## CITY OF DANA POINT PLANNING COMMISSION AGENDA REPORT

DATE: FEBRUARY 8, 2016

## TO: DANA POINT PLANNING COMMISSION

- FROM: COMMUNITY DEVELOPMENT DEPARTMENT URSULA LUNA-REYNOSA, DIRECTOR EVAN LANGAN, AICP, ASSOCIATE PLANNER
- SUBJECT: ANTENNA USE PERMIT AUP15-0002 TO ALLOW THE INSTALLATION OF A COMMERCIAL WIRELESS TELECOMMUNICATION ANTENNA FACILITY TO THE EXTERIOR OF AN EXISTING CUPOLA AT THE ST. REGIS RESORT LOCATED AT 1 MONARCH BEACH RESORT

RECOMMENDATION:	That the Planning Commission adopt the attached resolution approving Antenna Use Permit Application AUP15-0002.
APPLICANT/OWNER:	Monroe MBR, LLC
<u>OWNER'S AGENT</u> :	Jacobs Engineering Group on behalf of Verizon Wireless
<u>REQUEST</u> :	Approval of an Antenna Use Permit to allow the installation of 16 "Commercial Wireless Telecommunication Antennas" (cellular antennas) to the exterior of an existing cupola located at the St. Regis Resort.
LOCATION:	1 Monarch Beach Resort Assessor Parcel Number (APN): 672-621-01
<u>NOTICE</u> :	Notices of the Public Hearing were mailed to property owners within a 500-foot radius, published within a newspaper of general circulation and posted at Dana Point City Hall, the Dana Point and Capistrano Beach Branch Post Offices, as well as the Dana Point Library on January 28, 2016.
ENVIRONMENTAL:	Pursuant to the California Environmental Quality Act (CEQA), the project is Categorically Exempt per Section 15301 (Class

improvements to an existing structure.

1 - Existing Facilities) in that it proposes nominal

## ISSUES:

- Project consistency with the Dana Point General Plan, Zoning Code (DPZC) and Monarch Beach Resort Specific Plan (MBRSP).
- Project satisfaction with all findings required pursuant to the DPZC for approval of an Antenna Use Permit (AUP).
- Project compatibility with and enhancement of the site and surrounding neighborhood.

**BACKGROUND**: The subject property measures an approximate 620,438 square feet (14.25 acres) and is presently developed with the St. Regis Resort - a multi-story hotel constructed in the late 1990's. The property is located within the area of the Monarch Beach Resort Specific Plan (MBRSP), bordered to the north, south and east by residential development and to the west, the City's Sea Terrace Park. Pursuant to the MBRSP, the property is zoned "Visitor Recreation Commercial" (VRC) and is located both within the City's Coastal Overlay District (the California Coastal Zone) as well as the Appeals Jurisdiction of the California Coastal Commission.

**DISCUSSION**: The subject application proposes the addition of 16 cellular antennas to the exterior of an existing cupola located at the "South Wing" of the St. Regis Resort. The purpose of the new antennas would be to improve cellular and data transfer services for both public and private sector users within a prescribed radius around the subject property and would be the first commercial cellular antenna facility to be added to the site for the purposes of improving coverage in the surrounding community. The boundaries of the subject property are located approximately 70 feet from Niguel Road - a "Scenic Highway" as designated in the Circulation Element of the City's adopted General Plan. Pursuant to Section 9.07.020 (4)(K) of the DPZC, this proximity to both a Scenic Highway as well as to residentially zoned properties in the vicinity requires that a "Major" Antenna Use Permit (AUP) be approved by the Planning Commission.

The antennas would be installed around the perimeter (all four sides) of the cupola and completely housed within matching protrusions measuring 20 inches deep. The exterior of these protrusions would be surfaced and painted to match the exterior of the cupola and broader hotel and contain faux windows with louver inserts. No component of the antennas themselves would be exposed or visible to the public and no changes would result to the roof of the cupola or the overall height of the hotel with installation of proposed equipment. Supporting accessory cabinets, a generator and two global positioning system [GPS] units would be located at grade at the eastern side of the property (facing Niguel Road) and completely screened from public view by an existing wall and landscaping.

In compliance with Section 9.07.020 of the DPZC, propagation maps have been submitted to the City illustrating the improvement in service with placement of the new antennas. Finally, a radio frequency (RF) report (as prepared by a licensed engineer) has been submitted which shows that the proposed antennas will comply with all emission requirements per Federal Communications Commission (FCC) standards.

Section 9.07.020 (b)(6) of the DPZC stipulates the following six findings must be made in order to approve an AUP. Pursuant to the (Federal) Telecommunications Act of 1996, a local government may not regulate the placement or construction of cellular antenna facilities on the basis of environmental effects when such facilities are found to otherwise comply with FCC emission regulations.

- 1. That the proposed antenna facility will not create any significant or meaningful blockage to public views.
- 2. That the proposed antenna facility will be an enhancement to the City due to its ability to provide additional communication capabilities.
- 3. That the proposed antenna facility will be aesthetically integrated into its surrounding environment.
- 4. That the proposed antenna facility will not interfere with the reception or transmission of other wireless telecommunication signals within the surrounding community.
- 5. That the proposed antenna facility will operate in compliance with all applicable Federal safety regulations for such facilities.
- 6. That the public need for the use of the antenna facility has been documented.

The subject project has been found to comply with standards and location requirements enumerated in Section 9.07.020 of the DPZC as well as those of the MBRSP and staff's recommended findings to approve the AUP request are included in the project's draft resolution (Attachment 1).

**<u>CORRESPONDENCE</u>**: To date, no correspondence has been received concerning the subject project.

**<u>CONCLUSION</u>**: Staff finds that the subject project is consistent with the policies and provisions of the City of Dana Point General Plan, Zoning Ordinance and the Monarch Beach Resort Specific Plan. As the project has been found to comply with all standards of development, staff recommends the Planning Commission adopt the attached resolution, approving AUP15-0002 subject to findings and conditions of approval.

Ulq os

Evar Langari, AICP Associate Planner

Ursula Luna-Reynosa, Director Community Development Department

## ATTACHMENTS:

## Action Documents

1. Draft Planning Commission Resolution No. 16-02-08-xx

## Supporting Documents

- 2. Vicinity Map
- 3. Site Photos
- 4. Project Plans (architectural only)
- 5. Photo Simulations of Proposed Antenna Installations

## **RESOLUTION NO. 16-02-08-XX**

## A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF DANA POINT, CALIFORNIA, APPROVING ANTENNA USE PERMIT AUP15-0002 TO ALLOW THE INSTALLATION OF A COMMERCIAL WIRELESS TELECOMMUNICATION ANTENNA FACILITY TO THE EXTERIOR OF AN EXISTING CUPOLA AT THE ST. REGIS RESORT LOCATED AT 1 MONARCH BEACH RESORT

The Planning Commission of the City of Dana Point does hereby resolve as follows:

WHEREAS, Monroe MBR, LLC (the "Applicant") is the owner of real property commonly referred to as 1 Monarch Beach Resort (APN 672-621-01) (the "Property"); and

WHEREAS, the Applicant filed a verified application for an Antenna Use Permit to allow the installation of 16 Commercial Wireless Telecommunication Antennas to the exterior of an existing cupola located at the Property; and

WHEREAS, said verified application constitutes a request as provided by Title 9 of the Dana Point Zoning Code; and

WHEREAS, pursuant to the California Environmental Quality Act ("CEQA"), the project is Categorically Exempt per Section 15301 (Class 1 – Existing Facilities) in that it proposes nominal improvements to an existing structure; and

WHEREAS, the Planning Commission did, on the 8<sup>th</sup> day of February, 2016 hold a duly noticed public hearing as prescribed by law to consider said requests; and

WHEREAS, at said public hearing, upon considering all testimony and arguments, if any, of all persons desiring to be heard, said Commission considered all factors relating to Antenna Use Permit AUP15-0002.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Planning Commission of the City of Dana Point as follows;

- A. The above recitations are true and correct and incorporated herein.
- B. Based on the evidence presented at the public hearing, the Planning Commission adopts the following findings and approves AUP15-0002, subject to conditions:

## Findings:

## Antenna Use Permit AUP15-0002

- 1. That the proposed antenna facility will not create any significant or meaningful blockage to public views in that existing public views through the subject property as viewed from public places would not be impacted by the addition of the facility.
- 2. That the proposed antenna facility will be an enhancement to the City due to its ability to provide additional communication capabilities in that propagation maps have been submitted and are on file with the City and which illustrate that the proposed antennas would provide improved cellular and data transfer services for private, commercial and emergency users.
- 3. That the proposed antenna facility will be aesthetically integrated into its surrounding environment in that all antennas will be fully screened within new enclosures mounted to the exterior of an existing cupola, designed, surfaced and painted to complement the structure and broader hotel. The proposed cellular antennas will not visible to the public and/or from public rights-of-way; all accessory/supporting equipment will be located at-grade and similarly screened from public view by existing development and landscaping.
- 4. That the proposed antenna facility will not interfere with the reception or transmission of other wireless telecommunication signals within the surrounding community in that documentation (specifically a radio frequency report) prepared by a licensed engineer has been submitted to the City and which demonstrates that proposed facilities will comply with Federal Communication Commission (FCC) standards as relate both to emissions as well as non-interference with other wireless telecommunication signals and facilities.
- 5. That the proposed antenna facility will operate in compliance with all applicable Federal safety regulations for such facilities in that a radio frequency (RF) report has been received by the City and stipulating compliance of proposed antennas with FCC and other applicable standards. After installation and prior to final inspection and sign-off of the project by City staff, installed antennas will be tested and verified once more as to compliance with these same standards.

6. That the public need for the use of the antenna facility has been documented in that evidence in the record illustrates a marked improvement in cellular coverage will occur with placement of the subject equipment – increasing or improving service to private, commercial and/or emergency cellular users.

## Conditions:

## A. General:

- 1. Approval of this application permits the Approval of an Antenna Use Permit to allow the installation of 16 "Commercial Wireless Telecommunication Antennas" (cellular antennas) to the exterior of an existing cupola at located at 1 Monarch Beach Resort (the St. Regis Resort). Subsequent submittals for this project shall be in substantial compliance with the plans presented to the Planning Commission and in compliance with the applicable provisions of the Dana Point General Plan and Municipal Code.
- 2. Approval of this application is valid for a period of 24 months (two years) from the date of determination. If the development approved by this action is not established, or a building permit for the project is not issued within such period of time, the approval shall expire and shall thereafter be null and void.
- 3. The application is approved as a plan for the location and design of the uses, structures, features, and materials, shown on the approved plans. Any relocation, alteration, or addition to any use, structure, feature, or material, not specifically approved by this application, will nullify this approving action. If any changes are proposed regarding the location or alteration to the appearance or use of any structure, an amendment to this permit shall be submitted for approval by the Director of Community Development. If the Director of Community Development determines that the proposed change complies with the provisions and the spirit and intent of this approval action, and that the action would have been the same for the amendment without requiring a new public hearing.
- 4. Failure to abide by and faithfully comply with any and all conditions attached to the granting of this permit shall constitute grounds for revocation of said permit.

5. The applicant or any successor-in-interest shall defend, indemnify, and hold harmless the City of Dana Point ("CITY"), its agents, officers, or employees from any claim, action, or proceeding against the CITY, its agents, officers, or employees to attack, set aside, void, or annul an approval or any other action of the CITY, its advisory agencies, appeal boards, or legislative body concerning the project. Applicant's duty to defend, indemnify, and hold harmless the City shall include paying the City's attorney's fees, costs and expenses incurred concerning the claim, action, or proceeding.

The applicant or any successor-in-interest shall further protect, defend, indemnify and hold harmless the City, its officers, employees, and agents from any and all claims, actions, or proceedings against the City, its offers, employees, or agents arising out of or resulting from the negligence of the applicant or the applicant's agents, employees, or contractors. Applicant's duty to defend, indemnify, and hold harmless the City shall include paying the City's attorney's fees, costs and expenses incurred concerning the claim, action, or proceeding.

The applicant shall also reimburse the City for City Attorney fees and costs associated with the review of the proposed project and any other related documentation.

- 6. The applicant and applicant's successors in interest shall be fully responsible for knowing and complying with all conditions of approval, including making known the conditions to City staff for future governmental permits or actions on the project site.
- 7. The applicant and applicant's successors in interest shall be responsible for payment of all applicable fees along with reimbursement for all City expense in ensuring compliance with these conditions.
- 8. The construction site shall be posted with signage indicating that construction may not commence before 7:00 AM and must cease by 8:00 PM, Monday through Saturday, with no construction activity permitted on Sundays or Federal holidays.
- The applicant, property owner or successor in interest shall submit a Waste Management Plan to the City's C&D Official per the Dana Point Municipal Code. A deposit will be required upon approval of the Waste Management Plan to ensure compliance.

- 10. During construction, the project shall implement and maintain all minimum construction Best Management Practices (BMPs), assigned by priority level and/or as required by the Director of Public Works or designee. Applicable minimum BMPs for the project's priority as determined by the Urban Runoff Threat Assessment Form may be found in the City's Construction Urban Runoff BMP Requirements Manuals.
- 11. During the construction phase, all construction materials, wastes, grading or demolition debris, and stockpiles of soil, aggregates, soil amendments, etc. shall be properly covered, stored, managed, secured and disposed to prevent transport into the streets, gutters, storm drains, creeks and/or coastal waters by wind, rain, tracking, tidal erosion or dispersion.
- 12. Approved antenna facilities, accessory equipment and the approved AUP and its conditions of approval shall be subject to review by the City every two years from the date of approval to determine if technology has changed such that the installation may be reduced in size or redesigned in a more "stealth" manner and to evaluate Radio-Frequency emissions. Should this review be deemed required/appropriate, the applicant shall submit a technology upgrade report and Radio-Frequency emission testing report for review by the Director of Community Development. Said report will not be required more than once within a twenty four (24) month period.
- 13. At all times, other than during a 24-hour "cure period," the applicant shall not prevent the City of Dana Point from having adequate spectrum capacity on the City's 800 MHz radio frequency.
- 14. The applicant shall provide a 24-hour phone number to which interference problems may be reported, and will resolve all interference complaints within 24 hours.
- 15. The applicant shall cease operation of this facility should it cause interference with any City facilities immediately upon expiration of the 24-hour "cure period" until the cause of interference is eliminated.
- 16. Subsequent amendments, additions or other modifications to antennas approved under this AUP shall not result in increased overall height of the St. Regis Resort from that originally approved or in an increase in height for any singular component of the structure housing existing or proposed antennas.

# B. Prior to Building Plan Check Submittal and/or issuance of any Building Permits:

- 17. Building plan check submittal shall include three sets of the following construction documents:
  - a. Building Plans
  - b. Structural Calculations
- 18. All documents prepared by a professional shall be wet-stamped and signed.
- 19. The project applicant shall secure project approval from the Orange County Fire Authority (OCFA), and provide proof of such approval to the Planning Division.

## C. Prior to final inspection or approval of the project by City staff:

- 20. Upon installation of approved antenna facilities, a Temporary Certificate of Occupancy will be issued. Once the site is operable, a radio frequency (RF) report shall be submitted within 45 days to demonstrate that the facility (post-installation) remains in compliance with government safety standards
- 21. The applicant shall submit to a post-installation test to confirm that the facility does not interfere with the City of Dana Point's Public Safety radio equipment. This test will be conducted by the Communications Division of the Orange County Sheriff's Department or a Division approved contractor at the expense of the applicant. Proof of compliance shall be provided to the Director of Community Development.
- 22. The applicant shall provide a "single point of contact" in its Engineering and Maintenance Departments to ensure continuity on all interference issues. The name, telephone and fax numbers and e-mail address of that contact shall be provided to the Orange County Sheriff's Department.

