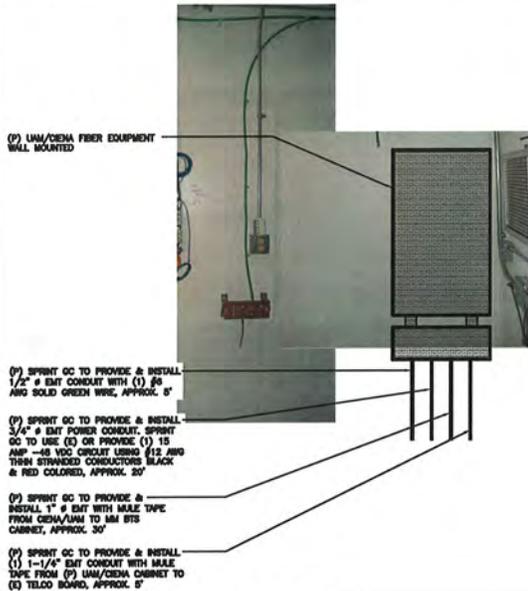
SITE PHOTOS

SHEET NUMBER:

T-2

REVISION:

B



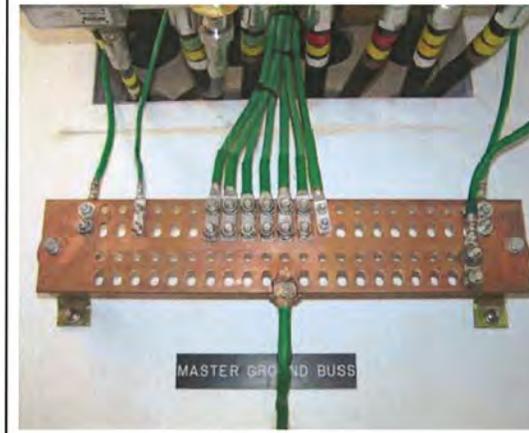
(N) UAM/CIENA LOCATION & CONDUIT RUN

3



-48 VDC POWER SOURCE ELTEK RECTIFIER PLANT

2



(E) GROUND BAR

1





PROJECT INFORMATION:

SPRINT WORK VISION BACKHAUL PROJECT

CASH  
OG73XC760

506 SOUTH FEE AVE  
PLACENTIA, CA 92870  
CITY OF PLACENTIA

ISSUE DATE:

7/23/2012

ISSUED FOR:

90% CD REVIEW

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	7/23/12	ISSUED FOR 90% CD REVIEW	JB
B	9/14/12	ISSUED FOR 90% CD REVIEW	XS

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSE:

SHEET TITLE:

EQUIPMENT DETAILS

SHEET NUMBER:

A-3

REVISION:

B

NOT USED

7

NOT USED

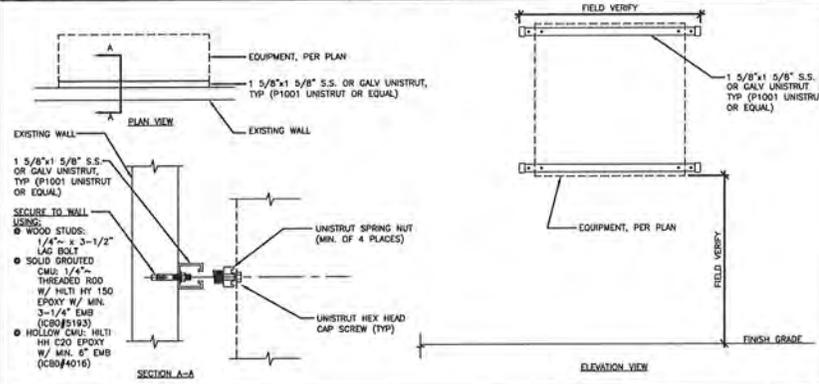
6

NOT USED

5

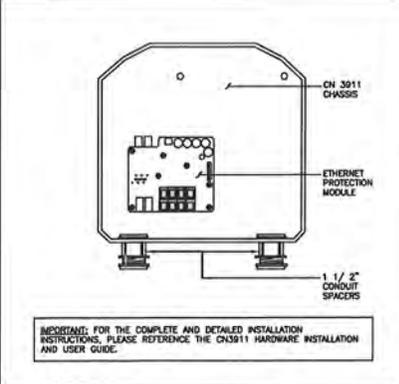
NOT USED

4



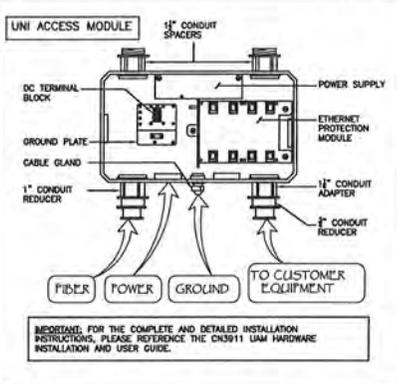
EQUIPMENT - WALL MOUNTED

3



CIENA 3911

2



UAM CIENA

1



## **EXECUTIVE SUMMARY**

### **Purpose of Report**

EnviroBusiness Inc. (dba EBI Consulting) has been contracted by Sprint Nextel to conduct radio frequency electromagnetic (RF-EME) monitoring and modeling for Sprint Site OG73XC760 located at 506 South Fee Ana in Placentia, California to determine RF-EME exposure levels from existing and proposed Sprint wireless communications equipment at this site. As described in greater detail in Section 11.0 of this report, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general public exposures and occupational exposures. This report summarizes the results of RF-EME monitoring and modeling in relation to relevant FCC RF-EME compliance standards for limiting human exposure to RF-EME fields.

EBI field personnel visited this site on September 28, 2012. This report contains a detailed summary of the RF EME analysis for the site.

This document addresses the compliance of Sprint's proposed transmitting facilities independently and in relation to all collocated facilities at the site.

## **1.0 LOCATION OF ALL EXISTING ANTENNAS AND FACILITIES AND EXISTING RF LEVELS**

This project involves the removal of three (3) existing antennas replaced with three (3) proposed Sprint wireless telecommunication antennas on a monotree located at 506 South Fee Ana in Placentia, California. There are three Sectors (A, B, and C) proposed to be replaced at the site, with one (1) antennas to be re-installed per sector in addition to the three (3) antennas per sector to remain on site.

Based on drawings and aerial photography review, an unknown provider also has wireless antennas on the monotree. These antennas were included in the modeling analysis.

## **2.0 LOCATION OR ALL APPROVED (BUT NOT INSTALLED) ANTENNAS AND FACILITIES AND EXPECTED RF LEVELS FROM THE APPROVED FACILITIES**

There are no antennas or facilities that are approved and not installed based on information provided to EBI and Sprint at the time of this report.

## **3.0 NUMBER AND TYPES OF WTS WITHIN 100 FEET OF THE PROPOSED SITE AND ESTIMATES OF CUMULATIVE EMR EMISSIONS AT THE PROPOSED SITE**

With the exception of the antennas mentioned in Section 1.0, there are no other Wireless Telecommunication Service (WTS) sites observed within 100 feet of the proposed site.

## **4.0 LOCATION AND NUMBER OF THE SPRINT ANTENNAS AND BACK-UP FACILITIES PER BUILDING AND NUMBER AND LOCATION OF OTHER TELECOMMUNICATION FACILITIES ON THE PROPERTY**

Sprint proposes the removal of three (3) existing antennas replaced with three (3) proposed Sprint wireless telecommunication antennas on a monotree located at 506 South Fee Ana in Placentia, California. There are three Sectors (A, B, and C) proposed to be replaced at the site, with one (1) antennas to be re-installed per sector in addition to the three (3) antennas per sector to remain on site.. In each sector, there is proposed to be one antenna transmitting in the 1900 MHz frequency range. The Sector A antennas will be oriented 340° from true north. The Sector B antennas will be oriented 100° from true north. The Sector C antennas will be oriented 220° from true north. The bottoms of the antennas will be 49.1 feet above ground level.

Based on drawings and aerial photography review, an unknown provider also has wireless antennas on the monotree. These antennas were included in the modeling analysis.

## **5.0 POWER RATING FOR ALL EXISTING AND PROPOSED BACKUP EQUIPMENT SUBJECT TO THE APPLICATION**

The operating power for modeling purposes was assumed to be 20 Watts per transmitter and eight (8) transmitters operating at the 1900 MHz.

## **6.0 TOTAL NUMBER OF WATTS PER INSTALLATION AND THE TOTAL NUMBER OF WATTS FOR ALL INSTALLATIONS ON THE BUILDING**

The effective radiated power (ERP) for the 1900 MHz transmitters combined on site is 7,548Watts. The ERPs for other carriers on site was not provided.

## **7.0 PREFERRED METHOD OF ATTACHMENT OF PROPOSED ANTENNA WITH PLOT OR ROOF PLAN INCLUDING: DIRECTIONALITY OF ANTENNAS, HEIGHT OF ANTENNAS ABOVE NEAREST WALKING SURFACE, DISCUSS NEARBY INHABITED BUILDINGS**

Based on the information provided to EBI, the information indicates that the proposed antennas are to be pipe mounted to the monotree, operating in the directions, frequencies, and heights mentioned in section 4.0 above. There are dense industrial communities to the south and dense residential communities to the north.

## **8.0 ESTIMATED AMBIENT RADIO FREQUENCY FIELDS FOR THE PROPOSED SITE**

Based on worst-case predictive modeling, there are no modeled exposures on any accessible ground-level walking/working surface related to proposed equipment in the area that exceed the FCC's occupational and general public exposure limits at this site. As such, the proposed Sprint project is in compliance with FCC rules and regulations. At the nearest walking/working surfaces to the proposed Sprint antennas, the maximum power density is 2.00 percent of the FCC's general public limit (0.40 percent of the FCC's occupational limit). The composite exposure level from all other carriers existing on this site combined with Sprint's proposed antennas is 3.30 percent of the FCC's general public limit (0.66 percent of the FCC's occupational limit) at the nearest walking/working surface to each antenna. The inputs used in the modeling are summarized in the RoofView® export file presented in Appendix B.

There are no modeled areas on the ground that exceed the FCC's limits for general public or occupational exposure in front of the other carrier antennas.

## **9.0 SIGNAGE AT THE FACILITY IDENTIFYING ALL WTS EQUIPMENT AND SAFETY PRECAUTIONS FOR PEOPLE NEARING THE EQUIPMENT AS MAY BE REQUIRED BY THE APPLICABLE FCC ADOPTED STANDARDS (DISCUSS SIGNAGE FOR THOSE WHO SPEAK LANGUAGES OTHER THAN ENGLISH)**

Signs are the primary means for control of access to areas where RF exposure levels may potentially exceed the MPE. It is recommended that additional signage be installed for the new antennas making people aware of the antennas locations. There are no exposures above the FCC limits in front of the proposed antennas and therefore barriers are not recommended.

Additionally, there are areas where workers elevated above the ground may be exposed to power densities greater than the general population and occupational limits. Workers and the general public should be informed about the presence and locations of antennas and their associated fields.

Access to this site is accomplished via a gate in the fence surrounding the tower. Workers must be elevated to antenna level to access them, so these antennas are not accessible to the general public.

## **10.0 STATEMENT ON WHO PRODUCED THIS REPORT AND QUALIFICATIONS**

Please see the certifications attached in Appendix A below.

## **11.0 FEDERAL COMMUNICATIONS COMMISSION (FCC) REQUIREMENTS**

The FCC has established Maximum Permissible Exposure (MPE) limits for human exposure to Radiofrequency Electromagnetic (RF-EME) energy fields, based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of

frequencies, the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC guidelines incorporate two separate tiers of exposure limits that are based upon occupational/controlled exposure limits (for workers) and general public/uncontrolled exposure limits for members of the general public.

**Occupational/controlled exposure limits** apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general public/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

**General public/uncontrolled exposure limits** apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Table I and Figure I (below), which are included within the FCC’s OET Bulletin 65, summarize the MPE limits for RF emissions. These limits are designed to provide a substantial margin of safety. They vary by frequency to take into account the different types of equipment that may be in operation at a particular facility and are “time-averaged” limits to reflect different durations resulting from controlled and uncontrolled exposures.

The FCC’s MPEs are measured in terms of power (mW) over a unit surface area (cm<sup>2</sup>). Known as the power density, the FCC has established an occupational MPE of 5 milliwatts per square centimeter (mW/cm<sup>2</sup>) and an uncontrolled MPE of 1 mW/cm<sup>2</sup> for equipment operating in the 1900 MHz frequency range. For the Sprint equipment operating at 800 MHz, the FCC’s occupational MPE is 2.66 mW/cm<sup>2</sup> and an uncontrolled MPE of 0.53 mW/cm<sup>2</sup>. These limits are considered protective of these populations.

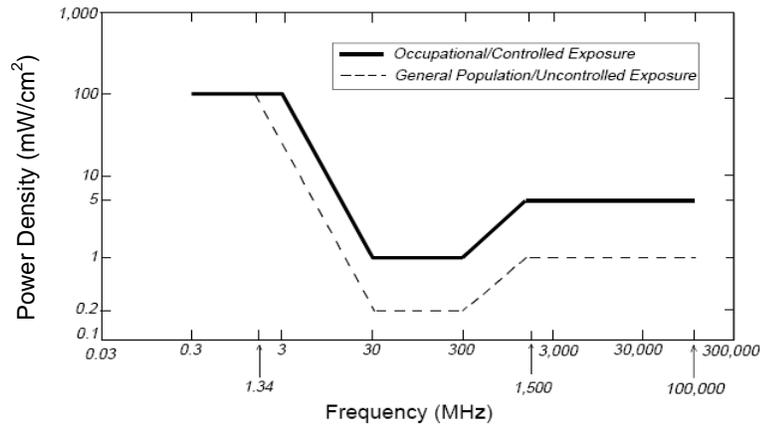
Table I: Limits for Maximum Permissible Exposure (MPE)				
(A) Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time [E] <sup>2</sup> , [H] <sup>2</sup> , or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30-300	61.4	0.163	1.0	6
300-1,500	--	--	f/300	6
1,500-100,000	--	--	5	6
(B) Limits for General Public/Uncontrolled Exposure				

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time [E] <sup>2</sup> , [H] <sup>2</sup> , or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1,500	--	--	f/1,500	30
1,500-100,000	--	--	1.0	30

f = Frequency in (MHz)

\* Plane-wave equivalent power density

Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)  
 Plane-wave Equivalent Power Density



Based on the above, the most restrictive thresholds for exposures of unlimited duration to RF energy for several personal wireless services are summarized below:

Personal Wireless Service	Approximate Frequency	Occupational MPE	Public MPE
Personal Communication (PCS)	1,950 MHz	5.00 mW/cm <sup>2</sup>	1.00 mW/cm <sup>2</sup>
Cellular Telephone	870 MHz	2.90 mW/cm <sup>2</sup>	0.58 mW/cm <sup>2</sup>
Specialized Mobile Radio	855 MHz	2.85 mW/cm <sup>2</sup>	0.57 mW/cm <sup>2</sup>
Most Restrictive Freq, Range	30-300 MHz	1.00 mW/cm <sup>2</sup>	0.20 mW/cm <sup>2</sup>

MPE limits are designed to provide a substantial margin of safety. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

Personal Communication (PCS) facilities used by Sprint in this area operate within a frequency range of 800-1900 MHz. Facilities typically consist of: 1) electronic transceivers (the radios or cabinets) connected to wired telephone lines; and 2) antennas that send the wireless signals created by the transceivers to be received by individual subscriber units (PCS telephones). Transceivers are typically connected to antennas by coaxial cables.

Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for

exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of areas directly in front of the antennas.

### **Statement of Compliance**

A site is considered out of compliance with FCC regulations if there are areas that exceed the FCC exposure limits and there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards.

### **12.0 LIMITATIONS**

This report was prepared for the use of Sprint Nextel. It was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by EBI are based solely on the information collected during the site survey and provided by the client. The observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made

### **13.0 SUMMARY AND CONCLUSIONS**

EBI has prepared this Radiofrequency Emissions Compliance Report for the proposed Sprint telecommunications equipment at the site located at 506 South Fee Ana in Placentia, California.

EBI has conducted theoretical modeling to estimate the worst-case power density from Sprint antennas and the other carriers' existing antennas to document potential MPE levels at this location and ensure that site control measures are adequate to meet FCC and OSHA requirements. As presented in the preceding sections, based on worst-case predictive modeling, there are no modeled exposures on any accessible ground-level walking/working surface related to proposed equipment in the area that exceed the FCC's occupational and general public exposure limits at this site. As such, the proposed Sprint project is in compliance with FCC rules and regulations.

Signage is recommended at the site as presented in Section 9.0. Posting of the signage brings the site into compliance with FCC rules and regulations.

# **Appendix A**

## **Certifications**

Reviewed and Approved by:



A handwritten signature in blue ink that reads "H. Stockinger". The signature is written over the right side of the professional seal.

---

Herbert J. Stockinger, PE  
Senior Engineer

Note that EBI's scope of work is limited to an evaluation of the Radio Frequency – Electromagnetic Energy (RF-EME) field generated by the antennas and broadcast equipment noted in this report. The engineering and design of the building and related structures, as well as the impact of the antennas and broadcast equipment on the structural integrity of the building, are specifically excluded from EBI's scope of work.

## Preparer Certification

I, C Chang, state that:

- I am an employee of EnviroBusiness Inc. (d/b/a EBI Consulting), which provides RF-EME safety and compliance services to the wireless communications industry.
- I have successfully completed RF-EME safety training, and I am aware of the potential hazards from RF-EME and would be classified “occupational” under the FCC regulations.
- I am familiar with the FCC rules and regulations as well as OSHA regulations both in general and as they apply to RF-EME exposure.
- I have reviewed the data collected during the site survey and provided by the client and incorporated it into this Site Compliance Report such that the information contained in this report is true and accurate to the best of my knowledge.



---

## **Appendix B**

### **Roofview® Export File**

Map, Settings, Antenna, and Symbol Data Table .. Exported from workbook -> Roof View RF Template\_ATT Composite.xls  
 Done on 9/28/2012 at 10:36:37 AM.

Use this format to prepare other data sets for the RoofView workbook file.  
 You may use as many rows in this TOP header as you wish.  
 The critical point are the cells in COLUMN ONE that read 'Start...' (eg. StartMapDefinition)  
 If used, these (4) headers are required to be spelled exactly, as one word (eg. StartMapDefinition)  
 The very next row will be considered the start of that data block.  
 The first row of the data block can be a header (as shown below), but this is optional.  
 When building a text file for import, Add the Map info first, then the Antenna data, followed by the symbol data.  
 All rows above the first marker line 'Start...' will be ignored, no matter how many there are.  
 This area is for you use for documentation.  
 End of help comments.

You can place as much text here as you wish as long as you don't place it below  
 the Start Map Definition row below the blue line.  
 You may insert more rows using the Insert menu.  
 Should you need additional lines to document your project, simply insert additional rows  
 by highlighting the row number adjacent to the blue line below and then clicking on the Insert menu  
 and selecting rows.

**StartMapDefinition**

Roof Max Y Roof Max X Map Max Y Map Max X Y Offset X Offset Number of envelope  
 170 170 190 210 20 0 1 \$K\$31:\$FX!\$K\$31:\$FX\$200

List Of Area  
 \$K\$31:\$FX!

**StartSettingsData**

Standard Method Uptime Scale Facto Low Thr Low Color Mid Thr Mid Color Hi Thr Hi Color Over Color Ap Ht Mult Ap Ht Method  
 4 2 1 1 100 1 500 4 5000 2 3 1.5 1

**StartAntennaData**

It is advisable to provide an ID (ant 1) for all antennas

ID	Name	Freq (MHz)	Power	Trans Count	Coax Len	Coax Type	Other Loss	Input Power	Calc Power	Mfg	Model	X (ft)	Y (ft)	Z (ft)	Type	Aper (ft)	dBd Gain	BWdth Pt Dir	Uptime Profile	ON flag
SPT A1	Sprint	1900	20	5	10	1/2 LDF	0.5		84.33348	RFS	APXVSPP18-C-A20	15	18	49.1		6	15.9	65;340		ON•
SPT B1	Sprint	1900	20	5	10	1/2 LDF	0.5		84.33348	RFS	APXVSPP18-C-A20	29	12	49.1		6	15.9	65;100		ON•
SPT C1	Sprint	1900	20	5	10	1/2 LDF	0.5		84.33348	RFS	APXVSPP18-C-A20	18	3	49.1		6	15.9	65;220		ON•
SPT A2	Sprint	1900	20	1			3		10.02374			18	18	49.85		4.5	16	65;340		ON•
SPT A3	Sprint	1900	20	1			3		10.02374			21	18	49.85		4.5	16	65;340		ON•
SPT B2	Sprint	1900	20	1			3		10.02374			27	10	49.85		4.5	16	65;100		ON•
SPT B3	Sprint	1900	20	1			3		10.02374			25	8	49.85		4.5	16	65;100		ON•
SPT C2	Sprint	1900	20	1			3		10.02374			16	5	49.85		4.5	16	65;220		ON•
SPT C3	Sprint	1900	20	1			3		10.02374			14	7	49.85		4.5	16	65;220		ON•
UNK1 A1	Unknown	850	50	1			3		25.05936			15	18	58.58333		3.5	12	63;340		ON•
UNK1 A2	Unknown	850	50	1			3		25.05936			26	18	58.58333		3.5	12	63;340		ON•
UNK1 B1	Unknown	850	50	1			3		25.05936			29	12	58.58333		3.5	12	63;100		ON•
UNK1 B2	Unknown	850	50	1			3		25.05936			24	3	58.58333		3.5	12	63;100		ON•
UNK1 C1	Unknown	850	50	1			3		25.05936			18	3	58.58333		3.5	12	63;220		ON•
UNK1 C2	Unknown	850	50	1			3		25.05936			12	11	58.58333		3.5	12	63;220		ON•

**StartSymbolData**

Sym	Map Mark	Roof X	Roof Y	Map Label	Description ( notes for this table only )
Sym			5	35 AC Unit	Sample symbols
Sym			14	5 Roof Access	
Sym			45	5 AC Unit	
Sym			45	20 Ladder	



# Placentia Planning Commission Agenda Staff Report

<b>AGENDA ITEM NO.:</b> 2	<b>DATE:</b> December 11, 2012	<b>PUBLIC HEARING:</b> Yes
<b>APPLICATION:</b> Use Permit (UP) 2012-12 (Modification to Use Permit 02/05)		
<b>DESCRIPTION:</b> To permit the modification of an existing T-Mobile wireless communication facility on a +/- 65 foot high, freestanding "monopine" and related ground equipment located at 506 S. Fee Ana Street.		
<b>RELATED ITEMS:</b> None		
<b>APPLICANT:</b> T-Mobile C/O Reliant Land Services for T-Mobile (Mr. Tom Mundl)		
<b>PROPERTY OWNER:</b> Mr. Robert Sackett		
<b>LOCATION:</b> 506 S. Fee Ana Street		
<b>CEQA DETERMINATION:</b> Categorically Exempt: Class 3, Section 15303		
<b>ZONING:</b> M – Manufacturing	<b>APN(S):</b> 346-241-13	
<b>GENERAL PLAN:</b> Industrial	<b>CITY COUNCIL ACTION REQUIRED:</b> No	
<b>PREPARED BY:</b> Monique Schwartz, Associate Planner		
<b>REVIEWED BY:</b> Kenneth A. Domer, Assistant City Administrator		

## **REQUEST:**

To permit the modification of an existing wireless communication facility on a +/- 65 foot high freestanding "monopine" and related ground equipment located at 506 S. Fee Ana Street within the Manufacturing (M) District.

## **INTRODUCTION:**

Pursuant to § 23.82.070 of the Placentia Municipal Code, all major wireless communication facilities established in the City are required to obtain Planning Commission approval of a use permit application.

On June 11, 2002, the Planning Commission approved Use Permit (UP) 02/05 to permit the installation of a +/- 65 foot high, freestanding Cingular Wireless communication facility designed as a pine tree, with related ground equipment located next to the "monopine", inside a building, within a +/- 2,500 square foot fenced lease area. The pole was designed to accommodate three co-locations, with Cingular Wireless at the top of the pole. Cingular was approved with 12 panel antennas (4 antennas per sector, 3 sectors total). As specified in approved Special Condition of Approval No. 2 of Use Permit 02/05, "no expansion or modification of the wireless communication facility shall occur at any time without first obtaining Planning Commission approval."

When the existing "monopine" cell tower and related ground equipment was approved by the Planning Commission on June 11, 2002, the wireless communication carrier at that time was Cingular Wireless. The existing "monopine" is now owned and operated by T-Mobile, who has an existing ground lease with Mr. Robert Sackett (owner of 506 S. Fee Ana Street). T-Mobile, the applicant and owner of the pole is proposing to modify

their antennas by replacing 2 existing antennas per sector, for a total of 6 antennas with 6 new upgraded antennas. The ground equipment within the existing building enclosure will essentially remain the same.

**RECOMMENDATION:**

The Planning Division recommends approval of Use Permit 2012-12, which is a modification of a wireless communication facility on an existing +/- 65 foot high freestanding “monopine” and related ground equipment, located at 506 S. Fee Ana Street within the Manufacturing (M) District.

**DISCUSSION:**

**Subject Site and Surrounding Land Uses:**

The subject property is a 30,576 square foot (.702 acres) parcel that is located south of Orangethorpe Avenue, south of the Burlington Northern Santa Fe Railroad, and north of the Orange County Flood Control Channel with access from Fee Ana Street. The property is owned by Mr. Robert Sackett and is currently improved with a 720 square foot house that is being used as an office and a 2,500 square foot fenced area for a “monopine” wireless communication facility and related ground-mounted equipment that is leased to T-Mobile. The remainder of the parcel is being used as a construction storage yard and for storage of vehicles and equipment.

	<b>Existing Land Use</b>	<b>Zoning Map Designation</b>	<b>Land Use Element General Plan Designation</b>
Present	Contractors Storage Yard owned by Mr. Robert Sackett, with Leased Space for a “Monopine” Wireless Communication Facility	Manufacturing (M) District	Industrial
Proposed	Contractors Storage with proposed modifications to the T-Mobile Antennas on Existing “Monopine”	Manufacturing (M) District	Industrial
North	BNSF Railroad/Residential	Planned Unit Development 3 (PUD-3) District	Medium Density Residential
South	Orange County Flood Control Channel	Manufacturing (M) District	Industrial
East	Contractor’s Storage Yard	Manufacturing (M) District	Industrial
West	Vacant Parcel Owned by Orange County Flood Control District	Manufacturing (M) District	Industrial

## **LOCATION ON PROJECT SITE:**

The existing sixty-five (65) foot high “monopine” and adjacent equipment building are located within a 2,500 square foot chain link fenced area along the north-east property line. The submittal site plan indicates that the existing ground lease area will remain the same. T Mobile is proposing to modify their antennas by replacing two existing antennas per sector, for a total of 6 antennas with 6 new upgraded antennas. The ground equipment within the existing building enclosure will remain the same.

## **Height:**

Per Manufacturing (M) District regulations, the maximum permitted height for structures in this district is fifty-four (54) feet. The existing “monopine” is sixty-five (65) feet tall, taller than the maximum allowable height in this district; however, the cell tower “monopine” design is also regulated by Placentia Municipal Code § 23.81.090 (Height limits-Generally) which states that “chimneys, silos, cupolas, flag poles, monuments, gas storage holders, radio and other towers, water tanks, church steeples and similar structures and mechanical appurtenances may be permitted in excess of height limits provided a use permit is first obtained in each case.” Use Permit 02/05 was approved by the Placentia Planning Commission for the existing “monopine” wireless communication facility on June 11, 2002.

The new or modified antennas for T-Mobile will be mounted on the existing “monopine” approximately 63 feet to the centerline of the antennas above the finish grade.

## **Antennas/Operational Characteristics:**

T-Mobile is proposing to keep 6 existing antennas (2 per sector) and install 6 new AIR21 Panel Antennas-integrated radio units (2 per sector). The applicant will also install 3 Tower Mounted Amplifiers (1 per sector) at approximately 63 feet (measured to the center of antennas) above the finish grade. T-Mobile will not be modifying the existing ground equipment within the enclosed 160 square foot structure that is within the existing fenced leased area.

The wireless communication facility will provide twenty-four (24) hour service to T-Mobile customers, seven (7) days a week. A T-Mobile technician will service the facility on a periodic basis; with routine maintenance/inspections of the facility occurring once a month, during normal working hours. T-Mobile requires twenty-four (24) hour access to the facility to ensure that technical support is immediately available, if warranted. The applicant will have keys to access the gate that surrounds the property and the gate that houses the “monopine” and related equipment cabinets.

## **Aesthetics:**

The City's wireless communication facility Ordinance specifically requires operators to consider visual impacts when locating and constructing a major wireless communication facility. The current facility was originally designed to blend into the surrounding environment; however, the existing "monopine" does not meet the standards set forth by the City as evidenced by recent approvals of similar "monopine" facilities. As now required, the trunk and branches of a "monopine" are to be painted brown and the needles are to be multi-shades of green to resemble a living pine tree. The colors are to be subdued and non-reflective to blend with materials and colors in the surrounding area.

A recent site inspection of the existing "monopine" facility shows a facility that is over ten years of age and one that stands out in a negative way when viewed from adjacent areas, including Orangethorpe Avenue. As a condition to this Use Permit, it is required that the pole owner upgrade the aesthetics of the entire facility, per what is shown on page A-3 of the submittal elevations. The facility shall include faux branches down to a level no higher than twelve (12) feet from the ground in a manner that provides a general pine tree appearance (at least 2.25 branches per foot) up to the existing branches. Further, all antenna units are to be painted green or green/brown patterns and shall be covered with panel covers (socks) with matching branch material. The pole owner shall endeavor to work with the other two wireless communication carriers in order to improve the aesthetics of their individual pole locations.

The existing ground leased fenced area is not visible to cars or to the general public. The perimeter of the site is surrounded by a screened chain link fence and the ground leased fenced area is located within the existing construction storage yard. Staff determined that no further screening of the ground-mounted equipment is necessary because it is situated within a contractor's storage yard that is completely screened from public view. A Special Condition of Approval was included with the original Use Permit to require that all cable/utility runs be placed underground.

## **Safety:**

Wireless communication facilities are regulated by the Federal Communications Commission (FCC) and must receive a federal license before transmission can begin. Providers must comply with the American National Standards Institute (ANSI) and Institute of Electrical and Electronic Engineers (IEEE) standards for safe human exposure to radio electromagnetic fields. ANSI and IEEE standards are considered the most appropriate health and safety guidelines for this type of industry. If a wireless communications facility does not maintain ANSI/IEEE mandated standards, their FCC license will be revoked and any authorized use permit would be declared null and void.

FCC rules require transmitting facilities (including wireless) to comply with Radio Frequency (RF) exposure guidelines. The rules have been clarified in several FCC rulemakings but are most conveniently grouped and discussed in the FCC's Office of

Engineering and Technology Bulletin 65, titled, “*Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields.*” The limits established in the guidelines are designed to protect the public health with a very large margin of safety. The limits set forth by the FCC have been endorsed by the Environmental Protection Agency and the Food and Drug Administration. As stated below, the proposed facility, like most facilities, create maximum exposures that are only a small fraction of the limits set by the FCC. Moreover, the limits themselves are many times below levels that are generally accepted as having the potential to cause adverse health effects. Nonetheless, it is recognized that any instance of noncompliance with the guidelines is potentially very serious, and the FCC has therefore implemented procedures to enforce compliance with its rules.

Section 332(c)(7) of the Communications Act (which is identical to § 704(a) of the Telecommunications Act of 1996) does not limit local government authority over siting wireless facilities, but it does set forth specific limitations on local governments. Specifically, 47 U.S.C. § 332(c)(7) (B) (iv) states: “No State or local government or instrumentality thereof may regulate the placement, construction, or modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission’s regulations concerning such emissions.”

Therefore, the authority of the Planning Commission with regard to RF emissions is limited to reviewing the proposed project for planned compliance with the FCC RF emissions safety rules, and to ensure that any special conditions of approval approved with the Use Permit maintain that compliance.

Based on material submitted by T-Mobile, to include the Antenna Site Radiofrequency Emissions Analysis Report, and a letter from Dave Baron, consulting engineer for the telecommunication facility, it is determined that the wireless communications facility will operate at the lowest possible power levels and is below the established standards used by the FCC for safe human exposure to radio frequency electromagnetic fields. These standards have been tested and are considered safe by the American National Standards Institute (ANSI) and the Institute of Electrical Electronics Engineers (IEEE). The attached Special Conditions of Approval (Attachment A) address continued compliance with ground level RF emissions as set forth in Bulletin 65.

