

PROPOSED SOLAR POWER SITE:
37 HUNTERS LANE
41°34'44.32"N, 72°54'17.09"W
SOUTHINGTON, CT 06489

PREPARED FOR:
HORTON ELECTRICAL SERVICES
97 RIVER ROAD
CANTON, CT 06019

PREPARED BY:
FLEXRACK BY QCELLS
23000 HARVARD RD., SUITE B
CLEVELAND, OH 44122

ARRAY LOCATION



PROJECT SITE

NORTH

GENERAL NOTES:

1. CODES AND STANDARDS:

IBC 2021
NEC 2020
AISC 360–16
AISI S100–20
ASCE 7–16
2022 CT STATE BUILDING CODE

2. WIND DESIGN PARAMETERS:

ULTIMATE DESIGN WIND SPEED, V – 110 MPH
RISK CATEGORY – I
WIND EXPOSURE CATEGORY C, K_z – 1.00
TOPOGRAPHICAL FACTOR, K_{zt} – 1.00
WIND DIRECTIONALITY FACTOR, K_d – 0.85
GUST FACTOR & NET PRESSURE COEFFICIENT, GCN
–GCN COEFFICIENTS DETERMINED BASED ON WIND TUNNEL TESTING
–SEE SFR STRUCTURAL REPORT FOR PROJECT SPECIFIC GCN COEFFICIENTS

3. SNOW DESIGN PARAMETERS:

GROUND SNOW LOAD – 30 PSF
EXPOSURE CATEGORY, Ce – 0.90
SNOW THERMAL FACTOR, Ct – 1.20
SNOW IMPORTANCE FACTOR, I – 0.80
ROOF SLOPE FACTOR, Cs – 1.00

4. EARTHQUAKE DESIGN PARAMETERS – EQUIVALENT LATERAL FORCE:

RISK CATEGORY – I
SITE CLASS – D
SEISMIC IMPORTANCE FACTOR, I_e – 1.0
RESPONSE MODIFICATION COEFFICIENT, R – 2
SPECTRAL RESPONSE ACCELERATION PARAMETERS

MAPPED	DESIGN
S _s – 0.196g	S _{ps} – 0.209g
S ₁ – 0.055g	S _{p1} – 0.088g

SEISMIC DESIGN CATEGORY – D
SEISMIC RESPONSE COEFFICIENT, C_s – 0.105

5. FOUNDATIONS:

FOUNDATION DESIGN DERIVED FROM GEOTECHNICAL REPORT PROVIDED BY: TBD

6. APPLICABLE INSTALLATION TOLERANCES (PER SINGLE TRACKER):

N–S POST SPACING: ±1 ½”
N–S SLOPE: 5%
E–W POST ALIGNMENT: ±¾”
IDLER POST HEIGHT OUT OF STRING–LINE: ±1”
POST PLUMB: ±1”
POST TWIST: ±3”
TUBE TWIST: ±2”

POST TOLERANCES ARE REFERENCED AT TOP–OF–POST LOCATION.
DRIVE POST HEIGHT ABOVE GRADE IS 3” ABOVE IDLER POSTS
MINIMUM RECOMMENDED CLEARANCE BETWEEN TRACKERS NO LESS THAN 12”.

POST EMBEDMENT AND ABOVE GRADE TOLERANCES ARE SHOWN ON S2–S3.
S2–S3 TOLERANCES GIVEN TO ASSIST WITH VARIATIONS IN GRADE.

7. CONNECTIONS:

SEE SHEETS S4–S7 FOR TORQUE VALUES FOR EACH CONNECTION.