PASSED, APPROVED, AND ADOPTED at a regular meeting of the Planning Commission of the City of Dana Point, CA, held on this 8<sup>th</sup> day of February, 2016 by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

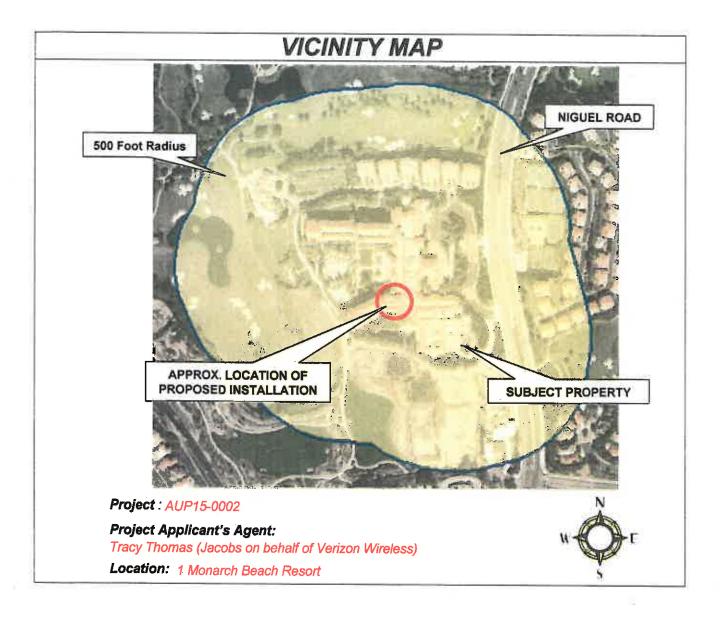
April O'Conner, Chairperson Planning Commission

Ursula Luna-Reynosa, Director Community Development Department



City of Dana Point

Antenna Use Permit AUP15-0002 Evan Langan, AICP, Associate Planner Community Development Department 33282 Golden Lantern Dana Point, CA 92629-1805



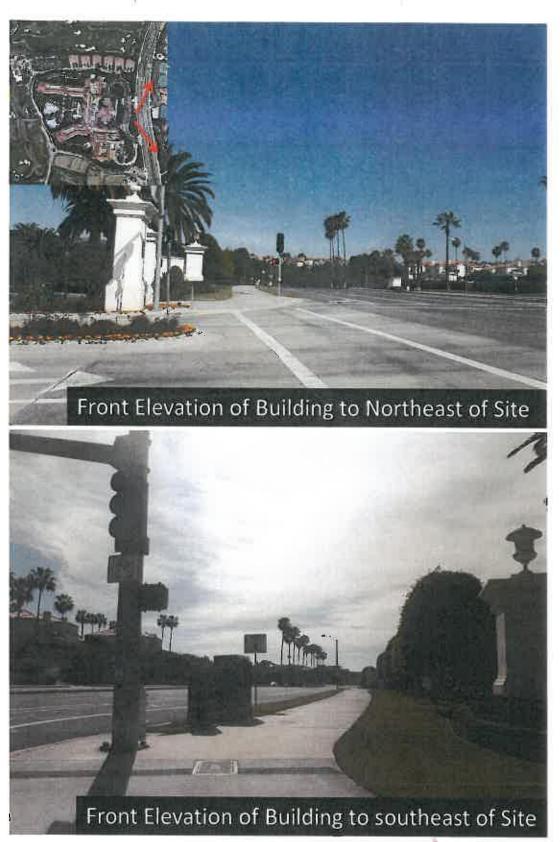






**Via Monarca** 1 Monarch Beach Resort Dana Point, CA

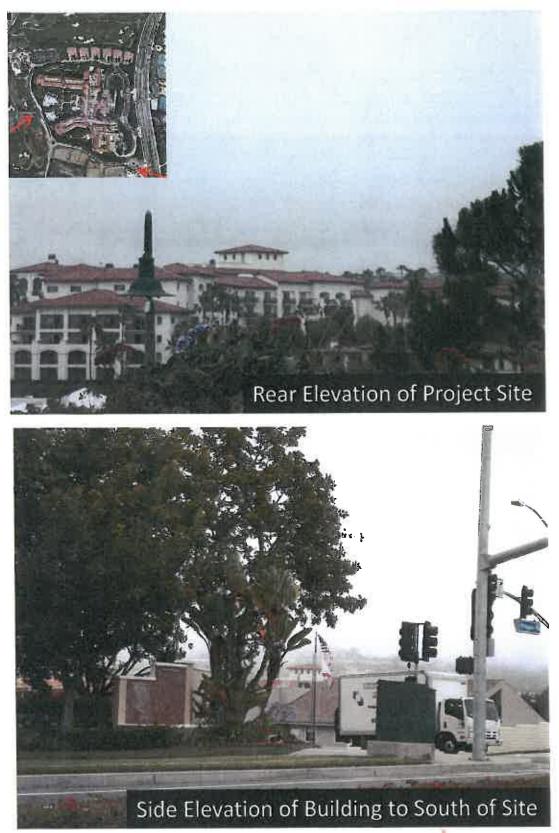






Via Monarca 1 Monarch Beach Resort Dana Point, CA



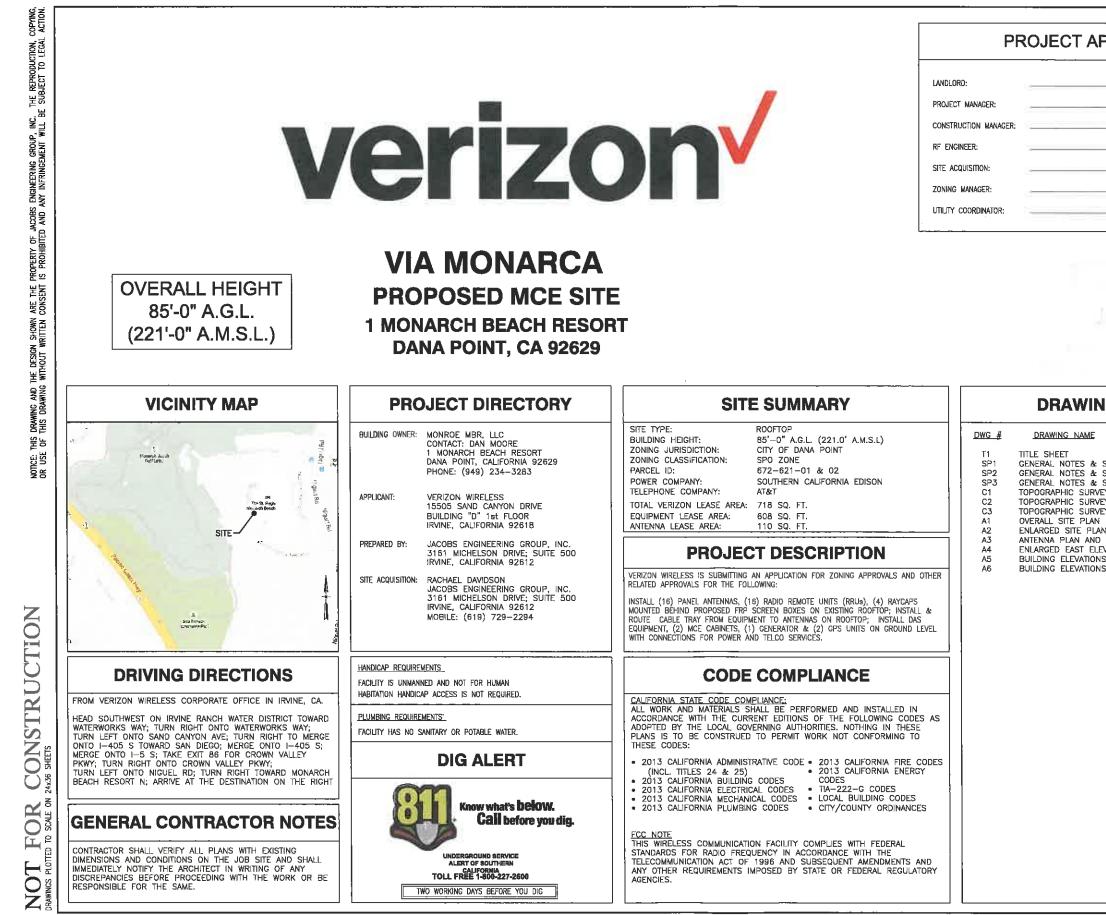


JACOB 3161 Michelson Avenue, Suite 500 Irvine, CA 92612

Via Monarca 1 Monarch Beach Resort Dana Point, CA



Irvine, CA 92618



	PREPARED FOR:
PPROVAL	verizon
	15505 SAND CANYON AVENUE BLDG, D, FIRST FLR. IRVINE, CALLFORNIA 92018
	949.256.7000
	JACOBS
	Jacobs Engineering Group. Inc.
	3181 MICHELSON ORIVE; SUITE 500 RYINE, CALIFORNIA 92812 PHONE: 549-250-1818 FAX: 549-224-7801
	- ENGINEER SEAL
Add to a long the	
Joil 20 Shi	DESIGN REVISION:
NG INDEX	
	2 07/24/15 100% ZD AU
	1 07/01/15 ISSUED FOR RU
SPECIFICATIONS     SPECIFICATIONS	0 08/03/15 ISSUED FOR JNR ZONING NO. DATE REVISIONS BY
SPECIFICATIONS	NOT VALID WITHOUT SIGNATURE AND DATE
WEY WEY	- VERIZON SITE ID:
RVEY	L L
LAN ID EQUIPMENT PLAN	10 S
LEVATION	VIA MONARCA MONARCH BEACH RESORT DANA POINT, CA. 92629
DNS DNS	A B B B B B B B B B B B B B B B B B B B
	M X X V
	S ZZZ
	Ĩ Să Să
	-
	- TOWER OWNER SITE ID:
	WITEN WINER BITE ID.
	VIA MONARCA #316293
	APPROVED BY: DMS
	DESIGNED BY: RU PROJECT NO: EU601C02
	DATE: 06/03/15
	TITLE SHEET
	DRAWING NUMBER;
	T1

#### PART 1 - GENERAL CONDITIONS:

- 1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
- GENERAL CONTRACTOR TBD 11
- SUBCONTRACTOR TBD OWNER - VERIZON WIRELESS
- THE CONTRACTOR SHALL VISIT THE SITE BEFORE BIDDING ON THE WORK CONTAINED WITHIN THIS DESIGN PACKAGE. THE GENERAL CONTRACTOR SHALL VERIFY ALL AND ELEVATIONS DIMENSIONS. CONDITIONS. BEFORE STARTING WORK. DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER AND SHALL BE RESOLVED BEFORE PROCEEDING WITH THE WORK, ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.
- 3. IT IS THE INTENTION OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES, 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.
- 4. REFERENCES:

βÅ

88

ğρ

뛷망

ЗЩ

GROU AENT

INEERING INFRINGFI

ä≽

AND

Ч. Ц

PROPERTY IS PROHIE

뛷훕

AR NO

1 EN

뛷뒿

AND

THIS

ЩĘ

ыß

98

O

 $\mathbf{Z}$ 

 $\overline{\mathcal{O}}$ 

Z

**O** 

24X36

5

ſ<u>⊥</u> ₽

O

- 4.1. THE PUBLICATIONS LISTED BELOW ARE PART OF THIS SPECIFICATION, EACH PUBLICATION SHALL BE THE LATEST REVISION AND ADDENDUM IN EFFECT ON THE DATE. THIS SPECIFICATION IS ISSUED FOR CONSTRUCTION UNLESS OTHERWISE NOTED, EXCEPT AS MODIFIED BY THE REQUIREMENT SPECIFIED HEREIN OR THE DETAILS OF THE DRAWINGS, WORK INCLUDED IN THIS SPECIFICATION SHALL CONFORM TO THE APPLICABLE PROVISION OF THESE PUBLICATIONS.
- 4.2. 1. ANSI/IEEE (AMERICAN NATIONAL STANDARDS INSTITUTE)
- 4.3. 2. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)
- 4.4. 3. ICE (INSULATED CABLE ENGINEERS ASSOCIATION)
- 4.5. 4. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
- 4.6. 5. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
- 6. OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION) 4.7.
- 4.8. 7. UL (UNDERWRITERS LABORATORIES, INC.)
- 5. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORK.
- 6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- 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. ERECTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE. ALL MEMBERS SHALL BE LAID PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.
- 8. 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 THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO INDEMNIFY AND HOLD DESIGN ENGINEER / ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.
- PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK, DETAILS ARE INTENDED TO SHOWN DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
- 10. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- 11. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER / ARCHITECT PRIOR TO PROCEEDING.
- 12. GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.
- 13. SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH UL LISTED MATERIALS. APPROVED BY LOCAL JURISDICTION. SUBCONTRACTOR SHALL KEEP AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DEBRIS.
- 14. SITE GROUNDING SHALL COMPLY WITH VERIZON WIRELESS GROUNDING STANDARDS. LATEST EDITION, AND COMPLY WITH VERIZON WIRELESS GROUNDING CHECKLIST, LATEST VERSION, WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT, THEY SHALL GOVERN. GROUNDING SHALL BE COMPLETED BEFORE ERECTION OF A NEW TOWER.

- 15. ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, PROPOSED CONSTRUCTION, AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION. IF TEMPORARY LIGHTING AND MARKING IS 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.
- 16. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE, AND 2. MATERIALS AND EQUIPMENT: FEDERAL CODES OR ORDINANCES. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS.
- 17. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- 18. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AMPLE NOTICE TO THE BUILDING 2. LIQUIDTIGHT FLEXIBLE METAL CONDUIT SHA INSPECTION DEPARTMENT TO SCHEDULE THE REQUIRED INSPECTIONS. A MINIMUM OF 24 HOURS OF NOTICE SHOULD BE GIVEN AND THE BUILDING INSPECTION DEPARTMENTS HAVE REQUESTED THAT GROUPS OF TWO OR THREE SITES BE SCHEDULED AT ONE TIME IF POSSIBLE.
- 19. THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS AND TOWER DRAWINGS/ANALYSIS. CONTRACTOR IS RESPONSIBLE REVIEW OF THE TOTAL BID PACKAGE PRIOR TO BID SUBMITTAL.
- 20. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF 3. CONDUCTORS AND CABLE: CONSTRUCTION. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL PROPOSED UTILITIES WITHIN THE CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION. 3.1. CONDUCTORS AND CABLE:
- 21. GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND SUBCONTRACTORS TO THE SITE AND/OR BUILDING.
- 22. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.
- 23. 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 CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.
- 24. PERMITS: THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, LICENSES, FEES AND INSPECTIONS, ETC.
- 25. SUBCONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
- 26. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION.
- 27. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES
- 28. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.
- 29. ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT
- 30. SUBCONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.
- 31. SUBCONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION
- 32. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS NOT FOR HUMAN HABITAT (NO HANDICAP ACCESS REQUIRED)
- 33. NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.
- 34. NO WHITE STROBIC LIGHTS ARE PERMITTED. LIGHTING IF REQUIRED, WILL MEET FAA STANDARDS AND REQUIREMENTS.

#### PART 2 - PRODUCTS

- 1. GENERAL:
- 1.1. ALL MATERIALS AND EQUIPMENT SHALL BE UL LISTED, NEW, AND FREE FROM DEFECTS
- 1.2. ALL ITEMS OF MATERIALS AND EQUIPMENT SHALL BE ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION AS SUITABLE FOR THE USE INTENDED.
- 1.3. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF

APPROVAL, AND SHALL CONFORM TO CODF.

