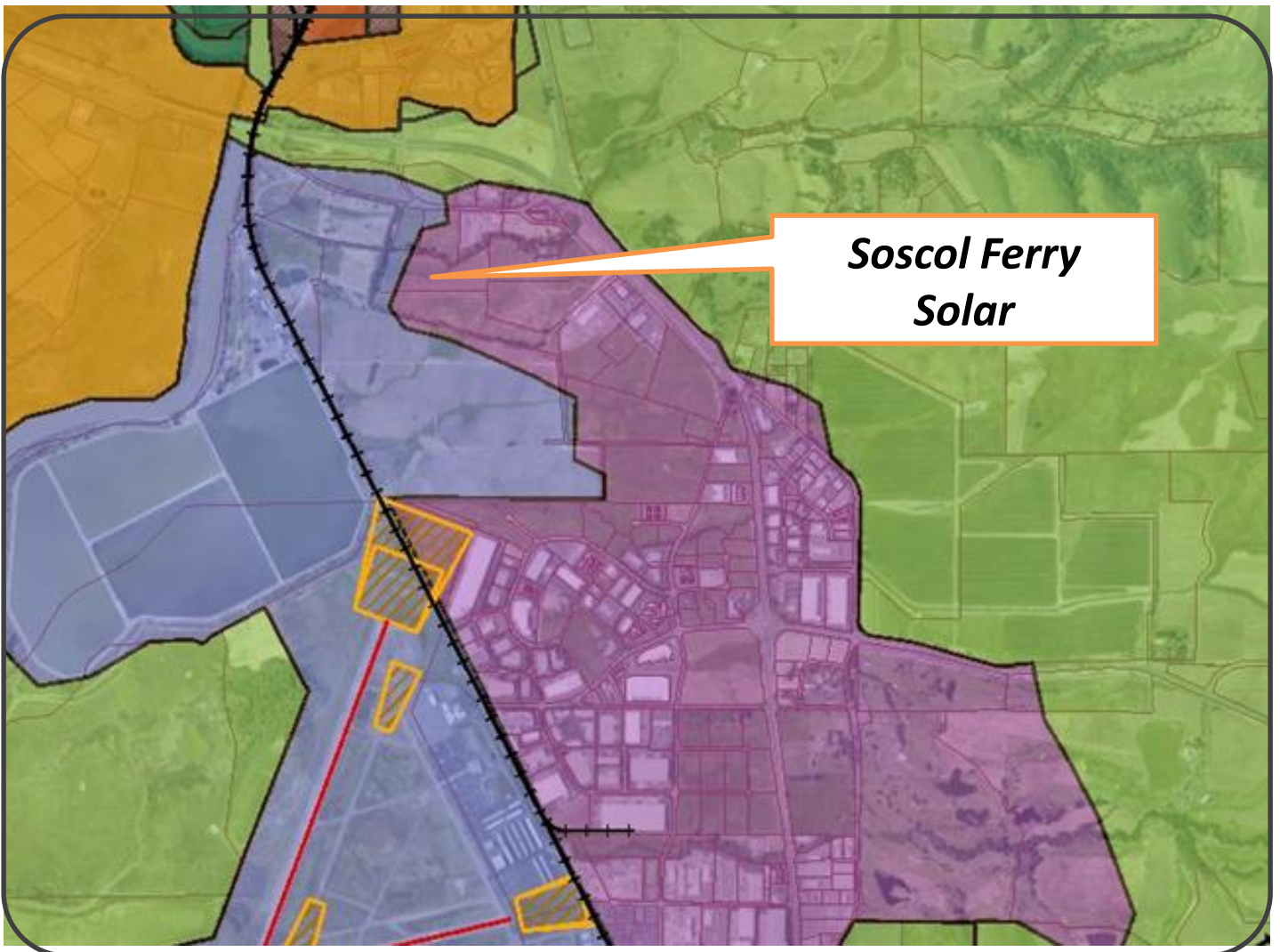


“J”

Graphics

NAPA COUNTY LAND USE PLAN 2008 – 2030



LEGEND



URBANIZED OR NON-AGRICULTURAL

- Study Area
- Cities
- Urban Residential*
- Rural Residential*
- Industrial
- Public-Institutional
- Napa Pipe Mixed Use

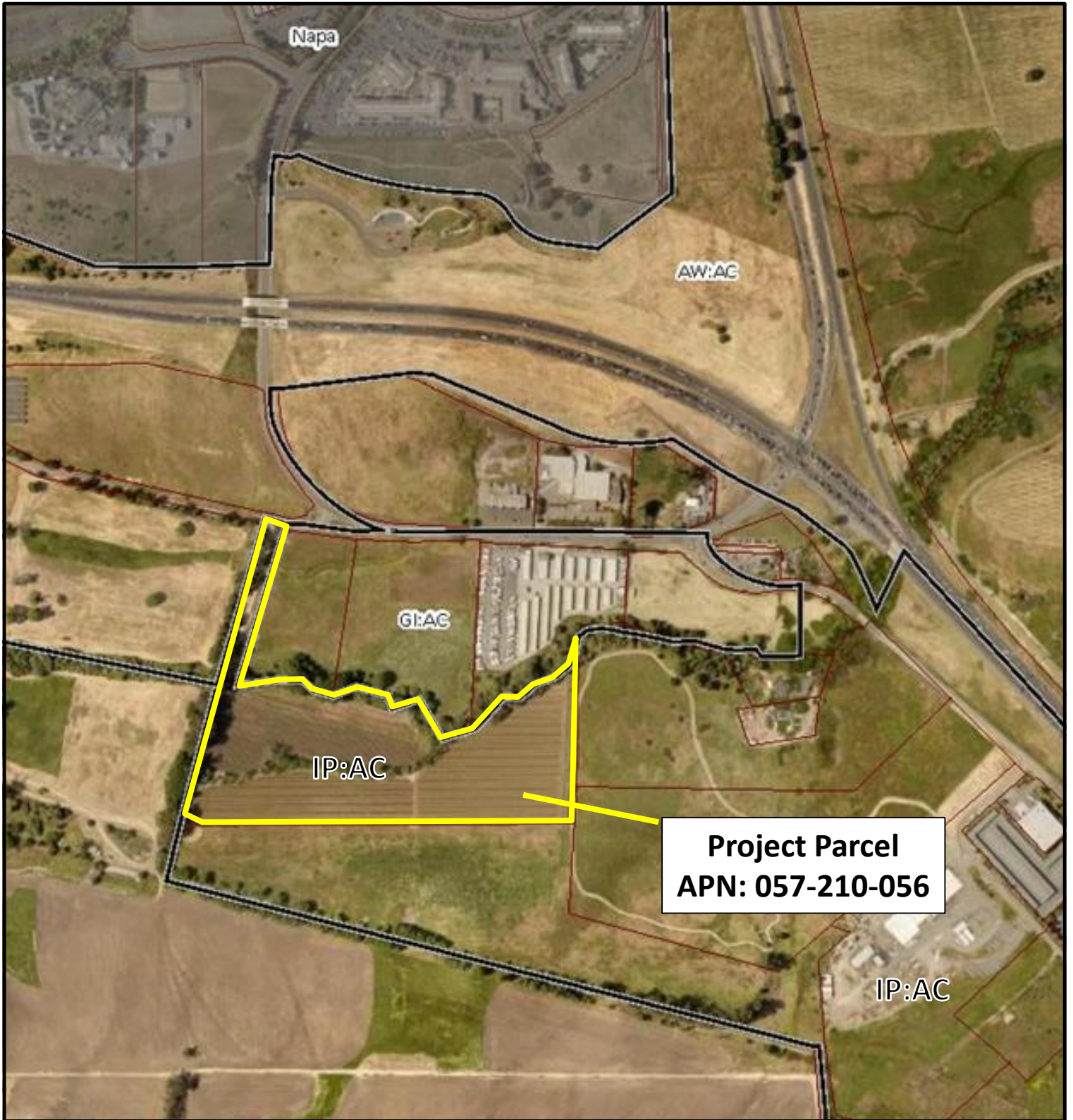
OPEN SPACE

- Agriculture, Watershed & Open Space
- Agricultural Resource

TRANSPORTATION

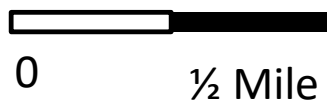
- Mineral Resource
- Limited Access Highway
- American Canyon ULL
- City of Napa RUL
- Landfill - General Plan
- Road
- Airport
- Railroad
- Airport Clear Zone

* See Action Item AG/LU-114.1 regarding agriculturally zoned areas within these land use designations



LEGEND

- Zoning
- Parcels



ZONING MAP

SOSCOL FERRY SOLAR SINGLE AXIS TRACKER PHOTOVOLTAIC SYSTEM

SOSCOL FERRY ROAD, NAPA, CA 94559



ENGINEER:
CALIFORNIA
ENGINEERING CO.
OWNER OF RECORD:
KIMBAL GRIGGS GILES &
THERESE BLODGETT-GILES
PROJECT APPLICANT:
RP NAPA SOLAR 2, LLC

SOSCOL FERRY SOLAR

SOSCOL FERRY RD,
NAPA, CA 94559, USA

LAT: 38.237851°
LON: -122.275392°

REV. NO.	DESCRIPTION	DATE
0	FOR UTILITY APPLICATION	09/17/19

SHEET TITLE:

COVER SHEET

DRAWING NO.:

T-000

DRAWN BY:

LR

REVIEWED BY:

DATE:

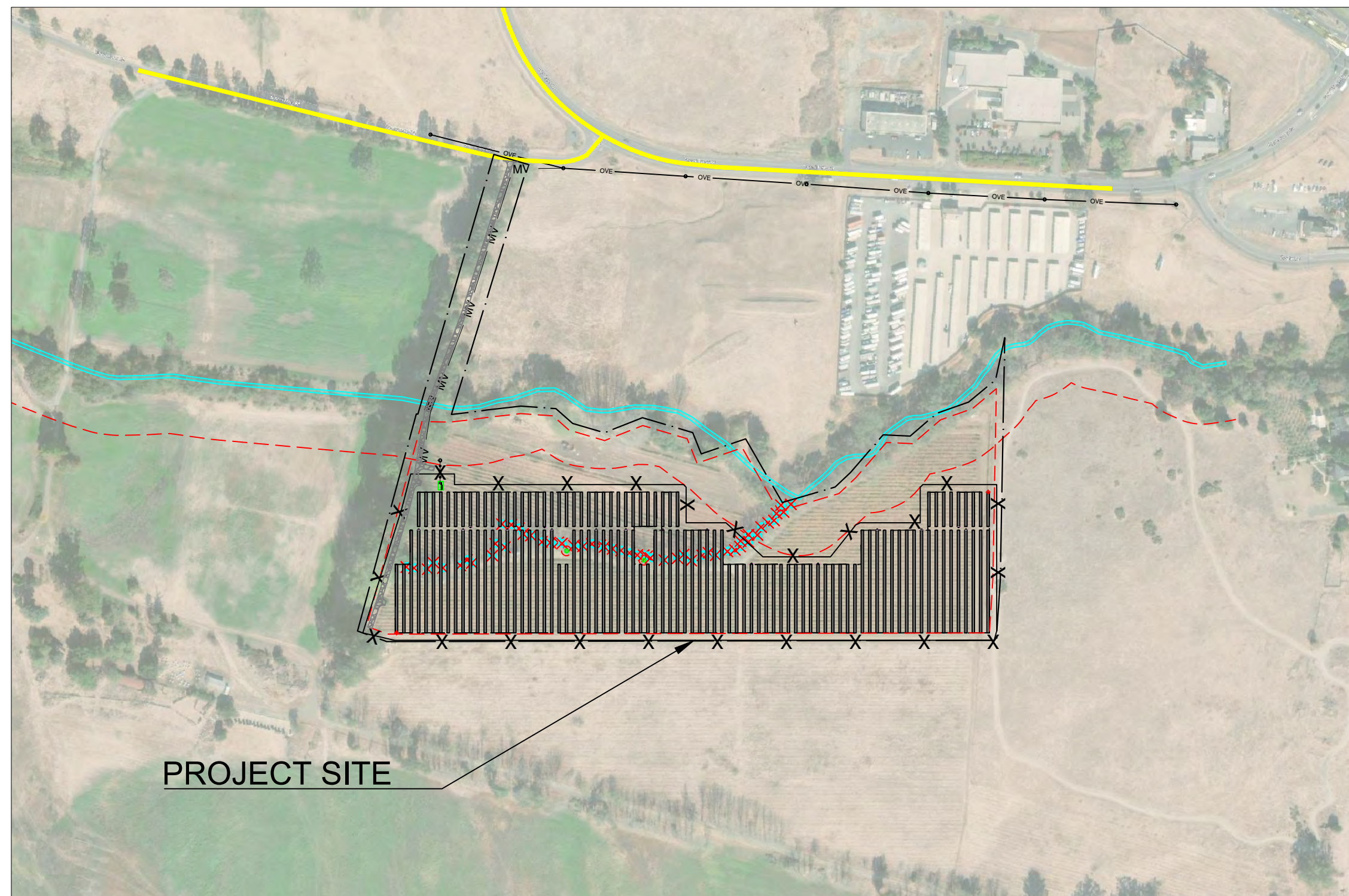
09/17/19

SCALE:

AS SHOWN

PROJECT NO.:

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

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.