8. PV MODULE INFORMATION:

NAME/MODEL: TSM–540–DEG19C.20 540W
DIMENSIONS: 93.858” LONG X 43.150” WIDE X 1.378” TALL
WEIGHT: 71.9 LBS
VERSION: TSM_EN_2020_APAC_A

9. MATERIALS AND COATINGS:

- A. PILES:
- I. W–SECTIONS: A992 STEEL HOT DIPPED GALVANIZED PER ASTM A123.
- B. HARDWARE:
- I. ¾”Ø TO BE F3125 GRADE A325 HOT DIPPED GALVANIZED PER ASTM A153.
II. ⅝”Ø TO BE F3125 GRADE A325 HOT DIPPED GALVANIZED PER ASTM A153.
III. ½”Ø TO BE F3125 GRADE A325 HOT DIPPED GALVANIZED PER ASTM A153.
IV. ⅜”Ø TO BE A449 MECHANICAL GALVANIZED PER MAGNI 560.
V. ⅝”Ø TO BE A449 MECHANICAL GALVANIZED PER MAGNI 560
OR STAINLESS STEEL.
VI. ¼”Ø TO BE A449 MECHANICAL GALVANIZED PER MAGNI 560
OR STAINLESS STEEL.
- C. COLD FORMED STEEL:
- I. ALL COLD FORM STEEL TO BE PRE GALVANIZED PER A653 UNLESS OTHERWISE NOTED.

10. SPECIAL INSPECTIONS:

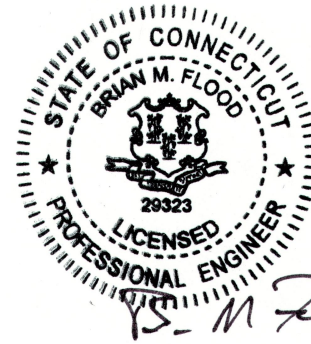
THE FOLLOWING SPECIAL INSPECTIONS MAY BE REQUIRED PER IBC CHAPTER 17.
CHECK WITH LOCAL BUILDING OFFICIAL FOR APPLICABILITY.
DRIVEN PILES.....(CONTINUOUS)
–SEE IBC 2021, TABLE 1705.7, ITEMS 1–5
ASTM A325 BOLTS AND FASTENERS.....(PERIODIC)
–SEE AISC 360–16, SECTION N5.6
ASTM A307 BOLTS AND FASTENERS
–NOT REQUIRED

ABBREVIATIONS

MIN	MINIMUM	BC	BEARING CRADLE
MAX	MAXIMUM	C–C	CENTER TO CENTER
OH	OVERHANG	CD	CRITICAL DIMENSION
PAG	POST ABOVE GRADE	CTA	CENTRAL TUBE AXIS
REF	REFERENCE	DIM	DIMENSION
DIA	DIAMETER	EOP	END OF PANEL
TYP	TYPICAL	HORIZ	HORIZONTAL
VERT	VERTICAL	HDG	HOT DIPPED GALVANIZED
STD	STANDARD	PLN	PLAIN
RV	RECEIVER	SWG	SWAGED
CP	CLAMP	EOT	END OF TUBE
S/C	STOCK CODE		

SHEET INDEX: FLEXTRACK S–SERIES

S1	PV MODULE SPECIFICATION SHEETS	●	●		
S2	1X70 RACK PLAN VIEW, ELEVATION, & NOTES	●	●		
S3	1X35 RACK PLAN VIEW, ELEVATION, & NOTES	●	●		
S4	TRACKER CONNECTIONS – DRIVE POST & SPLICE CONNECTION DETAILS	○	●		
S5	TRACKER CONNECTIONS – IDLER POST & VERTICAL RAIL CONNECTION DETAILS	○	●		
S6	TRACKER CONNECTIONS – DAMPER & PANEL CONNECTION DETAILS	○	●		
S7	TCU COMPONENT AND CONNECTION DETAILS	○	●		
S8	ALTERNATE FOUNDATIONS DETAILS	○	●		
LEGEND:					
● ISSUED					
○ REVISED, BUT NOT ISSUED					
		SIGN–OFF			
		JUNE 19, 2024			
		STAMPED SET			
		NOV. 19, 2024			
		ISSUANCE/REVISION			



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COVER SHEET

CUSTOMER: HORTON ELECTRICAL SERVICES
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SHEET 18662

PAGE: S0

OF S8

S0



BIFACIAL DUAL GLASS MONOCRYSTALLINE MODULE

Mono Multi Solutions

PRODUCT: TSM-DEG19C.20
PRODUCT RANGE: 525-550W

550W+

MAXIMUM POWER OUTPUT

0~+5W

POSITIVE POWER TOLERANCE

21.0%

MAXIMUM EFFICIENCY



High customer value

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance of System) cost, shorter payback time
- Lowest guaranteed first year and annual degradation;
- Designed for compatibility with existing mainstream system components
- Higher return on Investment



