

PHOTOVOLTAIC MODULE GROUND MOUNT SYSTEM

TERRASmart, INC. RACK MODEL: RBI GLIDE WAVE

FOR ALLCO FINANCE LIMITED

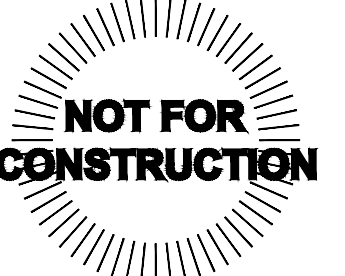
AT
BORELLI SOLAR
197 BORELLI ROAD
EAST HAVEN, CT 06511



terrasmart™
6715 STEGER DRIVE
CINCINNATI, OH 45237
513.242.2051
FAX: 513.242.0816

PROFESSIONAL SEAL

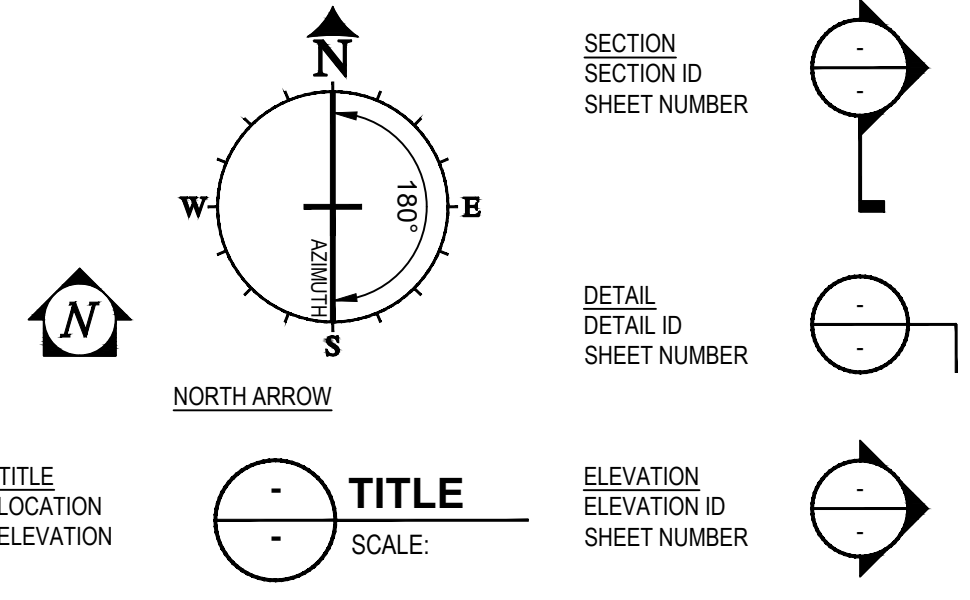
ENGINEER'S SEAL APPLIES TO DESIGN OF STRUCTURAL COMPONENTS ONLY



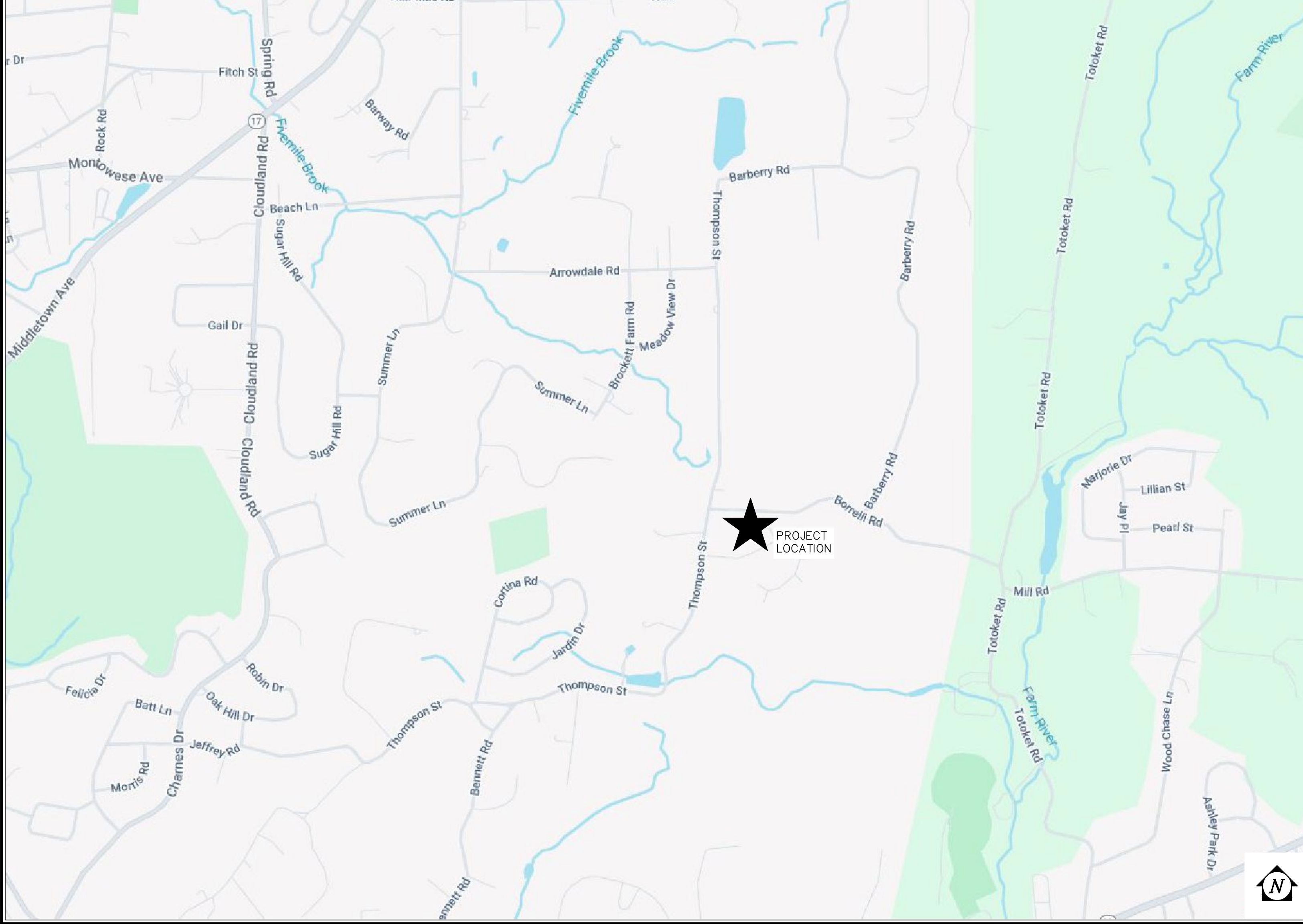
TERRASmart, INC. IS NOT RESPONSIBLE FOR CONSTRUCTION THAT IS BUILT FROM SET LABELED "NOT FOR CONSTRUCTION"

GROUND MOUNT FOR ALLCO FINANCE LIMITED

SYMBOLS LEGEND



VICINITY MAP



SHEET INDEX

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GOVERNING CODE

IBC 2021

RISK CATEGORY: I

DESIGN LOADS:

- DEAD LOADS:
 - STRUCTURE: 2.0 PSF
 - GLAZING: 3.0 PSF
 - 5.0 PSF
- ROOF LIVE LOAD = 0 PSF
- SNOW LOAD:
 - $P_g = 30.0$ PSF (GROUND SNOW)
 - $P_f = 30.0$ PSF (FLAT ROOF SNOW)
 - $P_s = 24.6$ PSF (SLOPED ROOF SNOW)
 - $C_d = 0.90$
 - $C_e = 1.20$
 - $C_g = 0.82$
 - $I_s = 0.80$
- WIND LOAD: (MAIN WIND FORCE RESISTING SYSTEM)
 - $V = 86$ MPH (PER LOCAL WIND STUDY BY WINDSIM) DATED: 07/24/2025 REPORT #: 250724_TR_EAST HAVEN_100
 - EXPOSURE: C
- SEISMIC:
 - $S_s = 0.203$
 - $S_1 = 0.054$
 - $S_2 = 0.217$
 - $S_3 = 0.087$
 - $S_4 = 1.00$
 - SITE CLASS: D
 - SEISMIC DESIGN CATEGORY: B
 - SEISMIC FORCE RESISTING SYSTEM = CANTILEVERED COLUMN SYSTEM
 - DESIGN BASE SHEAR: $V = 0.109W$
 - $C_d = 0.109$
 - $R = 2.00$
 - EQUIVALENT LATERAL FORCE ANALYSIS

CUSTOMER SPECIFICATIONS

NOTE: THIS SUBMITTAL/CONSTRUCTION SET WAS PRODUCED FROM DOCUMENTS RECEIVED FROM CUSTOMER ON 08/08/2025.

PV MODULE MANUFACTURER	FIRST SOLAR
PV MODULE MODEL #	FS-7XXXA-TR1
PV MODULE WATTAGE	530
# OF PV MODULES/STRING	6
# OF ACTIVE PV MODULES	3588
# OF INACTIVE PV MODULES	0
TOTAL # OF PV MODULES	3588
PV SYSTEM WATTS SUBTOTAL	1,902 MW
TOTAL PV SYSTEM WATTS	1,902 MW
TOPOGRAPHIC RELATIONSHIP	FOLLOW GRADE
ARRAY TILT	25° ±2°
MINIMUM MODULE CLEARANCE	3'-0"
ARRAY AZIMUTH*	180°

* - NOT ADJUSTED FOR MAGNETIC DECLINATION

RELEASE RECORD

MARK	DATE	DESCRIPTION
4	09/23/25	90% REVIEW
3	08/12/25	50% REVIEW (R2)
2	07/25/25	50% REVIEW (R1)
1	07/22/25	50% REVIEW

PROJECT INFORMATION

TITLE & ADDRESS:
BORELLI SOLAR

197 BORELLI ROAD
EAST HAVEN, CT 06511

TERRASmart PROJECT No.: 2535009

DRAWN BY: CTN REVIEWED BY:

SHEET TITLE:
COVER SHEET

SHEET No.:
SG001

MODULE SPECIFICATION SHEETS



Series 7 TR1. 525-550 Watt Thin Film Solar Module

Series 7 TR1 modules combine First Solar's thin film technology with a larger form factor and an innovative new back rail mounting system to deliver improved efficiency, enhanced installation velocity, and unmatched lifetime energy performance for utility-scale PV projects.

- More Energy per Nameplate Watt**
- Superior temperature coefficient, spectral, and shading response
 - No power loss from LID or LeTID
 - Anti-reflective coated glass enhances energy production

- Innovative Module Design**
- Optimized back rails enhance installation velocity
 - Frameless design improves soiling and snow shedding
 - Dual junction box design reduces wire management complexity and cost

- Unmatched Quality and Reliability**
- End-to-end manufacturing process for globally consistent quality
 - Tested and certified to IEC standards and beyond
 - Durable glass/glass construction
 - Immune to and warranted against power loss from cell cracking
 - 30-year Linear Performance Warranty

- Industry's Most Eco-efficient PV Solution**
- Industry-leading carbon footprint, water footprint and energy payback time
 - Globally available PV module recycling services

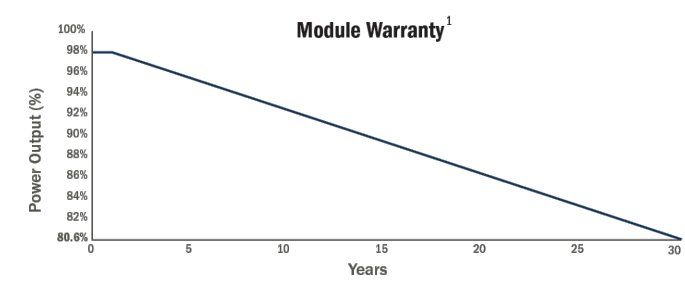
- America's Solar Company**
- Designed, responsibly sourced, and manufactured in the USA

19.7%
HIGH BIF EFFICIENCY

30YR
LINEAR PERFORMANCE WARRANTY

98%
WARRANTY START POINT

0.6%
WARRANTED ANNUAL DEGRADATION RATE



Learn more about First Solar and Series 7 TR1 at firstsolar.com/S7

First Solar, Inc. | firstsolar.com | info@firstsolar.com

Series 7 TR1. Electrical Specifications

MODEL TYPES: FS-7XXXA-TR1 (XXX = NOMINAL POWER)

RATINGS AT STANDARD TEST CONDITIONS (1000W/m², AM 1.5, 25°C)¹

		525	530	535	540	545	550
Nominal Power ¹ (P _{max})	P _{max} (W)	525	530	535	540	545	550
Efficiency (%)	%	18.8	19.0	19.1	19.3	19.5	19.7
Cell Efficiency (%)	%	19.7	19.9	20.1	20.3	20.4	20.6
Voltage at P _{max}	V _{max} (V)	186.0	186.9	187.8	188.7	189.6	190.4
Current at P _{max}	I _{max} (A)	2.82	2.84	2.85	2.86	2.88	2.89
Open Circuit Voltage	V _{oc} (V)	226.1	226.7	227.2	227.7	228.2	228.8
Short Circuit Current	I _{sc} (A)	3.04	3.05	3.06	3.06	3.07	3.08
Maximum System Voltage	V _{sys} (V)	1500 ²					
Limiting Reverse Current	I _r (A)	0.0					
Maximum Series Fuse	I _{sf} (A)	0.0					

TEMPERATURE CHARACTERISTICS

Module Operating Temperature Range	(°C)	-40 to +85
Temperature Coefficient of P _{max}	1% (P _{max})	-0.32%/°C (Temperature Range: 25°C to 75°C)
Temperature Coefficient of V _{oc}	1% (V _{oc})	-0.28%/°C
Temperature Coefficient of I _{sc}	1% (I _{sc})	+0.04%/°C
Nominal Operating Cell Temperature	(°C)	45

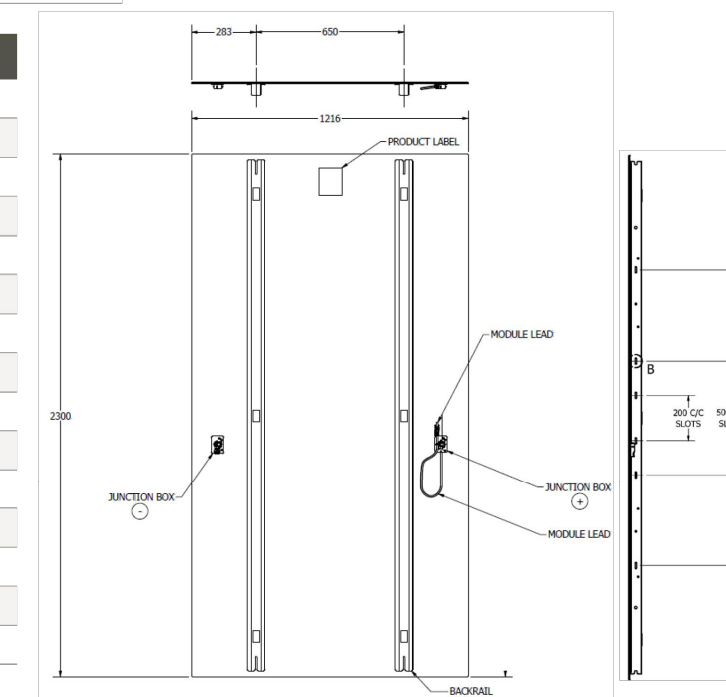
PACKAGING INFORMATION

Module Type	Modules Per Pack	Packs per 5' Container
FS-7XXXA-TR1	44 / 46	Up to 10

Mechanical Specifications

MECHANICAL DESCRIPTION

Length	2300mm
Width	1215mm
Area	2.80m ²
Module Weight	38.4 ¹ / 39.7 kg
Leadspan ²	2.5m ² , 450mm (x) & Bulkhead (x)
Connectors	TE Connectivity PV4-S or alternate
Junction Box	IP68 Rated
Bypass Diode	N/A
Cell Type	Thin film CdTe semiconductor, up to 268 cells
Back Rail Material	Galvanized steel
Front Glass	Heat strengthened
Back Glass	Heat strengthened
Encapsulation	Laminated material with edge seal
Frame to Glass Adhesive	Silicone
Load Rating	2400Pa



Certifications & Tests⁴

CERTIFICATIONS AND LISTINGS	EXTENDED DURABILITY TESTS	QUALITY & EMS	Notes (contact only)
IEC 61215-2016 & 61730-1:2016 CE	IEC TS 63209-1 Extended Stress Test	ISO 9001:2015	1. Limited power output and product warranties subject to warranty terms and conditions.
IEC 61730-2:2016	Long Term Damp Heat	ISO 14001:2015	2. All ranges, limits, unless specified otherwise, Specifications are subject to change.
IEC 60086-2:08 Damp and Salt Resistance	Thermal Test	ISO 45001:2018	3. Measurement uncertainties apply.
IEC 62716 Ammonia Corrosion	PID Resistant	ISO 14084-3:2009	4. Testing Certifications/Stamp pending
UL 61730 1500V Listed		ISO 9001:2015	5. IEC 61730-2:2016 Class II
		ISO 14001:2015	6. Leadspan length from junction box end to connector mating surface.
		ISO 45001:2018	7. +/-300mm mounting location added to product variant.

Disclaimer: All images shown are provided for illustrative purposes only and may not be an exact representation of the product. First Solar, Inc. reserves the right to change product images at any time without notice. The information included in this Module Datasheet is subject to change without notice and is provided for informational purposes only. No contractual rights are established or should be inferred because of user's reliance on the information contained in this Module Datasheet. Please refer to the appropriate Module Type Guide and Module Product Specification document for more detailed technical information regarding module performance, installation and use.

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GENERAL NOTES

GENERAL/CONSTRUCTION/SAFETY:

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE CONSTRUCTION CODE AND THE PROJECT SPECIFICATIONS.
- LOCATION OF UNDERGROUND UTILITIES SHALL BE VERIFIED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- DIMENSIONS SHOWN ON PLAN SHALL BE VERIFIED IN FIELD.
- LAYOUT IS SUBJECT TO CHANGE PER REQUEST AND/OR EXISTING CONDITIONS IN THE FIELD.
- ENGINEER SHALL NOT BE RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF CONSTRUCTION SELECTED BY CONTRACTOR.
- CONTRACTOR SHALL FIELD MEASURE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. ANY UNEXPECTED CONDITIONS OR DISCREPANCIES WITH THE DESIGN DOCUMENTS SHALL BE REPORTED TO THE ENGINEER PRIOR TO INSTALLATION OR ERECTION OF MATERIALS.
- THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. WHEN ON SITE, THE ENGINEER IS RESPONSIBLE FOR HIS OWN SAFETY BUT HAS NO RESPONSIBILITY FOR THE SAFETY OF OTHER PERSONNEL OR SAFETY CONDITIONS AT THE SITE.
- NO PERSONNEL SHALL STEP OR STAND ON PHOTOVOLTAIC (PV) MODULES (SOLAR PANELS) AT ANY TIME. RACK STRUCTURE AND PV MODULES ARE NOT DESIGNED FOR LIVE LOADS AND MAY VOID WARRANTY.
- THIS TERRASART, INC. CONSTRUCTION SET IS DESIGNED FROM PV MODULE DATA SHEET(S) PROVIDED BY THE CUSTOMER. CUSTOMER IS RESPONSIBLE FOR VERIFYING THAT THE PV MODULE(S) DELIVERED TO SITE MATCH DATA SHEET(S) PROVIDED TO TERRASART, INC. TERRASART, INC. IS NOT RESPONSIBLE FOR PV MODULE DIMENSIONAL DISCREPANCIES DUE TO FURNISHED PV MODULES NOT MATCHING CUSTOMER FURNISHED PV MODULE DATA SHEETS.

SPECIAL FIELD INSPECTIONS:

SPECIAL INSPECTION NOT REQUIRED BY TERRASART, INC. AS REQUIRED BY OWNER/CUSTOMER AND/OR AUTHORITY HAVING JURISDICTION, MINIMUM INSPECTION SHALL INCLUDE THE FOLLOWING NOTES AND TABLE:

- ALL SPECIAL INSPECTORS SHALL BE RETAINED BY OWNER/CUSTOMER. THE EXTENT OF THE INSPECTION SHALL COMPLY WITH THE CONTRACT DOCUMENTS, THE BUILDING CODE REQUIREMENTS, AND LOCAL JURISDICTION. IT IS THE OWNER/CUSTOMER'S RESPONSIBILITY TO GIVE PROPER NOTIFICATION TO THE SPECIAL INSPECTOR AND PROCEED WITH THE WORK ONLY AFTER THE SPECIAL INSPECTOR'S APPROVAL.
- FAILURE TO NOTIFY THE SPECIAL INSPECTOR MAY RESULT IN OWNER/CUSTOMER HAVING TO REMOVE WORK FOR THE PURPOSE OF INSPECTION AT THE OWNER'S/CUSTOMER'S EXPENSE.
- PREMATURE NOTIFICATION FOR INSPECTION WILL RESULT IN AN ADDITIONAL INSPECTION WITH ALL EXPENSES AND FEES PAID BY THE OWNER/CUSTOMER.
- SPECIAL INSPECTORS SHALL KEEP RECORDS OF ALL INSPECTIONS. RECORDS SHALL BE FURNISHED TO THE OWNER, ENGINEER OF RECORD, AND LOCAL JURISDICTION AS REQUIRED. ANY AND ALL DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR. CORRECTIONS SHALL BE MADE AND A FINAL REPORT OF INSPECTIONS SHALL BE PROVIDED NOTING COMPLETION OF INSPECTIONS AND CORRECTIONS OF DISCREPANCIES. FAILURE TO CORRECT DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER OF RECORD AND THE LOCAL JURISDICTION AND MAY RESULT IN REMOVAL OF COMPLETED WORK AND ADDITIONAL WORK TO CORRECT DISCREPANCIES AT THE CONTRACTOR'S EXPENSE.
- REFERENCE SHEET SG701 FOR SPECIAL INSPECTION CHARTS.