Richard Tell Associates, Inc., a retained consulting engineering firm, and David Baron, consulting engineer, evaluated the proposed facility for compliance with appropriate guidelines limiting human exposure to radio frequency electromagnetic fields. The Antenna Site Radiofrequency Emissions Analysis Report, and a letter from Dave Baron have been included as an exhibit to this staff report.

Finally, the applicant indicates that the equipment operates quietly or almost noise free. The equipment does not emit fumes, smoke or objectionable odors.

**Environmental Review**

The proposed use is not expected to create a negative impact on the physical environment. It is City Staff’s opinion that the use is categorically exempt pursuant to the California Environmental Quality Act (CEQA) Guideline § 15303 and City Environmental Guidelines.

Section 15303 allows for exemptions for small new construction projects which do not result in any changes in land use or density. The proposed project involves a minor alteration to an existing site involving a negligible expansion of use beyond that presently existing, and will not result in an increase of more than 50 percent of the floor area, nor more than 2,500 square feet. As a result, City Staff recommends that the Planning Commission find that the use is categorically exempt from CEQA.

**Actions:**

Adopt Resolution No. PC-2012-20 approving Use Permit (UP) 2012-12, subject to the Special Conditions of Approval and Standard Development Requirements set forth therein.

Prepared and submitted by:

Reviewed and approved by:

\_\_\_\_\_  
Monique B. Schwartz  
Associate Planner



\_\_\_\_\_  
Kenneth A. Domer  
Assistant City Administrator

**Attachments:**

Attachment A: Special Conditions of Approval and Standard Development Requirements

**Exhibits:**

- Exhibit 1: Vicinity Map
- Exhibit 2: Site Plan
- Exhibit 3: Floor Plan
- Exhibit 4: Elevations
- Exhibit 5: Antenna Site Radiofrequency Emissions Analysis Report and Letter from David Baron, Consulting Engineer

RESOLUTION NO. PC-2012-20

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PLACENTIA APPROVING USE PERMIT NO. 2012-12 PERTAINING TO MODIFICATIONS TO A T-MOBILE WIRELESS COMMUNICATION FACILITY ON PROPERTY LOCATED AT 506 S. FEE ANA STREET AND MAKING FINDINGS IN SUPPORT THEREOF.

**A. Recitals.**

(i). Reliant Land Services for T-Mobile, ("Applicant" hereinafter) and Mr. Robert Sackett, the property owner, have filed an application for approval of Use Permit No. 2012-12 on property located at 506 S. Fee Ana Street, as described in the title of this Resolution. Hereinafter, in this Resolution, the subject Use Permit request is referred to as the "Application".

(ii). On December 11, 2012 this Commission conducted a duly noticed public hearing, as required by law, and concluded said hearing prior to the adoption of this Resolution.

(iii). All legal prerequisites to the adoption of this Resolution have occurred.

**B. Resolution.**

NOW, THEREFORE, it is hereby found, determined and resolved by the Planning Commission of the City of Placentia as follows:

1. The Commission hereby specifically finds that all of the facts set forth in the Recitals, Part A., of this Resolution are true and correct.

2. Based upon substantial evidence presented to this Commission during the public hearing conducted with regard to the Application, including written staff reports, verbal testimony and development plans, this Commission hereby specifically finds as follows:

a. The proposed use will not be: (1) detrimental to the health, safety or general welfare of the persons residing or working within the neighborhood of the proposed use or within the city, or (2) injurious to the property or improvements within the neighborhood or within the city. Subject to compliance with the attached Special Conditions of Approval and Standard Development Requirements (Attachment "A"), this use complies with all applicable code requirements and development

standards of the "M" Manufacturing District and Placentia Municipal Code Chapter 23.82, Wireless Communication Facilities.

b. According to the submitted Radiofrequency Emissions Analysis Report and the letter from David Baron, applicant retained engineer, the proposed T Mobile modifications are regulated by the Federal Communications Commission (FCC) and will operate within the frequencies established for Specialized Mobile Radio operators. The T-Mobile wireless telecommunication facility will operate at the lowest possible power levels that are below established standards used by the FCC for safe human exposure to radio frequency electromagnetic fields. These standards have been tested and considered safe by the American National Standards Institute (ANSI) and the Institute of Electrical and Electronics Engineers (IEEE). Included with the application is a Report of Compliance with FCC/FAA from Richard A. Tell of Richard Tell Associates, Inc., Consulting Engineer and a letter from David Baron, consulting engineer concluding that the facility will comply with the prevailing standards for limiting public exposure to radio frequency energy and will not cause a significant impact on the environment.

c. With adherence to the Conditions of Approval related to aesthetic improvements, the wireless communication facility will not have a visual or aesthetic impact on the property or in the immediate vicinity. The facility shall include the installation of faux branches down to a level no higher than twelve (12) feet from the ground in a manner that provides a general pine tree appearance (at least 2.25 branches per foot) up to the existing branches. Further, all antenna units are to be painted green or green/brown patterns and shall be covered with panel covers (socks) with matching branch material. Special Conditions of Approval have been included to require that all new cable/utility runs are to be placed underground. The applicant has indicated that there will not be any modifications to the existing ground mounted equipment cabinets that are located within an enclosed building in the fenced lease area. The applicant has indicated that the T-Mobile equipment operates quietly or almost noise free and the equipment does not emit fumes, smoke or objectionable odors.

d. The proposed use is consistent with the City's General Plan. The General Plan Land Use designation for the subject site is "Industrial", and the proposed use does not involve any change in the land use of the subject site. Wireless communications facilities are permitted in the "M" Manufacturing District.

e. The proposed use, activity or improvements, subject to the attached Special Conditions of Approval and Standard Development Requirements (Attachment "A"), is consistent with the provisions of the Zoning Ordinance or regulations applicable to the property. The proposed use is a permitted use in the "M" Manufacturing District in the City of Placentia.

f. Conditions necessary to secure the purposes of this section, including guarantees and evidence of compliance with conditions are made part of the Use Permit approval. Attachment "A" contains Special Conditions of Approval and Standard Development Requirements specific to Use Permit 2012-12 to ensure compliance with the Placentia Municipal Code.

3. The Planning Commission specifically finds that the Application is Categorically Exempt pursuant to the California Environmental Quality Act of 1970, as amended, the Guidelines promulgated thereunder (14 CCR § 15303) and Placentia Environmental Guidelines.

4. The Planning Commission hereby directs that, upon approval of Use Permit 2012-12, a Notice of Exemption be filed with the Orange County Clerk/Recorder.

5. Based upon the findings and conclusions set forth herein, this Planning Commission hereby approves Use Permit 2012-12 as modified herein, and specifically subject to the conditions set forth in Attachment "A" attached hereto and by this reference incorporated herein.

6. The Secretary to the Planning Commission shall:

- a. Certify to the adoption of this Resolution; and
- b. Forthwith transmit a certified copy of this Resolution, by certified mail, to the Applicant at the address of record set forth in the Application.

ADOPTED AND APPROVED this 11th day of December, 2012.

---

Chairman

I, Kenneth A. Domer, Secretary to the Planning Commission of the City of Placentia, do hereby certify that the foregoing Resolution was introduced at a regular meeting of the Planning Commission of the City of Placentia held on the 11<sup>th</sup> day of December, 2012, and was passed at this regular meeting of the Planning Commission of the City of Placentia held on the 11<sup>th</sup> day of December, 2012, by the following vote:

AYES:	COMMISSION MEMBERS:
NOES:	COMMISSION MEMBERS:
ABSENT:	COMMISSION MEMBERS:
ABSTAINED:	COMMISSION MEMBERS:

ATTEST:

---

Secretary to the Planning Commission

APPROVED AS TO FORM:

---

Andrew V. Arczynski,  
City Attorney

## Attachment "A"

### Special Conditions of Approval and Standard Development Requirements for Use Permit (UP) 2012-12

## SPECIAL CONDITIONS

If the above referenced application is approved, applicant and/or property owner shall comply with the Special Conditions listed below and the Standard Development Requirements attached.

**ALL OF THE FOLLOWING SPECIAL CONDITIONS OF APPROVAL AND STANDARD DEVELOPMENT REQUIREMENTS SHALL BE FULLY COMPLIED WITH FOR THE USE PERMIT TO CONTINUE IN GOOD STANDING.**

#### **CITY PLANNING DIVISION:**

1. Use Permit (UP) 2012-12 is valid for a period of twelve (12) months from the date of final determination. If the use approved by this action is not established within such a period of time, this approval shall be terminated and shall be null and void.
2. Use Permit (UP) 2012-12 shall expire and be of no further force or effect if the use is discontinued or abandoned for a period of one (1) year.
3. The applicant shall, as a condition of project approval, at its sole expense, defend, indemnify and hold harmless the City, its officers, employees, agents and consultants from any claim, action, proceeding, liability or judgment against the City, its officers, employees, agents and/or consultants, which action seeks to set aside, void, annul or otherwise challenge any approval by the City Council, Planning Commission, or other City decision-making body or City staff action concerning applicant's project. The applicant shall pay the City's defense costs, including attorney fees and all other litigation-related expenses, and shall reimburse the City for any and all court costs, which the City may be required to pay as a result of such defense. The applicant shall further pay any adverse financial award which may issue against the City including but not limited to any award of attorney fees to a party challenging such project approval. The City shall retain the right to select its counsel of choice in any action referred to herein, subject to notice to the applicant. The City agrees to promptly notify the applicant of any such claim filed against the City and to fully cooperate in the defense of any such action.
4. Prior to any modifications to the plans that would affect the location or visibility of the wireless communication facility and/or the ground installation; the applicant shall obtain prior written approval from the Development Services Department.

5. No expansion or modification of the wireless communications facility shall occur at any time without first obtaining approval from the Development Services Department. The Director, or designee, may require that an expansion or future modification of the use permit requires Planning Commission discretionary review.
6. Applicant shall obtain approval of a Building and Zoning Compliance Application and shall obtain a valid Business License prior to the issuance of any building permits. Business Licenses for all sub-contractors shall be obtained.
7. Applicant shall provide to the Development Services Department a preliminary report and field report, both prepared by a licensed engineer, indicating that the operation of the facility is in full conformance with the standards established by the American National Standards Institute (ANSI) and the Institute of Electrical and Electronics Engineers (IEEE) for safe human exposure to electromagnetic fields (EMF) and radio frequency radiation (RFR). These reports are due within ninety (90) days after the start of operations.
8. Applicant shall receive and maintain a license by the Federal Communications Commission (FCC) to operate a wireless communication facility in this location. A copy of this FCC license shall be submitted to the Development Services Department prior to the issuance of any building permits.
9. The major wireless communications facility shall be approved for a period not to exceed the term of the lease. A copy of the lease shall be submitted to the Development Services Department prior to the issuance of a building permit for a new wireless communication facility.
10. If the lease is extended or terminated, notice and evidence thereof shall be provided to the Development Services Department.
11. Use Permit (UP) 2012-12 shall be reviewed by the Development Services Department ten (10) years from the date of approval to ensure compliance with all Special Conditions of Approval and Standard Development Requirements.
12. Applicant shall place all cable/utility runs underground.
13. Applicant/pole owner shall maintain the "monopine", its ground lease and related enclosure in good visual and physical condition at all times.
14. Wireless communication facilities shall not bear any signs or advertising devices other than certification, warnings or other required seals or signage at any time.
15. The applicant shall maintain its wireless telecommunication equipment in good condition and shall make repairs and replacements of equipment, stealth and structural components, due to damage caused by outdoor exposure and/or inclement weather. Under this condition, if the faux branch attachments and/or trunk bark features, among others, fade in color due to outdoor exposure, the applicant shall replace such components within 60 days of written notice by the Director of Development Services or his/her designee. If the work cannot be

completed within 60 days, the applicant shall provide the City with a bond or certification of deposit in the amount of the valuation of the requested repair and completion timeline to guarantee the work. The applicant shall be responsible for maintaining the leased property, including any applicable landscaped areas, walkways and all paved surfaces, free from graffiti, debris and litter at all times.

16. The applicant shall comply with all provisions of the Placentia Municipal Code, including Chapter 23.76, Noise Control.
17. Prior to issuance of building permits, the applicant is required to provide the City with a letter and timeline from the pole owner regarding installation of new branch and antenna sock material. The applicant shall install new branch foliage which shall vary in density, spacing, size and angle to avoid rigid symmetry; overall tree shape shall integrate with the context of the site; colors of the faux trunk and branches shall be non-reflective; green leaves/needles shall be interspersed with brown to provide more natural appearance, and the exterior surface of the faux trunk shall emulate the texture of a real tree; all antennas (panels, microwave and GPS), mounting brackets, and coaxial cables shall be completely screened from public view by the faux foliage and painted to match; branch foliage shall continue down the faux trunk so as to fully conceal the trunk from prominent public vantage points; and the overall design shall substantially conform to and implement the visual effect of an actual pine tree. The branches at the top of the "monopine" shall form a natural peak and not appear to have a flat top. Branches shall be at least 2.25 per foot from a level no higher than twelve (12) feet above ground level. All aesthetic design shall be approved by the Director of Development Services prior to issuance of building permits. The "monopine" owner shall endeavor to work with the other two (2) wireless communication facility co-locations in order to improve the visual aesthetics of their respective locations on the pole.
18. The property owner shall not at any time rent the existing house as a residence at anytime.

**CITY BUILDING DIVISION:**

19. The building plans shall be prepared by a California licensed structural/civil engineer, with structural details and calculations regarding wind and seismic loads. Each page of plans shall be wet-signed.
20. Structural plans and calculations for the new antennas shall consider the extra weight that applies to the existing "monopine" structure.
21. Building and electrical permits shall be required for the new antennas, remote radio heads and other equipment to include, but not limited to: microwave dishes, lighting and related ground-mounted equipment related to this project.

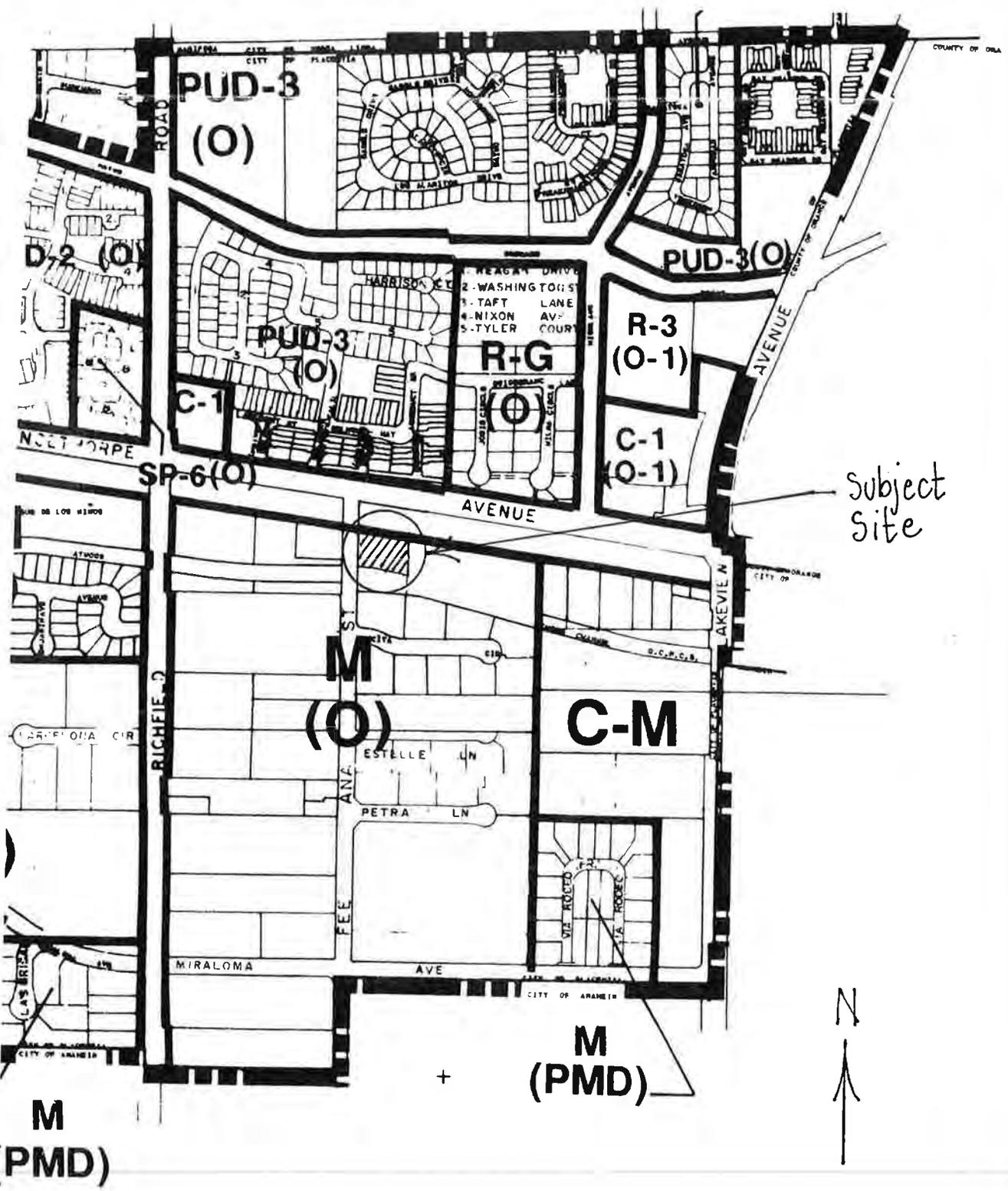
22. All contractors and sub-contractors shall obtain a city business license. Applicant and/or contractor shall request a standard sub-contractor form from the City Building Division prior to issuance of a building permit. This standard form shall be completed and submitted to the City Business License Division prior to the issuance of any building permits.

**CITY POLICE DEPARTMENT:**

23. Burglary resistant material shall be used:
- (1) Products intended for use shall be permanently labeled as such.
  - (2) Materials used shall meet UL 972 Standards for Safety Burglary Resistant Glazing Materials.
  - (3) Only materials approved by ICBO shall be used.
24. Address numbers shall be mounted near the front entry of any building or other conspicuous location and be no less than six (6) inches high. They shall be mounted on a contrasting background and easily visible from the street or walkway. If rear-vehicular access, the same numbers, no less than six (6) inches high shall be displayed on the rear of the building. Numerals of the street address shall be displayed on the uppermost roof, in luminous paint or other material capable of being read from the air. Minimum numeral size shall be twenty-four (24) inches. The building designation, if within a complex (such as "A" or "B" etc) shall accompany displayed street address.
25. Exterior lighting of an intensity of at least twenty-five hundredths (.25) foot-candles shall be provided adjacent to doors and windows. Exterior bulbs shall be protected by polycarbonate or other weather and vandal resistant globe or cover. Light(s) shall be operated during hours of darkness through either photovoltaic sensors or appropriate timers. Parking lots for use by the general public and/or employees shall be provided with exterior lighting of an intensity of at least one (1) foot-candle of light on the parking surface and operated from dusk until at least one-half (1/2) hour after the termination of business.

**ORANGE COUNTY FIRE AUTHORITY:**

26. No conditions specified by OCFA.



Vicinity Map

NTS



PLANNING DIVISION REPORT  
 UP 2012-12  
 Exhibit 1



**T-Mobile**  
Get more from life



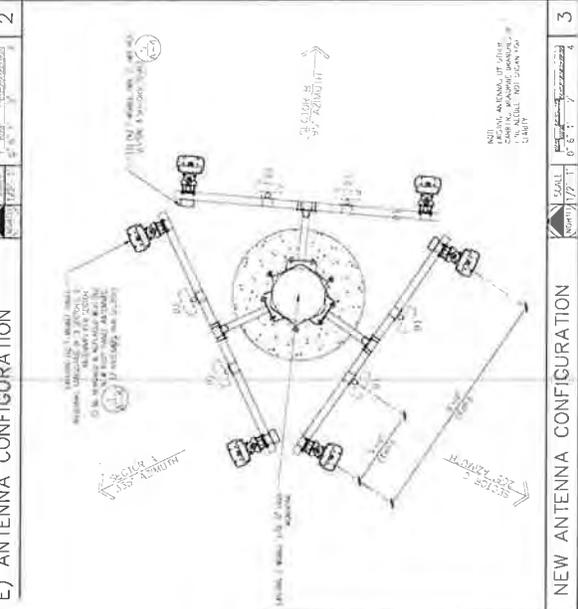
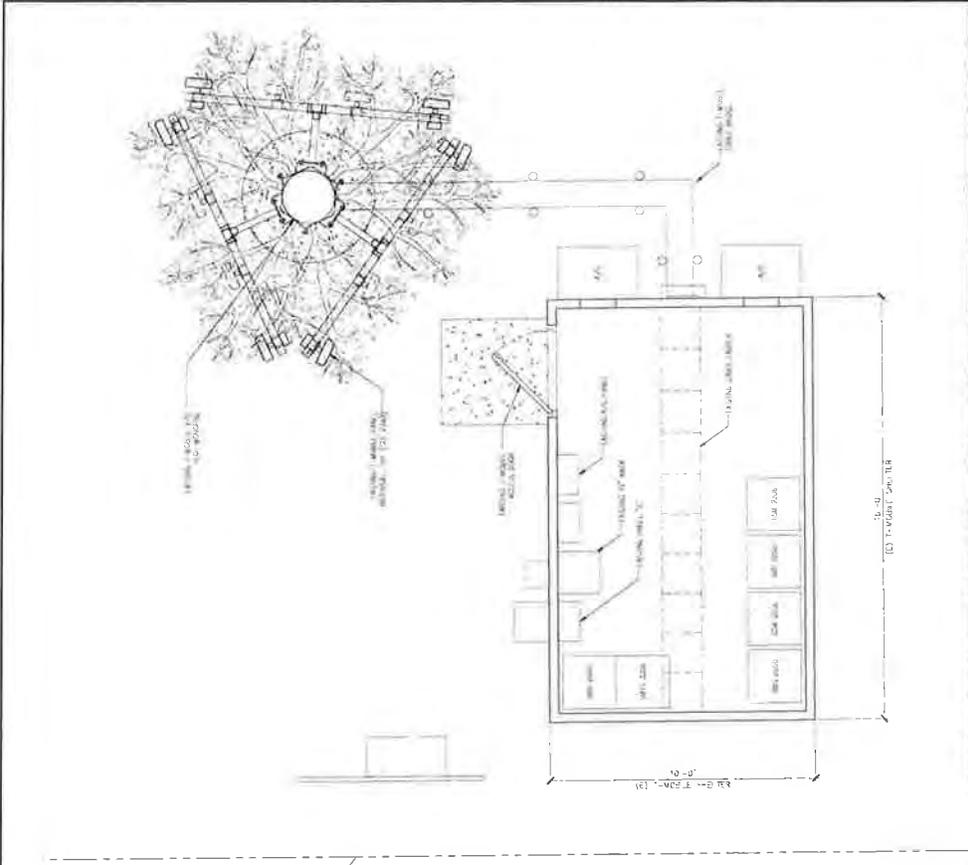
NO.	DATE	DESCRIPTION	BY
1	09/11/12	PRELIMINARY L&D	GL
2	09/11/12	18752 CD	DC

**SITE INFORMATION**  
**SC093 SCI BTS FEE ANA**  
**IE04093A**  
 596 S. FEE ANA STREET  
 PLACENTIA, CA 92670  
 ORANGE COUNTY



**SHEET TITLE**  
 ENLARGED SITE PLAN,  
 EQUIPMENT PLAN  
 & ANTENNA CONFIGURATION

**SHEET NUMBER**  
**A-2**



**PLANNING DIVISION REPORT**  
 APPLICATION: UP 2012-12  
 EXHIBIT: 3  
 PAGE 1 OF 1  
 DATE: 12-11-12

NO.	DATE	DESCRIPTION	BY
1	09/11/12	PRELIMINARY L&D	GL
2	09/11/12	18752 CD	DC



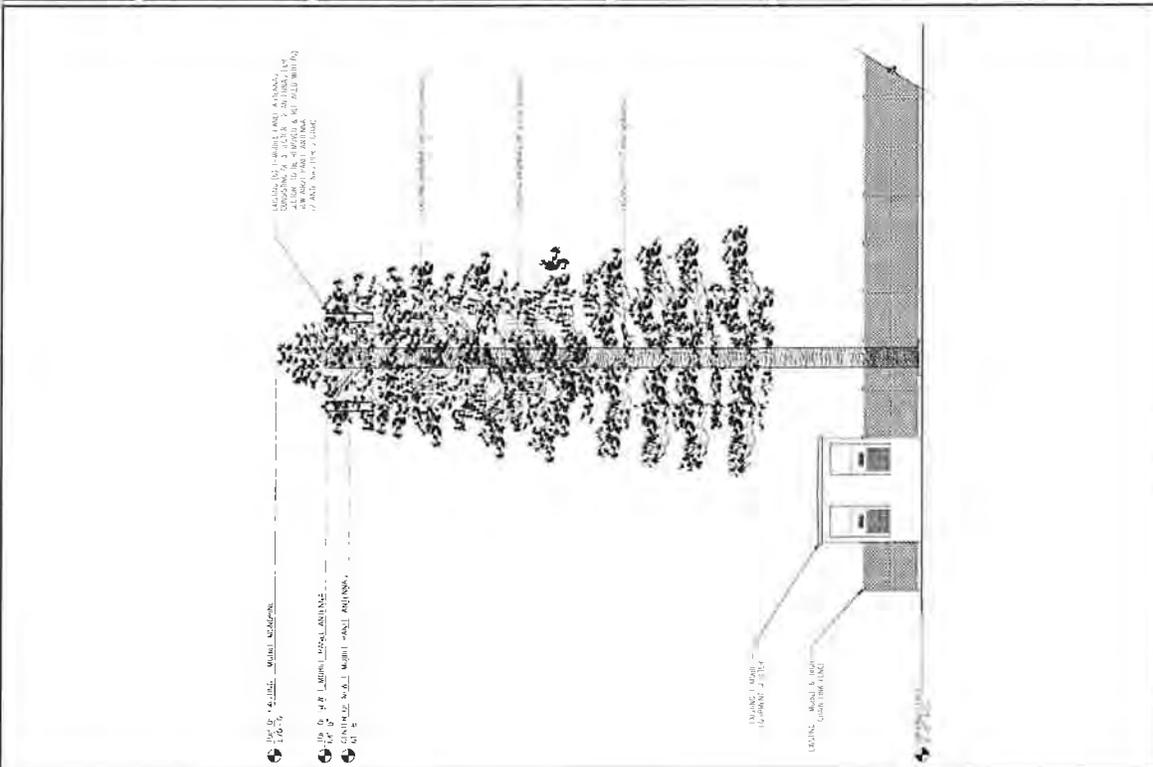
NO.	DATE	DESCRIPTION	BY
1	05/07/12	LIBRARY CD	UC
2	05/11/12	1022-57	UC

**SITE INFORMATION**  
**SC093 SCI BTS FEE ANA**  
 IE04093A  
 506 SCI FEE ANA STREET  
 PACIFIC PALMS, CA 92670  
 ORANGE COUNTY

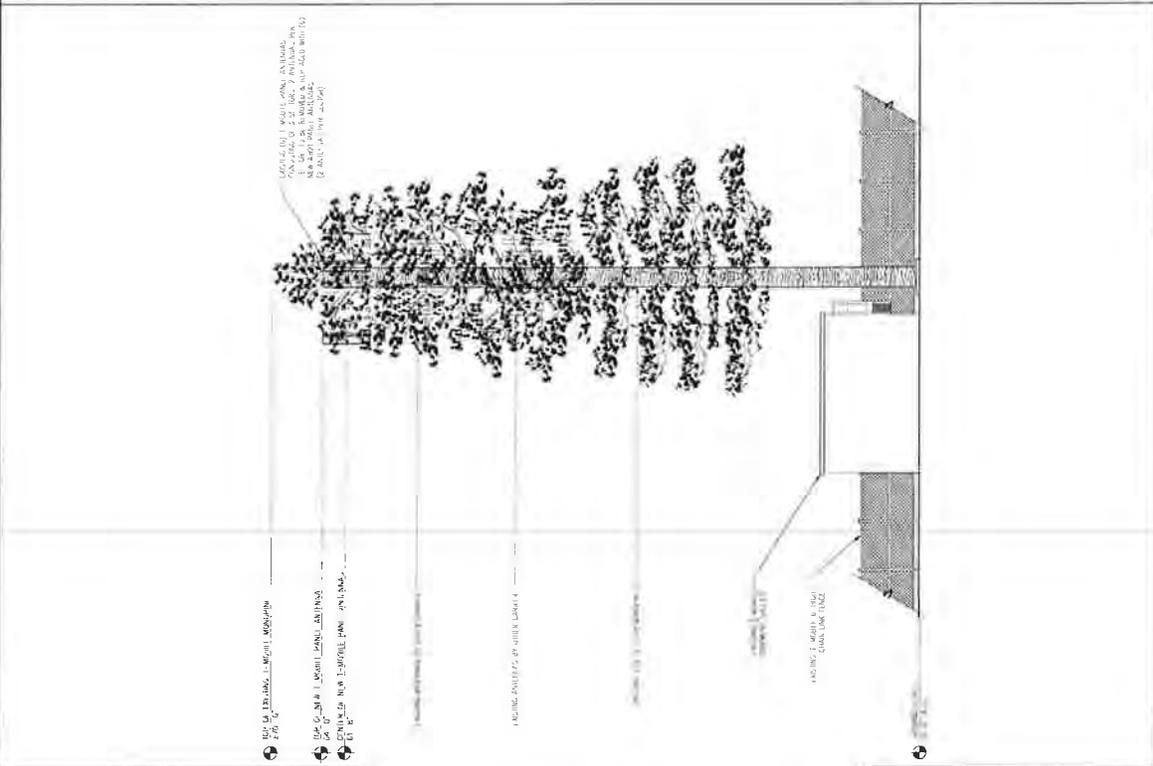


**SHEET TITLE**  
**ARCHITECTURAL ELEVATIONS**

**SHEET NUMBER**  
**A-3**



**EAST ELEVATION**



**SOUTH ELEVATION**

**PLANNING DIVISION REPORT**  
 APPLICATION: UP 2012-12  
 EXHIBIT: 4  
 PAGE 1 OF 1  
 DATE: 12-11-12

**RICHARD TELL ASSOCIATES, INC.**

---

**Antenna Site Radiofrequency Emissions  
Analysis Report**



**T-Mobile Site IE04093A SC093 SCI BTS Fee Ana  
Placentia, California**

October 27, 2012

Prepared for

T-Mobile  
3 Imperial Promenade, 10<sup>th</sup> floor  
Santa Ana, CA 92707

By

Richard A. Tell  
Richard Tell Associates, Inc.  
1872 E. Hawthorne Avenue  
Colville, WA 99114

---

(509)684-9999 • FAX (509)684-2956 • 1872 E. Hawthorne Ave. • Colville, WA 99114-9352

**PLANNING DIVISION REPORT**  
APPLICATION: UP 2012-12  
EXHIBIT: 5  
PAGE 1 OF 18  
DATE: 12-11-12

### **Acknowledgment**

This report was developed through the cooperative endeavors of Richard Tell Associates, Inc., Colville, WA and T-Mobile. T-Mobile provided information and data on the subject site which was relied upon for accuracy in the analysis of radiofrequency fields addressed in this report. This report is for the exclusive use of T-Mobile.

**Antenna Site Radiofrequency Emissions Analysis Report for  
T-Mobile Site IE04093A  
Placentia, California**

**TABLE OF CONTENTS**

Introduction .....	1
Evaluation Approach .....	1
Site Information.....	2
Relevant Analysis Results .....	3
Conclusions and Recommendations .....	3
References .....	5
Figures .....	6
Appendix A RF Exposure Limits .....	12
Appendix B Sign Legend .....	13
Appendix C RF Safety Information .....	14
Professional Engineer Review.....	15
Site Drawings .....	16

# Antenna Site Radiofrequency Emissions Analysis Report for T-Mobile Site IE04093A Placentia, California

## Introduction

This report provides the results of an analysis for a faux monopine-mounted cellular telephone communications facility relative to compliance with Federal Communications Commission (FCC) rules on human exposure to radiofrequency (RF) fields.<sup>1</sup> The analysis results contained herein specifically address only transmitting antennas used by T-Mobile. However, it should be recognized that the site is a collocation site with multiple wireless operators present. While this analysis addresses the T-Mobile operations, caution should be used when working near any of the collocated antennas.