CODES & REGULATIONS

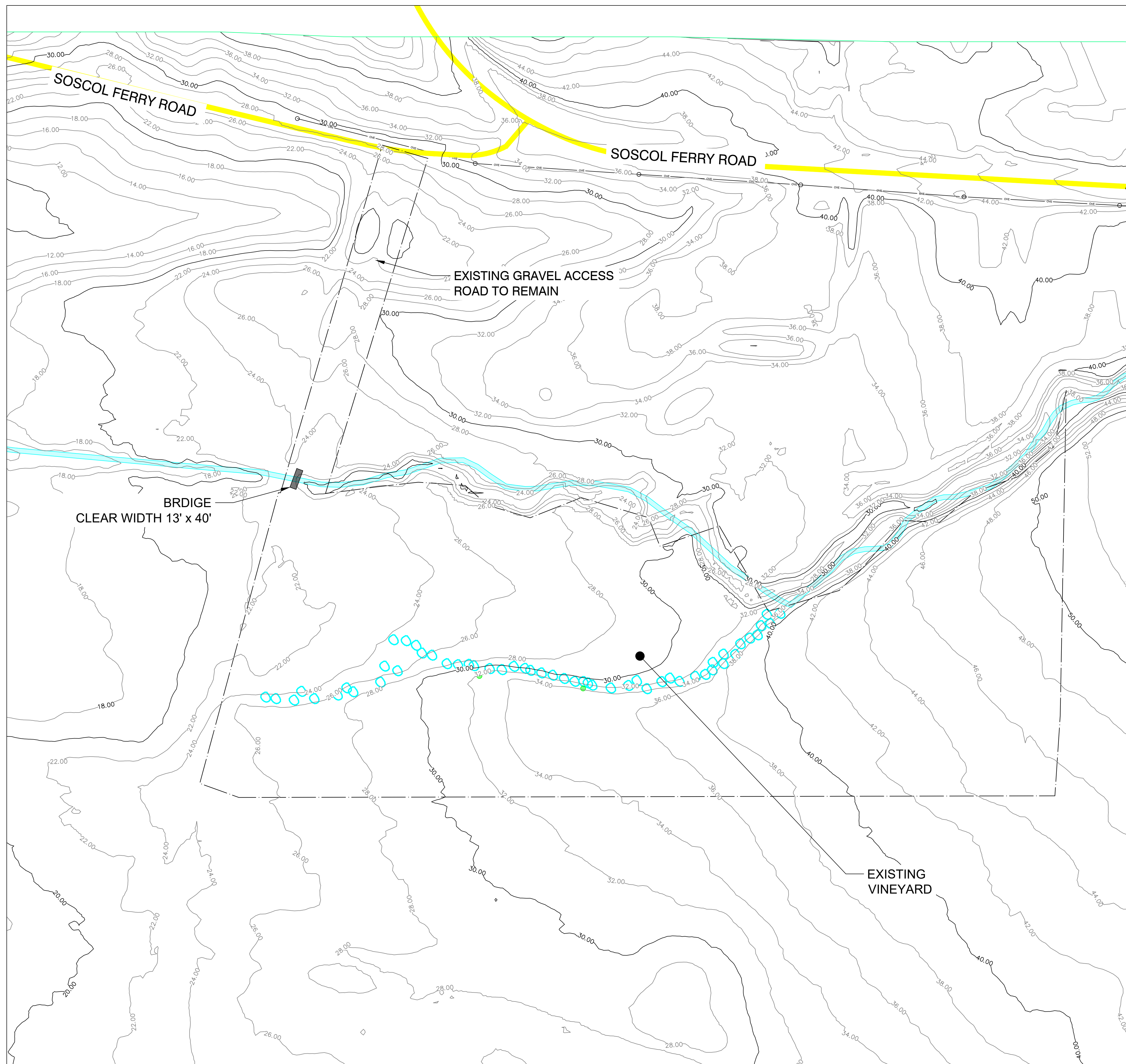
WORK PERFORMED AND MATERIALS FURNISHED SHALL CONFORM TO THE APPLICABLE PUBLICATIONS AND STANDARDS OF THE ORGANIZATIONS LISTED BELOW:

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)



LEGEND	
	12' WIDE SITE ACCESS GRAVEL ROAD
	(E) WETLAND
	PUBLIC ROAD
	PROPERTY LINE
	SETBACK
	(E) OH LINES
	EXISTING OAK TREE
	EXISTING TREES



ENGINEER:
CALIFORNIA
ENGINEERING CO.
OWNER OF RECORD:
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THERESE BLODGETT-GILES
PROJECT APPLICANT:
RP NAPA SOLAR 2, LLC

SOSCOL FERRY SOLAR

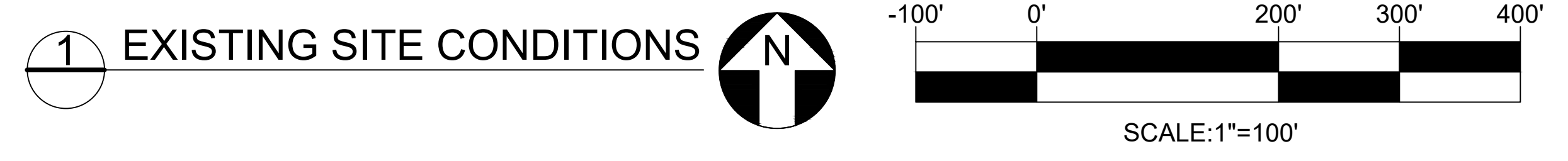
SOSCOL FERRY RD,
NAPA, CA 94559, USA
LAT: 38.237851°
LON: -122.275392°

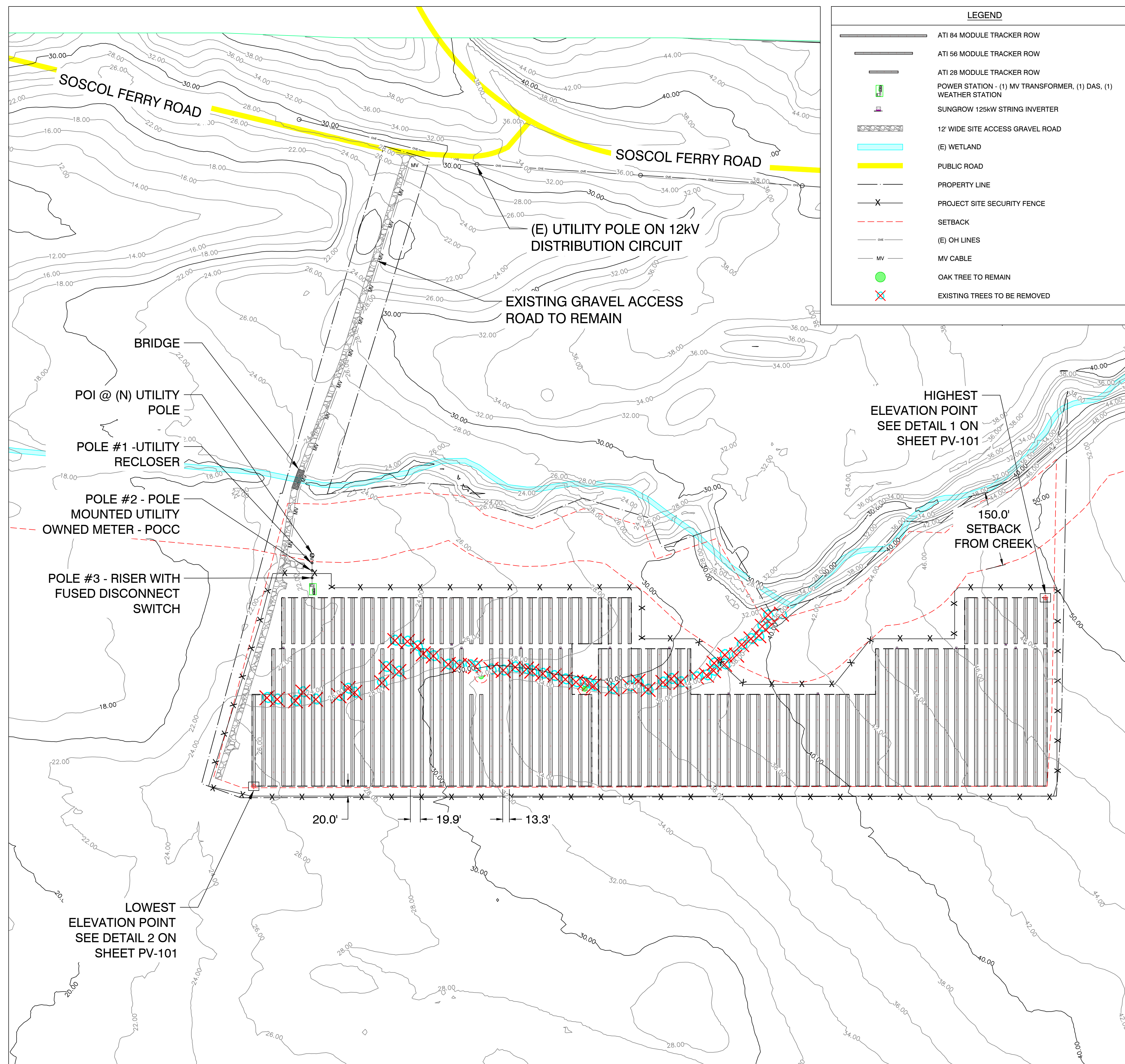
REV. NO.	DESCRIPTION	DATE
0	FOR UTILITY APPLICATION	09/17/19

SHEET TITLE:
EXISTING SITE CONDITIONS

DRAWING NO.:
PV-001

DRAWN BY:
LR
REVIEWED BY:
DATE:
09/17/19
SCALE:
AS SHOWN
PROJECT NO.:





LEGEND

- ATI 84 MODULE TRACKER ROW
- ATI 56 MODULE TRACKER ROW
- ATI 28 MODULE TRACKER ROW
- POWER STATION - (1) MV TRANSFORMER, (1) DAS, (1) WEATHER STATION
- SUNGROW 125kW STRING INVERTER
- 12' WIDE SITE ACCESS GRAVEL ROAD
- (E) WETLAND
- PUBLIC ROAD
- PROPERTY LINE
- PROJECT SITE SECURITY FENCE
- SETBACK
- (E) OH LINES
- MV CABLE
- OAK TREE TO REMAIN
- EXISTING TREES TO BE REMOVED

SYSTEM SPECIFICATIONS

SOSCOL FERRY ROAD	
	TOTAL
SYSTEM SIZE DC	2,808.96 kW
SYSTEM SIZE AC	1,980.00 kW*
DC/AC RATIO	1.42
MODULE MANUFACTURER	TRINA SOLAR
MODULE MODEL	TSM-DE14H(I)
MODULE RATING	380 W
TOTAL MODULE QTY	7,392
MODULES PER STRING	28
TOTAL NO. OF STRINGS	264
INVERTER MODEL	SUNGROW SG125HV
INVERTER RATING	125 kW
INVERTER QTY	16
STEP-UP TRANSFORMER	12KV/600V, 2000KVA
RACKING	ATI HSAT
INTER-ROW SPACING	13.3'
PITCH	19.9'
GCR	33%
SITE AREA INSIDE FENCE	13.84 Ac

* PLANT NAMEPLATE LIMITED TO 1980 kW AC AND IS CONFIGURED IN FACTORY BY INVERTER MANUFACTURER.

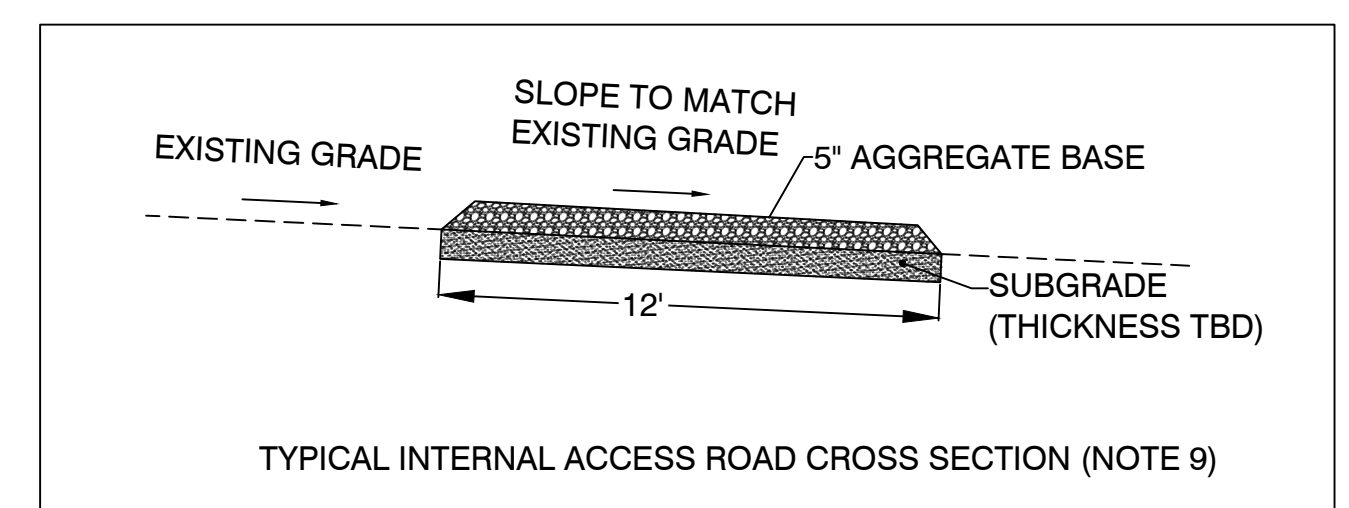
- GENERAL NOTES**
- INSTALLATION TO COMPLY WITH NEC 2014 ARTICLE 690 AND ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES OR REGULATIONS.
 - EQUIPMENT SHALL BE LABELED PER NEC 690 AND UTILITY REGULATIONS.
 - 12' ACCESS ROADS SHALL BE DESIGNED TO ACCOMMODATE ALL CONSTRUCTION, OPERATIONS, MAINTENANCE, AND UTILITY TRAFFIC THROUGHOUT THE SITE.
 - DIMENSIONS TO PROPERTY LINES AND EXISTING FEATURES ARE APPROXIMATE PENDING SURVEY.
 - LANDSCAPING WILL BE COMPLIANT TO THE BIOLOGICAL CONSTRAINTS ANALYSIS FOR LANDSCAPING AND WATER EFFICIENT LANDSCAPE ORDINANCE.
 - ALL TOPOGRAPHY, ELEVATION INFORMATION, DRAINAGE PATTERNS AND COURSES ARE SUBJECT TO THE OUTCOME OF DRAINAGE CALCULATIONS AND STORM WATER DRAINAGE REPORT (NOT YET PERFORMED).
 - A 15.5' ACCESS CORRIDOR WILL BE PROVIDED WHICH WILL CONSIST OF 12' GRAVEL ROAD WITH 3' CLEARANCE BETWEEN ROAD AND FENCE.
 - THE CROSS SECTION OF THE PROPOSED 12 FT WIDE ROAD WILL MATCH THE EXISTING GRADE, WHICH SLOPES TOWARD THE PERIMETER FENCE. ROAD CROSS SECTIONS WILL BE DESIGNED TO DRAIN TOWARDS THE FENCE. FINAL CIVIL DESIGN WILL SPECIFY THE PROPOSED GRADES.