WORK BY OTHERS:

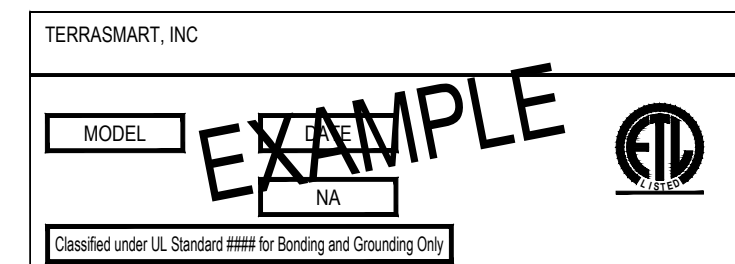
- SITE WORK AND DEVELOPMENT.
- ALL ELECTRICAL WORK INCLUDING WIRING, CONDUIT, PANELS AND LIGHTS TO BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- GROUNDING REQUIREMENTS.
- ALL SHADING ANALYSIS AND/OR PRODUCTION ANALYSIS SHALL BE PERFORMED AND VERIFIED BY OTHERS. TERRASART, INC. IS NOT RESPONSIBLE FOR PV SYSTEM DESIGN AS IT PERTAINS TO ELECTRICAL OR PV SYSTEM PRODUCTION.

MISCELLANEOUS DISCLAIMERS:

- WETLANDS DISCLAIMER:** TERRASART IS NOT RESPONSIBLE FOR THE DETECTION, IDENTIFICATION, DELINEATION, PERMITTING, OR MITIGATION OF WETLANDS OR WETLAND-LIKE CONDITIONS AT THE SITE. CLIENT/GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL DUE DILIGENCE AND MITIGATION MEASURES NECESSARY TO ENSURE THAT CONDITIONS TYPICALLY PRESENT IN WETLANDS (INCLUDING BUT NOT LIMITED TO SATURATED/ORGANIC/PEATY SOILS, HIGH OR PERCHED GROUNDWATER, STANDING WATER, AND POOR DRAINAGE) DO NOT ADVERSELY AFFECT FOUNDATIONS OR RACKING. IF FOUNDATIONS ARE INSTALLED IN WETLANDS OR IN AREAS NOT PROPERLY MITIGATED FOR SUCH CONDITIONS, CLIENT ACKNOWLEDGES THAT SYSTEM PERFORMANCE CANNOT BE GUARANTEED AND ANY WARRANTY PROVIDED BY TERRASART DOES NOT APPLY TO, AND TERRASART SHALL HAVE NO RESPONSIBILITY FOR, DISTRESS, DEFLECTION, SETTLEMENT, CORROSION, OR OTHER FAILURES CAUSED BY WETLANDS OR BY INADEQUATE/IMPROPER MITIGATION, WHETHER OR NOT TERRASART WAS INFORMED OR AWARE OF SUCH CONDITIONS. ANY ADDITIONAL WORK REQUIRED TO ADDRESS WETLAND CONDITIONS (INCLUDING DEWATERING, SOIL STABILIZATION, FOUNDATION REDESIGN, OR REMEDIATION) SHALL BE AT CLIENT'S EXPENSE AND MAY REQUIRE A CHANGE ORDER. THIS NOTE SUPPLEMENTS AND DOES NOT MODIFY THE REQUIREMENTS OF SECTIONS I AND II; IN THE EVENT OF A CONFLICT, THE MORE RESTRICTIVE REQUIREMENT SHALL GOVERN. SEE SECTIONS I.I.HI AND III.

ETL CLASSIFIED:

THIS PROJECT CONTAINS RACKING LABELED AS ETL CLASSIFIED UNDER UL SUBJECT 2703 OR UL STANDARD 2703. LABELS ARE APPLIED AT THE FACTORY ON COMPONENTS THAT MAY BE ASSEMBLED AT THE FACTORY OR IN THE FIELD. SEE DETAIL SHEET IN THIS DRAWING SET FOR MORE INFORMATION.



STRUCTURAL STEEL:

- ALL STRUCTURAL STEEL SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST VERSION OF AISI "MANUAL OF STEEL CONSTRUCTION" LIGHT GAGE COLD-FORMED SECTIONS SHALL CONFORM TO LATEST VERSION OF AISI SPECIFICATIONS FOR COLD-FORMED STEEL STRUCTURAL MEMBERS.
- MATERIALS:
 - A. ROLLED SHAPES: ASTM A992 OR A572 GRADE 55, F_y = 55 KSI MINIMUM
 - B. PLATES: ASTM A36
 - C. TUBULAR SHAPES: ASTM A500 GRADE C, F_y = 50 KSI MINIMUM
 - D. FIELD BOLTS (TYP. U.N.O.): SAE J429 GRADE 5
 - E. SCREWS: #12 TEKS - GALVANIZED
 - F. COLD-FORMED/LIGHT GAGE: ASTM A653 GRADE 55
 - G. ANCHOR RODS: ASTM A307 (TYPICAL U.N.O.)
- TEK SCREWS ARE TO BE INSTALLED USING A 2500 RPM MAX. NON-IMPACTING VARIABLE SPEED DRILL WITH CLUTCH OUT.
- REFER TO THE LATEST TERRASART, INC. RBI GLIDE WAVE MOUNTING SYSTEM INSTALLATION GUIDE FOR STRUCTURAL CONNECTION TORQUE VALUES.
- ALL WELDING OF STEEL SHALL BE DONE IN ACCORDANCE WITH THE LATEST VERSION OF THE AMERICAN WELD SOCIETY'S SPECIFICATIONS - AWS D1.1. ELECTRODES SHALL BE E70 SERIES UNLESS NOTED OTHERWISE.
- GALVANIZING SPECIFICATIONS
 - A. STRUCTURAL SHAPES: HOT-DIPPED GALVANIZING SHALL BE PER ASTM A123.
 - B. PRE-GALVANIZED MATERIALS SHALL COMPLY WITH ASTM A653 - G90 MINIMUM.
 - C. ALL STRUCTURAL HARDWARE (NOT MODULE MOUNTING HARDWARE); HOT-DIPPED GALVANIZING SHALL BE PER ASTM F2329 UNLESS NOTED OTHERWISE.

MISCELLANEOUS FASTENERS:

- ALL BOLTS SHALL BE THE TYPE AND SIZE INDICATED ON DRAWINGS.
- ALL HARDWARE USED FOR MOUNTING PV MODULES SHALL BE STAINLESS STEEL UNLESS NOTED OTHERWISE.
- ALL PV MODULE MOUNTING HARDWARE SHALL BE INSTALLED AND TORQUED PER THE LATEST TERRASART, INC. RBI GLIDE WAVE MOUNTING SYSTEM INSTALLATION GUIDE.

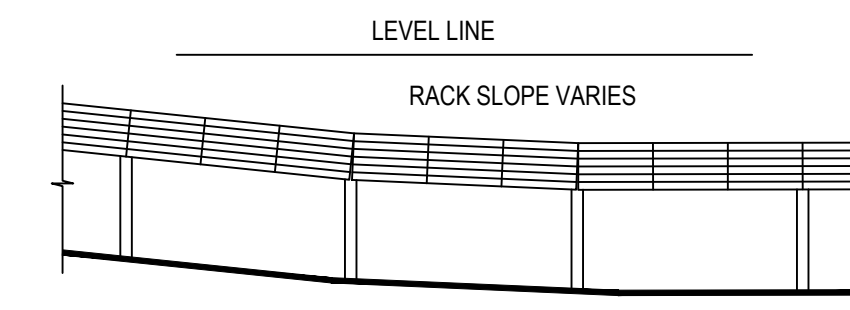
FOUNDATIONS/CONCRETE:

- THE FOUNDATION DESIGN IS BASED ON PRESUMPTIVE LOAD-BEARING VALUES PER IBC TABLE 1806.2 FOR CLASS 5 SOILS WITH INCREASED LATERAL CAPACITY PER 1806.3.4.
 - a. VERTICAL FOUNDATION PRESSURE = 1000 PSF
 - b. LATERAL BEARING PRESSURE = 200 PSF/FT
- CONCRETE SPECIFICATIONS:
 - STRENGTH: 2500 PSI MINIMUM @ 28 DAYS FOR FOOTINGS OR 4500 PSI MINIMUM @ 28 DAYS FOR BALLASTS
 - AIR CONTENT: 6% ± 1.5% AGGREGATE SIZE: 3/4" MAXIMUM MINIMUM COVER: 3" UNLESS NOTED OTHERWISE
- GROUT SPECIFICATIONS: 8000 PSI MINIMUM, NON-SHRINK
- REINFORCING STEEL: ASTM A615 GRADE 60 BILLET STEEL
- CUSTOMER IS RESPONSIBLE FOR VERIFYING FINAL SOIL CONDITIONS DURING CONSTRUCTION HAVE NOT BEEN PURPOSEFULLY ALTERED IN ANY WAY TO ENSURE THE SOIL IS CONSISTENT WITH FINDINGS INCLUDED IN GEOTECHNICAL REPORT, IF APPLICABLE, AND OR FIELD TESTS PERFORMED BY TERRASART, INC. VARIATIONS IN SOIL CONDITIONS SHALL BE REPORTED TO GEOTECHNICAL ENGINEER AND/OR ENGINEER OF RECORD RESPONSIBLE FOR FOUNDATION DESIGN PRIOR TO INSTALLATION OF ANY FOUNDATION MATERIALS.
- CUSTOMER IS RESPONSIBLE FOR ENSURING SITE CONDITIONS ARE NOT ALTERED REGARDING CORROSION POTENTIAL FROM WHAT WAS CONSIDERED IN TERRASART'S ANALYSIS.
- INSTALLER/CONTRACTOR SHALL COORDINATE PLACEMENT OF FOUNDATIONS AND/OR ANCHOR BOLTS PER DESIGN DRAWINGS AND/OR MANUFACTURER'S SPECIFICATIONS.
- TERRASART, INC. DESIGNS DRIVEN-PILE AND ALTERNATIVE FOUNDATIONS BASED ON SOIL PROPERTIES OUTLINED IN CERTIFIED GEOTECHNICAL REPORTS AND/OR DATA FROM FIELD TESTING. ALL DESIGNS ASSUME UNDISTURBED SOIL CONDITIONS, AND DO NOT TAKE INTO ACCOUNT TRENCHING NEAR FOUNDATIONS. FOR CASES WHERE TRENCHING FOR ELECTRICAL WORK IS AT OR NEAR A FOUNDATION, TERRASART, INC. RECOMMENDS A MINIMUM OF 3'-0" CLEAR FROM THE EDGE OF THE TRENCH TO THE EDGE OF THE FOUNDATION FOR "NORMAL GOOD SOIL CONDITIONS". IN CASES OF "POOR SOIL" CONDITIONS, TERRASART, INC. RECOMMENDS A MINIMUM CLEAR DISTANCE EQUAL TO OR GREATER THAN THE DEPTH OF THE FOUNDATION. IF IN DOUBT OF SOIL CONDITIONS, TERRASART, INC. RECOMMENDS CONSULTING A QUALIFIED GEOTECHNICAL ENGINEER TO ASSESS SOIL CONDITIONS AT THE SITE.
- NOTE: TRENCHING/EXCAVATION WITHIN 3'-0" OF ANY RACK SUPPORT POST REQUIRES REPLACING THE ORIGINAL SOIL AND COMPACTION TO 90% MODIFIED PROCTOR DENSITY. FOR FURTHER CLARIFICATION ON COMPACTION REQUIREMENTS, TERRASART, INC. RECOMMENDS CONSULTING A QUALIFIED GEOTECHNICAL ENGINEER.
- REFER TO SHEET SG302 FOR REFUSAL REMEDY PROCEDURE AND ALTERNATE FOUNDATION OPTIONS.

SURVEYING REQUIREMENTS:

- ALL SURVEYING WORK MUST BE COMPLETED BY OTHERS PRIOR TO TERRASART, INC. MOBILIZING ON-SITE UNLESS NOTED OTHERWISE.
- ALL SURVEYING FOR THE RACKING MUST BE BASED OFF OF THE LATEST DOCUMENT SET FROM TERRASART, INC.
- THE FIRST AND LAST RACKING POST IN EVERY ROW MUST HAVE THE CENTER POINTS SURVEYED AND MARKED. THERE MUST BE A FIVE FOOT OFFSET TO THE WEST OF THE WESTERMOST POST LOCATION AND A FIVE FOOT OFFSET TO THE EAST OF THE EASTERMOST POST LOCATION IN EVERY ROW.
- FOR ROWS LONGER THAN 100 FEET, THE CENTERLINE LOCATION MUST BE MARKED WITHIN THE ROW AT EVERY 100 FEET MAXIMUM. THESE ADDITIONAL MARKS SHOULD NOT BE AT A POST LOCATION. DO NOT MARK EACH INDIVIDUAL POST LOCATION WITHIN A ROW AS IT WILL NOT BE ACCURATE DUE TO TOPOGRAPHY.
- EVERY INDIVIDUAL EQUIPMENT POST LOCATION MUST HAVE THE CENTER POINT SURVEYED AND MARKED.

RACK SYSTEM TOPOGRAPHIC RELATIONSHIP



- KEY POINTS**
- RACK STRUCTURE IS PARALLEL TO SITE GRADE
 - COLUMN LENGTHS ARE EQUAL THROUGHOUT
 - TOPS OF PIERS FOLLOW SITE GRADE
 - EXPOSED PIER HEIGHTS MAY VARY

FOLLOW GRADE



terrasart™

6715 STEGER DRIVE
CINCINNATI, OH 45237
513.242.2051
FAX: 513.242.0816

PROFESSIONAL SEAL

ENGINEERS SEAL APPLIES TO DESIGN OF STRUCTURAL COMPONENTS ONLY

NOT FOR CONSTRUCTION

TERRASART, INC. IS NOT RESPONSIBLE FOR CONSTRUCTION THAT IS BUILT FROM SET LABELED "NOT FOR CONSTRUCTION"

GROUND MOUNT FOR

ALLCO FINANCE LIMITED

RELEASE RECORD

MARK DATE	DESCRIPTION
4 09/23/25	90% REVIEW
3 08/12/25	50% REVIEW (R1)
2 07/25/25	50% REVIEW

PROJECT INFORMATION

TITLE & ADDRESS:
BORELLI SOLAR

197 BORELLI ROAD
EAST HAVEN, CT 06511

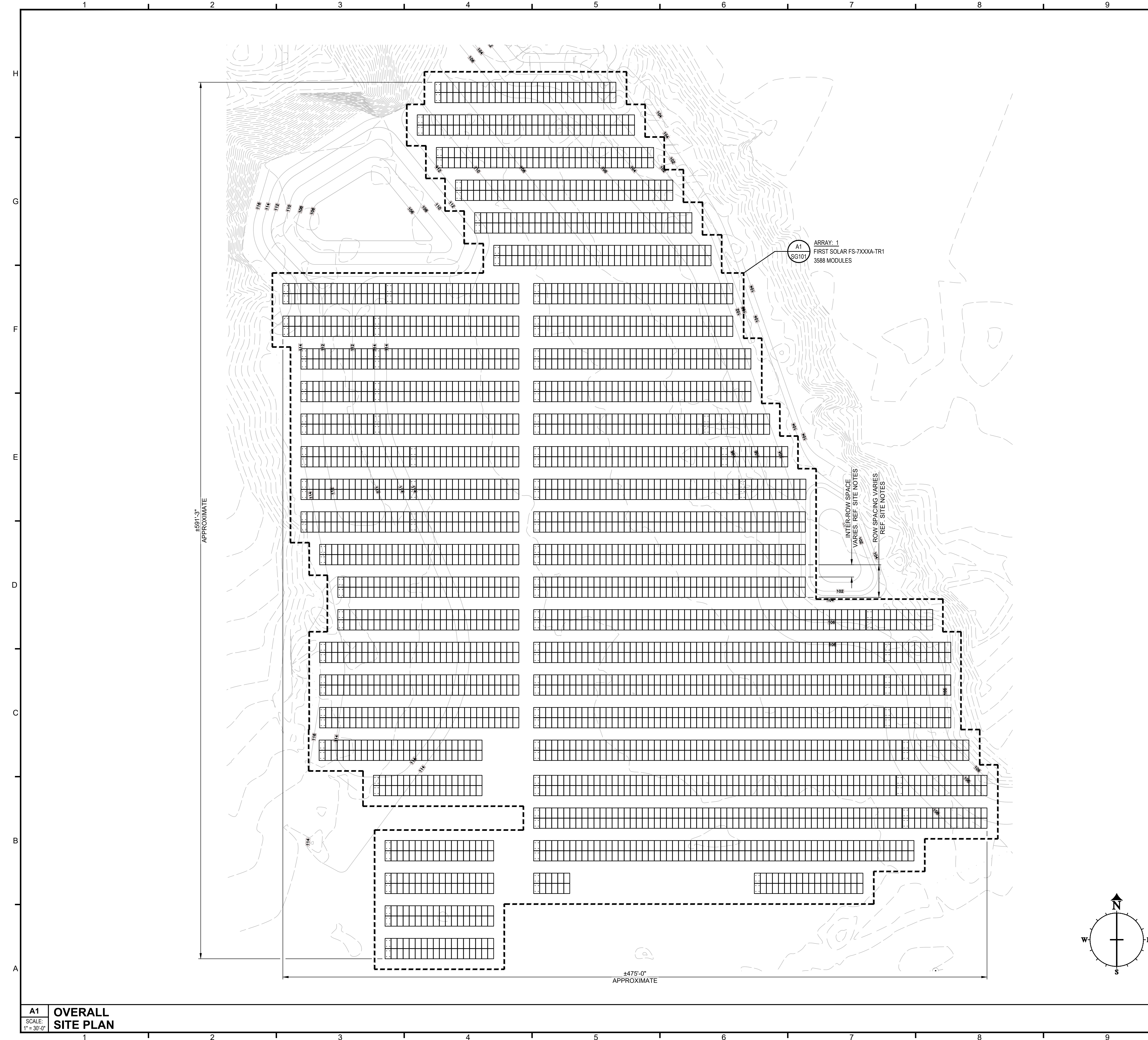
TERRASART PROJECT No.:
2535009

DRAWN BY: CTN REVIEWED BY:

SHEET TITLE:
GENERAL NOTES/
MODULE SPECIFICATION SHEETS

SHEET No.:

SG002



SITE NOTES

1. TOPOGRAPHY PROVIDED BY ALCO FINANCE LIMITED ON 07/22/2025. DIMENSIONS SHOWN FOR REFERENCE ONLY. PRESUMPTIVE OR INADEQUATE TOPOGRAPHY USED FOR THIS DESIGN MAY REQUIRE ADDITIONAL MATERIALS. ACTUAL ON-SITE CONDITIONS SHALL BE FIELD VERIFIED AND TERRASMART, INC. SHALL BE NOTIFIED IF ON-SITE CONDITIONS ARE DIFFERENT THAN SHOWN OR PRESUMED.