Calculated RF field levels in this report are presented graphically in RoofView® plots. These plots are useful for identifying cautionary zones, where relevant, near the antennas. Further, this evaluation which is applicable to assessing the matter of FCC compliance is ONLY applicable to T-Mobile's operations at the site.

## Evaluation Approach

The evaluation documented here was based on theoretical analysis of the near field associated with active transmitting antennas used by T-Mobile at the subject site. Information about the site was developed by examining drawings, photographs and written communications with T-Mobile engineering personnel. This base station site is located on a faux monopine and the likelihood of RF fields approaching the FCC MPE for general public/uncontrolled exposure at ground level is very low. Nonetheless, theoretical analyses were performed for two relevant conditions: (a) maximum ground level RF fields, and (b) a worst case scenario of an individual accessing the immediate area of the antennas at an elevation that could result in maximum possible exposure of the body such as a person using a bucket truck to elevate themselves to the antenna.

RF fields were analyzed by applying a cylindrical model for vertical collinear antennas to calculate the spatially averaged power density near the antennas. The calculation method is included in the RoofView® software package which was used to produce RF field maps in this document.<sup>2</sup> In concept, when sufficiently close to an

---

<sup>1</sup> Safe exposure limits are specified by the FCC in terms of Maximum Permissible Exposure (MPE) limits that vary with frequency. See Appendix A for details on these MPE limits for both occupational/controlled exposures and general public/uncontrolled exposures.

<sup>2</sup> RoofView® is a commercially available RF analysis software package designed to assist in the assessment of compliance with FCC RF rules for rooftop antenna sites developed by Richard Tell Associates, Inc.

**RF Field Analysis Report for T-Mobile, Site IE04093A, page 2**

antenna, the beam of the antenna has not formed and, hence, the far-field gain of the antenna cannot be exhibited. Thus, calculations of RF field power densities close to such antennas, using a far-field model, will generally greatly over predict the field magnitude. When in close proximity to such antennas, alternative calculation models should be used to more accurately evaluate the RF fields.

RoofView® uses a near-field method of computing the field based on assuming that the total input power delivered to the antenna, at its input terminal(s), is distributed over an imaginary cylindrical surface surrounding the antenna. The height of the cylinder is equal to the aperture height of the antenna while the radius is simply the distance from the antenna at which the field power density is to be computed. Within the aperture of the antenna, this approximation is quite accurate but as the antenna is elevated above the region of interest, the model output must be corrected for mounting height.

The analysis approach used in this study produced detailed graphical plots of the distribution of RF fields for the antenna configuration at the site. The difference between the plots is related to the height of the antennas above the horizontal plane upon which an individual may stand. Each field plot provides insight to regions in which the RF fields may exceed either the general public MPE or the occupational MPE.

The cylindrical model for computing RF fields in the near-field region of vertical collinear antennas is discussed in some depth in various technical reports including Tell (1995, 1996). The validity of the cylindrical model for obtaining meaningful and quick estimates of local power density has been explored and independently validated (Faraone, et al, 2000) and, recently, has been confirmed as a conservative approach to estimating the magnitude of near fields close to active antennas (Thors, et al., 2008; Gosselin, et al., 2009). In detailed analyses using the finite difference time domain (FDTD) methodology, the cylindrical model, within its applicable range of calculation, tends to over predict the RF field that would be associated with the underlying basic restriction imposed by the FCC exposure rules.

**Site Information**

The subject site is installed on a faux monopine located at 506 South Fee Ana Street, Placentia, California. This analysis assumed T-Mobile using two panel antennas (Ericsson AIR21 B2A/B4P) in each of three sectors (A @ 335 degrees, B @ 95 degrees, and C @ 205 degrees) with 65 degree azimuth beamwidths and aperture heights of 56 inches. The bottoms of the transmit antennas were assumed to be mounted at a height of 59.3 feet above ground level (AGL). The antennas are mounted within each sector 9 feet apart. Figure 1 is a photograph showing the site.

For purposes of the analysis applied in this report, an assumption was made that one of the T-Mobile transmit antennas in each sector was driven with 50.5 watts of power in the 1710-2155 MHz band this corresponds to one channel each of GSM, UMTS PCS

## RF Field Analysis Report for T-Mobile, Site IE04093A, page 3

and UMTS AWS. The other antenna in each sector was driven with 18.4 watts of power in the 1720-2155 MHz band corresponding to one channel of LTE AWS.

### Relevant Analysis Results

The antenna mounting configuration at this site is such that any significant exposure to RF fields from the transmit antennas would only be possible if an individual could gain access to the frontal region of the antennas such as if elevated to the transmit antennas. For example, personnel supported in a bucket truck for repair work on the monopine could result in direct frontal exposure.

Figure 2 graphically illustrates the worst case estimate of RF fields in the vicinity of all three sectors at this site with a maximum value equivalent to 160.6% of the occupational MPE. The black dots in Figure 2 represent the RoofView™ method of displaying the location of each transmit antenna. Figure 2 shows that the RF field is reduced to less than the FCC general public MPE at a distance of 8 feet directly in front of the antennas whereas it takes a standoff of 2 feet to comply with the FCC occupational trained (aware) worker MPE.

The spatial distribution of RF fields shown in Figure 2 represents the fields that would be associated with an individual standing with their feet at the same height as the bottom of the panel antennas. This condition represents the situation wherein the greatest spatially averaged RF exposure would result. While this condition may not represent typical exposures of persons working at the site, it is conceivable that such exposures could occur given the necessity to access some areas. Figures 3 and 4 are simplified drawings showing an individual in a bucket truck raised to the same level as the panel antennas.

For locations on the ground, the RF fields will be extremely weak due to the significant mounting height of the antennas. Figure 5 illustrates the analysis results with no location exceeding the general public MPE. The maximum found at ground level is 0.2% of the FCC occupational/controlled MPE, equivalent to 1.0% of the FCC general public MPE limit. Figure 6 is a sketch showing an individual standing at ground level below the panel antennas that are mounted 59.3 feet above ground.

### Conclusions and Recommendations

RF exposures for individuals at ground level due to T-Mobile operated antennas will comply with the FCC general public MPE by a wide margin due to the elevated mounting height of the transmit antennas.

For elevated locations where individuals may access the immediate frontal region of the transmit antennas, a standoff distance of 8 feet should be maintained to comply

**RF Field Analysis Report for T-Mobile, Site IE04093A, page 4**

with the FCC general public MPE. A standoff of 2 feet is required to comply with the FCC occupational trained (aware) worker MPE.

Should personnel need to access the front surface of active transmit antennas, caution should be exercised. T-Mobile should continue to ensure that its personnel and contractors requiring access to the immediate region of active transmit antennas have received appropriate EME (Electromagnetic Energy) awareness training. A mechanism should exist whereby the site management can inform T-Mobile when there is a need for personnel to gain access to the immediate region of T-Mobile antennas so that they can obtain specific guidance for complying with FCC RF exposure rules. Such guidance may include the use of personal RF monitors to alert personnel to the presence of intense RF fields approaching the MPE limit, observation of stand-back distances from active antennas, deactivating specific antennas when work on or near them is required and obeying all posted RF safety related signs. These guidelines are particularly important at collocated antenna sites where low-mounted antennas and/or omnidirectional antennas may be present. Caution should be used if work is required in the immediate region of the collocated antennas mounted on this monopine. With application of these guidelines, the operation of T-Mobile equipment at this site will comply with FCC rules on RF exposure.

The site should be posted with a T-Mobile NOC sign and a blue NOTICE TO WORKERS sign as shown in Appendix B at the equipment shelter location. A yellow CAUTION label, as illustrated in Appendix B, should be installed on each antenna such that the label is visible to individuals approaching the front of any transmit antenna. As described earlier, caution should be used when workers access areas near the collocated antennas at this site.

**RF Field Analysis Report for T-Mobile, Site IE04093A, page 5****References**

Farone, A., R. Y-S Tay, K. H. Joyner and Q. Balzano (2000). Estimation of the average power density in the vicinity of cellular base-station collinear array antennas. *IEEE Transactions on Vehicular Technology*, vol. 49, No. 3, May, pp. 984-996.

Gosselin, M., A. Christ, S. Kuhn and N. Kuster (2009). Dependence of the occupational exposure to mobile phone base stations on the properties of the antenna and the human body. *IEEE Transactions on Electromagnetic Compatibility*, Vol. 51, No. 2, pp. 227-235.

Tell, R. A. (1995). *Engineering Services for Measurement and Analysis of Radiofrequency (RF) Fields*. Technical report prepared for the Federal Communications Commission, Office of Engineering and Technology, Washington, DC, FCC/OET RTA 95-01 [NTIS order no. PB95-253829].

Tell, R. A. (1996). *CTIA's EME Design and Operation Considerations for Wireless Antenna Sites*. Technical report prepared for the Cellular Telecommunications Industry Association, 1250 Connecticut Avenue, N.W., Washington, DC 20036. August 12, 83 p.

Thors, B, M. Strydom, B. Hansson, F.J.C. Meyer, K. Kaarkkainen, P. Zollman, S. Illvonen and C.Tornevik (2008). On the estimation of SAR and compliance distance related to RF exposure from mobile communication base station antennas. *IEEE Transactions on Electromagnetic Compatibility*, Vol. 50, No. 4, pp. 837-848.

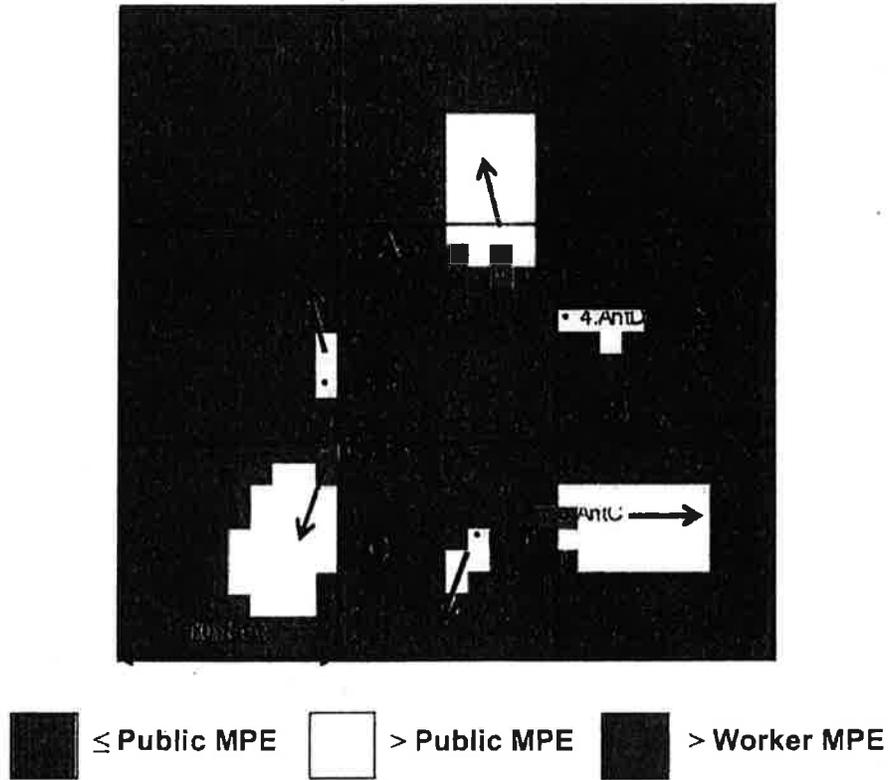
RF Field Analysis Report for T-Mobile, Site IE04093A, page 6



**Figure 1.** Photograph of the T-Mobile site IE04093A, SC093 SCI BTS Fee Ana, 506 S. Fee Ana St., Placentia, CA. Yellow circle shows location of faux monopine with T-Mobile antennas attached.

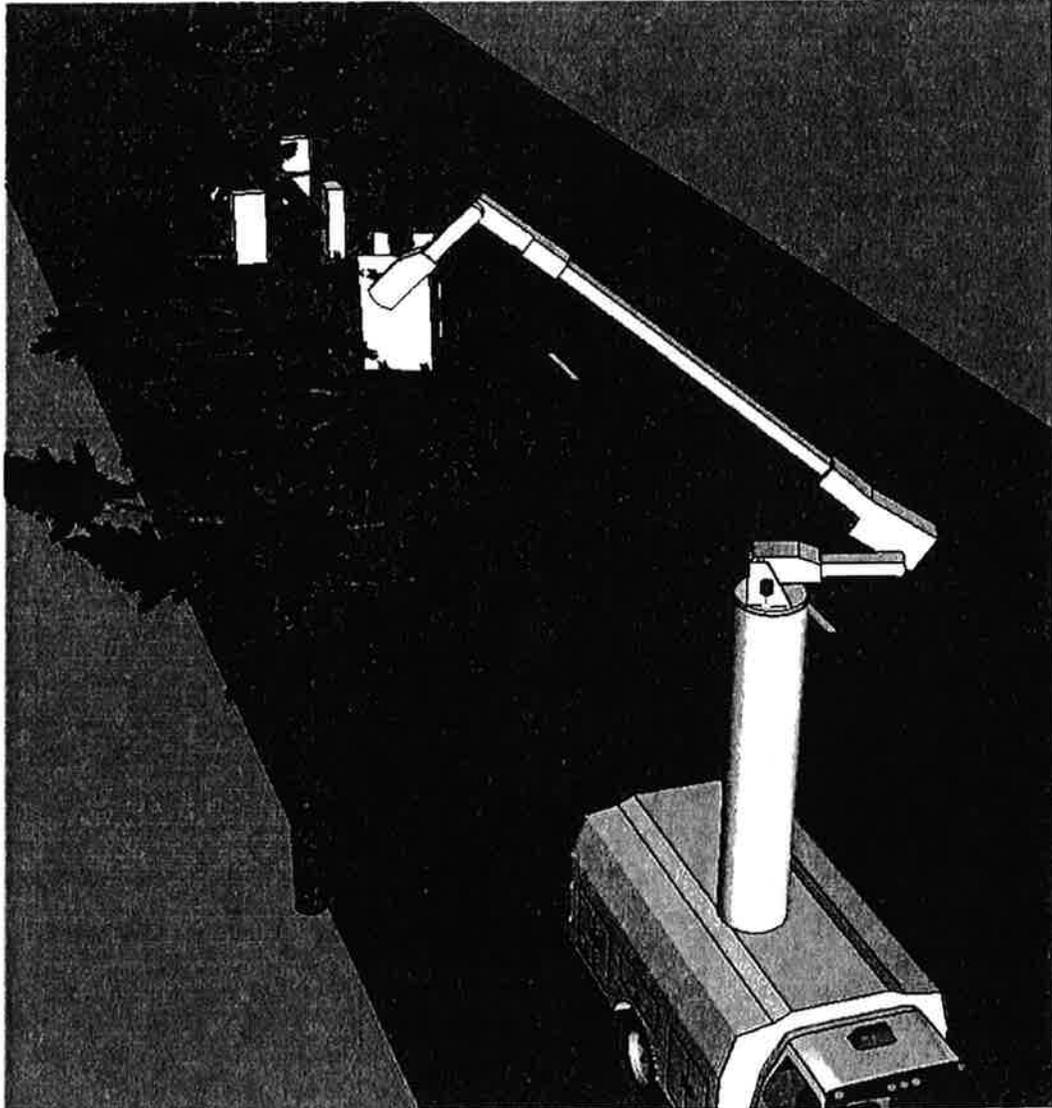
RF Field Analysis Report for T-Mobile, Site IE04093A, page 7

View of RF field distribution from above antennas



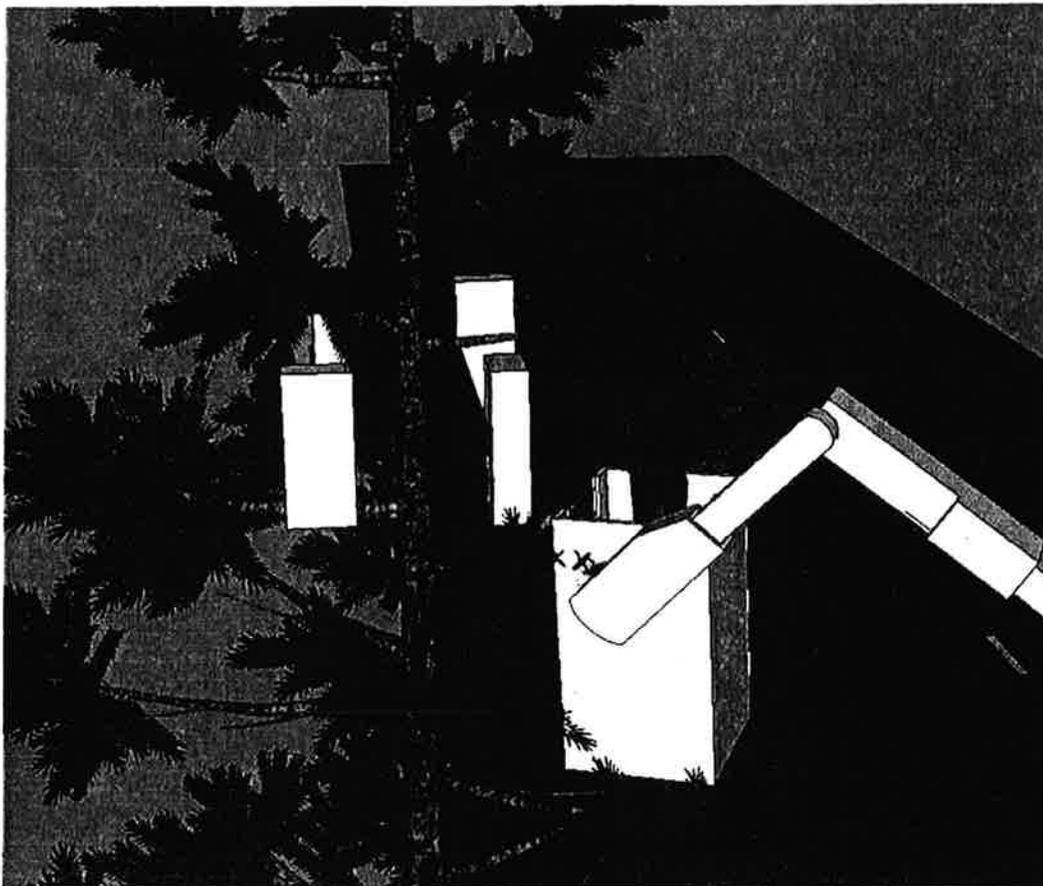
**Figure 2.** Worst case RF field pattern for T-Mobile panel antennas at faux monopine site IE04093A. This field pattern shows all three sector antennas transmitting and represents the maximum spatially averaged RF field that could be expected for an individual standing with their feet at the same height as the bottom of the panel antennas. The maximum calculated field corresponds to 160.6% of the FCC occupational/controlled exposure MPE directly in front of any antenna. The black arrows represent the orientations for sectors A, B and C.

RF Field Analysis Report for T-Mobile, Site IE04093A, page 8



**Figure 3.** Simplified drawing showing T-Mobile site IE04093A. This drawing shows an individual using a bucket truck to raise themselves to the same level as the panel antennas and represents the maximum potential exposure from the antennas.

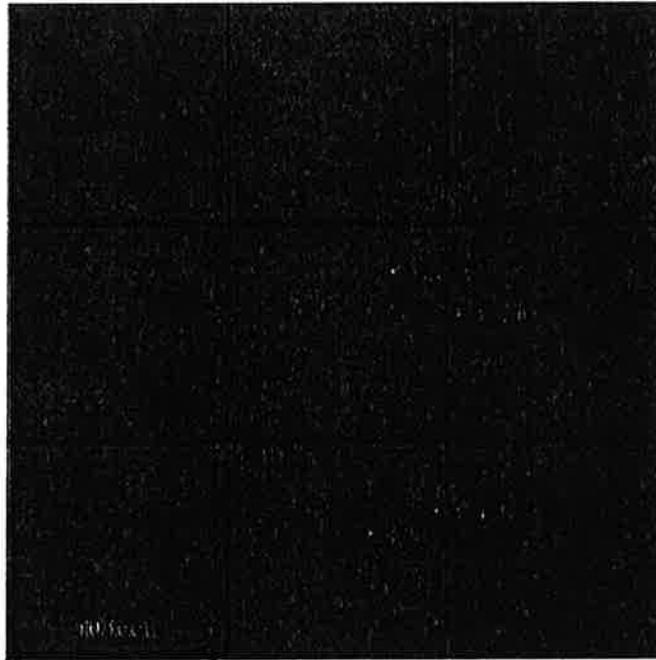
RF Field Analysis Report for T-Mobile, Site IE04093A, page 9



**Figure 4.** Simplified drawing showing T-Mobile site IE04093A. This drawing shows a close up view of an individual using a bucket truck to raise themselves to the same level as the panel antennas and represents the maximum potential exposure from the antennas.

RF Field Analysis Report for T-Mobile, Site IE04093A, page 10

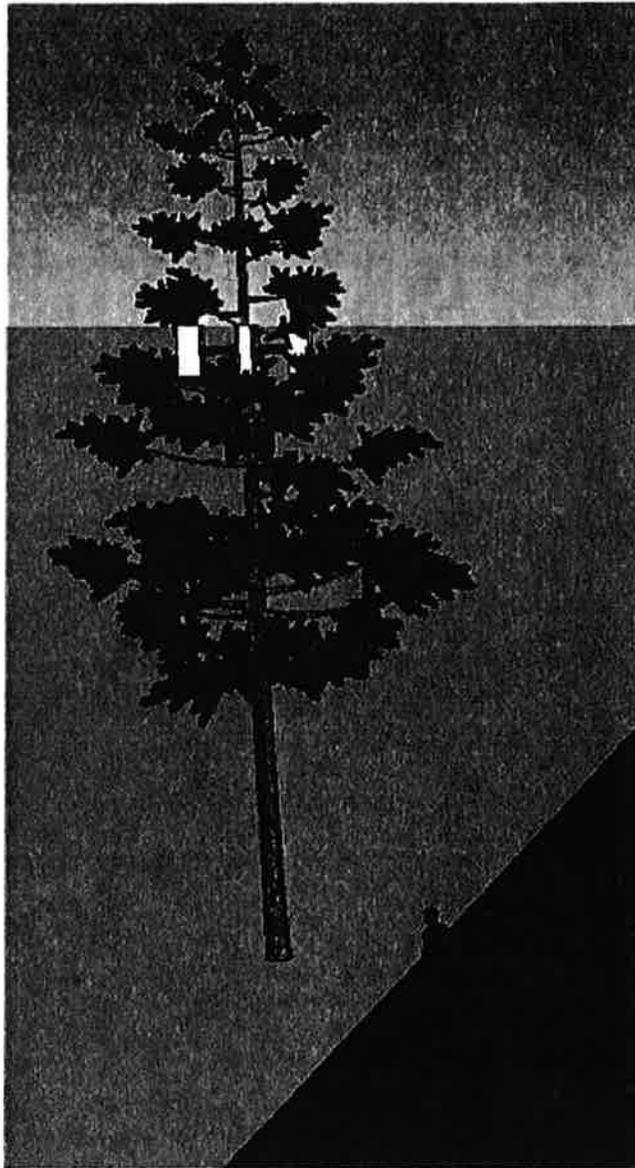
View of RF field distribution from above antennas



■ ≤ Public MPE    □ > Public MPE    ■ > Worker MPE

**Figure 5.** Ground level calculated RF field pattern for T-Mobile panel antennas at faux monopine site IE04093A with antennas mounted 59.3 feet above ground (as installed). Maximum ground level RF field is estimated to be 0.2% of the FCC occupational/controlled exposure MPE.

RF Field Analysis Report for T-Mobile, Site IE04093A, page 11



**Figure 6.** Simplified drawing showing T-Mobile site IE04093A. This drawing shows an individual standing at ground level. This represents the typical ground level exposure.

## RF Field Analysis Report for T-Mobile, Site IE04093A, page 12

**APPENDIX A - LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)**  
**Adopted by the Federal Communications Commission**  
**(Reference = Table 1. Title 47 CFR)**

**(A) Limits for Occupational/Controlled Exposure**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

**(B) Limits for General Population/Uncontrolled Exposure**

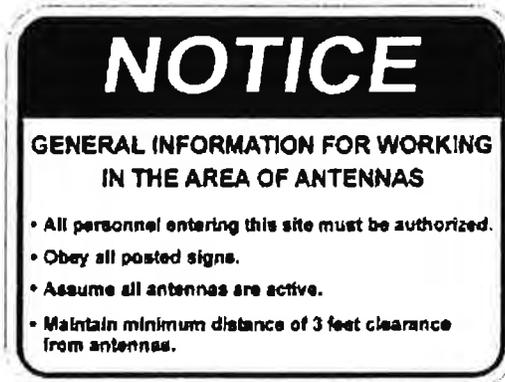
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz      \*Plane-wave equivalent power density

NOTE 1: *Occupational/controlled* limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2: *General population/uncontrolled* exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

## APPENDIX B



**NOTICE to WORKERS Sign**



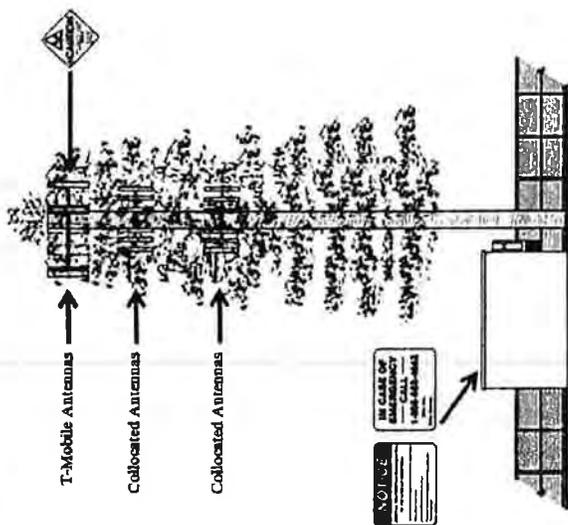
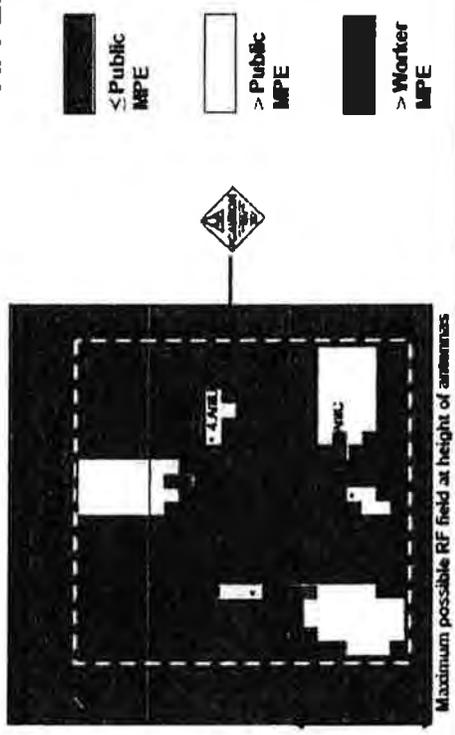
**NOC Sign**



**RF CAUTION Sign**

RoofView® RF Field Plot Applicable to Sectors A, B, & C

APPENDIX C



Legend

NOTICE  
 IN CASE OF EMERGENCY CALL 1-888-662-4662

CAUTION  
 RF RADIATION

T-MOBILE SITE RF SAFETY INFORMATION

T-Mobile site: IE04093A  
 Location: 506 S. Fee Ana, Placentia, CA  
 Site name: SC093 SCI BTS Fee Ana  
 Date: 10-26-2012 Rev. 0  
 Prepared by: Richard Tell Associates, Inc.  
 www.radhaz.com

**Radiofrequency (RF) Exposure Regulations**  
 Human exposure to RF signals (also known as RF fields) is regulated by the Federal Communications Commission rules that set maximum permissible exposure (MPE) values to insure safety for members of the general public and workers who have received RF safety awareness training.

**Possible RF Exposure**

This monopine supports cellular telephone transmitting antennas operated by T-Mobile. This site has been evaluated for possible exposure of individuals to radiofrequency (RF) fields that are produced by these antennas. This evaluation determined that at ground level the RF fields comply with the general public MPE limit. Panel 1 shows the region in the immediate vicinity of any of the three (sectors) of antennas on this monopine relative to work at the level of the antennas. For individuals elevated to the same level as the bottom of the antennas and directly in front of the antennas, Panel 1 illustrates that within a distance of 8 feet in front of the antennas, RF fields could exceed the general public MPE, whereas within 2 feet of the antennas, RF fields may exceed the trained worker MPE. Access to this area would only exist for persons elevated to the same level as the bottom of the antennas and directly in front of the antennas.

**Sign Information**

RF safety signs have been posted to alert individuals to the fact that cellular telephone transmitting antennas are installed at this site. A blue NOTICE TO WORKERS sign is installed at the location of the entrance to the equipment shelter as indicated on this drawing. This sign contains guidelines for remaining safe when working in an RF environment. Yellow CAUTION signs are posted at the front side of each of the three antenna locations (sectors) to indicate the possibility of RF exposures that may exceed the limits for the general public when directly in front of the antennas. A sign with an emergency contact number (1-888-662-4662) is posted at the entrance to the equipment shelter in the event that you need to contact T-Mobile.



Dave Baron, PE  
Consulting Engineer  
Electromagnetic Field Safety  
10687 Bramblecrest  
Ste 221B  
Austin, TX 78726  
(612) 568-3416

29 October 2012

RE: T-Mobile Site IE04093A SC093 SCI BTS Fee Ana, Placentia, California

I have reviewed and evaluated the field analysis report for T-Mobile Site IE04093A SC093 SCI BTS Fee Ana, Placentia, California, prepared by Richard Tell Associates, Inc. and dated 27 October, 2012.

The analysis methods described in this report are consistent with generally accepted methodologies for evaluating compliance with Federal Communications Commission (FCC) guidelines for human exposure to radiofrequency electromagnetic fields as provided by the FCC Office of Engineering Technology (OET) in Bulletin 65, August 1997.

It should be noted that the site description indicates two additional sets of collocated antennas, both positioned below the T-Mobile antennas, on the mono-pine structure. Electromagnetic fields generated by these collocated antennas may affect the RF exposures of those working on or near the structure. These potentially additional sources should also be considered in determining total workplace exposures.

David Baron, PE  
Texas License No. 105797  
Expires 3/31/2013



**PLANNING DIVISION REPORT**  
APPLICATION: UP 2012-12  
EXHIBIT: 5  
PAGE 18 OF 18  
DATE: 12-11-12



# Placentia Planning Commission

## Agenda Staff Report

<b>AGENDA ITEM NO.:</b> 3	<b>DATE:</b> December 11, 2012	<b>PUBLIC HEARING:</b> Yes
<b>APPLICATION(S):</b> Development Plan Review (DPR) 2012-03		
<b>DESCRIPTION:</b> To permit the construction of a +/- 600 square foot pump house structure to enclose a new Golden State Water Company 1,500-2,500 gallon per minute domestic water well, +/- 900 LF of 12 inch diameter distribution water line and +/- 900 LF of 16 inch diameter drain line connecting to the public storm drain, as well as associated water well facilities for the purpose of improving fire flow and water quality I the existing Placentia water system. and other related on site improvements on a +/- 9,100 square foot site at 202 Wilson Avenue in the Single Family Residential (R-1) District.		
<b>RELATED APPLICATIONS:</b> None		
<b>APPLICANT:</b> Golden State Water Company: Daniel Flores		
<b>PROPERTY OWNER:</b> Golden State Water Company		
<b>LOCATION:</b> 202 Wilson Avenue		
<b>CEQA DETERMINATION:</b> Mitigated Negative Declaration 2012-02; Section 21092 and Guidelines Section 15072		
<b>ZONING:</b> Single Family Residential (R-1) District		<b>APN(S):</b> 339-021-38
<b>GENERAL PLAN:</b> Low Density Residential		<b>CITY COUNCIL ACTION REQUIRED:</b> No
<b>PREPARED BY:</b> Monique B. Schwartz, Associate Planner		
<b>REVIEWED BY:</b> Kenneth A. Domer, Assistant City Administrator, Development Services		

**REQUEST:**

To permit the construction of a +/- 600 square foot pump house structure to enclose a new Golden State Water Company 1,500-2,500 gallon per minute domestic water well, +/- 900 LF of 12 inch diameter distribution water line and +/- 900 LF of 16 inch diameter drain line connecting to the public storm drain and other related on site improvements on a +/- 9,100 square foot site at 202 Wilson Avenue in the Single Family Residential (R-1) District.

