

STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov Web Site: portal.ct.gov/csc

VIA ELECTRONIC MAIL

June 29, 2023

Bradley J. Parsons North Haven Solar One c/o Verogy 124 LaSalle Road, 2nd Floor West Hartford, CT 06107 bparsons@verogy.com

RE:

PETITION NO. 1541 – North Haven Solar One, LLC declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 1.625-megawatt AC solar photovoltaic electric generating facility located at 122 Mill Road, North Haven, Connecticut, and associated electrical interconnection.

Dear Bradley Parsons:

The Connecticut Siting Council (Council) is in receipt of your correspondence dated June 28, 2023, regarding compliance with Condition Nos. 3, 4 and 7 of the Council's Declaratory Ruling issued on December 23, 2022 for the above-referenced facility. The correspondence includes a copy of the DEEP Stormwater Permit, the final structural design for the racking system stamped by a Professional Engineer duly licensed in the State of Connecticut, and notification in writing at least two weeks prior to the commencement of site construction, in accordance with Condition Nos. 3, 4, and 7 respectively.

Therefore, the Council acknowledges that Condition Nos. 3, 4 and 7 have been satisfied. This acknowledgment applies only to the condition satisfied by the June 28, 2023 correspondence.

Please be advised that deviations from the standards established by the Council in the Declaratory Ruling are enforceable under the provisions of Connecticut General Statutes §16-50u.

Thank you for your attention and cooperation.

Sincerely,

Melanie A. Bachman Executive Director

Mulia Real

MB/MP/laf

North Haven Solar One c/o Verogy 124 LaSalle Road, 2nd Floor West Hartford, CT 06107

June 28, 2023

Via Electronic Filing and FedEx Delivery

Melanie A. Bachman, Executive Director/Staff Attorney Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

Re: Petition No. 1541 North Haven Solar One, LLC for a Declaratory Ruling for the Proposed Construction, Operation and Maintenance of a 1.625 MW AC Solar Photovoltaic Electric Generating Facility Located at 122 Mill Road, North Haven, Connecticut

Dear Ms. Bachman:

As you know, on December 22, 2022 the Connecticut Siting Council ("Council") approved the above-referenced Petition for Declaratory Ruling ("Petition") subject to certain conditions. In accordance with Condition Nos. 1 thru 8 of the Council's approval, you will find fifteen (15) copies of the attached exhibits and status of each of the conditions as follows for Council staff review and approval.

1. Approval of any project changes be delegated to Council staff;

There are no changes to the plans that were submitted.

2. Implement the eastern box turtle and word turtle protection plan recommended by the Department of Energy and Environmental Protection in the Natural Diversity Data Base Determination letter dated March 1, 2022 during project construction;

The Petitioner is implementing the protection plan as recommended by CT DEEP and VHB will be performing the required work for this plan.

3. Submit a copy of a DEEP Stormwater Permit prior to commencement of construction;

See attached. Exhibit A for the DEEP Stormwater Permit.

4. Submit the final structural design for the racking system stamped by a Professional Engineer duly licensed in the State of Connecticut prior to commencement of construction;

See attached, Exhibit B for the final structural racking drawings stamped by a Professional Engineer licensed in the State of Connecticut.

5. Provide training to emergency responders;

Once the project is constructed the Petitioner will reach out to emergency responders to provide training.

6. Utilize a pollinator seed mix where feasible;

A pollinator seed mix will be used on the project where feasible.

8. The Council shall be notified in writing at least two weeks prior to the commencement of site construction activities;

The Project is intending to start construction July 5, 2023.

Should you have any questions concerning this submittal, please contact me at your convenience.

Sincerely,

Bradley J. Parsons, P.E. North Haven Solar One.

Enclosures

Cc: The Honorable Michael J. Freda, First Selectperson, Town of North Haven

79 Elm Street • Hartford, CT 06106-5127

www.ct.gov/deep

Affirmative Action/Equal Opportunity Employer

Bureau of Materials Management and Compliance Assurance

Notice of Permit Authorization

March, 27 2023

Brad Parsons NORTH HAVEN SOLAR ONE 150 Trumbull St Hartford, CT 06103-2446

Subject: General Permit Registration for the Discharge of Stormwater and Dewatering

Wastewaters from Construction Activities

Application NO.: 202210381

Brad Parsons:

The Department of Energy and Environmental Protection, Water Permitting and Enforcement Division of the Bureau of Materials Management and Compliance Assurance, has completed the review of the North Haven Solar One (located at 122 Mill Road, North Haven) registration for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective 12/31/2020, modified 11/25/2022 (general permit). The project is compliant with the requirements of the general permit and the discharge(s) associated with this project is (are) authorized to commence as of the date of this letter. Permit No. GSN003876 has been assigned to authorize the stormwater discharge(s) from this project.

Questions can be emailed to deep.stormwater@ct.gov.

EXHIBIT B

STRUCTURAL PRINT PACKAGE - 220695

NORTH HAVEN, CT 06473

RACKING PROVIDER



20-345 COUNTY ROAD X RIDGEVILLE CORNERS, OHIO 43555 (P) 419.267.5280 (F) 419.267.5214 WWW.APASOLAR.COM STRUC. ENGINEER OF RECORD



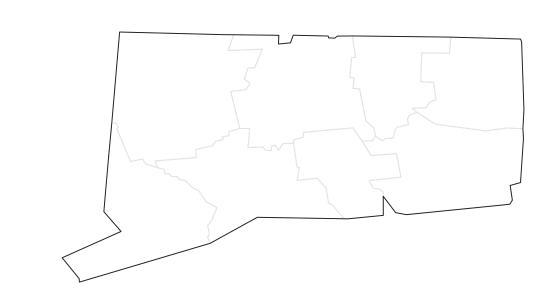
360 W. DUSSEL DR. MAUMEE, OH 43537 |P| 419.725.7161 |F| 419.725.7160 RACKING PRODUCT LINE



USE WITH THE FOLLOWING PRINTS & PACKAGES. INCLUDE WITH SUBMISSION TO PERMIT/INSPECTION AGENCY:

- ✓ CALCULATION PACKAGE:

 220695 CALC SET STAMPED
- FOUNDATION DESIGN REPORT (SITE SPECIFIC, & ONLY WHERE REQUIRED BY EOR OR AHJ)



SITE ADDRESS: 122 MILL RD.

NORTH HAVEN, CT 06473

REVISION: B

PERMIT SET/ STRUCTURAL PACKET

APPROVED

SHEET INDEX				
STRUCTURAL				
S-000	В	STRUCTURAL COVER		
S-100	Α	RACKING OVERVIEW		
S-200	Α	GROUND SCREW: SECTION A		
S-201	Α	GROUND SCREW: SECTION B		
S-300	Α	STRUCTURAL COMPONENTS		
S-400	Α	CONNECTIONS		
S-500	Α	STRUCTURAL PURLINS		
S-600	Α	CLAMPS & BRACES		

GOVERNING STRUCTURAL CODE/S

2021 INTERNATIONAL BUILDING CODE

PACKAGE COVERAGE — LOADING AND SETUP RANGES & CONSTANTS

TILT ANGLES:	25°
MAX GROUND SNOW LOAD (PSF):	30
MAX WIND LOADS (MPH):	110
WIND EXPOSURE CATEGORY:	С
MAX SEISMIC Ss:	0.204 g
MAX SEISMIC S1:	0.054 g

PV MODULE: PHONO SOLAR

MAX. PANEL WIDTH MAX. PANEL LENGT MAX. PANEL HEIGH MAX. PANEL WEIGH	TH: 89.69" T: 2.00"
RISK CATEGORY:	

RISK CATEGORY: I
MAX FRONT LIP CLEARANCE: 48"

