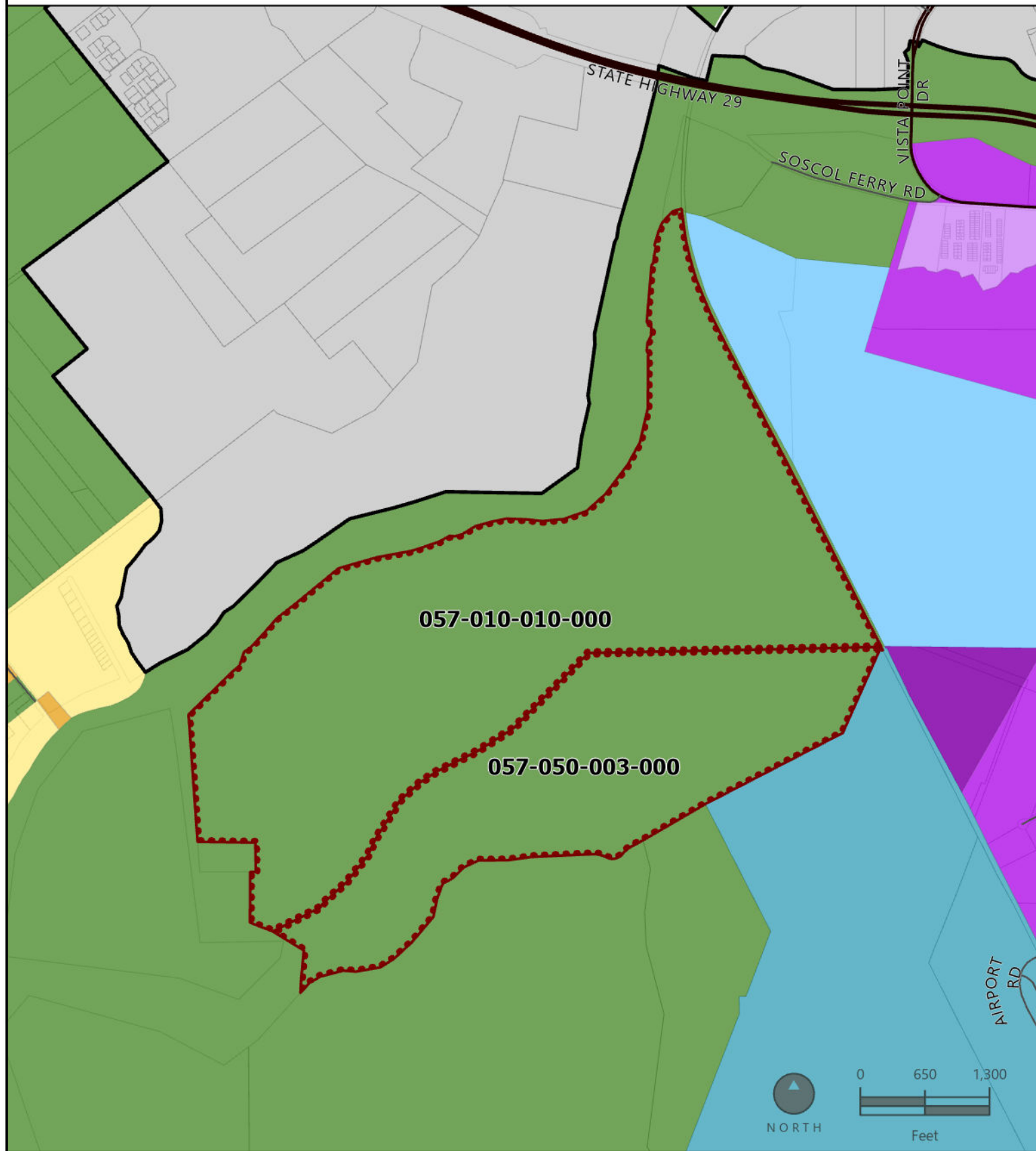
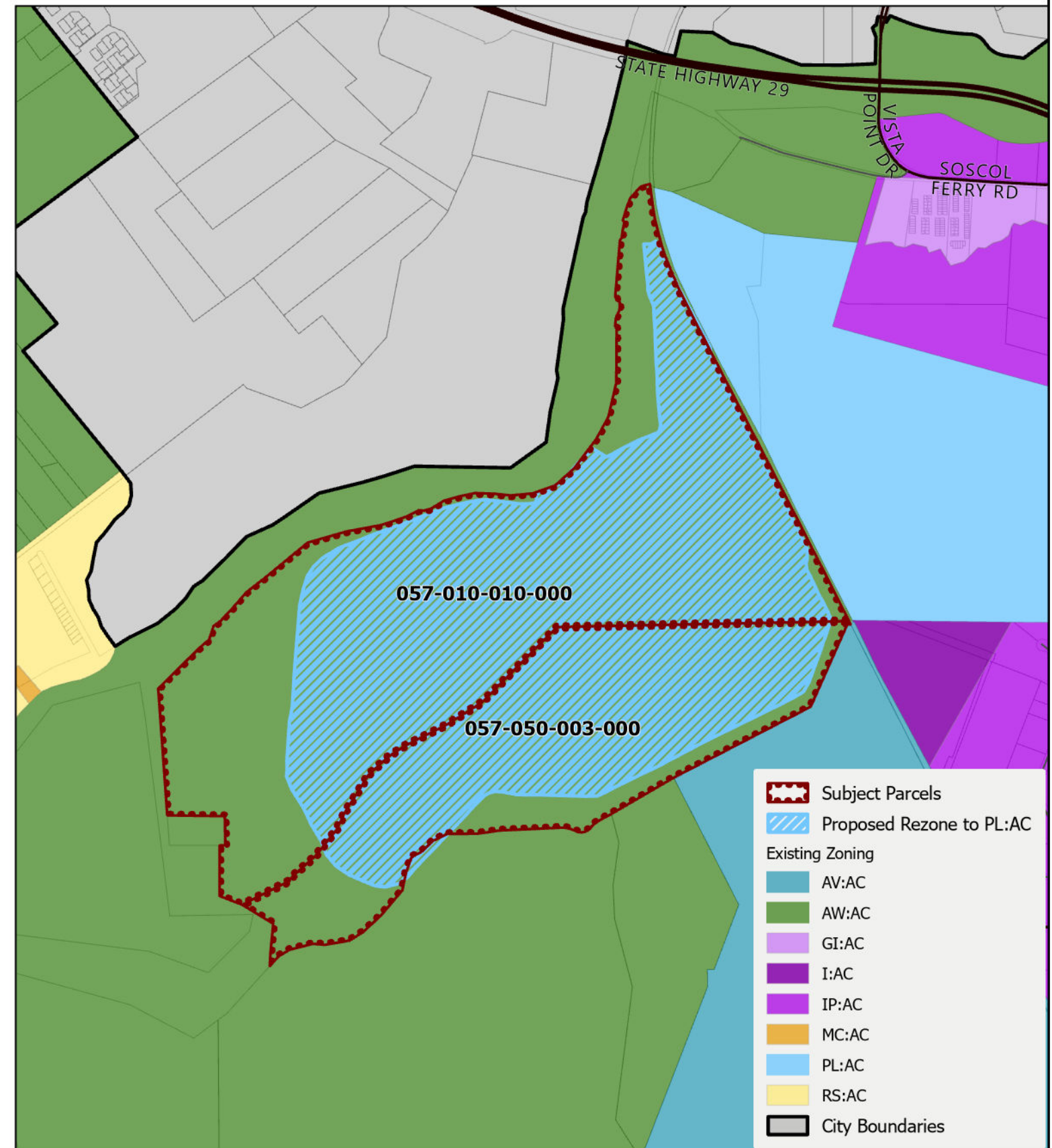













Existing Zoning



Proposed Zoning



-  Subject Parcels
-  Proposed Rezone to PL:AC
- Existing Zoning
-  AV:AC
-  AW:AC
-  GI:AC
-  I:AC
-  IP:AC
-  MC:AC
-  PL:AC
-  RS:AC
-  City Boundaries

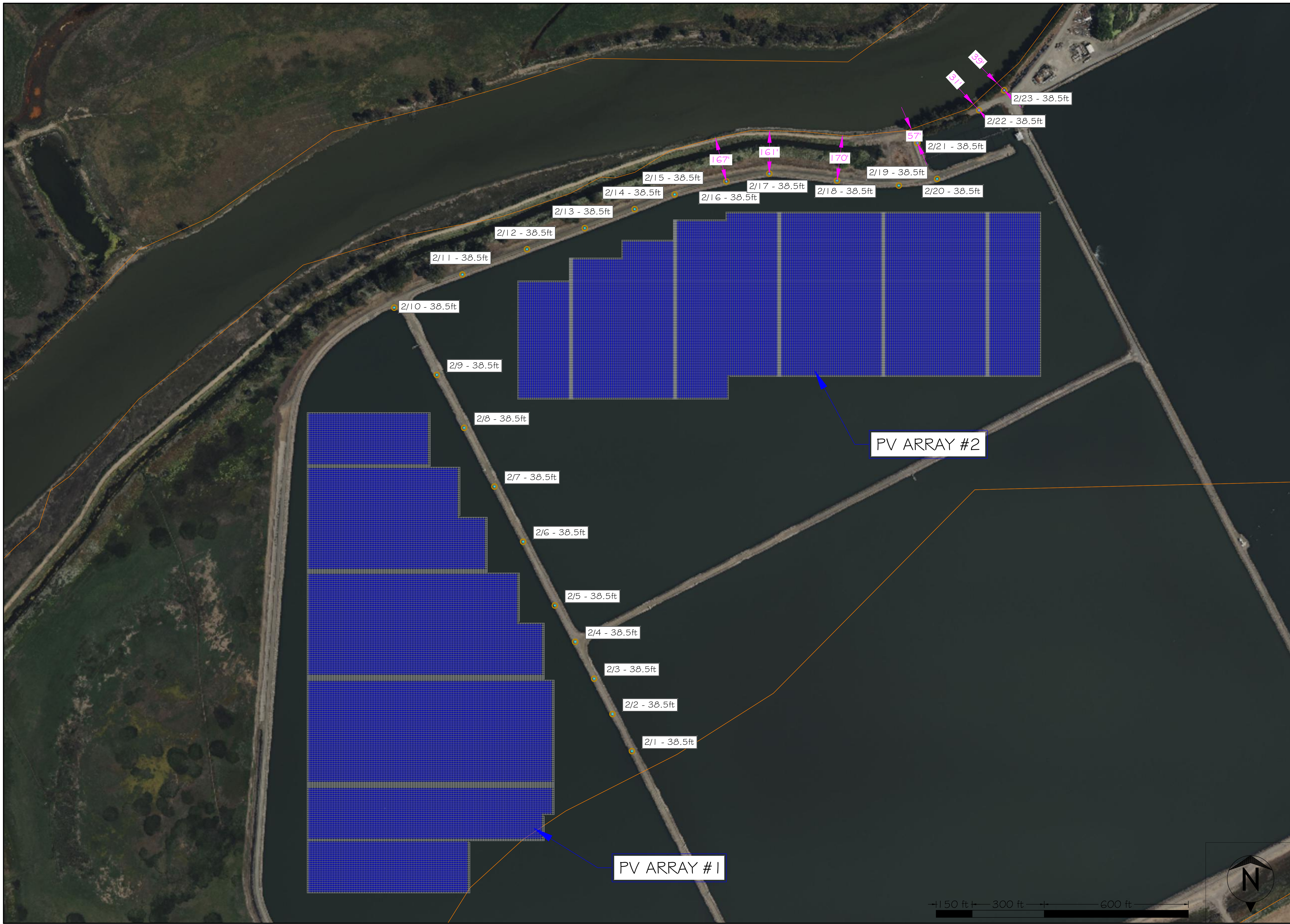
Existing vs. Proposed Zoning | P23-00181

Disclaimer: This map was prepared for informational purposes only. No liability is assumed for the accuracy of the data delineated hereon.