**BACKGROUND:**

American States Water Company is the parent of Golden State Water Company. Through its subsidiaries, American States Water Company provides water service to 1 out of 36 Californians located within 75 communities throughout 10 counties in Northern, Coastal and Southern California. Approximately 40 percent of the Placentia Customer Service Area water supply is imported water purchased from the Municipal Water District of Orange County. The remaining 60 percent of the supply is pumped from 5 wells in the

customer service area. This project will improve fire flow and water quality within the Placentia System as well as provide an additional source of water to increase system groundwater production capacity and reliability.

According to Section 23.12.030 of the Placentia Municipal Code, a public utility is among the uses within the Single Family Residential District that require Use Permit approval; however, as determined by the City Attorney, and pursuant to the California Public Utilities Code Section 12808.5 and California Government Code 53091(e), the proposed water supply well is exempt from the City's Zoning Code from Use Permit requirements because this type of facility is for the "production, generation, storage, treatment or transmission of water." This exemption is subject to compliance with all requirements of the Public Utilities Code, including Section 12808.5. In addition, the exemption is limited by the terms of the Government Code and subsequent court decisions to include facilities directly and immediately used to produce, generate, store, treat or transmit water. All other structures are subject to the review of the Development Services Department, thus the purpose of this application.

The proposed well site contains an existing single family residential structure that will be demolished according to State and City of Placentia regulations. The applicant proposes to construct a +/- 600 square foot pump house with related on and off site improvements. Pursuant to Section 23.75.010 of the Placentia Municipal Code, construction of new buildings over 250 square feet shall require Planning Commission approval of a Development Plan Review application to ensure compliance with all applicable development standards of the Placentia Municipal Code.

### **RECOMMENDATION:**

City Planning Division is recommending approval of Development Plan Review 2012-03, subject to the attached recommended Special Conditions of Approval and Standard Development Requirements and approval of Mitigated Negative Declaration 2012-02 including mitigating measures prepared by RBF Consulting and reviewed by Tierra West Advisors.

### **INTRODUCTION:**

The proposed well site is located on a residential property at 202 Wilson Avenue. Wilson Avenue is situated north of Chapman Avenue and west of Bradford Avenue. The south (rear) property line of the subject site abuts the north property line of Kraemer Park. The site is currently improved with a single family home that will be demolished as part of this project.

**Subject Site and Surrounding Land Uses:**

	<b>Existing Land Use</b>	<b>Land Use Element General Plan Designation</b>	<b>Zoning Map Designation</b>
<b>Existing</b>	Existing vacant single family residence	“Low Density Residential”	“R-1”
<b>Proposed</b>	Demolish existing single family residence and construct a +/- 600 square foot pump house and related on/off site improvements	“Low Density Residential”	“R-1”
<b>North</b>	Single Family Residential	“Low Density Residential”	“R-1”
<b>South</b>	Kraemer Park	“Open Space”	“R-1”
<b>East</b>	Single Family Residential	“Low Density Residential”	“R-1”
<b>West</b>	Single Family Residential	“Low Density Residential”	“R-1”

Golden State Water Company proposes to construct a new potable water well/facility designed to pump and treat approximately 1,500-2,500 gallons per minute of water into the Placentia water system. Included in this facility will be a chlorination system, a vertical turbine pump, electric panel and other related well facilities. These facilities will be housed in a stuccoed block wall building with three rooms: a chlorination room; electrical room and pump room. The well will be approximately 1,000 feet in depth. A 12 inch diameter waterline for conveyance from the well will connect to a new 12 inch distribution waterline. The total length of the new 12 inch distribution line is approximately 900 linear feet. All of the distribution pipeline will be constructed and buried within City of Placentia existing street right-of-way. In addition, a 16 inch drain line is proposed to connect the well site to the County of Orange public storm drain system. This line will extend to an existing 54 inch storm drain system owned and operated by the County of Orange. The well facility will be entirely located on the subject property and screened behind an 8 foot high combination block and wrought iron fence/wall and will have perimeter landscaping. The site will be accessed through a locked gate for periodic maintenance.

The existing well site contains an existing single family residential structure that will be demolished per the State and City of Placentia regulations.

**Development Standards in the R-1 District:**

	<b>Required</b>	<b>Proposed</b>	<b>Notes</b>
Density	6 dwelling units/acre	A water well pump house and no residential structures	Complies with requirement
Building Site Area	+/- 7,500	+/- 9,100 square feet	Complies With Requirement
Lot Width	75 Feet	65 L.F.	Existing non conforming
Height	20 Feet For Accessory Buildings	13'-10"	Complies With Requirement
Lot Coverage	50%	+/- 600 sq.ft. = 0.6%	Complies with Requirement
Building Setbacks	Front: 20 Feet (Public Street)	+/- 58 LF	Complies With Requirement
	Side: 12 Feet	12 feet	Complies With Requirement
	Rear: 20 Feet	32 feet	Complies With Requirement
Parking	Two (2) Spaces/Dwelling unit, all spaces in a garage	Because no dwelling unit will be constructed, this requirement is not necessary	N/A

**Density:**

Pursuant to the General Plan designation of Low Density Residential, the maximum density permitted in the "R-1" Single Family Residential District is six (6) dwelling units per acre. This project involves the demolition of one housing unit and the construction of a non residential structure. There will not be an impact to the density of this site because no living units will be added.

**Coverage:**

As per Section 23.12.060 of the Placentia Municipal Code, the required lot coverage, "land area covered by building or structures is 50% of the site area, which is approximately 4,550 square feet. With the construction of the new pump house structure, the lot coverage will be 6 percent, well below the allowable lot coverage area.

**Setbacks:**

The submittal site plan indicates that the proposed pump house is +/- 8 feet from the east (side) property line. The applicant will be required to construct the new pump house 12 feet from the east property line, as specified in Section 23.12.080(1)(A) of the Placentia Municipal Code. All other setbacks are in compliance with the Placentia Municipal Code.

### **Floor Plan:**

The pump house will be approximately 600 square feet and contain three distinct areas; a chlorination room; electrical room and pump room. Access to the separate rooms of the building will be through gated doors along the west side of the structure.

### **Architecture:**

Architecturally, the submittal building elevation plans indicate that the new pump house enclosure will be constructed to look similar to a simple residential structure. Exterior finishes include: painted textured stucco, plywood sheathing and coco brown asphalt shingles. The block walls that will be located along the perimeter boundaries of the property will be solid split face block and a combination block and screened black wrought iron.

The exterior color scheme features an earth tone palette. These finishes, materials and colors are consistent with the color palettes in the surrounding areas.

### **Access and Interior Circulation:**

The main entrance to the proposed site is via a 16 foot wide driveway approach along Wilson Avenue and a secondary ingress/egress point along Melrose Avenue. These entrances/exits will be gated and will provide the primary ingress/egress to the project site.

### **Off-Street Parking:**

Pursuant to Section 23.78.030 of the Placentia Municipal Code, two spaces are required per dwelling unit, all spaces in a garage. For initial construction, 3 spaces are required for dwelling units having 5 bedrooms or more, all spaces in a garage. In this particular case, the property will not have a residential structure nor be used for residential purposes. There will only be temporary parking on the property for the servicing or maintenance of the well, equipment and property. No garage is necessary for this site.

### **Public Outreach:**

The Development Services Department recommended that Golden State Water Company reach out to the neighboring properties and community regarding the construction of the new well project. The applicant in turn mailed and hand delivered 40 invitations for an Informational Community meeting to be conducted at the Backs Community Building on November 14, 2012 at 6:00 p.m. The applicant displayed color boards of the proposed project, distributed a handout with questions and answers about the well project, displayed a diagram of the structure of a water well, photographs of typical sound walls constructed at a well site during the day and a drill rig and lighting at night. Seven (7) Golden State Water Company employees and six (6) neighboring residents attended the meeting. The primary concerns voiced from the residents were

the aesthetics of the proposed building and the noise. The residences preferred a slump stone block wall building as opposed to the proposed stucco façade. There were no objections to the project proposal voiced at this meeting, received by the Water Company or the City. Please refer to Exhibit 5 which is a copy of the Notice mailed out by the Water Company, the informational flyer and a summary report and pictures of the meeting provided by the applicant.

**CEQA:**

As described in the attached Initial Study/Mitigated Negative Declaration, in accordance with the CEQA (Public Resources Code Section 21000-21177) and pursuant to Section 15063 of the California Code of Regulations, the California Department of Public Health, acting in the capacity of lead Agency, is required to undertake the preparation of an Initial Study to determine if the proposed Project would have a significant environmental impact. An Initial Study was prepared by RBF Consulting and it was concluded that a Mitigated Negative Declaration was required. The California Department of Public Health prepared the Notice of Intent to adopt a Negative Declaration and it was advertised in the Orange County Register on September 28, 2011. A Notice of Determination was filed in compliance with Section 21108 of the Public Resources Code.

Tierra West Advisor's, the City's retained consultant performed a peer review of the Initial Study/Mitigated Negative Declaration prepared by RBF Consulting and it was concluded that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in the Mitigated Negative Declaration prepared by RBF Consulting have been added. A Mitigation Negative Declaration is adequate.

**ACTIONS:**

1. Adopt Resolution No. PC-2012-21 approving Development Plan Review (DPR) 2012-03, subject to the Special Conditions of Approval and Standard Development Requirements set forth therein.
2. Approve Mitigated Negative Declaration 2012-02 including mitigation measures as prepared by RBF Consulting and reviewed by Tierra West Advisors.

**Prepared and submitted by:**

\_\_\_\_\_  
Monique B. Schwartz  
Associate Planner



**view and approved by:**

\_\_\_\_\_  
Kenneth A. Domer  
Assistant City Administrator

**Attachments:**

Attachment "A" Special Conditions of Approval and Standard Development Requirements for Development Plan Review (DPR) 2012-03  
Attachment "B" Placentia Police Department Standard Development Requirements  
Attachment "C" Orange County Fire Authority (OCFA) Site Development Requirements

**Exhibits:**

Exhibit 1 Vicinity Map  
Exhibit 2 Site Plan/Conceptual Landscaping Plan/Floor Plan  
Exhibit 3 Elevations  
Exhibit 4 Initial Study/Mitigated Negative Declaration 2012-02 completed by RBF Consulting and reviewed by Tierra West Advisors  
Exhibit 5 Notice mailed out by the Water Company, the informational flyer and a summary report and pictures of the public meeting provided by the applicant.

RESOLUTION NO. PC-2012-21

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PLACENTIA APPROVING DEVELOPMENT PLAN REVIEW (DPR) 2012-03 PERTAINING TO PROPERTY LOCATED AT 202 WILSON AVENUE AND MAKING FINDINGS IN SUPPORT THEREOF.**

**A. Recitals.**

(i) Daniel Flores of Golden State Water Company, applicant and Golden State Water Company, owner of the property located at 202 Wilson Street ("Applicant" hereinafter) heretofore filed an application for approval of Development Plan Review (DPR) 2012-03, as described in the title of this Resolution. Hereinafter, in this Resolution, the subject Use Permit request is referred to as the "Application".

(ii) On December 11, 2012, this Commission conducted a duly noticed public hearing, as required by law, and concluded said hearing prior to the adoption of this Resolution.

(iii) All legal prerequisites to the adoption of this Resolution have occurred.

**B. Resolution.**

NOW, THEREFORE, it is hereby found, determined and resolved by the Planning Commission of the City of Placentia as follows:

1. The Commission hereby specifically finds that all of the facts set forth in the Recitals, Part A, of this Resolution are true and correct.

2. Based upon substantial evidence presented to this Commission during the public hearing conducted with regard to the Application, including written staff reports, verbal testimony and development plans, this Commission hereby specifically finds as follows:

a. The proposed project will not be: (1) detrimental to the health, safety or general welfare of the persons residing or working within the neighborhood of the proposed development or within the city, or (2) injurious to the property or improvements within the neighborhood or within the city. Subject to compliance with the attached Special Conditions of Approval and Standard Development Requirements (Attachments "A, B and C"), this development complies with all applicable code requirements and development standards of the "R-1" Single Family Residential District and Title 22, Building Codes and Regulations of the Placentia Municipal Code.

b. The proposed use is consistent with the City's General Plan. The General Plan Land Use designation for the subject site is "Low Density Residential", and the proposed use does not involve any change in the land use of the subject site. The proposed project involves the installation of a new water well, a +/- 600 square foot well enclosure and related on and off-site improvements that will service the Placentia water system.

c. The proposed project as presented in the staff report and accompanying plans complies with all requirements of Chapter 23.75, Development Plan Review and Chapter 23.12, Single Family Residential District of the Placentia Municipal Code. City Staff carefully examined the proposed development against the applicable development regulations prescribed in Title 23 (Zoning Ordinance), and determined it to be in substantial compliance. The proposed Development includes Special Conditions of Approval and Standard Development Requirements to ensure full compliance with applicable code requirements.

d. Conditions necessary to secure the purposes of this section, including guarantees and evidence of compliance with conditions are made part of this development approval. Attachments "A, B, and C" contain Special Conditions of Approval and Standard Development Requirements specific to this development application in order to provide assurances that the proposed construction of the Wilson Well Facility and related on and off-site improvements are in compliance with applicable requirements of the Placentia Municipal Code.

3. Based upon the environmental review of the project, the Planning Commission finds that Development Plan Review 2012-03 will create no adverse environmental impacts. Mitigated Negative Declaration 2012-02 with included mitigation measures was prepared by RBF Consulting and reviewed by the City's retained consultant Tierra West Advisors in accordance with the California Environmental Quality Act (CEQA) and City Environmental Guidelines.

4. Based upon the findings and conclusions set forth herein, this Planning Commission hereby approves Development Plan Review (DPR) 2012-03 as modified herein, and specifically subject to the conditions set forth in Attachments "A, B, and C" attached hereto and by this reference incorporated herein.

5. The Secretary to the Planning Commission shall:
- a. Certify to the adoption of this Resolution; and
  - b. Forthwith transmit a certified copy of this Resolution, by certified mail, to the Applicant at the address of record set forth in the Application.

ADOPTED AND APPROVED this 11th day of December 2012.

---

Chairman

I, Kenneth A. Domer, Secretary to the Planning Commission of the City of Placentia, do hereby certify that the foregoing Resolution was introduced at a regular meeting of the Planning Commission of the City of Placentia held on the 11<sup>th</sup> day of December, 2012, and was passed at this regular meeting of the Planning Commission of the City of Placentia held on the 11<sup>th</sup> day of December, 2012, by the following vote:

AYES:	COMMISSION MEMBERS:
NOES:	COMMISSION MEMBERS:
ABSENT:	COMMISSION MEMBERS:
ABSTAINED:	COMMISSION MEMBERS:

ATTEST:

---

Secretary to the Planning Commission

APPROVED AS TO FORM

---

ANDREW V. ARCZYNSKI,  
CITY ATTORNEY

## **Attachment "A"**

### **Special Conditions of Approval and Standard Development Requirements for Development Plan Review (DPR) 2012-03**

#### **SPECIAL CONDITIONS**

If the above referenced application is approved, applicant and/or property owner shall comply with the Special Conditions of Approval listed below and the Standard Development Requirements attached.

**ALL OF THE FOLLOWING CONDITIONS OF APPROVAL OF DEVELOPMENT PLAN REVIEW (DPR) 2011-03 SHALL BE FULLY COMPLIED WITH PRIOR TO THE FINAL INSPECTION FOR USE AND OCCUPANCY OF THE PREMISES.**

#### **CITY PLANNING DIVISION:**

1. Failure to abide by and faithfully comply with any and all conditions attached to this action shall constitute grounds for revocation or amendment of said action by the City of Placentia Planning Commission.
2. Development Plan Review (DPR) 2012-03 shall expire two (2) years from the date of final approval, if not implemented. An application may be made to the Director of Development Services for a one (1) year extension. No more than one (1) extension shall be permitted.
3. The applicant shall, as a condition of project approval, at its sole expense, defend, indemnify and hold harmless the City, its officers, employees, agents and consultants from any claim, action, proceeding, liability or judgment against the City, its officers, employees, agents and/or consultants, which action seeks to set aside, void, annul or otherwise challenge any approval by the City Council, Planning Commission, or other City decision-making body or City staff action concerning applicant's project. The applicant shall pay the City's defense costs, including attorney fees and all other litigation-related expenses, and shall reimburse the City for any and all court costs, which the City may be required to pay as a result of such defense. The applicant shall further pay any adverse financial award which may issue against the City including but not limited to any award of attorney fees to a party challenging such project approval. The City shall retain the right to select its counsel of choice in any action referred to herein. The City agrees to promptly notify the applicant of any such claim filed against the City and to fully cooperate in the defense of any such action.

4. Prior to the submittal of working drawings, five (5) site plans shall be submitted for the review and certification of the Director of Development Services and shall include the following information:
  - a. All Special Conditions of Approval and Standard Development Requirements of Development Plan Review (DPR) 2012-03.
  - b. Include any project revisions on the site plan. Additionally, include separate sheets with approved Special Conditions of Approval, Standard Development Requirements.
  - c. Typical cross section views and details through the property and across each property line as directed by the Director of Development Services.
  - d. Full site plan notes, details and dimensions.
  - e. Location of transformers, meters and other aboveground appurtenances.
5. Prior to the issuance of any building permits, submit the following for the approval of the Director of Development Services:
  - a. An exterior lighting plan showing location, type and design of fixtures and areas of illumination (photometric). Lighting shall neither negatively impact adjacent properties nor the public right-of-way.
  - b. Complete landscape and irrigation plans.
  - c. Postmaster approval of the location and design of the mailboxes, if applicable.
  - d. Samples of all colors, textures and materials.
  - e. A detailed site plan showing the location where building related-equipment, facilities and materials will be stored during construction.
  - f. A detailed timeline outlining the course of drilling, grading/construction work that will take place on the property.
  - h. A detailed site plan showing how pedestrians will be protected during construction.

6. Prior to the issuance of building permits, the developer shall submit for City approval a construction staging plan that indicates how safe vehicular and pedestrian access to the site will be maintained for the duration of the construction period. The construction staging plan shall include measures such as, but not limited to the following:
  - a. A telephone number and a name of a contact person for registering complaints or comments shall be posted in a clearly visible manner along the perimeter of the site.
  - b. A flag person shall be employed to direct traffic when construction vehicles access the project site and the construction staging area.
  - c. Alternate pedestrian routes to the site shall be clearly delineated with safe access to and the site.
  - d. If any sidewalk is blocked during construction, alternate routes for pedestrians and bicycles shall be clearly marked with signs approved by the City.
  - e. All access points shall be clearly marked during construction, and if an access point is blocked during construction, a detour sign to an alternate access point shall be clearly posted.
7. All roof mounted equipment and appurtenances shall be screened as an integral part of the architectural design, subject to the review and approval of the Director of Development Services and the Chief Building Official.
8. Roofing materials shall comply with the City's Roofing Policy on file with the City Building Division.
9. Applicant/builder shall comply with all applicable Water Quality Management Plan (WQMP) requirements and Best Management Practices (BMPs) to control pollutant run-off from the subject site during construction. Applicant to provide plan to be approved by the Public Works Department.
10. Prior to final release of the buildings:
  - a. All Special Conditions of Approval and Standard Development Requirements shall have been completed and final inspections approved.
  - b. Landscape and irrigation plans shall be approved and on file with the City Building Division and all landscape materials established and irrigation system properly functioning.

11. Complete project Landscape and irrigation plans shall comply with the provisions of Chapter 23.77, Xeriscape of the Placentia Municipal Code.
12. During grading and construction, site shall be regularly sprinkled with water to minimize fugitive dust emissions. Also, compliance shall be required with the permitted working hours as specified in Section 23.81.170, Grading, construction and maintenance of real property of the Placentia Municipal Code. Signs shall be posted at all construction entrances to the project site indicating the permitted working days and hours.
13. Applicant shall comply with the City's Noise Control Ordinance, Chapter 23.76 of the Placentia Municipal Code.
14. Applicant/builder is responsible, at its sole cost and expense, to cause all project related cable, telephone, electrical, and other utility services serving the property to be placed underground within the subject site. Prior to the issuance of building permits, Applicant/builder shall submit a separate utility plan for each such utility service. The utility plan shall indicate the precise location of where all cable, telephone, electrical, and other utility services serving the property will be placed underground within the subject site, as well as the points of connection at the proposed building or buildings on the site and the public right-of-way. Prior to the submittal of the utility plans to the City, the plans shall be reviewed and approved by the utility companies. Evidence of approvals shall be in the form of a signed and dated approval stamp and/or approval letter. If the precise locations of future utility services cannot be reasonably ascertained prior to the issuance of building permits, upon prior written approval of the Director of Development Services, prior to issuance of a certificate of occupancy. Applicant/builder shall provide the City with "as built" plans showing the precise locations where all cable, telephone, electrical, and other utility services serving the property were placed underground within the subject site, as well as the points of connection at the building or buildings on the site and the public right-of-way.
15. Applicant/Builder shall establish a rodent abatement program prior to the demolition of existing structures on the property, or before any other on or off-site work. A detailed description of how this program will work shall be submitted to the City Planning Division for approval prior to obtaining a demolition permit.
16. Prior to the final release of the structure, all Special Conditions of Approval and Standard Development Requirements shall have been completed and final inspections approved.
17. The applicant/property owner shall be responsible for maintaining the property, including the landscaped areas, walkways, and all paved surfaces, free from graffiti, debris and litter at all times. Graffiti shall be removed by the applicant/property owner within 48 hours of defacement and/or upon notification by the City.

18. The side yard setback to the water well enclosure structure shall be 12'-0" as measured from the east property line that runs parallel to Melrose Avenue.
19. Applicant shall provide a plan that indicates the manner in which adjacent structures are protected against noise, vibration and other factors relating to the drilling, grading and construction of the proposed water well facility. Plan shall be submitted prior to any construction work conducted on the subject property.
20. Applicant shall provide sufficient written notice to adjacent property owners as to the drilling, grading and construction schedule of the proposed water well facility. Notice shall include a telephone number and a name of a contact person for registering complaints or comments
21. This site shall operate as a water well facility at all times. Activities, including maintenance and servicing shall not cause objectionable noise, odor or other nuisances.
22. Property owner shall be responsible for maintaining the property, including the landscaped areas, walkways, and all paved surfaces, free from graffiti, debris and litter. Graffiti shall be removed by the applicant/property owner within 72 hours of defacement and/or upon notification by the City.
23. Litter shall be regularly removed from the premises, including adjacent public sidewalks, and from all areas under the control of the applicant.
24. No expansion or modification of the water well facility shall occur at any time without first obtaining approval from the Development Services Department. The Director, or designee, may require that a future modification of the facility requires Planning Commission discretionary review.
25. The Wilson Well facility shall not bear any signs or advertising devices other than certification, warnings or other required seals or signage at any time.

**CITY BUILDING DIVISION:**

26. Building structure (pump house) shall be designed and prepared by a licensed California architect or engineer.
27. Grading plans shall be prepared by a registered, licensed California civil engineer and shall be approved by the City Engineering Division prior to the issuance of any building permits.
28. All contractors and subcontractors shall obtain a City business license. Developer/Applicant shall request a standard subcontractor form from the City Building Division prior to the issuance of any building permits. This standard form

shall be completed and submitted to the City Business License Division prior to release of a Certificate of Occupancy.

**CITY ENGINEERING DIVISION:**

29. The overflow drainage from the well and pumping operation shall be captured on site and conveyed via storm drain to existing storm drain at Chapman/Walnut. Storm drain plans shall be prepared by a State registered engineer and inspection fees paid prior to issuance of building permit.
30. Applicant shall provide a grading plan prepared by State registered engineer detailing site construction and elevations.
31. The applicant shall process and record offsite SCE and GSWC easements to the satisfaction of the City Engineer prior to issuance of building permits. Conditions for grant of easement are listed below:
  - a. 24 hour notice is required prior to start of construction.
  - b. Building permit is required for demo work.
  - c. Grading permit is required for removal of excess material. An approved haul route is required as well as a transportation permit to transport material.
  - d. No dirt or dust shall be allowed to accumulate. A Water Quality Management Control Plan is required, including BMP's, trench dewatering discharges, or other to meet state permit requirements. Provisions for contributory drainage shall be made at all times.
  - e. Excess debris or material shall be removed from work area daily. Material will not be stored within public traffic areas, pedestrians or vehicular.
  - f. Construction activities within the park shall be coordinated with the City Recreation Department planned activities. All grass and irrigation shall be restored to like new condition. The contractor will install (6) 24 inch box trees from an approved City tree list at a location specified by the Recreation Superintendent within the Walnut Avenue parkway area.
  - g. An approved construction schedule shall be submitted prior to the start of construction. Access to driveways shall be maintained at all times.
  - h. Surety shall be posted to guarantee execution of work.
  - i. The Golden State Water Company shall provide full time inspection. The Water Company shall deposit an inspection fee for the City to provide part-time inspection pertaining to the demo work, the park restoration where areas are affected, or street work due to drain line installation.
  - j. Walnut Avenue pavement surface shall be restored for full street width curb to curb by grinding and placement of one inch overlay to the satisfaction of the Placentia City Engineer.
  - k. Insurance certificates shall be filed to the satisfaction of the City Attorney. The City of Placentia shall be named additional insured.
  - l. All trench work shall be neat and clean cut. Finish work shall be smooth and properly compacted.

- m. Photographs depicting before and after conditions shall be provided to the City Public Works Department.
- n. Compaction testing of native material and aggregate base shall be furnished. The use of two sack slurry cement may be substituted for native backfill.
- o. Permanent hot mix asphalt shall be in place within two working days of completion of backfill.
- p. Tests for compliance, gradation, and oil content shall be submitted as work progresses.
- q. A licensed land surveyor shall restore survey reference points or monuments as required by State law.
- r. Project signs informing the public are required. The signs shall be in place one week prior to start of construction and State office and emergency phone numbers shall be provided on the signs.
- s. Record drawings shall be filed with the City engineer upon completion of the project work.
- t. All work shall conform to project plans and specifications and the Standard Specifications for Public Works Construction (Green Book), latest edition.
- u. Flashing arrow boards are required for lane closures along Chapman Avenue.
- v. Wet sand blasting is permitted; dry sand blasting is not permitted.
- w. Work may not proceed if the work conflicts with a special event.
- x. Temporary tabs shall be used after paving operation. Striping requires two coats.
- y. Working hours are limited to 8:30 a.m. to 4:30 p.m.
- z. All catch basins along the construction route must be protected and kept clean.
- aa. An easement document is required acceptable to the City for providing power to the well site if power is provided through the park. The easement must be recorded prior to start of work within the park.
- bb. The City will review and approve the water company's design and construction plans for the installation of drain line prior to issuance of building permits for well site.

32. An encroachment permit for work in public right of way is required.

33. Block perimeter walls and landscape irrigation systems require separate permit.

**CITY POLICE DEPARTMENT:**

34. Developer/Applicant shall comply with Placentia Police Department standard development requirements for security (See Attachment "B")

**ORANGE COUNTY FIRE AUTHORITY:**

35. Developer/Applicant shall comply with all site development requirements specified by the Orange County Fire Authority (OCFA) and provide City with applicable proof of OCFA necessary approvals. (See Attachment "C")

# RESIDENTIAL AND INDUSTRIAL / COMMERCIAL STANDARD DEVELOPMENT REQUIREMENTS DPR 2012-03

THE FOLLOWING SHALL APPLY IF CHECKED

## **BUILDING DIVISION**

### ***Compliance required with the latest***

- 2012 California Building Code
- 2012 California Plumbing and Mechanical Code
- 2012 California Electrical Code
- License Ordinance (Sub-Contractor List)
- Flood Plain Management Regulations
- State of California Energy Conservation Standards
- Handicap Requirements

## **ENGINEERING DIVISION**

### **STREETS**

#### ***Dedications***

- Street Rights-of-Way
- Vehicular access rights to arterial highways

#### ***Improvements***

- Grading, paving, curb and gutter, sidewalks, medians on arterial highways, storm drains

#### ***Miscellaneous***

- Installation of survey monuments
- Street Naming Committee to approve all street names
- Treewells, planters, storm drains, sewer lines
- No easements to be granted to any agency or individual prior to issuance of building permits except to the City of Placentia
- Sidewalk / Utility
- Vehicle Access (emergency)
- Project address shall be provided prior to issuance of any City permits

### **UTILITIES**

#### ***Undergrounding***

- Existing overhead facilities
- Proposed utilities

- Pipelines**
- Relocation or removal of existing pipelines

- Provide**
- Sewer mains and laterals
  - Approved conduit for cable television
  - Ornamental street lights

- Services**
- Water service by City approved agency
  - Sewer service by City approved agency
  - Annexation to Placentia Street Lighting District

## **MEDIANS**

- Arterial Highway Medians** (where required)
- Construct one-half of median, including landscaping or pay for one-half cost of construction and installation

## **MAINTENANCE DIVISION**

- Provide**
- Street trees, fifteen (15) gallon or larger size at maximum                      ft. o.c.
  - Species
  - Sprinkler system
  - Sprinkler Controller (type and number of stations)

## **PLANNING DIVISION**

- Expiration**
- Expires two (2) years from the date of approval unless used or an extension is requested and approved
- Garage**
- Electric garage door openers required where driveways are less than twenty (20) feet in length
- Roof-Mounted Equipment or Appurtenances**
- Completely screened from public view
- Mailboxes**
- Approved by the Postmaster
- Sales Office**
- Copies of the current Placentia Zoning and General Plan Land Use maps displayed at all times

## **O.C. SANITATION DISTRICT**

### ***Permit***

- Required of industrial and commercial users for discharge of waste water directly or indirectly to the District's sewerage facilities

## **O.C. FIRE PROTECTION AUTHORITY**

### **HYDRANT**

- Provide the following hydrants:  
Number            Size            Capacity
- All hydrants, valves, and mains installed and operable prior to construction with combustible materials

### **MISCELLANEOUS**

#### ***Parking***

- Permitted only in approved spaces for private drives. Signs provided noting prohibition of parking in unauthorized areas

#### ***Trash Storage Areas***

- Approved one (1) hour fire separation or sprinklers for those connected to or immediately adjacent to any structure

#### ***Fire Alarm System***

- Local alarm and evacuation system installed and maintained

#### ***Decorative Grills or Bars***

- Provided with breakaway devices

### **PERMITS**

#### **Permits necessary for the following prior to installation and / or use**

- 1. Underground storage tanks for flammable liquids
- 2. Flammable liquids dispensing equipment
- 3. Operation using flammable or toxic liquids
- 4. Storage of more than six (6) gallons of Class I or Class II flammable liquids

## **FEES - CHARGES - DEPOSITS**

Fees, charges, and deposits shall be paid prior to issuance of grading and / or building permits.

### **BUILDING**

- County sewer
- Building permit and plan check
- Recreation / park in-lieu
- Curb identification
- General and sub-contractor's business license fees

### **ENGINEERING**

#### ***Fees and Charges***

- Storm drain acreage
- Sewer acreage
- Engineering plan check and inspection
- Final subdivision map check
- Street name and traffic control sign
- Arterial street soil test
- Thoroughfare acreage
- Mission bell street lights
- Arterial highway median construction
- Arterial highway median landscaping
- Traffic Impact

#### ***Deposit***

- Street tree maintenance
- Pre-acceptance street cleaning
- Street light advance maintenance and energy
- Grading Bond

### **PLANNING**

- Landscape plan check

## PLANS

### ENGINEERING

***Submit five (5) copies of the following to the City Engineer prior to issuance of building permits***

- Grading plan and Drainage Plan
- Street improvement plan
- Sewer plan
- Storm drain plan
- Preliminary composite utility / plot plan
- Tract map
- Parcel map
- Landscape plan for sight distance clearance

***Provide***

- City Engineer with “as-built” construction plans for the above items

### MAINTENANCE

***Approval by the Maintenance Division of the following prior to the issuance of building permits***

- Landscape Plans

***Provide Maintenance Division Superintendent with “as-built” originals of irrigation systems for***

- Street trees
- Planters
- Landscaped medians
- Sprinkler Controller (type and number of stations)

### PLANNING DIVISION

***Applicable to all development or significant redevelopment greater than 5,000 square feet:***

- Prior to issuance of building permits, submit a Water Quality Management Plan (WQMP) specifically identifying Best Management Practices (BMPs) that shall be used on site to control predictable pollutant run-off.
- Prior to recordation of a map for subdivision of land and if determined applicable by City / EMA official(s), submit a WQMP that identifies the application and incorporation of those routine structural and non-structural BMPs outlined in the countrywide NPDES Drainage Area Management Plan Appendix detailing implementation of BMPs not dependent on specific land uses for approval of the City and EMA official(s)

- Prior to issuance of grading or grubbing and clearing or surface mining or paving permits, obtain coverage under the NPDES Statewide Industrial Storm water Permit for General Construction Activities from the State Water Resources Control Board. Evidence that this has been obtained shall be submitted to City / EMA official(s)

### **C.C. & R.'s**

- Provide***  
Planning Division with three (3) copies of C.C. & R.'s prior to approval of the final map
- Record***  
C.C. & R.'s prior to or simultaneously with the recordation of the final tract or parcel map

**Attachment "B"**  
**Placentia Police Department Standard Development Requirements**

# **PLACENTIA POLICE DEPARTMENT**

APPLICATION: Development Plan Review 2012-03: 202 Wilson Avenue

## **STANDARD DEVELOPMENT REQUIREMENTS RESIDENTIAL**

The following standards shall be required for all residential developments. No modifications shall be made without the approval of the Police Chief.