High power Mono Perc up to 550W

- Up to 21.0% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection



High reliability

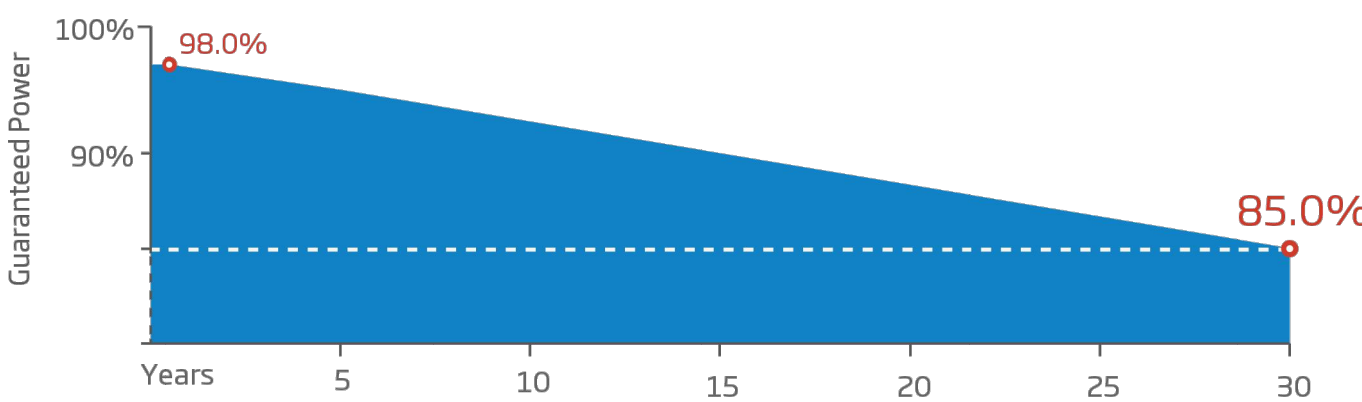
- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material control
- Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load



High energy yield

- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions
- Lower temperature coefficient (-0.34%) and operating temperature
- Up to 25% additional power gain from back side depending on albedo