SOLAR PHOTOVOLTAIC GROUND MOUNT

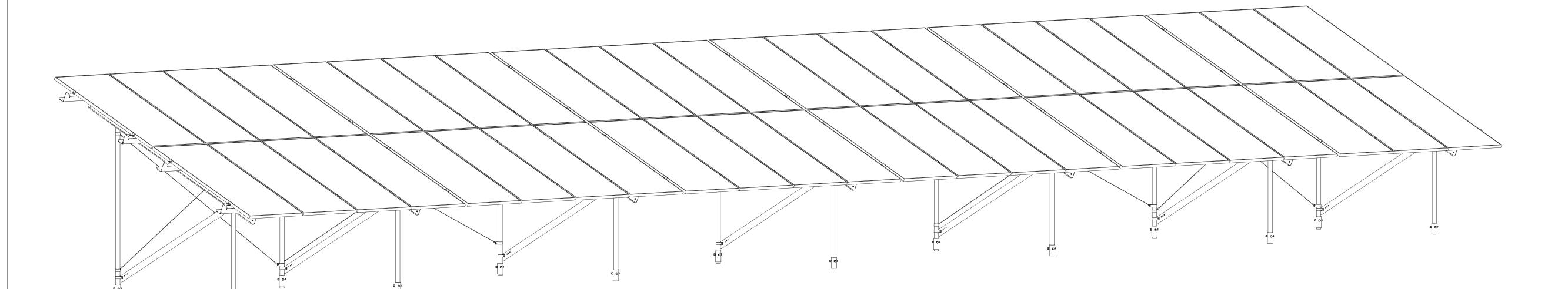
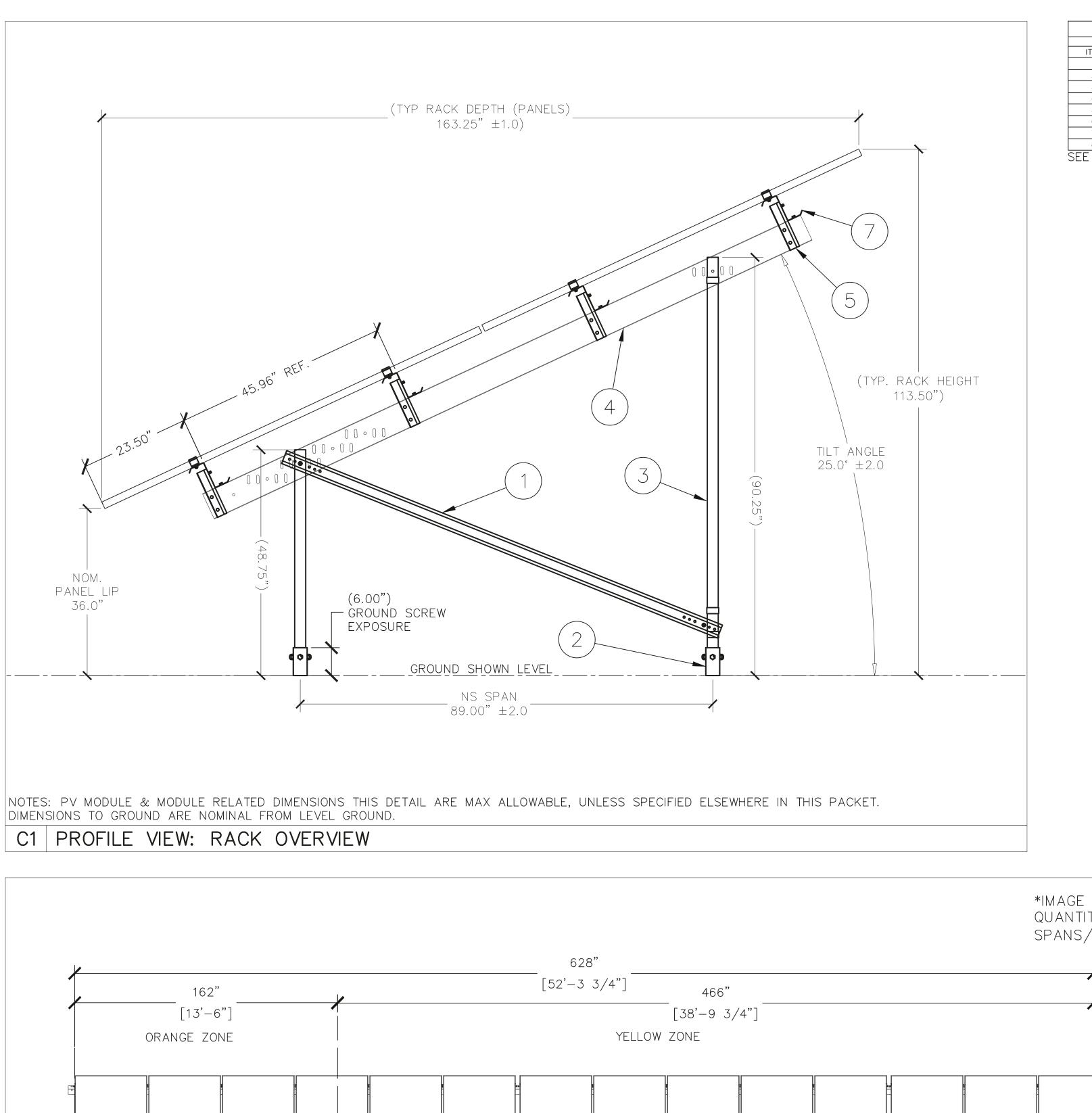




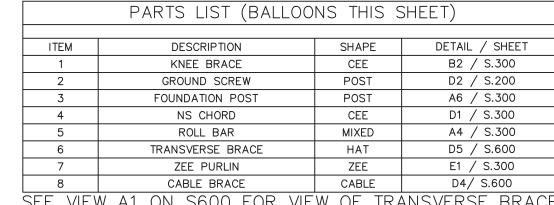
IMAGE FOR REFERENCE ONLY



1. WHERE ALLOWABLE PER THE CALCULATIONS PACKAGE. EXTERIOR/CORNER AREAS SHALL REMAIN ZONED YELLOW. SEE EXPLAINATION IN CALC PACKAGE.

SITE SPECIFIC BUILD PLANS SHALL DESIGNATE EXTERIOR/CORNER SPANS.

A1 ELEVATION VIEW FROM FRONT (NORTH-FACING)



SEE VIEW A1 ON S600 FOR VIEW OF TRANSVERSE BRACE

NOTES:

- 1. STANDARD FRONT LIP HEIGHT AND TILT ANGLES MEASURED FROM LEVEL GROUND
- 2. FOUNDATION TESTING, WHERE REQUIRED, SHALL BE DONE ACCORDING TO THE "QUICK TEST METHOD" PER ASTM D1143 & D3689.
- 3. PRINT DIMENSIONS: DIMENSIONS SHOWN REFLECT POST HEIGHTS ON LEVEL GROUND. ON UNEVEN TERRAIN, REAR FOUNDATION POST HEIGHT WILL BE DICTATED BY FRONT LIP HEIGHT, PANEL TILT, AND NORTH/SOUTH POST SPACING.
- 4. <u>ADDITIONAL TOLERANCES</u>: POST PLUMBNESS SHOULD BE WITHIN ±2°
- 5. SPECIAL INSPECTIONS (WHERE REQUIRED):

SPECIAL INSPECTIONS ARE <u>NOT REQUIRED BY APA</u> SOLAR OR THE STRUCTURAL ENGINEER OF RECORD, THE JDI GROUP. WHERE REQUIRED BY OWNER, CUSTOMER, AND/OR AUTHORITY HAVING JURISDICTION, MÍNIMUM INSPECTION SHALL FOLLOW IBC OR LOCAL AHJ SPECIAL INSPECTIONS GUIDELINES.

RACKING PROVIDER SOLAR RACKING

20-345 COUNTY ROAD X RIDGEVILLE CORNERS, OHIO 43555 (P) 419.267.5280 (F) 419.267.5214 WWW.APASOLAR.COM

RACKING TYPE

TITAN ENGINEER OF RECORD

360 W. DUSSEL DR. MAUMEE, OH 43537 |P| 419.725.7161 |F| 419.725.7160

architects & engineers

PROFESSIONAL SEAL/STAMP

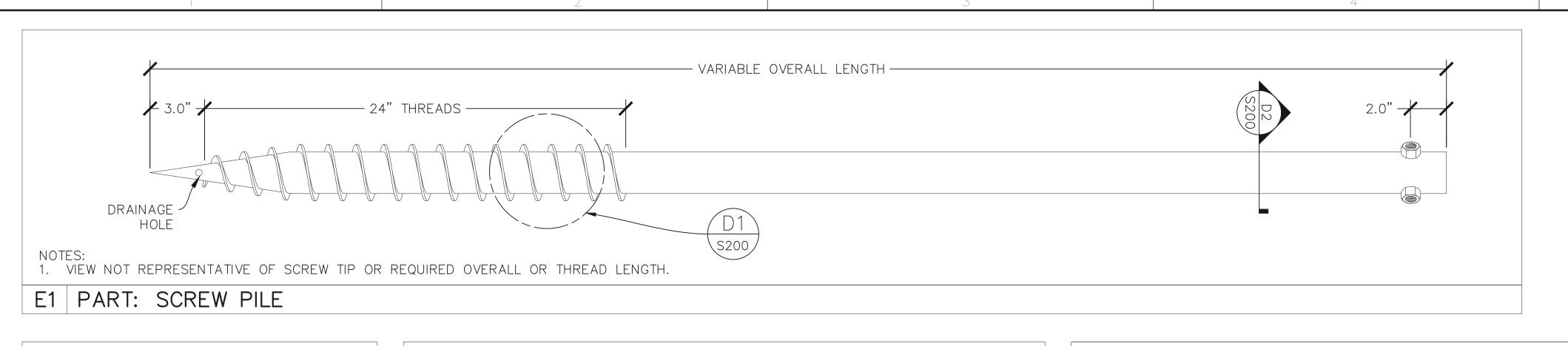
SHEET REVISIONS
REV. DESCRIPTION
A INITIAL RELEASE

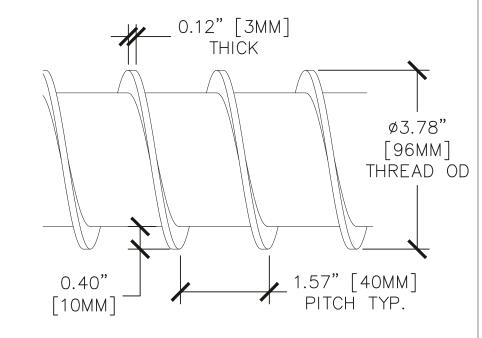
APPROVED

DRAWN REVIEWED APPROVED SIZE LB TM JDI RACKING OVERVIEW 220695

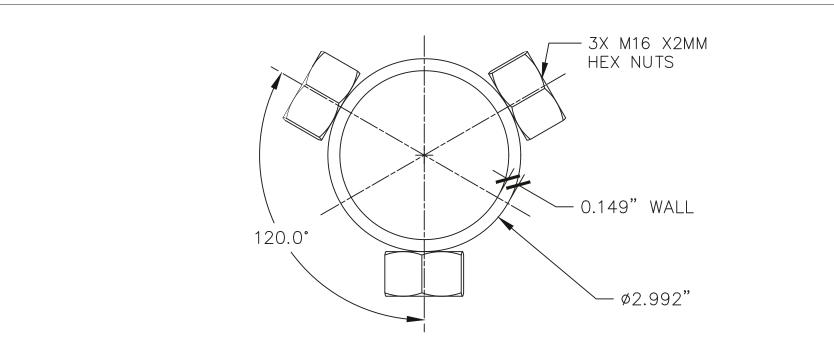
*IMAGE REFERENCE ONLY.SHOWS STRUCTURAL MAXIMUMS. NOT INDICATIVE OF REQUIRED QUANTITIES.PLEASE REFER TO SITE SPECIFIC BUILD PLANS FOR SITE SPECIFIC REQUIRED