DATE PUBLISHED: 3/15/2024 AUTHOR: S.C.
 DATE REVISED: MAP SCALE: 1:15,600

PLANNING, BUILDING, &
 ENVIRONMENTAL SERVICES
 1195 THIRD STREET, SUITE 210
 NAPA, CA 94559
 (707) 253-4417





OWNER:
 DYNAMO SOLAR LLC,
 755 BAYWOOD DRIVE,
 PETALUMA, CA, 94954






CONTRACTOR:

 755 BAYWOOD DRIVE,
 2ND FLOOR, SUITE 201,
 PETALUMA, CA 94954

PROJECT:
 DYNAMO SOLAR,
 1515 SOSCOL FERRY RD
 NAPA CA 94558

PROJECT DETAILS:
 WU5077
 34.79 MW STC
 24.5 MW AC

ENGINEERING APPROVAL:

- LEGEND:
-  PV Array
 -  Floats
 -  Poles
 -  Poles setback
 -  Parcel boundaries

REVISIONS

| DESCRIPTION | DATE | REV |
|-------------|------------|-----|
| SITE PLAN | 12/15/2023 | 01 |
| | | |
| | | |
| | | |
| | | |
| | | |

SHEET TITLE:
 A I. O DISTRIBUTION
 POLES LOCATION
 AND HEIGHT

SHEET SIZE:
 ARCH D - 36" x 24"

DESIGN & DRAFTING BY:
 SELIM LEYSSAC

REVIEWED & APPROVED BY:
 SARAN KUMAR
 KOMARI

PV ARRAY #2

PV ARRAY #1





Underground transmission line

IC SUBSTATION

OWNER:
 DYNAMO SOLAR LLC,
 755 BAYWOOD DRIVE,
 PETALUMA, CA, 94954

CONTRACTOR:

 755 BAYWOOD DRIVE,
 2ND FLOOR, SUITE 201,
 PETALUMA, CA 94954

PROJECT:
 DYNAMO SOLAR,
 1515 SOSCOL FERRY RD
 NAPA CA 94558

PROJECT DETAILS:
 WU5077
 34.79 MW STC
 24.5 MW AC

ENGINEERING APPROVAL:

LEGEND:
 NSD parcels
 Silverado Suscol parcels
 PG&E parcels
 Other parcels
 Poles
 Poles setback

| REVISIONS | | |
|-------------|-----------|-----|
| DESCRIPTION | DATE | REV |
| SITE PLAN | 1/23/2024 | 01 |
| | | |
| | | |
| | | |
| | | |

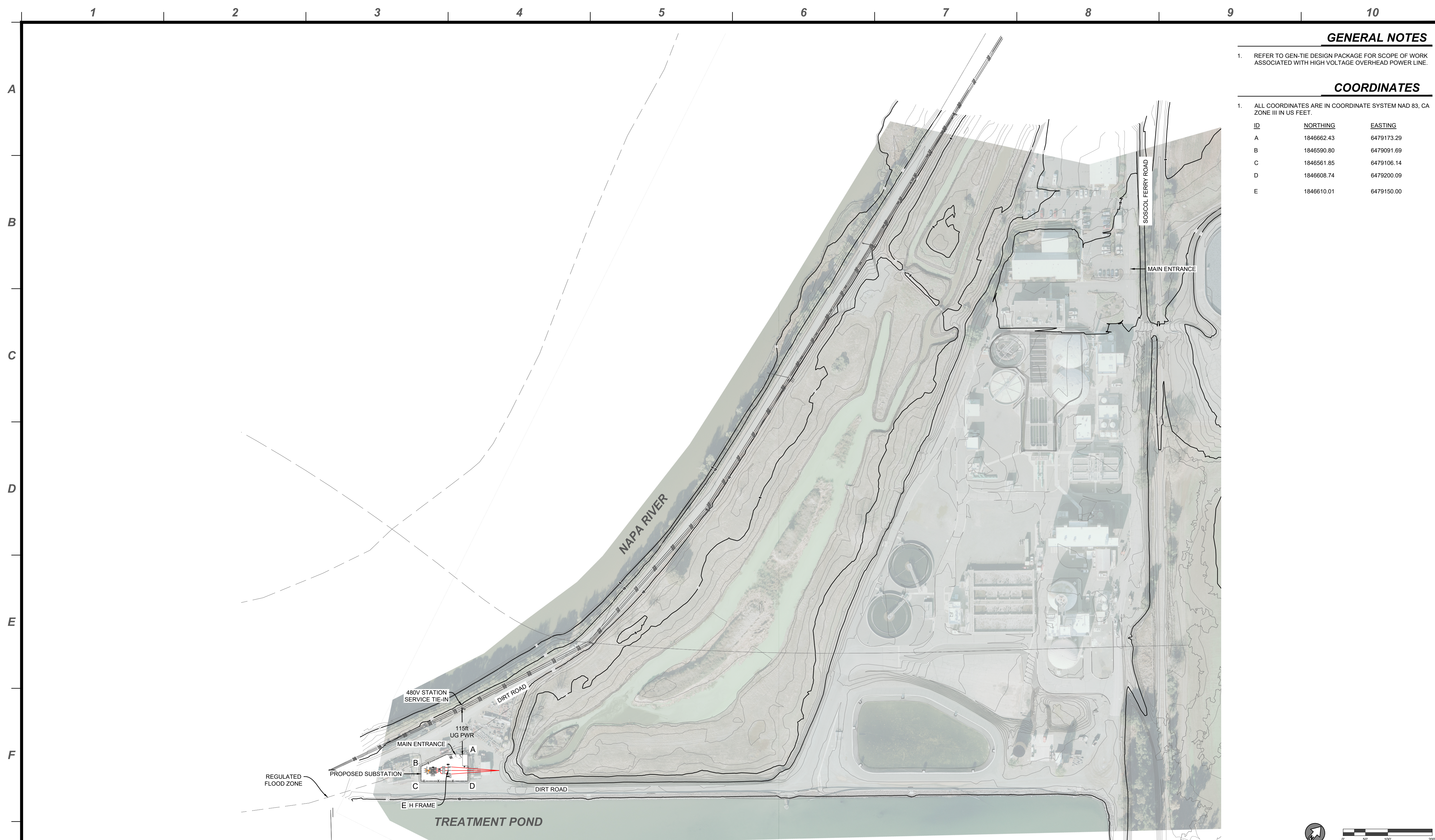
SHEET TITLE:
 A.I.I
 TRANSMISSION
 POLES LOCATION
 AND HEIGHT

SHEET SIZE:
 ARCH D - 36" x 24"

DESIGN & DRAFTING BY:
 SELIM LEYSSAC

REVIEWED & APPROVED BY:
 SARAN KUMAR
 KOMARI





GENERAL NOTES

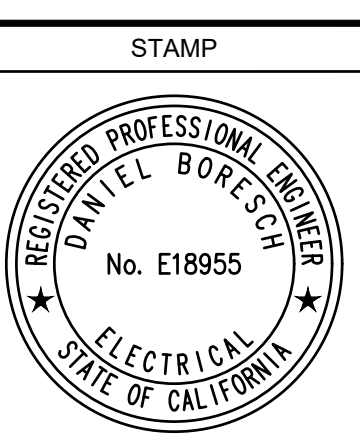
- REFER TO GEN-TIE DESIGN PACKAGE FOR SCOPE OF WORK ASSOCIATED WITH HIGH VOLTAGE OVERHEAD POWER LINE.

COORDINATES

- ALL COORDINATES ARE IN COORDINATE SYSTEM NAD 83, CA ZONE III IN US FEET.

| ID | NORTHING | EASTING |
|----|------------|------------|
| A | 1846662.43 | 6479173.29 |
| B | 1846590.80 | 6479091.69 |
| C | 1846561.85 | 6479106.14 |
| D | 1846608.74 | 6479200.09 |
| E | 1846610.01 | 6479150.00 |

| REVISION HISTORY | | |
|------------------|-------------|----------|
| No. | DESCRIPTION | DATE |
| 1 | 30% DESIGN | 02.17.23 |
| 2 | IDP | 04.26.23 |
| 3 | 60% DESIGN | 12.29.23 |
| 4 | PROGRESS | 01.05.24 |
| | | |
| | | |
| | | |
| | | |



PHASE X
engineering

151 NORTH SUNRISE AVE. SUITE 1016
ROSEVILLE, CA 95661 | Tel: (916) 297-1127

THIS DRAWING WAS PREPARED BY PHASE X ENGINEERING, INC. IN ACCORDANCE WITH THE PROFESSIONAL ENGINEERS ACT OF THE STATE OF CALIFORNIA FOR A SPECIFIC PROJECT TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM PHASE X AND ITS CLIENT IS GRANTED.