BAY INFORMATION

TYPE	QTY.
BAY TYPE 2P2	7
BAY TYPE 3EP2	63
BAY TYPE 3P2	114
BAY TYPE 3WP2	63
BAY TYPE 4DP2	1
BAY TYPE 4P2	232
TOTAL # OF BAYS	480

BILL OF MATERIALS

ITEM	QTY.
BALLAST BLOCKS:	
BLOCK TYPE A	351
BLOCK TYPE B	193
TOTAL # OF BALLAST BLOCKS	544
PURLINS:	
PURLIN MARK Z2	28
PURLIN MARK Z3E	252
PURLIN MARK Z3	456
PURLIN MARK Z3W	252
PURLIN MARK Z4D - 7" DEEP FOR 4DP2 BAY TYPE	4
PURLIN MARK Z4	928
TOTAL # OF PURLINS	1920
CABLE X-BRACE SETS	526
TOTAL # OF TOP CHORD ASSEMBLIES	544
TOTAL SETS OF POST: (P1) 5'-3 5/8" & (P2) 1'-7 9/16" (PER BALLAST)	544
TOTAL # OF EXTENDED POST TOP ASSEMBLIES	1088
TOTAL # OF KNEE BRACES 92 1/16" X 2" SQ. 15 GA. GALVANIZED	544
4.25" X 3" X 4.125" 10 GA ANGLE BRACKET	2176
3/4" X 5" MAGNI BOLT WITH NUT	544
3/4" X 3 1/2" GALV. BOLT WITH NUT	544
3/4" X 1 1/2" BOLT WITH NUT	1088
1/2" X 10" HOT DIPPED GALV. L-BOLT WINUT	2176
3/8" X 5" GALV. BOLT WITH NUT	1088
3/8" X 1 1/4" GALV. BOLT WITH NUT	3228
3/8" X 3/4" GALV. BOLT WITH NUT	8704
3/4" GALV. WASHER	544
1/2 GALV. WASHER	2176
3/8" GALV. WASHER	5404
#12 X 1 1/4" HEX HEAD TEK SCREW	4352
FS7 FIXED TILT MOUNTING BRACKET	14352
RAYMOND POWAR WEDGE	14352
5/16" x 3/4" GR. 5 GALV. BOLT WITH NUT	14352
5/16" GALV. WASHER	14352

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GROUND MOUNT FOR

ALCO FINANCE LIMITED

RELEASE RECORD

MARK DATE	DESCRIPTION
09/23/25	90% REVIEW
08/12/25	50% REVIEW (R1)
07/25/25	50% REVIEW

PROJECT INFORMATION

TITLE & ADDRESS:
BORELLI SOLAR

197 BORELLI ROAD
 EAST HAVEN, CT 06511

TERRASMART PROJECT No.:
 2535009

DRAWN BY: CTN REVIEWED BY: _____

SHEET TITLE:
SITE PLAN & BILL OF MATERIALS

SHEET No.:
SG003

A1
 SCALE:
 1" = 30'-0"

OVERALL SITE PLAN

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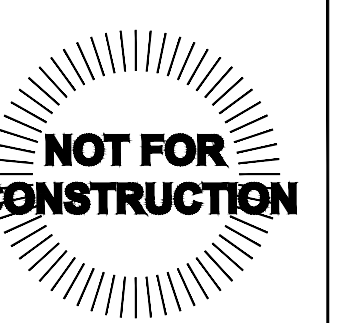


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Table with 2 columns: MARK DATE, DESCRIPTION. Row 4: 09/23/25 90% REVIEW

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TITLE & ADDRESS: BORELLI SOLAR

197 BORELLI ROAD
EAST HAVEN, CT 06511

TERRASMART PROJECT No.: 2535009

DRAWN BY: CTN REVIEWED BY:

SHEET TITLE:

ARRAY: 1 COMPONENT LAYOUT

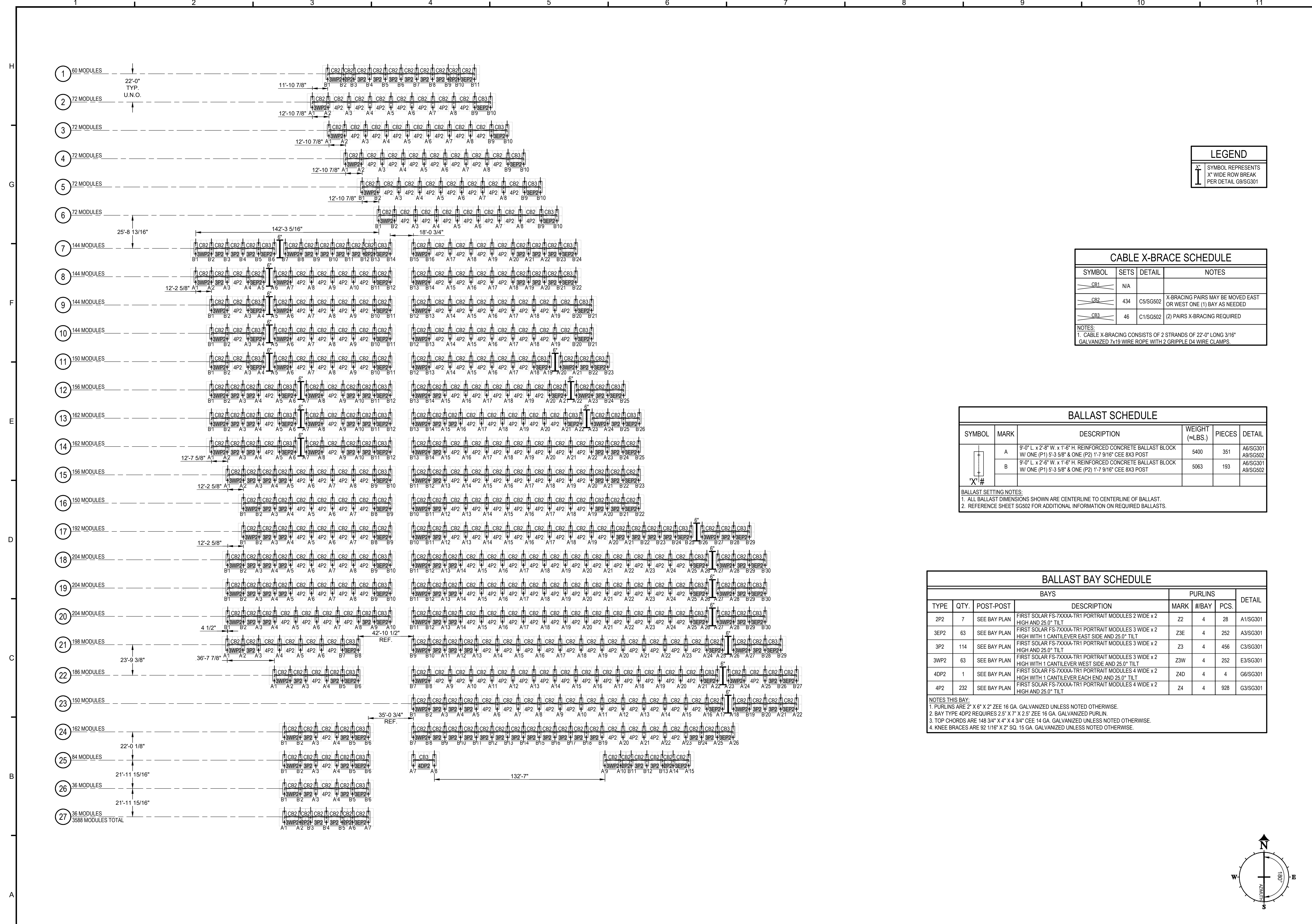
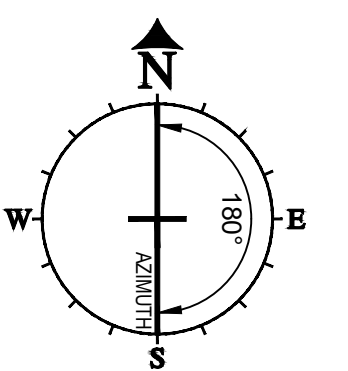
SHEET No.: SG101

LEGEND table with 2 columns: SYMBOL, DESCRIPTION. Row 1: X' WIDE ROW BREAK PER DETAIL G9/SG301

CABLE X-BRACE SCHEDULE table with 4 columns: SYMBOL, SETS, DETAIL, NOTES. Rows for CB1, CB2, CB3.

BALLAST SCHEDULE table with 6 columns: SYMBOL, MARK, DESCRIPTION, WEIGHT, PIECES, DETAIL. Rows for A and B ballast types.

BALLAST BAY SCHEDULE table with 5 columns: TYPE, QTY., POST-POST, DESCRIPTION, PURLINS, DETAIL. Rows for 2P2, 3EP2, 3P2, 3WP2, 4DP2, 4P2.



A1 ARRAY: 1 COMPONENT LAYOUT SCALE: 1/32" = 1'-0"

S:\RRI SolarDesign\2025 Jobs\2535009 - Alco Finance Limited - Borelli Solar, CT\Drawings\2535009 - R2.dwg, 9/23/2025 11:20:41 AM, Corbin

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2	07/25/25	50% REVIEW

PROJECT INFORMATION

TITLE & ADDRESS:

BORELLI SOLAR

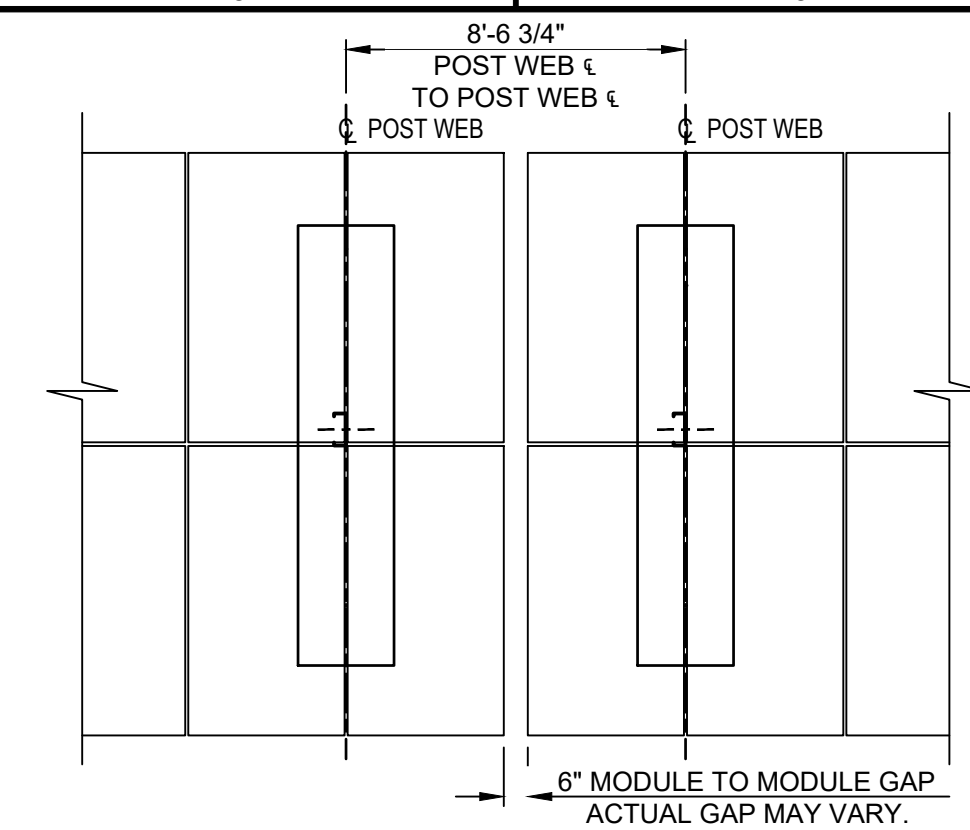
197 BORELLI ROAD
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TERRASMART PROJECT No.:
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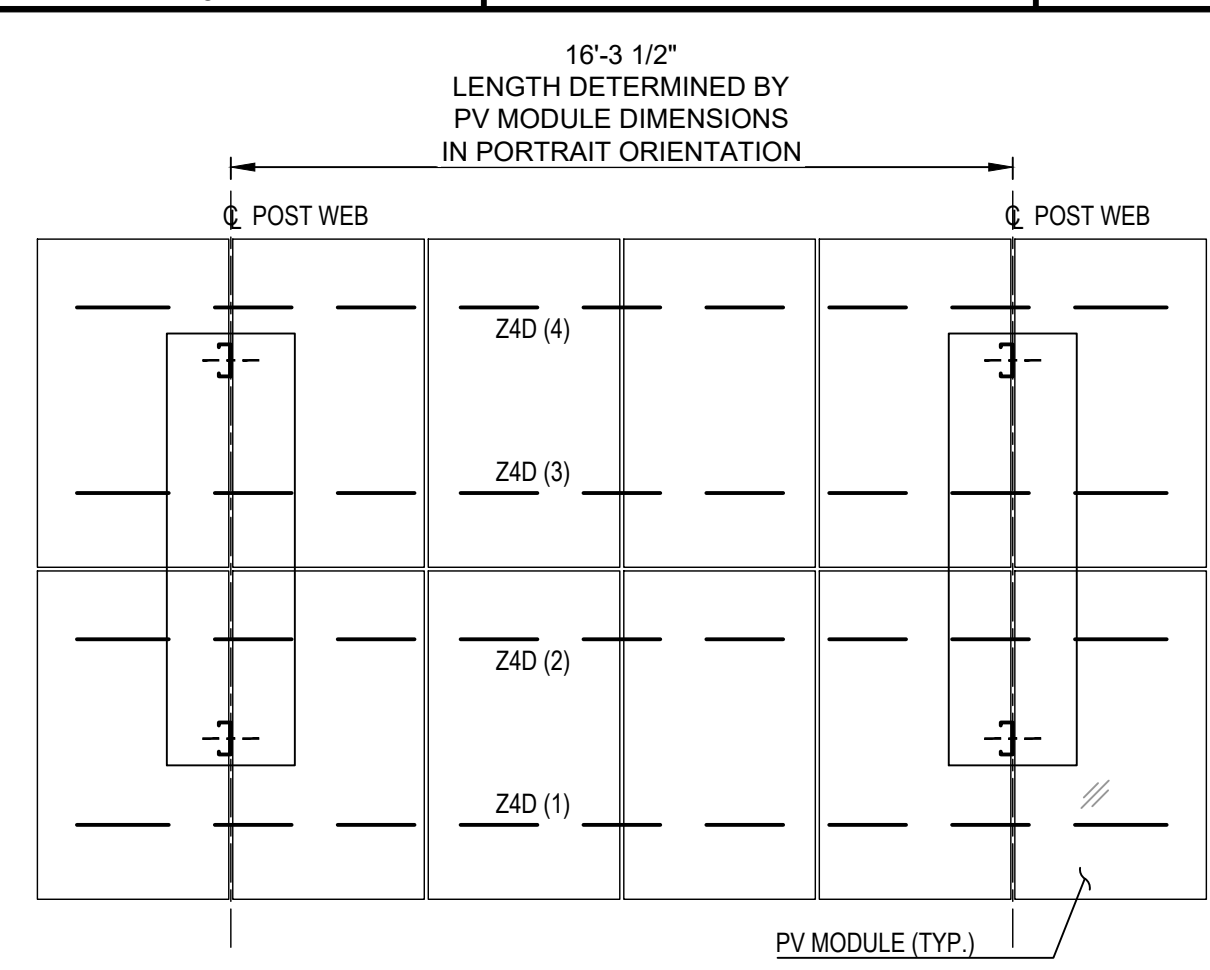
SHEET TITLE:
RACK SECTION & BAY PLAN VIEWS

SHEET No.:
SG301



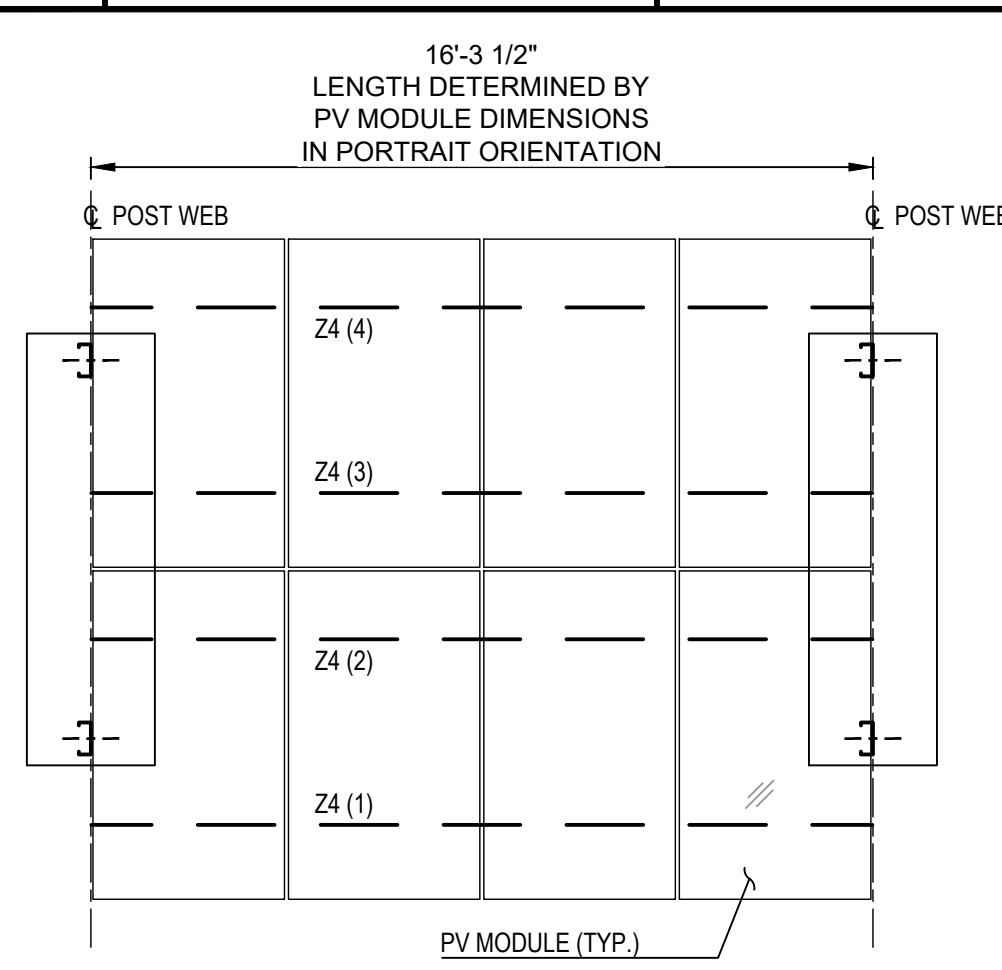
NOTE: COMPONENTS SHOWN MAY VARY FROM ACTUAL CONFIGURATION. SEE INDIVIDUAL BAY PLANS THIS SHEET FOR MORE DETAILED PLANS. INSTALL EXTENDED POST TOP ASSEMBLY AT EITHER SIDE OF ROW BREAK PER DETAIL A1/SG501.

G9 TYPICAL ROW BREAK DETAIL
SCALE: NONE

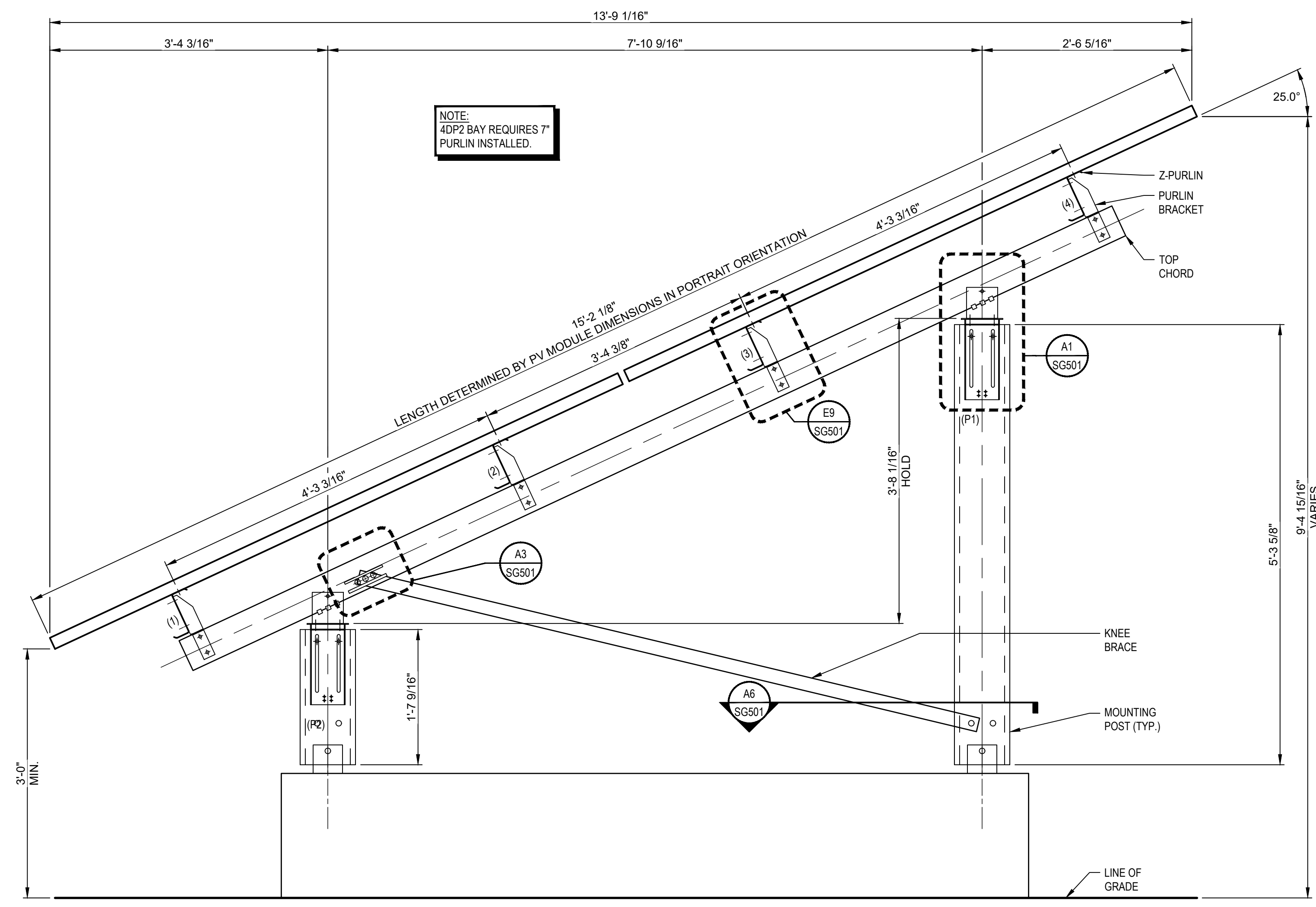


NOTE: THIS BAY REQUIRES 7" PURLIN.