- ALL OVERCURRENT DEVICES SHALL HAY 1.4. TO OR GREATER THAN THE SHOR SUBJECTED, 10,000 AIC MINIMUM. DOES NOT EXCEED THE RATING OF EL

1 CONDUIT:

- 1.1. RIGID METAL CONDUIT (RMC) SHALL OUTSIDE INCLUDING ENDS AND THREAD ADDITION TO GALVANIZING.
- 2.1. CONDUIT CLAMPS, STRAPS AND SUPP ALL FITTINGS SHALL BE COMPRESSIO BUSHINGS WITH INSULATED THROATS TERMINATIONS.
- 2.2. NONMETALLIC CONDUIT AND FITTINGS SOLVENT-CEMENT-TYPE JOINTS AS RE-
- CONDUCTORS AND CABLE SHALL BE RESISTANT THERMOPLASTIC, SINGLE 600 VOLT, SIZE AS INDICATED, 12 AW USED.
- 10 AWG AND SMALLER CONDUCTOR 3.2. AND LARGER CONDUCTORS SHALL BE
- SOLDERLESS, COMPRESSION-TYPE COM 3.3. OF ALL STRANDED CONDUCTORS.
- 3.4. STRAIN-RELIEF SUPPORTS GRIPS SH EQUAL, CABLES SHALL BE SUPPORTED MANUFACTURER'S RECOMMENDATIONS.
- 3.5. ALL CONDUCTORS SHALL BE TAGGED PULL BOXES, J-BOXES, EQUIPMENT A APPROVED PLASTIC TAGS (ACTION CRAI
- 4. DISCONNECT SWITCHES
- 1. DISCONNECT SWITCHES SHALL BE 4.1. QUICK-BREAK, EXTERNALLY OPERABL COVER IN CLOSED POSITION, RATING NEMA 3R ENCLOSURE, SQUARE-D OR

#### 5. SYSTEM GROUNDING:

- 5.1. ALL GROUNDING COMPONENTS SHALL SHALL BE 2 AWG BARE, SOLID, T CONDUCTORS SHALL BE INSULATED WH
- GROUNDING BUSES SHALL BE BAR RECTANGULAR CROSS SECTION. STAND 52 AND INSTALLED BY THE SUBCONTRAC MODIFIED IN THE FIELD. ALL GROU MINIMUM 3/4" LETTERS BY WAY OF ST
- 5.3. CONNECTORS SHALL BE HIGH-CONDUC GROUNDING CONNECTORS FOR THE MA LUGS WITH HEAT SHRINK FOR MECHAN
- EXOTHERMIC WELDED CONNECTIONS 5.4. SELECTED FOR THE SPECIFIC TYPES AND OTHER ITEMS TO BE CONNECTED
- GROUND RODS SHALL BE COPPER-CL 5.5. AND ELECTROLYTIC-GRADE COPPER 5/8"x10'-0". ALL GROUNDING ROD SLEEVES.
- INSTALL AN EQUIPMENT GROUNDING C WITH THE SPECIFICATIONS AND NEC SHALL BE BONDED AT ALL JUNCTION STARTERS, AND EQUIPMENT CABINETS

#### 6. OTHER MATERIALS:

- 61 THE SUBCONTRACTOR SHALL PROVIDE DESCRIBED. WHICH ARE REQUIRED FO PROPER INSTALLATION OF THE WORK.
- 6.1. PROVIDE PULL BOXES AND JUNCTION

7. PANELS AND LOAD CENTERS:

7.1. ALL PANEL DIRECTORIES SHALL BE TYP

WE AN INTERRUPTING CURRENT RATING COLAL CIRCUIT CURRENT TO WHICH THEY ARE CATTOR AVAILABLE SHORT CIRCUIT CURRENT C CONCURRENT TO WHICH THEY ARE CONTROL OF THEY ARE CATTOR AVAILABLE SHORT CIRCUIT CURRENT C C CONTROL CURRENT TO WHICH THEY ARE CONTROL OF THEY ARE CATTOR AVAILABLE SHORT CIRCUIT CURRENT C C C C C C C C C C C C C C C C C C C		
L BE HOT-DIPPED GALVANIZED INSIDE AND DISS AND ENAMPLED OR LACQUERED INSIDE IN ALL BE ULLISTED. MULTION STALLED ON ALL CONDUCT SHALL BE SCHEDULE BO PVC. INSTALL USING COMMENDED BY THE MANUFACTURER. HE FLAME-RETARDANT, MOISTURE AND HEAT CONDUCTOR, COPPER, TYPE THHIN/THWA-2, AG SHALL BE SCHEDULE BO PVC. INSTALL USING SHALL BE SOLID OR STRANDED AND B AWG STRANDED. NNECTORS SHALL BE USED FOR TERMINATION HALL BE MUBBELL KELLENS OR APPROVED IN ACCORDANCE WITH THE NEC AND CABLE AT BOTH ENDS OF THE CONDUCTOR, AT ALL IND CAEINETS AND SHALL BE IDENTIFIED WITH FT, BRADY, OR APPROVED EQUAL). L BE TINNED. AND GROUNDING CONDUCTOR RE, THANED, ULLABELED FURNISHED IN APPROVED EQUAL. L BE TINNED. AND GROUNDING CONDUCTOR RE, TINNED, ANNEALED COPPER BARS OF DARD BUS BARS MGB, SHALL BE FURNISHED INDIVIDUE DISTINITION PLATE. CTIVITY, HEAVY DUTY, USTED AND LABELED FABILATION APPROVED EQUAL. L BE TINNED. ANNEALED COPPER BARS OF CAND BUSE BARS MGB, SHALL BE FURNISHED INDIVIDUE DISTINITION WITH APPROVED EQUAL. L BE TINNED. AND GROUNDING CONDUCTOR RE, TINNED, ANNEALED COPPER BARS OF CAND BUSE BARS MGB, SHALL BE FURNISHED OR INDIVIDUE DISTINITION PLATE. CTIVITY, HEAVY DUTY, USTED AND LABELED FABILATOR DISTINCTIONER AND BARS INDIVIDUE DISTINITY INSPECTION INCOLOR TION ALL CONDUITS IN COMPLIANCE INTERCLINENT ROUNDING CONDUCTORS I BOXES, PULLBOXES, DISCONNECT SWITCHES, DATE BOUNDER TORONDING CONDUCTORS I BOXES, PULLBOXES, DISCONNECT SWITCHES, DATE BOUNDERT OF CONDUCTORS IN COMPLIANCE I THE EDIMENT OR CONDUCTOR IN ALL CONDUITS IN COMPLIANCE I THE EDIMENT OR CONDUCTORS CONDUCTORS I BOXES, PULLBOXES, DISCONNECT SWITCHES, DECIMATE MATERIALS, THOUGH NOT SPECIFICALLY PREAMED DY: MATERIALS, THOUGH NOT SPECIFICALLY PREAMED DY: MATERIALS, THOUGH NOT SPECIFICALLY DY AMOUNTER SHALL NOTESS AND SPECIFICATIONS		VERIZON
SHALL BE SCHEDULE 80 PVC, INSTALL USING COMMENDED BY THE MANUFACTURER. BE FLAME-RETARDANT, MOISTURE AND HEAT CONDUCTOR, COPPER, TYPE THHU/THWN-2, WG SHALL BE THE MINIMUM SIZE CONDUCTOR SHALL BE THE MINIMUM SIZE CONDUCTOR SHALL BE SOLD OR STRANDED AND B AWG STRANDED. NNECTORS SHALL BE USED FOR TERMINATION HALL BE HUBBELL KELLEMS OR APPROVED D IN ACCORDANCE WITH THE NEC AND CABLE AT BOTH ENDS OF THE CONDUCTOR, AT ALL AT BOTH ENDS OF THE CONDUCTOR, AT ALL AT BOTH ENDS OF THE CONDUCTOR, AT ALL D GAGARIS 199282002 MULT SHALL BE DENNIFIED WITH FT, BRADY, OR APPROVED EQUAL). E HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, E, HANDLE LOCKABLE AND INTERLOCK WITH APPROVED EQUAL. L BE TINNED, AND GROUNDING CONDUCTORS NICAL CONNECTION. SHALL BE PROVIDED IN KIT FORM AND SIZES, AND COMBINATIONS OF CONDUCTORS HAZER NOTED. SHALL BE INSTALLED COPPER BAS ON NICAL CONNECTIONS. SHALL BE PROVIDED IN KIT FORM AND SIZES, AND COMBINATIONS OF CONDUCTORS HAZER NOTED. SHALL BE INSTALLED WITH INSPECTION SIZES, AND COMBINATIONS OF CONDUCTORS HAZEL WITH HIGH-STRENGTH STEEL CORPE UST SHALL BE INSTALLED WITH INSPECTION SIZES, AND COMBINATIONS OF CONDUCTORS I BOXES, PULLBOXES, DISCONNECT SWITCHES, THE EQUIPMENT GROUNDING CONDUCTORS I BOXES, PULLBOXES, DISCONNECT SWITCHES, DOTHER MATERIALS, THOUGH NOT SPECIFICALLY MA COMPLETELY OPERATIONAL SYSTEM AND BOXES WHERE SHOWN OR REQUIRED BY NEC.	L BE HOT-DIPPED GALVANIZED INSIDE AND ADS AND ENAMELED OR LACQUERED INSIDE IN ALL BE UL LISTED. PORTS SHALL BE STEEL OR MALLEABLE IRON. ON AND CONCRETE TIGHT TYPE. GROUNDING S SHALL BE INSTALLED ON ALL CONDUIT	Jacobs Engineering Group. Inc. 3161 MICHELSON DRIVE; SUITE 500 INVINE; CALIFORNIA 22812 PHONE: 549-230-1516 FAX: 549-234-7501
CONDUCTOR, COPPER, TYPE THHY/THWN-2, WG SHALL BE THE MINIMUM SIZE CONDUCTOR SHALL BE THE MINIMUM SIZE CONDUCTOR STRANDED. NNECTORS SHALL BE USED FOR TERMINATION HALL BE HUBBELL KELLEMS OR APPROVED D IN ACCORDANCE WITH THE NEC AND CABLE AT BOTH ENDS OF THE CONDUCTOR, AT ALL ND CARINETS AND SHALL BE IDENTIFIED WITH FT, BRADY, OR APPROVED EQUAL). E HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, F, HANDLE LOCKABLE AND INTERLOCK WITH APPROVED EQUAL. L BE TINNED AND GROUNDING CONDUCTOR HERE NOTED. RE, THANDL, ANNEALED COPPER BASS OF DARD BUS BARS MGB, SHALL BE FURNISHED INTENCLURG DESIGNATION PLATE. CTIVITY, HEAVY DUTY, LISTED AND LABELED AS ATERIALS USED. USE TWO-HOLE COMPRESSION INCAL CONNECTIONS. SHALL BE PROVIDED IN KIT FORM AND SIZES, AND COMBINATIONS OF CONDUCTORS I BOXES, PULLBOXES, DISCONNECT SWITCHES, I BOXES, PULLBOXES, DISCONNECT SWITCHES, DOTHER MATERIALS, THOUGH NOT SPECIFICALLY OTHER MATERIALS, THOUGH NOT SPECIFICALLY OFHER MATERIALS, THOUGH NOT SPECIFICALLY OFTIME MAME	SHALL BE SCHEDULE 80 PVC. INSTALL USING COMMENDED BY THE MANUFACTURER.	
STRANDED. NNECTORS SHALL BE USED FOR TERMINATION HALL BE HUBBELL KELLEMS OR APPROVED D IN ACCORDANCE WITH THE NEC AND CABLE AT BOTH ENDS OF THE CONDUCTOR, AT ALL IND CARINETS AND SHALL BE IDENTIFIED WITH FT, BRADY, OR APPROVED EQUAL). E HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, E, HANDLE LOCKABLE AND INTERLOCK WITH FT, BRADY, OR APPROVED EQUAL). E HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, E, HANDLE LOCKABLE AND INTERLOCK WITH APPROVED EQUAL. L BE TINNED AND GROUNDING CONDUCTOR HERE NOTED. RE, TINNED, ANNEALED COPPER BARS OF CORK THEY SHALL NOT BE FABRICATED OR HERE NOTED. RE, TINNED, ANNEALED COPPER BARS OF CORK THEY SHALL NOT BE FABRICATED OR HERE NOTED. RE, TINNED, AND GROUNDING CONDUCTOR HERE NOTED. RE, TINNED, AND GROUNDING CONDUCTOR HERE NOTED. RE, TINNED, AND GROUNDING CONDUCTOR SHALL BE PROVIDED IN KIT FORM AND SIZES, AND COMBINATIONS OF CONDUCTORS I BOXES, PULLBOXES, DISCONNECT SWITCHES, OTHER MATERIALS, THOUGH NOT SPECIFICALLY DR A COMPLETELY OPERATIONAL SYSTEM AND BOXES WHERE SHOWN OR REQUIRED BY NEC.	BE FLAME-RETARDANT, MOISTURE AND HEAT CONDUCTOR, COPPER, TYPE THHN/THWN-2, WG SHALL BE THE MINIMUM SIZE CONDUCTOR	
HALL BE HUBBELL KELLEMS OR APPROVED D IN ACCORDANCE WITH THE NEC AND CABLE         AT BOTH ENDS OF THE CONDUCTOR, AT ALL ND CABINETS AND SHALL BE IDENTIFIED WITH FT, BRADY, OR APPROVED EQUAL).         E HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, F, HANDLE LOCKABLE AND INTERLOCK WITH S AS INDICATED, UL LABELED FURNISHED IN APPROVED EQUAL.         L BE TINNED AND GROUNDING CONDUCTOR INNED, COPPER. ABOVE GRADE GROUNDING HERE NOTED.         RE, TINNED, ANNEALED COPPER BARS OF DARD BUS BARS MGB, SHALL BE FURNISHED INDING BUSES SHALL BE FURNISHED WITH TENCILING OR DESIGNATION PLATE.         CTVITY, HEAVY DUTY, LISTED AND LABELED AS ATERIALS USED. USE TWO-HOLE COMPRESSION INCAL CONNECTIONS.         SHALL BE PROVIDED IN KIT FORM AND SIZES, AND COMBINATIONS OF CONDUCTORS I BOXES, PULLBOXES, DISCONNECT SWITCHES, IS SHALL BE INSTALLED WITH INSPECTION CONDUCTOR IN ALL CONDUITS IN COMPLIANCE SONDUCTOR IN ALL CONDUITS IN COMPLANCE THE EQUIPMENT GROUNDING CONDUCTORS I BOXES, PULLBOXES, DISCONNECT SWITCHES, DEMONING NUMER BITE ID::         OTHER MATERIALS, THOUGH NOT SPECIFICALLY OR A COMPLETELY OPERATIONAL SYSTEM AND BOXES WHERE SHOWN OR REQUIRED BY NEC.	SHALL BE SOLID OR STRANDED AND B AWG STRANDED.	DESIGN REVISION:
D IN ACCORDANCE WITH THE NEC AND CABLE AT BOTH ENDS OF THE CONDUCTOR, AT ALL ND CABINETS AND SHALL BE IDENTIFIED WITH FT, BRADY, OR APPROVED EQUAL). E HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, F, HANDLE LOCKABLE AND INTERLOCK WITH APPROVED EQUAL. L BE TINNED AND GROUNDING CONDUCTOR TINNED, COPPER. ABOVE GRADE GROUNDING HERE NOTED. RE, TINNED, ANNEALED COPPER BARS OF DARD BUS BARS MGB, SHALL BE FURNISHED UNDING BUSES SHALL BE IDENTIFIED WITH TERNCLING OR DESIGNATION PLATE. CTIMITY, HEAVY DUTY, LISTED AND LABELED AS TATERIALS USED. USE TWO-HOLE COMPRESSION NICAL CONNECTIONS. SHALL BE PROVIDED IN KIT FORM AND SIZES, AND COMBINATIONS OF CONDUCTORS I BOXES, PULLBOXES, DISCONNECT SWITCHES, OTHER MATERIALS, THOUGH NOT SPECIFICALLY DRA COMPLETELY OPERATIONAL SYSTEM AND BOXES WHERE SHOWN OR REQUIRED BY NEC. DRAWING NUMBER: DRAWING NUMB	NNECTORS SHALL BE USED FOR TERMINATION	
APPROVED EQUAL. APPROVED EQUAL. APPROV	HALL BE HUBBELL KELLEMS OR APPROVED D IN ACCORDANCE WITH THE NEC AND CABLE	
E HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, F, HANDLE LOCKABLE AND INTERLOCK WITH APPROVED EQUAL. L BE TINNED AND GROUNDING CONDUCTOR TINNED, COPPER. ABOVE GRADE GROUNDING HERE NOTED. RE, TINNED, ANNEALED COPPER BARS OF DARD BUS BARS MGB, SHALL BE FURNISHED CTOR, THEY SHALL NOT BE FABRICATED OR UNDING BUSES SHALL BE IDENTIFIED WITH TENCILING OR DESIGNATION PLATE. CTIMTY, HEAVY DUTY, LISTED AND LABELED AS ATERIALS USED. USE TWO-HOLE COMPRESSION NICAL CONNECTIONS. SHALL BE PROVIDED IN KIT FORM AND SIZES, AND COMBINATIONS OF CONDUCTORS I BOXES, PULLBOXES, DISCONNECT SWITCHES, I BOXES, PULLBOXES, DISCONNECT SWITCHES, OTHER MATERIALS, THOUGH NOT SPECIFICALLY DRAMENDALS, THOUGH NOT SPECIFICALLY COMPLETELY OPERATIONAL SYSTEM AND BOXES WHERE SHOWN OR REQUIRED BY NEC. DRAWING NUMBER: DRAWING NUMBER: DR	AT BOTH ENDS OF THE CONDUCTOR, AT ALL AND CABINETS AND SHALL BE IDENTIFIED WITH AFT, BRADY, OR APPROVED EQUAL).	1 07/01/15 ISSUED FOR RU ZONING RU
TOWER OWNER BITE ID: TOWER OWNER BITE ID:	E HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, E, HANDLE LOCKABLE AND INTERLOCK WITH G AS INDICATED, UL LABELED FURNISHED IN APPROVED EQUAL.	NO. DATE REVISIONS BY NOT VALID WITHOUT SIGNATURE AND DATE
OUTER SHEATH, MOLTEN WELDED TO CORE, IS SHALL BE INSTALLED WITH INSPECTION CONDUCTOR IN ALL CONDUITS IN COMPLIANCE THE EQUIPMENT GROUNDING CONDUCTORS I BOXES, PULLBOXES, DISCONNECT SWITCHES, OTHER MATERIALS, THOUGH NOT SPECIFICALLY DR A COMPLETELY OPERATIONAL SYSTEM AND BOXES WHERE SHOWN OR REQUIRED BY NEC.	DARD BUS BARS MGB, SHALL BE FURNISHED CTOR. THEY SHALL NOT BE FABRICATED OR UNDING BUSES SHALL BE IDENTIFIED WITH STENCILING OR DESIGNATION PLATE. CTIVITY, HEAVY DUTY, LISTED AND LABELED AS ATERIALS USED. USE TWO-HOLE COMPRESSION NICAL CONNECTIONS.	VIA MONARCA 1 MONARCH BEACH RES DANA POINT, CA. 926
CTHE EQUIPMENT GROUNDING CONDUCTORS I BOXES, PULLBOXES, DISCONNECT SWITCHES, OTHER MATERIALS, THOUGH NOT SPECIFICALLY DR A COMPLETELY OPERATIONAL SYSTEM AND BOXES WHERE SHOWN OR REQUIRED BY NEC. DRAWING NUMBER:	OUTER SHEATH, MOLTEN WELDED TO CORE, DS SHALL BE INSTALLED WITH INSPECTION	
BOXES WHERE SHOWN OR REQUIRED BY NEC.	CONDUCTOR IN ALL CONDUITS IN COMPLIANCE THE EQUIPMENT GROUNDING CONDUCTORS BOXES, PULLBOXES, DISCONNECT SWITCHES,	APPROVED BY: DMS DESIGNED BY: RU PROJECT NO: EU801C02 DATE: 06/03/15
	OTHER MATERIALS, THOUGH NOT SPECIFICALLY OR A COMPLETELY OPERATIONAL SYSTEM AND BOXES WHERE SHOWN OR REQUIRED BY NEC.	GENERAL NOTES AND SPECIFICATIONS
	PEWRITTEN.	