TWPOWER LINE
CONSTRUCTION

DYNAMO SOLAR
SUBSTATION
755 BAYWOOD DRIVE, 2ND FLOOR
PETELUMA, CA 94954

SHEET TITLE
OVERALL SITE PLAN

SHEET NUMBER
G1.10
PROJECT No ----

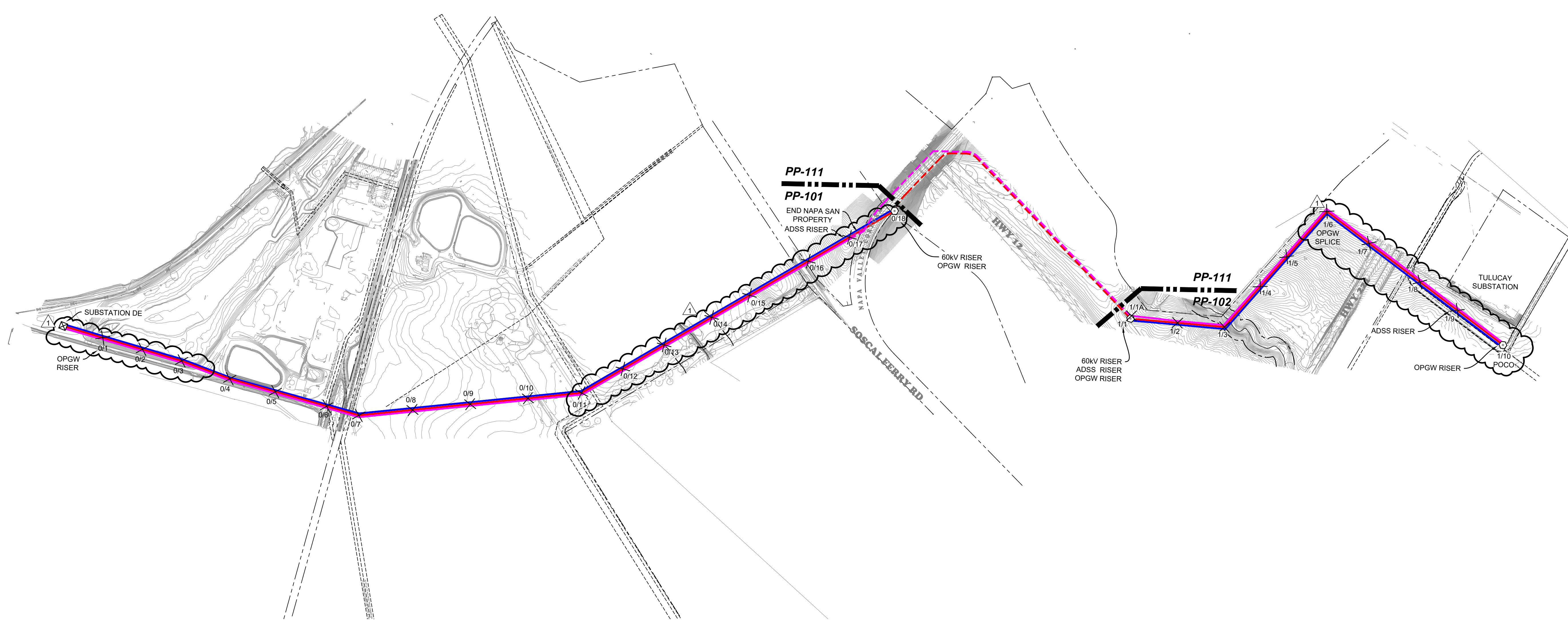
SYMBOLS LEGEND

- × WOOD POLE
- TUBULAR STEEL POLE
- ⊠ STEEL H-FRAME
- GEN-TIE CONDUCTOR
- - - GEN-TIE CONDUCTOR FIBER UNDERGROUND
- OPGW
- ADSS OVERHEAD
- - - ADSS UNDERGROUND

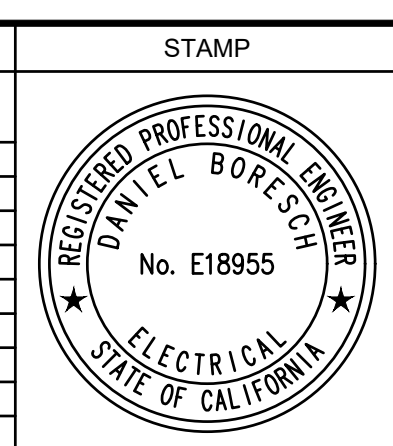
LENGTHS

| VOLTAGE | OH | UG | DESCRIPTION |
|---------|---------|--------|------------------------|
| 60kV | 22600FT | | 336.4kcmil AAC "TULIP" |
| 60kV | | 2000FT | 250kcmil Al, 100% EPR |
| OPGW | 7800FT | | DNO-12213 |
| ADSS | 7000FT | 2200FT | DNA-31734 |

A
B
C
D
E
F
G



| REVISION HISTORY | | |
|------------------|-------------------|----------|
| No. | DESCRIPTION | DATE |
| | 30% DESIGN | 03.07.23 |
| | 60% DESIGN | 05.19.23 |
| | 90% DESIGN | 09.27.23 |
| 1 | 90% DESIGN UPDATE | 12.27.23 |



PHASE X
engineering

151 NORTH SUNRISE AVE. SUITE 1016
ROSEVILLE, CA 95661 | Tel: (916) 297-1127

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TWPOWER LINE
CONSTRUCTION

PROJECT

TULUCAY - DYNAMO
60kV GEN-TIE
755 BAYWOOD DRIVE, 2ND FLOOR
PETELUMA, CA 94954

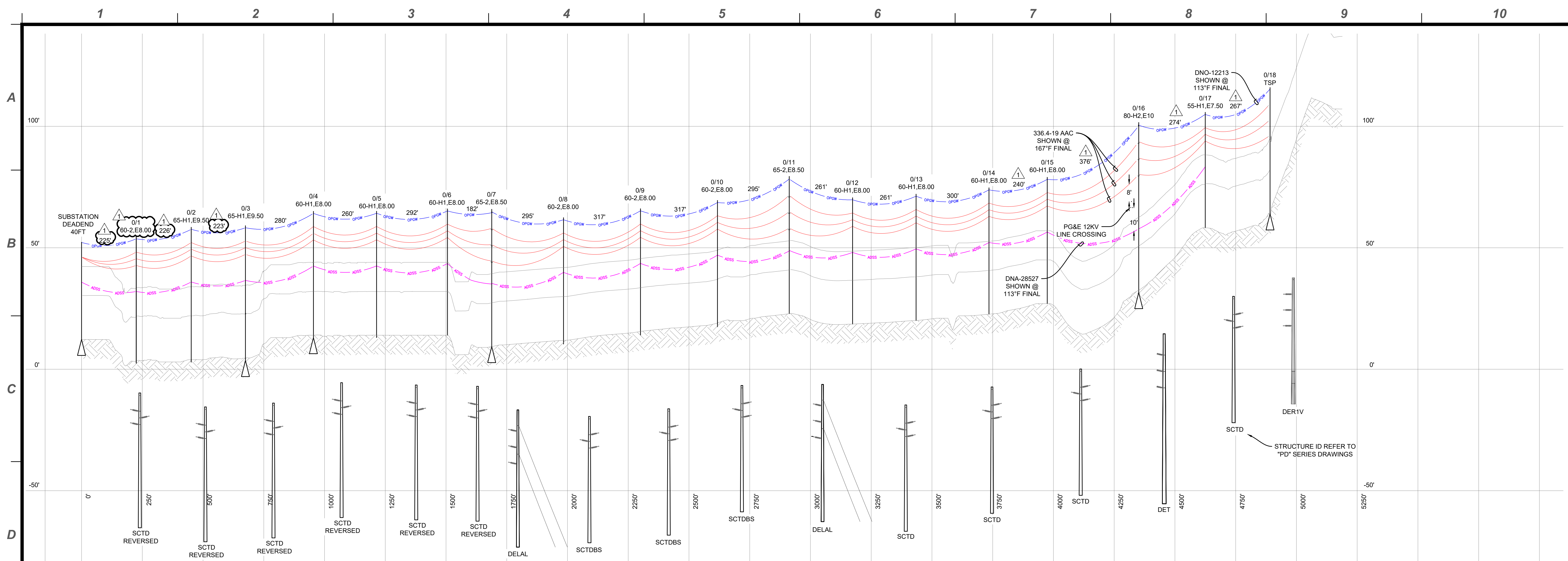
SHEET TITLE

PLAN OVERALL

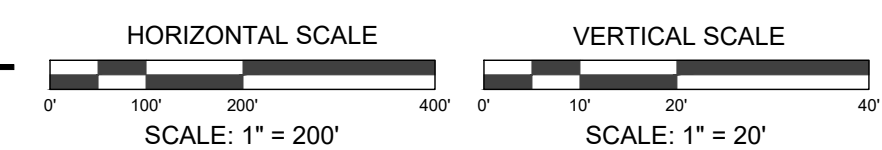
SHEET NUMBER

PP-100

PROJECT No ----



2 PROFILE

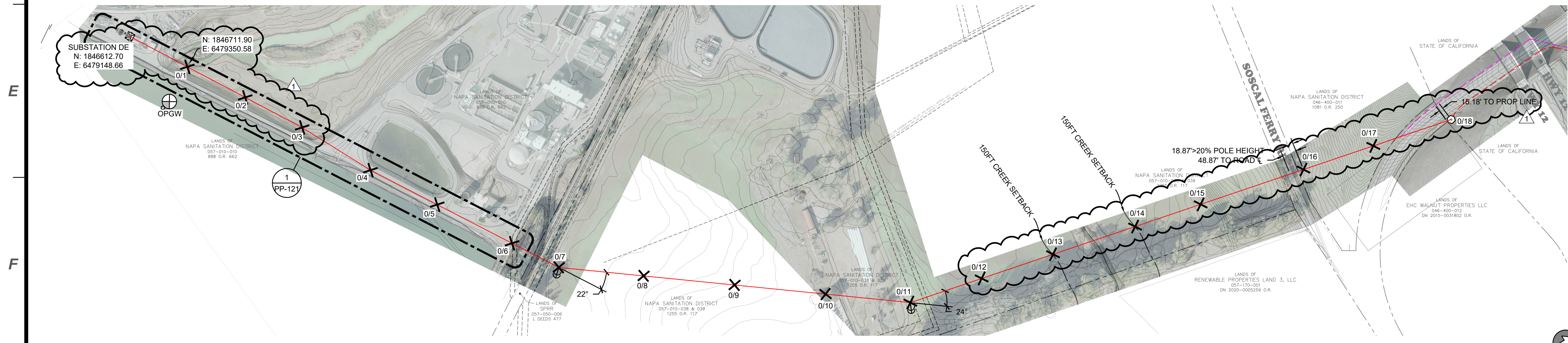


GENERAL NOTES

1. ALL STRUCTURE STICK FIGURES AND PHASE DESIGNATIONS ARE LOOKING AHEAD-OF-LINE (TOWARD SUBSTATION).
2. DESIGN OF THE COLLECTOR CIRCUIT PLAN & PROFILE WAS PERFORMED IN PLS-CADD.
3. POLE COORDINATES ARE INDICATED AT THE BEGINNING, ENDING, AND CHANGES IN DIRECTION OF THE ALIGNMENT.
4. REFER OH-000 FOR SECTION TENSIONS.