### **RESIDENTIAL SECURITY**

#### **Sliding Glass Doors**

Shall be of tempered glass with locking bolt that grips door and frame together and prevents the door from being pried in an upward direction. The strike area shall be reinforced to prevent prying and disengagement of the locking bolts. Anti-lift out device(s) shall be installed in the upper channel above the moving panel to prevent raising and removal from the tract while in the closed position.

#### **Other Doors**

Except for vehicular access doors, all exterior swinging doors of any residential building and attached garage, including the door leading from the garage area into the dwelling unit, shall be equipped as follows:

All wood doors shall be of solid core construction with a minimum thickness of one and three-fourths (1 3/4) inches, or with panels not less than nine-sixteenths (9/16) inch thick.

Metal doors of hollow construction shall be of a minimum 16 gauge steel with reinforcement to maintain the design thickness of the door when any locking device is installed. Metal jambs shall be used.

Door stops on wooden jambs for in-swinging doors shall be of one piece construction with the jamb.

A single or double door shall be equipped with a double or single cylinder deadbolt lock. The bolt shall have a minimum projection of one (1) inch and be constructed so as to repel cutting tool attack. The deadbolt shall have an embedment of at least three-fourths (3/4) inch into the strike receiving the projected bolt. The cylinder shall have a hardened, rotating steel cylinder guard, a minimum of five pin tumblers, and shall be connected to the inner portion of the lock by connecting screws of at least one-fourth (1/4) inch in diameter. A dual locking mechanism constructed so that both deadbolt and latch can be

retracted by a single action of the inside door knob, or lever, may be substituted provided it meets all other specifications for locking devices.

The inactive leaf of double door(s) shall be equipped with metal flush bolts having a minimum embedment of five-eighths (5/8) inch into the head and threshold of the door frame.

Glazing in exterior doors or within forty (40) inches of any locking mechanism shall be of fully tempered glass or rated burglary resistant glazing, except when double cylinder deadbolt locks are installed.

The strike plate for deadbolts on all wood framed doors shall be constructed of minimum sixteen (16) U.S. gauge steel, bronze, or brass and secured to the jamb by minimum of two screws, which

**(Doors, continued)**

must penetrate at least two (2) inches into solid backing beyond the surface to which the strike is attached.

Hinges for out-swinging doors shall be equipped with non-removable hinge pins or a mechanical interlock to preclude removal of the door from the exterior from the exterior by removing the hinge pins. Except where clear vision panels are installed, all front exterior doors shall be equipped with a wide angle one hundred-eighty degree (180°) door viewer.

Upon occupancy by the owner or proprietor, each single unit in tract or multi-unit development, constructed under the same general plan, shall have locks using combinations which are interchange free from locks used in all other separate dwellings, proprietorships or similar distinct occupancies.

**Windows**

No Louvered windows shall be used.

All windows shall have a locking mechanism(s) which when in a closed and locked position, shall be constructed so as to prevent the window from being opened or removed by external force or prying.

**Address**

The address number shall be mounted near the front entry of each building or other conspicuous location and be no less than four (4) inches high. They shall be mounted on a contrasting background and easily visible from the street or walkway. If rear-vehicular access, the same numbers shall be displayed on the rear of building.

There shall be positioned at each entrance of a multiple-family dwelling complex an illuminated diagrammatic representation of the complex which shows the location of the viewer and the unit designations within the complex. In addition, each individual unit

within the complex shall display a prominent identification number, not less than four (4) inches in height, which is easily visible to approaching vehicular and/or pedestrian traffic.

### **Lighting**

Aisles, passageways, and recesses related to and within the building complex shall be illuminated with an intensity of at least twenty-five one hundredths (.25) foot-candles at the ground level during the hours of darkness. Lighting devices shall be protected by weather and vandalism resistant covers.

Open parking lots and car ports of multi-family units shall be provided within a minimum of one (1) footcandle of light on the parking surface during the hours of darkness. Lighting devices shall be protected by weather and vandalism resistant covers.

### **Ladders**

Ladders leading to the roof shall do so from the interior of the building.

### **Other**

CC&R's to require Homeowners' Association to petition City Council for resolution enabling enforcement of traffic regulations on private streets by police (Section 21107.7 State of California Vehicle Code).

**Attachment "C"**  
**Orange County Fire Authority (OCFA) Special Conditions of Approval**



# ORANGE COUNTY FIRE AUTHORITY

*Fire Prevention Department*

*P. O. Box 57115, Irvine, CA 92619-7115 • 1 Fire Authority Road, Irvine, CA 92602*

---

*Planning and Development Services • [www.ocfa.org](http://www.ocfa.org) • (714) 573-6100 / Fax (714) 368-8843*

Date: October 24, 2012

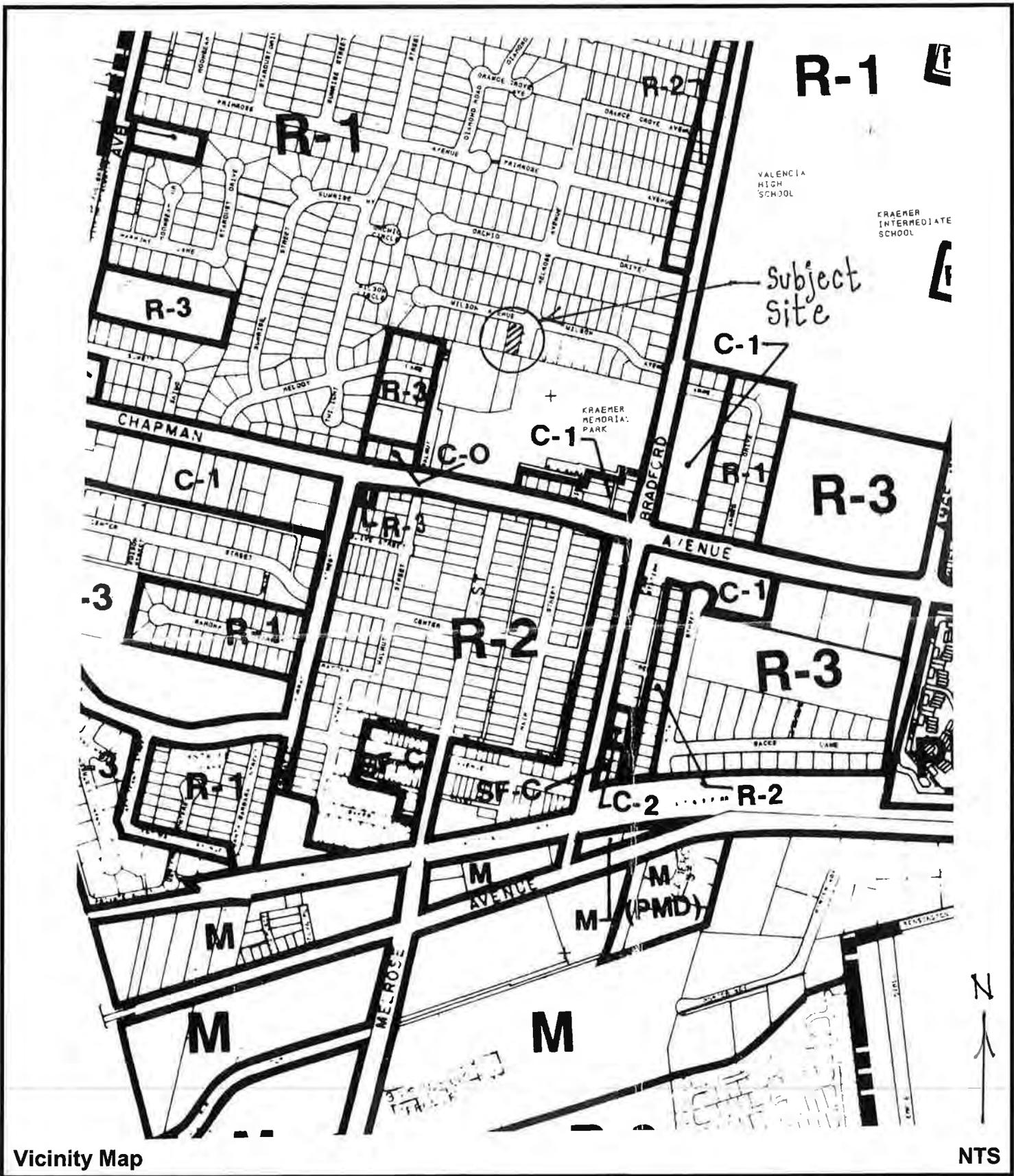
To: City of Placentia Planning  
Attention: Monique Schwartz, Planner

From: Lynne Pivaroff, Fire Prevention Analyst

Subject: **OCFA Service Request SR #185740**  
**Wilson Plant- 202 Wilson Avenue, Placentia**  
**Service Code: PR105 Site Development Review/CUP**

The OCFA has reviewed the proposed project and there do not appear to be any significant issues associated with this proposal that would require further submittals to the OCFA should the city approve the CUP. The only condition that OCFA would require is a Knox lock on proposed gates so that in the event of an emergency access could be made.

If you need additional information or clarification, please contact me by phone at (714) 573-6133, by fax at (714) 368-8843, or by email: [lynnepivaroff@ocfa.org](mailto:lynnepivaroff@ocfa.org).



Vicinity Map

NTS



**PLANNING DIVISION REPORT**  
**UP 2012-03**  
**Exhibit 1**



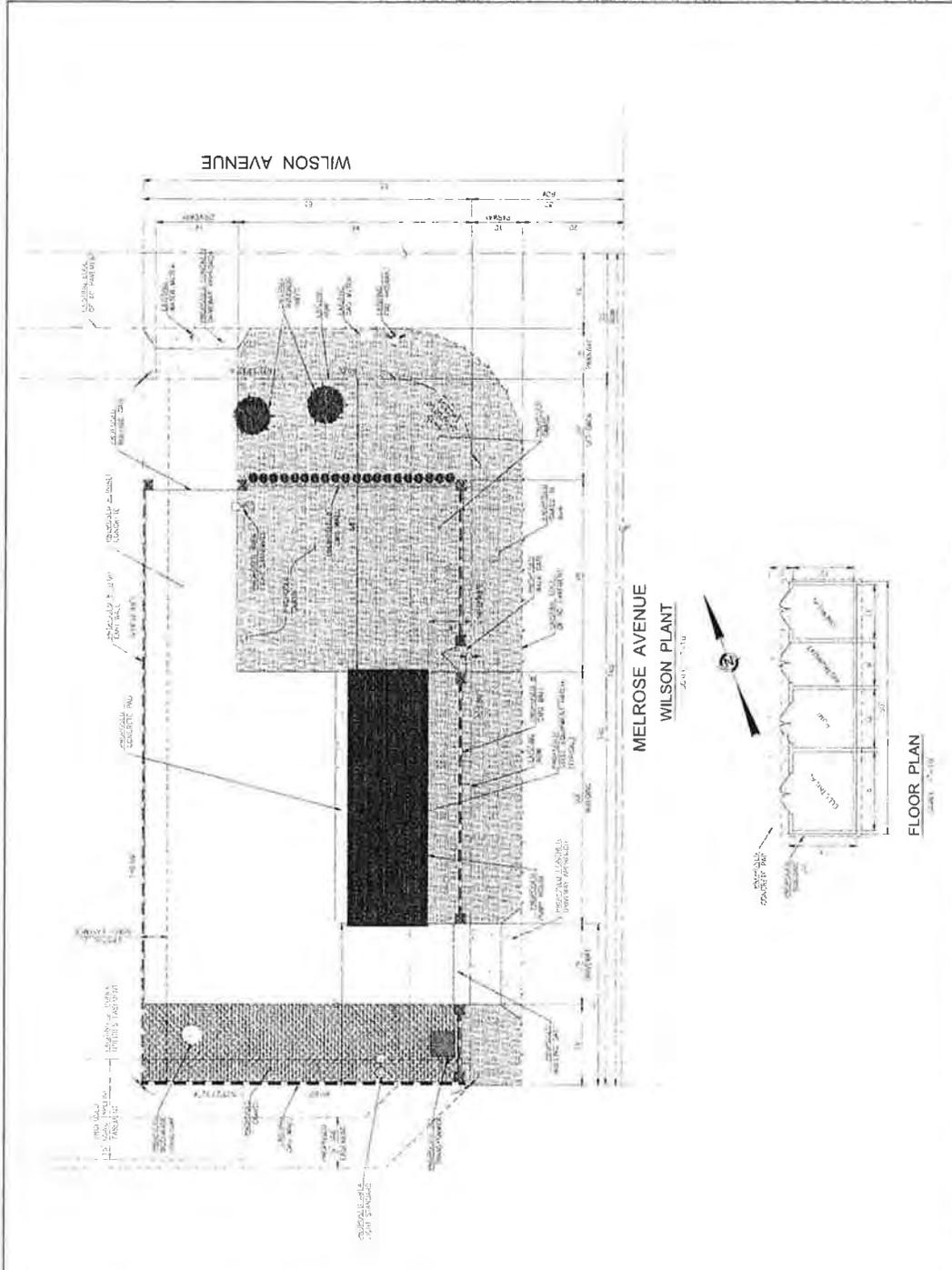
**PLANNING DIVISION REPORT**  
**APPLICATION: DPR 2012-03**  
**EXHIBIT: 2**  
**PAGE 1 OF 1**  
**DATE: 12-11-12**

**PROPERTY SUMMARY TABLE**

Parcel No.	Area (sq. ft.)								
12345678	10000	10000	10000	10000	10000	10000	10000	10000	10000
87654321	10000	10000	10000	10000	10000	10000	10000	10000	10000

**DATA**  
 12345678  
 87654321  
 12345678  
 87654321

**LEGEND**  
 - - - - - Proposed  
 - - - - - Existing  
 - - - - - Easement  
 - - - - - Utility



**WILSON PLANT**  
 202 WILSON AVENUE  
 PHASE IV - EDIPPING WELL NO. 1  
 CITY OF PASADENA  
 CH  
 PROPOSED SITE PLAN  
 27500349



Item	Description	Quantity	Unit	Notes
1	Excavation	1000	sq. ft.	
2	Foundation	1000	sq. ft.	
3	Structure	1000	sq. ft.	
4	Roofing	1000	sq. ft.	
5	Interior Finishes	1000	sq. ft.	
6	Exterior Finishes	1000	sq. ft.	
7	Landscaping	1000	sq. ft.	
8	Site Work	1000	sq. ft.	
9	Utilities	1000	sq. ft.	
10	Other	1000	sq. ft.	



Item	Description	Quantity	Unit	Notes
1	Excavation	1000	sq. ft.	
2	Foundation	1000	sq. ft.	
3	Structure	1000	sq. ft.	
4	Roofing	1000	sq. ft.	
5	Interior Finishes	1000	sq. ft.	
6	Exterior Finishes	1000	sq. ft.	
7	Landscaping	1000	sq. ft.	
8	Site Work	1000	sq. ft.	
9	Utilities	1000	sq. ft.	
10	Other	1000	sq. ft.	

**811**  
 Know what's below.  
 Call before you dig.

**PLANNING DIVISION REPORT**  
**APPLICATION: DPR 2012-03**  
**EXHIBIT: 2**  
**PAGE 1 OF 1**  
**DATE: 12-11-12**



THE CONTRACTOR IN ADDITION TO OBTAINING ALL NECESSARY PERMITS AND A BIDDING INSTRUMENT IN THE PROJECT AREA TO COMPLETE THE SUBSTRUCTURE AND FOUNDATION SHALL OBTAIN A PERMIT FROM THE PLANNING DIVISION FOR INFORMATION FROM THE PLANNING DIVISION. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND A BIDDING INSTRUMENT IN THE PROJECT AREA TO COMPLETE THE SUBSTRUCTURE AND FOUNDATION SHALL OBTAIN A PERMIT FROM THE PLANNING DIVISION FOR INFORMATION FROM THE PLANNING DIVISION.

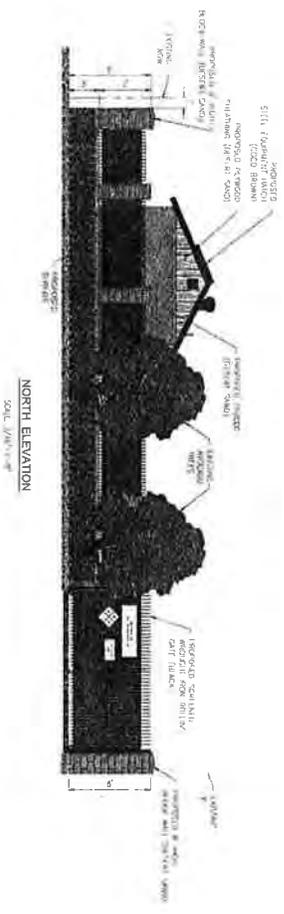
NO.	DESCRIPTION	DATE
1	PRELIMINARY	01/11/12
2	REVISED	01/11/12
3	REVISED	01/11/12
4	REVISED	01/11/12
5	REVISED	01/11/12
6	REVISED	01/11/12
7	REVISED	01/11/12
8	REVISED	01/11/12
9	REVISED	01/11/12
10	REVISED	01/11/12



NO.	DESCRIPTION	DATE
1	PRELIMINARY	01/11/12
2	REVISED	01/11/12
3	REVISED	01/11/12
4	REVISED	01/11/12
5	REVISED	01/11/12
6	REVISED	01/11/12
7	REVISED	01/11/12
8	REVISED	01/11/12
9	REVISED	01/11/12
10	REVISED	01/11/12

**Golden State Water Company**  
 1001 WEST 10TH AVENUE, SUITE 100  
 DENVER, CO 80202  
 (303) 733-2222

WILSON PLANT  
 2022 ESCROW CENTER  
 PHASE IV, ESCROW WELL NO 1  
 CITY OF DENVER  
 27500349



**PLANNING DIVISION REPORT**  
 APPLICATION: DPR 2012-03  
 EXHIBIT: 3  
 PAGE 1 OF 1  
 DATE: 12-11-12

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

---

**Golden State Water Company  
Wilson Well Project**

---

LEAD AGENCY:

**California Department of Public Health**  
Division of Drinking Water and Environmental Management  
1616 Capital Avenue  
Sacramento, CA 95814  
*Contact: Kelvin Yamada, Section Chief*  
(916) 449-5600

PREPARED BY:

**RBF Consulting**  
40810 County Center Drive, Suite 100  
Temecula, California 92591  
*Contact: Mr. Kevin Thomas, CEP*  
(951) 506-2074

August 9, 2011

JN 15-101781

**PLANNING DIVISION REPORT**  
APPLICATION: OPR 2012-03  
EXHIBIT: 4  
PAGE 1 OF 62  
DATE: 12-11-12

# TABLE OF CONTENTS

---

<b>1.0</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Statutory Authority and Requirements .....	1
1.2	Purpose .....	1
1.3	Consultation .....	2
1.4	Incorporation by Reference .....	2
<b>2.0</b>	<b>Project Description .....</b>	<b>3</b>
2.1	Project Location.....	3
2.2	Environmental Setting .....	3
2.2.1	On-Site Land Uses .....	3
2.2.2	Surrounding Land Uses .....	3
2.3	Existing General Plan and Zoning Designations .....	3
2.4	Project Background .....	4
2.5	Project Characteristics .....	4
<b>3.0</b>	<b>Initial Study Checklist.....</b>	<b>5</b>
3.1	Background .....	5
3.2	Evaluation of Environmental Impacts .....	6
3.3	Environmental Factors Potentially Affected .....	7
3.4	Environmental Checklist.....	8
<b>4.0</b>	<b>Environmental Analysis .....</b>	<b>19</b>
4.1	Aesthetics.....	19
4.2	Agriculture Resources .....	20
4.3	Air Quality.....	21
4.4	Biological Resources .....	25
4.5	Cultural Resources .....	27
4.6	Geology and Soils .....	29
4.7	Greenhouse Gas Emissions.....	31
4.8	Hazards and Hazardous Materials .....	32
4.9	Hydrology and Water Quality.....	34
4.10	Land Use and Planning .....	37
4.11	Mineral Resources .....	38
4.12	Noise .....	38
4.13	Population and Housing .....	42
4.14	Public Services .....	42
4.15	Recreation .....	43
4.16	Transportation/Traffic .....	44
4.17	Utilities and Service Systems .....	46
4.18	Mandatory Findings of Significance .....	47
<b>5.0</b>	<b>References.....</b>	<b>49</b>
5.1	Report Preparation Personnel.....	49
5.2	Reference Documents.....	49

## TABLE OF CONTENTS (continued)

---

6.0	Inventory of Mitigation Measures .....	51
7.0	Consultant Recommendation .....	54
8.0	Lead Agency Determination.....	55

## LIST OF TABLES

---

4.3-1	Thresholds of Significance for Construction Emissions .....	23
-------	---	----

## LIST OF EXHIBITS

---

*All Exhibits are located at the end of this document.*

2-1	Regional Vicinity Map.....	56
2-2	Proposed Pipeline Alignments .....	57
2-3	Site Plan.....	58
2-4	Project Site Photos (1 – 4) .....	59

## 1.0 INTRODUCTION

Following preliminary review of the proposed Wilson Well Project ("Project"), Golden State Water Company (GSWC) has determined that the Project is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). The Project addressed in this Initial Study/Mitigated Negative Declaration (IS/MND) consists of all actions related to the installation and operation of a 1,500-2,500 gallons per minute (gpm) domestic water well, approximately 900 lineal feet (LF) of 12-inch diameter distribution waterline, and approximately 900 LF of 16-inch diameter drain line connecting to the public storm drain, as well as associated water well facilities for the purpose of improving fire flow and water quality in the existing Placentia water system. This Initial Study has been prepared to address potential site-specific impacts associated with implementation of the proposed Project, as described below. The Initial Study addresses the potential direct, indirect and cumulative environmental effects associated with implementation of the proposed Project.

### 1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with the CEQA (Public Resources Code Section 21000 - 21177) and pursuant to Section 15063 of the California Code of Regulations (CCR), the California Department of Public Health (CDPH), acting in the capacity of Lead Agency, is required to undertake the preparation of an Initial Study to determine if the proposed Project would have a significant environmental impact. If the Lead Agency finds that there is no evidence that the Project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed Project would not have a significant effect on the environment and shall prepare a Negative Declaration for the Project. Such determination can be made only if "there is no substantial evidence in light of the whole record before the Lead Agency" that such impacts may occur (Section 21080(c), Public Resources Code).

This document has been prepared to provide an environmental basis for subsequent discretionary actions for the Project, to inform CDPH prior to taking action on the Project, and to provide Responsible Agencies, Trustee Agencies, other affected Agencies, and the general public with information regarding the Project and its potential environmental effects. As discussed further in Section 3.1, the only discretionary action anticipated to be required for the Project is CDPH's Water Supply Permit.

The environmental documentation and supporting analysis is subject to a public review period. During this review, comments on the document relative to environmental issues should be addressed to CDPH. Following review of comments received, CDPH will consider the comments as part of the Project's environmental review process.

### 1.2 PURPOSE

The purpose of the Initial Study/Mitigated Negative Declaration is to: (1) identify potential environmental impacts; (2) provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or Negative Declaration; (3) enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared; (4) facilitate environmental assessment early in the design of the project; (5) provide documentation of the factual basis for the finding in a Negative Declaration that a project would not have a significant environmental effect; (6) eliminate needless EIRs;

(7) determine whether a previously prepared EIR could be used for the project; and (8) assist in the preparation of an EIR, if required, by focusing the EIR on the effects determined to be significant, identifying the effects determined not to be significant and explaining the reasons for determining that potentially significant effects would not be significant. As discussed further below, GSWC has determined that the Project will not result in significant environmental impacts and has circulated this Draft IS/MND for public review and comment.

Section 15063 of the CEQA Guidelines identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include: (1) a description of the project including the location of the project; (2) an identification of the environmental setting; (3) an identification of the environmental effects by use of a checklist, matrix or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries; (4) a discussion of ways to mitigate significant effects identified, if any; (5) an examination of whether the project is compatible with existing zoning, plans and other applicable land use controls; and (6) the name of the person or persons who prepared or participated in the preparation of the Initial Study.

### **1.3 CONSULTATION**

As soon as the Lead Agency has determined that an Initial Study would be required for the Project, the Lead Agency is directed to consult informally with Responsible Agencies and Trustee Agencies that are responsible for resources affected by the Project, in order to obtain the recommendations of those agencies as to whether an EIR or Negative Declaration should be prepared for the Project. Following receipt of any written comments from those agencies, the Lead Agency would consider any recommendations of those agencies in the formulation of the preliminary findings. Following preparation of this Initial Study, the Lead Agency shall initiate formal consultation with these and other governmental agencies, as required under CEQA and its implementing guidelines.

### **1.4 INCORPORATION BY REFERENCE**

Pertinent documents relating to this Initial Study/Mitigated Negative Declaration have been cited and incorporated, in accordance with Sections 15148 and 15150 of the CEQA Guidelines. The following references were utilized during preparation of this Initial Study and are available for review at the CDPH, Division of Drinking Water and Environmental Management, 1616 Capital Avenue, Sacramento, CA 95814, or at GSWC, Orange County District, 1920 West Corporate Way, Anaheim, CA 92801:

- City of Placentia General Plan, adopted variously from 1972 - 2003
- City of Placentia Housing Element 2006-2014, adopted March 2, 2010
- City of Placentia Municipal Code, Updated April 2010
- County of Orange 2005 General Plan (Safety and Housing Elements; updated in 2011)

## 2.0 PROJECT DESCRIPTION

### 2.1 PROJECT LOCATION

The proposed Wilson Well Project ("Project") is located within the City of Placentia in Orange County. Placentia is located within the northeastern portion of Orange County, surrounded by the cities of Fullerton to the west, Brea to the north, Yorba Linda to the east, and Anaheim to the south (refer to Exhibit 2-1, *Regional Location Map*).

Locally, the proposed Project is located in the southeastern portion of the City of Placentia, in the vicinity of State Route 57 and State Route 91. The Project is within a residential neighborhood, near a local park.

### 2.2 ENVIRONMENTAL SETTING

#### 2.2.1 On-Site Land Uses

As shown on Exhibit 2-2, *Proposed Pipeline Alignments*, the proposed Project would be located within an existing single-family residential neighborhood. The Project site is relatively flat and is currently occupied by an existing single-family residential house along with ornamental trees, grass, and landscaping associated with a typical residential lot (refer to Exhibit 2-4, *Photo Study*). The Project site is currently zoned Single Family Residential (R-1) per the City of Placentia Zoning Map. The City's General Plan Land Use Map designates the Project site within the Low Density Residential (6 dwelling units per acre maximum) land use.

#### 2.2.2 Surrounding Land Uses

The Project site is completely surrounded by Single Family Residential (R-1), per the City of Placentia Zoning Map.

The Project site is within the vicinity of a local park, which is designated as Open Space per the City's General Plan Land Use Map. The local park provides recreational facilities for the community that includes a baseball/softball field, playground, turf areas, benches, public barbeque facilities, and a concrete walking path. The nearest "commercial corridor" to the Project site is located approximately 0.13 miles to the southeast on the corner of West Chapman Avenue and North Bradford Avenue.

### 2.3 EXISTING GENERAL PLAN AND ZONING DESIGNATIONS

According to the *City of Placentia Zoning Map*, the Project is surrounded by a single land use and zoning designation as described below.

- **R-1 – Single Family Residential:** The purpose of the "R-1" district is to stabilize and retain the residential character and integrity of the district. (City of Placentia Zoning Map, City of Placentia Municipal Code, Section 23.12.010).

According to the *City of Placentia General Plan Land Use Map*, the Project is located within Low Density Residential (6 dwelling units per acre maximum) land use area.

- **Low Density Residential:** Low-density residential land uses, including Residential Agricultural and Single Family Residential designations, consist of approximately 1,634.5 acres, or 47.1% of the total acreage in the City. Low-density residential uses are primarily located north of the Santa Fe Railroad, separated from existing industrial uses. 53% (9,361 dwelling units) of the residential units in Placentia are designated as low-density residential. (City of Placentia General Plan, Chapter 2, Land Use Element).

## 2.4 PROJECT BACKGROUND

American States Water Company is the parent of Golden State Water Company. Through its subsidiaries, American States Water Company provides water service to 1 out of 36 Californians located within 75 communities throughout 10 counties in Northern, Coastal, and Southern California. Approximately 40% of the Placentia Customer Service Area water supply is imported water purchased from Municipal Water District of Orange County. The remaining 60% of the supply is pumped from 5 wells in the Customer Service Area. This Project will improve fire flow and water quality within the Placentia System as well as provide an additional source of water to increase system groundwater production capacity and reliability.

## 2.5 PROJECT CHARACTERISTICS

The Project proposes to construct a new potable water facility/well designed to pump and treat approximately 1,500-2,500 gallons per minute (gpm) of water into the Placentia water system. Included in this facility will be a chlorination facility, a vertical turbine pump, electric panel, and other related well facilities. These facilities will be housed in a split-face block wall building with three rooms: a chlorination room; electrical room; and pump room. The well will be approximately 1,000 feet in depth. A 12-inch diameter waterline for conveyance from the well will connect to a new 12-inch distribution waterline. The total length of the new 12-inch distribution line is approximately 900 linear feet. All of the distribution pipeline will be constructed and buried within City of Placentia existing street right-of-way (refer to Exhibit 2-2, *Proposed Pipeline Alignments*). In addition, a 16-inch drain line is proposed to connect the well site to the County of Orange public storm drain system. This line will extend to an existing 54-inch storm drain system owned and operated by the County of Orange (refer to Exhibit 2-2, *Proposed Pipeline Alignments*). The well facility will be entirely located within an 8-foot combination block and tubular steel fence or wall, will have perimeter landscaping, and will be accessed through a locked gate for periodic maintenance.

It should be noted that the existing well site contains an existing single-family residential structure that will be demolished per the State and City of Placentia regulations. The demolition of the existing structure is considered a ministerial act and Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which public agencies exercise only ministerial authority (CEQA Guidelines 15300.1).

## 3.0 INITIAL STUDY CHECKLIST

### 3.1 BACKGROUND

1. <b>Project Title:</b> Golden State Water Company – Wilson Well Project
---

<b>2. Lead Agency Name and Address:</b>  California Department of Public Health Division of Drinking Water and Environmental Management 1616 Capital Avenue Sacramento, CA 95814 Contact: Mr. Kelvin Yamada, Section Chief (916) 449-5600
<b>3. Contact Person and Phone Number:</b>  Golden State Water Company Orange County District 1920 West Corporate Way Anaheim, CA 92801 Contact: Mr. Robert Jordan (Water Quality Engineer) (714) 535-7711 ext. 248
<b>4. Project Location:</b>  The proposed Wilson Well Project ("Project") is located within the City of Placentia in Orange County. Placentia is located within the northeastern portion of Orange County, surrounded by the cities of Fullerton to the west, Brea to the north, Yorba Linda to the east, and Anaheim to the south.  Locally, the proposed Project is located in the southeastern portion of the City of Placentia. The Project site is located near a local park within a residential neighborhood.
<b>5. Project Sponsor's Name and Address:</b>  Golden State Water Company Orange County District 1920 West Corporate Way Anaheim, CA 92801
<b>6. General Plan Designation:</b>  The City of Placentia General Plan Land Use Map designates the Project site as Low Density Residential (6 dwelling units per acre maximum)
<b>7. Zoning:</b>  According to the City of Placentia Zoning Map, the zoning on the Project site is Single Family Residential (R-1)
<b>8. Description of the Project:</b>  The Project proposes installation of a new potable water facility/well designed to pump and treat approximately 1,500-2,500 gallons per minute (gpm) of water into the Placentia System and the development of associated facilities, including but not limited to, conveyance pipeline, chlorination facilities, and electric well pump. Additional information is provided within Section 2.5, <i>Project Characteristics</i> .
<b>9. Surrounding Land Uses and Setting:</b>  <i>North:</i> Single Family Residential <i>South:</i> Residential park, Public Park/Open Space <i>East:</i> Single Family Residential <i>West:</i> Single Family Residential

**10. Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement).**

- California Department of Public Health – Water Supply Permit

***Possible Ministerial Permits***

- City of Placentia - Grading Permit
- City of Placentia - Encroachment Permit.
- Regional Water Quality Control Board - SWPPP for construction operations may be required and an NPDES Permit for discharge to the City's stormwater system during well development may be required.