SPANS/QUANTITIES. REMAINING INTERIOR RACKING GREEN ZONE 1 TYP. MAX CANT. 67" YELLOW ZONE SPAN _ 229.50" YELLOW ZONE SPAN 229.50" GREEN ZONE SPAN _ 275.25" ORANGE ZONE SPAN NOTES: MAX CANTILEVER MEASURED FROM EDGE OF PANEL TO POST CENTER. MAX SPAN MEASURED FROM PILE CENTER TO PILE CENTER. POST QUANTITY AS REQUIRED TO SATISFY CANTILEVERS, SPANS, ROW LENGTH, & PANEL QUANTITY





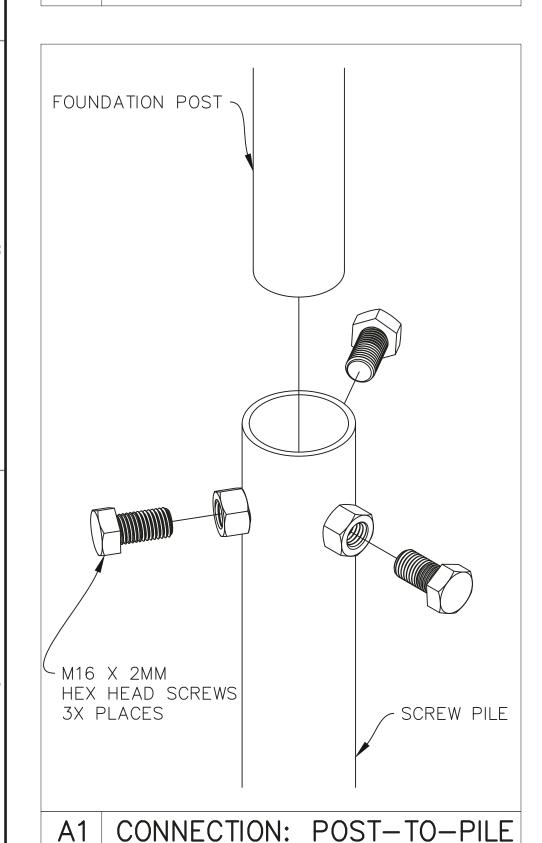
D1 DETAIL: SCREW PILE



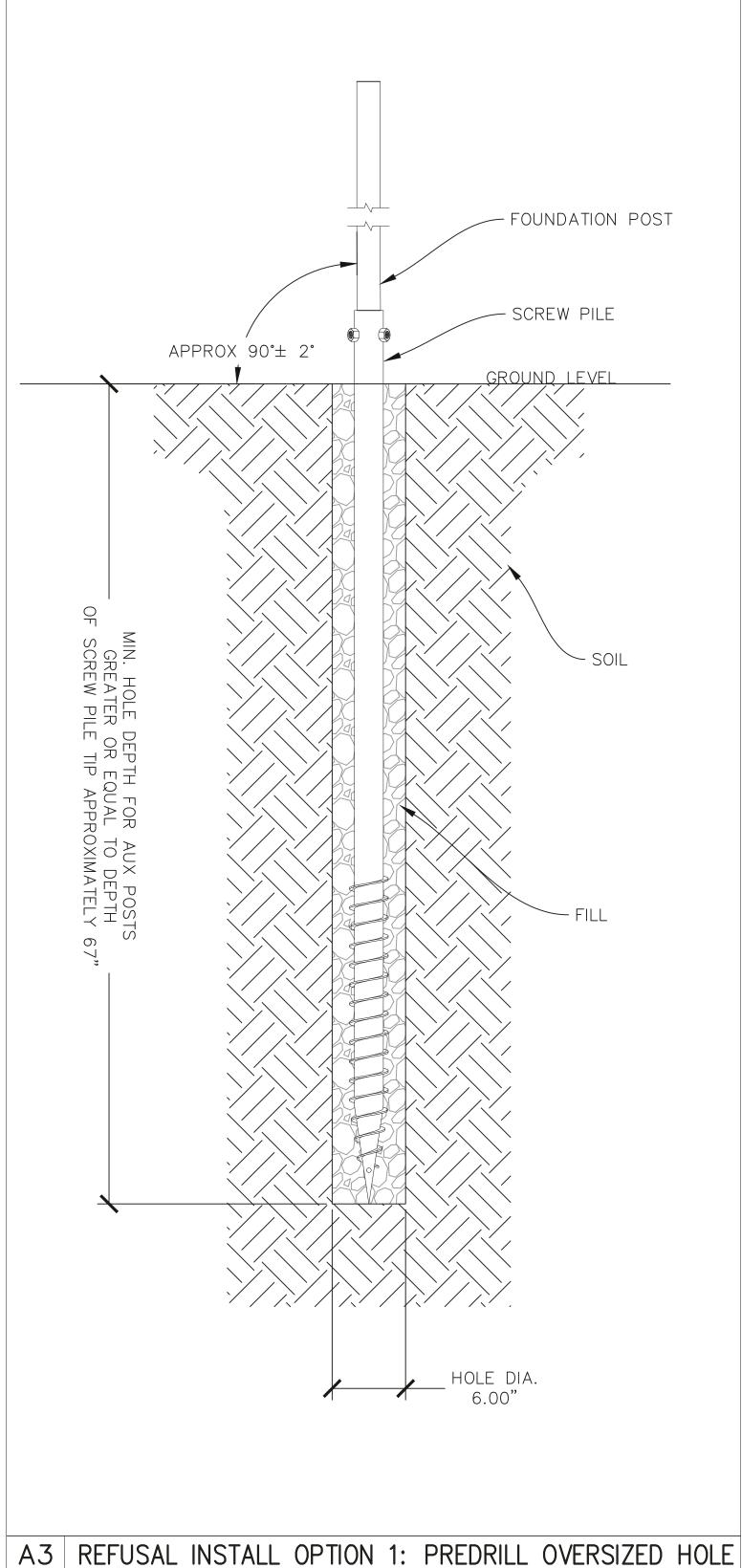
D2 | SECTION: SCREW PILE

FULLY SET/ FLUSH FIT BOLT INDENTS TUBE TO LOCK ASSEMBLY IN PLACE

C1 | SECTION: PILE ASSEMBLY



APPROX 90°± 2° GROUND LEVEL FROST LINE MIN. OF 2/3 THREADS BELOW FROST ALL ZONES 1. LENGTH & THREADS MAY VARY, SEE SHEET NOTES A2 VIEW: POST EMBEDMENT



NOTES:

- 1. FOUNDATION POST MATERIAL: 50 KSI MIN YIELD
- 2. FOUNDATION POST TO BE HOT DIPPED GALVANIZED TO ASTM A123 OR INLINE GALVANIZED TO ASTM A1057.
- 3. SCREW PILE TUBE MATERIAL: 30 KSI MIN YIELD STRENGTH STEEL.
- 4. SCREW PILE THREAD MATERIAL: 28 KSI MIN YIELD STRENGTH STEEL.
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- 6. ALL HARDWARE IS 300 SERIES STAINLESS STEEL, A574 ALLOY STEEL, OR MINIMUM 8.8 CLASS
- 7. BOLTS MUST BE FULLY SET INTO WELDED NUTS.
- 8. BOLTS SHALL BE 30 MM LONG.
- 9. SCREW PILE SHALL PENETRATE THE SOIL TO A DEPTH PAST THE FROST LINE, SUCH WHICH LESS THAN 1/3 OF THE TOTAL LENGTH OF THREADS ARE ABOVE THE FROST LINE, OR TO THE DEPTH INDICATED AS MINIMUM PER THE STAMPED FOUNDATION DESIGN REPORT, WHICHEVER IS DEEPER.
- 10. FOUNDATION POST SHALL EXTEND ABOVE GROUND LEVEL AT MINIMUM OF INDICATED FRONT LIP CLEARANCE, PLUS THE ADDITIONAL LENGTH REQUIRED TO ACHIEVE THE INDICATED TILT
- 11. MINIMUM ENGAGEMENT BETWEEN SCREW PILE AND FOUNDATION POST SHALL BE 4".
- 12. INSTALLERS SHALL REFER TO STRUT AND POST SETUP SHEETS FOR LENGTH AND PLACEMENT DETAILS.

FOUNDATION POST INSTALLATION

- 13. ACCURATELY LOCATE AND INSTALL SCREW PILES BY SUCH METHODS AND EQUIPMENT SO AS NOT TO IMPAIR THE PILE STRENGTH OR DAMAGE POSTS OR ADJACENT CONSTRUCTION.
- 14. INSTALLATION CONTRACTOR RESPONSIBLE FOR ALL CONSTRUCTION EQUIPMENT, METHODS, AND SEQUENCES.
- 15. DISTURBED GALVANIZED SURFACES SHALL BE TOUCHED UP WITH AN APPROVED COLD GALVANIZING COMPOUND.
- 16. INSTALL SCREW PILES TO MINIMUM DEPTH AS INDICATED THIS SHEET OR AS REQUIRED PER THE STAMPED FOUNDATION DESIGN REPORT, WHICHEVER IS GREATER.