SYSTEM SPECIFICATIONS

SOSCOL FERRY SOLAR	
SYSTEM SIZE DC	2808.96 kW
SYSTEM SIZE AC	1,980.00 kW
TOTAL ACREAGE	22.84 Ac

PROJECT SETBACKS

SOSCOL FERRY SOLAR	
FRONT	20'
REAR	20'
SIDE	20'
SOSCOL CREEK	150'



ENGINEER:
CALIFORNIA
ENGINEERING CO.
OWNER OF RECORD:
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RP NAPA SOLAR 2, LLC

SOSCOL FERRY SOLAR

SOSCOL FERRY RD,
NAPA, CA 94559, USA

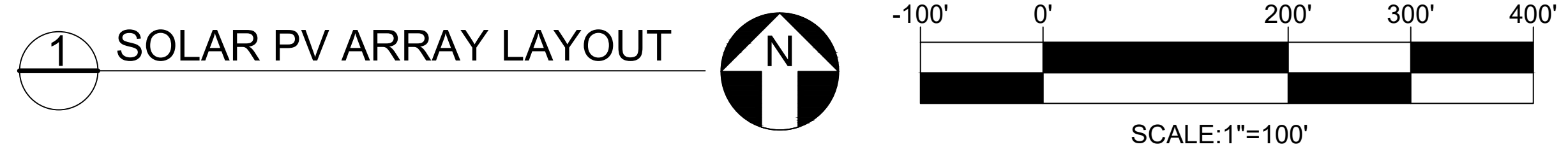
LAT: 38.237851°
LON: -122.275392°

REV. NO.	DESCRIPTION	DATE
0	FOR UTILITY APPLICATION	09/17/19

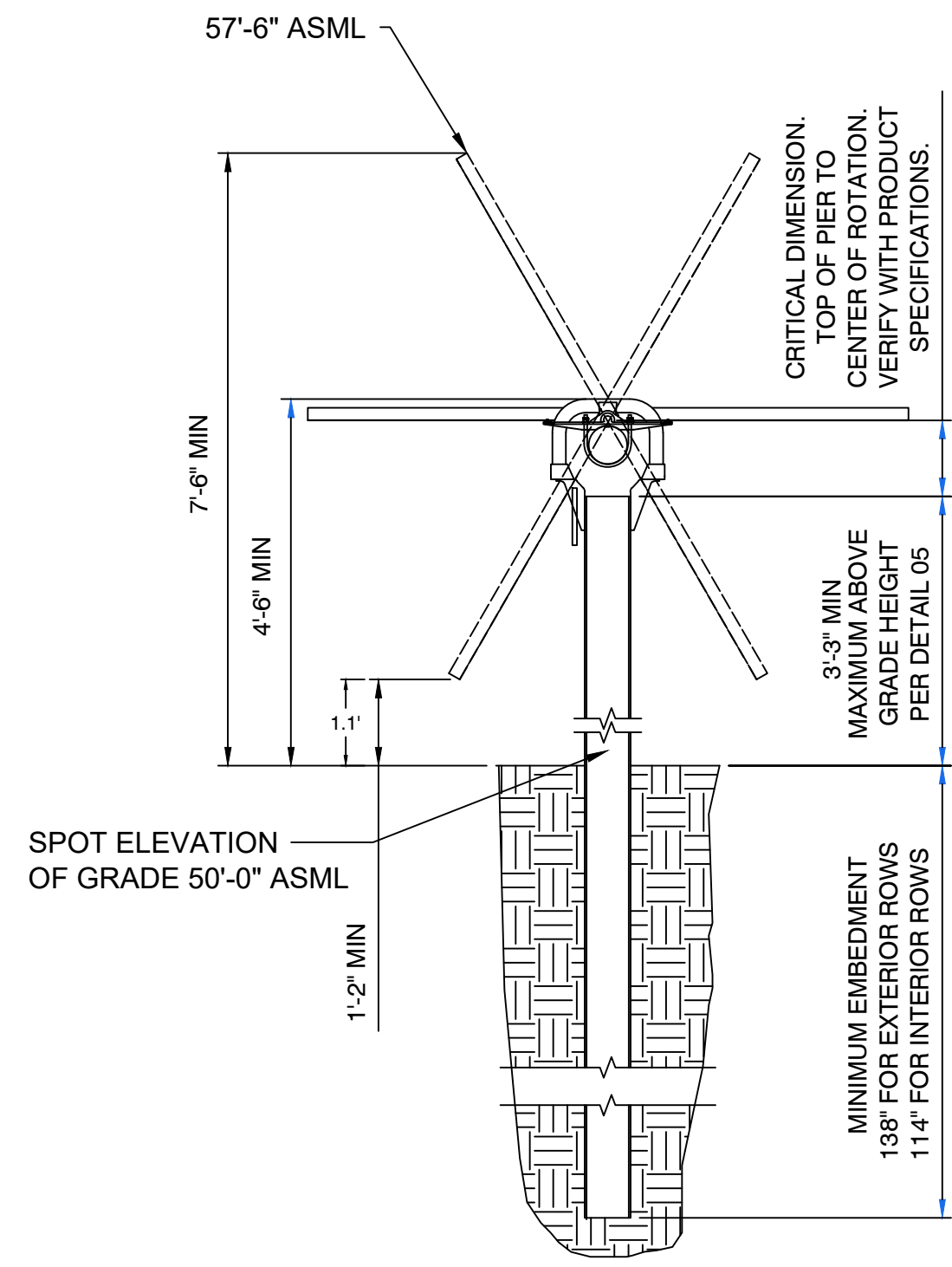
SHEET TITLE:
SOLAR PV ARRAY LAYOUT

DRAWING NO.:
PV-100

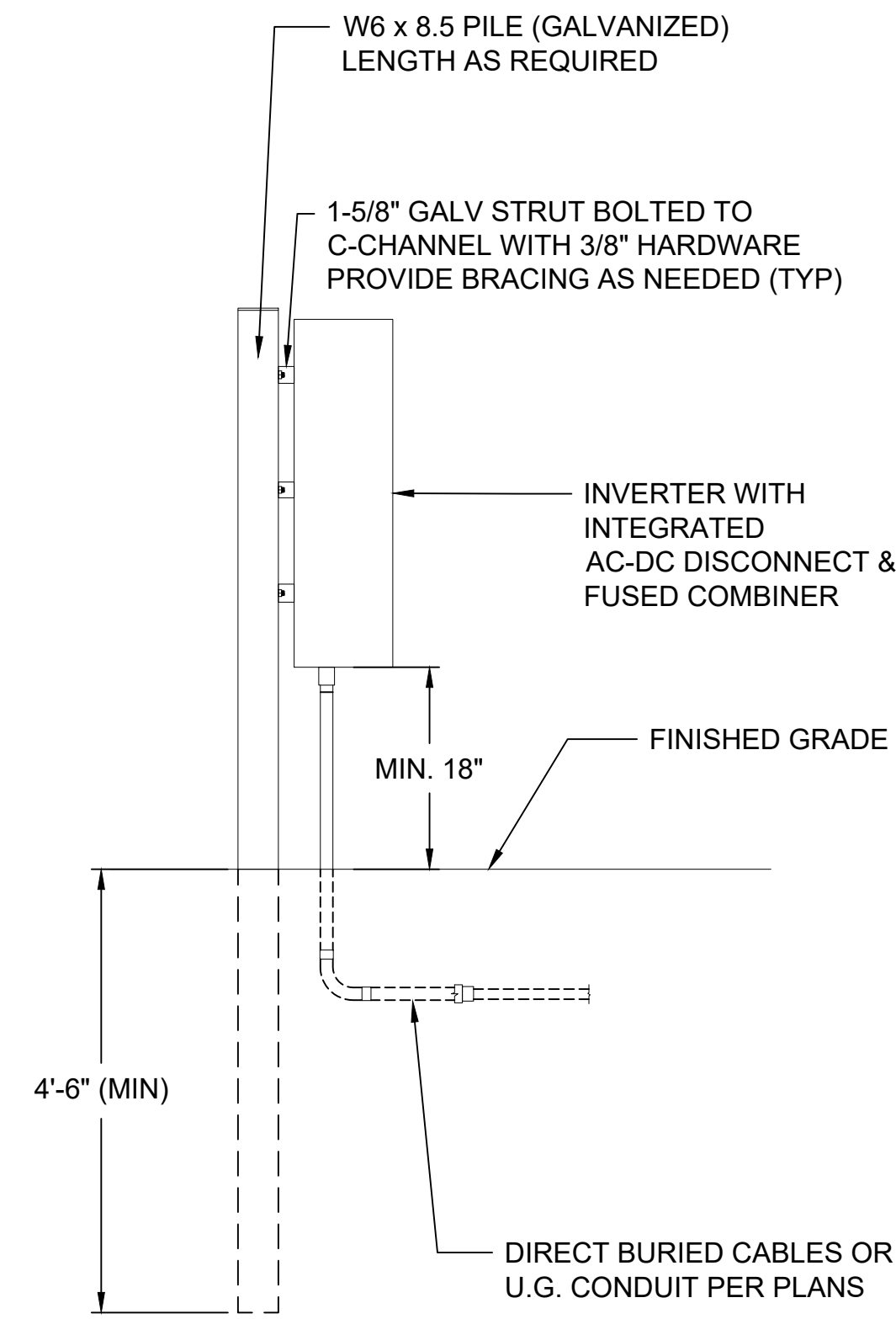
DRAWN BY:
LR
REVIEWED BY:
DATE:
09/17/19
SCALE:
AS SHOWN
PROJECT NO.:



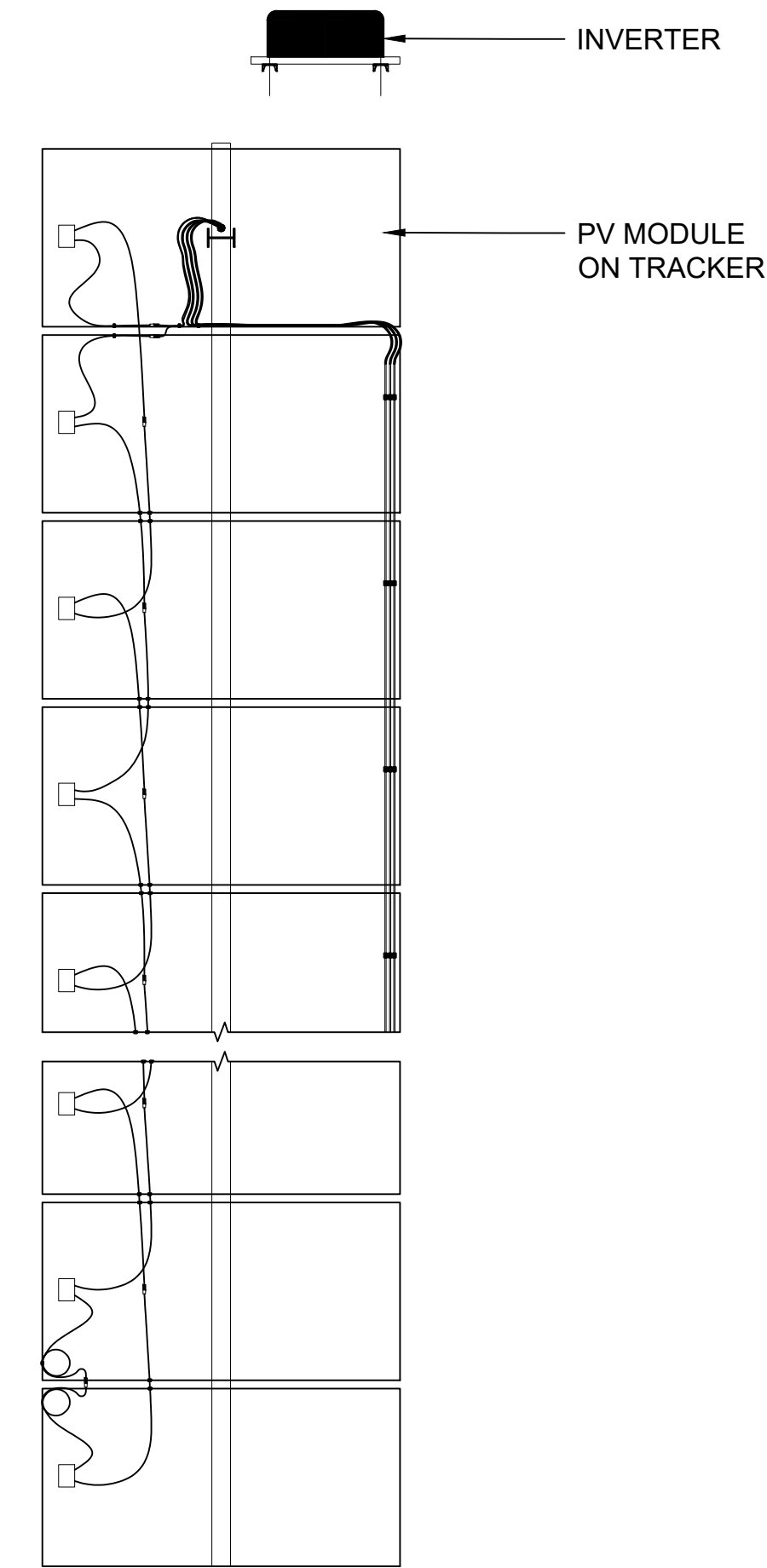
3 ROAD CROSS SECTION
SCALE: NTS



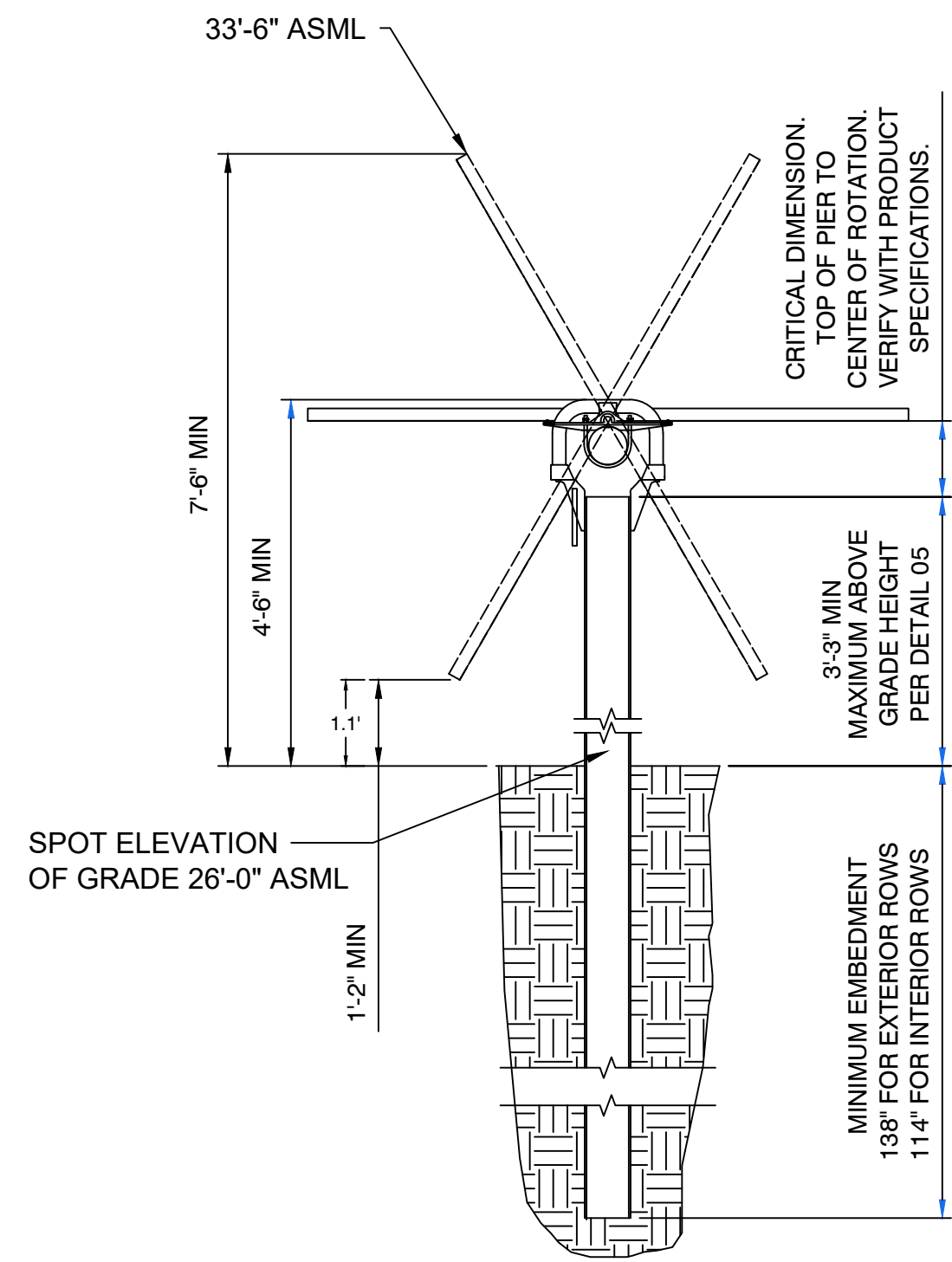
1 RACKING ELEVATION HIGHEST POINT
SCALE:NTS