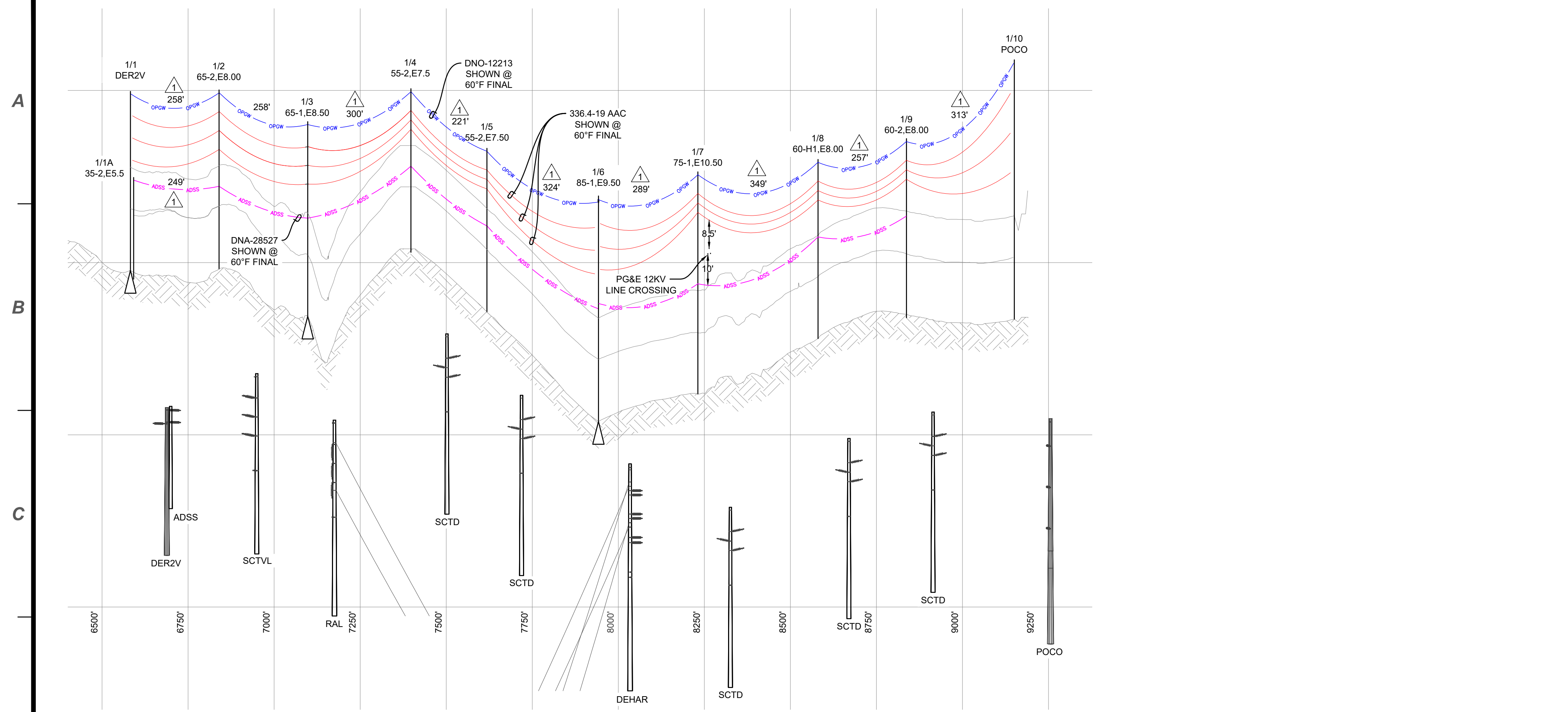
SYMBOLS LEGEND

- ☐ OVERHEAD EASEMENT (WHERE SHOWN)
 - 60KV GEN-TIE
 - OPGW (SHOWN IN PROFILE ONLY)
 - ADSS (MOSTLY SHOWN IN PROFILE ONLY)
 - CLEARANCE LINE
TOP @ 32FT FOR PHASE CONDUCTORS
BOTTOM @ 18 FT FOR ADSS
- POLES ANNOTATED WITH:
HEIGHT AND CLASS (i.e. "45-H1" FOR A 45 FOOT POLE CLASS H1)
EMBEDMENT DEPTH (i.e. "E6.50" FOR A 6.5 FOOT EMBEDMENT)
- POLE IDENTIFICATION X/Y WHERE X = CIRCUIT NUMBER AND
Y = SEQUENTIAL POLE NUMBER WITHIN THAT CIRCUIT (ie 4A/17)
- ⊗ PROPOSED POLE
 - TUBULAR STEEL POLE
 - STEEL H-FRAME
- ACCESSORY
- ⊕ RISER QUADRANT
 - PROPOSED PRIVATELY OWNED ANCHOR AND GUY
 - △ CHANGE IN DIRECTION



1 PLAN

| REVISION HISTORY | | | STAMP | ENGINEERING SERVICES | EPC CONTRACTOR | PROJECT | SHEET TITLE | SHEET NUMBER |
|--|-------------------|----------|-------|---|----------------|--|---------------------------------|---------------|
| No. | DESCRIPTION | DATE | | PHASE X engineering 151 NORTH SUNRISE AVE, SUITE 1016 ROSEVILLE, CA 95661 Tel: (916) 297-1127 | | TULUCAY - DYNAMO 60kV GEN-TIE 755 BAYWOOD DRIVE, 2ND FLOOR PETELUMA, CA 94954 | PLAN & PROFILE SOUTH | PP-101 |
| 30% | DESIGN | 03.07.23 | | | | | | |
| 60% | DESIGN | 05.19.23 | | | | | | |
| 90% | DESIGN | 09.27.23 | | | | | | |
| 1 | 90% DESIGN UPDATE | 12.27.23 | | | | | | |
| <p>THIS DRAWING WAS PREPARED BY PHASE X ENGINEERING, INC. IN ACCORDANCE WITH THE PROFESSIONAL ENGINEERS ACT OF THE STATE OF CALIFORNIA FOR A SPECIFIC PROJECT TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM PHASE X AND ITS CLIENT IS GRANTED.</p> | | | | | | | | |



GENERAL NOTES

- ALL STRUCTURE STICK FIGURES AND PHASE DESIGNATIONS ARE LOOKING AHEAD-OF-LINE (TOWARD SUBSTATION).
- DESIGN OF THE COLLECTOR CIRCUIT PLAN & PROFILE WAS PERFORMED IN PLS-CADD.
- POLE COORDINATES ARE INDICATED AT THE BEGINNING, ENDING, AND CHANGES IN DIRECTION OF THE ALIGNMENT.
- REFER OH-000 FOR SECTION TENSIONS.

SYMBOLS LEGEND

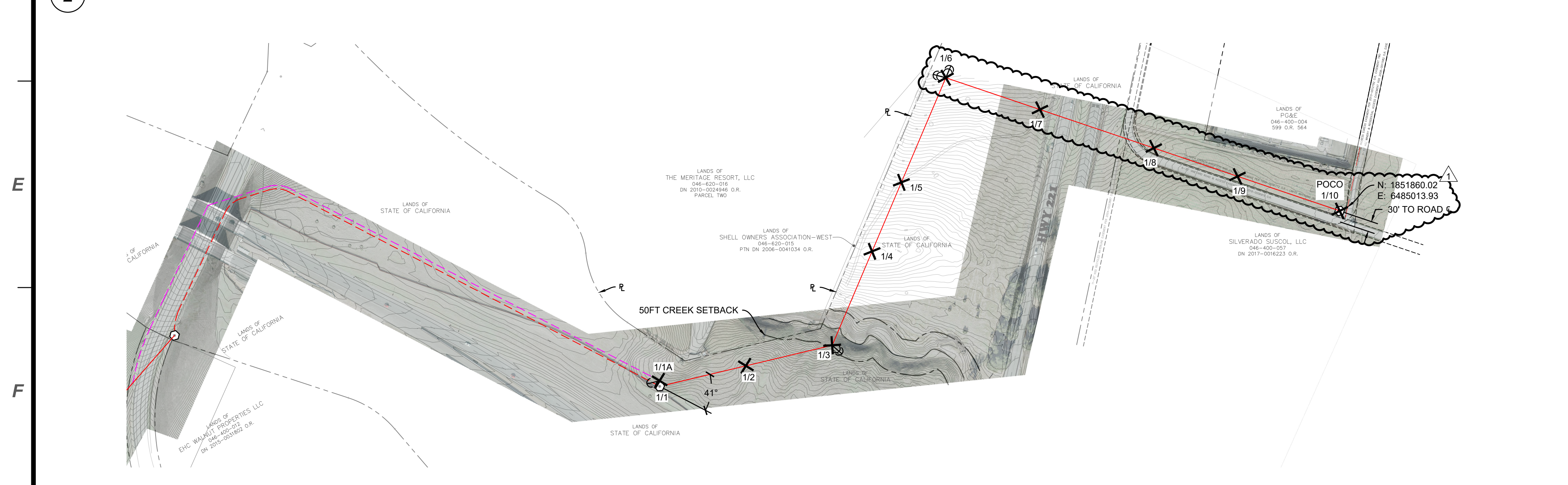
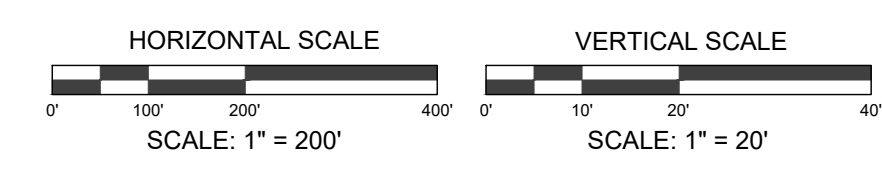
- OVERHEAD EASEMENT (WHERE SHOWN)
- 60KV GEN-TIE
- OPGW (SHOWN IN PROFILE ONLY)
- ADSS (MOSTLY SHOWN IN PROFILE ONLY)
- CLEARANCE LINE
TOP @ 32FT FOR PHASE CONDUCTORS
BOTTOM @ 18 FT FOR ADSS

POLES ANNOTATED WITH:
HEIGHT AND CLASS (i.e. "45-H1" FOR A 45 FOOT POLE CLASS H1)
EMBEDMENT DEPTH (i.e. "E6.50" FOR A 6.5 FOOT EMBEDMENT)

POLE IDENTIFICATION X/Y WHERE X = CIRCUIT NUMBER AND Y = SEQUENTIAL POLE NUMBER WITHIN THAT CIRCUIT (ie 4A/17)

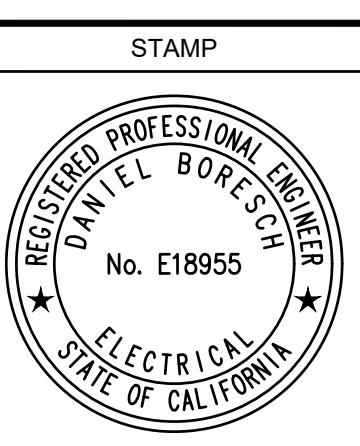
- PROPOSED POLE
- TUBULAR STEEL POLE
- STEEL H-FRAME
- ACCESSORY
- RISER QUADRANT
- PROPOSED PRIVATELY OWNED ANCHOR AND GUY
- CHANGE IN DIRECTION

2 PROFILE



1 PLAN

| REVISION HISTORY | | |
|------------------|-------------------|----------|
| No. | DESCRIPTION | DATE |
| | 30% DESIGN | 03.07.23 |
| | 60% DESIGN | 05.19.23 |
| | 90% DESIGN | 09.27.23 |
| 1 | 90% DESIGN UPDATE | 12.27.23 |