#### PART 3 - EXECUTION 5.3. PULLING LUBRICANTS SHALL BE UL APPROVED. SUBCONTRACTOR SHALL USE NYLON OR HEMP ROPE FOR PULLING CONDUCTOR OR CABLES INTO THE GENERAL CONDUIT 1.1. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE. CABLES SHALL BE NEATLY TRAINED. WITHOUT INTERLACING, AND BE OF 5.4. Ξe WITH THE MANUFACTURER'S RECOMMENDATIONS. SUFFICIENT LENGTH IN ALL BOXES & EQUIPMENT TO PERMIT MAKING A NEAT ARRANGEMENT. CABLES SHALL BE SECURED IN A MANNER TO AVOID TENSION ON CONDUCTORS OR TERMINALS. CONDUCTORS SHALL BE PROTECTED FROM EQUIPMENT SHALL BE TIGHTLY COVERED AND PROTECTED AGAINST DIRT OR 1.1. WATER, AND AGAINST CHEMICAL OR MECHANICAL INJURY DURING INSTALLATION MECHANICAL INJURY AND MOISTURE. SHARP BENDS OVER CONDUIT BUSHINGS ARE PROHIBITED. DAMAGED CABLES SHALL BE REMOVED AND REPLACED AT 보고 AND CONSTRUCTION PERIODS. THE SUBCONTRACTOR'S EXPENSE. 2. LABOR AND WORKMANSHIP: ALL LABOR FOR THE INSTALLATION OF MATERIALS AND EQUIPMENT FURNISHED FOR THE ELECTRICAL SYSTEM SHALL BE INSTALLED BY EXPERIENCED WIREMEN, DISCONNECT SWITCHES: 6. 2.1. INSTALL DISCONNECT SWITCHES LEVEL AND PLUMB. CONNECT TO WIRING SYSTEM AND GROUNDING SYSTEM AS INDICATED. 61 IN A NEAT AND WORKMAN-LIKE MANNER. ALL ELECTRICAL EQUIPMENT SHALL BE ADJUSTED, ALIGNED AND TESTED BY 2.2. 7. GROUNDING; THE SUBCONTRACTOR AS REQUIRED TO PRODUCE THE INTENDED PERFORMANCE. ALL METALLIC PARTS OF ELECTRICAL EQUIPMENT WHICH DO NOT CARRY CURRENT SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING MANUFACTURER, VERIZON WIRELESS MOBILITY GROUNDING CTANDADE AND CONSTANT OF CONSTANT OF CONSTANT OF CONSTANT 7.1. UPON COMPLETION OF WORK, THE SUBCONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED EQUIPMENT, REMOVE ALL LABELS AND ANY DEBRIS, CRATING OR 2.3 OF JACOBS STANDARD ND-00071, ND-00135, AND THE NATIONAL ELECTRICAL CODE CARTONS AND LEAVE THE INSTALLATION FINISHED AND READY FOR OPERATION. PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEM INDICATED WITH ASSEMBLY OF MATERIALS, INCLUDING GROUNDING ELECTRODES, BONDING 7.2. 3. COORDINATION JUMPERS AND ADDITIONAL ACCESSORIES AS REQUIRED FOR A COMPLETE 3.1. THE SUBCONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRICAL PROPERTY IS PROHIE INSTALLATION. ITEMS WITH THE OWNER-FURNISHED EQUIPMENT DELIVERY SCHEDULE TO PREVENT UNNECESSARY DELAYS IN THE TOTAL WORK. ALL GROUNDING CONDUCTORS SHALL PROVIDE A STRAIGHT DOWNWARD PATH 7.3. TO GROUND WITH GRADUAL BEND AS REQUIRED, GROUNDING CONDUCTORS SHALL NOT BE LOOPED OR SHARPLY BENT. ROUTE GROUNDING CONDUCTORS AND CONDUCTORS TO GROUND IN THE SHORTEST AND STRAIGHTEST PATHS INSTALLATION: 4.1. CONDUIT: CON POSSIBLE TO MINIMIZE TRANSIENT VOLTAGE RISES. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT AS SPECIFIED. 4.1.1. SHOWN BUILDINGS AND/OR NEW TOWERS GREATER THAN 75 FEET IN HEIGHT AND 7.4. WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE. THE SUBCONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS CONDUIT OR TUBING OF LESS THAN 3/4 INCH TRADE SIZE. FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THI EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 AWG COPPER. ROOFTOP GROUNDING RING SHALL BE PROVIDE RIGID PVC SCHEDULE 80 CONDUITS FOR ALL RISERS, RMC OTHERWISE NOTED. EMT MAY BE INSTALLED FOR EXTERIOR CONDUITS 4.1.2. WHERE NOT SUBJECT TO PHYSICAL DAMAGE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, THE INSTALLATION OF SCHEDULE 80 PVC AND RMC CONDUITS SHALL BE 24 INCHES MINIMUM DEPTH. ALL 90 DEGREE BENDS SHALL BE RMC. EXPANSION JOINTS ARE REQUIRED ON ALL CONDUIT RISERS. 4.1.3. LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY). TIGHTEN GROUNDING AND BONDING CONNECTORS, INCLUDING SCREWS AND 응응 7.5. USE GALVANIZED FLEXIBLE STEEL CONDUIT WHERE DIRECT CONNECTION TO 4.1.4. BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING NAN SHI EQUIPMENT WITH MOVEMENT, VIBRATION, OR FOR EASE OF MAINTENANCE. USE LIQUID TIGHT, FLEXIBLE METAL CONDUIT FOR OUTDOOR APPLICATIONS. VALUES FOR CONNECTORS AND BOLTS. WHERE MANUFACTURER'S TORQUING REQUIREMENTS ARE NOT AVAILABLE, TIGHTEN CONNECTIONS TO COMPLY WITH ĘЧ INSTALL GALVANIZED FLEXIBLE STEEL CONDUIT AT ALL POINTS OF TIGHTENING TORQUE VALUES SPECIFIED IN UL TO ASSURE PERMANENT AND CONNECTION TO EQUIPMENT MOUNTED ON SUPPORT TO ALLOW FOR EFFECTIVE GROUNDING. <u>ö</u>S EXPANSION AND CONTRACTION. SUBCONTRACTOR SHALL VERIFY THE LOCATIONS OF GROUNDING TIE-IN-POINTS TO THE EXISTING GROUNDING SYSTEM. ALL UNDERGROUND GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS AND 7.6. бR A RUN OF CONDUIT BETWEEN BOXES OR EQUIPMENT SHALL NOT CONTAIN 4.1.5. MORE THAN THE EQUIVALENT OF THREE QUARTER-BENDS, CONDUIT BEND SHALL BE MADE WITH THE UL LISTED BENDER OR FACTORY 90 DECREE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ELBOWS MAY BE USED. ALL GROUNDING CONNECTIONS SHALL BE INSPECTED FOR TIGHTNESS. EXOTHERMIC WELDED CONNECTIONS SHALL BE APPROVED BY THE INSPECTOR HAVING JURISDICTION BEFORE BEING PERMANENTLY CONCEALED. 7.7. 4.1.6. FIELD FABRICATED CONDUITS SHALL BE CUT SQUARE WITH A CONDUIT CUTTING TOOL AND REAMED TO PROVIDE A SMOOTH INSIDE SURFACE. PROVIDE INSULATED GROUNDING BUSHING FOR ALL CONDUITS. 4.1.7. APPLY CORROSION-RESISTANCE FINISH TO FIELD CONNECTIONS AND PLACES 7.8. WHERE FACTORY APPLIED PROTECTIVE COATINGS HAVE BEEN DESTROYED. USE 4.1.8. SUBCONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL CONDUITS DURING KOPR-SHIELD ANTI-OXIDATION COMPOUND ON ALL COMPRESSION GROUNDING CONSTRUCTION. TEMPORARY OPENINGS IN THE CONDUCT SYSTEM SHALL BE PLUGGED OR CAPPED TO PREVENT ENTRANCE OF MOISTURE OR FOREIGN MATTER. SUBCONTRACTOR SHALL REPLACE ANY CONDUITS CONTAINING FOREIGN MATERIALS THAT CANNOT BE REMOVED. CONNECTIONS. 7.9. A SEPARATE, CONTINUOUS, INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUITS. ALL CONDUITS SHALL BE SWABBED CLEAN BY PULLING AN APPROPRIATE SIZE MANDREL THROUGH THE CONDUIT BEFORE INSTALLATION OF 4.1.9. 7.10 BOND ALL INSULATED GROUNDING BUSHINGS WITH A BARE #6 AWG GROUNDING CONDUCTOR TO A GROUND BUS. CONDUCTORS OR CABLES. CONDUIT SHALL BE FREE OF DIRT AND DEBRIS. DIRECT BURIED GROUNDING CONDUCTORS SHALL BE INSTALLED AT A NOMINAL 7.11. INSTALL PULL STRINGS IN ALL CLEAN EMPTY CONDUITS. IDENTIFY PULL 4.1.10. DEPTH OF 36" MINIMUM BELOW GRADE, OR 6" BELOW THE FROST LINE, USE THE GREATER OF THE TWO DISTANCES. STRINGS AT EACH END. 4.1.11. INSTALL 2" HIGHLY VISIBLE AND DETECTABLE TAPE 12" ABOVE ALL ALL GROUNDING CONDUCTORS EMBEDDED IN OR PENETRATING CONCRETE 7.12. UNDERGROUND CONDUITS AND CONDUCTORS SHALL BE INSTALLED IN SCHEDULE 80 PVC CONDUIT. CONDUITS SHALL BE INSTALLED IN SUCH A MANNER AS TO INSURE AGAINST COLLECTION OF TRAPPED CONDENSATION. 4.1.12. SUBCONTRACTOR SHALL REPAIR, AND/OR REPLACE, EXISTING GROUNDING SYSTEM COMPONENTS DAMAGED DURING CONSTRUCTION AT THE 7.13. SUBCONTRACTORS EXPENSE. PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS TO ALLOW FOR RACEWAYS AND CABLES TO BE ROUTED THROUGH THE BUILDING. DO NOT 4.1.13. 8. ACCEPTANCE TESTING: PENETRATE STRUCTURAL MEMBERS. SLEEVES AND/OR PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE EFFECTIVELY SEALED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL Z CERTIFIED PERSONNEL USING CERTIFIED EQUIPMENT SHALL PREFORM REQUIRED 8.1. TESTS AND SUBMIT WRITTEN TEST REPORTS UPON COMPLETION. OR STRUCTURE. FIRE STOPS AT FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE, FIRE, AND FUMES. ALL MATERIAL SHALL BE WHEN MATERIAL AND/OR WORKMANSHIP IS FOUND NOT TO COMPLY WITH THE 8.2. UL APPROVED FOR THIS PURPOSE. FROM THE PROJECT SITE AND REPLACED WITH ITEMS COMPLYING WITH THE CONDUCTORS AND CABLE: 5. SPECIFIED REQUIREMENTS PROMPTLY AFTER RECEIPT OF NOTICE FOR 5.1. ALL POWER WIRING SHALL BE COLOR CODED AS FOLLOWS: NON-COMPLIANCE. 9. TEST PROCEDURES: DESCRIPTION PHASE A 208/240/120 VOLT SYSTEMS BLACK ALL FEEDERS SHALL HAVE INSULATION TESTED AFTER INSTALLATION, BEFORE CONNECTION TO DEVICES. THE CONDUCTORS SHALL TEST FREE FROM SHORT CIRCUITS AND GROUNDS. TESTING SHALL BE FOR ONE MINUTE USING 1000V DC. PROVIDE WRITTEN DOCUMENTATION FOR ALL TEST LISTED TO 9.1. PHASE RED PHASE C BLUE NEUTRAL WHITE GROUNDING GREEN SUBCONTRACTOR 5.2. SPLICES SHALL BE MADE ONLY AT OUTLETS, JUNCTION BOXES, OR ACCESSIBLE RACEWAY CONDULETS APPROVED FOR THIS PURPOSE.

BS S

5

NN N

뛷뷴

DESIGN

분물

C

N

S.

[L

 $\bigcirc$ 

9.2.

- 9.3. VOLTAGES
- 9.4. OHMS

## METALS

2.

## PART 1 - GENERAL

- SECTION INCLUDES:
- 1.1.
- QUALITY ASSURANCE
- 2.1. STEEL FOR BUILDINGS.
- 2.2. PERFORM DESIGN UNDER DIRECT SUPERVISION OF A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE.