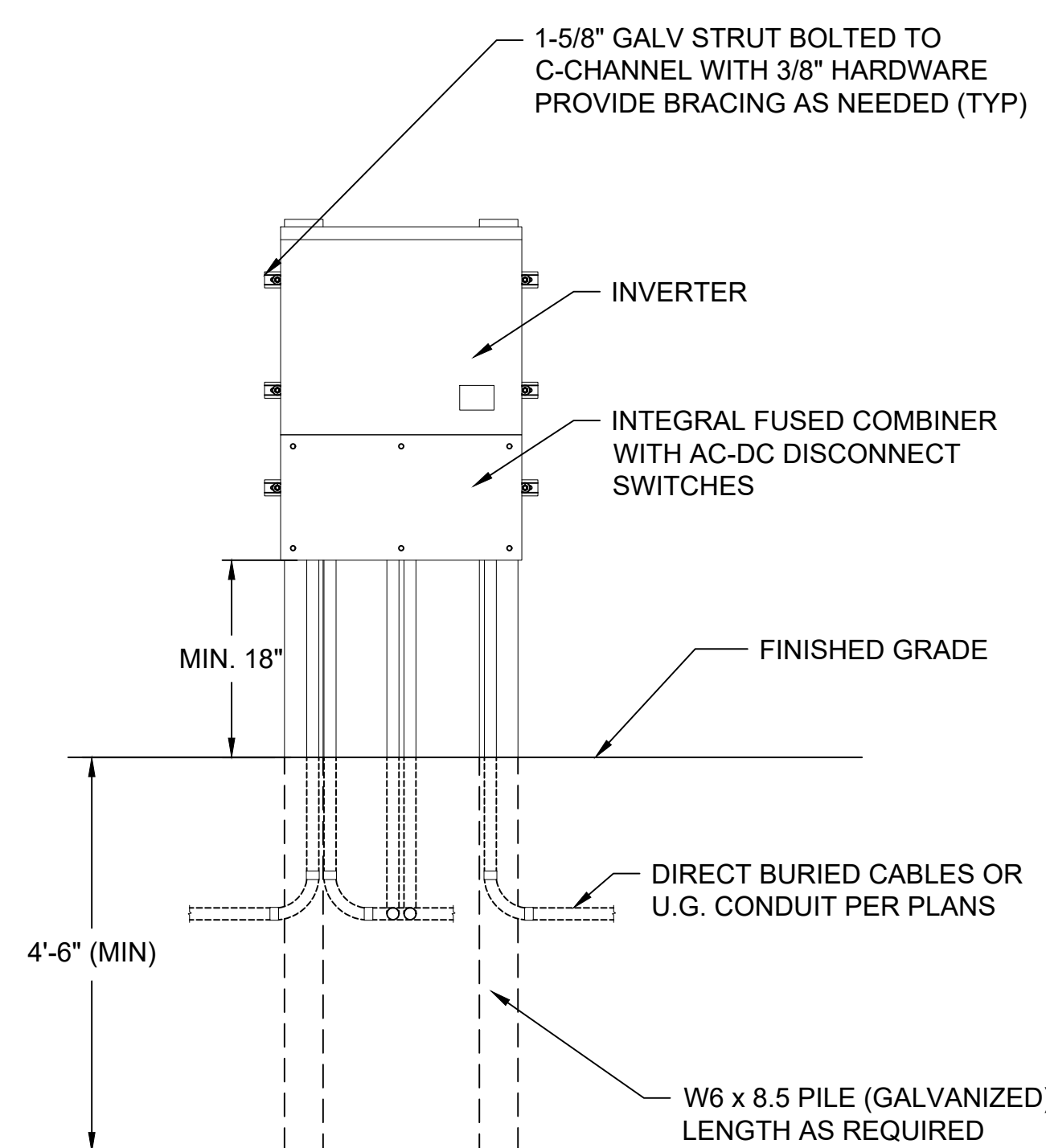
3 INVERTER SIDE ELEVATION
SCALE:NTS



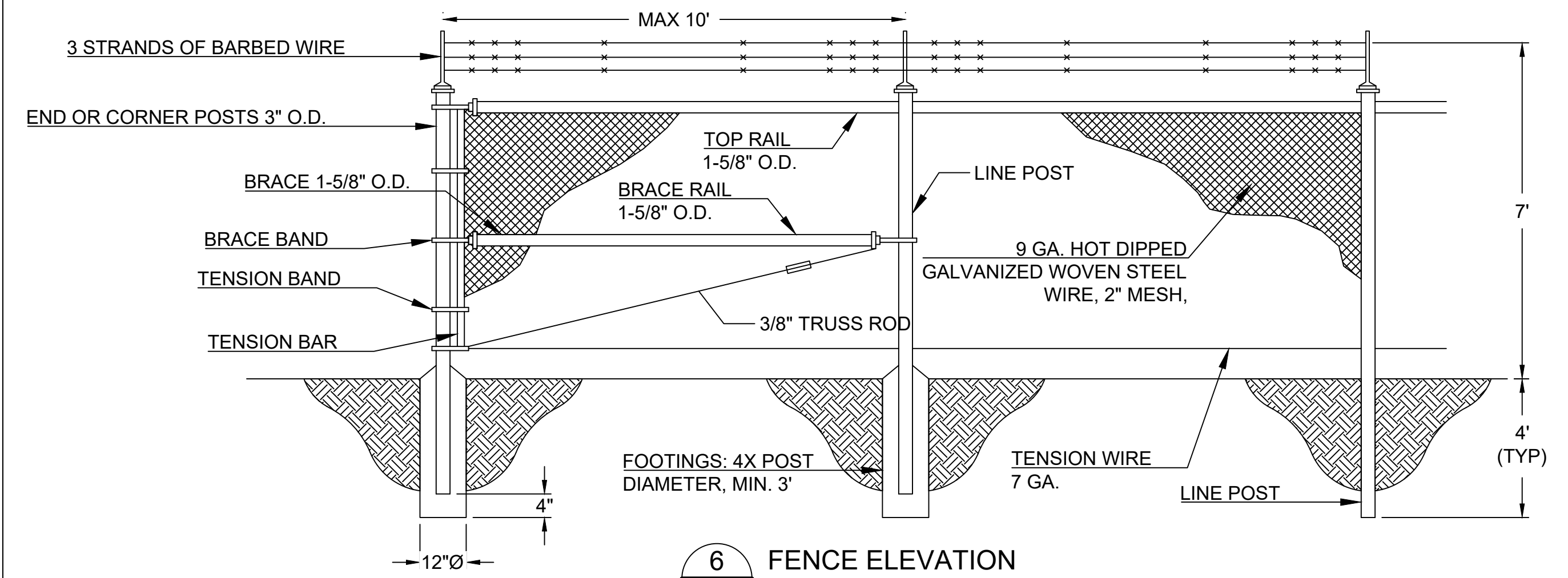
5 INVERTER LAYOUT
SCALE:NTS



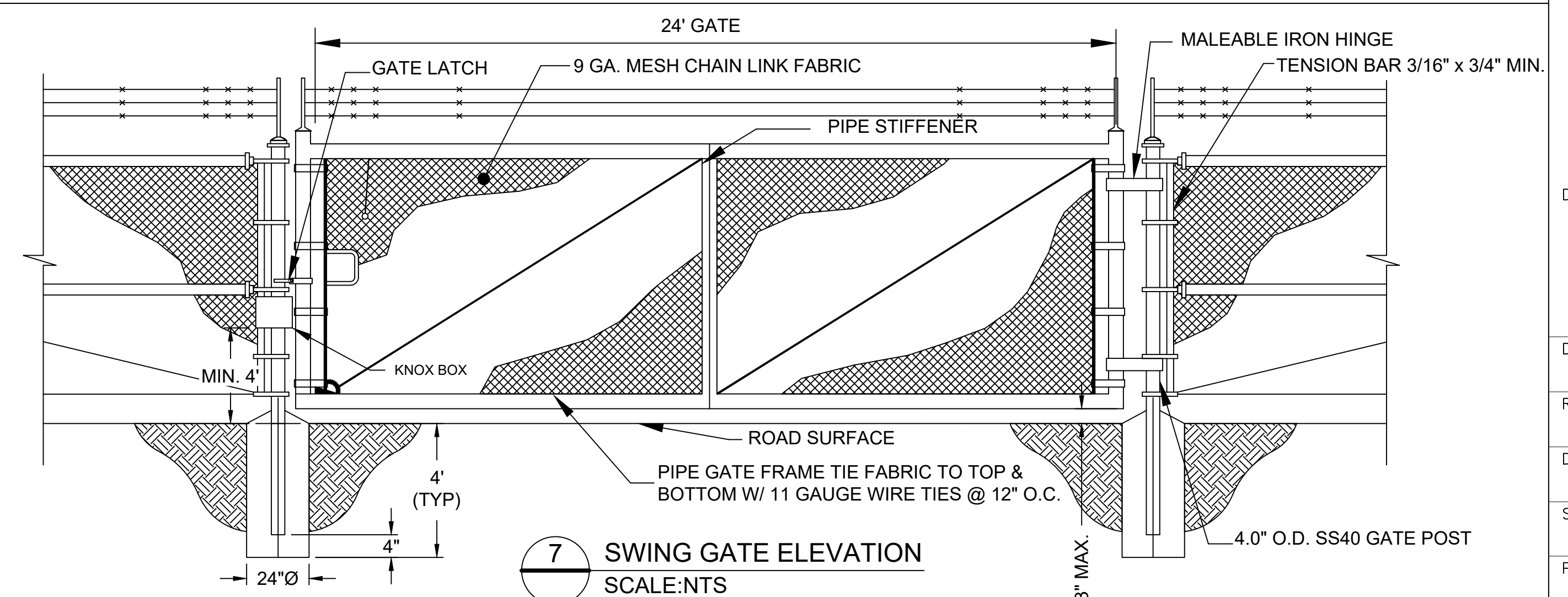
2 RACKING ELEVATION LOWEST POINT
SCALE:NTS



4 INVERTER FRONT ELEVATION
SCALE:NTS



6 FENCE ELEVATION
SCALE:NTS



7 SWING GATE ELEVATION
SCALE:NTS



ENGINEER:
CALIFORNIA
ENGINEERING CO.
OWNER OF RECORD:
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PROJECT APPLICANT:
RP NAPA SOLAR 2, LLC

SOSCOL FERRY
SOLAR

SOSCOL FERRY RD,
NAPA, CA 94559, USA

LAT: 38.237851°
LON: -122.275392°

REV. NO.	DESCRIPTION	DATE
0	FOR UTILITY APPLICATION	09/17/19

SHEET TITLE:

ELEVATION
DETAILS

DRAWING NO.:

PV-101

DRAWN BY:

LR

REVIEWED BY:

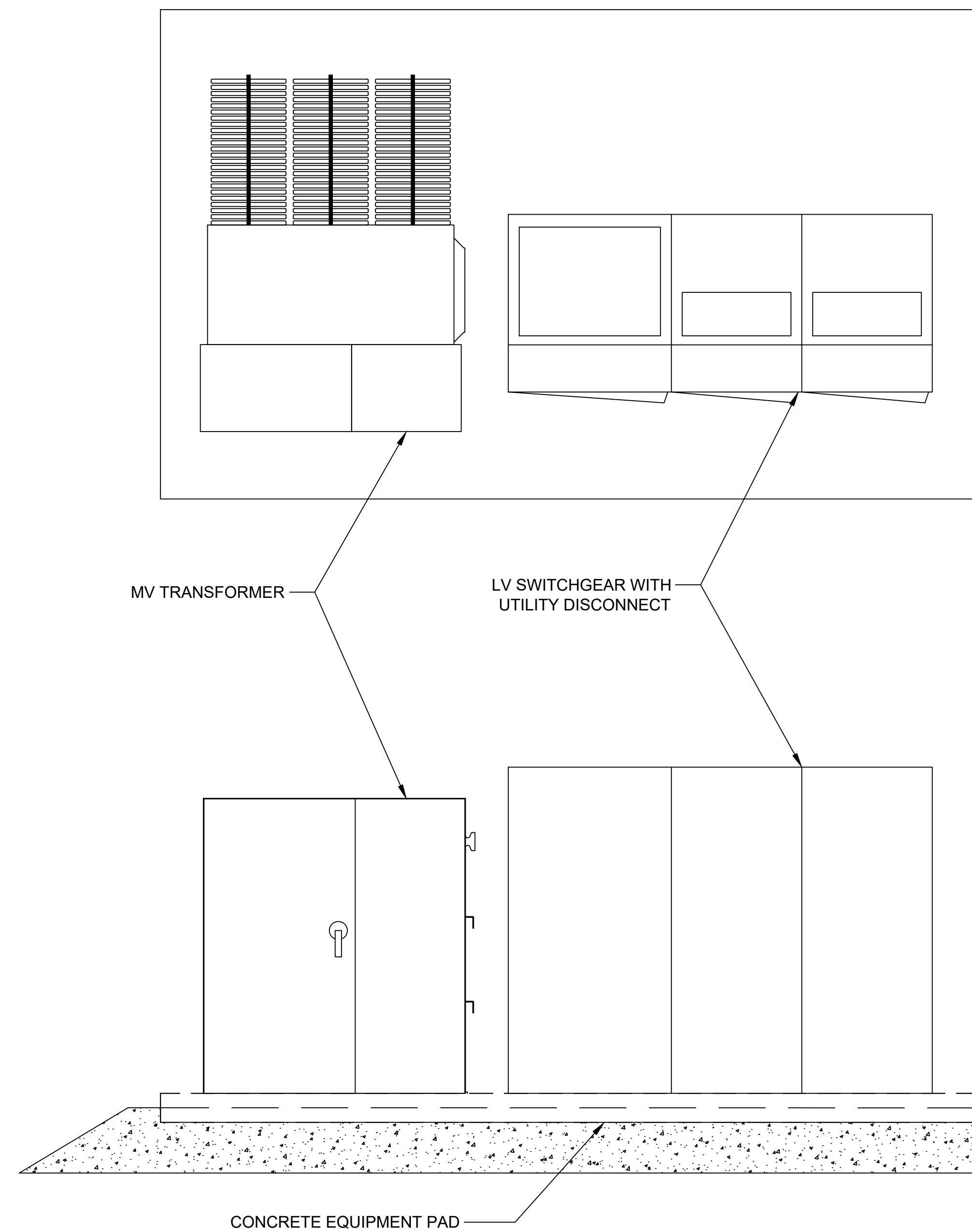
DATE:

09/17/19

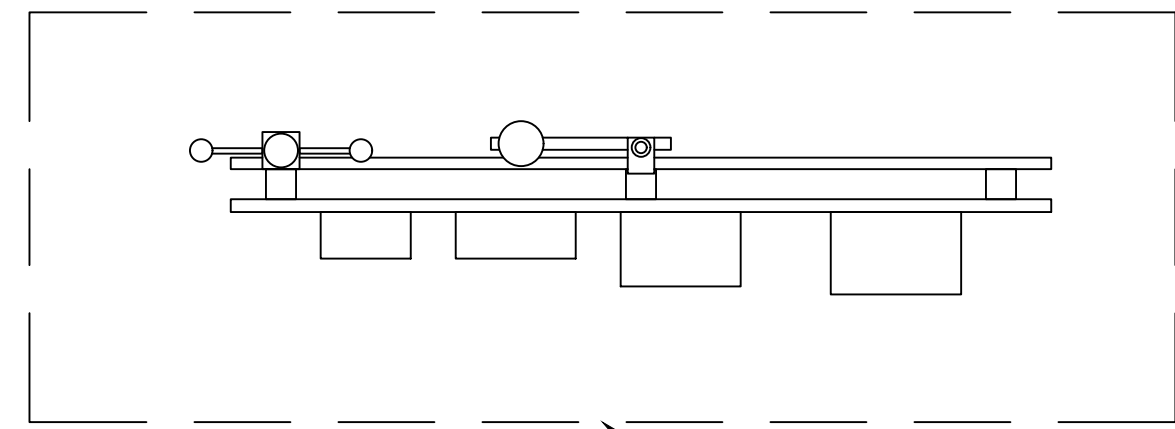
SCALE:

AS SHOWN

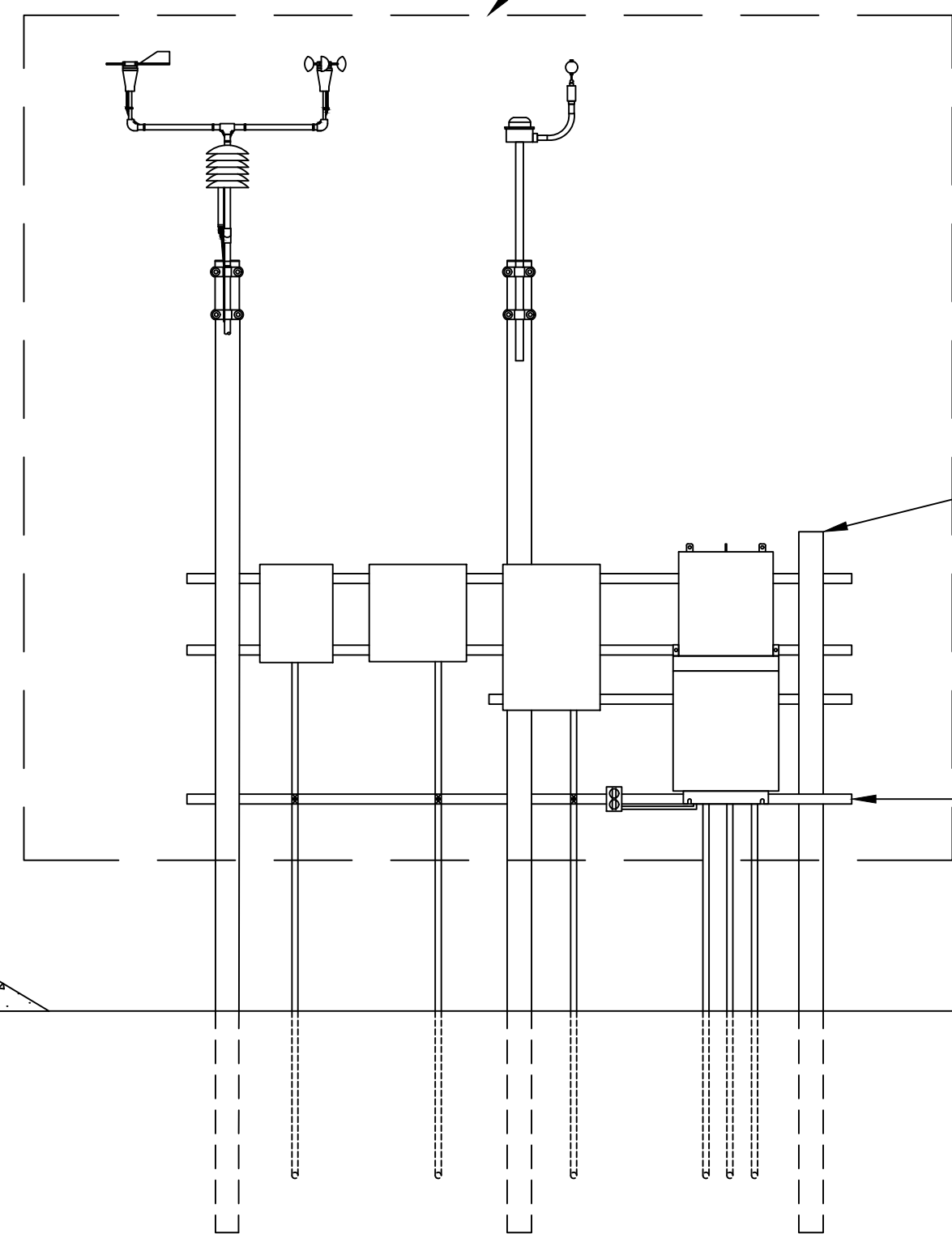
PROJECT NO.:



1 POWER STATION AND EQUIPMENT RACK ELEVATION
SCALE:NTS



STRUT MOUNTED ELECTRICAL EQUIPMENT ON GALVANIZED STEEL SUPPORT RACK



4" X 4" GALV. STEEL POST

1-5/8" X 1-5/8" GALV STRUT. ATTACH TO 4 X 4 POST WITH HILTI S-MD 12-14 X 3/4 HWH #3 KWIK-COTE TEK SCREWS AND 12 X 1" 1B-8 SS WASHERS

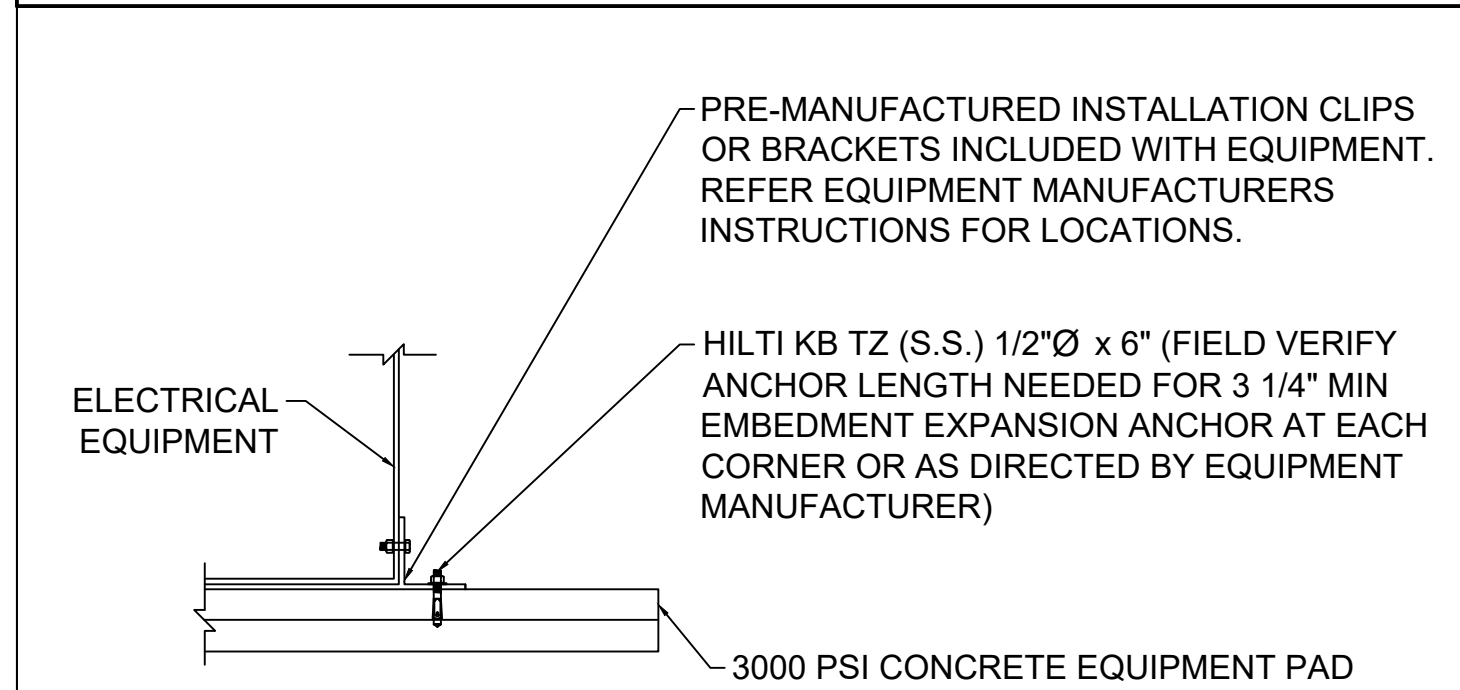
CONCRETE NOTES

- 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.
- CONCRETE MIX PORTIONS, INCLUDING DOCUMENTATION OF MATERIALS, ADMIXTURE PRODUCT INFORMATION, AND COMPRESSIVE STRENGTH OF MIX.
- MINIMUM CONCRETE STRENGTH CLASSES FOR VARIOUS STRUCTURES SHALL BE AS FOLLOWS:

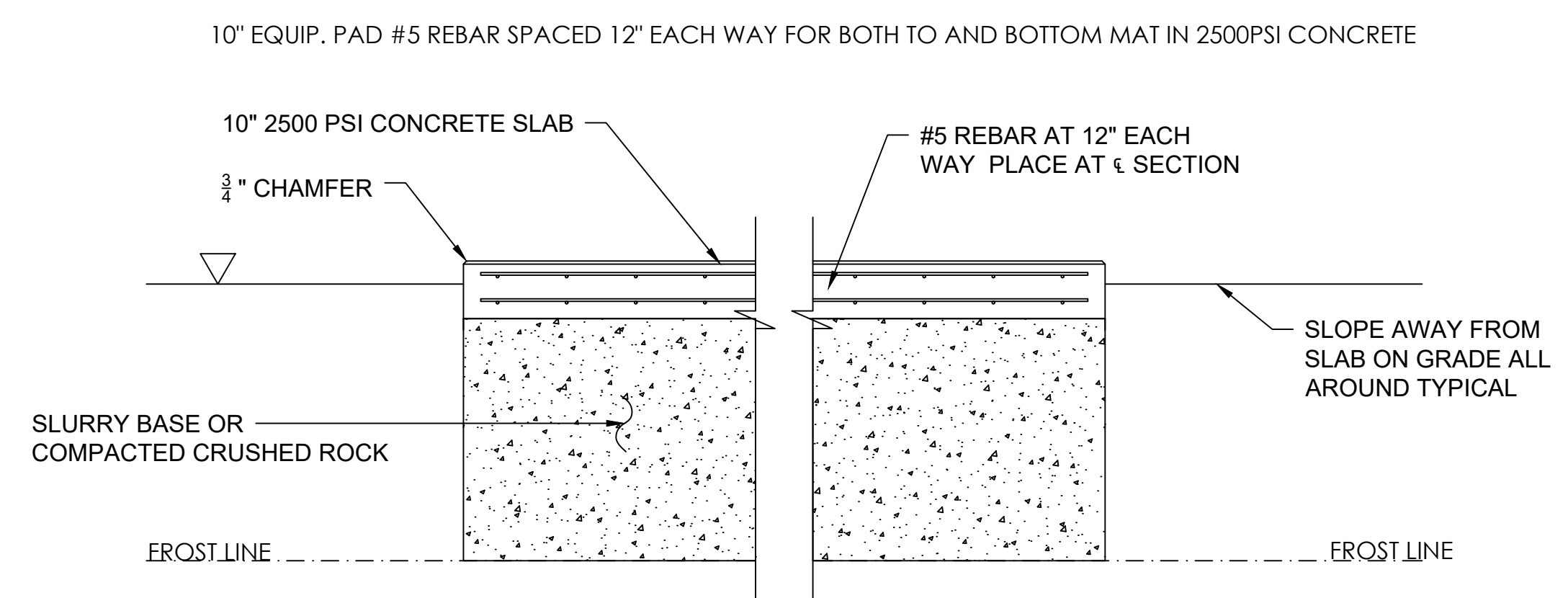
ITEM	MINIMUM ULTIMATE COMPRESSIVE STRENGTH (psi) (AT 28 DAYS)
ELECTRICAL DUCTBANKS UNDER ROADWAY CROSSINGS	3,000*
MAJOR EQUIPMENT / STRUCTURES WHERE REQUIRED AND ALL OTHER CONSTRUCTION	3,000*

*MINIMUM VALUES UNLESS SPECIFICALLY NOTED OTHERWISE IN DESIGN

- REINFORCING BARS SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60. WELDED FABRIC SHALL CONFORM TO ASTM A185. PLAIN WIRE SHALL CONFORM TO ASTM A82. PLACEMENT SHALL BE IN ACCORDANCE WITH CHAPTERS 7 AND 12 OF ACI 318 AND THE MANUAL OF STANDARD PRACTICE OF THE CONCRETE REINFORCING STEEL INSTITUTE.
- CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150, TYPE I OR TYPE II OR AS SUGGESTED BY THE GEOTECHNICAL REPORT.
- AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33 OR AS SUGGESTED BY THE GEOTECHNICAL REPORT.



2 CONCRETE ANCHOR DETAIL
SCALE:NTS



3 CONCRETE EQUIPMENT PAD DETAIL
SCALE:NTS



ENGINEER:
CALIFORNIA
ENGINEERING CO.
OWNER OF RECORD:
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THERESE BLODGETT-GILES
PROJECT APPLICANT:
RP NAPA SOLAR 2, LLC

SOSCOL FERRY SOLAR

SOSCOL FERRY RD,
NAPA, CA 94559, USA

LAT: 38.237851°
LON: -122.275392°

REV. NO.	DESCRIPTION	DATE
0	FOR UTILITY APPLICATION	09/17/19

SHEET TITLE:

POWER STATION ELEVATION DETAILS

DRAWING NO.:

PV-102

DRAWN BY:

LR

REVIEWED BY:

DATE:

09/17/19

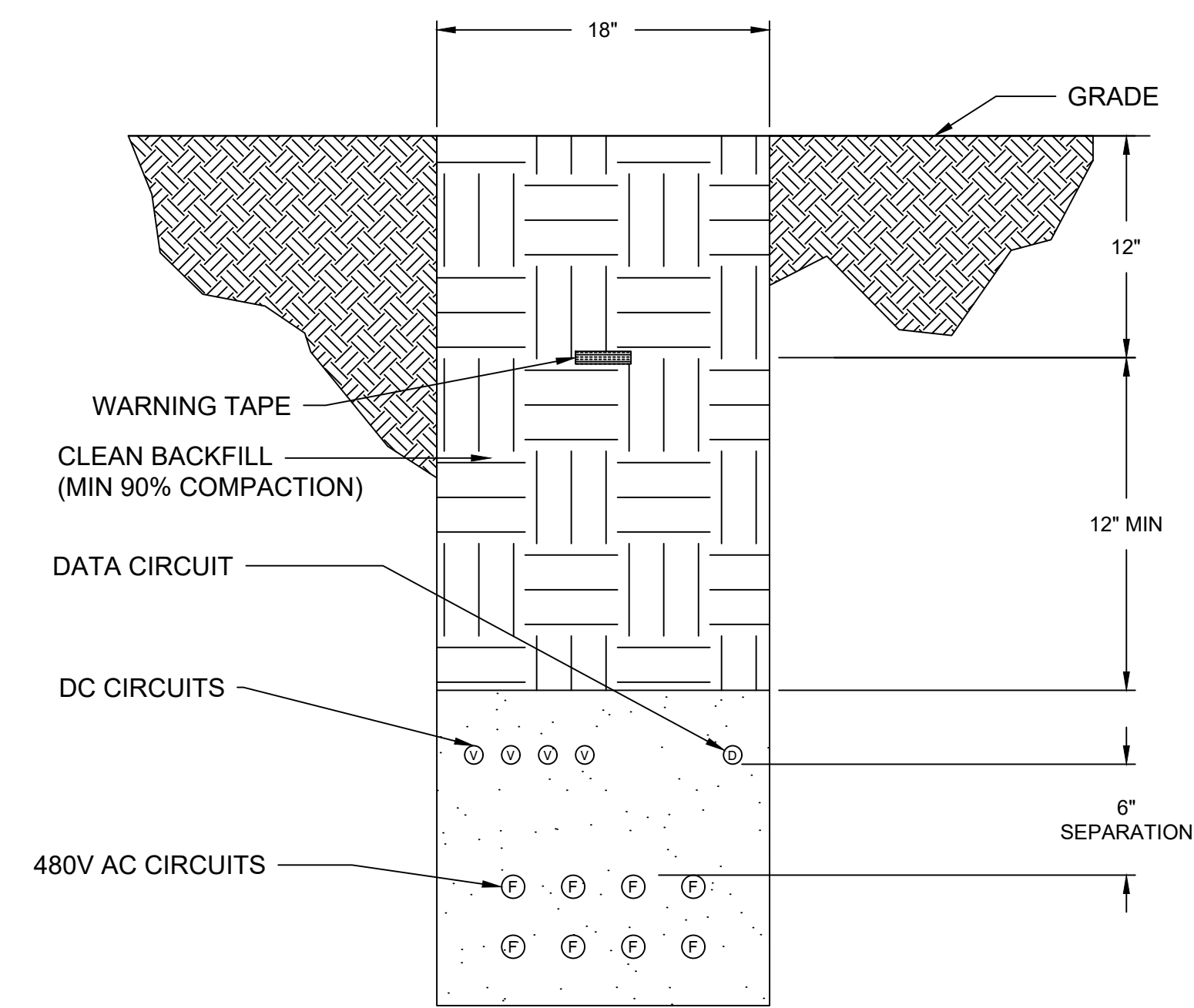
SCALE:

AS SHOWN

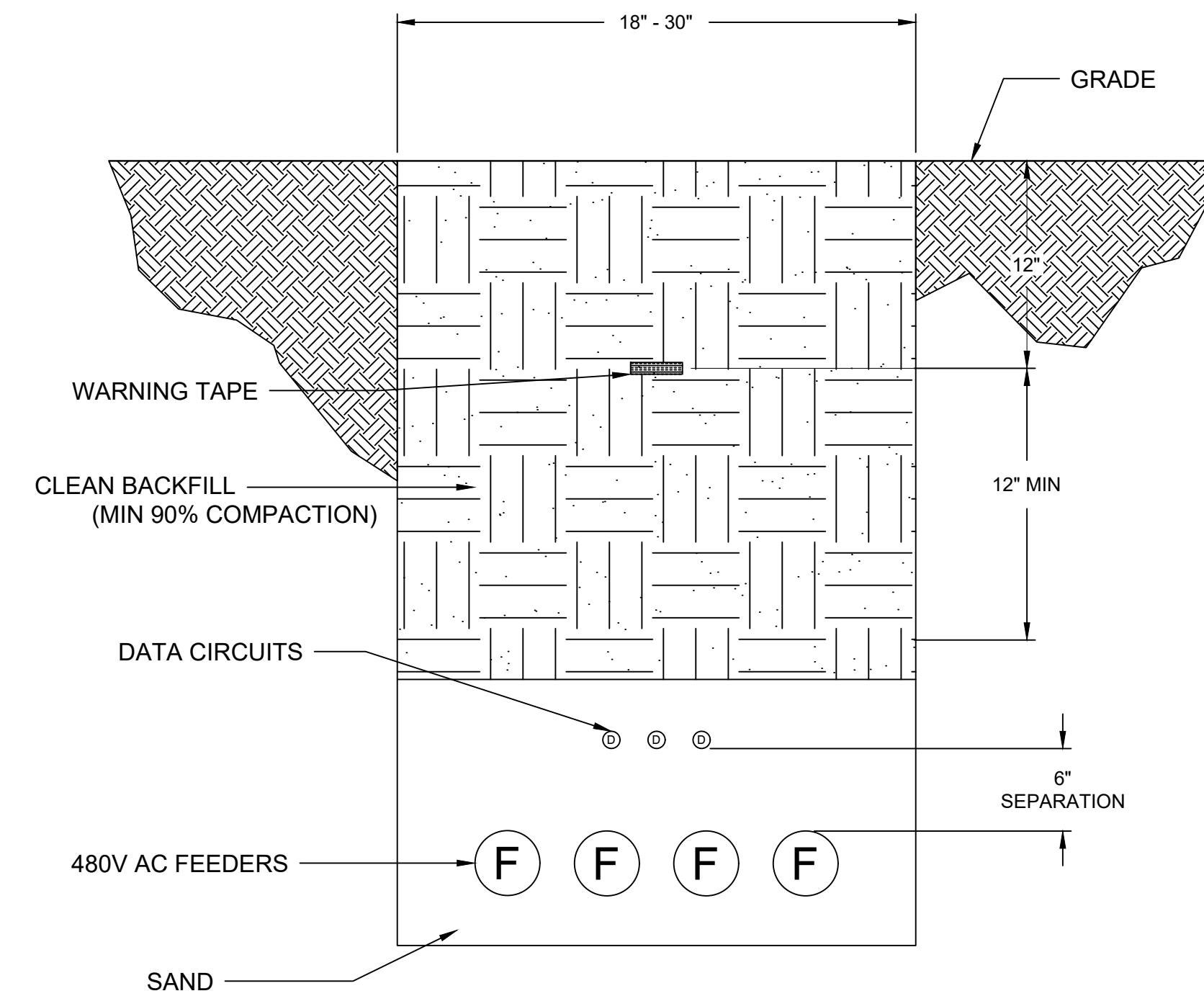
PROJECT NO.:

TRENCH NOTES

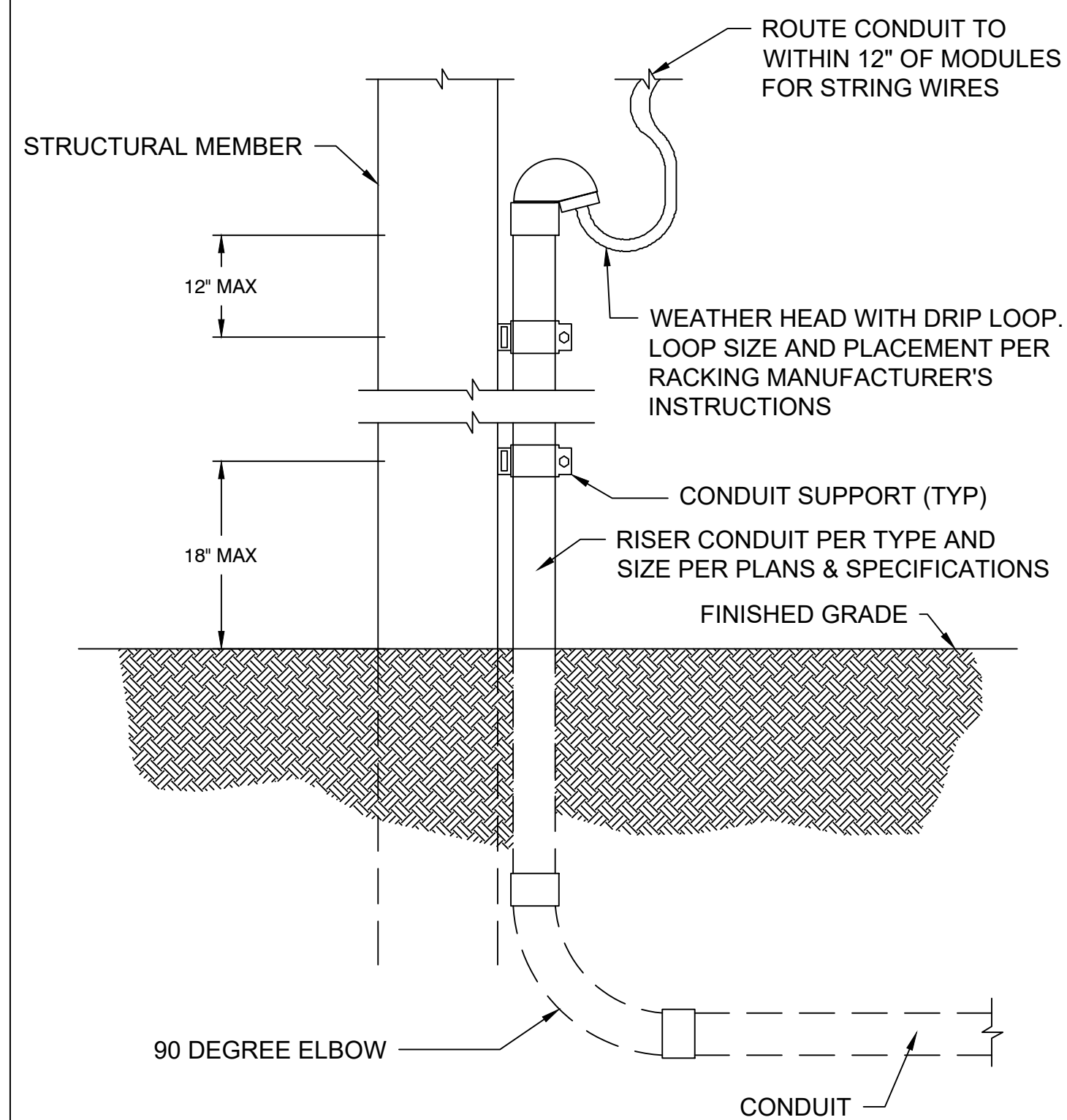
1. PROVIDE 3" CLEARANCE FROM SIDES AND BOTTOM OF TRENCH TO ANY CONDUIT OR CABLE.
2. PLACE 6" MINIMUM SAND COVER OVER CONDUIT AND CABLES. PLACE 3" MINIMUM SAND ON BOTTOM AND SIDES OF CABLES.
3. WITH CONDUIT AND CABLES IN PLACE, COMPACT TO 90% USING NO MECHANICAL EQUIPMENT. COMPACT 12" OF TRENCH TO 95% IN PAVEMENT AREAS.
4. USE NATIVE SOIL BACKFILL, LOWER 10-12" IS SAND
5. MAINTAIN MIN 36" CLEARANCE WHEN PARALLELING STRUCTURAL SUPPORTS. IN NO CASE SHALL CLEARANCE BE LESS THAN 5 TIMES DIAMETER OF DRIVEN PILES.
6. SURFACE ACTIVITIES AND LOADING OVER BURIED CABLES SHALL NOT EXCEED RATED CRUSH CAPACITY OF CABLES OR CONDUITS.
7. MAINTAIN MINIMUM 4" VERTICAL CLEARANCE WHERE DC CIRCUITS CROSS OR PARALLEL DC & AC CIRCUITS FROM OTHER LOW VOLTAGE SYSTEMS.
8. MAINTAIN MINIMUM 12" CLEARANCE BETWEEN ALL UNDERGROUND UTILITIES AND MEDIUM VOLTAGE CIRCUITS. VERIFY EXACT REQUIREMENTS WITH UTILITY BEFORE STARTING UNDERGROUND INSTALLATION.
9. 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.
10. MAINTAIN MINIMUM 6" OF SEPARATION BETWEEN DIFFERENT VOLTAGE CLASSES & MIN 3" SEPARATION BETWEEN CONDUITS, GROUND RODS AND UNDERGROUND OBSTRUCTIONS.



1 AC FEEDER TRENCH WITH DC SOURCE CIRCUIT & DATA
SCALE:NTS

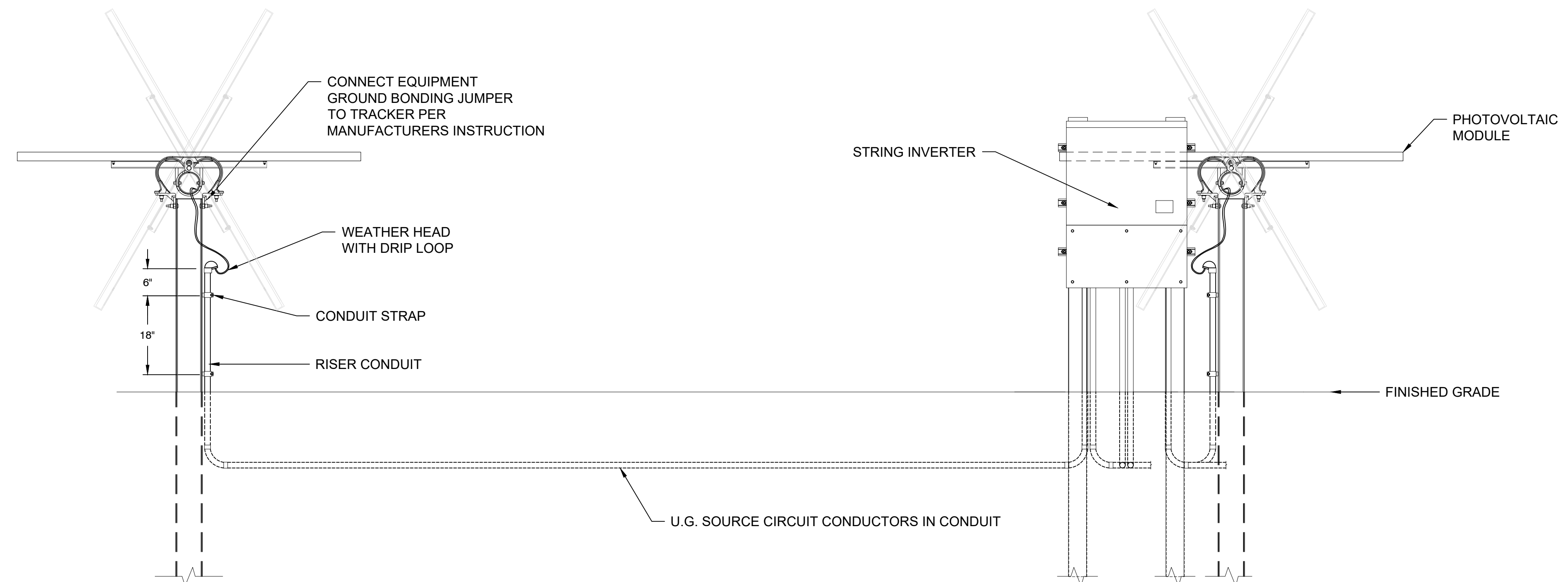


2 AC FEEDER TRENCH
SCALE:NTS



- NOTES:
1. DIMENSION BETWEEN RISER CONDUIT AND RACKING STRUCTURAL MEMBER TBD BY CONTRACTOR IN FIELD. USE CODE APPROVED MEANS AND METHODS.
 2. USE APPROVED CONDUIT FOR EXPOSED AREA PER NEC 352-10 (f) & NEC 352-12 (c).