### **3.2 EVALUATION OF ENVIRONMENTAL IMPACTS**

This section analyzes the potential environmental impacts associated with the proposed Project. The issue areas evaluated in this Initial Study include:

- |                                   |                                 |
|-----------------------------------|---------------------------------|
| • Aesthetics                      | • Land Use and Planning         |
| • Agriculture Resources           | • Mineral Resources             |
| • Air Quality                     | • Noise                         |
| • Biological Resources            | • Population and Housing        |
| • Cultural Resources              | • Public Services               |
| • Geology / Soils                 | • Recreation                    |
| • Greenhouse Gas Emissions        | • Transportation/Traffic        |
| • Hazards and Hazardous Materials | • Utilities and Service Systems |
| • Hydrology and Water Quality     |                                 |

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the CEQA Guidelines, Appendix G, and used by CDPH in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the Project's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of a project. To each question, there are four possible responses:

- **No Impact.** The project will not have any measurable environmental impact on the environment.
- **Less Than Significant Impact.** The project will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.

- **Less Than Significant With Mitigation Incorporated.** The project will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- **Potentially Significant Impact.** The development will have impacts, which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

### 3.3 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" or "Less Than Significant With Mitigation Incorporated," as indicated by the checklist on the following pages.

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

**3.4 ENVIRONMENTAL CHECKLIST**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

**1. AESTHETICS – Would the project:**

a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**2. 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. In determining whether impacts to forest resources, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**3. 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 project:**

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

**4. 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 status 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**5. CULTURAL RESOURCES -- Would the project:**

a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**6. 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 (2004), 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?

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

**7. GREENHOUSE GAS EMISSIONS - Would the project:**

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**8. HAZARDS AND HAZARDOUS MATERIALS - Would the project:**

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**9. HYDROLOGY AND WATER QUALITY --**  
**Would the project:**

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**10. LAND USE AND PLANNING - Would the project:**

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**11. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**12. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**13. 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**14. 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 objectives for any of the public services:

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**15. 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?

**16. TRANSPORTATION/TRAFFIC -- Would the project:**

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

b) Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads and 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)?

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**17. UTILITIES AND SERVICE SYSTEMS.**

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**18. 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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	-------------------------------------	--------------------------	--------------------------

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

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 probable future projects)?

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

## 4.0 ENVIRONMENTAL ANALYSIS

The following evaluation provides responses to the questions in the CEQA Environmental Checklist. A brief explanation for each question in the CEQA Environmental Checklist is provided to support each impact determination. All responses consider the whole of the action involved including construction and operational impacts, as well as direct and indirect impacts. Environmental factors potentially affected by the proposed Project are presented below and organized according to the format of the Checklist. Evaluation of the following resources was based on a site visit conducted by GSWC and RBF Consulting in July 2009, and review of preliminary design plans, review of available site geotechnical data, and other sources listed in Section 5.0, *References*, of this analysis. Demolition of the existing single-family residence and construction of the proposed well and associated facilities would occur on an existing predominantly disturbed site, and would be consistent with GSWC's plans for providing service to this area.

### 4.1 AESTHETICS. *Would the proposal:*

a) *Have a substantial adverse effect on a scenic vista?*

**No Impact.** As shown in Exhibit 2-2, *Proposed Pipeline Alignments*, and Exhibit 2-4, *Photo Study*, the Project site is in a predominantly residential area and adjacent to single-family residential homes and open space/recreational facilities. The proposed well house building will be constructed in such a manner to blend with the neighborhood structures and an 8-foot-high screen fence or wall would be constructed around the Project site to block views of any mechanical equipment from the adjacent streets. Landscaping would also be installed around the perimeter of the Project site to help screen views. Because the proposed Project and immediately surrounding uses do not contain scenic vistas and the Project site would be screened from views in the surrounding community, no impact would occur.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

**No Impact.** No State or County-designated scenic highway segments are within the City of Placentia. The City of Placentia does not contain areas of significant size that meet the qualifications for scenic highways (City of Placentia General Plan, section VI, p. VI-1). State Highway 57 (Orange Freeway) is the nearest Highway to the site and is not designated by the County of Orange as a "scenic route". California Department of Transportation (Caltrans) lists a portion of State Highway 57 as an eligible state scenic highway. However, this stretch of highway is located approximately 2.5 miles to the north of the nearest highway exit from the Project site. The proposed Project would be constructed on an existing developed site used as a single-family home that does not contain scenic resources. There are no scenic resources, significant trees, significant rock outcroppings or historic buildings located on the Project site. Since the Project would not damage any scenic resources, no impact would occur.

c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

**Less than Significant Impact with Mitigation.** Construction of the well and associated facilities on the Project site would change the existing visual character of the site from its present use as a single-family residential home. This proposed facility would be largely

screened from public view. The top of the new well house may be visible to residences located adjacent to the Project site, but it would not substantially degrade the existing visual character or quality of the site or its surroundings, because the visual impact would be reduced by incorporating architecture and paint color that would be compatible with the surrounding residential uses. Impacts would be less than significant with mitigation.

**Mitigation Measures:**

AES-1 To the extent practical, well house and wall/fence design shall incorporate colors and architecture features that are compatible with the surrounding uses.

d) *Create a new source of substantial light or glare, which, would adversely affect day or nighttime views in the area?*

**Less than Significant Impact.** The proposed well would require maintenance/security lights. Typical GSWC well facility design includes directing lighting downward away from existing residences near the Project site and lighting would be shielded or hooded to reduce light overspill and glare. The amount of lighting would be similar to other residential lots and existing overhead street lighting within the area. Based on GSWC's shielded or hooded lighting design features, impacts to adjacent land uses would be reduced to a less than significant level.

**4.2 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 Department 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?*

**No Impact.** The Project site is located in a fully developed portion of the City and is zoned Single Family Residential (R-1) that is intended for residential use and has no agricultural land use designation near the site. The Project site has no signs of agricultural use in the past and no agricultural uses exist on the site. The proposed Project site is not located on land designated for Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. Because of the factors listed above, no impact to agricultural resources would occur.

b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

**No Impact.** Since the proposed Project site is zoned Single Family Residential per the City's Zoning Map and the site is not encumbered by a Williamson Act contract, the proposed Project would not conflict with an existing zoning for agricultural use or Williamson Act contract and no impact would occur.

c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

**No Impact.** The Project site is not currently zoned for forest land, timberland, or timberland production. The proposed Project would not rezone or conflict with land classified as forest land, timberland, or timberland production. Therefore, no impact would occur.

d) *Result in the loss of forest land or conversion of forest land to non-forest use?*

**No Impact.** The Project site is not currently used for forest land, timberland, or timberland production. In addition, land in close proximity to the Project site is not used for forest land, timberland, or timberland production. There will be no loss of forest land or conversion of forest land to non-forest use because the Project site and surrounding area is currently developed residential area and park land. Therefore, no impact would occur.

e) *Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?*

**No Impact.** No farmland exists within or near the Project area and no conversion of farmland would occur because there is no agricultural activity on site, or in the Project vicinity. In addition, the Project would not interfere with any ongoing agricultural operations because there are no agricultural operations occurring on or near the Project site. Due to the lack of farmland in the area and non-existing agricultural uses on the Project site and surrounding areas, no impact would occur in this regard.

**4.3 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 project:***

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

**Less than Significant Impact.** The Project site is located within the South Coast Air Basin (Basin). The Basin includes the non-desert portions of Los Angeles, Orange, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area in Riverside County. The U.S Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have designated each County within California as either attainment or non-attainment for the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS). Pursuant to the federal Clean Air Act, the South Coast Air Basin is designated as non-attainment for ozone (O<sub>3</sub>) and particulate matter less than 10 microns in diameter (PM<sub>10</sub>), and non-attainment area for fine particulate matter (PM<sub>2.5</sub>) with respect to the NAAQS.

The South Coast Air Quality Management District (SCAQMD) is the regional agency that establishes and administers air quality regulations in the Project area. SCAQMD regulates air pollution from stationary sources through rules, regulations, and permits. According to the SCAQMD's Air Quality Analysis Guidance Handbook (SCAQMD, updated October 2003), the purpose of the consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality

plans, and thus if it would interfere with the region's ability to comply with federal and state Ambient Air Quality Standards (AAQS). Growth assumptions within the Air Quality Management Plan (AQMP) (adopted June 1, 2007) are based on growth assumptions and land use designations included within local general plans. The proposed Project includes a water well facility. This activity would not modify the City's current general plan land use designations. For this reason, the proposed Project is not anticipated to result in a potentially significant impact with regard to implementation of the South Coast Air Basin AQMP.

Projects in the Basin with construction-related emissions that exceed any of the emissions thresholds may be considered to have significant air quality impacts. Construction-related emissions would primarily be temporary dust generated from construction; temporary exhaust emissions from construction equipment; and temporary motor vehicle emissions associated with construction activities. As discussed in Question b below, construction of the proposed Project would not result in a significant impact and the Project construction activities would be consistent with SCAQMD Air Quality Management Plan. Furthermore, best management practices for dust control during facility construction will be implemented. Therefore, a less than significant impact would occur during construction of the proposed facility.

Operational emissions would consist of emissions associated with periodic routine delivery maintenance trips to the proposed Project site. Delivery and maintenance truck operations would occur during a scheduled trip or during required repairs. Emissions associated with delivery truck operations would not result in a significant impact and the operational activities are consistent with the SQAQMD Air Quality Management Plan. Therefore, a less than significant impact would occur during operation of the proposed Project.

*b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

***Less than Significant Impact with Mitigation Incorporated.***

#### Construction-Related Impacts

Construction of the proposed Project would result in emissions as a result of ground disturbance, construction vehicle exhaust, emissions from employee and delivery travel, and off-gassing from paving activities (it is assumed that architectural coating activities would not be needed for the proposed Project). Emissions would vary from day to day, depending on the level of activity, the specific type of construction activity occurring, and, for fugitive dust, prevailing weather conditions. An adverse impact on air quality would result in the emission levels from the Project were to exceed any of the significance thresholds.

For purposes of analysis, it is assumed that Project construction would occur in various separate phases. Drilling the production well would occur first, followed by installation of the casing for the production well. Next, building construction and trenching for utilities would occur. Lastly, asphalt paving and wall or fence construction would take place.

Exhaust emissions from construction activities would vary as activity levels change. The proposed construction activities would result in temporary localized exhaust emissions. Construction equipment may emit quantities of nitrous oxide (NO<sub>x</sub>), coarse particulate

matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), reactive organic gases (ROGs), and carbon monoxide (CO), but the concentrations of these emissions are not anticipated to be substantial, and would be temporary in nature. Construction vehicles would produce cumulatively insubstantial amounts of ozone (O<sub>3</sub>) emissions due to the relatively small scale of the Project. The SCAQMD *CEQA Air Quality Handbook* identifies thresholds of significance for construction emissions. The SCAQMD thresholds of significance for construction projects are provided below (refer to Table 4.3-1). The Project site as shown in the site plan (refer to Exhibit 2-3) would disturb a 125'-by-65' parcel in addition to 900 LF for the distribution line and 900 LF for the drain line. The distribution line would involve an estimated construction width of 3 feet. The drain line would disturb a width of 3' 4". Together the proposed construction activities would disturb approximately 14,000 square feet, or roughly one-third (1/3) acre. Based on this small disturbed area, Project emissions are not expected to rise above SCAQMD significance thresholds.

Construction equipment used at the Project site may also emit quantities of dust (PM<sub>2.5</sub> and PM<sub>10</sub>), but the concentrations of these emissions are not anticipated to be substantial, and would be temporary. While the construction of the well and pipeline together would not reach SCAQMD thresholds, dust-control measures are included in the Project to reduce particulate matter impacts related to grading activities. With incorporation of Mitigation Measure AQ-1, less than significant impacts related to air quality standards would occur.

**Table 4.3-1  
Thresholds of Significance for Construction Emissions:**

Phase	Pollutant (lbs/day)				
	ROGs	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>
Construction	75	100	550	150	150

Source: SCAQMD, *CEQA Air Quality Handbook*, November 1993.

**Mitigation Measures:**

AQ-1 During clearing, grading, earth moving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular watering or other dust-prevention measures using the following procedures, as specified in SCAQMD Rule 402, 403, and 403.1:

- Water material excavated or graded sufficiently to prevent excessive amounts of dust. Water at least twice daily with complete coverage, preferably in the late morning and after work is done for the day.
- Water or securely cover material transported on site or off site sufficiently to prevent generating excessive amounts of dust.
- Minimize area disturbed by clearing, grading, earth moving, or excavation operations so as to prevent generating excessive amounts of dust.
- Indicate these control techniques in Project specifications.
- Prevent visible dust from the Project from emanating beyond the property line, to the maximum extent feasible.

- Apply non-toxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more).
- Trucks transporting soil, sand, cut or fill materials, and/or construction debris to or from the site shall be covered with a tarp from the point of origin.

#### Operational Impacts

Operation of the Project would result in minimal emissions as a result of periodic vehicle trips for one part-time employee and chemical delivery trucks. Onsite use of electricity for the groundwater well, lights, and ancillary equipment would be provided by a connection to the local electrical grid. Therefore, operational emissions are expected to be minimal and are not anticipated to exceed SCAQMD thresholds. Operation of the Project would not result in an impact on air quality and emissions would not exceed applicable air quality standards or contribute to existing air quality violations. Therefore, the Project would have a less than significant impact during operation.

- 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)?*

**Less than Significant Impact.** New emissions associated with the proposed Project would be limited to temporary construction activities and vehicle emissions from the delivery of chemicals and routine maintenance to the Project site. As described in Response 4.3(b), above, the proposed Project would not be expected to result in the exceedance of SCAQMD-established air quality standards for which the Basin is in non-attainment during construction or operation. Therefore, a less than significant impact would occur.

- d) *Expose sensitive receptors to substantial pollutant concentrations?*

**Less than Significant Impact.** Locations where the very young, elderly, and those suffering from certain illnesses or disabilities reside are considered "sensitive receptors" to air quality impacts. Sensitive receptors are schools, day care centers, parks, recreational areas, medical facilities, rest homes, convalescent care facilities, and residences. Land use conflicts can arise when sensitive receptors are located next to major sources of air pollutant emissions. The Project site is bordered on the north, east, and west by single-family residential land use and on the south by a local park. Although the Project site is adjacent to residential and park uses, the Project would not generate substantial pollutant concentrations, as identified in Response 4.3(b), above. Therefore, a less than significant impact would occur.

e) *Create objectionable odors affecting a substantial number of people?*

**Less than Significant Impact.** Construction and operation of the proposed Project is not anticipated to generate any objectionable odors, and chemicals at the facility would be stored and used in a manner as to minimize odors. Therefore, a less than significant impact would occur.

#### 4.4 **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 status 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?*

**Less Than Significant With Mitigation Incorporated.** The existing Project site contains a residential structure, concrete areas, turf areas and ornamental landscaping, including trees. These trees could provide suitable nesting habitat for raptors and other birds protected by the Federal Migratory Bird Treaty Act (MBTA). The MBTA was enacted in 1918 and is a federal statute with a purpose that prohibits the kill or transport of native migratory birds, or any part, nest, or egg on any such bird unless allowed by another regulation adopted in accordance with the MBTA. A tree that would potentially be removed from the site would cause a direct impact to birds protected by the MBTA. Also, construction dust and noise could cause an indirect impact to nesting birds protected by the MBTA. Project implementation could cause these direct and indirect impacts on birds protected by the MBTA and the impacts would be considered significant. Implementation of Mitigation Measure BIO-1 and BIO-2 would reduce impacts to less than significant.

BIO-1 To avoid potential impacts to nesting migratory birds and raptors protected by the MBTA, any removal of trees will not be allowed during the breeding season, which is approximately February 1 through August 31.

BIO-2 If any trees are to be removed during the breeding season (February 1 through August 31), a pre-construction nesting bird survey shall be required by a qualified biologist, within three days prior to construction, to determine if nests are present and occupied/active. If nest are found present and occupied/active within 200 feet of construction activities, construction activities shall be delayed within an appropriate buffer, to be determined by a qualified biologist, from the occupied/active nest until the young birds have fledged and left the nest, or until the nest is no longer occupied/active as determined by a qualified biologist. If nesting activities within 200 feet of the construction area are not detected, construction activities may proceed.

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 U.S. Fish and Wildlife Service?*

**No Impact.** No drainage features, ponded areas, wetlands, or riparian habitat subject to jurisdiction by the California Department of Fish and Game (CDFG), Army Corps of Engineers (USACE), and/or Regional Water Quality Control Board (RWQCB) were found within the Project site.

- 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 pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

**No Impact.** Refer to Response 4.4(b), above. The Project site is located within a developed urban area, zoned and in use as residential. No federally protected wetlands or waterways exist at or near the site. The drain line from the well will be connected to an existing storm drain. The water line from the well will be connected to an existing water system. The Project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act. Thus, no impacts to federally protected wetlands would occur as a result of Project implementation.

- 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?*

**No Impact.** The proposed Project site is located in an existing fully developed residential community and contains existing perimeter fencing. The Project site will be enclosed by an 8 foot wall or fence. The Project site is within a single-family residential neighborhood near a park. No waterways with the ability to support the movement of any native resident or migratory fish exist on or near the Project site. No established native resident or migratory wildlife corridors exist on or near the Project site. Furthermore, there are no known native wildlife nursery sites on or near the Project site to impede. The site does not support native habitat or any migratory fish or wildlife species. No impacts to these resources are anticipated as a result of the proposed Project.

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

**No Impact.** The Proposed Project is located in the highly urbanized community of Placentia. Policy RM-7.1 of the City of Placentia General Plan (refer to Resource Management Element, Chapter 6, pg. 29) states that future development shall incorporate "the consistent use of street trees along all sidewalk and property frontages." Based on aerial photography and a site visit to the Project area, no consistent street tree palette is evident throughout the Project area. The Project area consists of a wide variety of tree species, not located within a linear parkway, but rather within the front yards of the adjacent residences. No clear aesthetic palette tends to emerge. GSWC will plant street trees at an appropriate spacing that are compatible in terms of scale, shape and form with trees in the Project area. These trees are not considered mitigation, based on the absence of a discernible street tree palette, but rather Project design features.

Apart from Policy RM-7.1, the City of Placentia does not have additional existing policies protecting biological resources which occur in the Project area. In addition, the Project is not located in an area that the County of Orange has designated as an area that is known to contain wildlife habitat (County of Orange General Plan, Figure VI-4). Therefore, the proposed Project would result in less than significant impacts related to local policies and ordinances protecting biological resources.

- 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?*

**No Impact.** The Project site is not located within an area covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Thus, no impacts would occur in this regard.

**4.5 CULTURAL RESOURCES. *Would the project:***

a) *Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?*

**Less Than Significant Impact.** Historic resources generally consist of buildings, structures, improvements, and remnants associated with a significant historic event or person(s) and/or have a historically significant style, design, or achievement. In general, resources greater than 50 years old have the potential to be considered a historic resource. The Project site is not listed in the City's General Plan as a historic site, nor is the residential neighborhood surrounding the Project site. The local park near the Project site is designated a historic site per the City's General Plan. The construction of a 16-inch pipeline through approximately 225 linear feet of the northern park boundary would not cause a substantial adverse change in the significance of the historic site because the pipeline would be buried and the alignment would avoid any existing trees or structures. The turf would be replanted after construction and the disturbed area would look similar to pre-construction conditions once construction is complete. Impacts are considered less than significant in this regard.

The Project site currently consists of a single-family residence built in 1952 (per Google Earth Parcel Detail data), chain link fencing, block walls, trees, brush, and grass typically found on a residential lot. This residence does not meet the criteria to be designated as a historic resource. The residential structure is not associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States. The residential structure is not associated with the lives of persons important to local California or national history. The residential structure does not appear to embody the distinctive characteristics of a type, period, region or method of construction, nor represents the work of a master, nor does it appear to possess high artistic values. Finally, the residential structure has not yielded, nor does not appear to have the potential to yield, information to the prehistory or history of the local area, California or the nation. The structures and materials used onsite are ubiquitous throughout the region. Therefore, no historic resources currently exist onsite and Project development would not cause a substantial adverse change in the significance of a historical resource. No impacts related to historic resources would occur.

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?*

**Less than Significant with Mitigation Incorporated.** Archaeological resources are defined as the material remains of any area's pre-historic (aboriginal/Native American) or historic (European and Euro-American) human activity, in addition to the traditional cultural resources associated with archaeological sites and historic buildings and structures. The area proposed for development is not located adjacent to or nearby any known archaeological resources. No cultural resources were observed during a site visit. While no cultural resources were observed on the Project site, the possibility remains that cultural resources may be identified during grading activities.

Implementation of Mitigation Measure CUL-1 would reduce impacts to a level of less than significant.

**Mitigation Measures:**

CUL-1 If buried archaeological or paleontological materials are discovered during any earth-moving operations associated with the Project, all work in that area shall be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the find(s). Salvage operation requirements in Section 15064.5 of the *California Environmental Quality Act Guidelines* shall be followed.

c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**Less than Significant with Mitigation Incorporated.** Refer to Response 4.5(b) and Mitigation Measure CUL-1, above. The Project site is within an area designated as having low potential for paleontological resources. It is not anticipated that the proposed Project will directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature. Therefore, this impact is considered less than significant with mitigation.

**Mitigation Measures:**

Refer to Mitigation Measure CUL-1, above.

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

**Less than Significant Impact.** No conditions exist that suggest human remains are likely to be found on the Project site. It is not anticipated that Project implementation would disturb any human remains, including those buried outside of formal cemeteries. If human remains are found, those remains would require proper treatment, in accordance with applicable laws. State of California Public Resources Health and Safety Code Section 7050.5-7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the Native American Heritage Commission (NAHC) and consultation with the individual identified by NAHC to be the "most likely descendant" (MLD). If human remains are found during excavation, excavation must stop in the vicinity of the find and any area that is reasonably suspected to overlie adjacent human remains until the County coroner has been contacted, and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains per Section 15064.5(e) of the *Guidelines for California Environmental Quality Act*. Following compliance with State regulations, which detail the appropriate actions necessary in the event human remains are encountered, impacts in this regard, would be considered less than significant.

**4.6 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:*

1) *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.*

**Less than Significant Impact.** The Project site is located in the seismically active Placentia area of Southern California and is considered likely to be subjected to strong ground motion from earthquakes in the region. Orange County, like most regions that border the Pacific Ocean, is a region of high seismic activity and, therefore, is subject to potentially destructive earthquakes (County of Orange General Plan, 2005, pg. IX-77). The Project site is located approximately 10 miles from the Whittier Fault, which forms the northerly extension of the Elsinore Fault, but does not lie within a State of California, Alquist-Priolo Earthquake Fault Zone. The potential for a damaging earthquake, with or without surface rupture, originating on the Whittier Fault is considered moderate to low for any given 50 to 100-year period (City of Placentia General Plan, Seismic Safety Element, pg. 1-9). The Uniform Building Code (UBC) establishes the Design Basis Ground Motion (often accepted as the minimum standard) as the maximum probable event that could potentially affect a particular site along the closest active fault. To reduce the potential effects of damage caused by surface fault rupture, development proposed would be required to be designed in accordance with the current measures of the California Building Code (CBC), seismic design parameters established by the Structural Engineers Association of California, and related applicable ordinances and policies. For the above reasons, impacts resulting from surface fault rupture are considered less than significant.

2) *Strong seismic ground shaking?*

**Less than Significant Impact.** The Project site is located within a seismically active region that experiences ground shaking resulting from earthquakes along active faults. The intensity of ground shaking at the Project site would depend upon the magnitude of the earthquake, distance to the epicenter and the geology of the area between the epicenter and the Project area. Refer to Response 4.6(a)(1), above.

Adherence to standard engineering practices and design criteria relative to seismic and geologic hazards in accordance with the CBC would minimize potential impacts. Thus, impacts in this regard would be considered less than significant.

3) *Seismic-related ground failure, including liquefaction?*

**Less than Significant Impact.** Liquefaction is a seismically induced form of ground failure. Liquefaction takes place when granular materials saturated by water lose strength and transform from a solid to a liquid state. Liquefaction generally occurs during significant earthquake activity, and structures located on soils such as silt or sand may experience significant damage during an earthquake due to the instability of structural foundations and the moving earth. Liquefaction is unlikely to be a potential hazard at the Project site, since the groundwater is believed to be deeper than 50 feet (the maximum depth that liquefaction is known to occur) and the very dense nature of the subsurface granular soil.

Subsidence or settlement is a loss of elevation of the land surface caused by rearrangement of individual soil grains into smaller spaces. The more significant natural causes are seismically induced ground shaking, local or regional tectonic settling and heavy rainfall. Man-induced causes of subsidence include groundwater, oil and gas withdrawal. Regional land subsidence resulting from the withdrawal of subsurface fluids is not known to significantly affect the City (City of Placentia General Plan, Seismic Safety Element, pg. 1-13). Should settlement occur, buried utility lines and structures may not settle equally. Therefore, utilities will be designed to accommodate differential movement in conformance with the CBC seismic engineering standards. Piping connections would be designed with flexible joints to accommodate differential settlement. Because construction would be temporary and operations would require minimal onsite operations and maintenance staff, exposure of people or structures to potential substantial adverse effects, including risk or loss, injury or death, from seismic-related ground failure, including liquefaction, is considered to be a less than significant impact

4) *Landslides?*

**No Impact.** Landslides are caused by high-intensity rainfall of short duration, most likely to occur in early fall, winter, or spring; or a high season of rainfall, followed by one or two days of heavy rainfall and by the rapidly melting of a heavy snowpack. Any slope stability problems within the City of Placentia are limited essentially to the hillside terrain to the northeast of Valencia Avenue and Bastanchury Road and to the southeast of Linda Vista Avenue. Therefore, no impacts related to landslides are anticipated to occur.

b) *Result in substantial soil erosion or the loss of topsoil?*

**Less than Significant Impact.** Construction of the proposed Project may temporarily increase the potential for soil loss due to wind and water erosion. Grading and trenching during the construction phase of the Project would displace soils and temporarily increase the potential for soils to be subject to erosion. Although the impact of the construction activities would be short-term, the contractor would be required to comply with standard engineering practices for erosion control including those measures identified in the Project SWPPP. In addition, grading operations, land-clearing, loading, stockpiling, landscaping, vehicular track-out and haul routes would be required to comply with SCAQMD Rule 403, *Fugitive Dust Emissions*. Thus, impacts related to erosion would be considered less than significant.

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 an on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

**Less than Significant Impact.** Refer to Response 4.6(a)(1) and (3). The proposed Project would be designed and constructed in conformance with the CBC seismic engineering standards. Furthermore, backfill would be placed to meet standard engineering design requirements and local grading practices. Therefore, the Project is anticipated to result in less than significant impacts.

- 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?*

**Less than Significant Impact.** Expansive soils are those possessing clay particles that react to moisture changed by shrinking (when they dry) or swelling (when they become wet). Expansive soils can also consist of silty to sandy clay. The extent of shrinking and swelling is influenced by the environment, such as alternating wet and dry cycles, and by the amount of clay in the soil. This physical change in the soils can result in damage to building foundations, concrete walkways, swimming pools, roadways and masonry wall, etc. The Project site has previously been developed as a single-family structure built in the 1950's as to which no evidence of expansive soils has caused any damage to the property. Thus, impacts in this regard would be considered less than significant.

- 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?*

**No Impact.** The proposed Project would not involve the use of septic tanks. No impacts would occur.

#### 4.7 GREENHOUSE GAS EMISSIONS. *Would the project:*

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

**Less than Significant Impact.** Greenhouse gases (GHGs) are gases that trap heat radiated from the sun as it is reflected back into the atmosphere. The accumulation of GHGs has been implicated as one of the leading causes of global climate change. GHGs include naturally occurring and man-made gases, including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), sulfur hexafluoride (SF<sub>6</sub>), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and nitrogen trifluoride (NF<sub>3</sub>).

Project construction would result in GHG emissions as a result of off-road diesel equipment exhaust and emissions from employee and material delivery travel. The primary emissions would include Carbon Dioxide (CO<sub>2</sub>) from gasoline and diesel combustion, with more limited vehicle tailpipe emissions of nitrous oxide (NO<sub>x</sub>) and methane (CH<sub>4</sub>), as well as other GHG emissions related to vehicle cooling systems. However, based on the scale of the Project construction emissions (refer to Response 4.3(b)) and temporary nature of the associated emission, the proposed Project is expected to have a less than significant impact on the environment.

- b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

**Less than Significant Impact.** California Governor Arnold Schwarzenegger issued Executive Order S-3-05 in June 2005, which established the following greenhouse gas emission reduction targets:

- 2010: Reduce greenhouse gas emissions to 2000 levels;
- 2020: Reduce greenhouse gas emissions to 1990 levels; and
- 2050: Reduce greenhouse gas emissions to 80 percent below 1990 levels.

Assembly Bill (AB) 32 requires that the California Air Resources Board (CARB) determine what the statewide greenhouse gas emissions level was in 1990, and approve a statewide greenhouse gas emissions limit that is equivalent to that level, to be achieved by 2020. CARB has approved a 2020 emissions limit of 427 metric tons of CO<sub>2</sub> equivalent. Due to the nature of global climate change, it is not anticipated that this Project would have a substantial effect on global climate change. It is difficult to deem a single project as individually responsible for a global temperature increase. In actuality, GHG emissions from the proposed Project would combine with emissions emitted across California, the United States, and the world to cumulatively contribute to global climate change. GHGs generated by construction and operation of the proposed well would be less than significant.

#### 4.8 HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

**Less than Significant Impact.** Like nearly all construction projects, Project equipment would use diesel fuel and other common petroleum-based products, but not in quantities that would be considered beyond that of any standard construction project and not of the quantities that would present any danger to the public. All materials would be transported and use in accordance with standard practices. Therefore, these construction-related impacts would be less than significant.

The proposed Project involves water system improvements, which do not have the capacity to create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials. Minimal amounts of potentially hazardous materials would be used and/or transported during routine maintenance of the well (e.g. hypochlorite) and from the maintenance vehicles as routine checks are performed. Transport of these materials is regulated by the California Health and Safety Code, and Project-related transport would comply with all mandatory regulations to ensure prevention of hazardous conditions.

In addition, any transportation, storage, use and disposal of hazardous materials shall comply with all regulations, guidelines, and standards contained within the City's Hazardous Waste Management Plan and applicable permitting procedures required by all federal, state, and local agencies associated with hazardous materials. Once on the site, these materials would be stored in double-walled tanks and bins constructed for the specific purpose of properly containing the chemicals and preventing spills or leaks.

Additionally, the site would be required to prepare a Hazardous Materials Businesses Plan, in accordance with California Health and Safety Code Section 6.95. These mandatory plans document procedures in case of a spill so as to prevent substantial risk to human health or the environment. The Project-related plan must be submitted to and approved prior to operation of the Project. Mandatory preparation of and ongoing compliance with this plan and adherence to the regulations mentioned above, operation of the Project would result in a less than significant impact.

- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

**Less than Significant Impact.** The proposed Project is not anticipated to result in a release of hazardous materials into the environment. However, during the short-term period of demolition and Project construction, there is the possibility of accidental release of hazardous substances such as spilling of petroleum-based fuels used for construction equipment solvents, or cleaning agents. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. The contractor would be required to use standard construction controls and safety procedures, which would avoid and minimize the potential for accidental release of such substances into the environment. Because of the low chance that a hazardous substance spill would occur and standard construction practices would be implemented such that any materials released are appropriately contained and remediated as required by local, state, and federal law, impacts are not anticipated and are considered to be less than significant.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

**Less than Significant Impact.** The Project site is located within the Placentia –Yorba Linda Unified School District. The nearest school to the Project site is Valencia High School, located at 500 North Bradford Avenue. As stated in Sections 4.7(a) and 4.7(b) above, the proposed Project is not anticipated to result in a release of hazardous materials into the environment. Only a minimal amount of potentially hazardous materials being used and/or transported from the Project site during construction, and operation of the Project. Therefore impacts are anticipated and are considered to be less than significant.