G6 4DP2 BAY PLAN VIEW
SCALE: 1/4" = 1'-0"



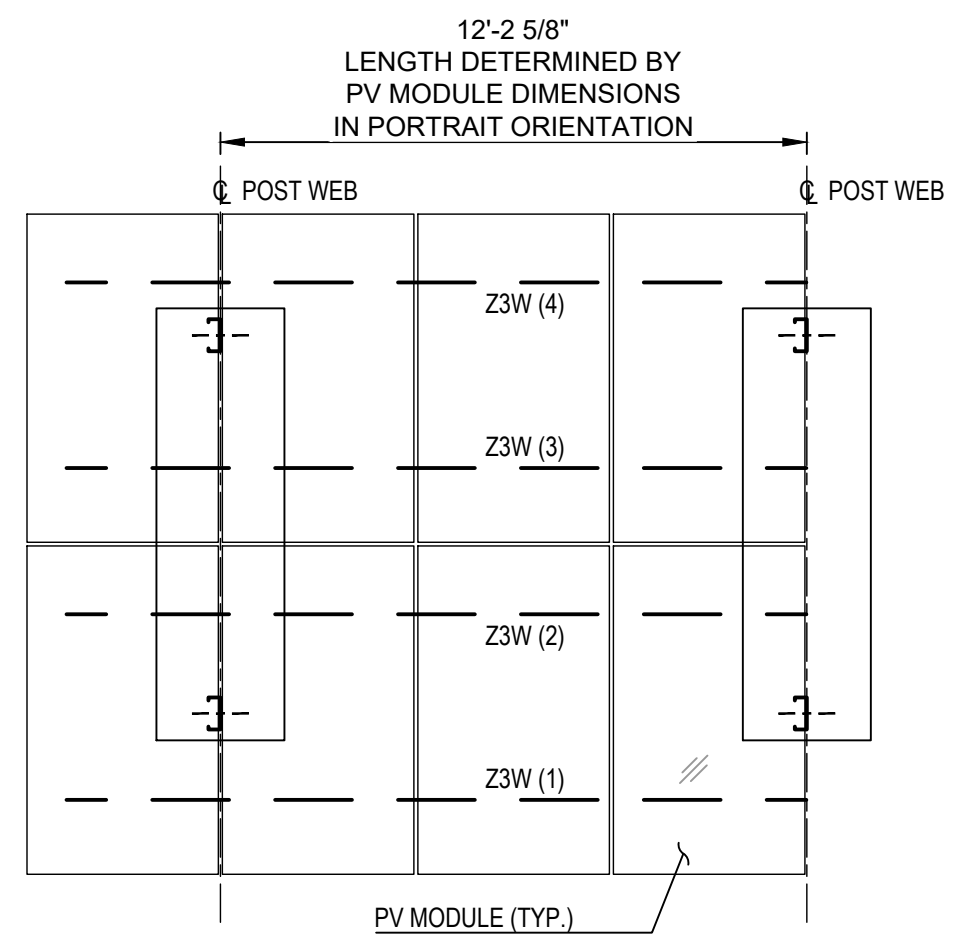
G3 4P2 BAY PLAN VIEW
SCALE: 1/4" = 1'-0"



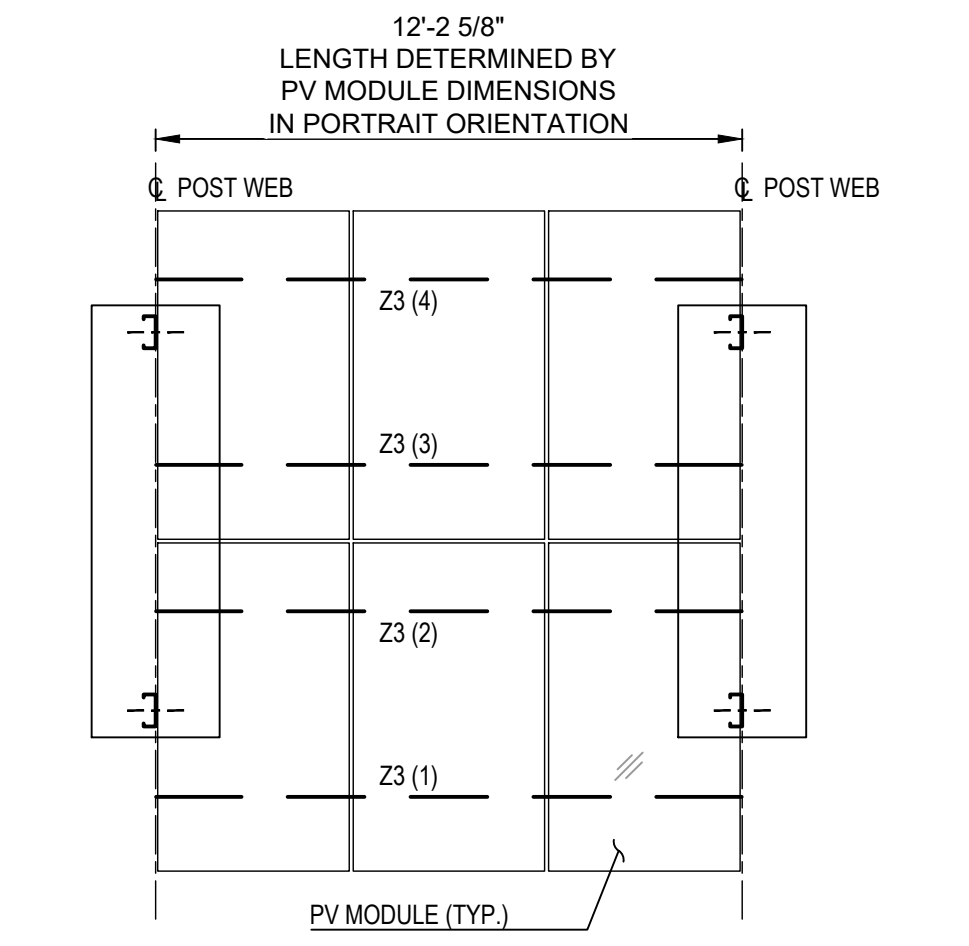
NOTE: 4DP2 BAY REQUIRES 7" PURLIN INSTALLED.

NOTE:
1. Z-PURLINS #1 & #4 HAVE RAISED MODULE MOUNTING SLOTS. (REF. F6/SG501)
2. Z-PURLINS #2 & #3 HAVE FLAT MODULE MOUNTING SLOTS. (REF. F6/SG501)

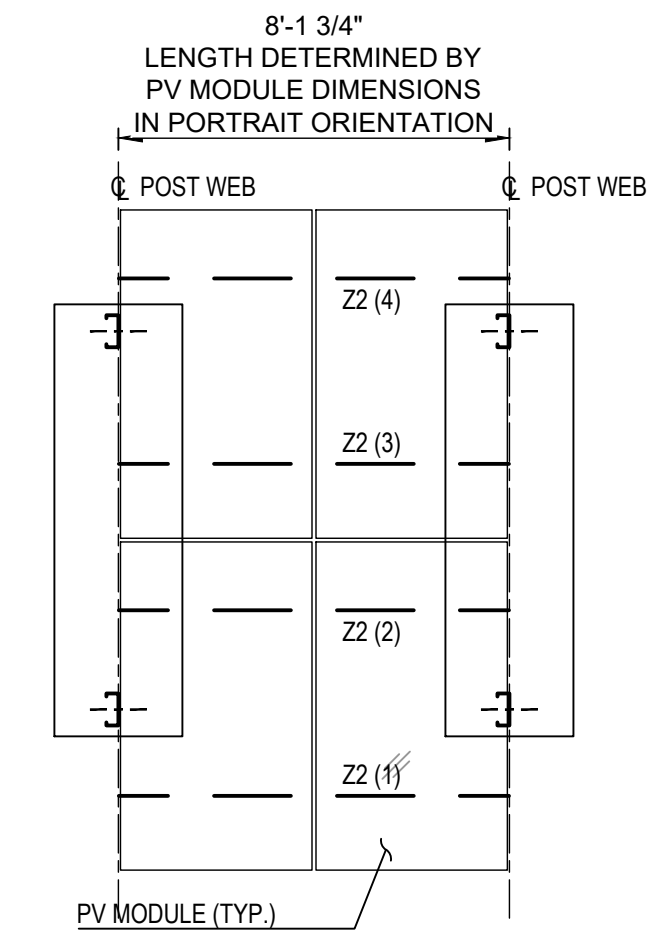
A6 DESIGN RACK SECTION
SCALE: 1" = 1'-0"



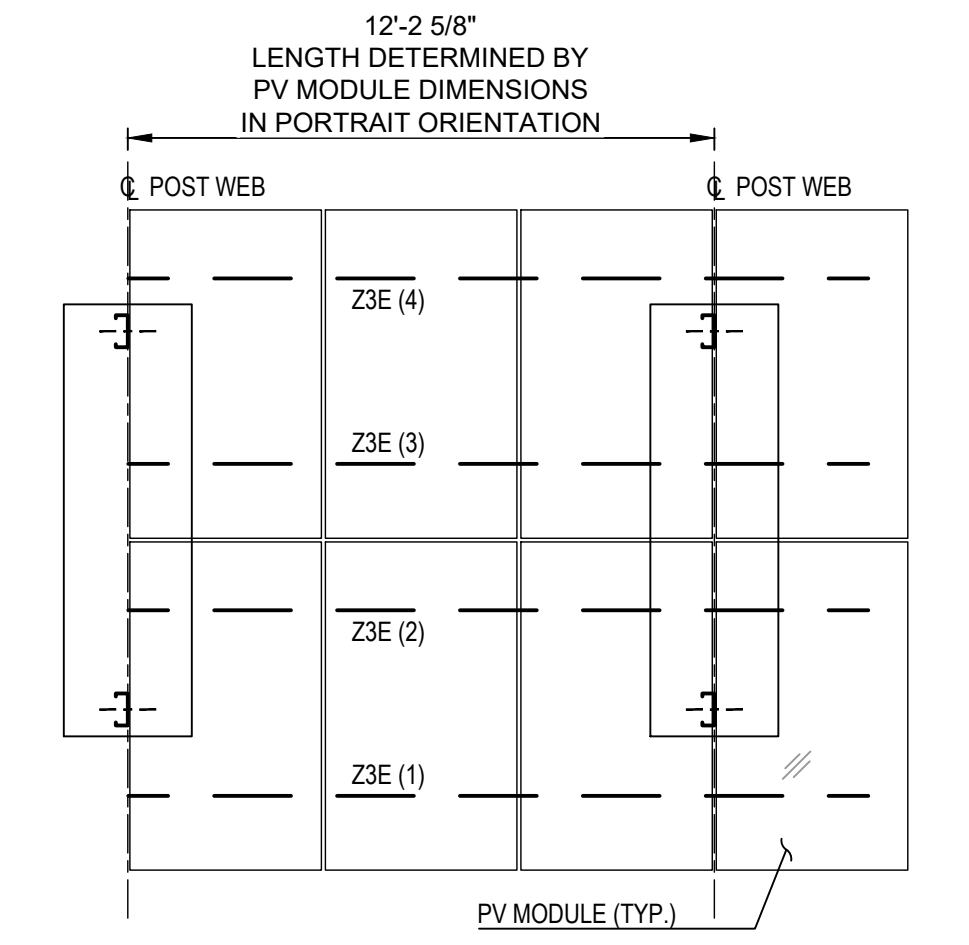
E3 3WP2 BAY PLAN VIEW
SCALE: 1/4" = 1'-0"



C3 3P2 BAY PLAN VIEW
SCALE: 1/4" = 1'-0"



A1 2P2 BAY PLAN VIEW
SCALE: 1/4" = 1'-0"



A3 3EP2 BAY PLAN VIEW
SCALE: 1/4" = 1'-0"

NOT USED

G1 BAY PLAN VIEW
SCALE: 1/4" = 1'-0"

NOT USED

E1 BAY PLAN VIEW
SCALE: 1/4" = 1'-0"

NOT USED

C1 BAY PLAN VIEW
SCALE: 1/4" = 1'-0"

NOT USED

A1 2P2 BAY PLAN VIEW
SCALE: 1/4" = 1'-0"

NOT USED

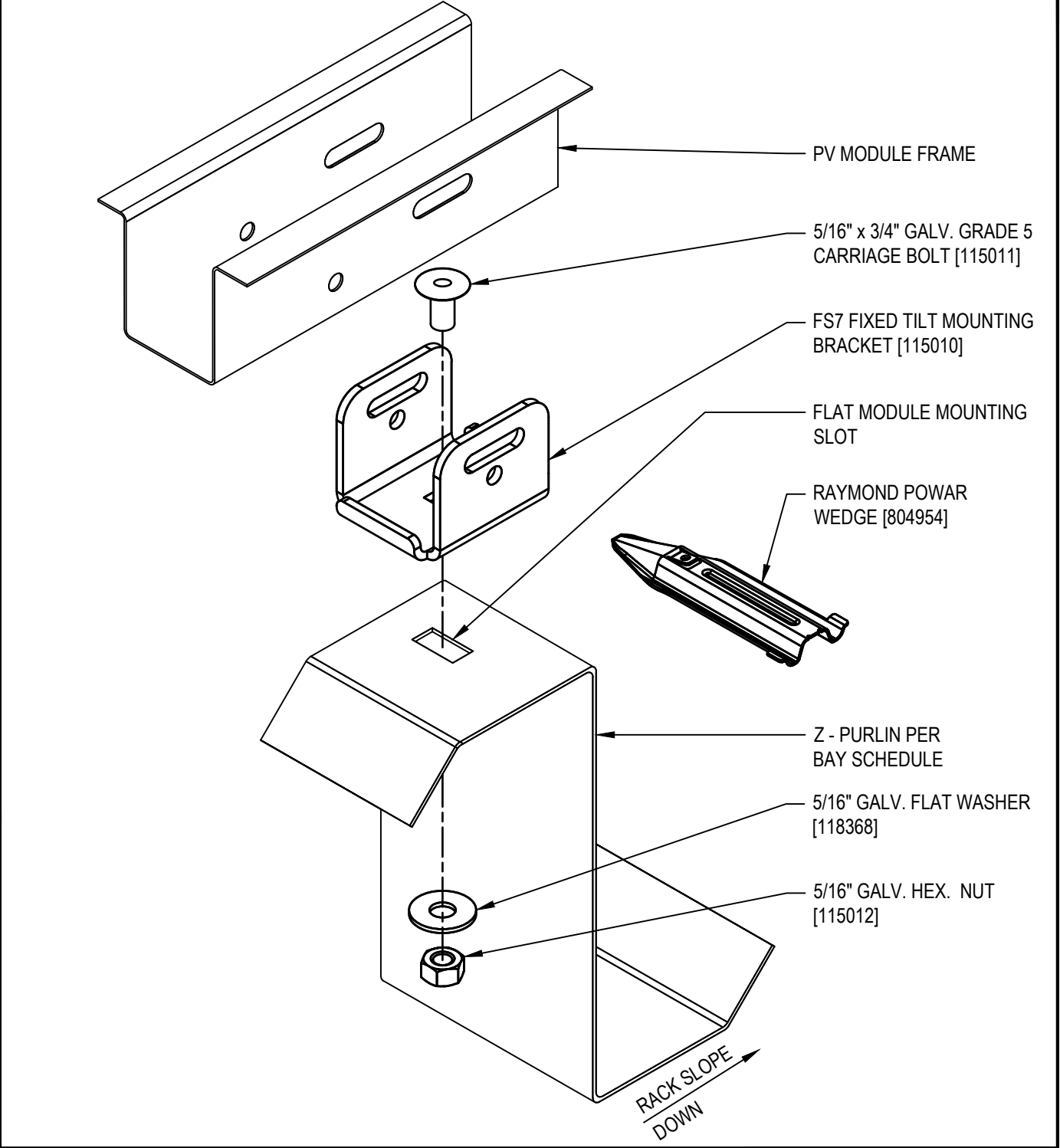
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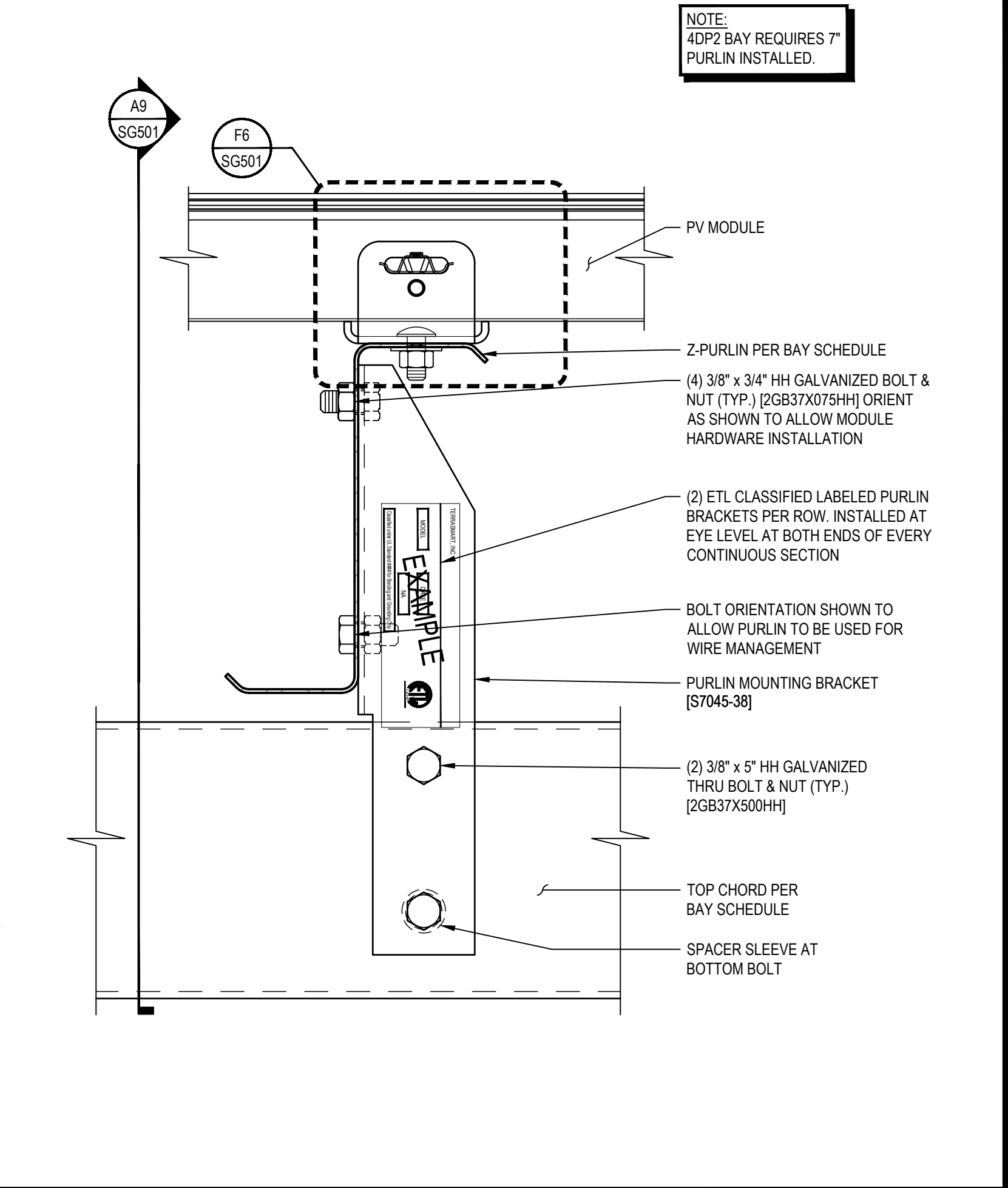
NOT USED

