“J”

Graphics
ZONING MAP

LEGEND

- Zoning
- Parcels

Project Parcel
APN: 057-210-056

Map Date: 12-18-19

P19-0338-UP APN: 057-210-056
AERIAL MAP VIEW

GENERAL PROJECT SCOPE OF WORK

DEVELOP NEW SOLAR PHOTOVOLTAIC ELECTRICAL GENERATING FACILITIES ON APPROXIMATELY 14 ACRES OF LAND. THE SOLAR POWER PLANT WILL BE A SINGLE AXIS TRACKER SYSTEM. THE ENTIRE SITE WILL HAVE MINIMAL EARTHWORK DISTURBANCE AND GRADING OPERATIONS WILL OCCUR MAINLY FOR INSTALLATION OF ACCESS ROADS AND EQUIPMENT PADS.

DC NAMEPLATE: 2,808.96 kW
AC RATING: 1,980.00 kW

SOLAR MODULE QTY & MODEL:
(7,392) TRINA TSM-DE14H(II), 380W

INVERTER QTY & MODEL:
(16) SUNGROW SG125HV, 125kW

INDEX OF DRAWINGS

SHEET # | SHEET TITLE
--- | ---
T-001 | COVER SHEET
PV-001 | EXISTING SITE CONDITIONS
PV-100 | SOLAR PV ARRAY LAYOUT
PV-101 | ELEVATION DETAILS
PV-102 | POWER STATION ELEVATION DETAILS
PV-103 | TRENCH DETAILS
PV-104 | ELECTRICAL DETAILS

CODES & REGULATIONS

WORK PERFORMED AND MATERIALS FURNISHED SHALL CONFORM TO THE APPLICABLE PUBLICATIONS AND STANDARDS OF THE ORGANIZATIONS LISTED BELOW:

NATIONAL
• 2015 INTERNATIONAL BUILDING CODE (IBC)
• NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
• NATIONAL ELECTRIC CODE, 2017 EDITION
• UNDERWRITERS LABORATORIES INV. (UL)
• US DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)

STATE
• 2016 CALIFORNIA BUILDING CODE
• 2016 CALIFORNIA ELECTRICAL CODE
• 2016 CALIFORNIA ENERGY CODE
• 2016 CALIFORNIA FIRE CODE
• RULE 21 GUIDELINES
• CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT (CAL OSHA)

OWNER INFORMATION, PROJECT TEAM

OWNER OF RECORD: KIMBAL GRIGGS GILES & THERESE BLODGETT-GILES
PROJECT APPLICANT: RP NAPA SOLAR 2, LLC
PROJECT ENGINEER: CALIFORNIA ENGINEERING CO.
1. INSTALLATION TO COMPLY WITH NEC 2014 ARTICLE 690 AND ALL APPLICABLE LOCAL, STATE, AND NATIONAL CODES OR REGULATIONS.

2. EQUIPMENT SHALL BE LABELED PER NEC 690 AND UTILITY REGULATIONS.

3. 12' ACCESS ROADS SHALL BE DESIGNED TO ACCOMMODATE ALL CONSTRUCTION, LANDSCAPING AND WATER EFFICIENT LANDSCAPE ORDINANCE.

4. DIMENSIONS TO PROPERTY LINES AND EXISTING FEATURES ARE APPROXIMATE PENDING SURVEY.

5. LANDSCAPING WILL BE COMPLIANT TO THE BIOLOGICAL CONSTRAINTS ANALYSIS FOR LANDSCAPING AND INTER-EPPONT LANDSCAPE DEMARCA.

6. ALL TOPOGRAPHY, ELEVATION INFORMATION, DRAINAGE PATTERNS AND COURSES ARE SUBJECT TO THE OUTCOME OF DRAINAGE CALCULATIONS AND STORM WATER DRAINAGE SURVEY.

7. A 15.5' ACCESS CORRIDOR WILL BE PROVIDED WHICH WILL CONSIST OF 12' GRAVEL ROAD WITH A CLEARANCE BETWEEN ROAD AND FENCE.