ENGINEERING SERVICES

PHASE X
engineering

151 NORTH SUNRISE AVE. SUITE 1016
ROSEVILLE, CA 95661 | Tel: (916) 297-1127

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EPC CONTRACTOR

TWPOWER LINE
CONSTRUCTION

PROJECT

TULUCAY - DYNAMO
60kV GEN-TIE
755 BAYWOOD DRIVE, 2ND FLOOR
PETELUMA, CA 94954

SHEET TITLE

PLAN & PROFILE NORTH

SHEET NUMBER

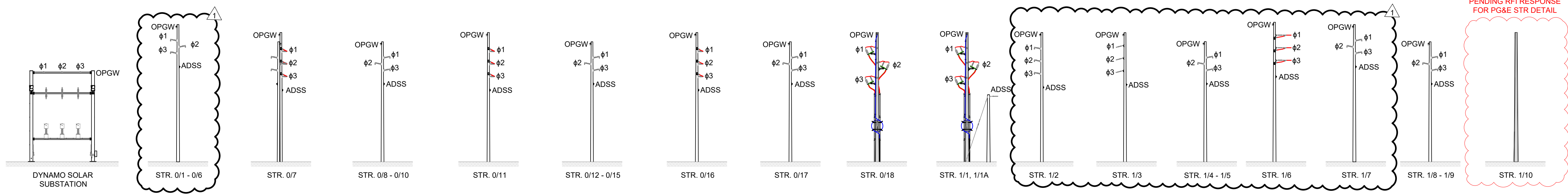
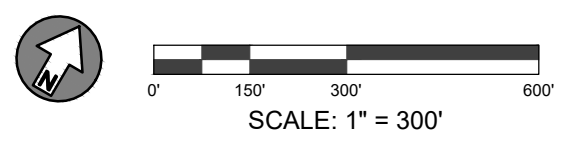
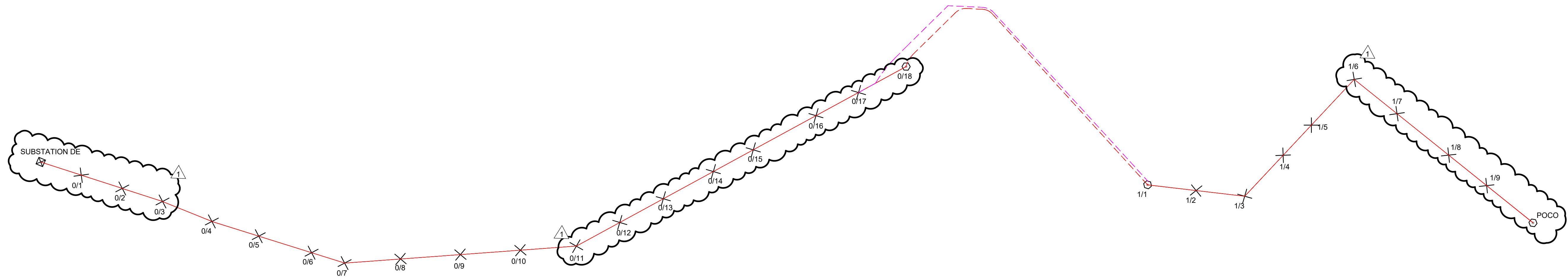
PP-102

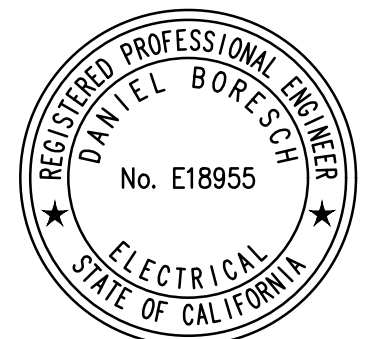


PROJECT No ----

GENERAL NOTES

1. ALL STRUCTURES LOOKING LINE AHEAD.

A
B
C
D
E
F
G



| REVISION HISTORY | | | STAMP | ENGINEERING SERVICES | EPC CONTRACTOR | PROJECT | SHEET TITLE | SHEET NUMBER |
|------------------|-------------------|----------|---|---|---|--|------------------------|--------------------------------------|
| No. | DESCRIPTION | DATE |  |  151 NORTH SUNRISE AVE, SUITE 1016 ROSEVILLE, CA 95661 Tel: (916) 297-1127 |  | TULUCAY - DYNAMO 60kV GEN-TIE 755 BAYWOOD DRIVE, 2ND FLOOR PETELUMA, CA 94954 | PHASING DIAGRAM | PP-103 PROJECT No ---- |
| 30% DESIGN | 03.07.23 | | | | | | | |
| 60% DESIGN | 05.19.23 | | | | | | | |
| 90% DESIGN | 09.27.23 | | | | | | | |
| 1 | 90% DESIGN UPDATE | 12.27.23 | | | | | | |

GENERAL NOTES

8. BENDS/SWEEPS MAY BE MADE IN THE FIELD AS FOLLOWS FOR EVERY 10' STICK BY DEFLECTING THE DUCT:

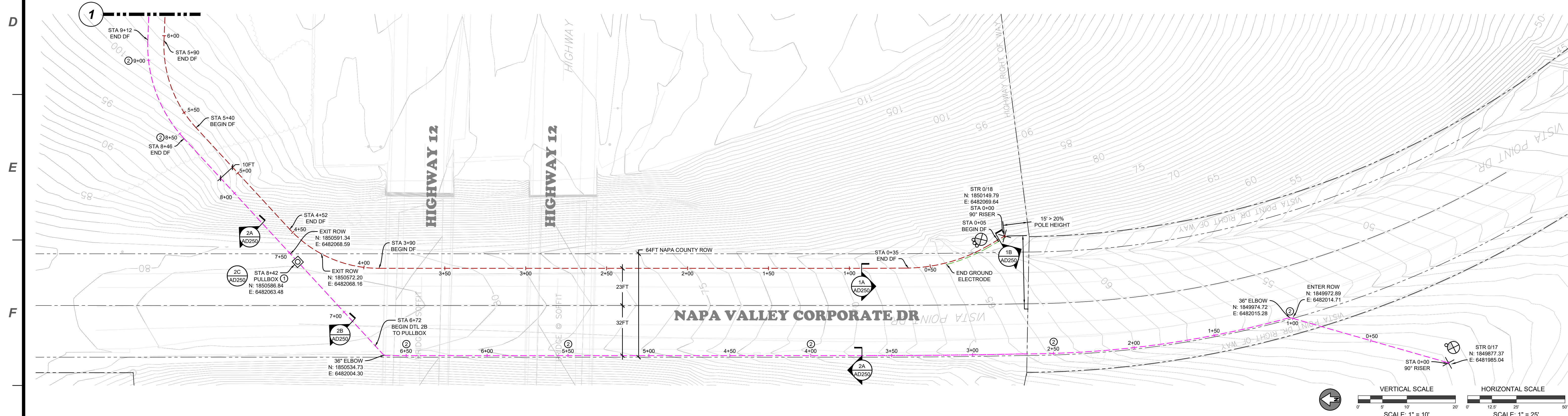
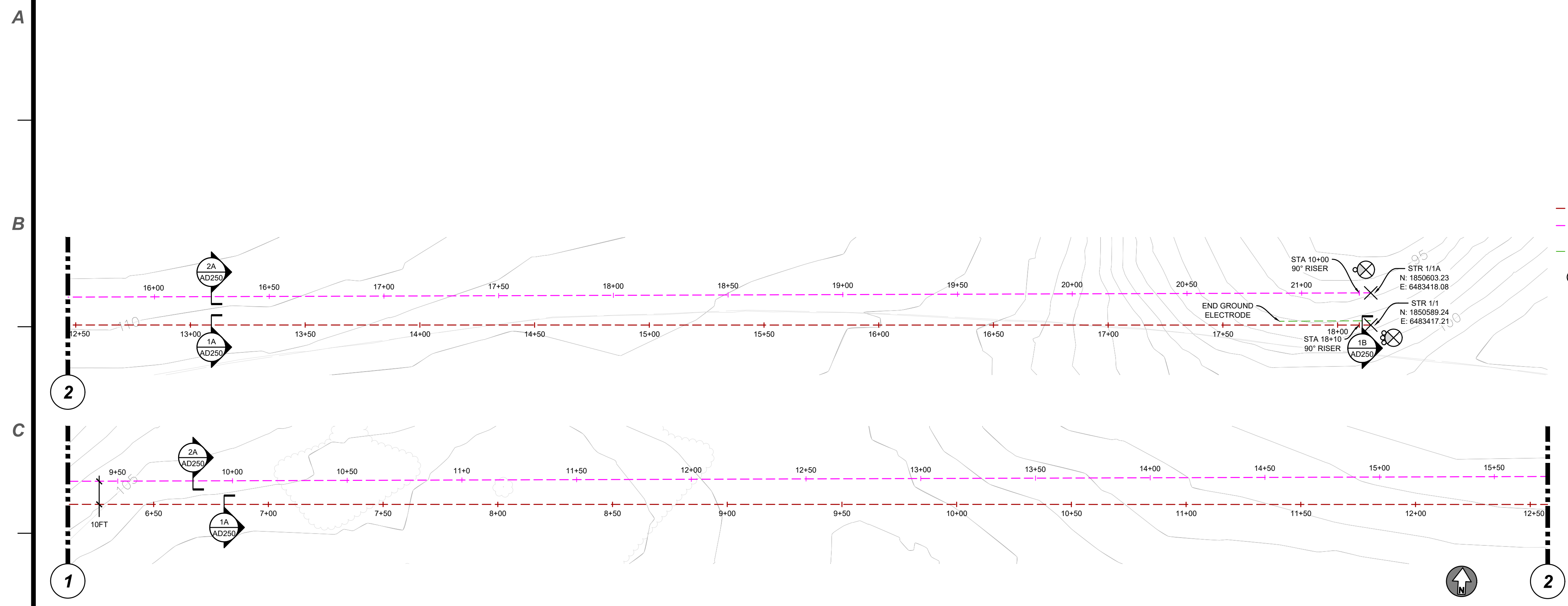
| SIZE | DF |
|--------|-----|
| 8.1 2" | 24" |
| 8.2 6" | 8" |
9. ALL PVC CONDUITS TO HAVE PVC BELL ENDS.
10. PLUG OPEN CONDUIT ENDS AFTER CONDUIT INSTALLATION. THOROUGHLY CLEAN CONDUIT BEFORE PULLING CABLE.
11. APPLY CEMENT SOLVENT ON ALL PVC CONDUIT JOINTS. THE SOLVENT APPLIED SHALL BE SUITABLE FOR THE AMBIENT TEMPERATURE AT THE TIME OF APPLICATION.
12. INSTALL DUCT SEAL TO ALL OPEN CONDUITS FOR WATERTIGHT SEAL.
1. TOTAL LENGTH OF PULL _____ FT
2. TOTAL PULLING ANGLES _____ ° (INCLUDES 2-90° RISERS)
3. CALC'D PULLING TENSION _____ LBS
4. CALL UNDERGROUND SERVICE ALERT (U.S.A.) AT 811 AT LEAST TWO WORKING DAYS PRIOR TO DIGGING. LOCATE ALL UNDERGROUND FACILITIES BEFORE TRENCHING & EXCAVATION.
5. LOCATION OF CONDUITS ARE APPROXIMATE. THE CONTRACTOR SHALL MAKE ANY NECESSARY ADJUSTMENTS TO SUIT FIELD CONDITIONS.
6. BEDDING OF 3" COMPACTED MATERIAL SIEVED 1/2" MINUS. FINE BACKFILL MATERIAL PLACED BETWEEN CONDUITS SHALL BE TAMPED TO REMOVE VOIDS.
 - 6.1 85% AT NON-ROADWAYS.
 - 6.2 90% AT DRIVABLE PATHS.
 - 6.3 95% WHEN WITHIN 24" OF CONCRETE PIER.
7. MINIMUM BEND RADIUS OF PREFORMED ELBOWS SHALL BE AS FOLLOWS:
 - 7.1 60" FOR 6°C
 - 7.2 24" FOR 2°C

SYMBOLS LEGEND

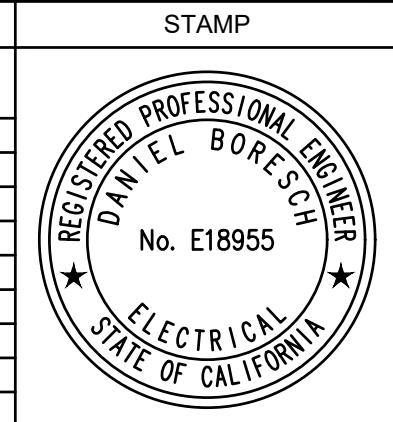
- 60KV & FIBER
- FIBER ONLY
- GROUND CONDUCTOR
- (N) #4/0 GROUNDING ELECTRODE CAST IN CONCRETE
- ⊕ BILL OF MATERIAL CALLOUT