AUXILLIARY FOUNDATION NOTES:

- 1. EMBEDMENT DEPTH CONTINGENT UPON SITE SPECIFIC DATA, INCLUDING BUT NOT LIMITED TO: FROST DEPTH, SOIL PROPERTIES, AND LOCAL BUILDING CODE REQUIREMENTS.
- 2. AUGERED HOLE SHOULD EXTEND BELOW THE LOCAL FROST LINE, INTO THE STABLE SOIL ZONE.
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- 5.5. KNOWN ACCEPTABLE AGGREGATES (NAMING PER ASTM C33-03):
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6. QUALITY CONTROL NOTES

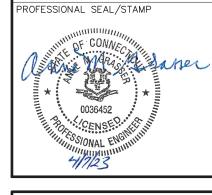
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SOLAR RACKIN

> 20-345 COUNTY ROAD X RIDGEVILLE CORNERS, OHIO 4355 (P) 419.267.5280 (F) 419.267.5214 WWW.APASOLAR.COM

architects & engineers

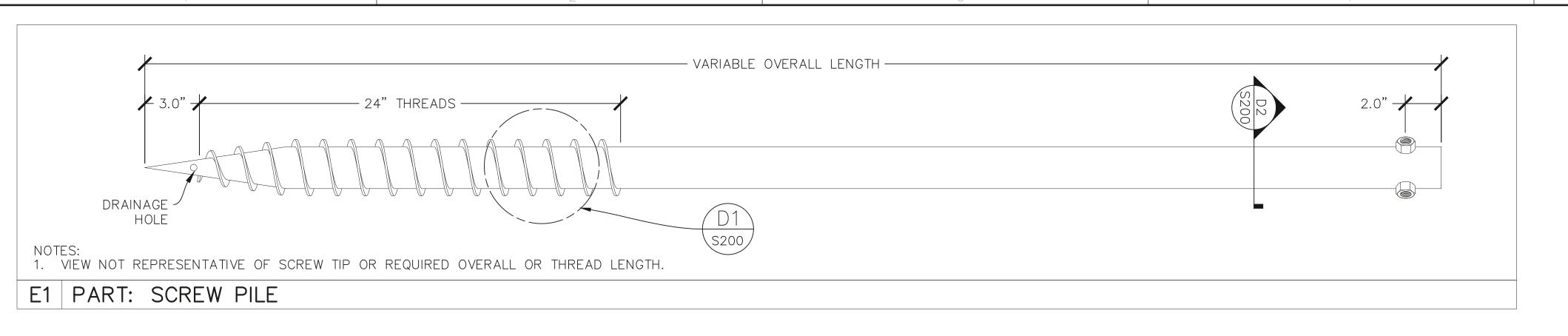
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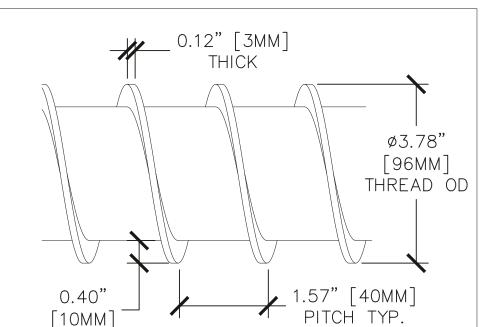


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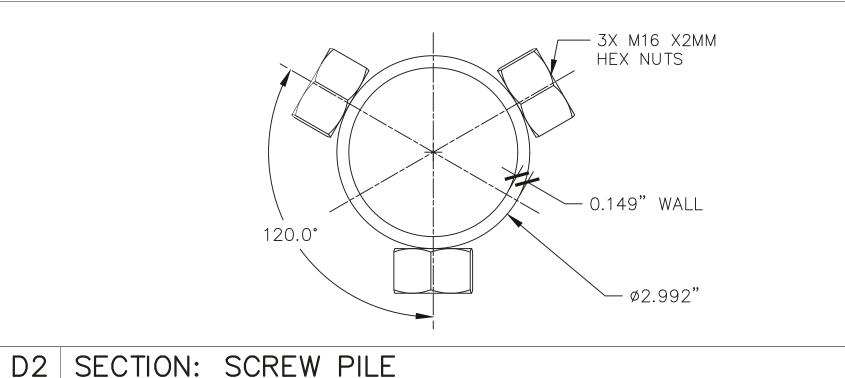
APPROVED

DRAWN REVIEWED APPROVED SIZE LB | TM | JDI | GROUND SCREW: SECTION A 220695 DRAWING NUMBER





D1 DETAIL: SCREW PILE



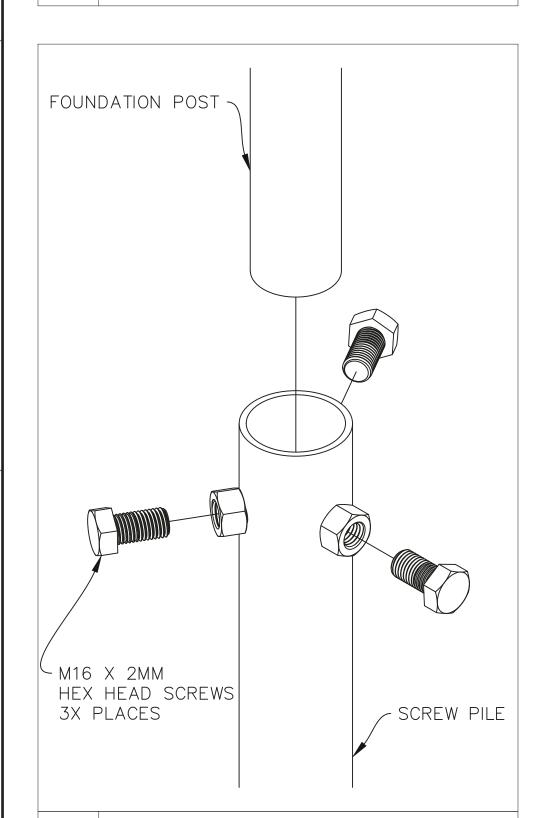
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TUBE TO LOCK