- 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?*

**No Impact.** The proposed Project would be located in disturbed area and would be constructing a water well facility. The Department of Toxic Substances Control (DTSC), Hazardous Waste and Substances List (Cortese List – <http://www.calepa.ca.gov/SiteCleanup/CorteseList/default.htm>) was searched on July 14, 2011, and it was confirmed that there are no known significant hazardous materials sites within the area of the proposed Project site. Because the Project site is not located in an area that is on a list of hazardous material sites, no impact would occur in this regard.

- 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?*

**No Impact.** The proposed Project site is located approximately 6 miles east of the Fullerton Municipal Airport and is not within an airport land use plan. The proposed Project would not pose a safety hazard for people working or residing in the Project area. Since the Project site is not located within two miles of a public or public use

airport and would not result in a safety hazard for people residing or working in the Project area, no impacts are anticipated in this regard.

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?*

**No Impact.** No private airstrip exists in the site vicinity. Thus, no impact would occur in this regard. Also, refer to response in Section 4.7(e), above.

g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

**Less than Significant Impact.** As standard procedure, a Traffic Management Plan (TMP) would be prepared by GSWC for approval by the City of Placentia, prior to construction of the proposed Project. Encroachment permits would be required from the City for work within a public right-of-way, which would ensure that street closures or detours would be approved by the City prior to construction. GSWC would be required to comply with traffic control requirements, as identified by the City. No revisions to an adopted emergency plan would be required, as a result of the proposed Project. Therefore, implementation of the proposed Project would not significantly interfere with an adopted emergency response plan and a less than significant impact would occur in this regard.

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?*

**No Impact.** The proposed Project is located in a fully developed urbanized area that does not contain any wildlands or areas where wildlands are adjacent to urbanized areas. Therefore, no impacts related to wildland fires would occur.

#### 4.9 HYDROLOGY AND WATER QUALITY. *Would the project:*

a) *Violate any water quality standards or waste discharge requirements?*

**Less than Significant Impact.** Surface water quality is subject to federal, state, and local water quality requirements administered and enforced by the U.S. Environmental Protection Agency (USEPA), the California State Water Resources Control Board (SWRCB), and the California RWQCB with cooperation from each County. The principal law governing pollution of the nation's surface waters is the Federal Water Pollution Control Act or Clean Water Act. Under the Act, regulatory requirements for industrial and municipal dischargers were set, as well as requirements for states to adopt water quality standards.

To achieve its objectives, the Act is based on the concept that all discharges into the nation's water are unlawful, unless specifically authorized by a permit. The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into water of the United States under Section 402 of the Clean Water Act. Thus, dischargers must obtain permits from the appropriate RWQCB.

Construction staging would occur on the Project site and temporary parking of vehicles for construction purposes would be on or adjacent to the Project site. Any residual oil, grease, and other fuel products from equipment would be maintained onsite and would not affect surface waters. Equipment would be inspected and maintained on a regular basis. Therefore, leaks of oil, grease, and other fuel products from equipment are expected to be negligible and would not affect surface or groundwater. Operation of the proposed Project would not violate any water quality standards or waste discharge requirements because of the strict requirements and regulations discussed above that the Project would be required to comply with during operation.

Because the proposed Project is subject to the requirements and regulations stated above, the proposed Project is anticipated to result in a less than significant impact related to a violation of 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 pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

**Less than Significant Impact.** The proposed Project is the construction of a 1,500 to 2,500 gpm well and related facilities. The Project would entail drawing groundwater from a deep unconfined groundwater aquifer (the Orange County Groundwater Basin or "Basin") that underlies the Project site. The Basin covers an area of approximately 350 square miles underlying the north half of Orange County beneath broad lowlands known as the Tustin and Downey plains. Based on information developed as part of the Orange County Water District (District) Groundwater Management Plan (2009), the Basin is believed to extend over 2,000 feet deep and form a complex series of interconnected sand and gravel deposits. As of publication of the 2009 Management Groundwater Plan, the latest total water demand within the District's boundary for water year 2007-2008 was calculated at 480,000 acre-feet. Total pumping from the basin is managed through a process that uses financial incentives to encourage groundwater producers to pump an aggregate amount of water that is sustainable without harming the basin. The process that determines the sustainable level of pumping considers the Basin's safe operating range and the amount of recharge water available to the District. The Basin's operating range refers to the upper and lower levels of groundwater storage in the Basin that can be reached without causing negative impacts. Each year the District estimates the level of storage for the following year.

The Project is being developed to provide service to the Placentia portion of GSWC's service area, consistent with GSWC water supply planning and locally adopted growth plans. Based on the scope of the proposed Project and available recharge sources identified in the District's water budget for the Basin, the proposed Project is not anticipated to produce a disproportionate or significant impact on groundwater supplies and would not affect the District's ability to recharge the groundwater aquifer. Therefore, less than significant impacts are anticipated.

*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?*

**Less than Significant Impact.** The Project site is a small parcel that is entirely disturbed and covered with existing residential structures, turf, and ornamental vegetation. The site has relatively level terrain and is not located on a major drainage system. The proposed Project would be constructed in areas of the Project site that would not substantially alter the existing drainage pattern of the site or area. The water well and well house building would create a very minor quantity of impervious area that is considered to be insignificant and the majority of the site would remain pervious. In addition, the distribution and drainage pipelines would be buried. The drain line to be installed as part of this Project would be for storm water runoff from the Project site as well as discharge for the Project well. The drainage pipeline will only be used when necessary due to the factors previously mentioned. Construction period impacts that may result in on- or offsite erosion or siltation would be minimized to less than significant levels by the implementation of BMPs set forth in the SWPPP. Operational impacts related to siltation or erosion would be minimized to less than significant levels by the development and use of standard stormwater drainage features. Additionally, no waterways flow through the Project site, so the alteration of a stream or river would not occur. Therefore, the proposed Project is not anticipated to alter the existing drainage pattern of the site and would not result in substantial erosion of siltation onsite or offsite and impacts are considered to be less than significant.

- 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?*

**Less than Significant Impact.** Refer to response in Section 4.8(c). Although the Project would increase introduce impervious surface area, implementation of standard stormwater drainage features would be sufficient to handle the stormwater runoff and would not result in flooding on- or offsite. Less than significant impacts related to on- and offsite flooding would occur.

- e) *Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?*

**Less than Significant Impact.** Refer to Responses 4.8(a) and 4.8(c). Less than significant impacts related to polluted runoff would.

- f) *Otherwise substantially degrade water quality?*

**Less than Significant Impact.** Refer to Responses 4.8(a) and 4.8(c). Beyond analysis provided above, the proposed Project is not anticipated to otherwise degrade water quality within the Project area. Impacts are anticipated to be less than significant in this regard.

- 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?*

**No Impact.** The well Project does not propose any housing. In addition, according to Figure IX-6 of the Orange County General Plan, Safety Element, the proposed Project is not located in a 100-year flood hazard area. Therefore, no impacts would occur in this regard.

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

**No Impact.** Because the proposed Project is not located within a 100-year flood hazard, no impacts related to flood flows would occur.

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?*

**No Impact.** Refer to Responses 4.8(g) and 4.8(h), above. The proposed Project is not situated within a 100-year flood hazard area. According to the Figure IX-9 of the Orange County General Plan, Safety Element, the Project site is located within the Prado Dam inundation area. Prado Dam is owned and operated by the Los Angeles District, U.S. Army Corps of Engineers (USACE). The recently recent (1999) installation of the Seven Oaks Dam 40 miles upstream on the Santa Ana River in San Bernardino County has increased the functioning capability of Prado Dam. During a flood event, Seven Oaks Dam will store water destined for Prado Dam for as long as the reservoir pool at Prado Dam is rising. When the flood threat at Prado Dam has passed, Seven Oaks Dam will begin to release its stored flood water at a rate that does not exceed the downstream channel capacity. Working in tandem, the Prado and Seven Oaks Dams provide increased flood protection to Orange County and, specifically, to the City of Placentia. Given that the Project site is current occupied by a residential dwelling and the proposed Project would lessen the exposure to potential loss, no impacts are anticipated in this regard.

j) *Inundation by seiche, tsunami, or mudflow?*

**No Impact.** Seiching is defined as a periodic oscillation of liquid within a container or reservoir. Its period is determined by the resonant characteristics of the container as controlled by its physical dimensions. There are no anticipated impacts to the proposed Project from seiche, tsunami or mudflow, as no structures, topographical features, or water bodies capable of producing such events exist within the Project site or vicinity. Implementation of the proposed Project would result in the construction of a domestic water well and associated facilities. Because of the factors discussed above, no impact from seiche, tsunami, or mudflow is anticipated to occur.

#### 4.10 LAND USE AND PLANNING. *Would the project:*

a) *Physically divide an established community?*

**No Impact.** The proposed well site is located in an existing single-family residential community. The Project site is within a single-family residential neighborhood. According to the City of Placentia Zoning Map, the Project is designated as Single Family Residential (R-1). The Project would be located on a single parcel that is less than one-third ( $\frac{1}{3}$ ) acre of land. Therefore, Project implementation would not physically divide an established community due to the nature and scope of the proposed facility and surrounding uses and structures. No impact would occur in this regard.

- 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?*

**Less Than Significant Impact.** The Project site is located on an existing developed single-family residential lot within a "Single Family Residential" (R-1) residential zone per the City of Placentia Zoning Map. According to California Government Code Section 53091(d), "building ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water, wastewater, or electrical energy by a local agency." The Code (Section 53091[e]) also states, "Zoning ordinances of a country or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water . . . ."

Therefore, the proposed Project would not be required to comply with the development standards and requirements as described in the City's Zoning Code and Municipal Code; therefore, pursuant to the California Government Code 53091(d) and (e), impacts related to potential conflicts with land use plans, policies, and regulations are considered less than significant.

- c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

**No Impact.** Refer to Response 4.4(f).

#### 4.11 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?*

**No Impact.** The proposed Project is located in an area of the County of Orange where no known mineral resources are located (County of Orange General Plan, 2005, Figure VI-3) Therefore, no impacts would occur.

- 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?*

**No Impact.** Refer to response 4.11(a).

#### 4.12 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?*

**Less than Significant with Mitigation Incorporated.** The proposed Project is located within a single-family residential area in the City of Placentia of the County of Orange. The nearest sensitive receptor (residence) to the proposed Project site is approximately

50 feet to the west of the site. Noise associated with the Project construction of the water well and related facilities would occur over the short term. Construction noise for the proposed well would be generated construction equipment, including trucks, a backhoe, a bore/drill rig, and other associated equipment. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation, followed by three to four minutes at lower power settings. Project construction noise may impact nearby sensitive receptors and would create a short-term impact in terms of construction noise. Construction of the distribution pipeline and drain line would involve minor construction (trenching in paved and unpaved areas) that would be very limited in duration. Noise from the operation of the well facility would be nearly non-existent.

According to the City of Placentia General Plan (Noise Element, pg. 8), the maximum ambient noise base level, clearly acceptable, in a residential district shall be 45 dBA when read in any inhabitable room and shall not exceed 55 dBA at the property line for a cumulative period of more than 15 minutes in any hour. Also, according to the City of Placentia General Plan (Noise Element, pg. 8), exceptions in the standards shall be made for construction. The General Plan states that in no case shall there be construction or operation of construction equipment from 6:00 p.m. to 7:00am. In no case shall the ambient noise level, in any district be over 75 dBA for a cumulative period of one hour during the allowable time period. The maximum noise level within the City of Placentia is prohibited from exceeding 110 dBA. The proposed Project will adhere to the City of Placentia construction noise standards for the Single Family Residential (R-1) zone.

Groundborne noise and other types of construction-related noise impacts would typically occur during the initial site preparation, which can create the highest levels of noise, but is also generally the shortest of all construction phases. Other primary sources of acoustical disturbance would be due to random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts).

With adherence to the City of Placentia construction noise standards and implementation of Mitigation Measure NOI-1 which requires implementation of various noise-attenuation measures, the Project's construction noise impacts would be less than significant. Operation of the well is not anticipated to generate any long-term significant noise activities. Therefore, impacts in this regard would be less than significant.

**Mitigation Measures:**

NOI-1 The construction contractor shall implement the following noise-abatement measures:

- Construction contracts shall ensure that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers that exceed state requirements for muffler attenuation devices.
- All construction equipment shall use available noise suppression devices and properly maintained mufflers. All internal combustion engines used in the Project area shall be equipped with the type of muffler recommended by the vehicle manufacturer. In addition, all

equipment shall be maintained in good mechanical condition to minimize noise created by faulty or poorly maintained engine, drive-train and other components.

- All residential units, or other sensitive receptors as defined by the City, located within 500 feet of the construction site shall be sent a notice at least fourteen (14) and not more than thirty (30) days prior to commencement of construction activity, and shall include a brief description of the Project, the overall duration of the various construction stages, noise abatement measures that shall be taken, and the name and phone number of the construction site supervisor or his designee to report any violation of a noise or mitigation standard.
- A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. The noise disturbance coordinator shall be required to maintain a log of complaints for the City's inspection, if requested. The log shall include the source of complaint, the complaint, time received, and the action taken in response. The noise disturbance coordinator shall make good faith efforts to respond to inquiries and complaints within twenty-four (24) hours of receipt of the inquiry or complaint.
- A sign, legible at a distance of 50 feet shall also be prominently posted at the construction site. All notices and signs shall indicate the dates and duration of construction activities, as well as provide the telephone number of the noise disturbance coordinator.
- The equipment staging area shall be situated to provide the greatest distance separation between construction-related noise sources and noise-sensitive receptors nearest the Project area during all Project construction. During construction, stockpiling and vehicle staging areas shall be located as far as practical from noise sensitive receptors. During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.
- Construction noise-reduction methods (i.e., shutting off idling equipment, maximizing the distance between construction equipment staging areas and occupied residential areas, and use of electric air compressors and similar power tools, rather than diesel equipment) shall be employed where feasible.

- b) *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

**Less than Significant Impact.** Refer to Response 4.11(a). Construction equipment required for the proposed Project is not anticipated to generate excessive groundborne vibrations or noise levels. Excessive groundborne vibration is typically caused by activities such as blasting used in mining operations, or the use of pile drivers during construction. The proposed Project is not anticipated to include blasting or pile driving activities; therefore, groundborne vibration is not expected to occur. Due to the temporary nature of construction activities, impacts in this regard are considered to be less than significant.

Daily operations of the proposed reservoir Project are not anticipated to result in impacts with regard to groundborne vibration or noise levels, as the well and associated facilities would convey extracted groundwater water and would not involve the use of heavy equipment. Additionally, the proposed well is not anticipated to increase vehicle trips and associated roadway noise beyond minimal periodic operation and maintenance visit by a part-time staff member. Therefore, impacts in this regard are not anticipated to be significant.

- c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

**Less than Significant Impact.** After construction is completed, the Project would have no long-term impacts in relation to noise. As previously stated the Project includes a new domestic water well designed to pump and treat approximately 1,500-2,500 gpm of water. Noise associated with the pump will be minimal as it is located in a fully enclosed well house building structure consisting of concrete masonry unit (CMU) block walls. Impacts in this regard would be less than significant.

- d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

**Less than Significant Impact.** Refer to Response 4.12(a), above. Construction of the proposed Project may result in short-term noise impacts generated by construction equipment. Impacts are anticipated to be less than significant.

- 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?*

**No Impact.** The proposed Project is not located within two miles of a public airport or public use airport. Given the Project site's distance from an airport, no impacts are anticipated in this regard.

- 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?*

**No Impact.** The Project is not located within the vicinity of a private airstrip. Therefore, the Project would not expose people residing or working within the Project area to excessive noise levels.

**4.13 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)?*

**No Impact.** The purpose of the Project is to add a 1,500 to 2,500 gpm well and associated facilities. The volume of water to be generated from this Project is intended to supply an already existing and established community, and would not induce directly, or indirectly, the growth of new homes, business, or populations. The Project would, therefore, not directly or indirectly induce substantial population growth in the area. No impact would occur.

- b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

**Less Than Significant Impact.** The proposed Project would require the demolition of a single existing single-family residence, but would not necessitate the construction of replacement housing. The proposed facilities are being constructed on private land that GSWC has purchased for purpose of developing this Project. The conveyance pipeline will be located and buried within the existing public street right-of-way and will terminate at an existing connection point. The drain line will be located and buried within existing street right-of-way and portions of a local park, which does not contain any existing housing. Therefore, no impact would occur.

- c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

**No Impact.** The proposed Project would require the demolition of a single existing single-family residence on property that GSWC has purchased for the purpose of developing this Project. Construction of replacement housing elsewhere will not be required. No impact would occur.

**4.14 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 objectives for any of the public services:*

- 1) *Fire protection?*

**Less Than Significant Impact.** The Orange County Fire Authority provides fire services under a joint powers agreement to the City of Placentia. The nearest fire station is Fire Station 35, approximately one-quarter mile southeast of the proposed Project, located at 120 South Bradford. The Project does not pose a significant fire hazard, nor is the proposed Project forecast to require additional fire protection services/facilities for construction or operation of the well facility. There would be periodic chemical deliveries and occasional facility maintenance at the proposed well facility during operation that would be infrequent and limit human presence at the site, which would not increase response times or necessitate additional firefighters for the

Project area. The proposed Project would not result in a considerable demand on fire protection services resulting in the requirement for new or altered fire protection services. Impacts to fire protection are considered to be less than significant.

2) *Police protection?*

**No Impact.** The City of Placentia Police Department is responsible for providing police protection services within Placentia. The Department headquarters are within two miles of the Project site. The proposed Project would install a small gated well facility on an existing developed residential lot that would not result in a substantial increase in onsite human occupation because of the periodic maintenance of the well facility. The Project would not create any security concerns that would necessitate additional police presence because the well facility will be behind a locked gate. No significant impacts related to police protection or services are anticipated with implementation of the proposed Project, since no special provisions for security are deemed necessary for this area.

3) *Schools?*

**No Impact.** The proposed Project would not involve new housing or employment and would not impact schools in any way. Therefore, Project implementation would not create a demand for new school facilities. No impacts in this regard would occur.

4) *Parks?*

**Less Than Significant Impact.** The proposed Project would not involve new housing or employment that would impact parks. The drain line that would align through a portion of the local park would have non-substantial temporary physical construction impacts that would be short term. Any short term construction impacts would require compliance with City Code construction requirements and regulations, which would deem the impacts less than significant. Operational impacts would be negligible because the drain pipeline would be buried and the disturbance would be returned to existing pre-construction conditions. Therefore, the proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities and impacts are considered to be less than significant in this regard.

5) *Other public facilities?*

**No Impact.** Due to the nature and scope of the proposed Project, implementation would not increase the demand for other public facilities such that it would create the need for alteration or construction of any new governmental facilities. No impact in this regard would occur.

#### 4.15 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?*

**No Impact.** Refer to Response 4.14(a)(4). Project implementation would not create an increased use of an existing recreational facility. Therefore, substantial physical

deterioration of these facilities would not occur or be accelerated. No impacts in this regard would occur.

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?*

**No Impact.** The proposed Project involves development of a domestic water well, distribution pipeline, and drain line. The Project does not propose or warrant construction of recreational facilities. No impacts in this regard would occur.

#### 4.16 TRANSPORTATION/TRAFFIC.

***Would the project:***

a) *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?*

**Less than Significant Impact.** The Project itself would not be a substantial generator of traffic. The primary source of Project-related trips would be due to heavy construction trucks (for equipment and/or soil import/export) and worker construction trips. However, the construction process would be temporary, and any increase in traffic would cease upon completion of construction. Vehicles entering and exiting the proposed Project site during Project construction and/or operation and would result in a temporary impact. Typical heavy equipment for construction of such a project may include a bore/drill rig, backhoe, front loader, dump truck, trencher, concrete transport truck, paver, roller, and possibly a crane. The equipment would be brought on site, remain onsite during construction, and would be removed upon completion of the Project construction.

The contractor would be required to implement any traffic control measures necessary to access the site to maintain unobstructed traffic flow during construction, and would be required to obtain any required encroachment permits for transporting heavy equipment, as needed. Other construction traffic would consist of delivery trucks and worker transportation. Delivery and parking of vehicles would be coordinated to minimize impacts to local traffic. It is expected that this added traffic would not conflict with applicable plans, ordinances, or policies related to performance of the circulation system and would be less than significant.

b) *Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads and highways?*

**No Impact.** The County of Orange Congestion Management Program (CMP) was established in 1990 under Proposition 111. Under this proposition, urbanized areas with populations of more than 50,000 would be required to develop and implement a CMP. The intent of the CMP is to foster coordination among land use, transportation planning and air quality management. The County of Orange's CMP is administered by the Orange County Transportation Authority (County of Orange General Plan, p. IV-24).

The minimal increase in traffic in the proposed Project area that may result from the transport of workers and materials to the site during the construction period and operational phase is not anticipated to result in a change to the existing level of service (LOS) and would not result in a significant impact related to travel demand measures. The proposed Project would not result in a significant adverse impact related to LOS. Therefore, no impact would occur.

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?*

**No Impact.** Due to the nature and scope of the proposed Project and the distance to private and public airports, Project implementation would not have the capacity to result in a change in air traffic patterns. Therefore, no impact would occur.

d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

**Less than Significant Impact with Mitigation.** The proposed Project would require temporary open trenches within existing roadways for distribution pipeline connections. The implementation of mitigation warning motorists, bicycle traffic, or pedestrians of potential dangers would reduce impacts to a less than significant level. A Traffic Management Plan (TMP) would be prepared by a Registered Civil Engineer and subject to the approval by the permitting agency (if any) prior to any trenching in public streets for distribution pipelines.

TRF-1 Short-term mitigation for roadways shall be mitigated by a Traffic Management Plan (TMP) to be approved by the permitting agency, if any, prior to any trenching in public streets for distribution and drain lines. The TMP shall consist of prior notices, adequate sign posting, detours (if needed), phased construction and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (prior notices, sign posting, detours, etc.) as determined appropriate by a GSWC Engineer. Adequate access to and from residential areas shall be provided at all times. Proper detours and warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner in an effort to reduce impacts.

e) *Result in inadequate emergency access?*

**Less than Significant Impact with Mitigation.** Refer to Response 4.16(d) above. The proposed Project would be required to prepare a Traffic Management Plan (TMP) to the satisfaction of a GSWC Engineer as described in Mitigation Measure TRF-1, which would reduce impacts in this regard. Impacts related to emergency access impacts would be less than significant with mitigation.

**Mitigation Measures:**

Refer to Mitigation Measure TRF-1, above.

f) *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?*

**No Impact.** There are no existing bus turnouts, bicycle racks, or bicycle lanes at the proposed Project site. The proposed Project would not affect any existing alternative transportation facilities or routes. Impacts related to alternative transportation are not anticipated. Therefore, no impact would occur.

#### 4.17 UTILITIES AND SERVICE SYSTEMS.

**Would the project:**

- a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

**No Impact.** Implementation of the proposed Project would not result in any new wastewater generation or changes to wastewater treatment facilities. Improvements associated with the proposed Project are small in scale and not located adjacent to any natural or manmade water body. Runoff from the Project site does enter the County's storm drain system, specifically a 54-inch storm drain within Chapman Avenue. Project construction would entail a minor amount of stormwater discharge that, due to the nature of construction, has the potential to include sediment and pollutants associated with the construction process. Project construction will require the preparation and implementation of a Project-specific SWPPP to describe best management practices (BMPs) that would be implemented to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources. Permittees are further required to ensure that BMPs are correctly implemented and effective in controlling the discharge of stormwater-related pollutants. Adherence to these mandatory criteria would ensure that Project construction would have a less than significant impact with respect to water quality standards and waste discharge requirements.

- 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?*

**Less than Significant Impact.** The proposed Project consists of a new 1,500 to 2,500 gpm domestic water well, distribution pipeline, and drain line. The Project itself represents an expansion of the existing groundwater extraction and distribution system, and represents a beneficial impact in regards to GSWC's water quality and ability to provide water to its service area. Less than significant impacts are anticipated in this regard.

- 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?*

**Less than Significant Impact.** A new 16-inch drain line, will be constructed through the adjacent local park and will tie in to the existing County of Orange public storm drain system, which has the capacity to take in water flows from the well facility. This line will provide a direct outlet from the proposed Project to the public storm drain facilities which will result in a less than significant impact to the existing facilities.

- d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

**No Impact.** No new or expanded entitlements would be required with implementation of the proposed Project. The Project would entail using existing GSWC groundwater supplies to allow blending of water treated on site with potable water currently running through the system. The proposed Project includes the construction and operation of a new domestic water well and distribution facilities. These facilities would not generate any new demands for water supply. As stated above, the Project represents a beneficial impact in regards to GSWC's water quality and ability to provide water. The Project itself would not create any additional demand for water. No impacts are anticipated.

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 project's projected demand in addition to the provider's existing commitments?*

**No Impact.** Refer to response 4.17(a) above. Project implementation would have a less than significant impact with respect to wastewater treatment capacity. No impacts would occur in this regard.

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

**Less than Significant Impact.** Small amounts of debris or solid waste will be generated during the construction phase of the Project and would be transported to an approved solid waste disposal facility. Based on the anticipated quantity of material, the construction phase of the Project is not expected to substantially affect the capacity of existing landfills. Therefore, a less than significant impact would occur.

g) *Comply with federal, state, and local statutes and regulations related to solid waste?*

**Less than Significant Impact.** Solid waste produced during construction and operation of the proposed Project would be disposed of at a properly permitted facility in accordance with federal and state laws. Project construction and operation would not have a significant impact on landfills. Therefore, a less than significant impact would occur.

#### 4.18 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?*

**Less than Significant with Mitigation.** The proposed Project would not 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 proceeds of California history or prehistory. Potential impacts to aesthetics, air quality, biological resources, cultural resources, noise, and transportation/traffic would be mitigated through implementing standard GSWC/District measures and recommended mitigation measures as identified above.

- 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 probable future projects)?*

**Less than Significant Impact.** The proposed Project would not 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 probable future projects.). Given the relatively small scale of the Project, Project-related cumulative impacts are considered less than significant.

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

**No Impact.** The proposed Project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly, following implementation of recommended mitigation measures. Construction-related activities primarily related to noise and transportation/traffic is anticipated to have some minor, temporary impacts. However, potential long-term impacts would be reduced to less than significant levels through implementation of required mitigation measures, as described above in the previous discussions.

## 5.0 REFERENCES

### 5.1 REPORT PREPARATION PERSONNEL

**Department of Public Health  
1616 Capitol Avenue  
Sacramento, CA 95814**

Mr. Kelvin Yamada, Section Chief

**Golden State Water Company  
Orange County District  
1920 West Corporate Way  
Anaheim, CA 92801**

Mr. Robert Jordan, Water Quality Engineer  
Ms. Stacey Roberts, REHS, Water Quality Manager  
Ms. Nancy Baker, P.E., Supervising Senior Engineer  
Ms. Brandy O'Gorman, Environmental Compliance Manager  
Mr. David Eikamp, Water Supply Superintendent  
Mr. Todd Waltz, Project Engineer

**RBF Consulting  
40810 County Center Drive, Suite 100  
Temecula, California 92591**

Mr. Kevin Thomas, CEP, Environmental Services Manager  
Mr. Darren Edgington, Environmental Planner  
Mr. Ryan Fowler, Environmental Planner  
Mr. Achilles Malisos, Air/Noise Specialist

### 5.2 REFERENCE DOCUMENTS

California Government Code.

California Department of Conservation, California Agriculture Land Evaluation and Assessment Model, 1997.

California Department of Fish and Game, Wildlife and Habitat Data Analysis Branch. California Natural Diversity Database (CNDDDB). Accessed July 13, 2011.

California Public Resources Code, Section 5097.98

California Department of Transportation, California Scenic Highway Mapping System, [http://www.dot.ca.gov/hq/LandArch/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm).

City of Placentia, General Plan, adopted variously from 1972 – 2003

City of Placentia, 2008 Municipal Code, updated 2010.

City of Placentia website, <http://www.placentia.org/>.

County of Orange, 2005 General Plan (Safety and Housing Elements, updated in 2011).

County of Orange, 2004 Subdivision Code

County of Orange, Orange County Williamson Act Lands 2004 Map.

Department of Toxic Substances Control, Hazardous Waste and Substances List. [www.calepa.ca.gov/sitecleanup/corteselist/default.htm](http://www.calepa.ca.gov/sitecleanup/corteselist/default.htm), Accessed October 19, 2009

California Department of Conservation, California Geological Survey, Mineral Land Classification Map, Plate 1, Open File Report 94-07

Federal Emergency Management Agency website, <http://www.fema.gov/>

Flood Insurance Rate Map, Orange County, California, Panel 0151H, October 19, 2009

Golden State Water Company, Water Quality Annual Report, 2011.

Golden State Water Company website, <http://www.gswater.com/>.

Google Earth website, <http://maps.google.com>.

Phase 1 Environmental Assessment, , Ninyo & Moore, January 14, 2009.

Santa Ana Regional Water Quality Control Board, <http://www.swrcb.ca.gov/rwqcb8/> accessed July 2011.

SCAQMD, Air Quality Management Plan, June 2007.

SCAQMD, Ozone State Implementation Plan for The South Coast Air Basin, December 1999.

SCAQMD website, <http://www.aqmd.gov/>.

State Water Resources Control Board website, <http://www.swrcb.ca.gov/>.

Thomas Guide – County of Orange, 2008.

Transit Noise and Vibration Impact Assessment, Federal Transit Administration, May 2006

## 6.0 INVENTORY OF MITIGATION MEASURES

### AESTHETICS

AES-1 To the extent practical, well house and wall/fence design shall incorporate colors and architecture features that are compatible with the surrounding uses.

### AIR QUALITY

AQ-1 During clearing, grading, earth moving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular watering or other dust-prevention measures using the following procedures, as specified in SCAQMD Rule 402, 403, and 403.1:

- Water material excavated or graded sufficiently to prevent excessive amounts of dust. Water at least twice daily with complete coverage, preferably in the late morning and after work is done for the day.
- Water or securely cover material transported on site or off site sufficiently to prevent generating excessive amounts of dust.
- Minimize area disturbed by clearing, grading, earth moving, or excavation operations so as to prevent generating excessive amounts of dust.
- Indicate these control techniques in Project specifications.
- Prevent visible dust from the Project from emanating beyond the property line, to the maximum extent feasible.
- Apply non-toxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more).
- Trucks transporting soil, sand, cut or fill materials, and/or construction debris to or from the site shall be covered with a tarp from the point of origin.

### BIOLOGICAL RESOURCES

BIO-1 To avoid potential impacts to nesting migratory birds and raptors protected by the MBTA, any removal of trees will not be allowed during the breeding season, which is approximately February 1 through August 31.

BIO-2 If any trees are to be removed during the breeding season (February 1 through August 31), a pre-construction nesting bird survey shall be required by a qualified biologist, within three days prior to construction, to determine if nests are present and occupied/active. If nest are found present and occupied/active within 200 feet of construction activities, construction activities shall be delayed within an appropriate buffer, to be determined by a qualified biologist, from the occupied/active nest until the young birds have fledged and left the nest, or until the nest is no longer occupied/active as determined by a qualified biologist. If nesting activities within 200 feet of the construction area are not detected, construction activities may proceed.

## CULTURAL RESOURCES

- CUL-1 If buried archaeological or paleontological materials are discovered during any earth-moving operations associated with the Project, all work in that area shall be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the find(s). Salvage operation requirements in Section 15064.5 of the *California Environmental Quality Act Guidelines* shall be followed.

## NOISE

- NOI-1 The construction contractor shall implement the following noise-abatement measures:

- Construction contracts shall ensure that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers that exceed state requirements for muffler attenuation devices.
- All construction equipment shall use available noise suppression devices and properly maintained mufflers. All internal combustion engines used in the Project area shall be equipped with the type of muffler recommended by the vehicle manufacturer. In addition, all equipment shall be maintained in good mechanical condition to minimize noise created by faulty or poorly maintained engine, drive-train and other components.
- All residential units, or other sensitive receptors as defined by the City, located within 500 feet of the construction site shall be sent a notice at least fourteen (14) and not more than thirty (30) days prior to commencement of construction activity, and shall include a brief description of the Project, the overall duration of the various construction stages, noise abatement measures that shall be taken, and the name and phone number of the construction site supervisor or his designee to report any violation of a noise or mitigation standard.
- A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. The noise disturbance coordinator shall be required to maintain a log of complaints for the City's inspection, if requested. The log shall include the source of complaint, the complaint, time received, and the action taken in response. The noise disturbance coordinator shall make good faith efforts to respond to inquiries and complaints within twenty-four (24) hours of receipt of the inquiry or complaint.
- A sign, legible at a distance of 50 feet shall also be prominently posted at the construction site. All notices and signs shall indicate the dates and duration of construction activities, as well as provide the telephone number of the noise disturbance coordinator.