BILL OF MATERIAL

| ID | DESCRIPTION | MFR MODEL | CATALOG NO. | QTY | APP'D EQUAL? |
|----|--|-----------|---------------|-----|--------------|
| 1 | 4ft x 4ft x 4ft AT&T Standard Concrete Pullbox, Box, Lid Frame, 3ft Manhole | Oldcastle | | 1 | No |
| 2 | Domed Marker Post, Hot Stamped, 72in "WARNING BURIED OPTIC CABLE" | Budco | 77-RDR72WO-FO | 7 | Yes |
| 3 | Underground Tape, Detectable, 6in Width, 1000ft Roll "CAUTION BURIED HIGH VOLTAGE LINE BELOW" | Budco | 85520 | 1 | Yes |
| 4 | Underground Tape, Detectable, 3in Width, 1000ft Roll "CAUTION BURIED COMMUNICATION LINE BELOW" | Budco | 85507 | 1 | Yes |
| 5 | Spacer, 3in Base for 4in Conduit | Carlton | S288NLN | LOT | Yes |
| 6 | Spacer, 3in Intermediate for 4in Conduit | Carlton | S289NLN | LOT | Yes |



| REVISION HISTORY | | |
|------------------|-------------------|----------|
| No. | DESCRIPTION | DATE |
| | 30% DESIGN | 03.07.23 |
| | 60% DESIGN | 05.19.23 |
| | 90% DESIGN | 09.27.23 |
| 1 | 90% DESIGN UPDATE | 12.27.23 |



PHASE X
engineering

151 NORTH SUNRISE AVE. SUITE 1016
ROSEVILLE, CA 95661 | Tel: (916) 297-1127

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TWPOWER LINE
CONSTRUCTION

TULUCAY - DYNAMO
60KV GEN-TIE
755 BAYWOOD DRIVE, 2ND FLOOR
PETELUMA, CA 94954

PLAN UNDERGROUND AT HIGHWAY

PP-111
PROJECT No ----

BILL OF MATERIAL

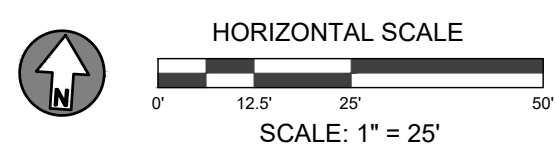
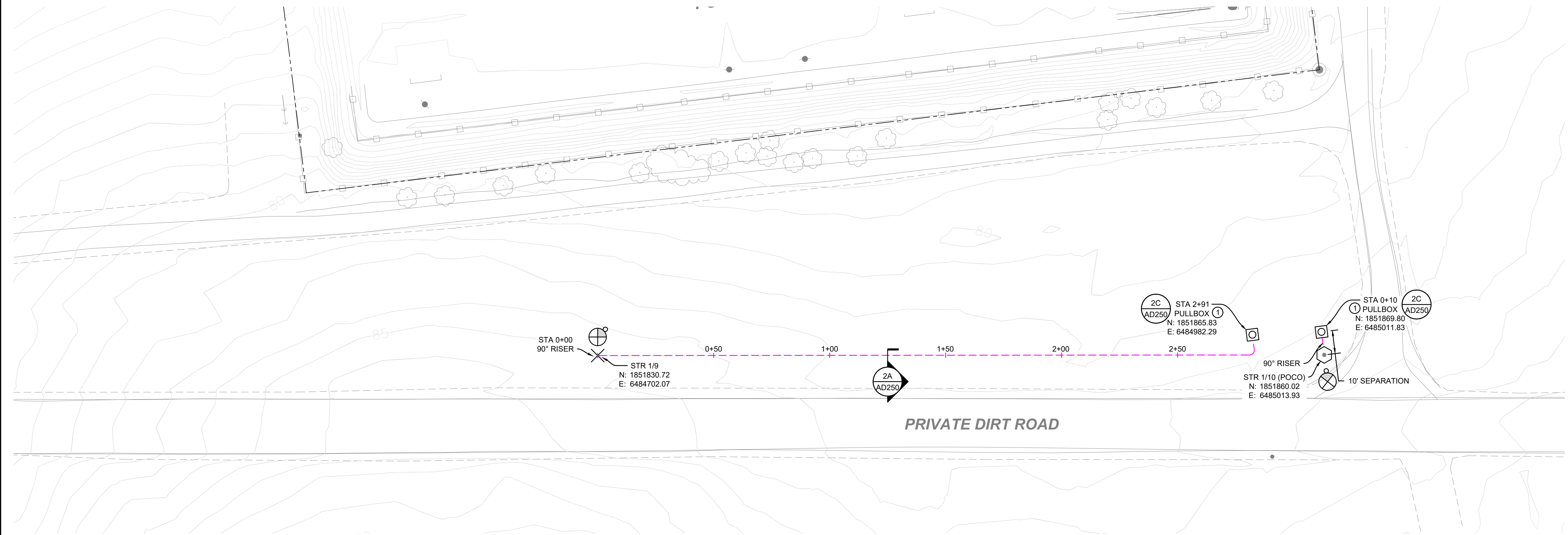
| ID | DESCRIPTION | MFR MODEL | CATALOG NO. | QTY | APP'VD EQUAL? |
|----|--|-----------|---------------|-----|---------------|
| 1 | 4ft x 4ft x 4ft AT&T Standard Concrete Pullbox, Box, Lid Frame, 3ft Manhole | Oldcastle | | 1 | No |
| 2 | Domed Marker Post, Hot Stamped, 72in "WARNING BURIED OPTIC CABLE" | Budco | 77-RDR72WO-FO | 2 | Yes |
| 4 | Underground Tape, Detectable, 3in Width, 1000ft Roll "CAUTION BURIED COMMUNICATION LINE BELOW" | Budco | 85507 | 1 | Yes |

GENERAL NOTES

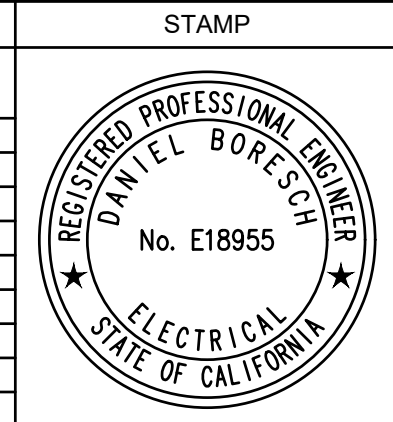
- CALL UNDERGROUND SERVICE ALERT (U.S.A.) AT 811 AT LEAST TWO WORKING DAYS PRIOR TO DIGGING. LOCATE ALL UNDERGROUND FACILITIES BEFORE TRENCHING & EXCAVATION.
- LOCATION OF CONDUITS ARE APPROXIMATE. THE CONTRACTOR SHALL MAKE ANY NECESSARY ADJUSTMENTS TO SUIT FIELD CONDITIONS.
- BEDDING OF 3" COMPACTED MATERIAL SIEVED 1/2" MINUS. FINE BACKFILL MATERIAL PLACED BETWEEN CONDUITS SHALL BE TAMPED TO REMOVE VOIDS.
 - 6.1 85% AT NON-ROADWAYS.
 - 6.2 90% AT DRIVABLE PATHS.
 - 6.3 95% WHEN WITHIN 24" OF CONCRETE PIER.
- MINIMUM BEND RADIUS OF PREFORMED ELBOWS SHALL BE 24" FOR 2"C.
- BENDS/SWEEPS MAY BE MADE IN THE FIELD AS FOLLOWS FOR EVERY 10' STICK OF 2"C BY DEFLECTING THE DUCT 24".
- ALL PVC CONDUITS TO HAVE PVC BELL ENDS.
- PLUG OPEN CONDUIT ENDS AFTER CONDUIT INSTALLATION. THOROUGHLY CLEAN CONDUIT BEFORE PULLING CABLE.
- APPLY CEMENT SOLVENT ON ALL PVC CONDUIT JOINTS. THE SOLVENT APPLIED SHALL BE SUITABLE FOR THE AMBIENT TEMPERATURE AT THE TIME OF APPLICATION.
- INSTALL DUCT SEAL TO ALL OPEN CONDUITS FOR WATERTIGHT SEAL.

SYMBOLS LEGEND

- FIBER ONLY
- GROUND CONDUCTOR (N) #4/0 GROUNDING ELECTRODE CAST IN CONCRETE
- BILL OF MATERIAL CALLOUT



| REVISION HISTORY | | |
|------------------|-------------------|----------|
| No. | DESCRIPTION | DATE |
| | 30% DESIGN | 03.07.23 |
| | 60% DESIGN | 05.19.23 |
| | 90% DESIGN | 09.27.23 |
| 1 | 90% DESIGN UPDATE | 12.27.23 |



PHASE X
engineering

151 NORTH SUNRISE AVE. SUITE 1016
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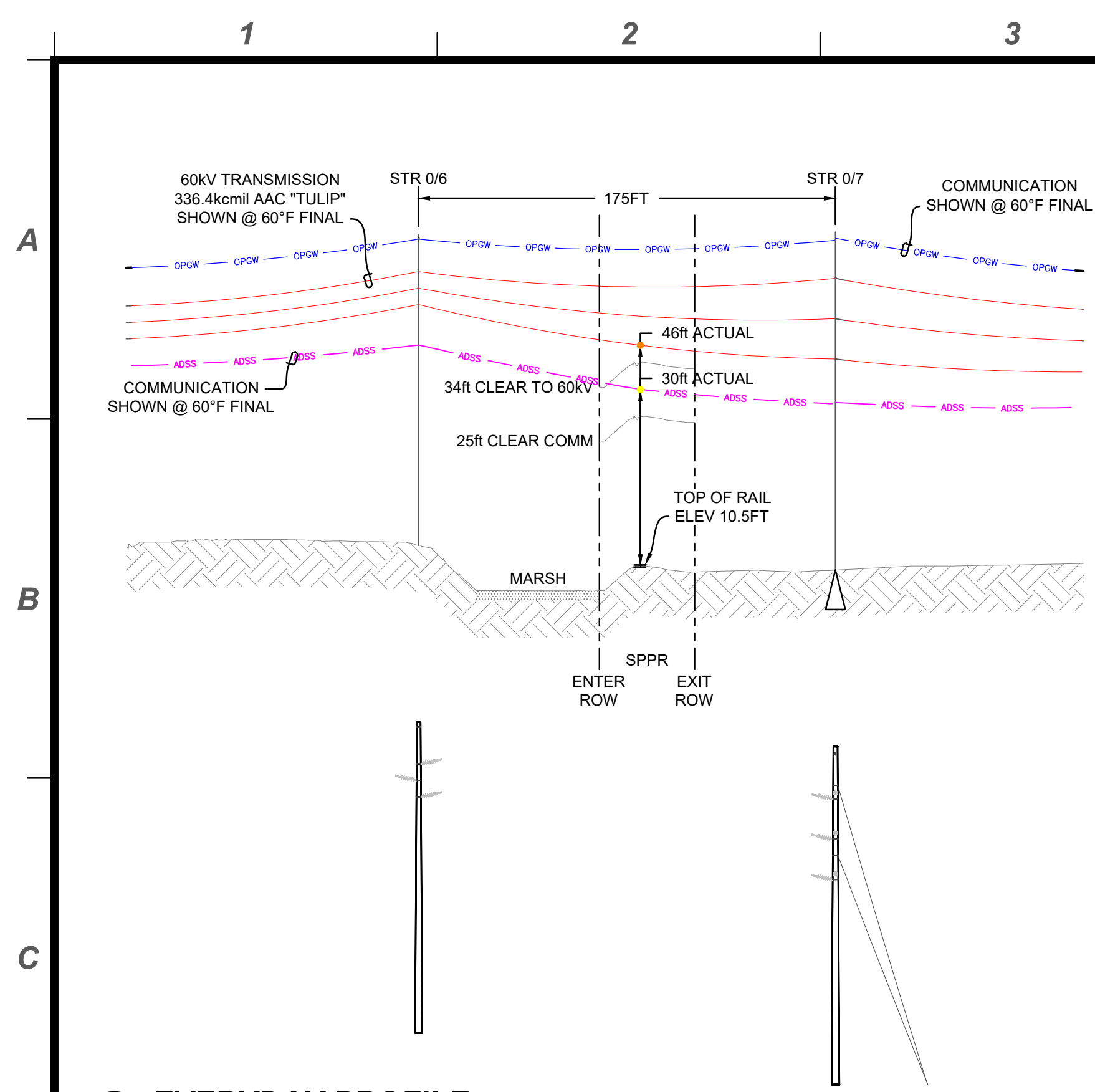
THIS DRAWING WAS PREPARED BY PHASE X ENGINEERING, INC. IN ACCORDANCE WITH THE PROFESSIONAL ENGINEERS ACT OF THE STATE OF CALIFORNIA FOR A SPECIFIC PROJECT TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM PHASE X AND ITS CLIENT IS GRANTED.