NOT USED

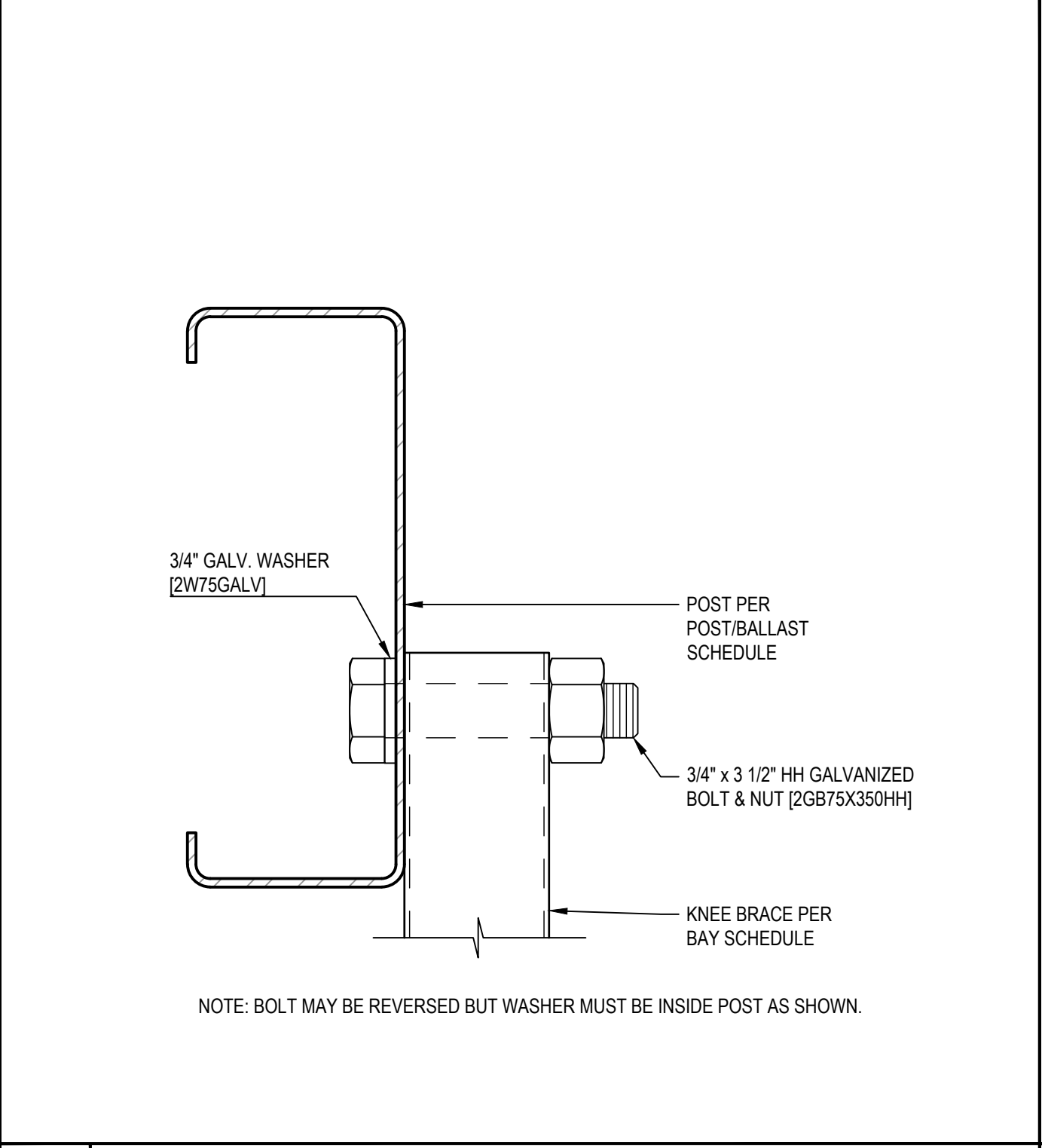
F6 PV MODULE TO PURLIN CONNECTION DETAIL



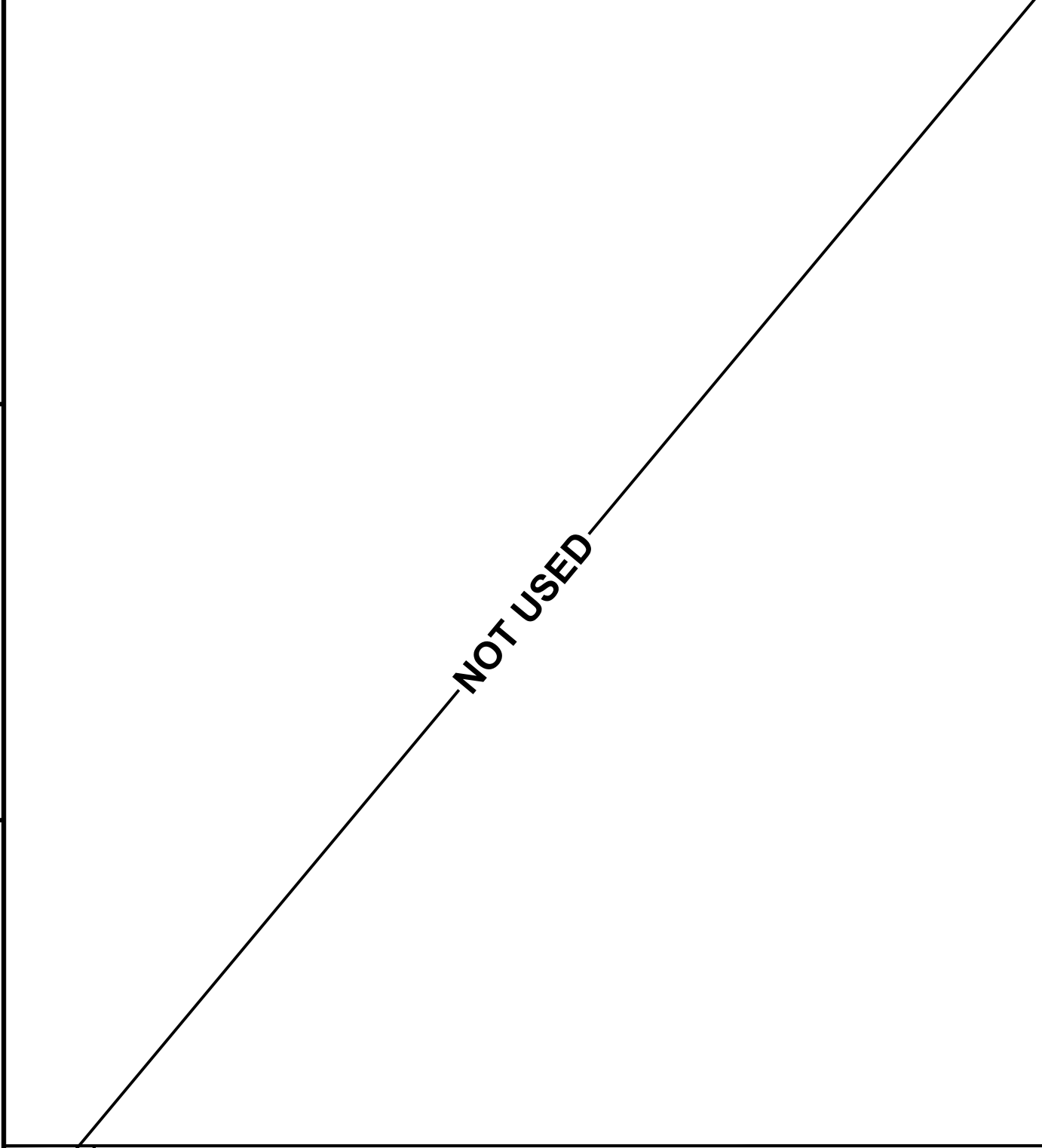
E9 TRANSVERSE PURLIN CONNECTION DETAIL



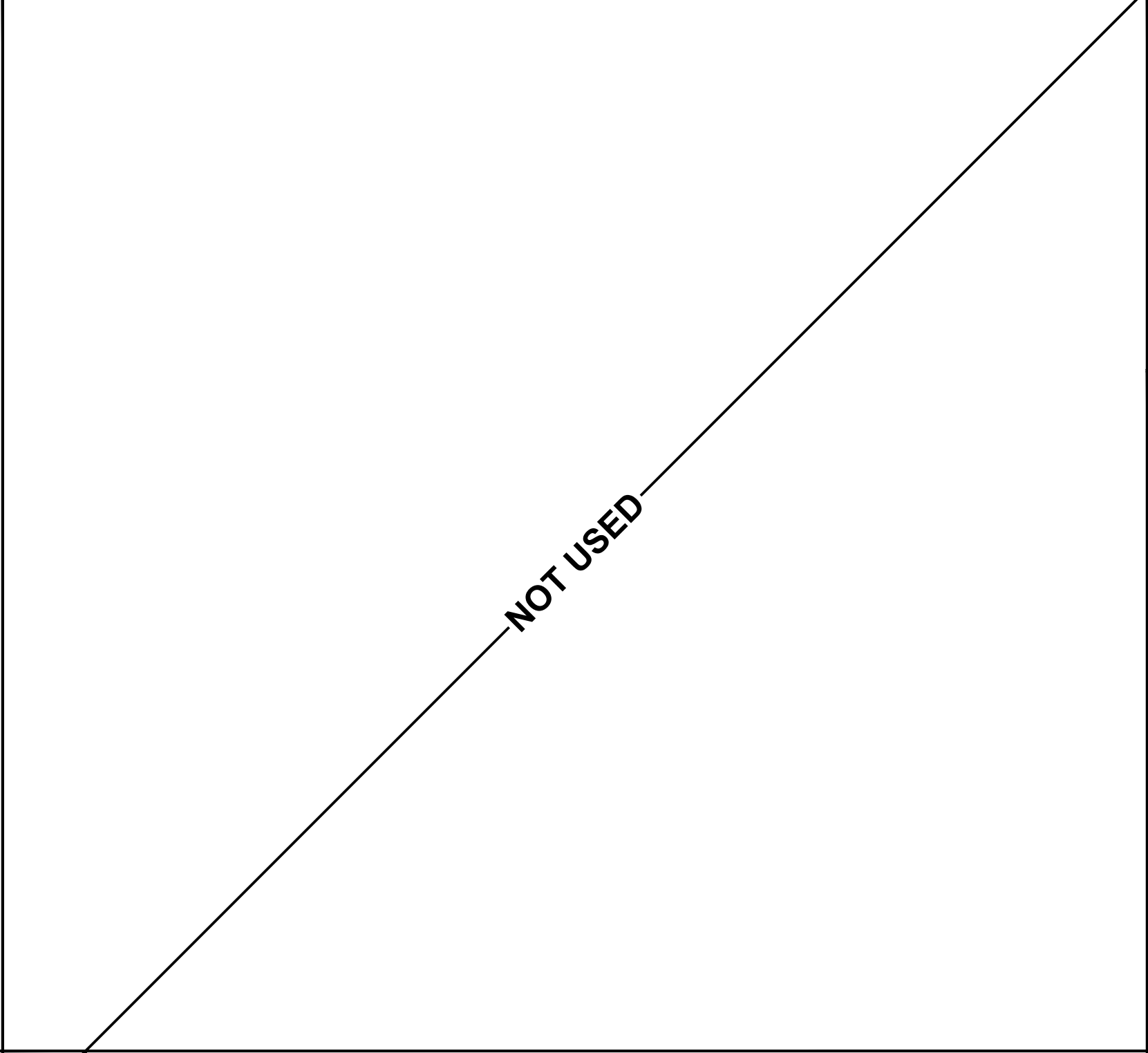
D6 TOP CHORD TO POST CONNECTION DETAIL



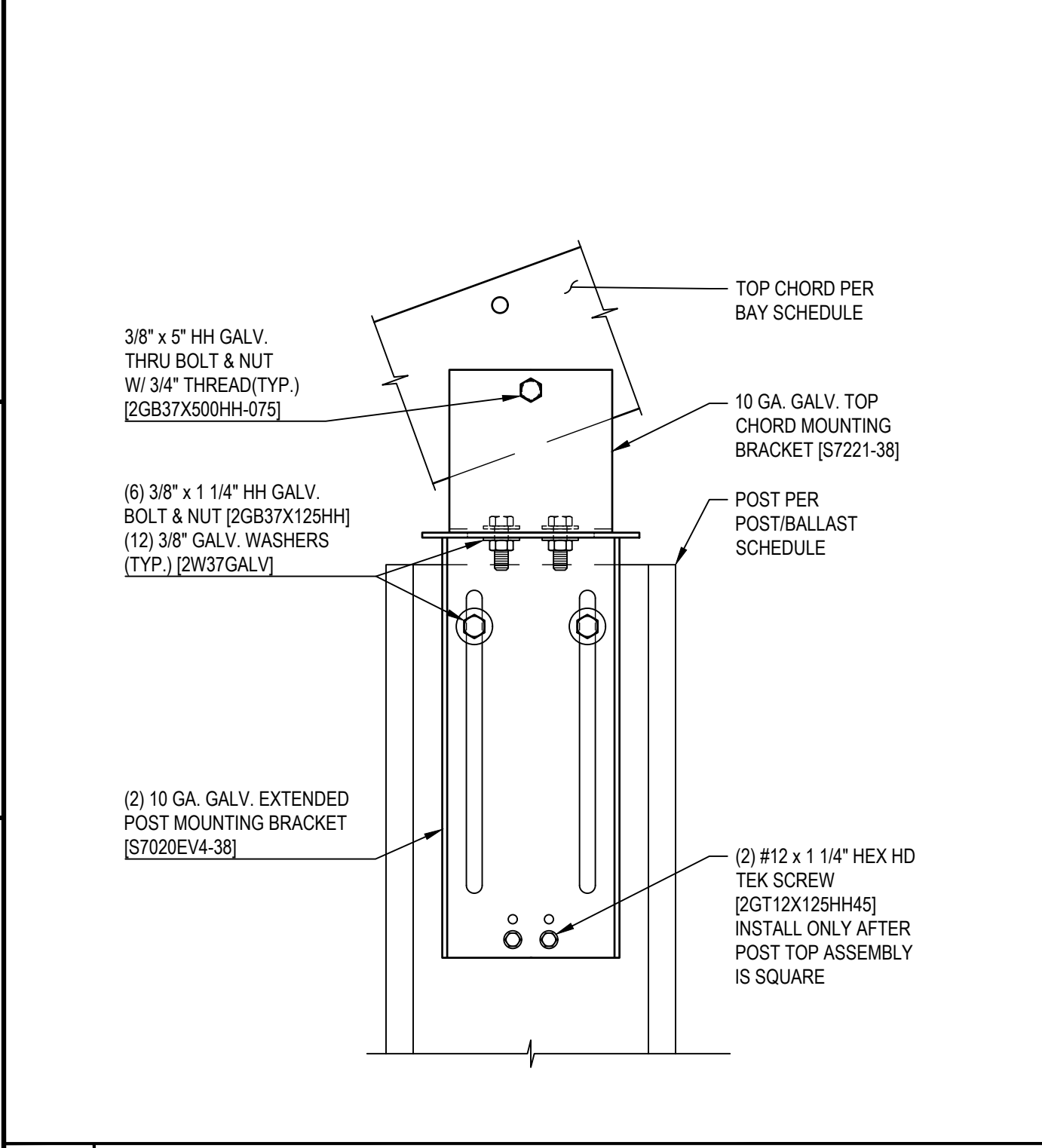
G1 X-BRACE TO POST CONNECTION DETAIL



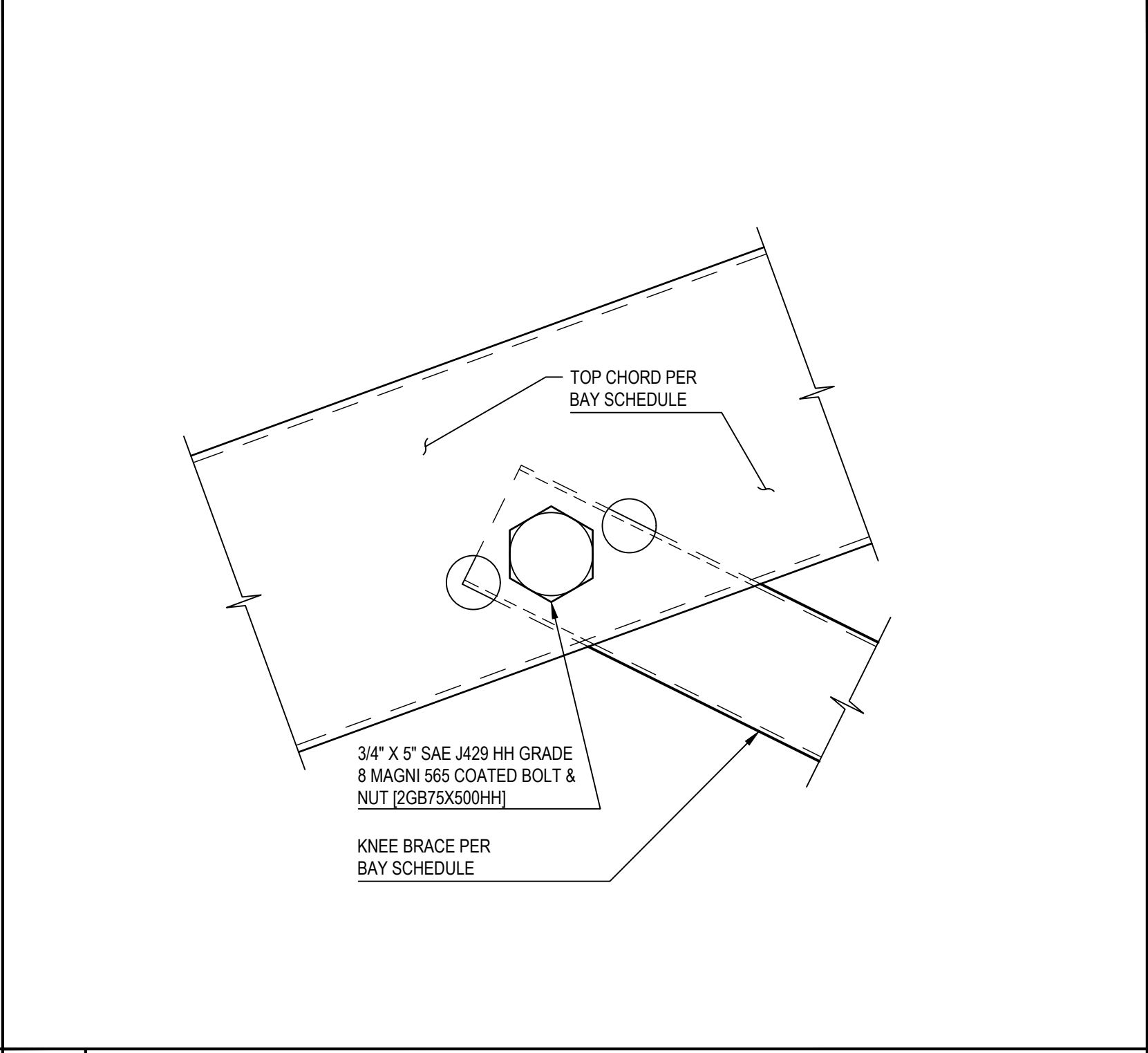
G3 X-BRACING ELEVATION



D1 WEEB PV MODULE BONDING WASHER DETAIL



D3 UPPER KNEE BRACE TO TOP CHORD CONNECTION DETAIL



A1 TOP CHORD TO POST CONNECTION DETAIL (EXTENDED)



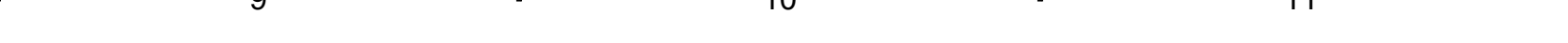
A3 LOWER KNEE BRACE TO TOP CHORD CONNECTION DETAIL



A6 KNEE BRACE TO POST CONNECTION DETAIL



A9 LONGITUDINAL PURLIN CONNECTION DETAIL



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ALLCO FINANCE LIMITED

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4	09/23/25	90% REVIEW
3	08/12/25	50% REVIEW (R1)
2	07/26/25	50% REVIEW

PROJECT INFORMATION
TITLE & ADDRESS:
BORELLI SOLAR
197 BORELLI ROAD
EAST HAVEN, CT 06511

TERRASMART PROJECT No.: 2535009
DRAWN BY: CTN
REVIEWED BY:
SHEET TITLE:
DETAILS
SHEET No.:
SG501

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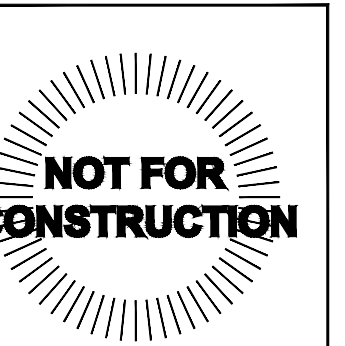


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08/12/25	50% REVIEW (R1)
07/25/25	50% REVIEW