#### PART 2 - PRODUCTS MATERIALS 1.

B. STRU C. PIPE: D. BOLT E. ANCH	CTURAL STI CTURAL TU. S, NUTS, A OR BOLTS: ING MATERI	BING: ND WAS		ASTM ASTM	A500 A53, A325 A307 D1.1,	D; G TYI 5 TYF
G. GROL	Лт:			NON- CONS CEME ADDIT MINIM psi A	ISTINC NT, W IVES, UM C	ATE CAF
H. SHOP	AND TOUC	CH-UP	PRIMER:	SSPC	15 1	TYPE
2.	тоисн-ир	PRIMÉR	FOR G	ALV. SU	JRFAC	ES:

- H. SHO
- 2.
- 2.1. ZINC RICH TYPE
- 3. EABRICATION-
- 3.1. CONTINUOUSLY SEAL JOINTED MEMBERS BY CONTINUOUS WELDS.
- 4. 4.1. FINISH GRIND EXPOSED WELDS SMOOTH.
- 4.2.
- SP-1 TO SP-10 PROCEDURES. 4.3.
- PART 3 EXECUTION
- EXAMINATION AND PREPARATION: 1.
- 2. ERECTION:
- 2.1. PERMANENT BRIDGING AND BRACING.
- ELECTRODES SHALL BE E70XX.
- 2.3. DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT APPROVAL OF THE ARCHITECT/ENGINEER.
- 2.4. AREAS).
- 3 FIELD QUALITY CONTROL:
- 3.1. TORQUE.



#### GENERAL ELECTRICAL NOTES:

- . ALL ELECTRICAL MATERIALS, EQUIPMENT AND INSTALLATION PROCEDURES TO CONFORM WITH VERIZON WIRELESS SPECIFICATIONS.
- 2. CONTRACTOR SHALL PERFORM ALL VERIFICATION TESTS AND EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION, CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ENGINEER LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
- ALL MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NFPA, AND 'UL' LISTED.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED PER THE NEC, AND ALL APPLICABLE LOCAL CODES.
- ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE A MINIMUM INTERRUPTING RATING OF 42,000 AIC.
- 6. FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT REFER TO VENDOR PRINTS PROVIDED BY VERIZON WIRELESS FOR BTS CABINET.
- 7. PATCH, REPAIR, AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
- PROVIDE VERIZON WIRELESS WITH ONE SET OF COMPLETE ELECTRICAL 'AS-BUILT' DRAWINGS AT THE COMPLETION OF THE JOB SHOWING ACTUAL ROUTINGS AND WIRING CONNECTIONS.
- ALL EQUIPMENT PUNCH OUTS AND CONDUITS (USED AND SPARE) TO BE RODENT PROOFED WITH CAPS, STEEL MESH, AND/OR FOAM FILL BY CONTRACTOR AS NEEDED.
- 10. ALL CONTRACTOR FURNISHED MATERIALS AND EQUIPMENT SPECIFIED ON THE PROJECT SHALL BE NEW AND UNUSED, OF CURRENT MANUFACTURE AND OF THE HIGHEST GRADE.
- ALL EQUIPMENT, MATERIAL AND THE INSTALLATION METHODS SPECIFIED ON THE PROJECT DRAWINGS SHALL BE DESIGNED AND FABRICATED IN COMPLIANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS, AND APPROPRIATE INDUSTRIAL CONSENSUS STANDARDS AND CODES INCLUDING ANSI, IEEE, NEMA, NFPA AND UL, ALL AS REVISED AS OF THE DATE OF THIS WORK PACKAGE.
- 12. ALL ELECTRICAL ITEMS BOTH CONTRACTOR AND OWNER FURNISHED SHALL BE CHECKED FOR AGREEMENT WITH THE PROJECT DRAWINGS AND SPECIFICATIONS AND SHALL BE VISUALLY INSPECTED TO ENSURE THAT EQUIPMENT IS UNDAMAGED AND IS IN PROPER ALIGNMENT, INSTALLED PER MANUFACTURER'S INSTRUCTIONS, ELECTRICAL CONNECTIONS ARE TIGHT AND PROPERLY INSULATED WHERE REQUIRED, FUSES ARE OF THE PROPER TYPE AND SIZE, AND ELECTRICAL ENCLOSURES ARE OF THE PROPER NEMA TYPE.
- 13. THE EQUIPMENT AND MATERIALS SHALL BE FURNISHED AND INSTALLED TO OPERATE SAFELY AND CONTINUOUSLY WITH NO PROTECTION FROM THE WEATHER.
- 14. ELECTRICAL WORK REPRESENTED ON THE PROJECT DRAWINGS IS SHOWN DIAGRAMMATICALLY, EXACT LOCATIONS AND ELEVATIONS OF ELECTRICAL EQUIPMENT SHALL BE DETERMINED IN THE FIELD AND VERIFIED WITH THE OWNER'S REPRESENTATIVE.
- 15. CONTRACTOR SHALL PROVIDE ALL NECESSARY SUPPORTS FOR EQUIPMENT INSTALLED AS PART OF THIS PROJECT. SUPPORTS SHALL CONSIST OF GALVANIZED STEEL FRAMES, PLATES, BRACKETS, RACKS AND OTHER SHAPES OF ADEQUATE SIZE AND FASTENED WITH BOLTS, SCREWS OR BY WELDING TO PROVIDE RIGID SUPPORT.

#### GENERAL RACEWAY NOTES:

- 1. CONDUIT AND CONDUIT FITTINGS SHALL MEET ANSI AND NEC STANDARDS FOR MATERIAL AND WORKMANSHIP AND SHALL BE UL LISTED.
- 2. EMT CONDUIT ELECTRIC METALLIC TUBING SHALL CONFORM TO ANSI C803 AND THE REQUIREMENTS OF NEC, PARAGRAPH 348 AND BE PROTECTED ON EXTERIOR WITH A ZINC COATING AND ON INTERIOR SURFACES WITH EITHER A ZINC COATING OR LACQUER ENAMEL. FITTINGS SHALL BE ZINC COATED STEEL.
- 3. MINIMUM CONDUIT SIZE SHALL BE 3/4", SIZES NOT SHOWN ON DRAWINGS SHALL BE PER NEC.
- 4. ALL SPARE CONDUITS SHALL HAVE A METALLIC PULL WIRE,
- 5. CONDUIT SUPPORTS SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AND IN ACCORDANCE WITH THE NEC.

#### GENERAL CONDUCTOR NOTES:

- ALL POWER, CONTROL AND COMMUNICATION WIRING SHALL MEET NEMA-WC, ASTM, UL, AND NEC STANDARDS FOR MATERIAL AND WORKMANSHIP UNLESS OTHERWISE SPECIFIED.
- 2. ALL CONDUCTOR ACCESSORIES INCLUDING CONNECTORS, TERMINATIONS, INSULATING MATERIALS, SUPPORT GRIPS, MARKER AND CABLE TIES SHALL BE FURNISHED AND INSTALLED SUPPLIER'S INSTALLATION INSTRUCTIONS SHALL BE OBTAINED FOR CABLE ACCESSORIES. THESE INSTRUCTIONS SHALL BE IN THE POSSESSION OF THE CRAFTSMAN WHILE INSTALLING THE ACCESSORIES AND SHALL BE AVAILABLE TO THE COMPANY FOR REFERENCE.
- WHERE POSSIBLE, NO. 6 AWG AND SMALLER WIRE SHALL BE COLORED CODED BY THE COLOR OF THE INSULATION COVERING. COLOR CODING OF WIRE LARGER THAN NO. 6 AWG MAY BE BY MEANS OF SELF-ADHESIVE WRAP AROUND TYPE MARKERS, PER NEC.
- 4. TERMINAL CONNECTOR FOR CONDUCTORS 8 AWG AND LARGER SHALL BE PRESSURE OR BOLTED CLAMP TYPE BURNDY QUIKLUG, VARILUG OR ACCEPTABLE EQUAL: OR

COMPRESSION TYPE, BURNDY TYPE YAV OR YA (LONG BARREL), PANDUIT TYPE LCA OR LCC, OR ACCEPTABLE EQUAL. ACCEPTABLE CONNECTORS INCLUDED WITH COMPANY-FURNISHED EQUIPMENT MAY BE USED.

- 5. TERMINATION PROVISIONS OF EQUIPMENT FOR CIRCUITS RATED 100 AMPERES OR LESS OR MARKED FOR NOS. 14 THROUGH 1 CONDUCTORS, SHALL BE USED ONLY FOR CONDUCTORS RATED 66°C (140°F). CONDUCTORS WITH HIGHER TEMPERATURE RATINGS SHALL BE PERMITTED, PROVIDED THE AMPACITY OR THE CONDUCTOR SIZE USED.
- 6. TERMINAL CONNECTORS FOR CONDUCTORS SMALLER THAN 8 AWG SHALL BE COMPRESSION TYPE CONNECTORS SIZED FOR THE CONDUCTOR AND THE TERMINAL. THE CONNECTORS SHALL BE CONSTRUCTED OF FINE GRADE HIGH CONDUCTIVITY COPPER IN ACCORDANCE WITH QQ-C-516 AND SHALL BE TIN-PLATED IN ACCORDANCE WITH MIL-T-10727. THE INTERIOR SURFACE OF THE CONNECTOR WIRE BARREL SHALL BE SERRATED AND THE EXTERIOR SURFACE OF THE CONNECTOR WIRE BARREL SHALL BE PROVIDED WITH CRIMP GUIDES.

### GENERAL GROUNDING NOTES:

- 1. ALL WORK SHALL COMPLY WITH THE LATEST VERIZON WIRELESS GROUNDING SPECIFICATIONS AND REQUIREMENTS.
- ALL METALLIC COMPONENTS ON THE SITE MUST BE GROUNDED TO THE GROUND RING. THIS INCLUDES STEEL CONDUITS USED TO DELIVER THE TELCO AND POWER UTILITY LINES TO THE SITE OR USED TO PROVIDE ACCESS BY UTILITIES OR CONTRACTORS TO THE VARIOUS CABINETS.
- 3. THE CONTRACTOR MUST VERIFY THAT NEW GROUNDING SYSTEM RESISTANCE IS EQUAL TO OR LESS THAN FIVE (5) OHMS PER VERIZON WIRELESS SPECIFICATIONS.
- 4. RUN ALL GROUND WIRES IN AN ORGANIZED MANNER, AVOID CROSSING OF WIRES WHEREVER POSSIBLE. DO NOT RUN WIRES OVER CONCRETE SLAB.
- 5. INSTALL ALL GROUND WIRES IN A DOWNWARD SLOPE FOR MAXIMUM LIGHTNING PROTECTION.
- 6. MAINTAIN ALL MINIMUM BENDING RADII OF THE GROUNDING WIRES.
- 7. DO NOT REMOVE MORE INSULATION FROM THE GROUND WIRES THAN NECESSARY WHEN CADWELDING OR CRIMPING IF EXCESS INSULATION IS REMOVED, THE CONNECTION WILL BE CONSIDERED UNACCEPTABLE AND WILL BE CORRECTED PER THE VERIZON WIRELESS REPRESENTATIVES'S DIRECTION.
- 8. DOWN LEAD FOR ANTENNA SECTORS MUST BE CONNECTED DIRECTLY TO THE GROUND RING.
- 9. ALL BASE TRANSCEIVER SITE EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH THE INTERNATIONAL ELECTRICAL CODE (NEC), AND THE LATEST EDITION OF LIGHTNING PROTECTION CODE NFPA 780 AND VERIZON WIRELESS STANDARDS.
- 10. ALL GROUNDING CONNECTIONS, INTERIOR AND EXTERIOR, MADE THROUGHOUT THIS DOCUMENT SHALL BE MADE USING AN ANTI-OXIDATION COMPOUND, THE ANTI-OXIDATION COMPOUND SHALL BE 'THOMAS AND BETTS' KOPR-SHIELD (TIM OF JET LUBE, INC.) THERE IS NO EQUIVALENT FOR THIS PRODUCT: NO OTHER COMPOUND WILL BE ACCEPTED. COAT ALL WIRES BEFORE LUGGING. COAT ALL SURFACES BEFORE CONNECTING.
- 11. ALL CONNECTIONS SHALL BE MADE TO BARE METAL. ALL PAINTED SURFACES SHALL BE FIELD INSPECTED AND MODIFIED TO ENSURE PROPER CONTACT PRIOR TO CADWELD, GALVANIZING SHALL BE REMOVED BY GRINDING SURFACE TO BARE METAL 'SLAG' FROM CADWELD MUST BE REMOVED AND WELD SHALL BE SPRAYED WITH COLD GALVANIZE AFTER COMPLETION.
- 12. FERROUS METAL CLIPS WHICH COMPLETELY SURROUND THE GROUNDING CONDUCTOR SHALL NOT BE USED. CLIPS OF THE FOLLOWING MATERIALS AND TYPES MAY BE USED TO SUPPORT GROUNDING CONDUCTORS.
- 12.1. PLASTIC CLIPS
- 12.2. STAINLESS STEEL CLIPS WHICH DO NOT COMPLETELY SURROUND THE GROUNDING CONDUCTOR.
- 12.3. FERROUS METAL CLIPS WHICH DO NOT COMPLETELY SURROUND THE GROUNDING CONDUCTOR.
- 13. ALL HARDWARE, BOLTS, NUTS, WASHERS, AND LOCK WASHERS SHALL BE 18-8 STAINLESS STEEL. EVERY CONNECTION SHALL BE (BOLT-FLATWASHER-BUSS-LUG-FLATWASHER -LOCKWASHER-NUT), IN THAT EXACT ORDER WITH NUT FACING OUTWARD, BACK TO BACK LUGGING SHALL BE (BOLT-FLATWASHER-LUG-FLATWASHER-LUG- BUSS-LUG-FLATWASHER-LOCK WASHER-NUT), IN THAT EXACT ORDER IS ACCEPTED WHERE NECESSARY TO CONNECT MANY LUGS TO A BUSS BAR. STACKING OF LUGS, BUS-LUG-LUG, IS NOT ACCEPTABLE.
- 14. THE COMPRESSION GROUND LUG FOR #2 AWG BARE SOLID GROUNDING CONDUCTORS SHALL BE BURNDY TYPE YA3C-2TC.
- 15. THE ANTENNA CABLES SHALL BE GROUNDED AT THE TOP AND BOTTOM OF THE VERTICAL RUN. THE ANTENNA CABLE SHIELD SHALL BE BONDED TO A COPPER GROUND BUS AT THE LOWEST POINT OF THE VERTICAL RUN. THE ANTENNA CABLE SHIELD SHALL BE GROUNDED JUST BEFORE ENTERING THE BTS. GROUNDING KITS ON CABLE SHALL HAVE A MINIMUM BEND OF 6" AND SHALL BE KEPT AS CLOSE TO VERTICAL AS POSSIBLE. FLAT WASHER SUPPLIED WITH GROUND KITS MUST BE REPLACED WITH SMALLER STAINLESS STEEL FLAT WASHERS, WASHERS MUST REMAIN FLAT AGAINST GROUND BAR, ALL FASTENERS MUST BE STAINLESS STEEL AND KOPR-SHIELD MUST BE USED ON BOTH SIDES OF THE GROUND BAR.