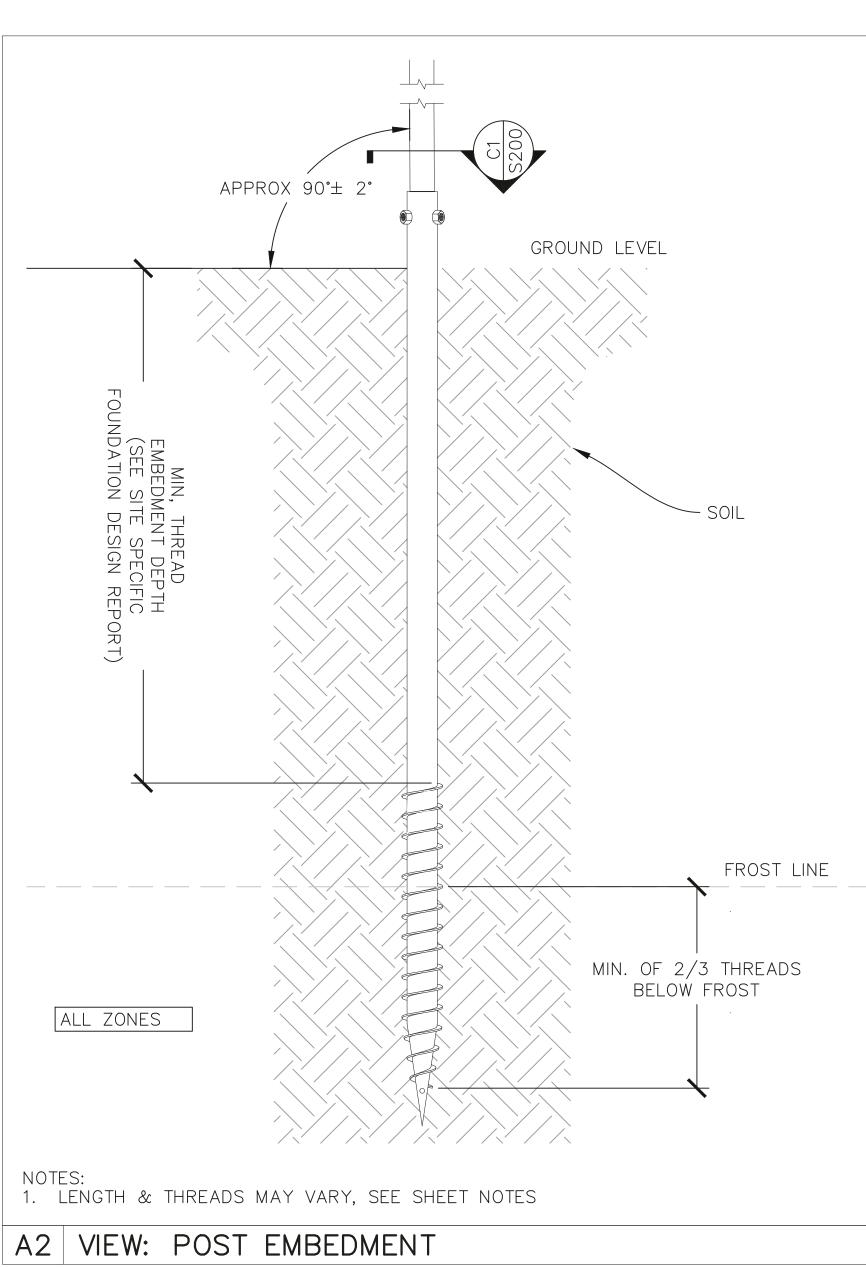
ASSEMBLY IN

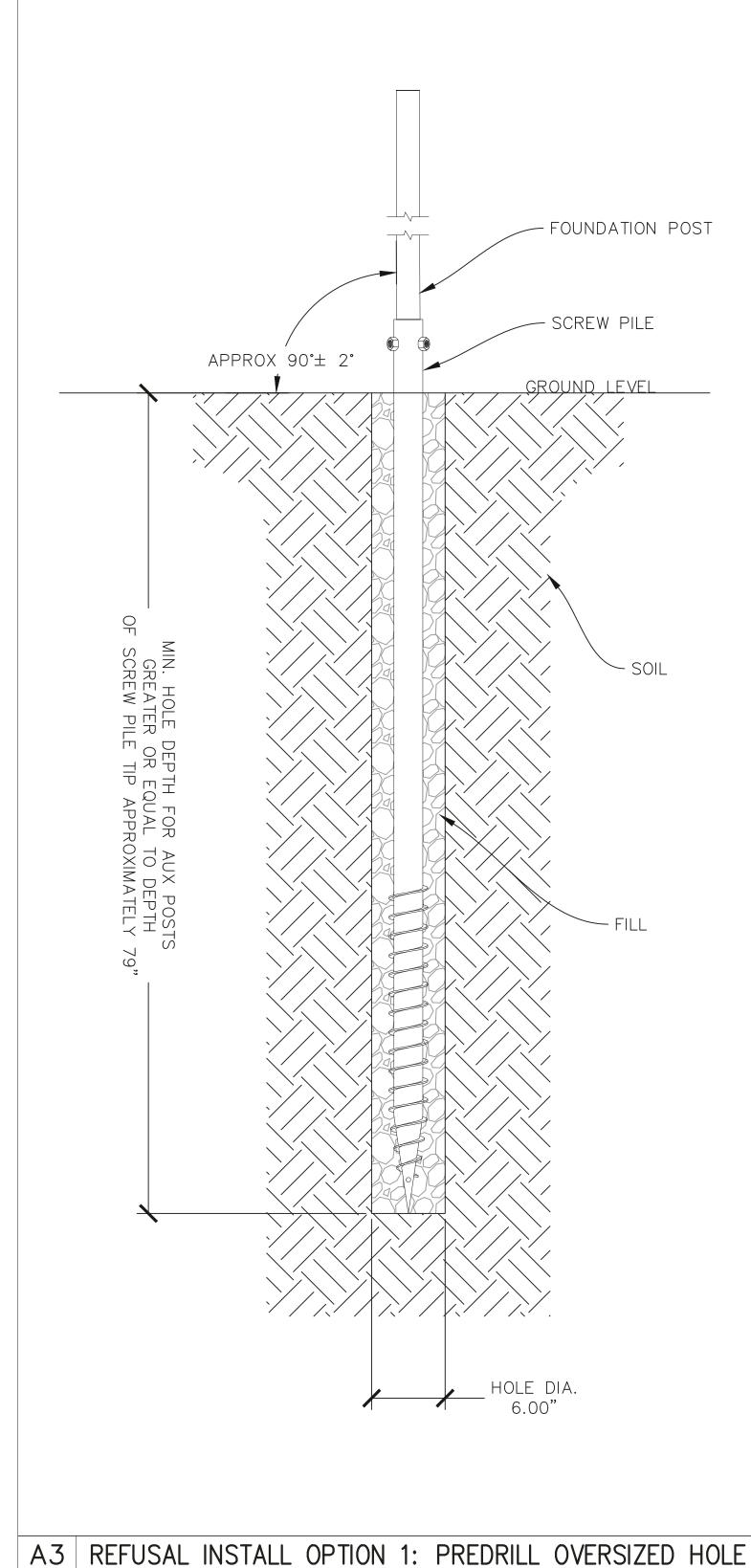
PLACE

C1 | SECTION: PILE ASSEMBLY



A1 CONNECTION: POST-TO-PILE





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SOLAR RACKIN

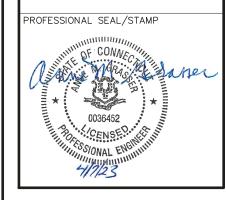
> 20-345 COUNTY ROAD X RIDGEVILLE CORNERS, OHIO 4355 (P) 419.267.5280 (F) 419.267.5214