TWPOWER LINE
CONSTRUCTION

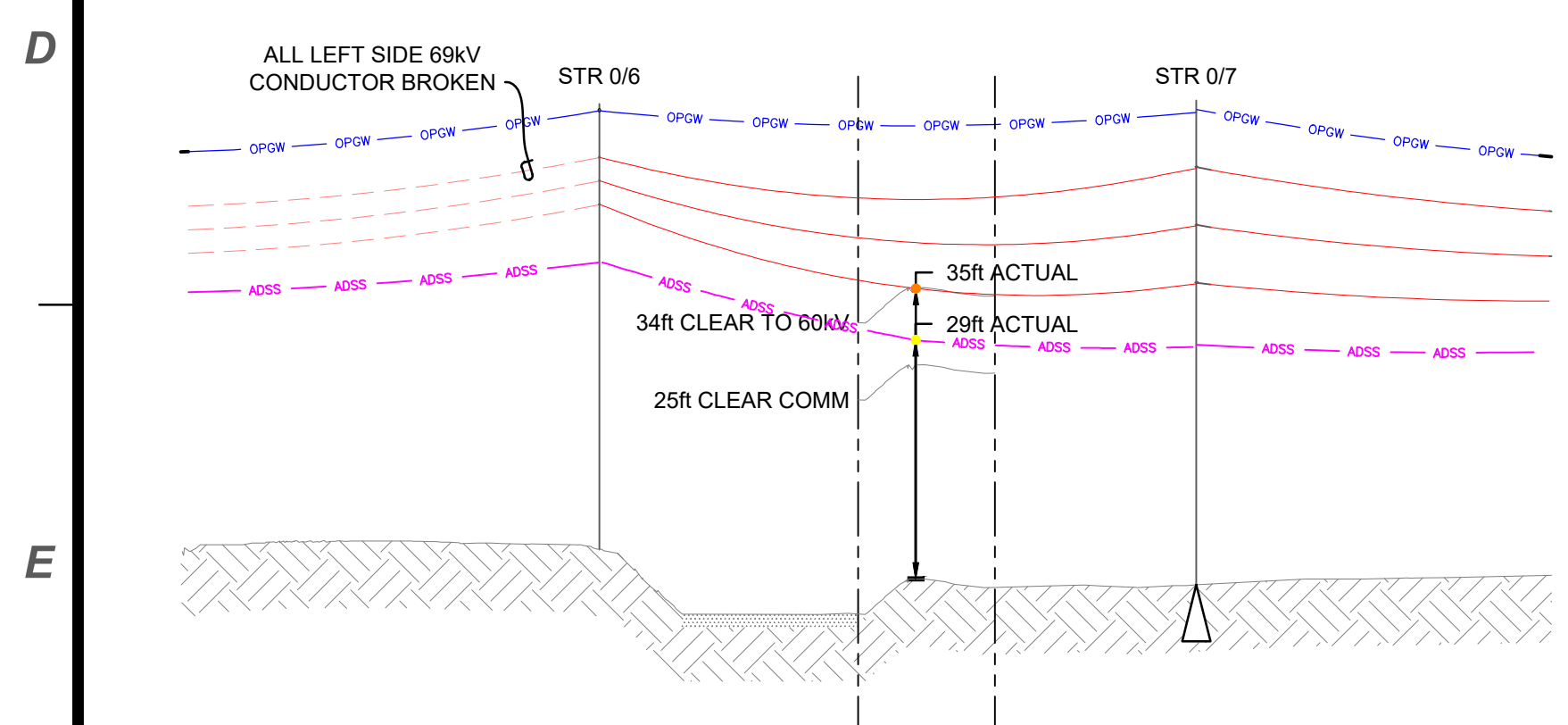
TULUCAY - DYNAMO
60kV GEN-TIE
755 BAYWOOD DRIVE, 2ND FLOOR
PETELUMA, CA 94954

SHEET TITLE
PLAN UNDERGROUND AT POCO

SHEET NUMBER
PP-112
PROJECT No ----



3A EVERYDAY PROFILE

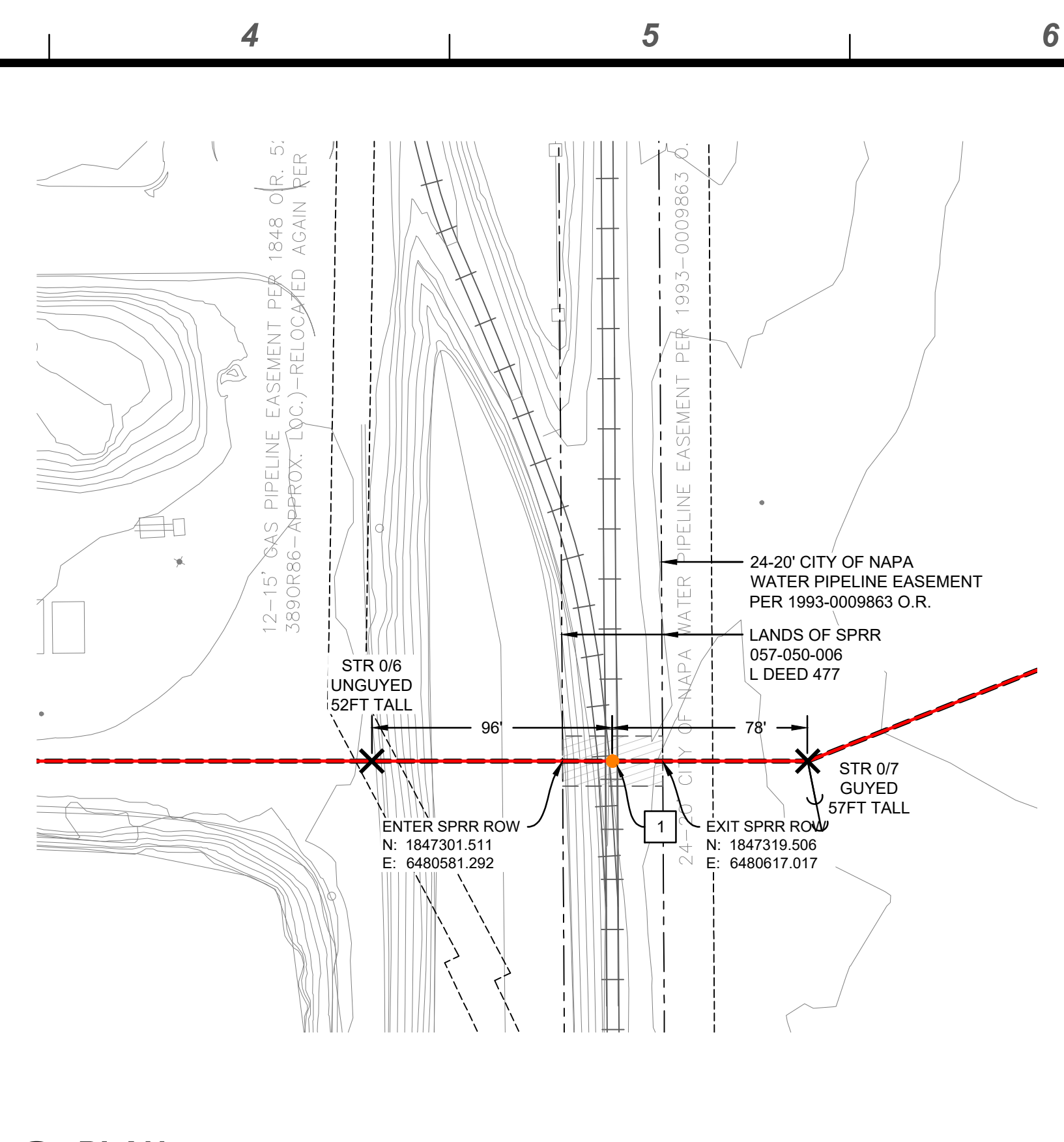


3B PROFILE WITH BROKEN CONDUCTOR LEFT OF STR 0/6

GENERAL NOTES

1. THIS DETAIL DEMONSTRATES COMPLIANCE WITH 2022 GO-95 SECTION 47.3 WHEREBY A MINIMUM OF 1/3 THE CONDUCTORS ARE BROKEN ONT THE ADJACENT SPAN WITHOUT REDUCING THE CLEARANCE ABOVE THE RAILROAD TRACKS BY 95% OF THE MINIMUM.
2. A MORE CONSERVATIVE 3 CONDUCTORS WERE BROKEN. CLEARANCE IS STILL MAINTAINED.