0

Ĩ

IR

 $\delta$ 

Ž

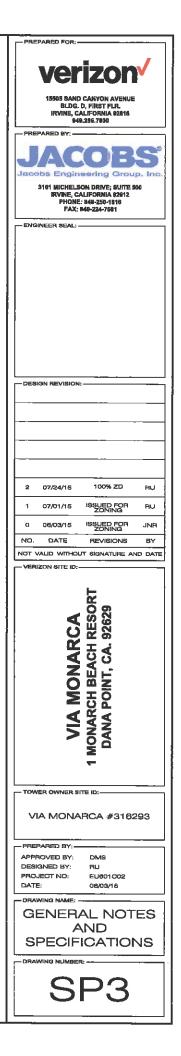
**Č** 

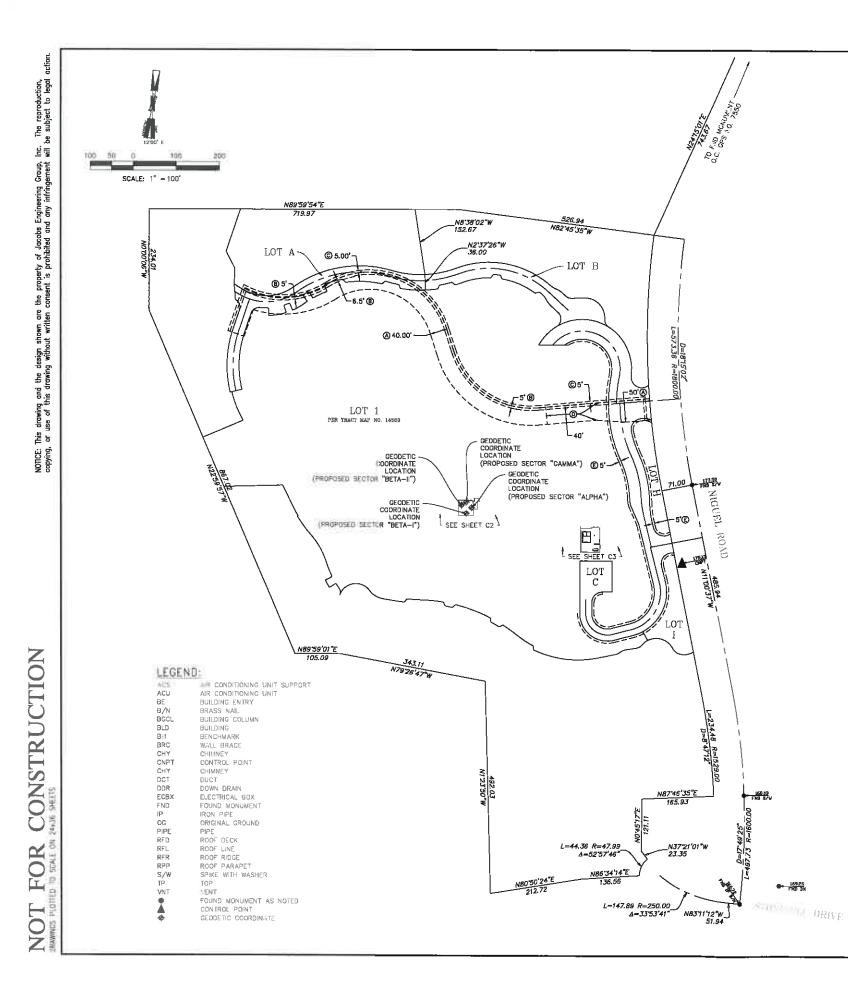
O

ГL Р

Oğ

Z





 PROPOSED
 SECTOR
 "ALPHA"
 PROPOSED
 SECTOR
 "SECTOR
 "BROPOSED
 SECTOR
 "BETA-II"
 PROPOSED
 SECTOR
 "BETA-II"
 PROPOSED
 SECTOR
 "BETA-II"
 LATITUDE
 LATITUDE
 33' 28' 54.61''
 N
 LATITUDE
 LONGITUDE
 117' 42' 57.44''
 LONGITUDE
 LONGITUDE
 Noncitude
 LONGITUDE
 Noncitude
 LONGITUDE
 Noncitude
 LONGITUDE
 Noncitude
 LONGITUDE
 LONGITUDE
 Noncitude
 LONGITUDE
 LONGITUDE</th

GEODETIC COORDINATES: +

#### BASIS OF BEARINGS:

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE ROAD BEING NORTH 11'00'37" WEST PER TRACT BOOK 790 PACES 4 THROUGH 14. DISTANC DISTANCES. TO OBTAIN GROUND DISTANCES MUL SCALE FACTOR OF 1.0000454478.

#### BENCHMARK REFERENCE:

DESCRIPTION: ALUMINUM BENCHMARK DISK "3MM-IN THE ORANGE COUNTY SURVEY DATA SHEETS. ELEVATION: 169.256' (NAVD88)

ASSESSOR'S IDENTIFICATION: DRANGE COUNTY A.P.N. 672-621-01

#### AREA:

14.24± ACRES PER ORANGE COUNTY ASSESSOR

#### EASEMENT NOTES:

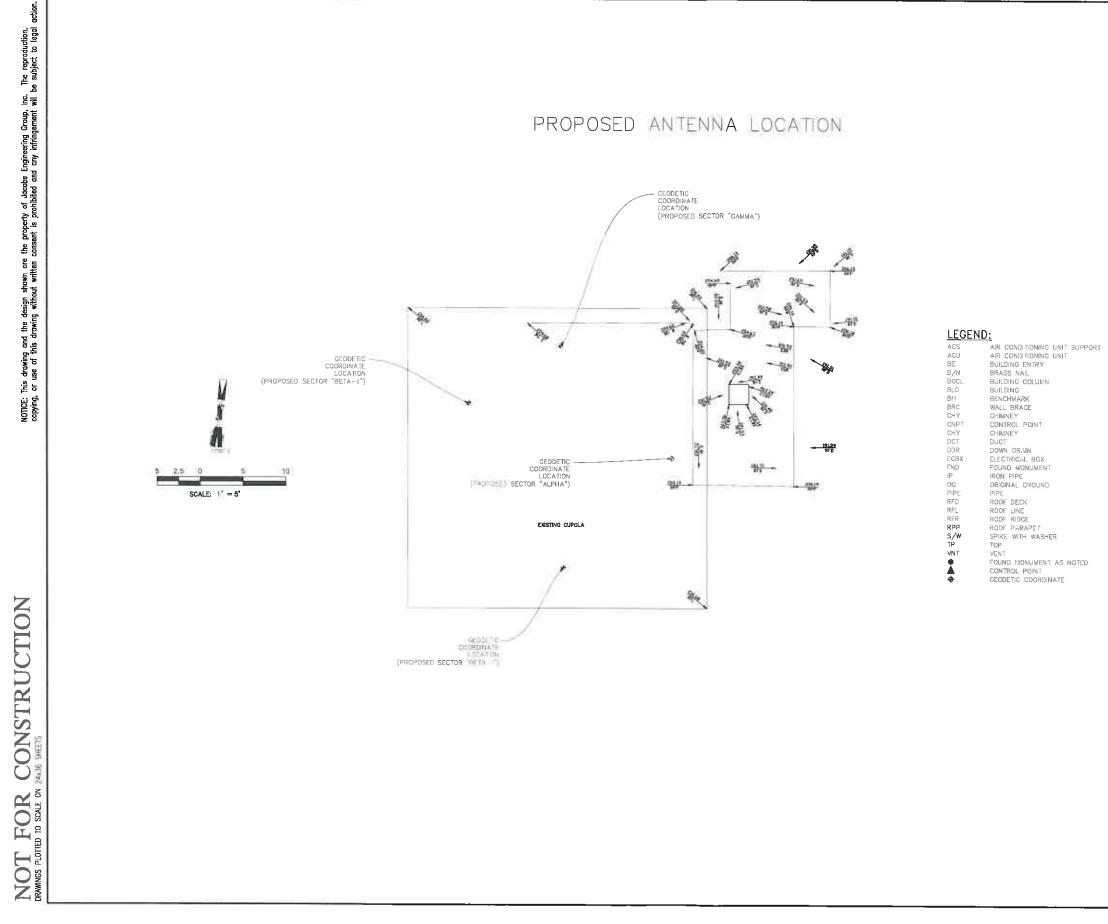
- AN EASEMENT IN FAUOR OF SOUTH COAST PUBLIC WATER OR SEWER LINE AND INCIDENT, JUNE 24, 1996, AS INSTRUMENT NO. 199 RECORDS.
- AN EASEMENT IN FAVOR OF PACIFIC BELL UNDERGROUND LINES, CONDUITS AND II INCLUDING ABOYE-GROUND APPURTENANT OCTOBER 16 1996, AS INSTRUMENT NO. 199 RECORDS.
- AN EASEMENT IN FAVOR OF SOUTHERN CAL FOR PIPELINES AND INCIDENTAL PURPOSES RI 1996, AS INSTRUMENT NO. 19960587379 OF O
- AN EASEMENT IN FAVOR OF THE CITY OF D/ AND EGRESS PURPOSES RECORDED MAY 8, 18 19980283676 OF OFFICIAL RECORDS.
- C AN EASEMENT TO THE CITY OF DANA POIN PURPOSES

## LEGAL DESCRIPTION:

TRACT NO. 14589, LOT 1 PORTION OF LOT & PORT

DATE OF SURVEY:

	PREPARED FOR:
	VERIZON WIRELESS 1509 SAND CANYON AVENUE BLDE. D. FRATFLA BVUNE, CALIFORNIA SZ418
ECTOR <u>"BETA~1"</u> 33* 28' 54.42" N 117' 42' 50.31" W	949.288.7000
ECIOR "GAMMA" 33° 25' 54.58" N 117' 42' 57.32" W	Jacobs Engineering Group. Inc. 3161 MICHELSON DRIVE; SUITE 500 IRVINE; CALIFORNA 32512 PROME: 445-224-7801
E CENTERLINE OF NIGUEL T.M.AP. NO. 14589, M.M. JES SHOWN ARE GRID LTIPLY BY & COMBINED	ENGINEER BEAL:
5-78886" AS PUBLISHED	
T WATER DISTRICT FOR AL PURPOSES RECORDED 660320839 OF OFFICIAL	A 06/20/15 80% REVIEW ZD RU NO. DATE REVISIONS BY NOT VALID WITHOUT SKNATURE AND DATE
FOR EITHER OR BOTH INCIDENTAL PURPOSES, FIXTURES, RECORDED 960524465 OF OFFICIAL	- VERIZON BITE ID:
LIFORNIA GAS COMPANY ECORDED NOVEMBER 21, OFFICIAL RECORDS. ANA POINT FOR INGRESS 1988, AS INSTRUMENT NO. NT FOR PUBLIC	VIA MONARCA 1 MONARCH BEACH RESORT SOUTH ANA POINT, CA. 92629
TION OF LOTS A & B	<u> </u>
	APPROVED BY: TBD D581GNED BY: TBD D581GNED BY: RU PROJECT NO: EU801C02 DATE: 06/20/15
	TOPOGRAPHIC SURVEY