- The equipment staging area shall be situated to provide the greatest distance separation between construction-related noise sources and noise-sensitive receptors nearest the Project area during all Project construction. During construction, stockpiling and vehicle staging areas shall be located as far as practical from noise sensitive receptors. During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.
- Construction noise-reduction methods (i.e., shutting off idling equipment, maximizing the distance between construction equipment staging areas and occupied residential areas, and use of electric air compressors and similar power tools, rather than diesel equipment) shall be employed where feasible.

#### **TRANSPORTATION/TRAFFIC**

TRF-1 Short-term mitigation for roadways shall be mitigated by a Traffic Management Plan (TMP) to be approved by the permitting agency, if any, prior to any trenching in public streets for distribution and drain lines. The TMP shall consist of prior notices, adequate sign posting, detours (if needed), phased construction and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (prior notices, sign posting, detours, etc.) as determined appropriate by a GSWC Engineer. Adequate access to and from residential areas shall be provided at all times. Proper detours and warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner in an effort to reduce impacts.

## 7.0 CONSULTANT RECOMMENDATION

Based on the information and environmental analysis contained in the Initial Study/Mitigated Negative Declaration, we recommend that GSWC prepare a mitigated negative declaration for the Wilson Well Project. We recommend that the second category (Mitigated Negative Declaration) be selected for the California Department of Public Health determination; refer to Section 8.0, *Lead Agency Determination*.

\_\_\_\_\_  
Signature

Kevin Thomas, Environmental  
Services Manager  
\_\_\_\_\_  
Printed Name/Title

\_\_\_\_\_  
RBF Consulting  
Consulting Firm

\_\_\_\_\_  
August 3, 2011  
Date

## 8.0 LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

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

I find that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section 4.0 and restated in Section 6.0 have been added. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

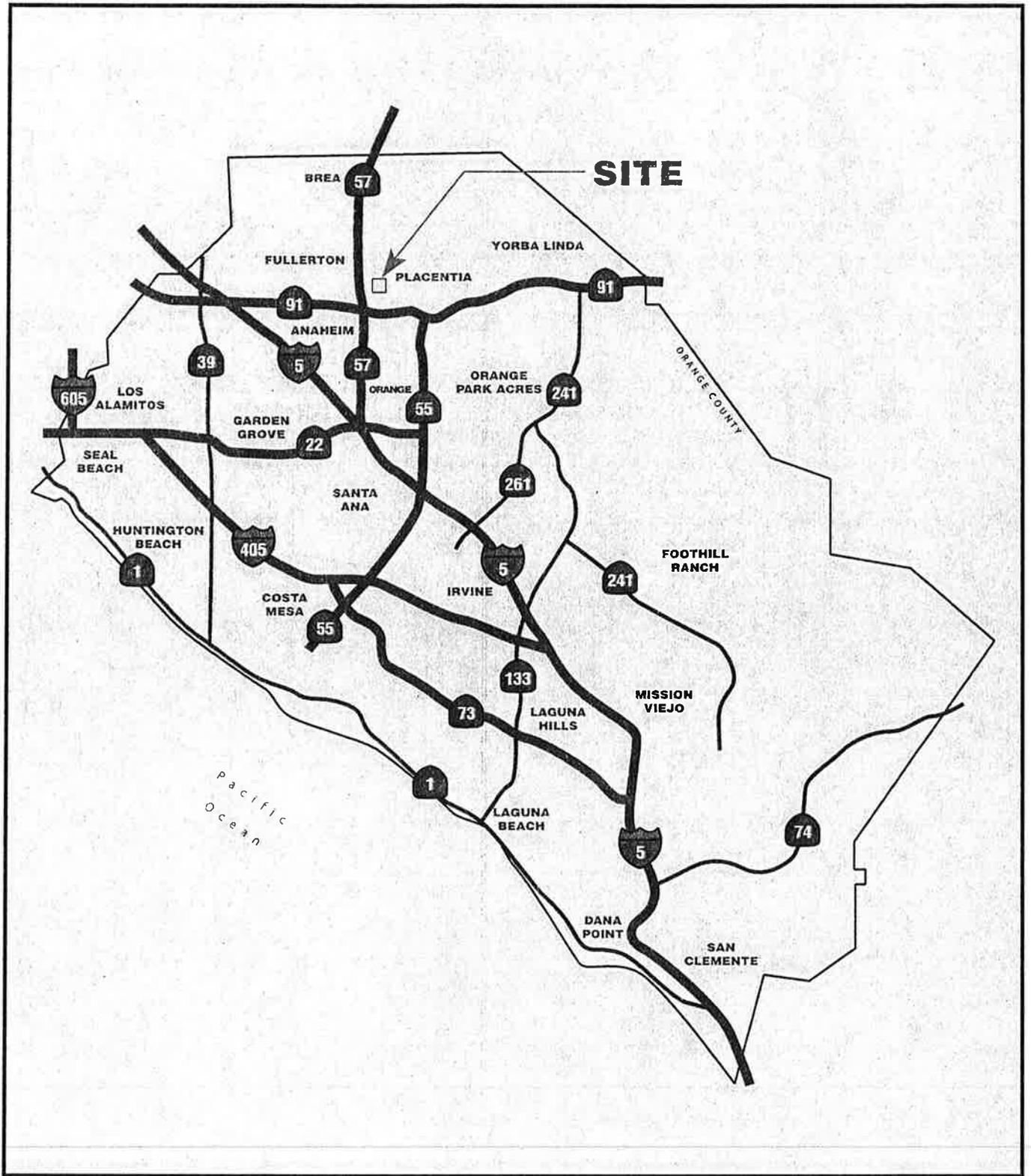
I find that the proposal MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached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

*F. M. Yarnall*  
Signature

Ca. Dept. of Public Health  
Agency

Kelvin Yarnall  
Printed Name/Title

9/22/11  
Date





GOLDEN STATE WATER COMPANY  
WILSON WELL

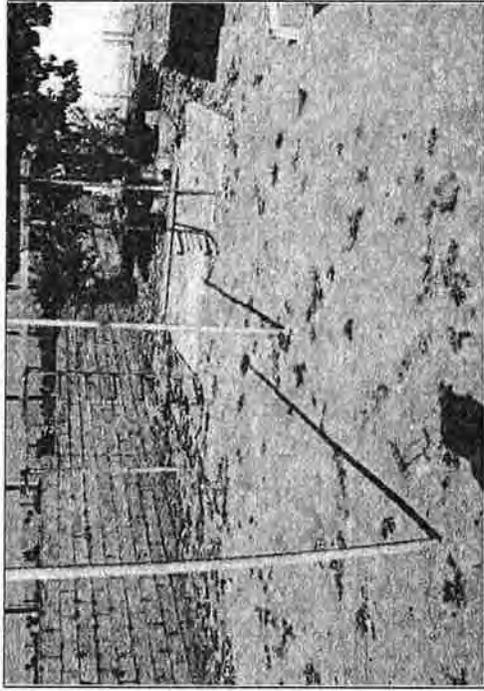
## Proposed Pipeline Alignments

Exhibit 2-2



15-102261-SEP-2017





GOLDEN STATE WATER COMPANY  
WILSON WELL  
**Photo Study**



# Golden State Water Company

A Subsidiary of American States Water Company

## You're Invited!

**WHAT:** Informational Meeting for new well construction project

**WHEN:** Nov. 14, 2012, from 6 to 7 p.m.

**WHERE:** Main Room, Backs Community Building, 201 N. Bradford Ave., Placentia

Learn more about Golden State Water Company's plans to build a new well near Kraemer Memorial Park. The project site is located at 202 Wilson Avenue, between Wilson Avenue and Kraemer Memorial Park.

At the Nov. 14 meeting, Golden State Water Company employees will provide details about the project and answer questions.

Free cookies and beverages provided.

For more information, call 1-800-999-4033.

### PLANNING DIVISION REPORT

APPLICATION: DPR 2012-03

EXHIBIT: 5

PAGE 1 OF 10

DATE: 12-11-12

## Placentia Wilson Well – Questions and Answers

### **Why do you need to drill a new well on Wilson Avenue near Kraemer Park?**

This well is part of the company's ongoing efforts to maintain and provide a reliable and cost effective water supply now and for generations to come. It will be built on property owned by Golden State at 202 Wilson Avenue.

### **What will be the overall impact on neighbors during construction and after the well is in service?**

A vacant home on Golden State property will be demolished in the first phase of construction. A drain line will be installed to create a water drainage system that is necessary for the company to drill and equip a new well.

#### **Noise**

We will comply with the all laws regarding noise and operations. We will install sound curtains around the perimeter of the construction that should reduce the noise outside the sound walls to levels that permit conversation and other activities such as sleeping, working and recreation, without annoyance.

#### **Lighting**

There will be construction lights installed. The height of the sound curtain should eliminate most of the lighting impact on neighbors during the night time.

#### **Traffic**

The impact on traffic should be minimal. There will be some additional truck traffic as crews bring equipment and supplies into and out of the area.

#### **Water Pressure and Quality**

There should be no impact on your water service during or after the construction period.

### **Has the well already been approved? By whom?**

The need for the project was approved by the California Public Utilities Commission as part of a previous General Rate Case decision. We are working with the City of Placentia on a final permit to begin construction. The California Department of Public Health will provide final approval for us to begin operating the well.

### **How much will this project cost? How much will this raise our rates?**

The estimated cost of the project is approximately \$2 million. All costs included in rates must be approved by the California Public Utilities Commission and will be spread out among all customers in Golden State Water Company's Region III, which includes our Foothill District, Orange County District, and Desert/Mountain District. There are approximately 95,000 customers in Region III.

### **Whom do I contact if I have a concern?**

Call our 24 customer service hotline: 1-800-999-4033. Concerns related to construction activity will be handled on a case-by-case basis. Customers who become concerned will be put in touch with the local manager who will work with customers to resolve the issue.

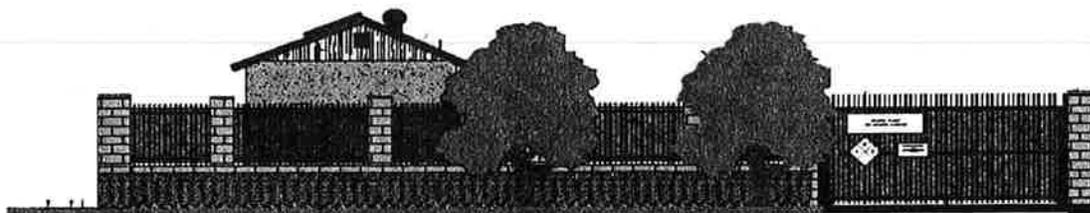
### **Will there be new buildings or landscaping? What will that look like?**

There will be a small building constructed that should not be visible to most customers. The well will be designed in a way that will blend into the area. See the drawing below.

### **What is the timetable for construction? How would we be notified when drilling would begin?**

We hope to begin construction in early 2013. We will provide all area customers advance notification of drilling and more information about the different phases of the project at a later date.

View Looking South from Wilson Avenue





**Summary of Wilson Well Information Meeting  
6 p.m. to 7 p.m., Nov. 14, 2012  
Backs Building, Placentia**

**Attendees**

Forty nearby residents received invitations to the meeting by mail and by door hanger. Six of them attended. All signed their name on the sign-in sheet:

**Customers**

Margie Wells, 216 Wilson Avenue, 714-792-3938, [w4skylark@att.net](mailto:w4skylark@att.net)  
John Napoli, 215 Wilson Avenue, 714-961-8609, no email provided  
George Arechiga, 248 Wilson Avenue, 714-822-5617, [atmtile@hotmail.com](mailto:atmtile@hotmail.com)  
Matt Wilken, 148 Wilson Avenue, 714-996-9508, [mwilken@fullerton.edu](mailto:mwilken@fullerton.edu)  
Sue Fisher, 148 Wilson Avenue, 714-996-9508, [suemama@mac.com](mailto:suemama@mac.com)  
Charles Davis, 208 Wilson Avenue, 949-768-0283, [bushmanc@cox.net](mailto:bushmanc@cox.net)

**Golden State Water Company Employees in Attendance**

District Manager Robert Hanford  
Superintendent Steve Brown  
Senior Civil Engineer Nancy Baker  
Engineering Design Manager Sunil Pillai  
Project Engineer Todd Waltz  
Assistant Engineer Dan Flores  
Community Education Manager John Dewey

**Materials on Display**

Handout - Questions and Answers about Wilson Well Project  
Exhibit – Preliminary Design  
Diagram – How a well is structured  
Photo – Sound walls constructed at a well site during the day  
Photo – Drill rig and lighting at night

The first two customers showed up at approximately 5:55 p.m. The other four arrived by 6:10 p.m. They stayed until all of their questions were answered. The meeting adjourned at approximately 7 p.m.

**Comments**

I believe an asphalt driveway would be a mistake in the northwest corner. It would be aesthetically pleasing if it was concrete.

CMUs (concrete masonry units) should be split-faced or slump stone. It will be easier to remove graffiti if it is slump stone.

I suggest anything other than turf for ground cover at the site for the sake of water-efficiency.



It would help to plant something thorny around the walls to prevent people from trying to enter or do graffiti.

I have concerns about the existing drainage, which sometimes floods my garage. The City said it would drill holes in an existing wall so the water wouldn't flow to my property. They have yet to do that. I would like to make sure drainage issue is addressed in this plan.

### **Questions and Responses**

Q: Do your people do daily maintenance checks, even on weekends?

A: Yes

Q: Are there safety mechanisms?

A: Yes. We don't get into specific details. We have alarms and sensors.

Q: When would be the soonest the plant would be built?

A: A lot depends on the City of Placentia.

Q: Do you have something to show us that would indicate what type of sound we would hear on a daily basis during normal operations?

A: We recommend you visit our recently constructed Clair Well in West Orange County, near Beach and Dale. It would be similar.

Q: What kind of vibration do you expect during drilling?

A: At a drilling site today in Claremont, there were no vibrations felt.

Q: If you go 1,000 feet, how long will it take?

A: We can get a pilot hole done in as little as 8 days. The casing a day and a half.

Q: How often is the pump on?

A: Typically, if it is an active well, it could be running 19 to 22 hours a day. The pump is enclosed in the building. Then we have the building walls which add another barrier to sound.

Q: What kind of chemical is stored on site?

A: Sodium hypochlorite. Essentially bleach.

Q: Is your nearby Ruby Well similar to this?

A: It has a running well but an older building. The motors will be similar but the new building at Wilson will be better for soundproofing.

Q: Are the lights motion-activated?

A: Yes.



Q: What will you do with the site if you find the water is not of good quality?

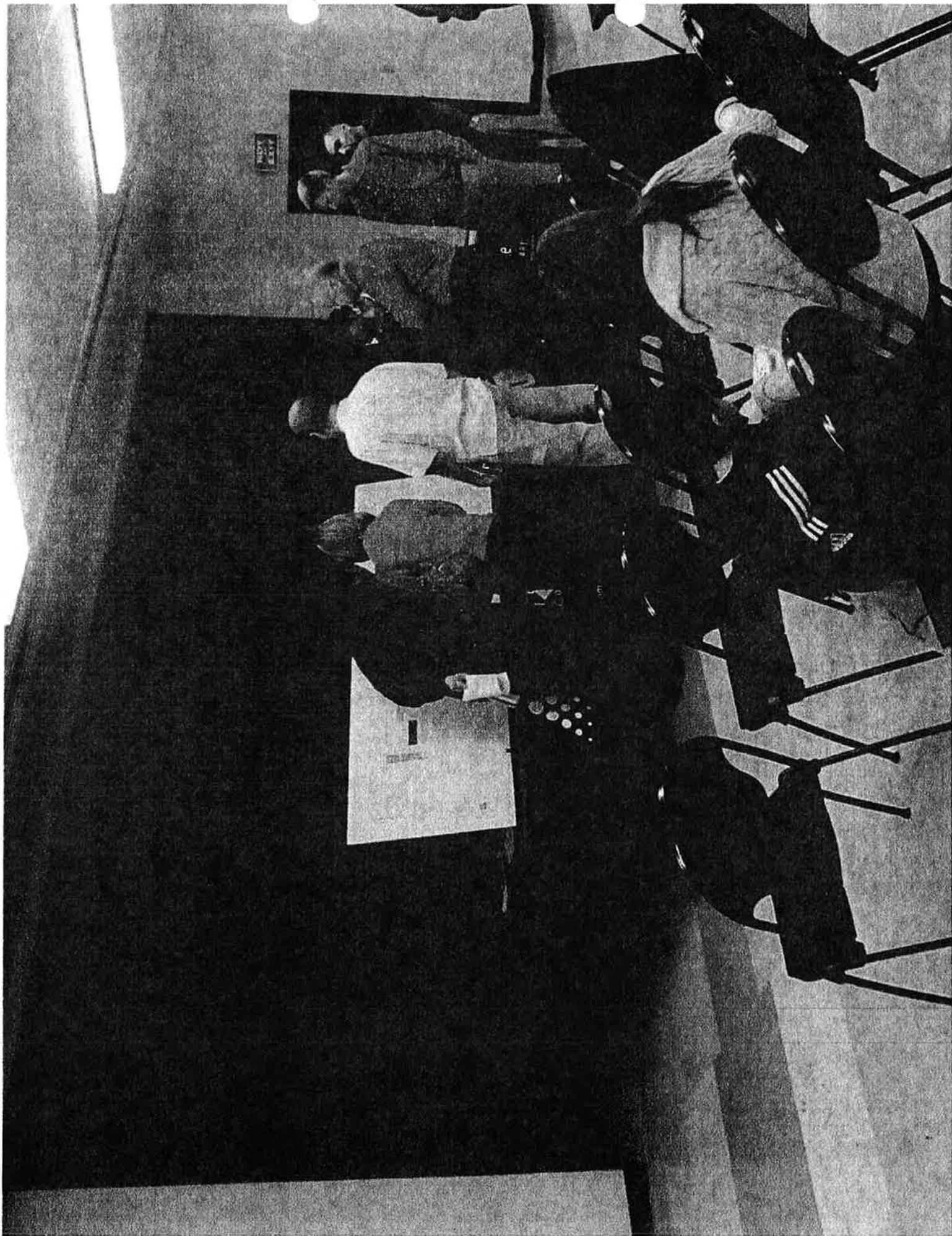
A: That is pretty hypothetical. We would have a couple options we would look at, including putting the land up for sale.

Q: The neighbors are concerned about aesthetics. We don't want it to look like an industrial site. How tall are the above-ground pipes and will they be visible from the sidewalk?

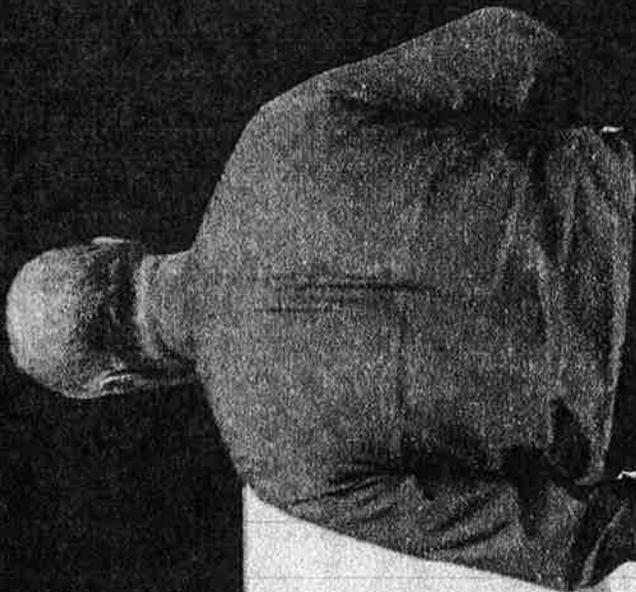
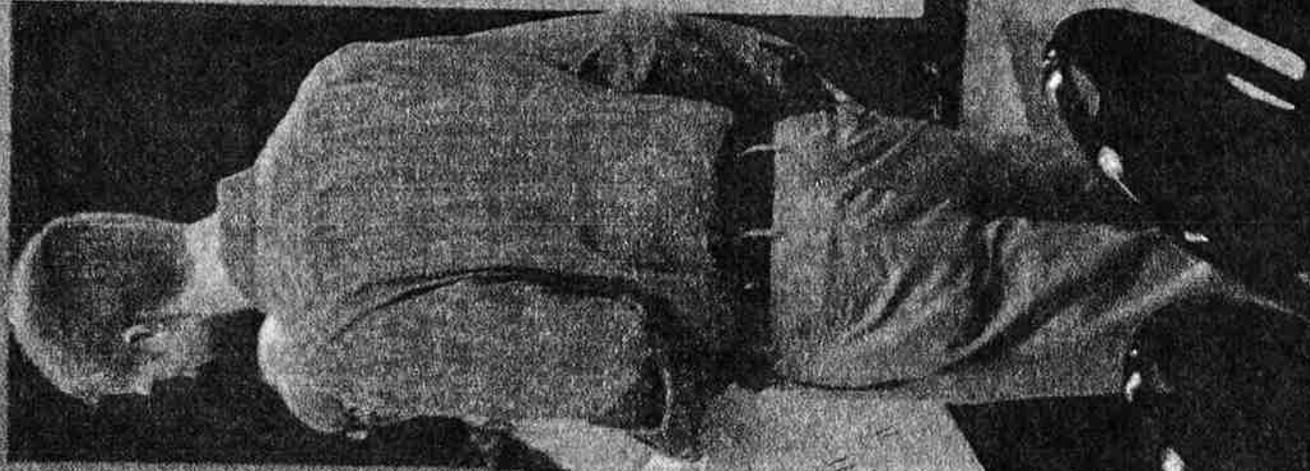
A: The walls and shrubs and the building should help block the view of them.

Q: How do we know you won't over-pump and take too much water out?

A: It is a managed basin that prevents that from happening.



NOT  
AN  
EXIT

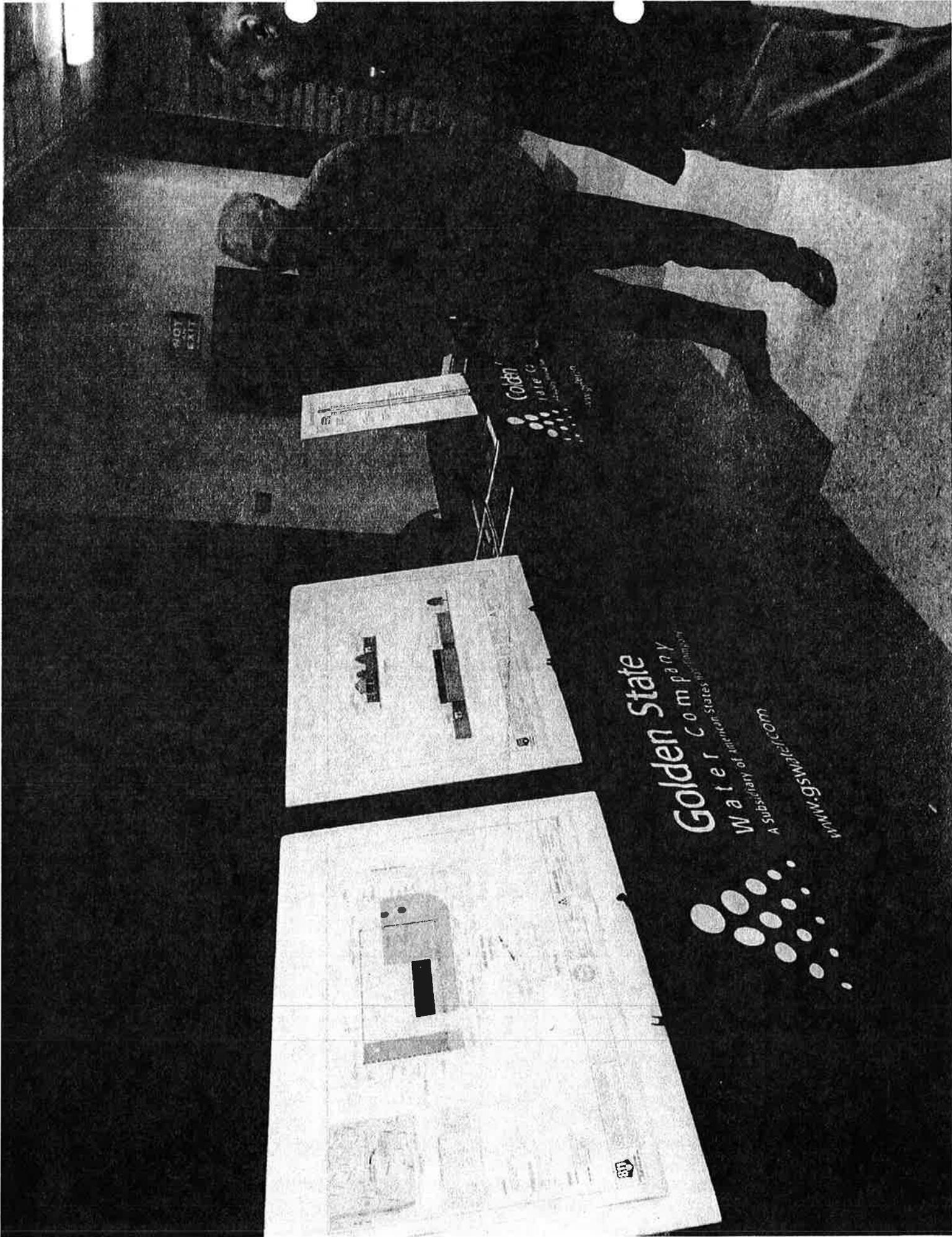


State  
Company  
from States Wear Company

st.com

State  
Company  
from States Wear Company

com



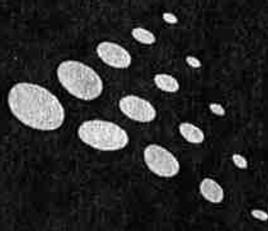
NOT AN EXIT

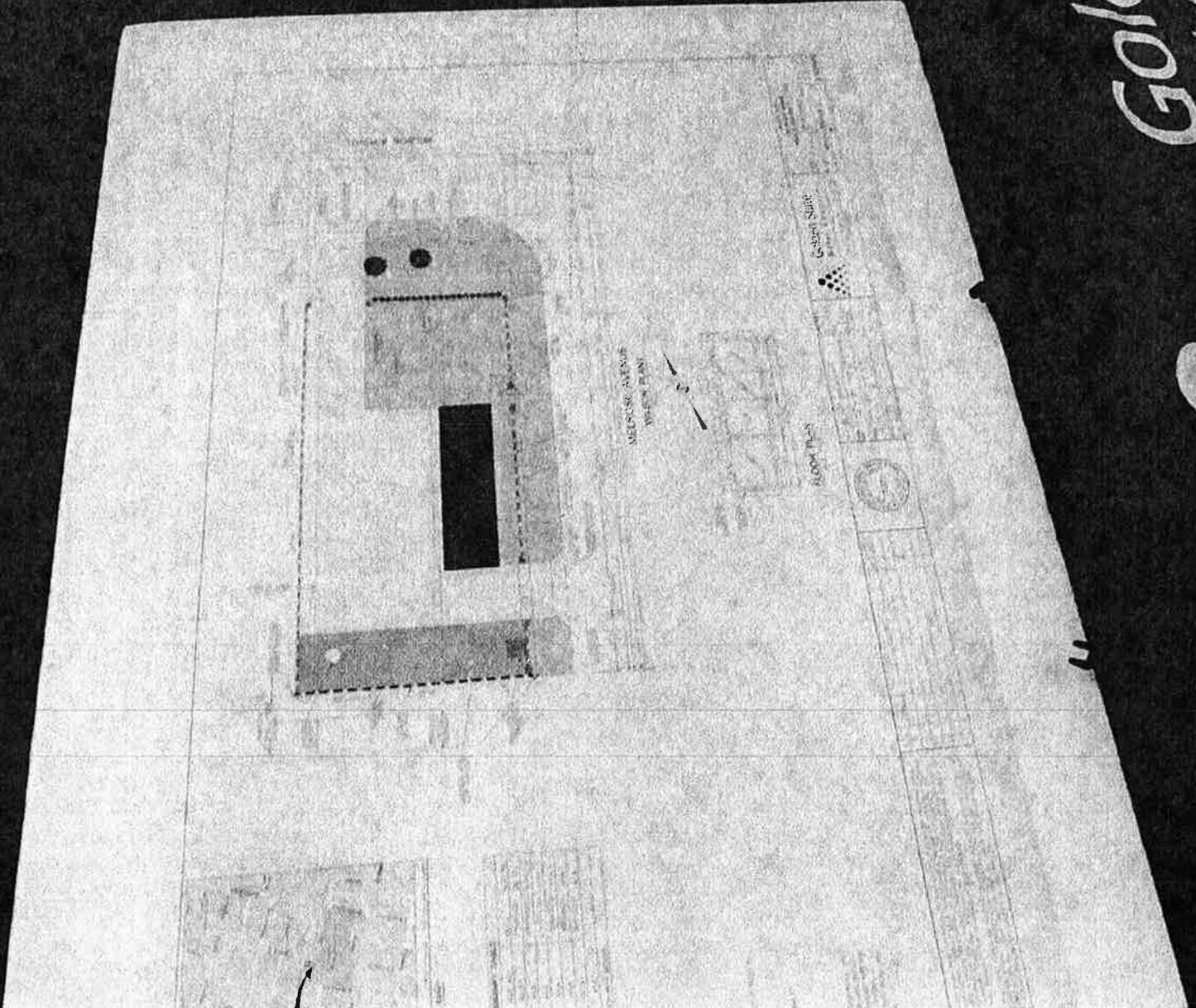
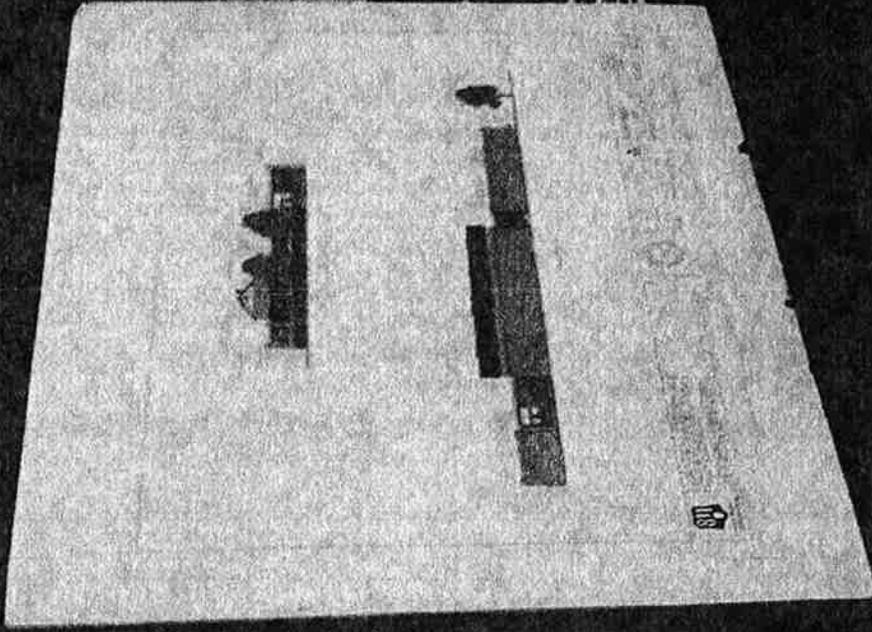
Golden State Water Company  
A subsidiary of the Metropolitan Water District of Southern California

Golden State Water Company  
A subsidiary of the Metropolitan Water District of Southern California

Golden State Water Company  
A subsidiary of the Metropolitan Water District of Southern California

Golden State Water Company  
A subsidiary of the Metropolitan Water District of Southern California  
www.GSWM.com





Golden State  
Company  
State of Montana

# Structure of a Well

**PUMP OUTLET**  
Distributes well water into the system. Treatment and sampling take place here.



**SURFACE SEAL**  
Helps to prevent surface contaminants

**MOTOR**

Turns shaft that spins the pump.



**CASING**

Metal wall of the well with small openings at selected intervals to allow water into casing.

**GRAVEL PACK**

Acts as a filter that keeps out surrounding soil.

**↑ WATER TABLE**

Level at which the ground becomes completely saturated with water.

**PUMP COLUMN**

Pipe through which groundwater is brought to the surface.

**TURBINE PUMP**

Pumps groundwater out of deep wells.