> > WWW.APASOLAR.COM

TITAN



360 W. DUSSEL DR. MAUMEE, OH 43537 |P| 419.725.7161 |F| 419.725.7160

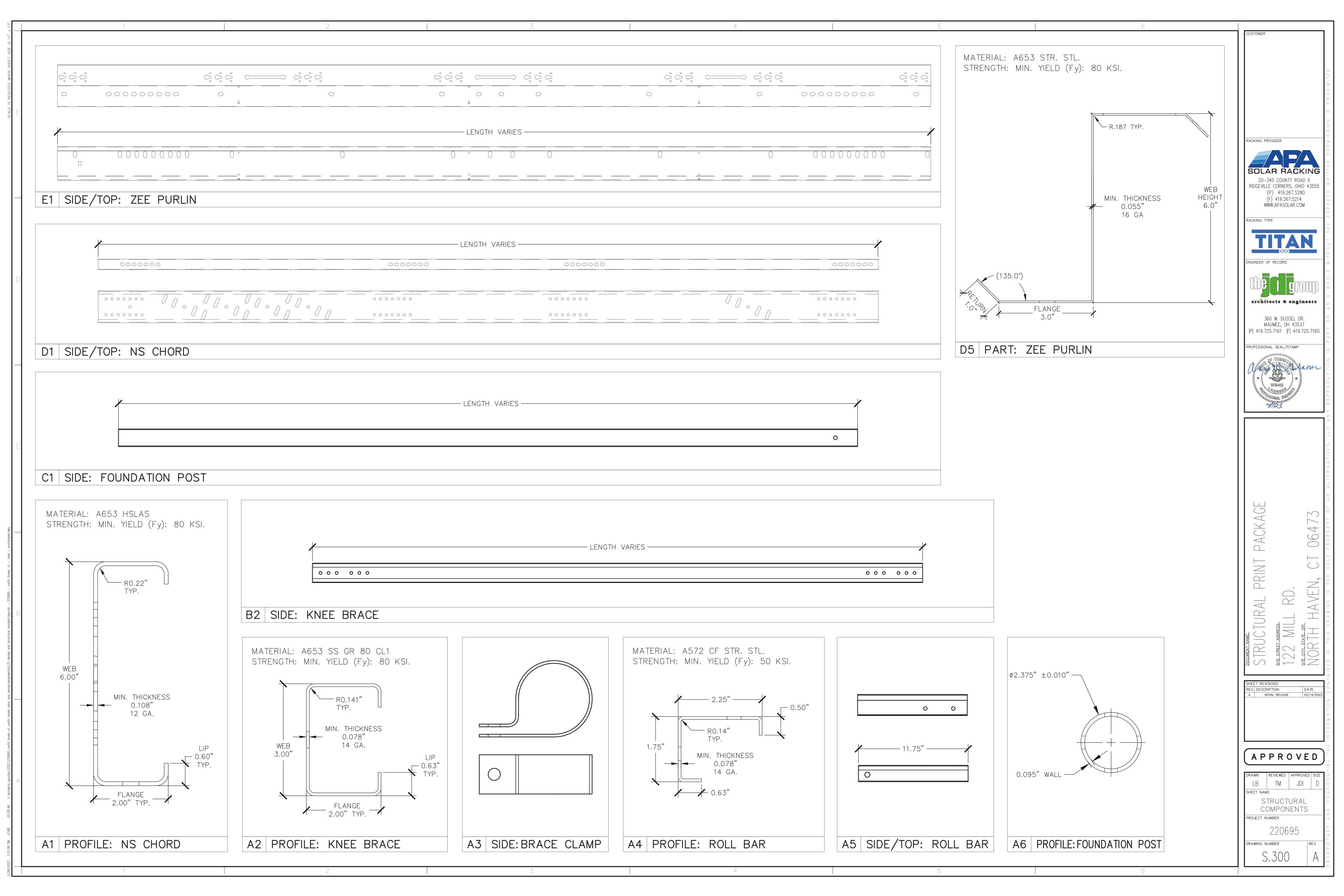


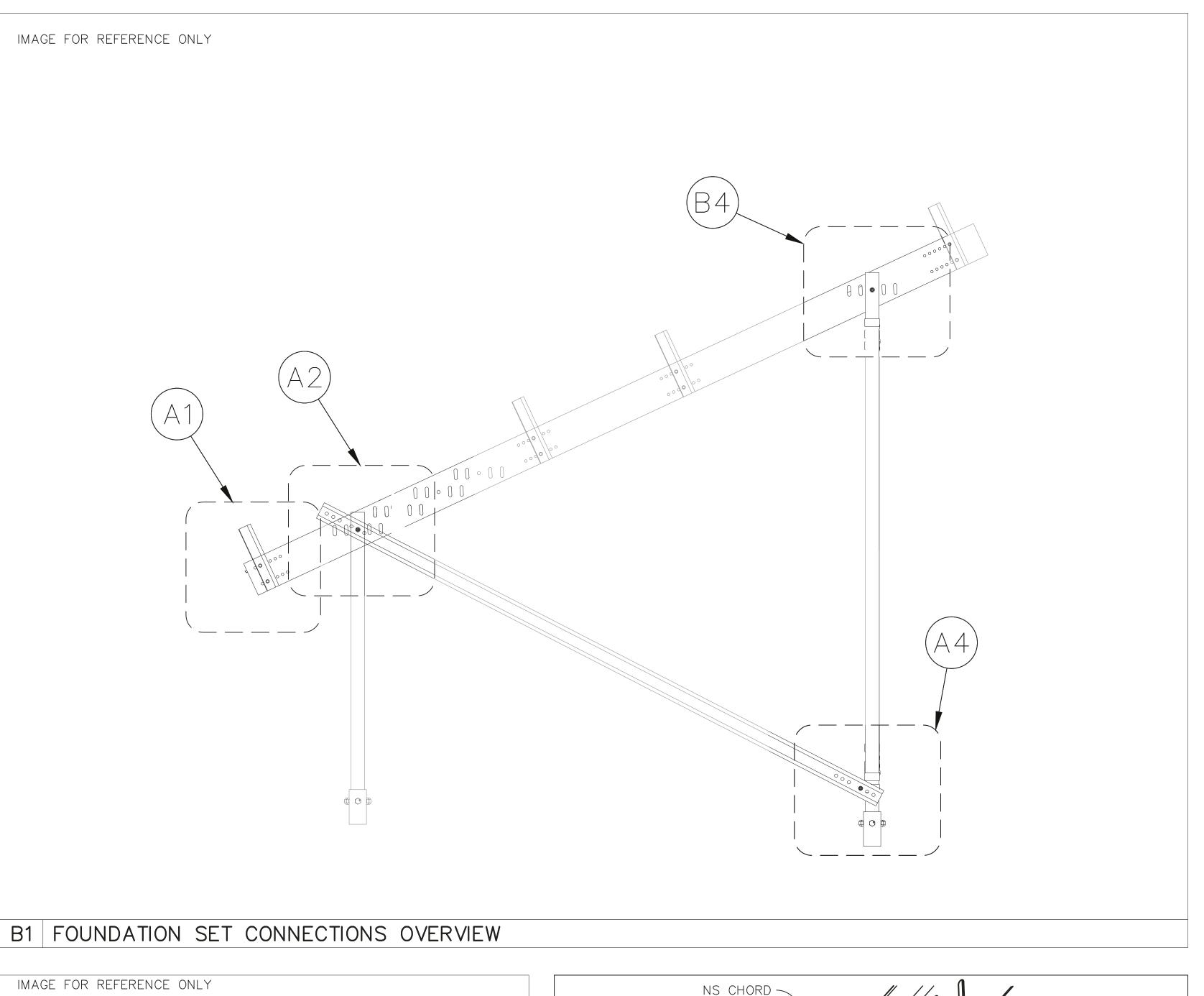
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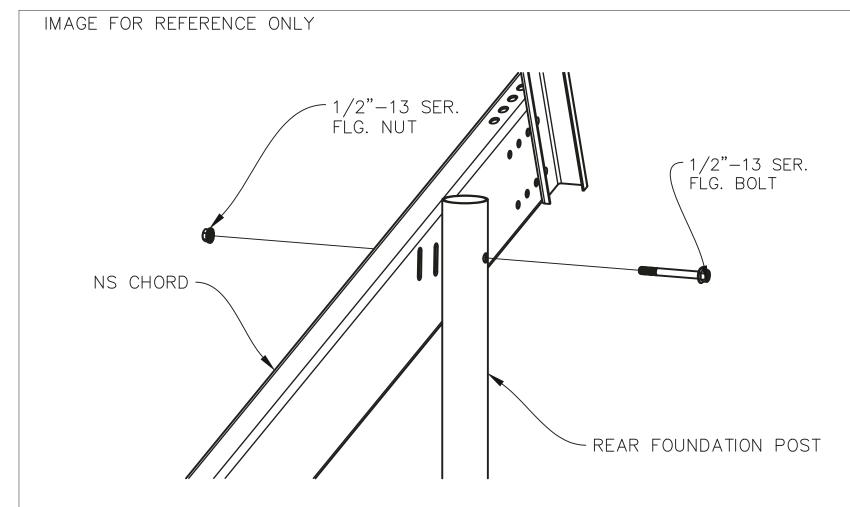
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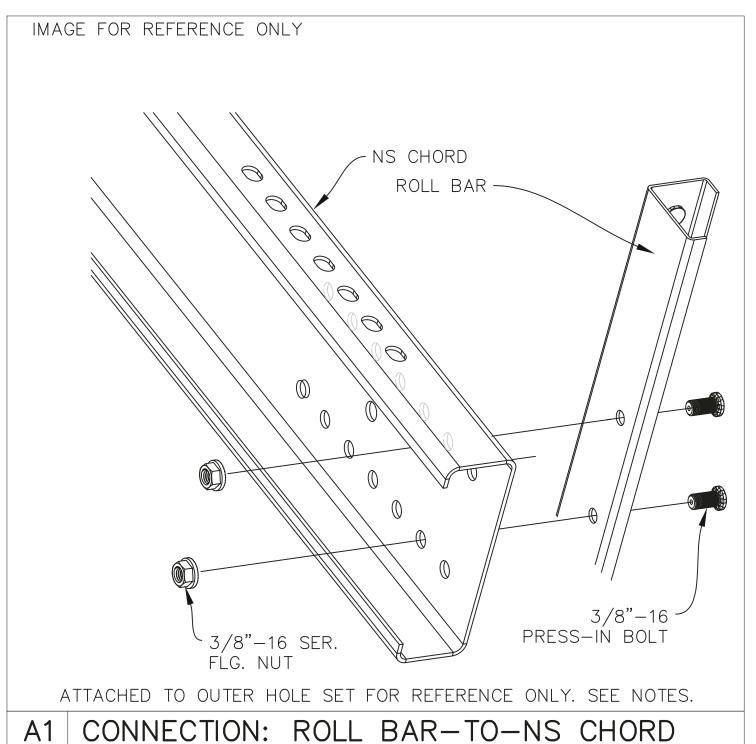
S.201

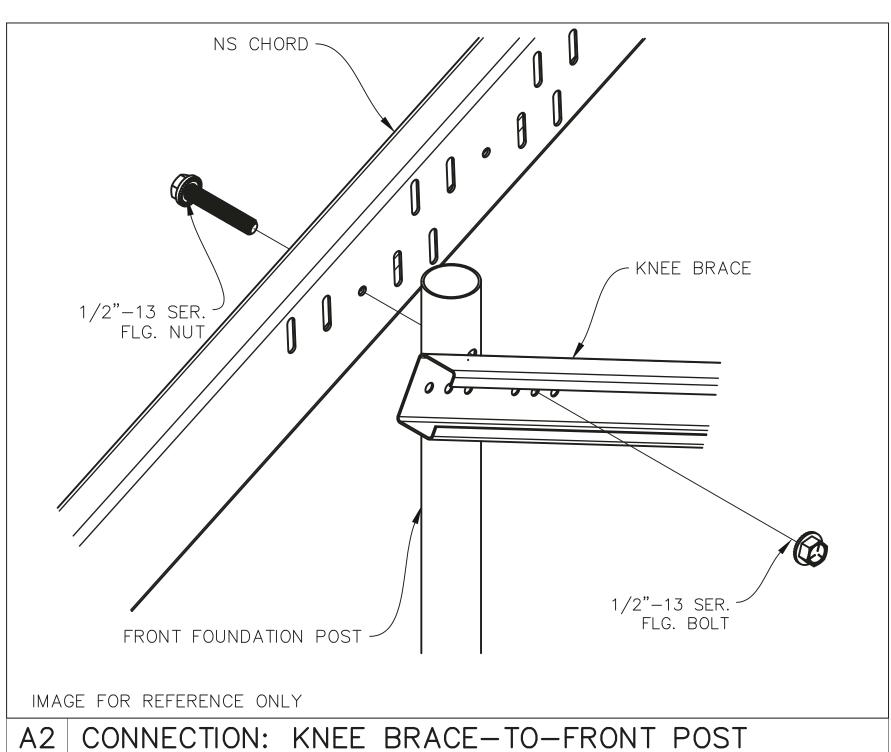


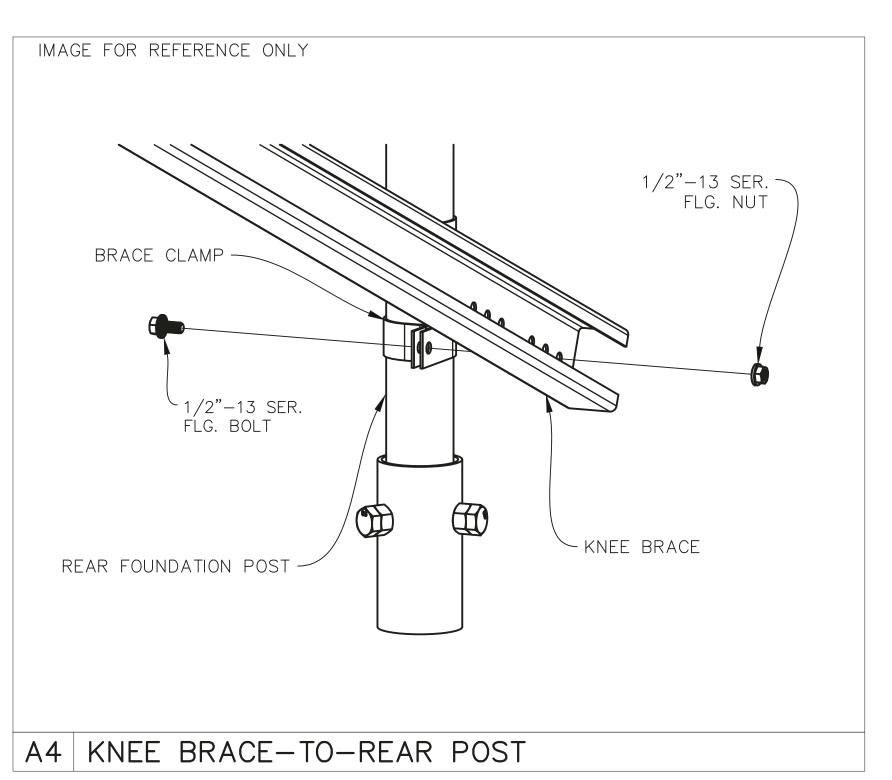




B4 CONNECTION: REAR POST-TO-NS CHORD







NOTES:

1. HARDWARE TORQUE VALUES:

3/8"-16 STAINLESS STEEL MIN.: 17.5 FT-LBS NOM.: 19.6 FT-LBS MAX.: 50.0 FT-LBS

1/2"-13 STAINLESS STEEL MIN: 25 FT-LBS

- 2. DEPICTED HARDWARE AND PART PLACEMENT NOT INDICATIVE OF PREFERRED OR REQUIRED POSITIONS.
- 3. HOLE/SLOT PATTERNS IN PARTS ALLOW FOR DEVIATION FROM NOMINAL DIMENSIONS, MULTIPLE PART POSITIONS, AND MULTIPLE TILT ANGLES.
- 4. SEE INSTALLATION MANUAL FOR SETUP INSTRUCTIONS.
- 5. SERRATED FLANGED BOLTS MAY BE REPLACED WITH EQUIVALENT PRESS—IN BOLTS. SEE NOTE 10 FOR MORE OPTIONS.
- 6. PRESS-IN BOLTS, WHERE PRESENT, TO BE INSTALLED TO MANUFACTURERS RECOMMENDED VALUES.
- 7. OTHER SPECIFIC CONNECTIONS ELSEWHERE IN PRINT SET.
- 8. ROLL BAR MUST CONNECT TO THE CORRECT HOLES IN CEE CHANNEL (INNER, OR OUTER TYPICALLY), AS DETERMINED BY PV MODULE MANUFACTURERS ALLOWABLE CLAMPING ZONE.
- 9. USE CORRECT NOMINAL HOLES IN CEE TO CONNECT TO FOUNDATION POST, AS INDICATED. ADJACENT HOLES AND SLOTS FOR FIELD ADJUSTMENTS.
- 10. SERRATED HARDWARE MAY BE REPLACED WITH EQUIVALENT HARDWARE WITH WASHERS IF NECESSARY.
- 11. IN ALL DETAILS, THE PRESENCE OF TWO SETS OF HARDWARE INDICATES THE REQUIREMENT OF TWO SETS OF HARDWARE.
- 12. STAINLESS STEEL HARDWARE MAY BE
 REPLACED WITH GALVANIZED STEEL HARDWARE
 OR CORROSION AND STRENGTH COMPARABLE
 HARDWARE MATERIALS AND FINISHES.
- 13. UNLESS NOTED OTHERWISE, ALL HARDWARE MAY BE INSTALLED IN EITHER DIRECTION (NUT/BOLT MAY BE ON EITHER SIDE OF CONNECTION).
- 14. WHEN NECESSARY, ADDITIONAL HOLES MAY BE DRILLED TO COMPLETE CONNECTION. ENGINEERING SHALL BE CONTRACTED PRIOR TO FIELD MODIFICATIONS OF PARTS.

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architects & engineers

PROFESSIONAL SEAL/STAMP

OF CONNECTION

O036452

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O036452

PACKAGE

SHEET REVISIONS

REV. DESCRIPTION DATE

A INITIAL RELEASE 03/14/2023

APPROVED

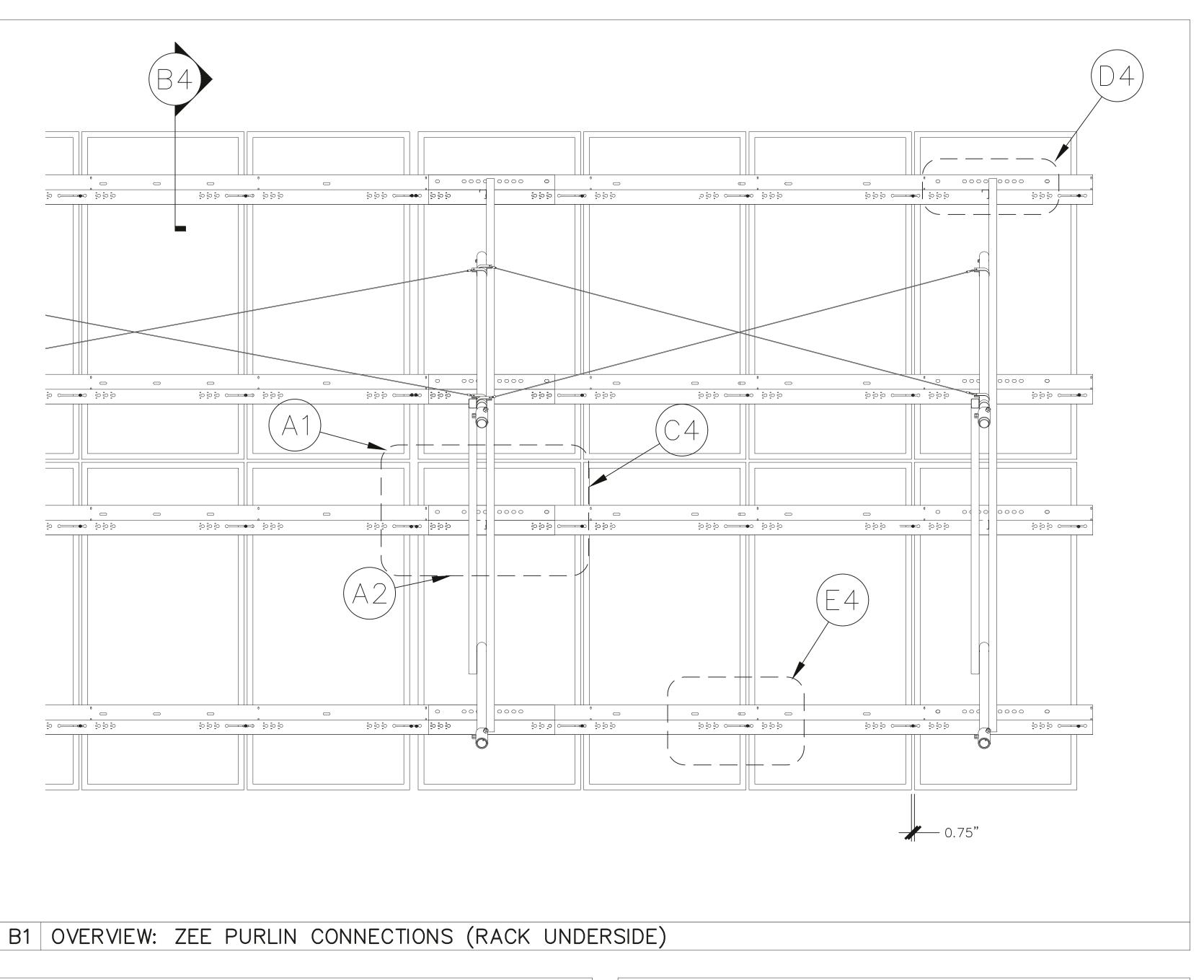
DRAWN REVIEWED APPROVED SIZE LB TM JDI CONNECTIONS