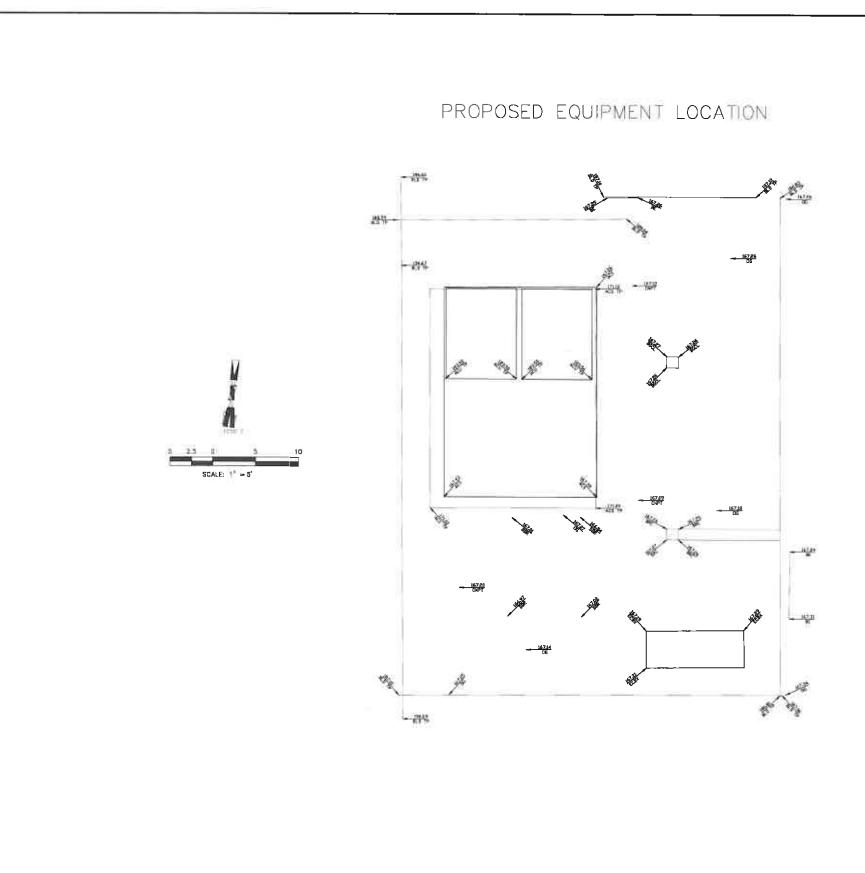


PREPARED FOR: USING SAND CANYON AVERUE BLOS D, REVISION REVISION SALAR, 700 SALAR, 700	
PREPARED BY:     P	
PREPARED BY:     P	
PREPARED BY:     P	verizon wireless
PREPARED BY: JACODE Engineering Group. Inc. 3151 BICHELSON DRIVE; SUITE SO IRVINE; CALFORMA 22912 PHONE: 44-224-7371 FINITE SEAL FINITE SEAL	
PREPARED BY: JACODS Engineering Group. Inc. Signification groups are so Inc. Signification groups are so PHONE 48-28-191 FAX: 64-22-791 ENGINEER SEAL: ENGINEER SEAL: DESIGN REVISION: DESIGN REVISION: DESIGN REVISION: DESIGN REVISION: PREPARED BY: HONO DATE REVISION: PREPARED BY: HONO BY E ID: PREPARED BY: HONO BY E ID: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: BY ED DESIGN REVISION: DESIGN REVISION:	BLDG. D, FROT FUR. RVINE, CALIFORNIA 82618
PREPARED BY: PREVISION SITE ID: PREVISION SI	
PREPARED BY: PREVISION: PREVISIO	
A OQ/20/16 BOX REVIEW 2D PU PAUSING SALE PREPARED BY: VERICON MERCISION: PREPARED BY: VERICON STELD: PREPARED BY: TOWER DMMER SITE ID: PREPARED BY: PREPARED BY: TOWER DMMER SITE ID: PREPARED BY: CONCLEDT NG: DESIGN REVISION: PREPARED BY: CONCLEDT NG: DESIGN REVISION: DESIGN REVI	
PREPARED BY: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: PREPARED B	
PREPARED BY: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: PREPARED B	3161 MICHELSON DRIVE; SUITE 500 IRVINE CALIFORNIA 92412
PREPARED BY: VERIZON SITE ID: PREPARED BY: PREPARED BY: NOT VALID WITHOUT BRANTURE AND DATE VERIZON SITE ID: PREPARED BY: NOT VALID WITHOUT BRANTURE AND DATE PREPARED BY: DEBIGNED BY: TOWER DWINER SITE ID: PREPARED BY: TOWER DWINER SITE ID: PREPARED BY: TOWER DWINER SITE ID: PREPARED BY: DEBIGNED BY: PROVED BY: TOWER DWINER SITE ID: PROVED BY: TOWER DWINER SITE ID: PREPARED BY: TOWER DWINER SITE ID: PREPARED BY: TOWER DWINER SITE ID: PREPARED BY: TOWER DWINER SITE ID: PREVENCE DY: DEBIGNED BY: PROVED BY: TOWER DWINER SITE ID: PROVED BY: PROVED	PHONE: 949-259-1816 FAX: 949-224-7591
PREPARED BY: PREPARED BY: PREPARED BY: TOWER DWINER SITE ID: PREPARED BY: NOT VALID WITHOUT BRANKTURE AND DATE VERIZON SITE ID: PREPARED BY: TOWER DWINER SITE ID: PREVISION BITE ID: PREPARED BY: TOWER DWINER SITE ID: PREVISION BITE ID: PREV	
PREPARED BY: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: DEBIGNIED BY: TOPOGRAPHIC SURVEY DRAWING NUMBER: DRAWING NUMBER:	.1
PREPARED BY: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: DEBIGNIED BY: TOPOGRAPHIC SURVEY DRAWING NUMBER: DRAWING NUMBER:	
PREPARED BY: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: DEBIGNIED BY: TOPOGRAPHIC SURVEY DRAWING NUMBER: DRAWING NUMBER:	
PREPARED BY: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: DEBIGNIED BY: TOPOGRAPHIC SURVEY DRAWING NUMBER: DRAWING NUMBER:	AF.
PREPARED BY: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: DEBIGNIED BY: TOPOGRAPHIC SURVEY DRAWING NUMBER: DRAWING NUMBER:	
PREPARED BY: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: DEBIGNIED BY: TOPOGRAPHIC SURVEY DRAWING NUMBER: DRAWING NUMBER:	
PREPARED BY: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: DEBIGNIED BY: TOPOGRAPHIC SURVEY DRAWING NUMBER: DRAWING NUMBER:	
PREPARED BY: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: DEBIGNIED BY: TOPOGRAPHIC SURVEY DRAWING NUMBER: DRAWING NUMBER:	
PREPARED BY: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: PREPARED BY: TOWER OWNER SITE ID: PREPARED BY: DEBIGNIED BY: TOPOGRAPHIC SURVEY DRAWING NUMBER: DRAWING NUMBER:	25
A 06/20/15 BO% REVIEW ZD RU NO. DATE REVIEW ZD RU NOT VALID WITHOUT BIGNATURE BY VERIZON SITE ID: VERIZON SI	<b>*</b>
VERIZON SITE ID: VERIZON SITE ID: VERIZO	
VERIZON SITE ID: VERIZON SITE ID: VERIZO	
VERIZON SITE ID: VERIZON SITE ID: VERIZO	
VERIZON SITE ID: VERIZON SITE ID: VERIZO	
VERIZON SITE ID: VERIZON SITE ID: VERIZO	
VERIZON SITE ID: VERIZON SITE ID: VERIZO	
VERIZON SITE ID: VERIZON SITE ID: VERIZO	
VERIZON SITE ID: VERIZON SITE ID: VERIZO	
VERIZON SITE ID: VERIZON SITE ID: VERIZO	
VERIZON SITE ID: VERIZON SITE ID: VERIZO	
VERIZON GITE ID: VERIZON GITE ID: VERIZO	A 05/20/15 90% REVIEW 7D BU
VERIZON SITE ID: VERIZON SITE	
TOWER OWNER SITE ID: TOWER OWNER SITE ID: PREPARED BY: APPROVED BY: PROJECT NO: EUG01002 DATE: 05/20115 DRAWING NUMBER: DRAWING NUMBER:	NO, DATE REVISIONS BY
TOWER OWNER SITE ID: TOWER OWNER SITE ID: PREPARED BY: APPROVED BY: PROJECT NO: EUG01002 DATE: 05/20115 DRAWING NUMBER: DRAWING NUMBER:	NO. DATE REVISIONS BY
TOWER OWNER SITE ID: TOWER OWNER SITE ID: PREPARED BY: APPROVED BY: PROJECT NO: EUG01002 DATE: 05/20115 DRAWING NAME: TOPOGRAPHIC SURVEY	NO. DATE REVISIONS BY
TOWER OWNER SITE ID: TOWER OWNER SITE ID: PREPARED BY: APPROVED BY: PROJECT NO: EUG01002 DATE: 05/20115 DRAWING NUMBER: DRAWING NUMBER:	NO. DATE REVISIONS BY
TOWER OWNER SITE ID: TOWER OWNER SITE ID: PREPARED BY: APPROVED BY: PROJECT NO: EUG01002 DATE: 05/20115 DRAWING NUMBER: DRAWING NUMBER:	NO. DATE REVISIONS BY
TOWER OWNER SITE ID: TOWER OWNER SITE ID: PREPARED BY: APPROVED BY: PROJECT NO: EUG01002 DATE: 05/20115 DRAWING NUMBER: DRAWING NUMBER:	NO. DATE REVISIONS BY
TOWER OWNER SITE ID: TOWER OWNER SITE ID: PREPARED BY: APPROVED BY: PROJECT NO: EUG01002 DATE: 05/20115 DRAWING NUMBER: DRAWING NUMBER:	NO. DATE REVISIONS BY
PREPARED BY: APPROVED BY: APPROVED BY: PROJECT NO: EU601002 DATE: DRAWING NAME: TOPOGRAPHIC SURVEY	NO. DATE REVISIONS BY NOT VALUE WITHOUT BRANATURE AND DATE VERIZON SITE ID: VERIZON SITE ID:
PREPARED BY: APPROVED BY: APPROVED BY: PROJECT NO: EU601002 DATE: DRAWING NAME: TOPOGRAPHIC SURVEY	CA. 9200 CA.
PREPARED BY: APPROVED BY: APPROVED BY: PROJECT NO: EU601002 DATE: DRAWING NAME: TOPOGRAPHIC SURVEY	T CAL BEACH T COUTH CALBEACH T COUTH T
PREPARED BY: APPROVED BY: APPROVED BY: PROJECT NO: EU601002 DATE: DRAWING NUMBER: DRAWING NUMBER:	T CAL BEACH T COUTH CALBEACH T COUTH T
PREPARED BY: APPROVED BY: TBD DEBIGNED BY: RU PROJEDT NO: EU601C02 DATE: 05/20/15 DRAWING NAME: TOPOGRAPHIC SURVEY	T CAL BEACH T COUTH CALBEACH T COUTH T
PREPARED BY: APPROVED BY: TBD DEBIGNED BY: RU PROJEDT NO: EU601C02 DATE: 05/20/15 DRAWING NAME: TOPOGRAPHIC SURVEY	T CAL BEACH T COUTH CALBEACH T COUTH T
PREPARED BY: APPROVED BY: TBD DEBIGNED BY: RU PROJEDT NO: EU601C02 DATE: 05/20/15 DRAWING NAME: TOPOGRAPHIC SURVEY	T CAL BEACH T COUTH CALBEACH T COUTH T
PREPARED BY: APPROVED BY: TBD DEBIGNED BY: RU PROJEDT NO: EU601C02 DATE: 05/20/15 DRAWING NAME: TOPOGRAPHIC SURVEY	T CAL BEACH T COUTH CALBEACH T COUTH T
APPROVED BY: TBD DISIGNED BY: RU PROJECT NO: EU601002 DATE: 05/20/15 DRAWING NAME: TOPOGRAPHIC SURVEY	T CAL BEACH T COUTH CALBEACH T COUTH T
APPROVED BY: TBD DISIGNED BY: RU PROJECT NO: EU601002 DATE: 05/20/15 DRAWING NAME: TOPOGRAPHIC SURVEY	VIA MONARCA TAM MONARCA TAM MONARCA TAM MONARCH BEACH RESORT SOUTH DANA POINT, CA. 92629 DANA POINT, CA. 92629
APPROVED BY: TBD DISIGNED BY: RU PROJECT NO: EU601002 DATE: 05/20/15 DRAWING NAME: TOPOGRAPHIC SURVEY	VIA MONARCA TAM MONARCA TAM MONARCA TAM MONARCH BEACH RESORT SOUTH DANA POINT, CA. 92629 DANA POINT, CA. 92629
APPROVED BY: TBD DISIGNED BY: RU PROJECT NO: EU601002 DATE: 05/20/15 DRAWING NAME: TOPOGRAPHIC SURVEY	VIA MONARCA TAM MONARCA TAM MONARCA TAM MONARCH BEACH RESORT SOUTH DANA POINT, CA. 92629 DANA POINT, CA. 92629
DESIGNED BY: RU PROJECT NO: EU601002 DATE: 05/20/15  DRAWING NAME:  TOPOGRAPHIC SURVEY  DRAWING NUMBER:	TOWER OWNER SITE ID:
DRAWING NUMBER:	DANA POINT, CA. 92629 TAN MONARCH BEACH I MONARCH BEACH
DRAWING NAME: TOPOGRAPHIC SURVEY	THE SHOLEN-PRESENT THE NO. ON STATE OF
C-2	NO. DATE REVISIONS BY NOT VALID WITHOUT BRANATURE AND DATE VERIZON SITE ID: VERIZON SITE ID
<u> </u>	NO. DATE REVISIONS BY NOT VALID WITHOUT BRANATURE AND DATE VERIZON SITE ID: VERIZON SITE ID



NOTCE: This drawing and the design shown are the property of Jacobs Engineering Graup, Inc. The reproduction, copying, or use of this drawing without written consent is prohibited and any infiningement will be subject to legal action

 $\mathcal{X} = \mathcal{U}$ 



## ACS AIR CONDITION ACU AIR CONDITION

ACU	AIR CONDITIO
BE	SUILDING EN
B/N	BRASS NAIL
BGCL	BUILDING CO
BLD	BUILDING
BM	BENCHMARK
BRC	WALL BRACE
CHY	CHIMNEY
CNPT	CONTROL PO
CHY	CHIMNEY
DCT	DUCT
DDR	DOWN DRAIN
ECBX	ELECTRICAL
FAGE: N	FOUND MONU
3	IRON PIPE
20	ORIGINAL GR
PRS	PIPE
N(3)	ROOF DECK
367	ROOF LINE
HTT III	ROOF RIDGE
10.001	ROOF PARAP
5/#.	SPIKE WITH 1
10	TOP
SWIT	VENT
٠	FOUND MONL
	CONTROL PO
*	GEODETIC CO

NING	UNIT	SUPPORT
NING	UNIT	
TRY		

OLUMN

OINT

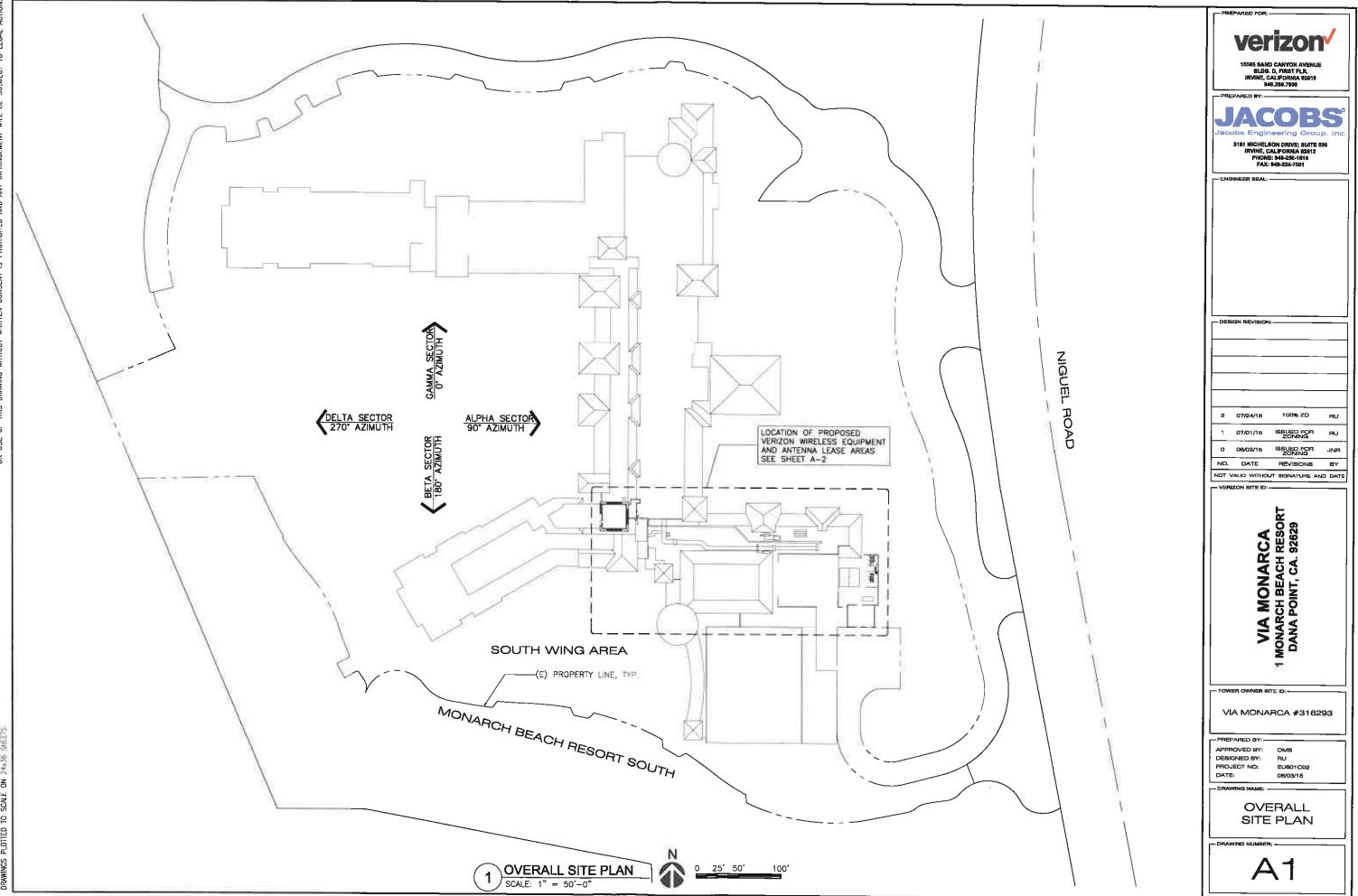
NUMENT

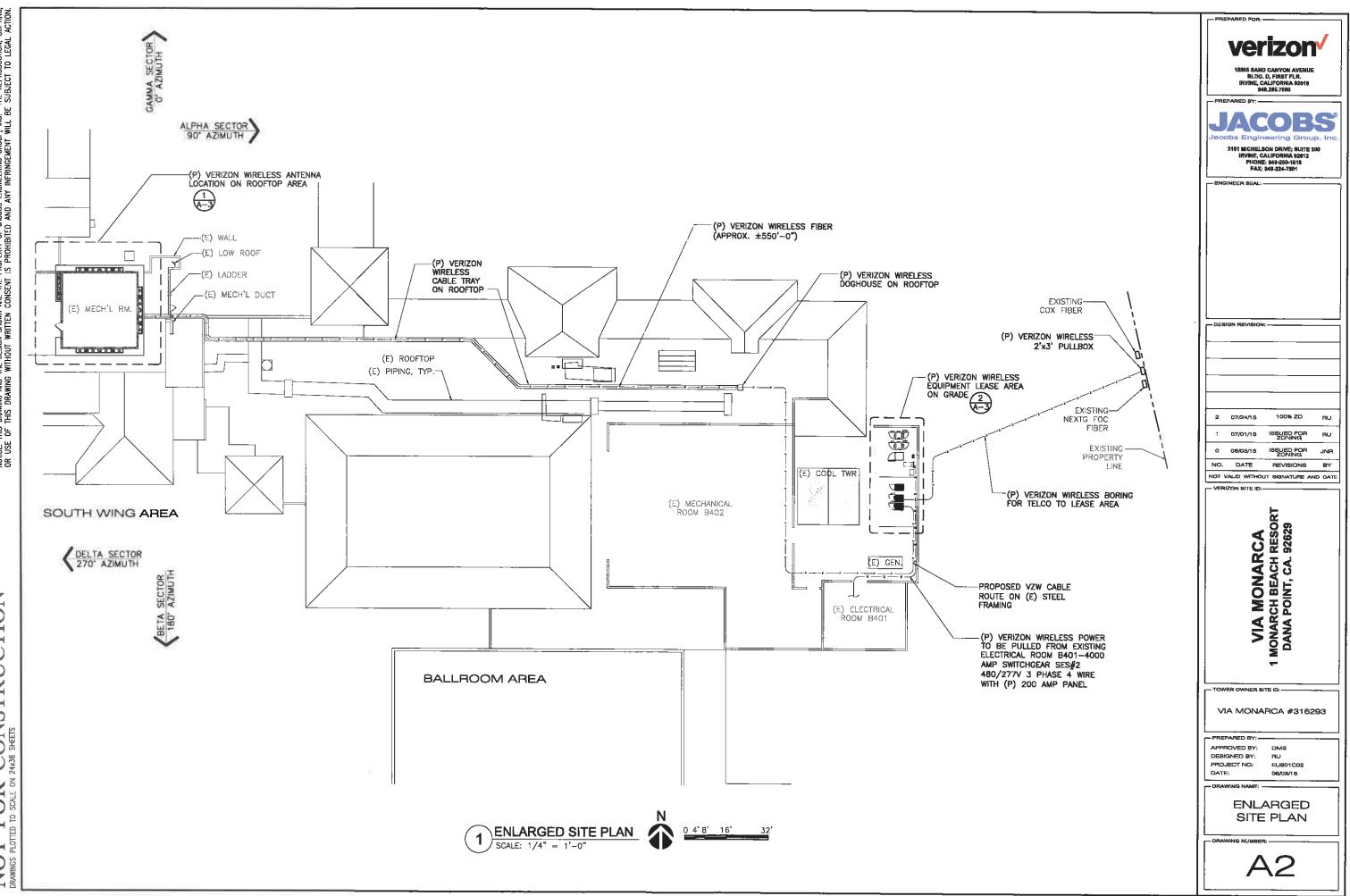
APET WASHER

NUMENT AS NOTED POINT COORDINATE

-PREPARED FOR:
Veri70nwireless
15595 SAND CANYON AVENUE
BLOG. D. FIRST FLR. STVINE, CALIFORNIA 92618
848.285.7990
PREPARED BY:
IACODC
JACUES
Jacobs Engineering Group, Inc.
3161 MICHELSON DRIVE; SUITE 500
IRVINE, CALIFORNIA 82612 PHONE: 849-250-1616 FAX: 949-224-7501
ENGINEER SEAL:
$\mathbb{A}$
A
PRELIMINARY
Nr.
- <del>2-</del> Y
1 <b>Q Y</b>
7
<u> </u>
· · · · · · · · · · · · · · · · · · ·
·
A 05/20/15 90% REVIEW ZD AU
NO. DATE REVISIONS BY
NO. DATE REVISIONS BY
NO. DATE REVISIONS BY NOT VALID WITHOUT SIGNATURE AND DATE VERIZON SITE ID:
NO. DATE REVISIONS BY
TAL DIAL STOCKAR
TAL DIAL STOLENDER TOULING ON ARCA
VE BROISIVER TAG ON TAG DIA BEACH STAD DIA BEACH CO. 35628 IN1, CO. 35628 IN1, CO
TAL DIAL STOLENDER TOULING ON ARCA
TAL DIAL STOLENDER TOULING ON ARCA
TAL DIAL STOLENDER TOULING ON ARCA
ALE SOUTH AND ARCA THE SOUTH DANA POINT, CA. 92629 DANA POINT, CA
TAL DIAL STOLENDER TOULING ON ARCA
ALE SOUTH AND ARCA AND ARCH BEACH AND ARCH BEACH AND POINT, CA. 92629 DANA POINT, CA. 9
ALE SOUTH AND ARCA AND ARCH BEACH AND ARCH BEACH AND POINT, CA. 92629 DANA POINT, CA. 9
TO A POINT, CA. 92001 A MONARCA A MONARCA
THE BACK BE AND
THE SHORE STREED.
THE ARCIENCE AND
THE PROPERTY OF THE OCTON OF TH
THE AREA STATE AND STATE A
TOPOGRAPHIC SURVEY