G

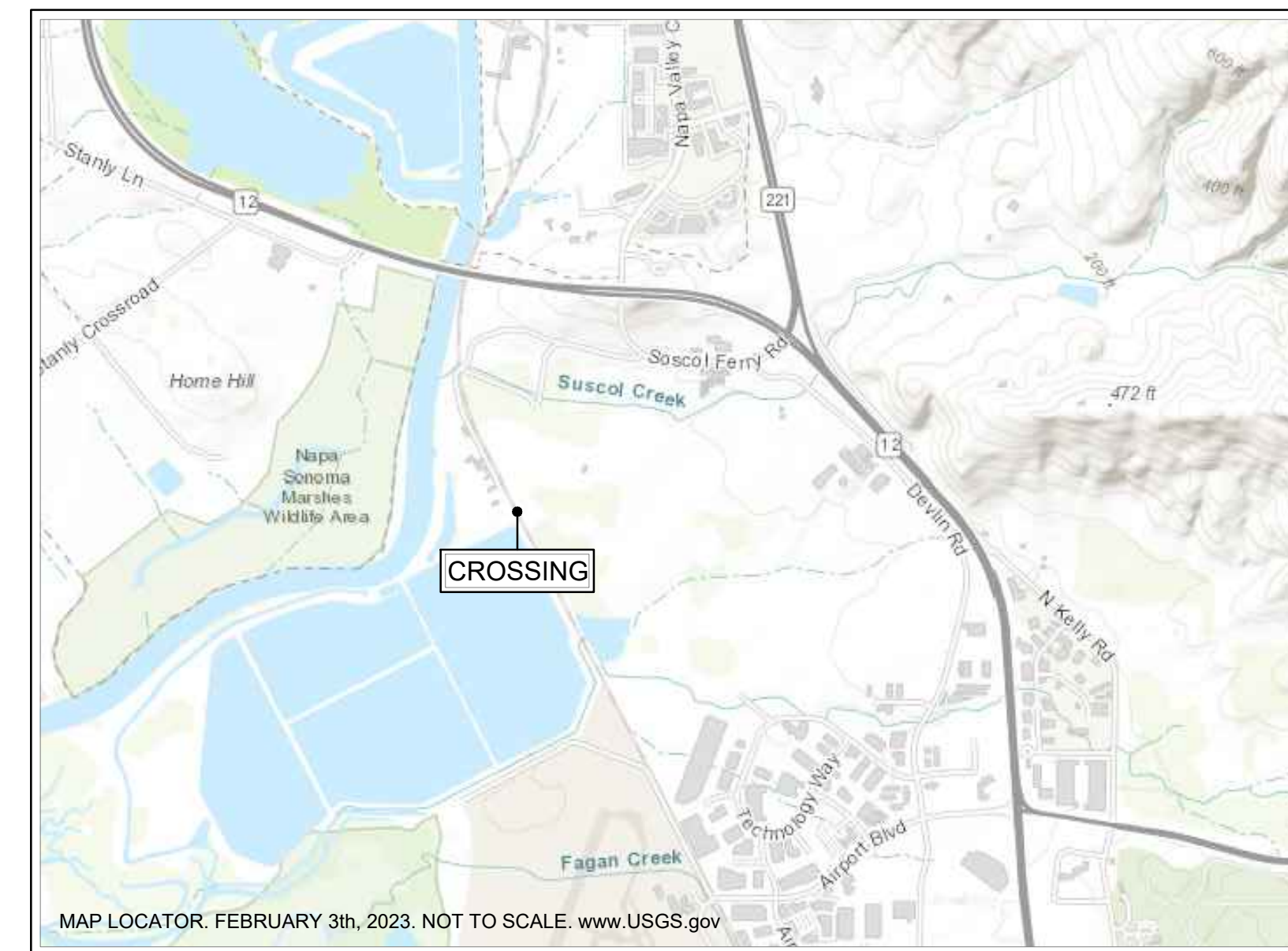


2 PLAN

GENERAL NOTES

1. THIS DETAIL DEMONSTRATES COMPLIANCE WITH 2022 GO-95 SECTION 47.3 WHEREBY A MINIMUM OF 1/3 THE CONDUCTORS ARE BROKEN ONT THE ADJACENT SPAN WITHOUT REDUCING THE CLEARANCE ABOVE THE RAILROAD TRACKS BY 95% OF THE MINIMUM.
2. A MORE CONSERVATIVE 3 CONDUCTORS WERE BROKEN. CLEARANCE IS STILL MAINTAINED.

3C PROFILE WITH BROKEN CONDUCTOR RIGHT OF STR 0/7



1 VICINITY MAP

SCOPE OF WORK

THIS CROSSING IS FOR HIGH VOLTAGE & COMMUNICATION CONDUCTORS OVER UNION PACIFIC RAIL ROAD (PREVIOUSLY SOUTHER PACIFIC RAIL ROAD) IN NAPA COUNTY.

IT IS BEING SUBMITTED FOR REVIEW AND APPROVAL BY UPRR FOLLOWING WIRELINE ENCRACEMENT PLANNING GUIDELINES AND CONSTRUCTION PROCEDURES.

GENERAL NOTES

1. ALL STRUCTURE STICK FIGURES AND PHASE DESIGNATIONS ARE LOOKING AHEAD-OF-LINE (TOWARD SUBSTATION).
2. DESIGN OF THE COLLECTOR CIRCUIT PLAN & PROFILE WAS PERFORMED IN PLS-CADD.
3. POLE COORDINATES ARE INDICATED AT THE BEGINNING, ENDING, AND CHANGES IN DIRECTION OF THE ALIGNMENT.
4. POLE COORDINATES ARE GIVEN IN NAD83, CA ZONE III.
5. REFER OH-000 FOR SECTION TENSIONS.

SYMBOLS LEGEND

- OVERHEAD CROSSING
- 60KV GEN-TIE
- OPGW (SHOWN IN PROFILE ONLY)
- ADSS (MOSTLY SHOWN IN PROFILE ONLY)
- CLEARANCE LINE
- PROPOSED POLE
- PROPOSED PRIVATELY OWNED ANCHOR AND GUY
- CHANGE IN DIRECTION

SHEET NOTES

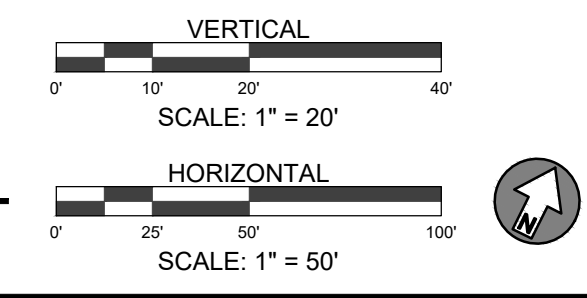
1. 20in MARKER BALL PER UPRR AERIAL CABLE MARKER GUIDELINES. ORANGE AT LOWER 69KV CONDUCTOR AND YELLOW AT LOWEST COMMUNICATION CONDUCTOR.

COMM CHECKLIST

1. The latest published edition of the National Electrical Safety Code shall apply with the height of rail car assumed to be 23 feet. If the local governing body does not recognize the latest published edition of the NESC, the Engineering Department of the Railroad will have to review each item on a case by case basis.
COMPLIANCE: PROJECT CLEARANCE IS 25FT PER 2022 GO-95.
2. Minimum 4 feet clearance required above signal and communication lines.
COMPLIANCE: N/A
3. Poles must be located 50 feet out from the centerline of railroad main, branch and running tracks, CTC sidings, and heavy tonnage spurs. Pole location adjacent to industry tracks must provide at least a 15 foot clearance from centerline of track when measured at right angles. If located adjacent to curved track, then said clearance must be increased at the rate of 1.5 inches per degree of curved track.
COMPLIANCE: POLES ARE BEYOND 50 FEET FROM CL.
4. Regardless of the voltage, unguayed poles shall be located a minimum distance from the centerline of any track equal to the height of the pole above the groundline plus 10 feet. If guying is required, the guys shall be placed in such a manner as to keep the pole from leaning/falling in the direction of the tracks.
COMPLIANCE: STR 0/6 IS UNGUYED AND MORE THAN THE MINIMUM REQUIRED SETBACK. REFER TO PLAN.
STR 0/7 IS GUYED BUS NOT IN A MANNER TO KEEP THE POLE FROM FALLING IN THE DIRECTION OF THE TRACKS HOWEVER, IT ALSO COMPLIES WITH THE MINIMUM REQUIRED SETBACK. REFER TO PLAN.
5. Poles (including steel poles) must be located a minimum distance from the railroad signal and communication line equal to the height of the pole above the groundline or else be guayed at right angles to the lines.
COMPLIANCE: N/A
6. All crossings must be located a minimum of 500 feet from the end of any railroad bridge, and 300 feet from the centerline of any culvert or switch area.
COMPLIANCE: N/A
7. Union Pacific Railroad requires all new and replacement overhead wirelines, that cross the track(s), to be visually identified with aerial cable markers. (Aerial Cable Markers Guide Lines, Engineering Standards).
COMPLIANCE: BOTTOM CONDUCTOR MARKED WITH 20in WHITE AERIAL MARKER INSTALLED DIRECTLY ABOVE TRACK.

HV CHECKLIST

1. The latest published edition of the National Electrical Safety Code shall apply with the height of rail car assumed to be 23 feet. If the local governing body does not recognize the latest published edition of the NESC, the Engineering Department of the Railroad will have to review each item on a case by case basis.
COMPLIANCE: PROJECT CLEARANCE IS 34FT PER 2022 GO-95.
2. Poles or other structures supporting power must be 50 feet out from the centerline of main running tracks, CTC sidings and heavy tonnage spurs. Pole location adjacent to industry tracks must provide at least a 30 foot clearance from centerline of track when measured at right angles. If located adjacent to curved track, then said clearance must be increased at the rate of 1.5 inches per degree of curved track.
COMPLIANCE: POLES ARE BEYOND 50 FEET FROM CL.
3. Regardless of the voltage, unguayed poles shall be located a minimum distance from the centerline of any track equal to the height of the pole above the groundline plus 10 feet. If guying is required, the guys shall be placed in such a manner as to keep the pole from leaning/falling in the direction of the tracks.
COMPLIANCE: STR 0/6 IS UNGUYED AND MORE THAN THE MINIMUM REQUIRED SETBACK. REFER TO PLAN.
STR 0/7 IS GUYED BUS NOT IN A MANNER TO KEEP THE POLE FROM FALLING IN THE DIRECTION OF THE TRACKS. HOWEVER, IT ALSO COMPLIES WITH THE MINIMUM REQUIRED SETBACK. REFER TO PLAN.
4. High voltage poles and structures (34.5kV and higher) must be located off railroad right of way.
COMPLIANCE: STRUCTURES ARE LOCATED OF UPRR ROW.
5. Crossings will not be installed under or within 500 feet from the end of any railroad bridge, or 300 feet from the centerline of any culvert or switch area.
COMPLIANCE: N/A
6. Union Pacific Railroad requires all new and replacement overhead wirelines, that cross the track(s), to be visually identified with aerial cable markers. (Aerial Cable Markers Guide Lines, Engineering Standards)
COMPLIANCE: BOTTOM CONDUCTOR MARKED WITH 20in ORANGE AERIAL MARKER INSTALLED DIRECTLY ABOVE TRACK.



| REVISION HISTORY | | | STAMP | ENGINEERING SERVICES | EPC CONTRACTOR | PROJECT | SHEET TITLE | SHEET NUMBER |
|------------------|-------------------|----------|-------|----------------------|----------------|--|---------------------------------|--------------------------------------|
| No. | DESCRIPTION | DATE | | | | TULUCAY - DYNAMO 60kV GEN-TIE 755 BAYWOOD DRIVE, 2ND FLOOR PETELUMA, CA 94954 | CROSSING EXHIBIT AT UPRR | CX-101 PROJECT No ---- |
| | 30% DESIGN | 03.07.23 | | | | | | |
| | 60% DESIGN | 05.19.23 | | | | | | |
| | 90% DESIGN | 09.27.23 | | | | | | |
| 1 | 90% DESIGN UPDATE | 12.27.23 | | | | | | |