4 RISER CONDUIT DETAIL
SCALE:NTS



3 DC SOURCE CIRCUIT (JUMPER) TRENCH DETAIL
SCALE:NTS



ENGINEER:
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ENGINEERING CO.
OWNER OF RECORD:
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PROJECT APPLICANT:
RP NAPA SOLAR 2, LLC

**SOSCOL FERRY
SOLAR**

SOSCOL FERRY RD,
NAPA, CA 94559, USA

LAT: 38.237851°
LON: -122.275392°

REV. NO.	DESCRIPTION	DATE
0	FOR UTILITY APPLICATION	09/17/19

SHEET TITLE:

**TRENCH
DETAILS**

DRAWING NO.:

PV-103

DRAWN BY:

LR

REVIEWED BY:

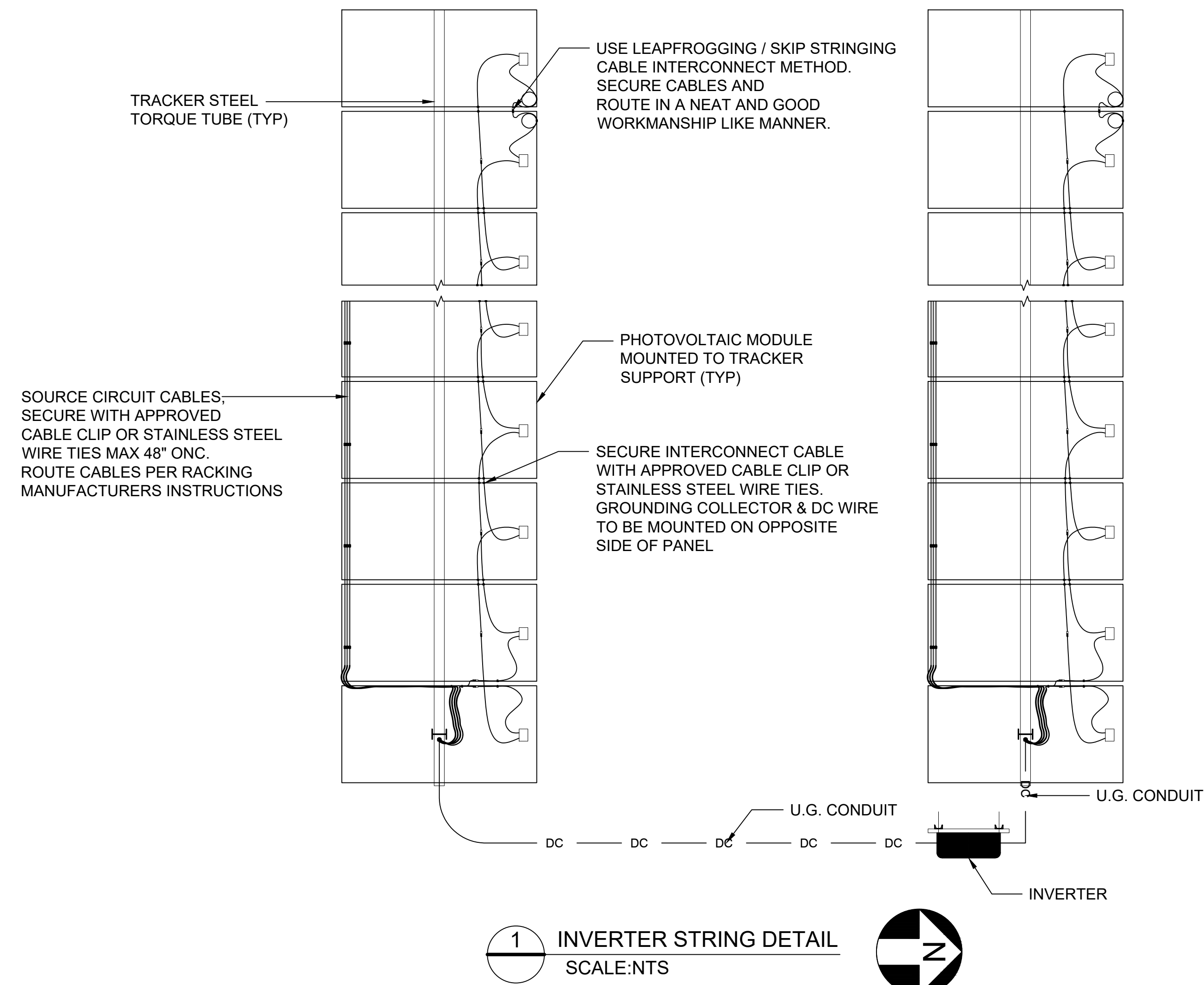
DATE:

09/17/19

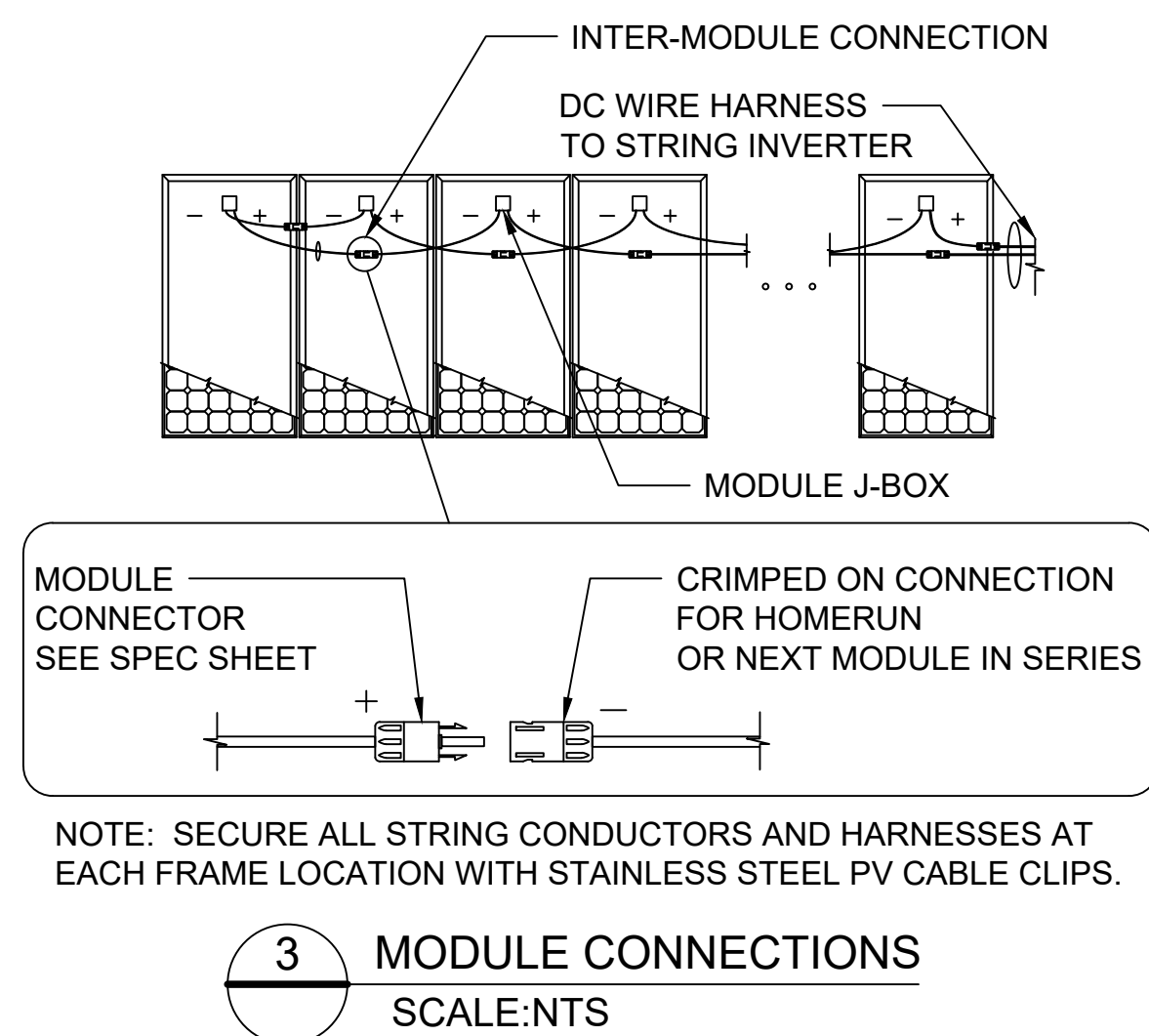
SCALE:

AS SHOWN

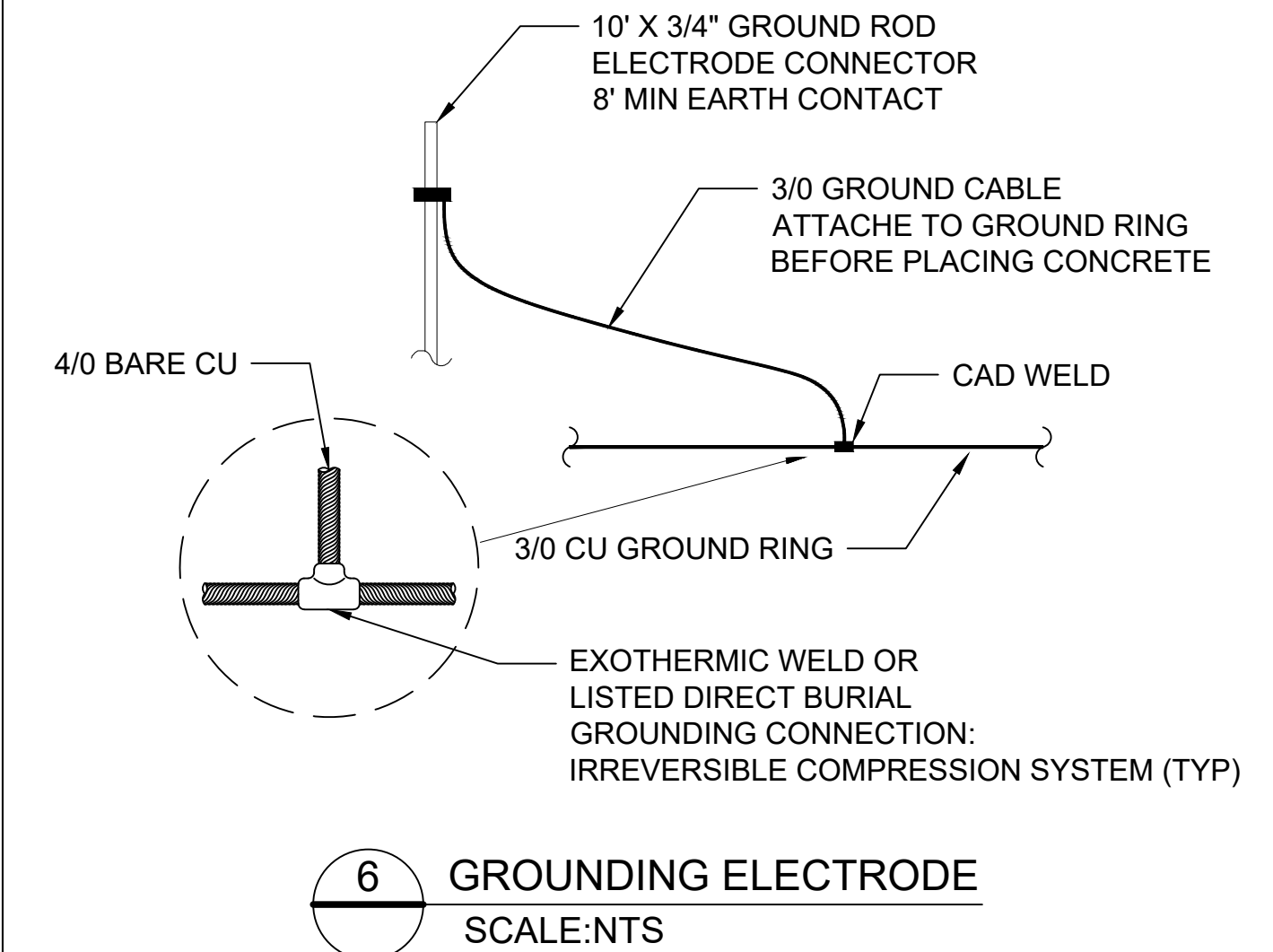
PROJECT NO.:



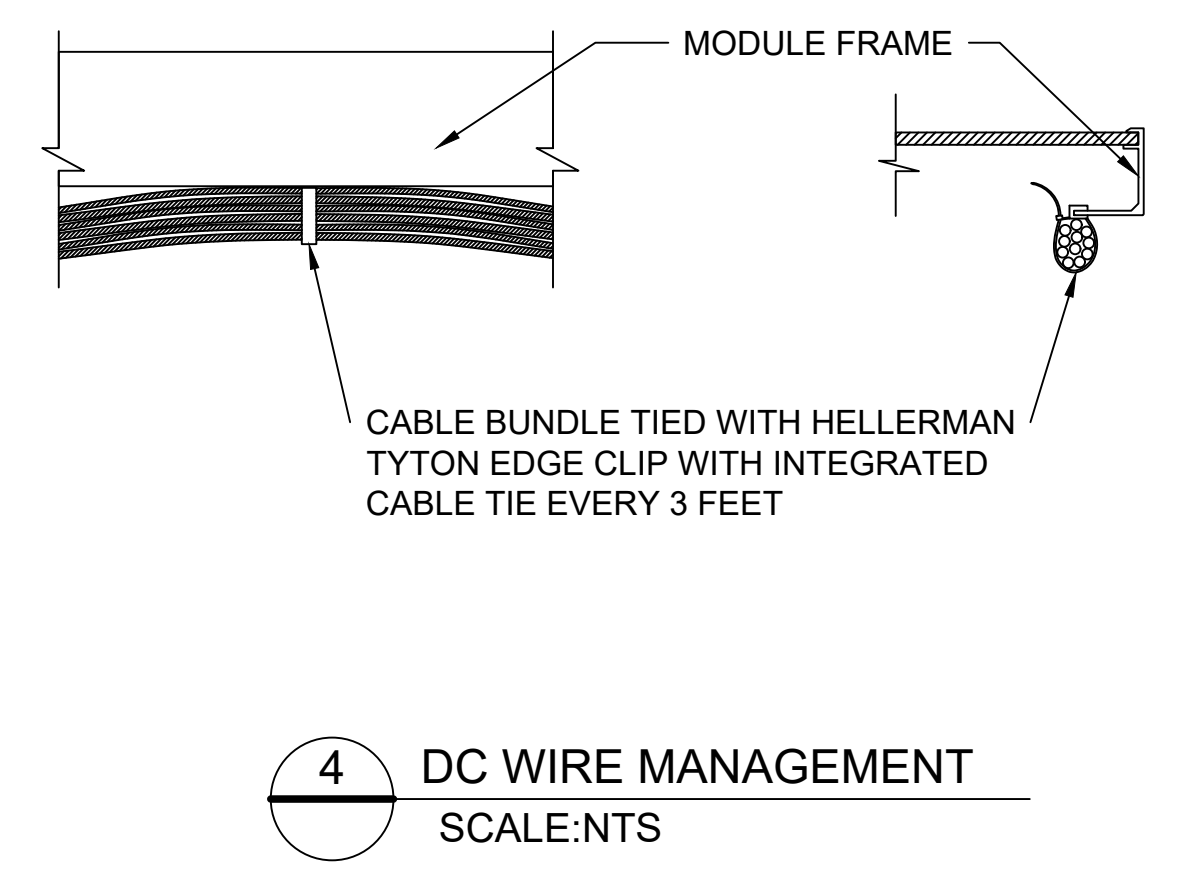
1 INVERTER STRING DETAIL
SCALE:NTS



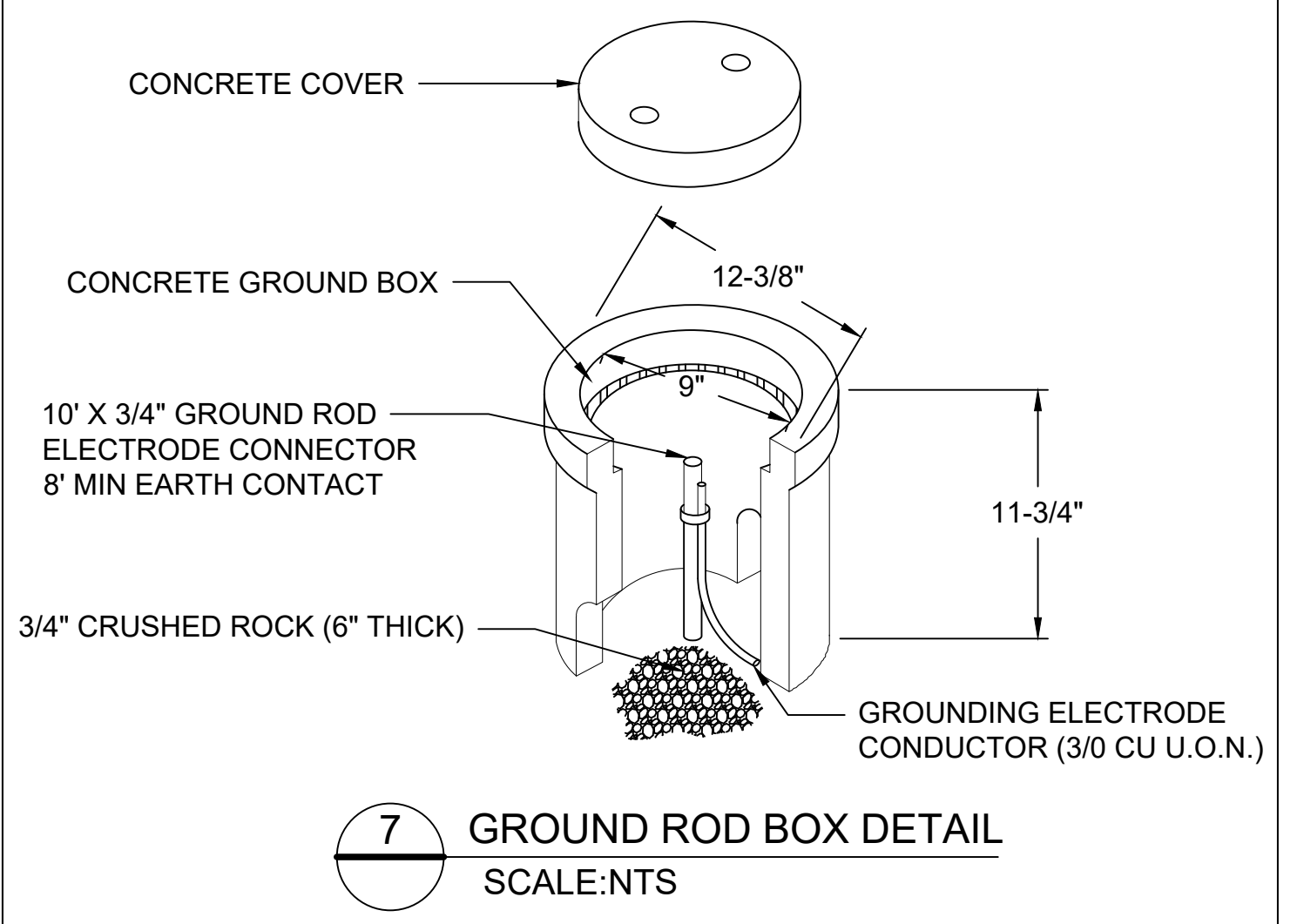
3 MODULE CONNECTIONS
SCALE:NTS



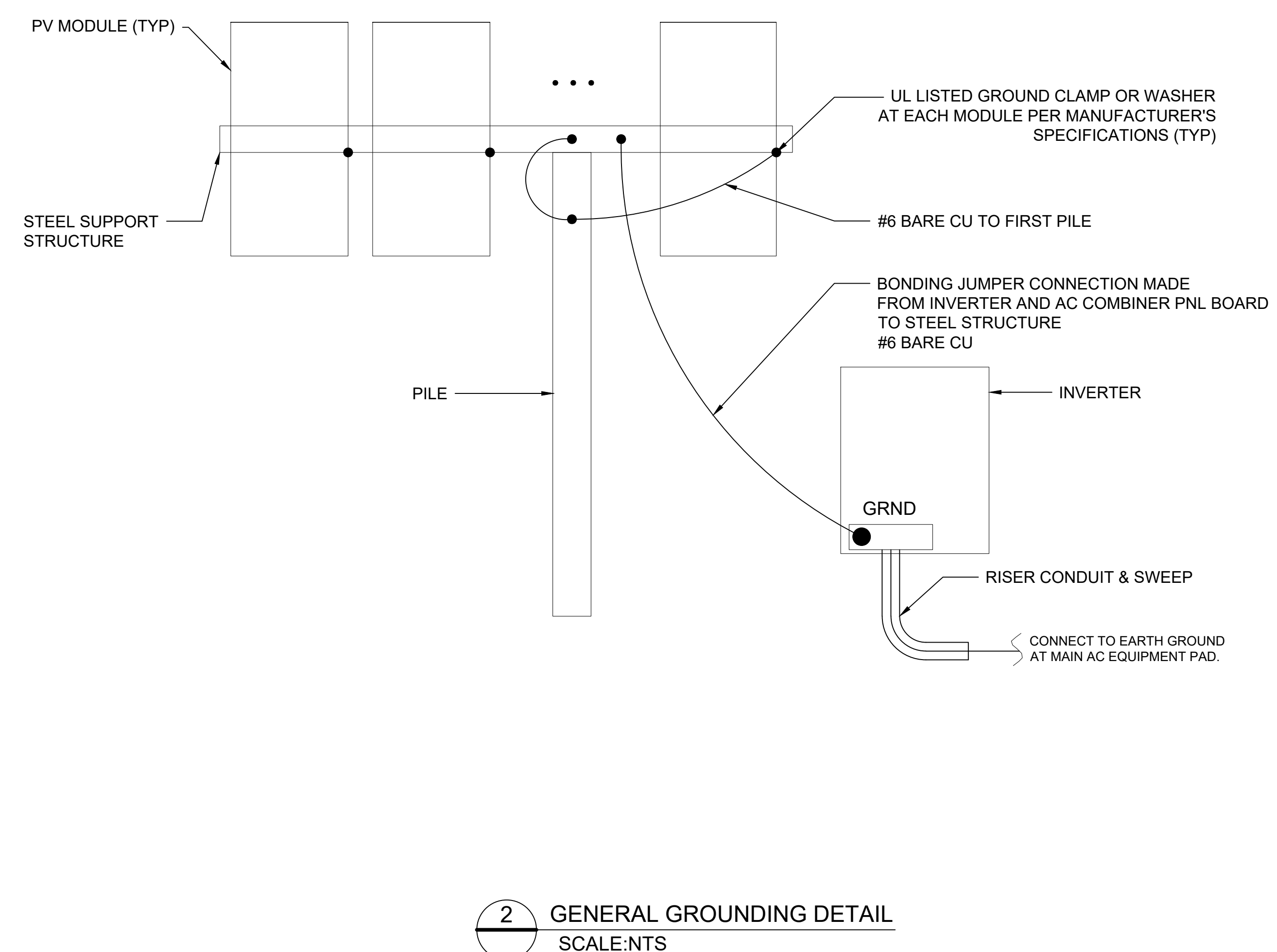
6 GROUNDING ELECTRODE
SCALE:NTS



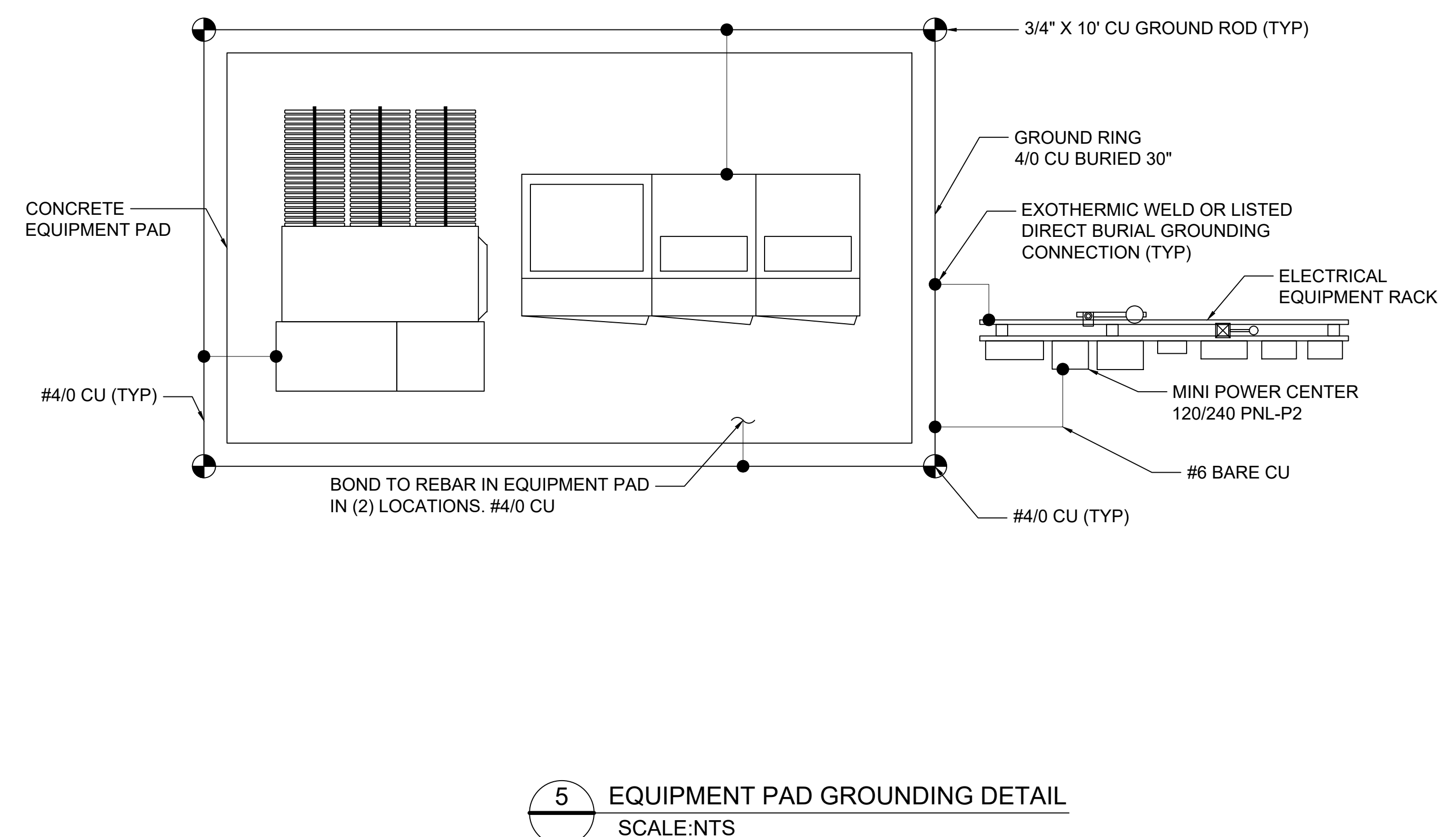
4 DC WIRE MANAGEMENT
SCALE:NTS



7 GROUND ROD BOX DETAIL
SCALE:NTS



2 GENERAL GROUNDING DETAIL
SCALE:NTS



5 EQUIPMENT PAD GROUNDING DETAIL
SCALE:NTS



ENGINEER:
CALIFORNIA
ENGINEERING CO.
OWNER OF RECORD:
KIMBAL GRIGGS GILES &
THERESE BLODGETT-GILES
PROJECT APPLICANT:
RP NAPA SOLAR 2, LLC

SOSCOL FERRY SOLAR

SOSCOL FERRY RD,
NAPA, CA 94559, USA

LAT: 38.237851°
LON: -122.275392°

REV. NO.	DESCRIPTION	DATE
0	FOR UTILITY APPLICATION	09/17/19

SHEET TITLE:

ELECTRICAL DETAILS

DRAWING NO.:

PV-104

DRAWN BY:

LR

REVIEWED BY:

DATE:

09/17/19

SCALE:

AS SHOWN

PROJECT NO.:



(E) GRAVEL ACCESS ROAD TO REMAIN

EXISTING CONDITIONS	
ITEM	VALUE
PROJECT AREA, FENCED (SQFT)	680,622
PROJECT AREA, FENCED (ACRES)	15.62
PROPOSED GRAVEL ROAD OUTSIDE OF FENCED AREA (SQFT)	1,982
TOTAL PROJECT AREA (SQFT)	682,604
TOTAL PRE-PROJECT IMPERVIOUS (SQFT)	0
GENERAL TERRAIN SLOPE	WEST
SLOPE %	~1.5%

GENERAL NOTES	
1. ELEVATION DATA SOURCE:	
1.1.	TITLE: NATIONAL ELEVATION DATA 3 METER OR BETTER
1.2.	ORIGINATOR: USDS / NRCS NATIONAL GEOSPATIAL CENTER OF EXCELLENCE



SOSCOL FERRY SOLAR

1605 SOSCOL FERRY RD.
NAPA, CA 94559

LAT: 38.237851°
LON: -122.275392°

REV. NO.	DESCRIPTION	DATE
0	USE PERMIT APPLICATION	09/13/19

SHEET TITLE:

DRAINAGE PLAN

EXISTING

DRAWING NO.:

C-100

DRAWN BY:

CA

REVIEWED BY:

DATE:

09/13/19

SCALE:

AS SHOWN

PROJECT NO.:



EXISTING CONDITIONS	
ITEM	VALUE
PROJECT AREA, FENCED (SQFT)	680,622
PROJECT AREA, FENCED (ACRES)	15.62
PROPOSED GRAVEL ROAD OUTSIDE OF FENCED AREA (SQFT)	1,982
TOTAL PROJECT AREA (SQFT)	682,604
TOTAL PRE-PROJECT IMPERVIOUS (SQFT)	0
GENERAL TERRAIN SLOPE	WEST
SLOPE %	~1.5%
TOTAL NEW GRAVEL ROADS (SQFT)	7,620
TOTAL NEW POWER STATIONS (SQFT)	314
TOTAL NEW MODULE ARRAYS (SQFT)	170,595
TOTAL NEW IMPERVIOUS SURFACE (SQFT)	178,529
TOTAL POST-CONSTRUCTION IMPERVIOUS SURFACE (SQFT)	178,529
PERVIOUS SURFACE AREA REDUCTION (SQFT)	26.15%

GENERAL NOTES

- ELEVATION DATA SOURCE:
 - TITLE: NATIONAL ELEVATION DATA 3 METER OR BETTER
 - ORIGINATOR: USDS / NRCS NATIONAL GEOSPATIAL CENTER OF EXCELLENCE
- NEW IMPERVIOUS AREAS (DRAINAGE MANAGEMENT AREA, DMA'S) TO DRAIN TO SURROUNDING PERVIOUS AREAS OF NON-NATIVE ANNUAL GRASSLAND AND EXISTING MATURE VEGETATION, WITH MAX RATIO OF 2:1, PERVIOUS TO IMPERVIOUS.
- NO GRADING IN EXCESS OF 50 CY IS ANTICIPATED.



SOSCOL FERRY SOLAR

1605 SOSCOL FERRY RD.
NAPA, CA 94559

LAT: 38.237851°
LON: -122.275392°

REV. NO.	DESCRIPTION	DATE
0	USE PERMIT APPLICATION	09/13/19

SHEET TITLE:

DRAINAGE AND GRADING PLAN

PROPOSED

DRAWING NO.:

C-101

DRAWN BY:	CA
REVIEWED BY:	
DATE:	09/13/19
SCALE:	AS SHOWN
PROJECT NO.:	