8. THE CROSS SECTION OF THE PROPOSED 12 FT WIDE ROAD WILL MATCH THE EXISTING GRAVY ROAD CROSS SECTIONS WHICH SLOPES TOWARDS THE PERIMETER FENCE. ROAD CROSS SECTIONS WILL BE DESIGNED WITH 3' CLEARANCE BETWEEN ROAD AND FENCE.

9. THE CROSS SECTION OF THE PROPOSED 12 FT WIDE ROAD WILL MATCH THE EXISTING GRAVY ROAD CROSS SECTIONS WHICH SLOPES TOWARDS THE PERIMETER FENCE. ROAD CROSS SECTIONS WILL BE DESIGNED WITH 3' CLEARANCE BETWEEN ROAD AND FENCE.
1'-2" MINIMUM EMBEDMENT
138" FOR EXTERIOR ROWS
114" FOR INTERIOR ROWS
3'-3" MIN MAXIMUM ABOVE GRADE HEIGHT
PER DETAIL 05 CRITICAL DIMENSION.
TOP OF PIER TO CENTER OF ROTATION.
VERIFY WITH PRODUCT SPECIFICATIONS.
4'-6" MIN
7'-6" MIN
4' (TYP)
7' (TYP)
4" Ø
1-5/8" O.D.
3 STRANDS OF BARBED WIRE
3/8" TRUSS ROD
TOP RAIL
1-5/8" O.D.
FOOTINGS: 4X POST DIAMETER, MIN. 3'
9 GA. HOT DIPPED GALVANIZED WOVEN STEEL WIRE, 2" MESH,
BRACE BAND
TENSION BAND
BRACE RAIL
1-5/8" O.D.
TENSION BAR 3/16" x 3/4" MIN.
ROAD SURFACE
PIPE GATE FRAME TIE FABRIC TO TOP & BOTTOM W/ 11 GAUGE WIRE TIES @ 12" O.C.
9 GA. MESH CHAIN LINK FABRIC
24' GATE
PIPE STIFFENER
4.0" O.D. SS 40 GATE POST
GATE LATCH
3" MAX.
4'-6" (MIN)
INVERTER SIDE ELEVATION
INVERTER LAYOUT
INTEGRAL FUSED COMBINER WITH AC-DC DISCONNECT SWITCHES
FINISHED GRADE
DIRECT BURIED CABLES OR U.G. CONDUIT PER PLANS
INVERTER
INVERTER FRONT ELEVATION
INVERTER LAYOUT SCALE:NTS
INVERTER LAYOUT
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PIPE STIFFENER
4.0" O.D. SS 40 GATE POST
GATE LATCH
3" MAX.
CONCRETE NOTES

1. Design of structural concrete shall be in accordance with the latest version of the American Concrete Institute (ACI) - "Building Code Requirements for Structural Concrete," ACI 318. All concrete framework shall conform to ACI 347.

2. Concrete mix portions, including documentation of materials, adventure product information, and compressive strength of mix shall be as follows:

3. Minimum concrete strength classes for various structures shall be as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum Ultimate Compressive Strength (psi) (at 28 Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical ductbanks under roadway crossings</td>
<td>3,000*</td>
</tr>
<tr>
<td>Major equipment / structures where required and all other construction</td>
<td>3,000*</td>
</tr>
</tbody>
</table>
   *Minimum values unless specifically noted otherwise in design.

4. Reinforcing bars shall be deformed bars conforming to ASTM A615, Grade 60. Welded fabric shall conform to ASTM A116. Plain wire shall conform to ASTM A36. Placement shall be in accordance with Chapters 7 and 12 of ACI 318 and the manual of Standard Practice of the American Concrete Institute.