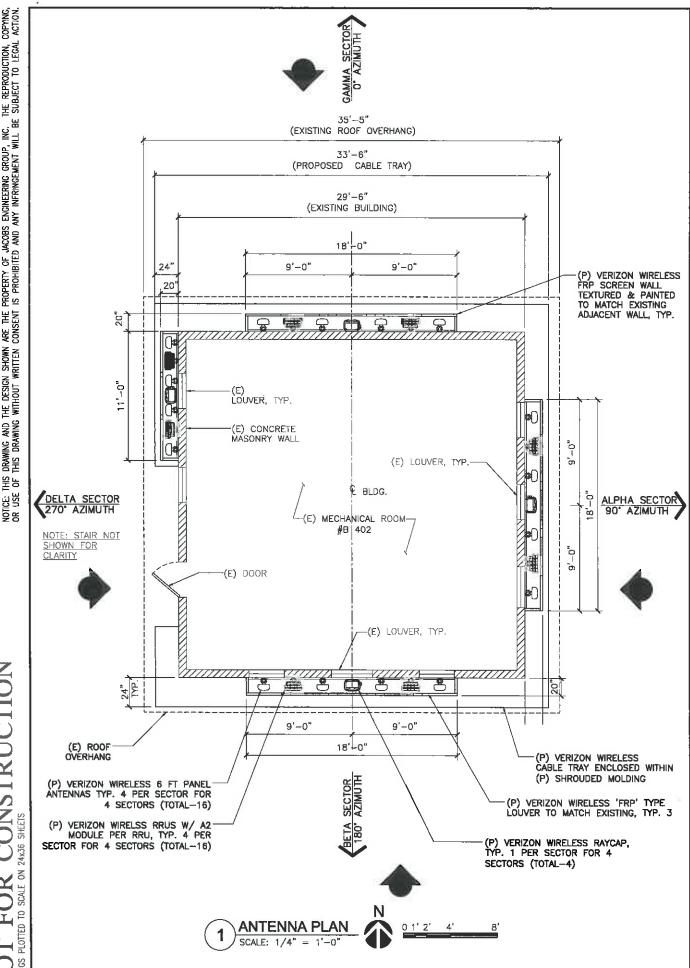
COPYING, ACTION. PROPERTY OF JACOBS ENCINEERING GROUP, INC. THE REPRODUCTION, IS PROHIBITED AND ANY INFRINGEMENT WILL BE SUBJECT TO LEGAL DRAWING AND THE DESIGN SHOWN ARE THE THIS DRAWING WITHOUT WRITTEN CONSENT NOTICE: THIS I OR USE OF T

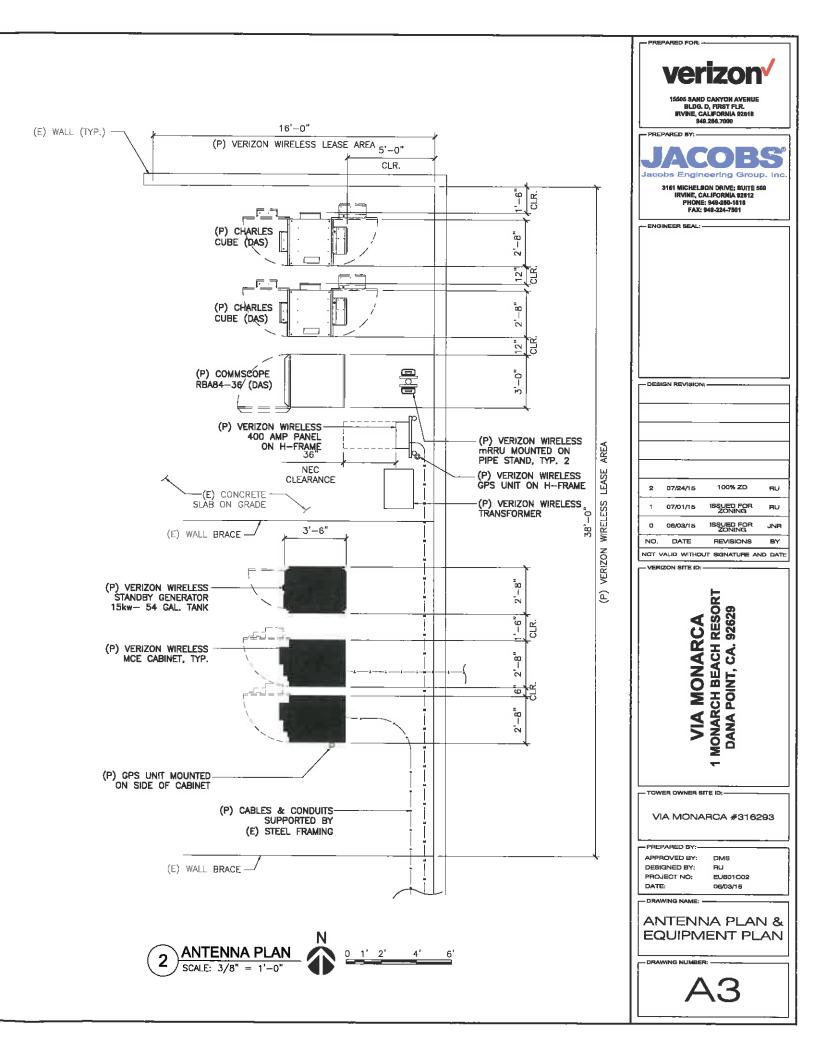
FOR CONSTRUCTION D TO SCALE ON 24x36 SHEETS NOT DRAWINGS PLOTT



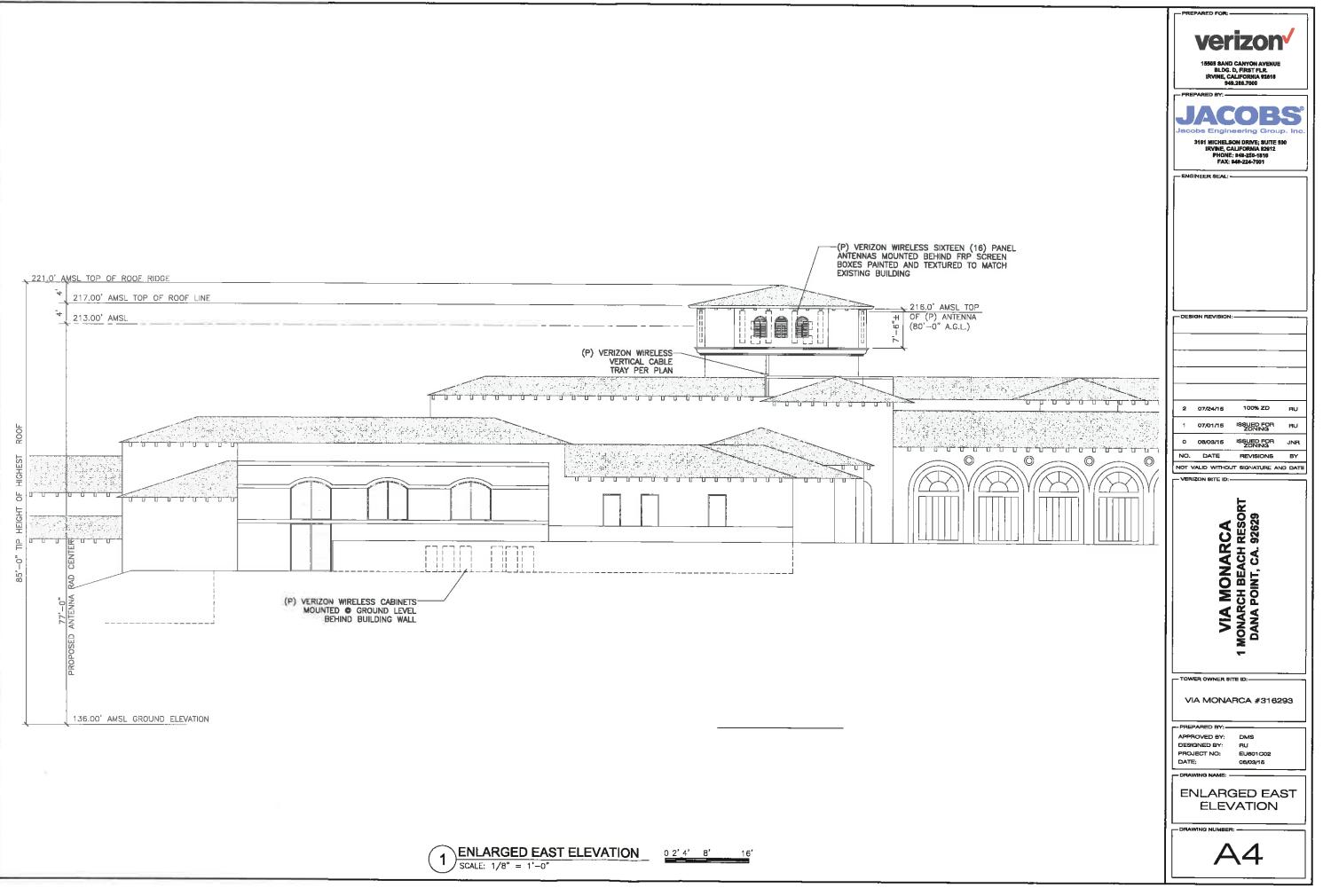
Z

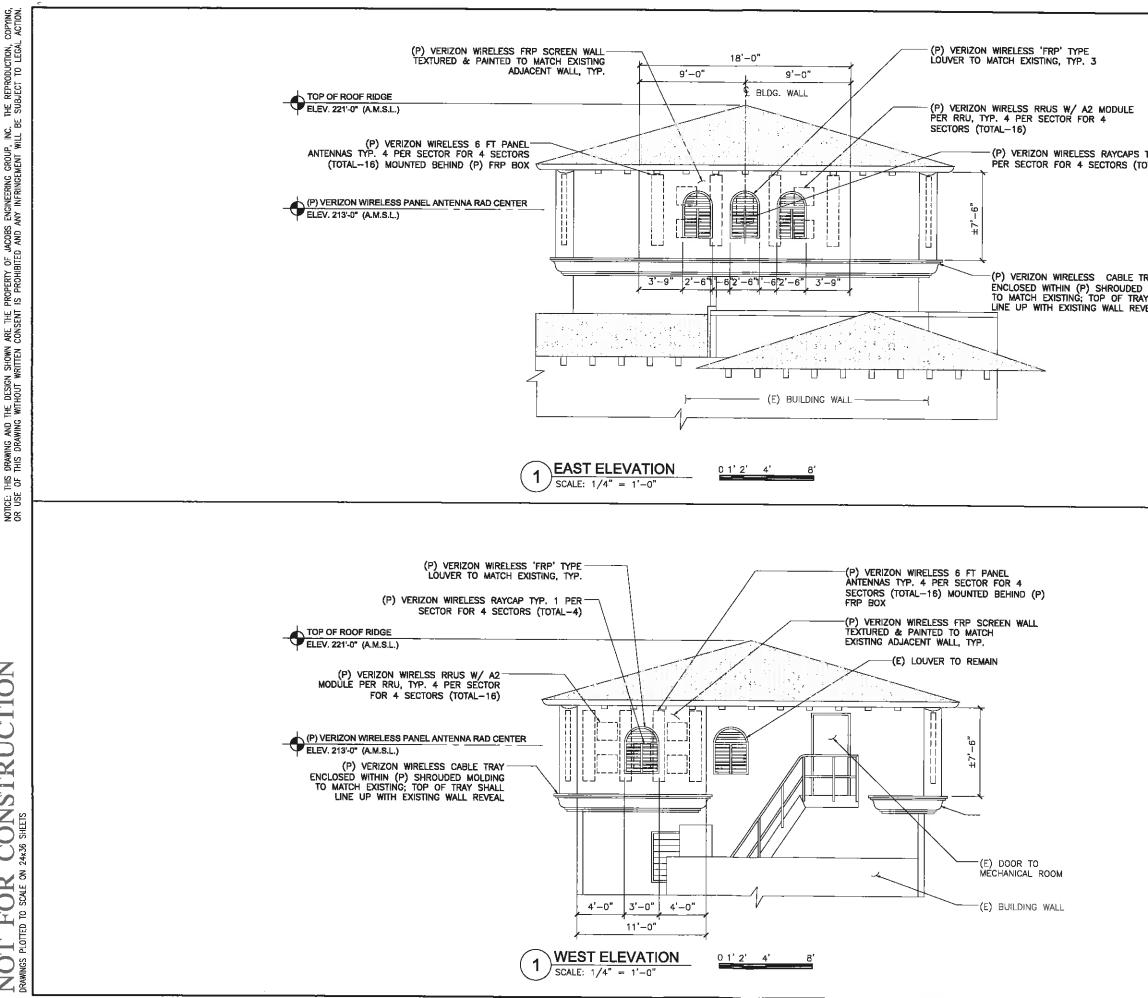












COPYING, ACTION. THE REPRODUCTION, C THE DESIGN SHOWN ARE THE PROPERTY OF JACOBS ENCINEERING GROUP, INC. "WITHOUT WRITTEN CONSENT IS PROHIBITED AND ANY INFRINGEMENT WILL BE DRAWING AND T ЯF USE ]

NOT FOR CONSTRUCTION DRAWINGS PLOTED TO SCALE ON 24:36 SHEETS

	PREPARED FOR:
	VERIZON
TYP. 1 DTAL-4)	JACOBS Jacobs Engineering Group. Inc. 3161 MICHELSON DRIVE; SUITE 500 IRVINE, CALIFORNIA 92612 PHICINE: 948-926-1816 FAX: 848-924-7601
RAY	ENUMEER BEAL
MOLDING Y SHALL FAL	
	2 07/24/15 100% ZD RU 1 07/01/16 ISQUED FOR RU 2 006/03/15 ISQUED FOR JNR 2 0106 JNR
	NO. DATE REVISIONS BY NOT VALID WITHOUT SKINATURE AND DATE VERIZON SITE ID:
	VIA MONARCA 1 MONARCH BEACH RESORT DANA POINT, CA. 92629
	VIA MONARCA #316293
	PREPARED BY:         DMS           APPROVED BY:         RU           DESIGNED BY:         RU           PROJECT NO:         EUR01C02           DATE:         08/03/15
	BUILDING ELEVATIONS
	A5