PROJECT INFORMATION

TITLE & ADDRESS:
BORELLI SOLAR

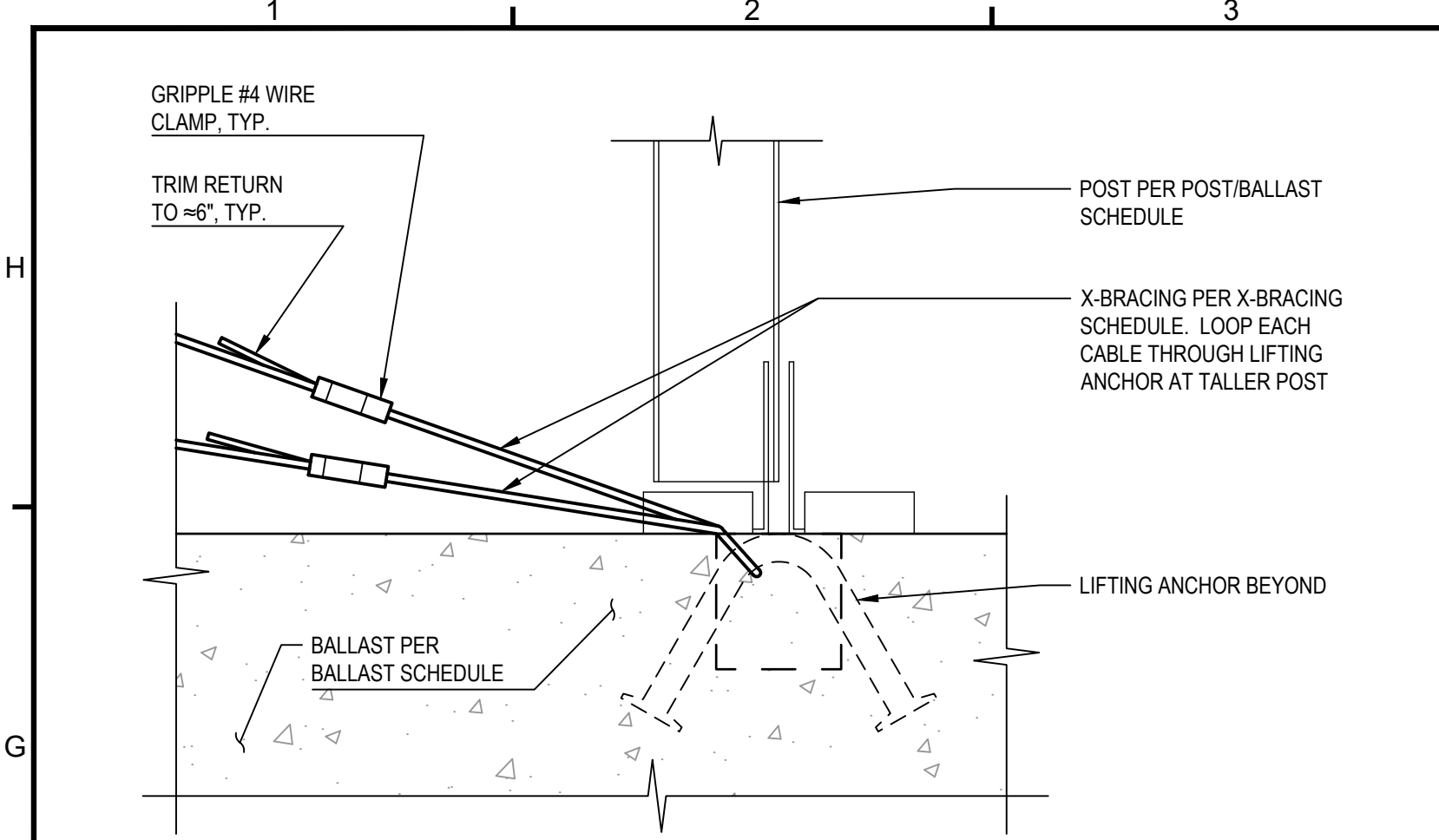
197 BORELLI ROAD
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TERRASMART PROJECT No.:
2535009

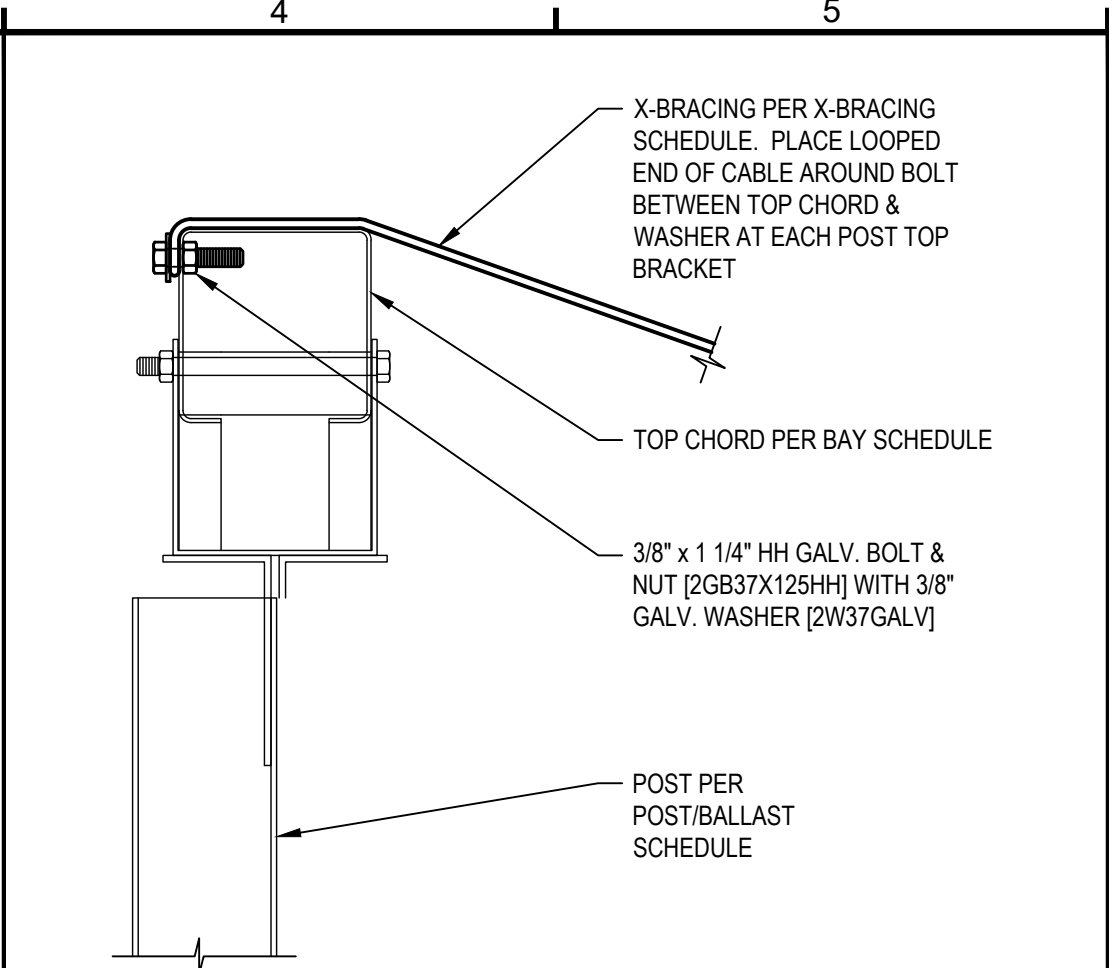
DRAWN BY: CTN
REVIEWED BY:

SHEET TITLE:
BALLAST BLOCK
DETAILS & SCHEDULES

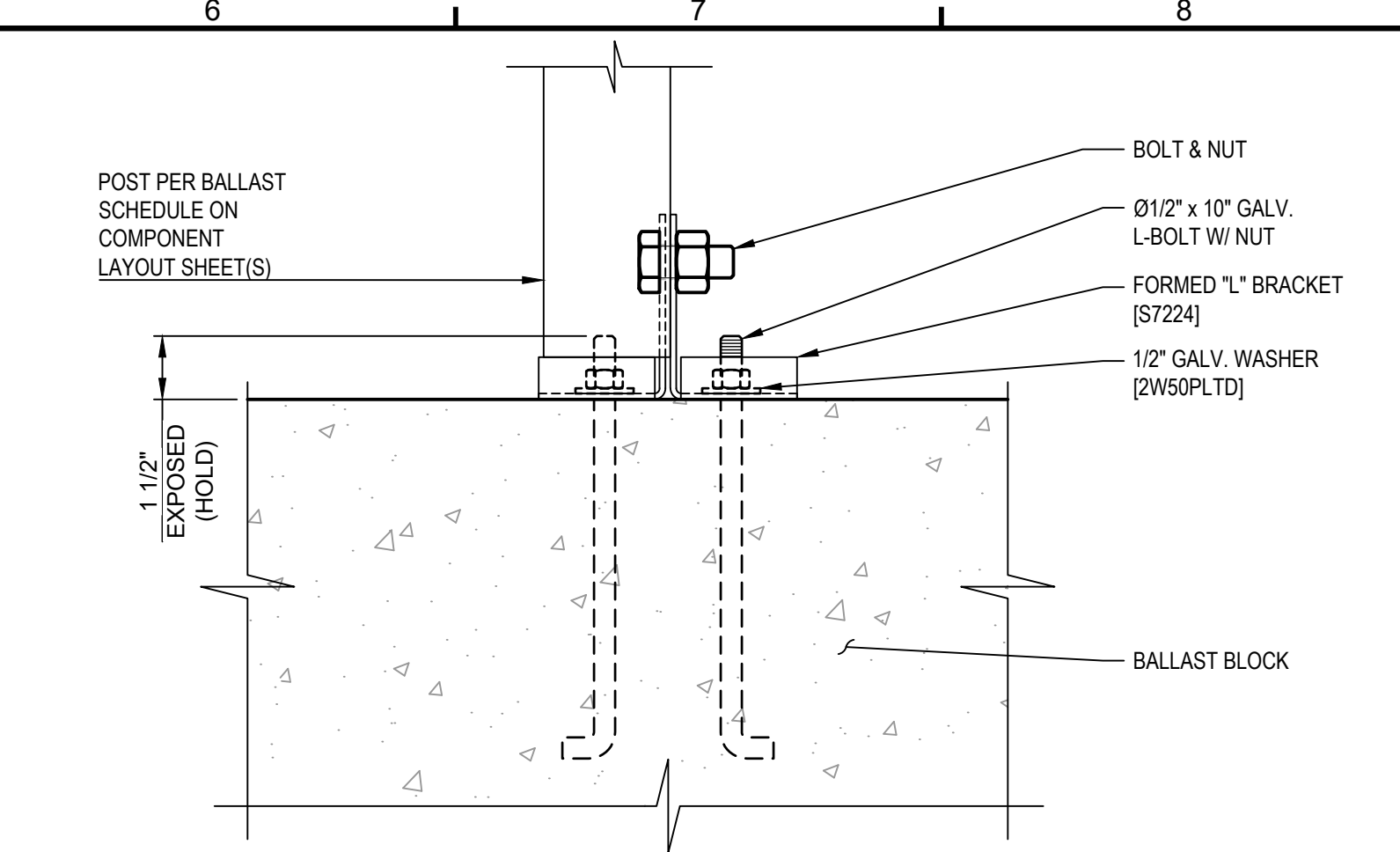
SHEET No.:
SG502



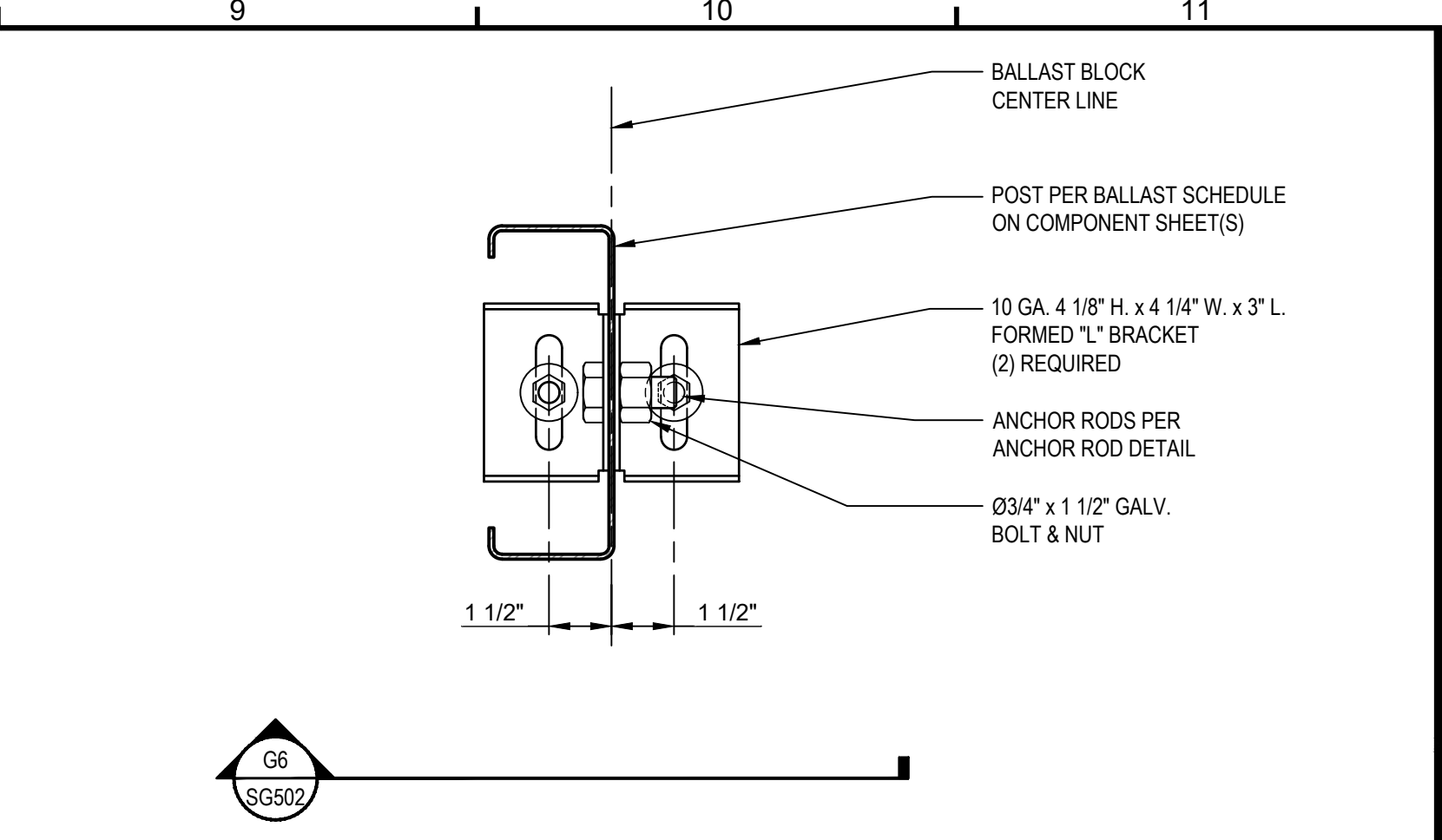
G1 X-BRACING TO BALLAST BLOCK CONNECTION DETAIL
SCALE: 3" = 1'-0"



G4 X-BRACING TO RACK FRAME CONNECTION DETAIL
SCALE: 3" = 1'-0"



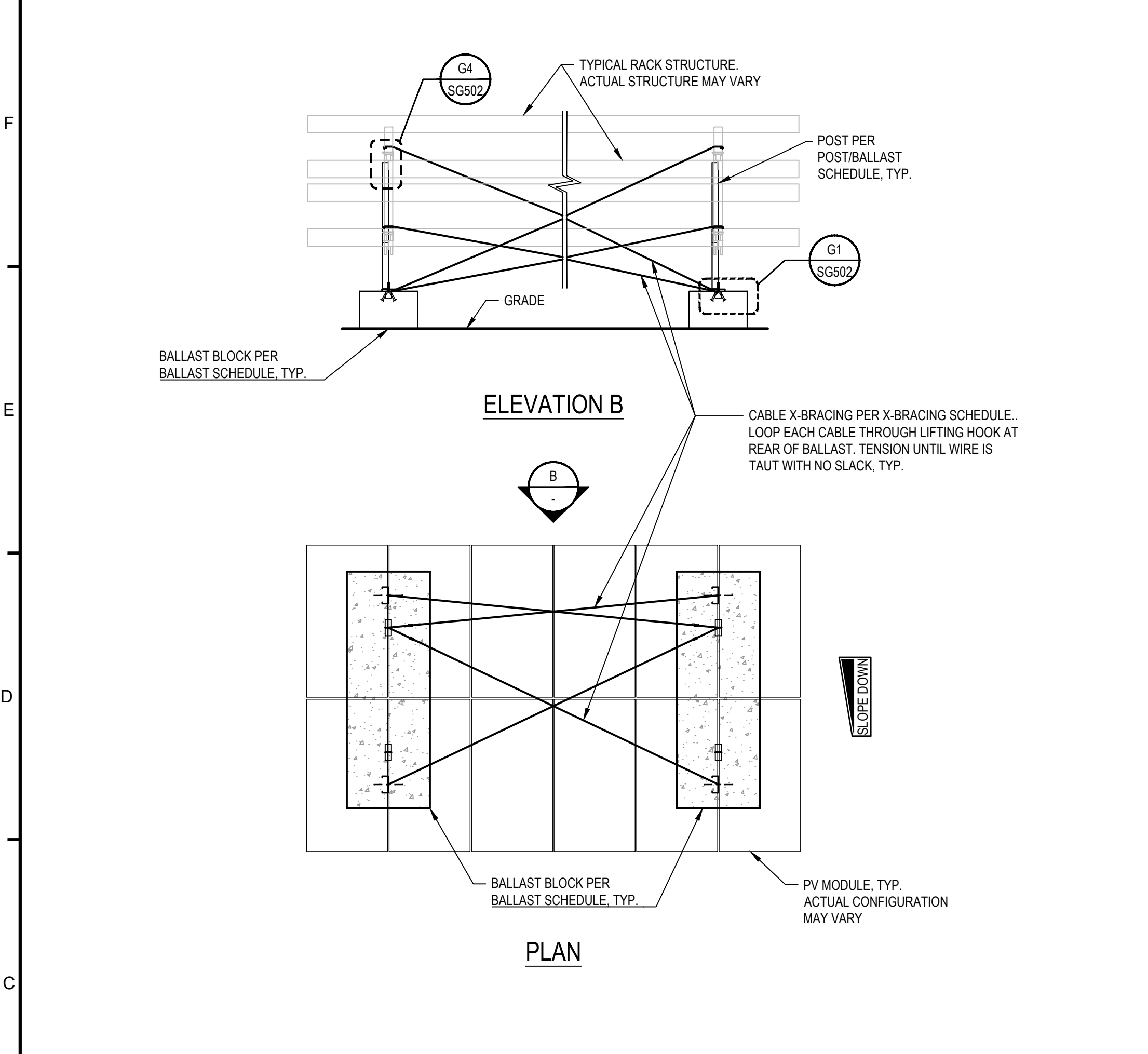
G6 BALLAST BLOCK ANCHOR ROD DETAIL
SCALE: 3" = 1'-0"