5. Cement shall be Portland cement conforming to ASTM C150, Type I or Type II as suggested by the geotechnical report.

6. Aggregates for normal weight concrete shall conform to ASTM C33 or as suggested by the geotechnical report.

7. Concrete equipment pad detail:

   - 3000 psi concrete equipment pad
   - #5 rebar spaced 12" each way for both top and bottom hat in 2000 psi concrete
   - SLOPE AWAY FROM SLAB ON GRADE ALL AROUND TYPICAL
   - Slurry base or compacted crushed rock
   - Electrical equipment pre-manufactured installation clips or brackets included with equipment manufacturer’s instructions for locations.
   - Hilti KB T2 (S.S.) 1/2" x 6" field verify anchor length needed for 3 1/4" embedment expansion anchor at each corner or as directed by equipment manufacturer.

8. Concrete anchor detail:

   - 4" x 4" galv strut
   - 1.590" x 1.590" galv strut
   - Attach to 4 x 4 post with 1/2" T5 and 1/2" x 2" x 4 LW #5 Kwik-Cote Tek screws and 1/2" x 1" #8 SS washers
   - LV switchgear with utility disconnect
   - LV transformer

9. Electrical equipment pre-manufactured installation clips or brackets included with equipment manufacturer’s instructions for locations.

10. Concrete equipment pad detail:

    - 3000 psi concrete equipment pad
    - #5 rebar at 12" each way on slab on grade all around typical
    - Slurry base or compacted crushed rock
    - 10" 2500 PSI CONCRETE SLAB SLOPE AWAY FROM SLAB ON GRADE ALL AROUND TYPICAL
TRENCH DETAILS

1. PROVIDE 3" CLEARANCE FROM SIDES AND BOTTOM OF TRENCH TO ANY CONDUIT OR CABLE.
2. PLACE 6" MINIMUM SAND COVER OVER CONDUIT AND CABLES. PLACE 3" MINIMUM SAND ON BOTTOM AND SIDES OF CABLES.
3. WITH CONDUIT AND CABLES IN PLACE, COMPACT TO 85% USING NO MECHANICAL EQUIPMENT. COMPACT 12" OF TRENCH TO 95% IN PAVEMENT AREAS.
4. USE NATIVE SOIL BACKFILL LOWER 10-12" IS SAND.
5. MAINTAIN MIN 36" CLEARANCE WHEN PARALLELING STRUCTURAL SUPPORTS OR CONDUIT. COMPACT TO 90% USING NO MECHANICAL EQUIPMENT. COMPACT 12" OF TRENCH TO 95% IN PAVEMENT AREAS.
6. MAINTAIN MIN 4" VERTICAL CLEARANCE WHERE DC CIRCUITS CROSS OR PARALLELS AC & DC CIRCUITS FROM OTHER LOW VOLTAGE SYSTEMS.
7. MAINTAIN MIN 12" VERTICAL CLEARANCE BETWEEN ALL UNDERGROUND UTILITIES AND MEDIAN VOLTAGE CIRCUITS. VERIFY EXACT REQUIREMENTS WITH UTILITY BEFORE STARTING UNDERGROUND INSTALLATION.
8. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (DIAL 811) TWO FULL BUSINESS DAYS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES, INCLUDING PAVEMENT REMOVAL, EXCAVATION AND AC OVERLAY, WHICH COULD AFFECT ANY UNDERGROUND UTILITY.
9. MAINTAIN MIN 6" OF SEPARATION BETWEEN DIFFERENT VOLTAGE CLASSES & MIN 3" SEPARATION BETWEEN CONDUITS, GROUND BARS AND UNDERGROUND OBSTRUCTIONS.

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6. SURFACE ACTIVITIES AND LOADING OVER BURIED CABLES SHALL NOT EXCEED RATED CRUSH CAPACITY OF CABLES OR CONDUITS.
7. MAINTAIN MINIMUM 12" VERTICAL CLEARANCE WHERE DC CIRCUITS CROSS OR PARALLELS AC & DC CIRCUITS FROM OTHER LOW VOLTAGE SYSTEMS.
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