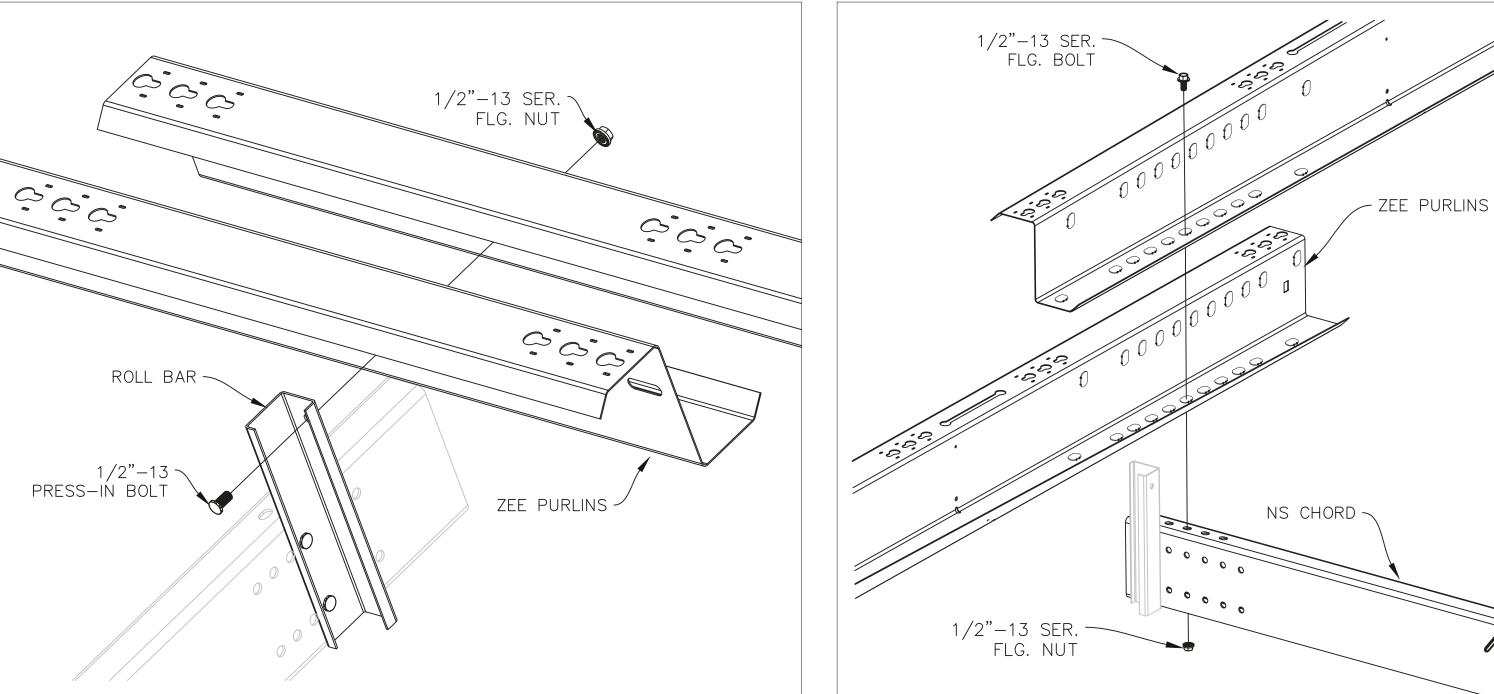
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220695

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S.400

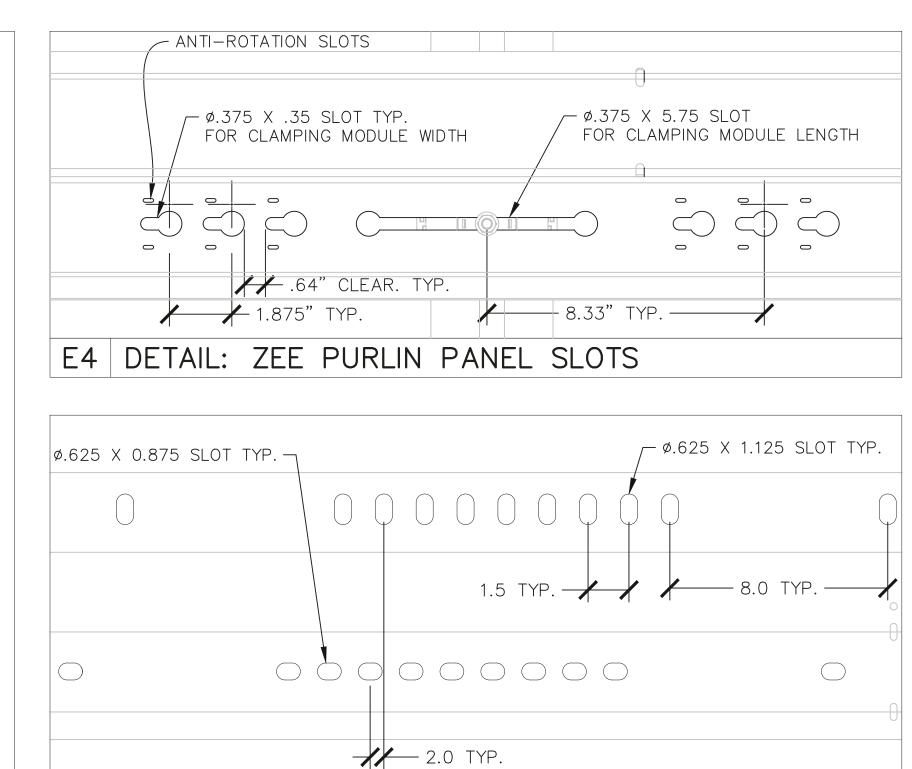
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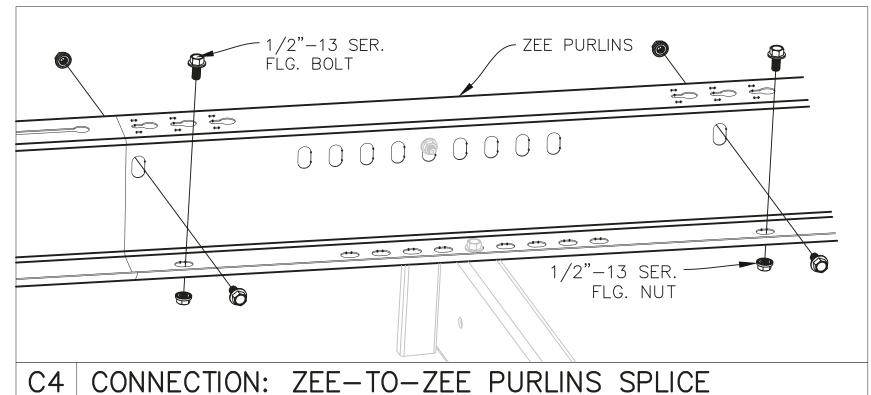




A1 CONNECTION: ZEE PURLINS-TO-ROLL BAR

A2 CONNECTION: ZEE PURLINS—TO—NS CHORD





D4 DETAIL: ZEE PURLIN SPLICE SLOTS

1. HARDWARE TORQUE VALUES:

MIN.: 17.5 FT-LBS NOM.: 19.6 FT-LBS MAX.: 50.0 FT-LBS

2. DEPICTED HARDWARE AND PART PLACEMENT NOT INDICATIVE OF PREFERRED OR REQUIRED POSITIONS.

DEVIATION FROM NOMINAL DIMENSIONS, MULTIPLE PART POSITIONS, AND MULTIPLE TILT ANGLES.

5. SERRATED FLANGED BOLTS MAY BE REPLACED

PRESS-IN BOLTS, WHERE PRESENT, TO BE

PRINT SET.

8. SERRATED HARDWARE MAY BE REPLACED WITH EQUIVALENT HARDWARE WITH WASHERS IF

9. IN ALL DETAILS, THE PRESENCE OF TWO SETS

10. STAINLESS STEEL HARDWARE MAY BE HARDWARE MATERIALS AND FINISHES.

11. UNLESS NOTED OTHERWISE, ALL HARDWARE MAY BE INSTALLED IN EITHER DIRECTION (NUT/BOLT MAY BE ON EITHER SIDE OF CONNECTION).

12. WHEN NECESSARY, ADDITIONAL HOLES MAY BE DRILLED TO COMPLETE CONNECTION. ENGINEERING SHALL BE CONTRACTED PRIOR TO FIELD MODIFICATIONS OF PARTS.

13. CONNECTION IN DETAIL A1 & A2 SHOWN IN NOMINAL POSITION. ACTUAL CONNECTION MAY BE ± 6 ".

15. WHERE PRESENT, TRANSVERSE BRACE MAY UTILIZE LOWER SPLICE BOLTS. SEE CONNECTIONS SHEET FOR MORE INFORMATION.

MINIMUM 32", AS INDICATED, EXCEPT AT ENDS

19. ZEE PURLINS GALVANIZED TO CONFORM TO A MINIMUM THICKNESS DESIGNATION EQUAL TO G90 OR INLINE GALVANIZED TO COMPARABLE THICKNESS AS PER ASTM A1057.

20. TYPICAL ZEE PURLIN RETURN LIP ANGLE SHOWN. ACTUAL ANGLE MAY VARY.

21. SLOT DIMENSIONS FOR REFERENCE ONLY. FINAL SHAPE, FREQUENCY, AND DIMENSIONS MAY

22. LENGTH OF PURLIN VARIES BY PROJECT AND LOCATION WITHIN ARRAY.

3/8"-16 STAINLESS STEEL

3. HOLE/SLOT PATTERNS IN PARTS ALLOW FOR

4. SEE INSTALLATION MANUAL FOR SETUP INSTRUCTIONS.

WITH EQUIVALENT PRESS-IN BOLTS.

INSTALLED TO MANUFACTURERS RECOMMENDED VALUES.

7. OTHER SPECIFIC CONNECTIONS ELSEWHERE IN

NECESSARY.

OF HARDWARE INDICATES THE REQUIREMENT OF TWO SETS OF HARDWARE.

REPLACED WITH GALVANIZED STEEL HARDWARE OR CORROSION AND STRENGTH COMPARABLE

14. WHEN CONNECTIONS IN DETAIL A1 & A2 ARE AT THEIR MAX/MIN POSITIONS $(\pm 2")$ INTERFERING SPLICE HARDWARE MAY BE RELOCATED TO NEXT NEAREST SLOTS.

16. ZEE-TO-ZEE SPLICE SHALL ALWAYS OVERLAP OF ROW, WHERE NO SPLICE IS REQUIRED.

17. SPLICE MAY OVERLAP IN EITHER DIRECTION.

18. ZEE PURLIN MATERIAL AND FINISH ARE MANUFACTURED TO SPECIFICATIONS THAT MEET OR EXCEED OUR STANDARD PRODUCT WARRANTY.

RACKING PROVIDER SOLAR RACKING

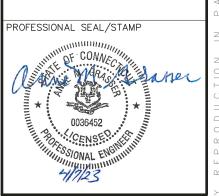
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