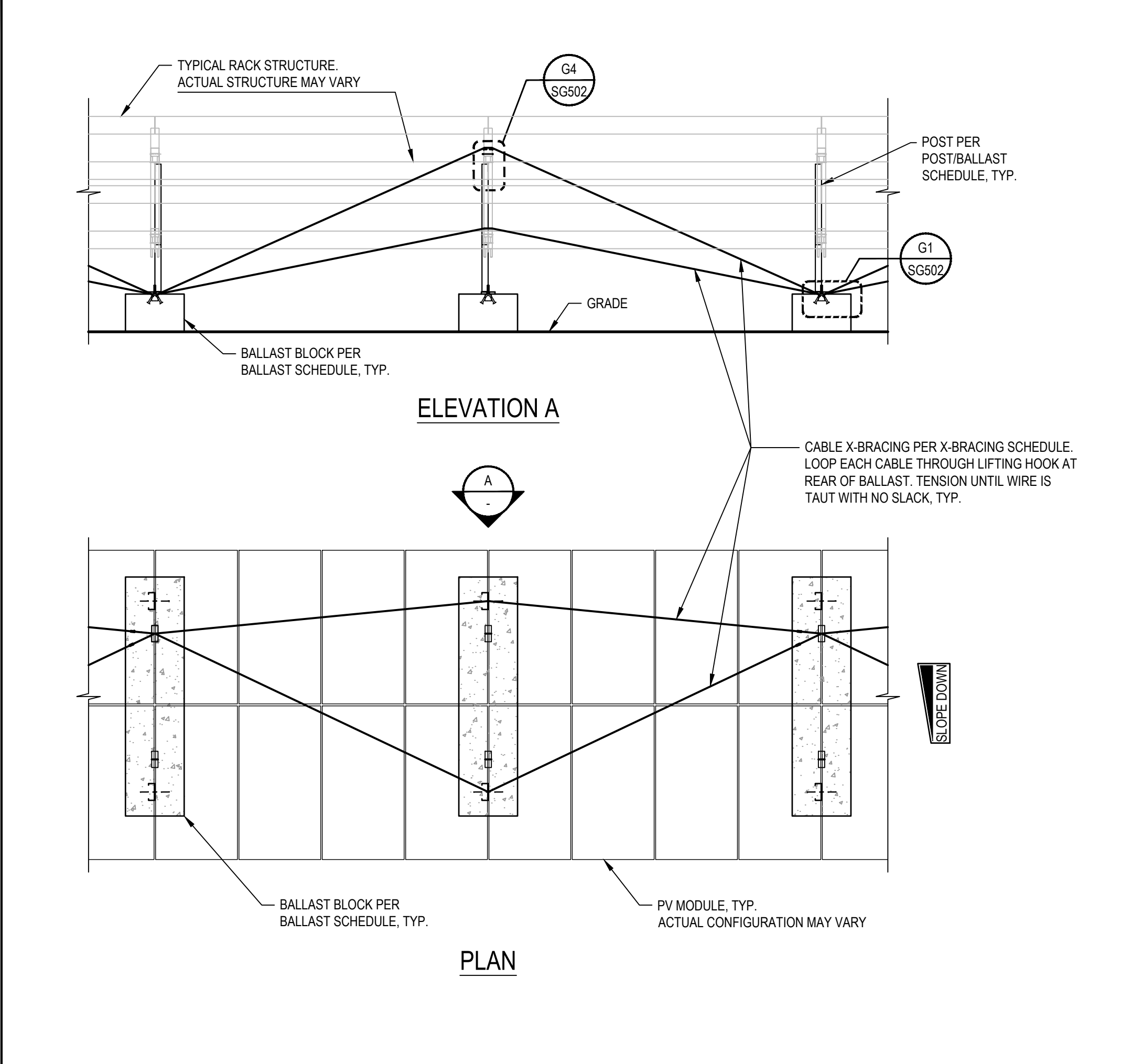
G9 BALLAST BLOCK BASE PLATE DETAIL
SCALE: 3" = 1'-0"

BALLAST CONSTRUCTION SCHEDULE

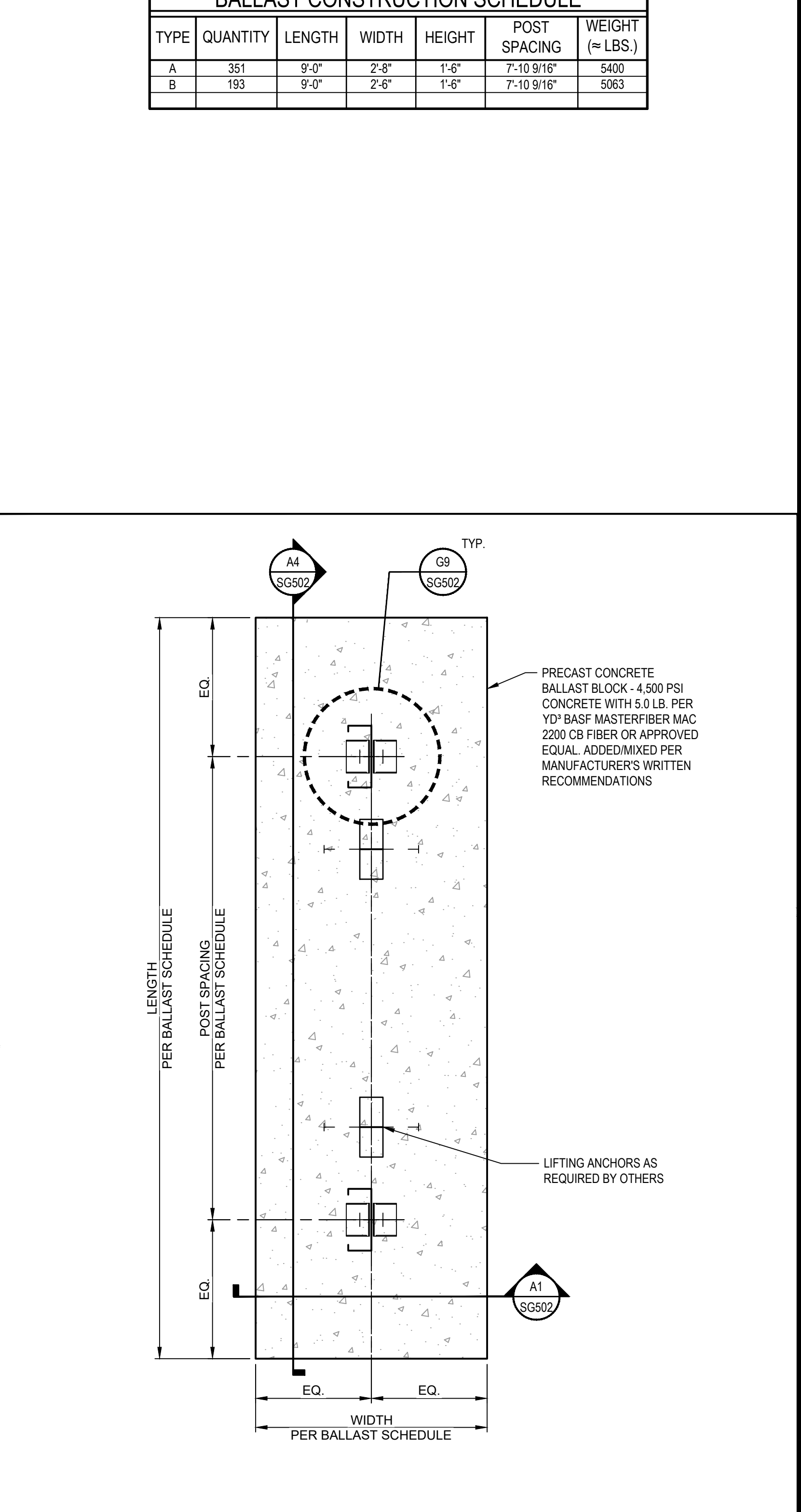
TYPE	QUANTITY	LENGTH	WIDTH	HEIGHT	POST SPACING	WEIGHT (≈ LBS.)
A	351	9'-0"	2'-8"	1'-6"	7'-10 9/16"	5400
B	193	9'-0"	2'-6"	1'-6"	7'-10 9/16"	5063



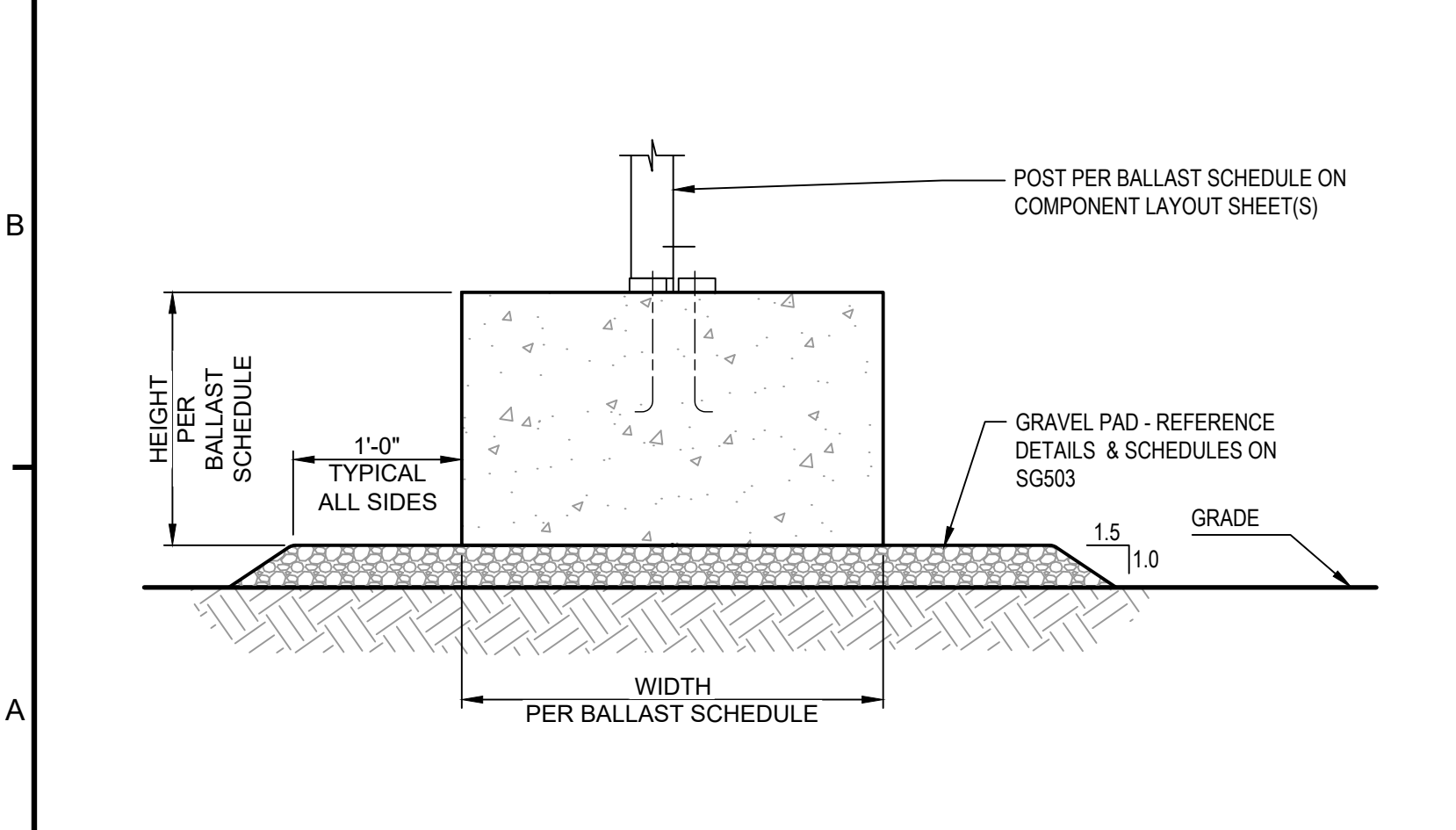
C1 BALLAST BLOCK X-BRACING CB3 PLAN/ELEVATION DETAIL
SCALE: 1/4" = 1'-0"



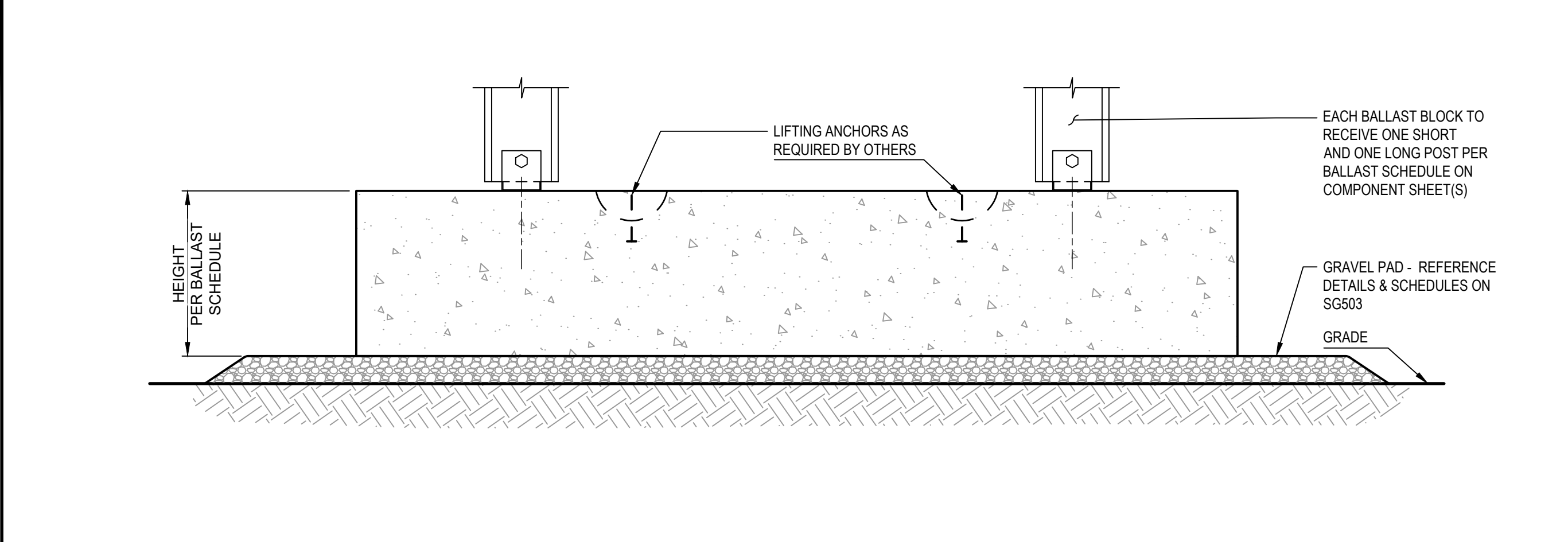
C5 BALLAST BLOCK X-BRACING CB2 PLAN/ELEVATION DETAIL
SCALE: 1/4" = 1'-0"



A9 BALLAST BLOCK PLAN
SCALE: 1" = 1'-0"



A1 TRAVERSE SECTION OF BALLAST BLOCK
SCALE: 1" = 1'-0"



A4 LONGITUDINAL SECTION OF BALLAST BLOCK
SCALE: 1" = 1'-0"

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2	07/25/25	50% REVIEW

PROJECT INFORMATION

TITLE & ADDRESS:

BORELLI SOLAR

197 BORELLI ROAD
EAST HAVEN, CT 06511

TERRASMART PROJECT No.:
2535009

DRAWN BY: CTN
REVIEWED BY: -

SHEET TITLE:

LEVELING PAD
TOLERANCE DETAILS

SHEET No.:

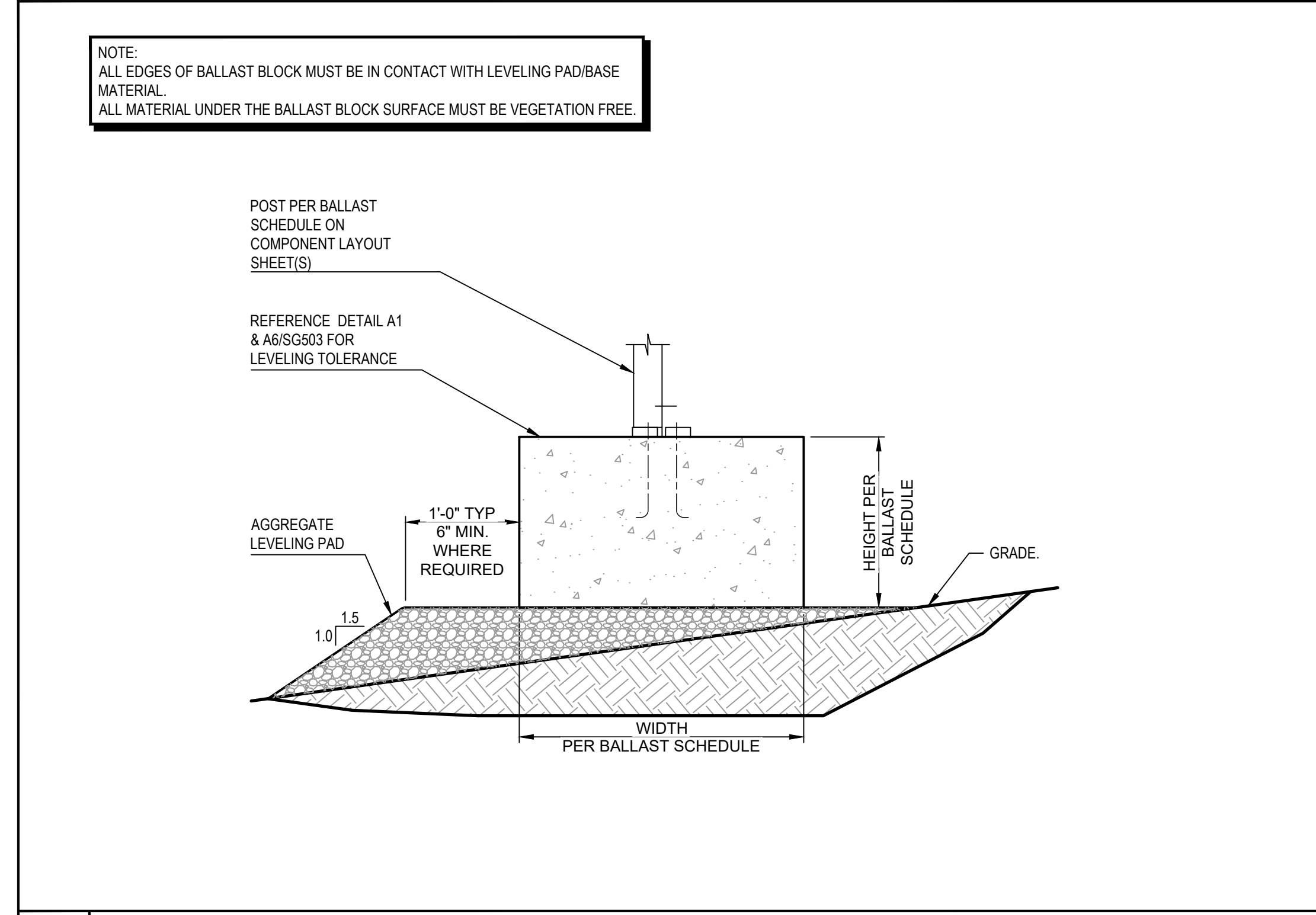
SG503

PERCENT SLOPE	LEVELING PAD REQUIREMENTS
SLOPE <= 3%	NONE REQUIRED
3.01% SLOPE UP TO 15%	LEVELING PAD REQUIRED
SLOPE > 15%	SLOPE STABLE ENGINEERED LEVELING PAD REQUIRED (BY OTHERS)

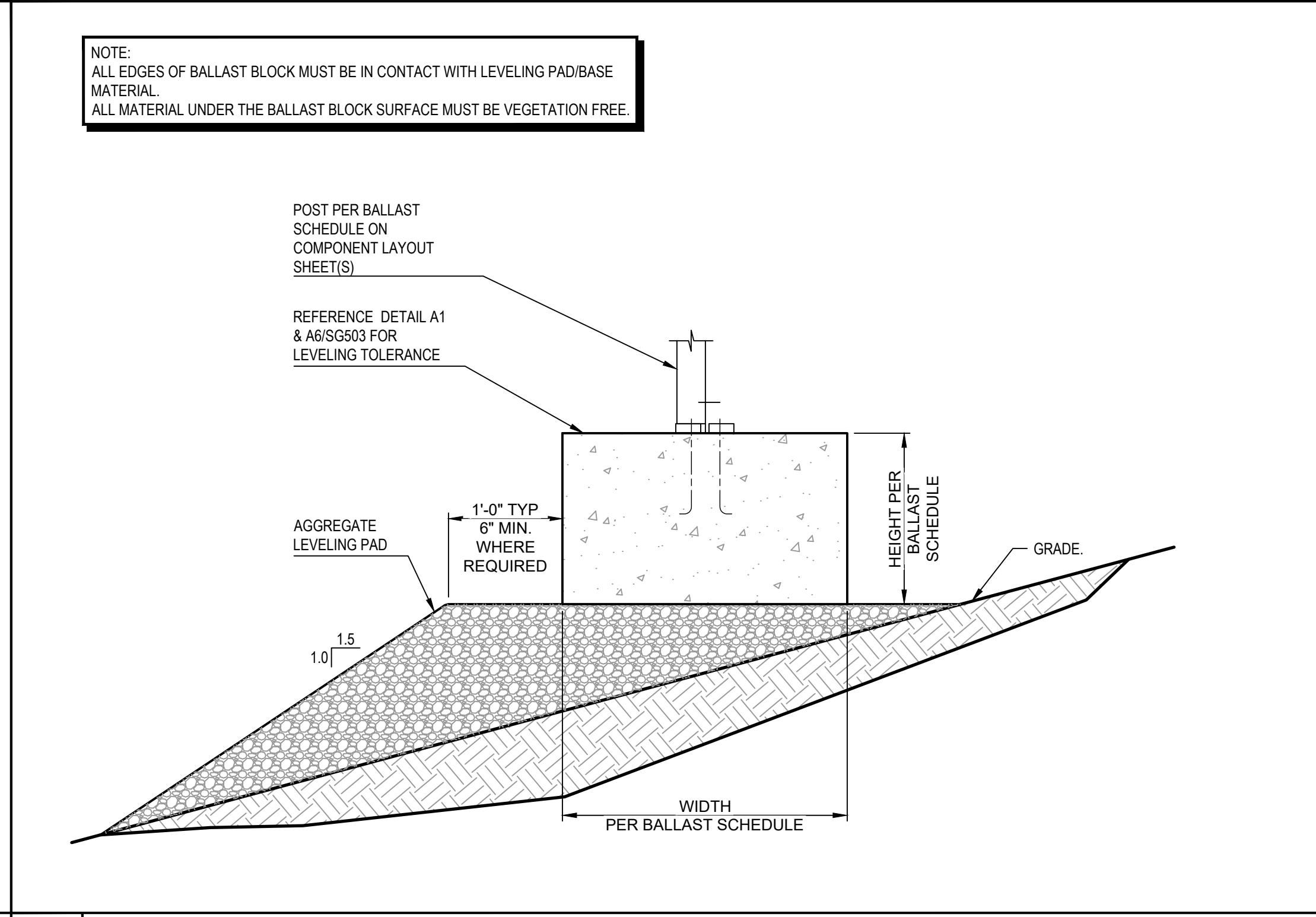
NOTE:
1. INSTALL AGGREGATE LEVELING PADS WHERE REQUIRED DUE TO SLOPE OF GRADE.
2. WHEN LEVELING PADS ARE UTILIZED, REFER TO DETAIL A1 & A6 FOR BLOCK LEVELING LIMITS.
3. DIFFERENTIAL TOP/O CONSIDERATIONS FOR RACK ASSEMBLY BETWEEN FOUNDATIONS MAY REQUIRE ADDITIONAL LEVELING PAD AND/OR MATERIAL ADJUSTABILITY BEYOND WHAT TABLE DESCRIBES.
4. REFER TO AGGREGATE TABLE FOR PERMISSIBLE MATERIALS TO CONSTRUCT LEVELING PADS.

SIEVE	% PASSING	
	OPTION A	OPTION B
1"	100	100
3/4"	50-85	60-100
#4	35-65	50-85
#10	25-50	40-70
#40	15-30	25-45
#200	<6	<6

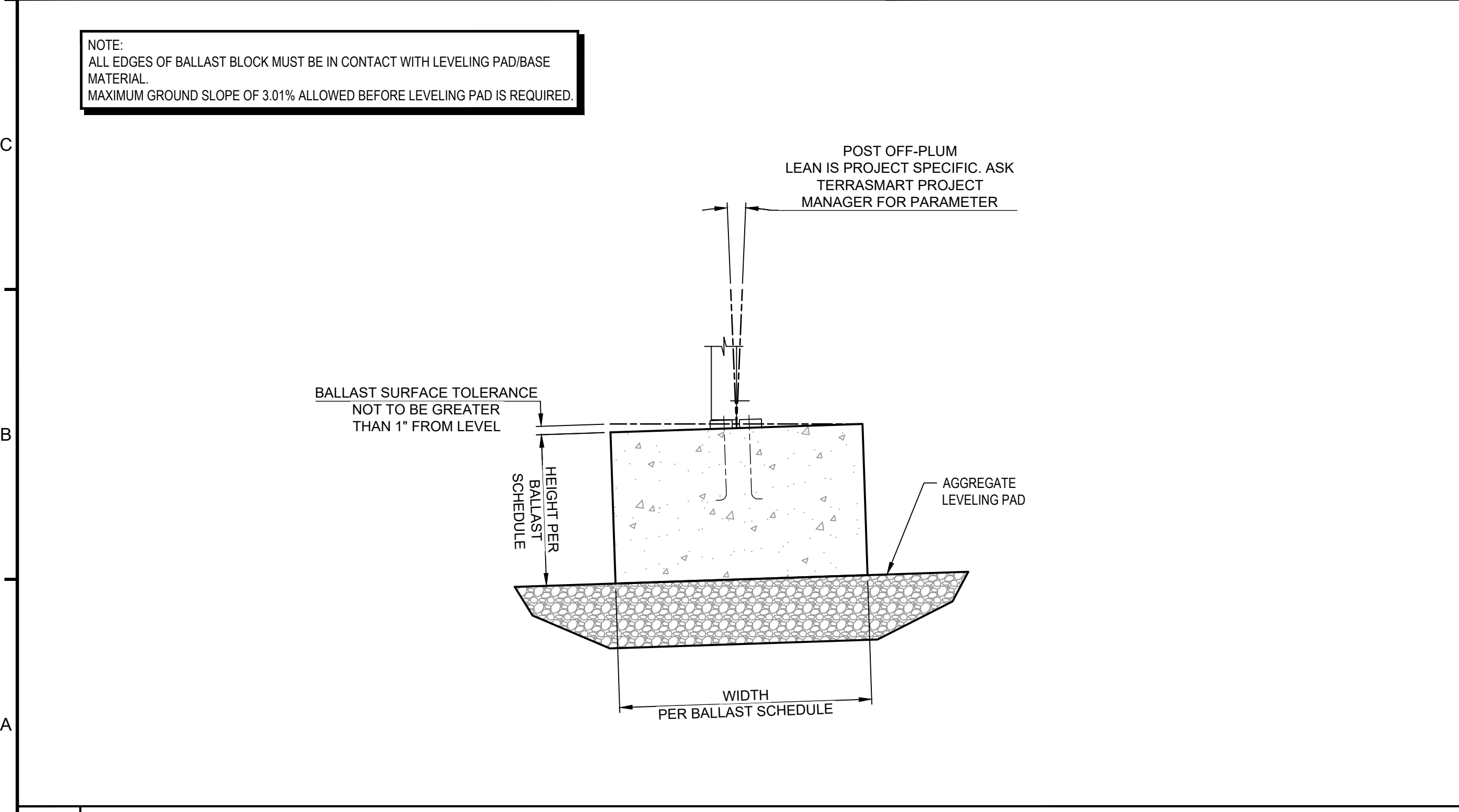
NOTE:
1. AGGREGATE SHALL BE ANGULAR CRUSHED STONE OR SLAG.
2. FINES ARE TO BE MANUFACTURED SAND OR OTHER FINE MATERIALS NATURALLY CONTAINED OR ADDED TO MEET SPECIFICATIONS ABOVE.
3. AGGREGATE TO BE COMPACTED WITH A VIBRATING COMPACTOR WITH 6" LIFTS MAXIMUM.



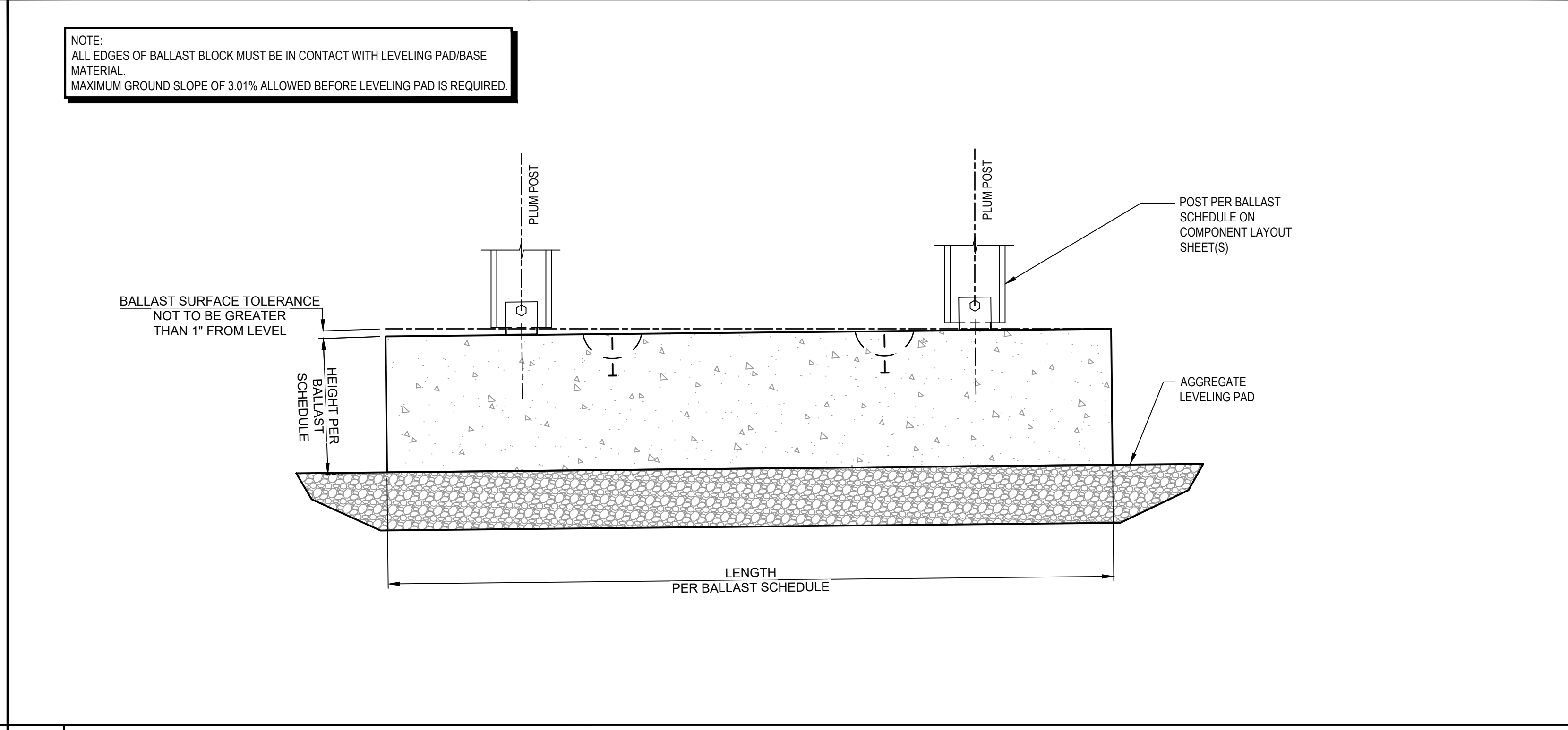
D4 LEVELING PAD DETAIL BETWEEN 3.01% & 10% SLOPE
SCALE: 1" = 1'-0"



D8 LEVELING PAD DETAIL BETWEEN 10.01% & 15% SLOPE
SCALE: 1" = 1'-0"



A1 LEVELING PAD DETAIL GRADE SLOPE TOLERANCE - EAST/WEST
SCALE: 1" = 1'-0"



A6 LEVELING PAD DETAIL GRADE SLOPE TOLERANCE - NORTH/SOUTH
SCALE: 1" = 1'-0"

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TABLE 1705(A).2 - REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION				
TYPE	CONTINUOUS	PERIODIC	REFERENCED STANDARD	
1. MATERIAL IDENTIFICATION AND TESTING OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS:				
A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	—	X	RCSC: 1.5, AISC 360: A3.3, J3.1 AND APPLICABLE ASTM MATERIAL STANDARDS	
B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	—	X	RCSC: 1.5 & 2.1; AISC 360: A3.3 & N3.2	
C. TESTING OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS.	—	X	RCSC: 7.2, APPLICABLE ASTM MATERIAL STANDARDS	
2. INSPECTION OF HIGH-STRENGTH BOLTING:				
A. SNUG-TIGHT JOINTS.	—	X	RCSC: 7-9, AISC 360: J3.1, J3.2, M2.5 & N5.6	
B. PRETENSIONED AND SLIP-CRITICAL JOINTS USING TURN-OF-NUT WITH MATCHMARKING, TWIST-OFF BOLT OR DIRECT TENSION INDICATOR METHODS OF INSTALLATION	—	X		
C. PRETENSIONED AND SLIP-CRITICAL JOINTS USING TURN-OF-NUT WITHOUT MATCHMARKING OR CALIBRATED WRENCH METHODS OF INSTALLATION.	X	—		
D. PRE-INSTALLATION VERIFICATION TESTING.	X	—		
3. MATERIAL IDENTIFICATION AND TESTING OF STRUCTURAL STEEL AND COLD-FORMED STEEL DECK:				
A. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360.	—	X	AISC 360: A3.1, N2.1, N3.2 (A) AND (K)(1)	
B. FOR OTHER STEEL, IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	—	—	APPLICABLE ASTM MATERIAL STANDARDS	
C. MANUFACTURER'S CERTIFIED TEST REPORTS.	—	X	"AISC 360: A3.1 & N3.2 APPLICABLE ASTM MATERIAL STANDARDS"	
D. TESTING OF UNIDENTIFIED STEEL.	—	X	APPLICABLE ASTM MATERIAL STANDARDS	
4. MATERIAL IDENTIFICATION OF WELDING CONSUMABLES AND TESTING OF WELDED ELEMENTS:				
A. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.	—	—	AISC 360, A3.5 & N3.2 AND APPLICABLE AWS A5 DOCUMENTS	
B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	—	—	AISC 360: N3.2	
C. NONDESTRUCTIVE TESTING OF WELDED JOINTS.	—	—	AISC 360: N5.5	
5. INSPECTION OF WELDING:				
A. STRUCTURAL STEEL AND COLD-FORMED STEEL DECK:				
1. COMPLETE AND PARTIAL JOINT PENETRATION GROOVE WELDS	X	—	AISC 360: J2, M2.4, & M4.5, AWS D1.1 AWS D1.8	
2. MULTIPASS FILLET WELDS.	X	—		
3. SINGLE-PASS FILLET WELDS > 5/16"	X	—		
4. PLUG AND SLOT WELDS.	X	—		
5. SINGLE-PASS FILLET WELDS ? 5/16"	—	X	AWS D1.3, SDI QA/QC	
6. FLOOR AND ROOF DECK WELDS.	—	X		
7. END-WELDED STUDS.	—	X	AWS D1.1	
8. WELDED SHEET STEEL FOR COLD-FORMED FRAMING MEMBERS	—	X	AWS D1.3	
B. REINFORCING STEEL				
1. PRE-WELDING VERIFICATION OF BASE MATERIAL	—	—	AWS D1.4	
2. REINFORCING STEEL-RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS AND SHEAR REINFORCEMENT.	X	—		
3. SHEAR REINFORCEMENT.	"X NOTE a"	—		
4. OTHER REINFORCING STEEL.	—	"X NOTE b"		
6. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS:				
A. DETAILS SUCH AS BRACING AND STIFFENING.	—	X	AISC 360: N5.8	
B. MEMBER LOCATIONS.	—	X		
C. APPLICATION OF JOINT DETAILS AT EACH CONNECTION.	—	X		

"NOTE:
FOR SI: 1 INCH = 25.4 MM.
a. A MINIMUM OF 10% OF SHEAR STUDS SHALL BE VERIFIED FOR STRENGTH OF WELDED CONNECTION. IF FAILURE IS EVIDENT ON ONE OR MORE, THEN THE STRENGTH OF ALL SHEAR STUDS SHALL BE VERIFIED.
b. WELDING OF INDIRECT AND DIRECT BUTT JOINTS SHALL BE CONTINUOUSLY INSPECTED."

TABLE 1705(A).6 - REQUIRED VERIFICATION AND INSPECTION OF SOILS		
VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
1. VERIFY MATERIAL BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	—	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	—	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	—	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	X	—
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	—	X

TABLE 1705(A).8 - REQUIRED SPECIAL INSPECTIONS AND TEST OF CAST-IN-PLACE DEEP FOUNDATION ELEMENTS		
TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1. INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.	X	—
2. VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM ELEMENT DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END-BEARING STRATA CAPACITY. RECORD CONCRETE OR GROUT VOLUMES.	X	—
3. FOR CONCRETE ELEMENTS, PERFORM TESTS AND ADDITIONAL SPECIAL INSPECTIONS IN ACCORDANCE WITH SECTION 1705(A).3.	IN ACCORDANCE WITH SECTION 1705(A).3	

TABLE 1705(A).3 - REQUIRED SPECIAL INSPECTIONS AND TEST OF CONCRETE CONSTRUCTION			
TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD
1. INSPECT AND TEST REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.			
A. REINFORCEMENT IN SPECIAL MOMENT FRAMES, BOUNDARY ELEMENTS OF SPECIAL STRUCTURAL WALLS AND COUPLING BEAMS.	X	—	ACI 318: CH. 20, 25.2, 25.3, 25.5.1, 26.6.1—26.6.3, 26.13.1, 26.13.3.2, 26.13.3.3
B. ALL OTHER REINFORCEMENT	—	X	
2. REINFORCING BAR WELDING:			
A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706;	—	X	AWS D1.4
B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; NOT DEFINED IN 2.D OR 2.E.	—	X	
C. INSPECT ALL OTHER WELDS.	X	—	
D. REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS AND COUPLING BEAMS OF SPECIAL STRUCTURAL WALLS OF CONCRETE AND SHEAR REINFORCEMENT.	X	—	ACI 318: 18.2.8, 25.5.7, 26.6.4, 26.13.1.4, 26.13.3.2, 26.13.3.3
E. SHEAR REINFORCEMENT.	X	—	
3. INSPECT ANCHORS CAST IN CONCRETE.			
A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	X	—	ACI 318: 17.8.2, 17.8.2.4, 26.7.2, 26.13.1, 26.13.3.2, 26.13.3.3
B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	—	X	
5. VERIFY USE OF REQUIRED DESIGN MIX.			
6. PRIOR TO AND DURING CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	—	ASTM C31 ASTM C172, ACI 318: 26.4, 26.5, 26.12
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.			
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.			
9. INSPECT PRESTRESSED CONCRETE FOR:			
A. APPLICATION OF PRESTRESSING FORCES; AND	X	—	ACI 318: 26.10.2, 26.13.1, 26.13.3.2
B. GROUTING OF BONDED PRESTRESSING TENDONS.	X	—	
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.			
11. FOR PRECAST CONCRETE DIAPHRAGM CONNECTIONS OR REINFORCEMENT AT JOINTS CLASSIFIED AS MODERATE OR HIGH DEFORMABILITY ELEMENTS (MDE OR HDE) IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY D, E OR F, INSPECT SUCH CONNECTIONS AND REINFORCEMENT IN THE FIELD FOR:	—	X	ACI 318: 26.13.1.3
A. INSTALLATION OF THE EMBEDDED PARTS	X	—	ACI 550.5
B. COMPLETION OF THE CONTINUITY OF REINFORCEMENT ACROSS JOINTS.	X	—	
C. COMPLETION OF CONNECTIONS IN THE FIELD.	X	—	
12. INSPECT INSTALLATION TOLERANCES OF PRECAST CONCRETE DIAPHRAGM CONNECTIONS FOR COMPLIANCE WITH ACI 550.5.			
13. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.			
14. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	—	X	ACI 318: 26.11.1.2(B), 26.13.3.3

TABLE 1705(A).7 - REQUIRED VERIFICATION AND INSPECTION OF DRIVEN DEEP FOUNDATION ELEMENTS		
VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
1. VERIFY ELEMENT MATERIAL, SIZES, AND LENGTHS COMPLY WITH THE REQUIREMENTS	X	—
2. DETERMINE CAPACITIES OF TEST ELEMENTS AND CONDUCT ADDITIONAL LOAD TESTS, AS REQUIRED	X	—
3. OBSERVE DRIVING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT	X	—
4. VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM TYPE AND SIZE OF HAMMER, RECORD NUMBER OF BLOWS PER FOOT OF PENETRATION, DETERMINE REQUIRED PENETRATIONS TO ACHIEVE DESIGN CAPACITY, RECORD TIP AND BUTT ELEVATIONS AND DOCUMENT ANY DAMAGE TO FOUNDATION ELEMENT	X	—
5. FOR STEEL ELEMENTS, PERFORM ADDITIONAL INSPECTIONS IN ACCORDANCE WITH SECTION 1705(A).2	IN ACCORDANCE WITH SECTION 1705(A).2	
6. FOR CONCRETE ELEMENTS AND CONCRETE-FILLED ELEMENTS, PERFORM ADDITIONAL INSPECTIONS IN ACCORDANCE WITH SECTION 1705(A).3	IN ACCORDANCE WITH SECTION 1705(A).3	
7. FOR SPECIALTY ELEMENTS, PERFORM ADDITIONAL INSPECTIONS AS DETERMINED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE	IN ACCORDANCE WITH STATEMENT OF SPECIAL INSPECTIONS	

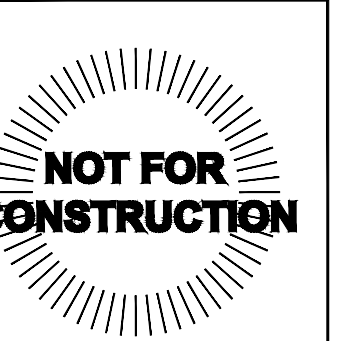


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GROUND MOUNT FOR ALLCO FINANCE LIMITED

RELEASE RECORD

MARK DATE	DESCRIPTION
4 09/23/25	90% REVIEW
3 08/12/25	50% REVIEW (R1)
2 07/25/25	50% REVIEW

PROJECT INFORMATION

TITLE & ADDRESS:

BORELLI SOLAR

197 BORELLI ROAD
EAST HAVEN, CT 06511

TERRASMART PROJECT No.:
2535009

DRAWN BY: CTN
REVIEWED BY: —

SHEET TITLE:

SPECIAL INSPECTION TABLES

SHEET No.:

SG701