Trina Solar's Vertex Bifacial Dual Glass Performance Warranty



Comprehensive Products and System Certificates

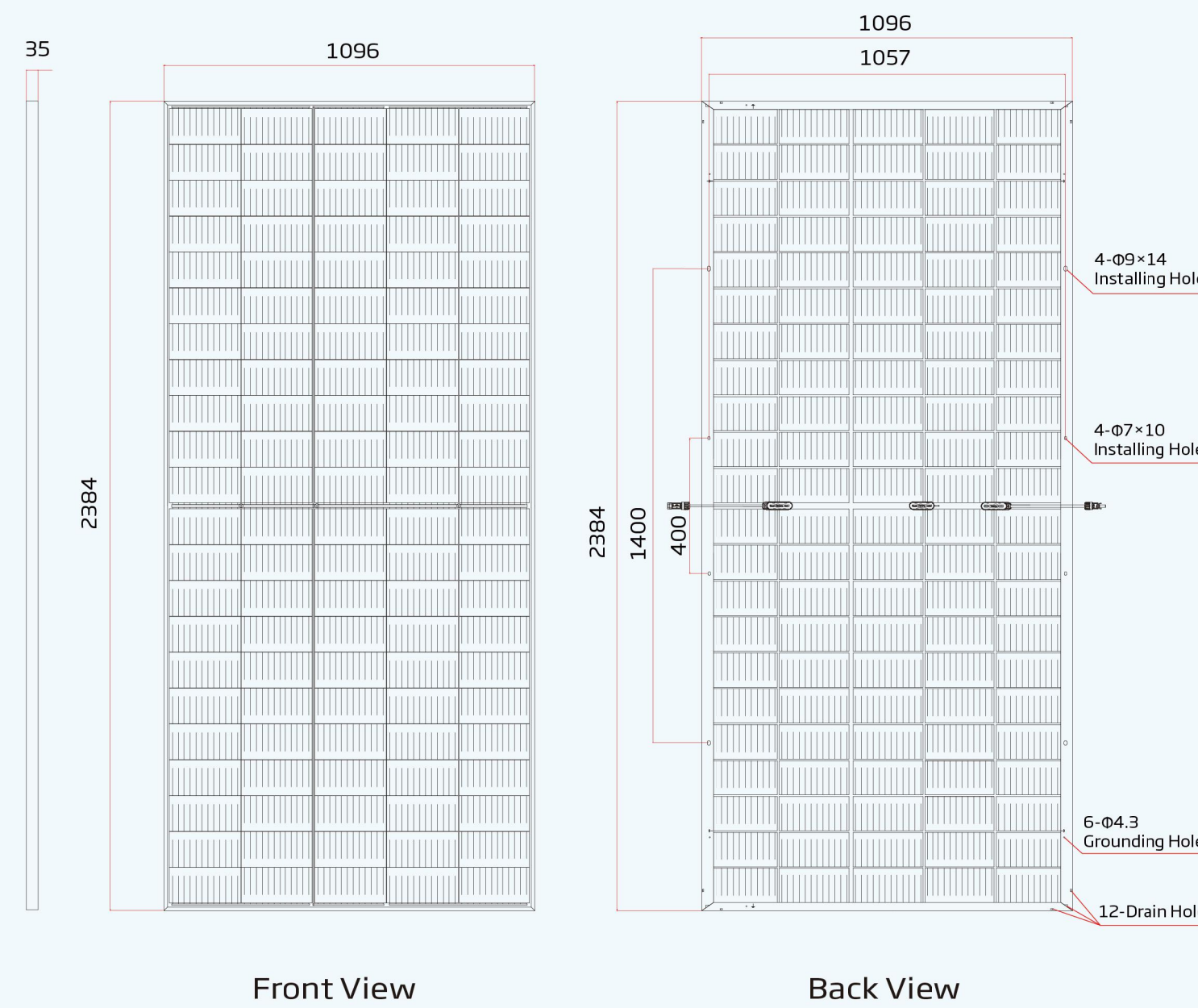


IEC61215/IEC61730/IEC61701/IEC62716/UL61730
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO14064: Greenhouse Gases Emissions Verification
ISO45001: Occupational Health and Safety Management System

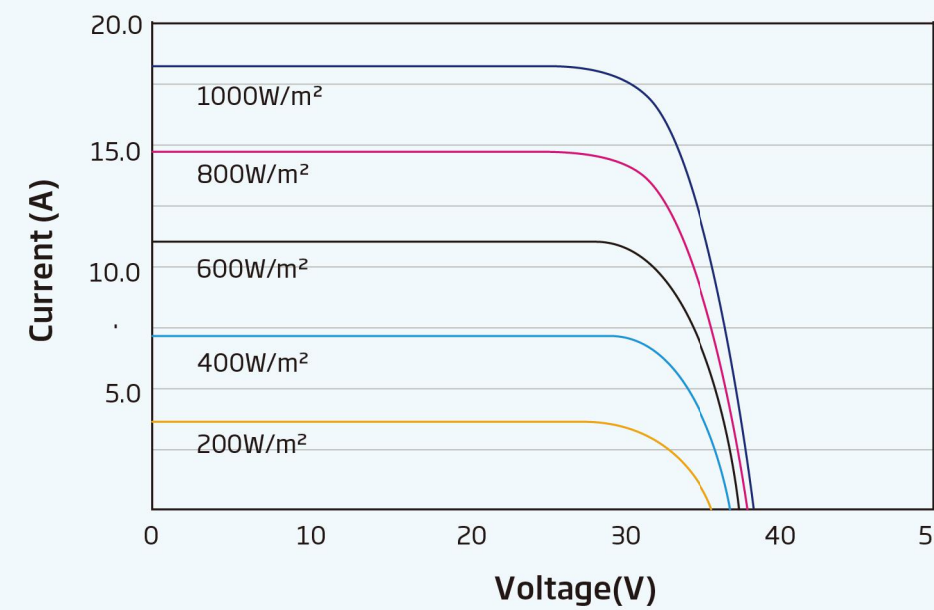


BIFACIAL DUAL GLASS MONOCRYSTALLINE MODULE

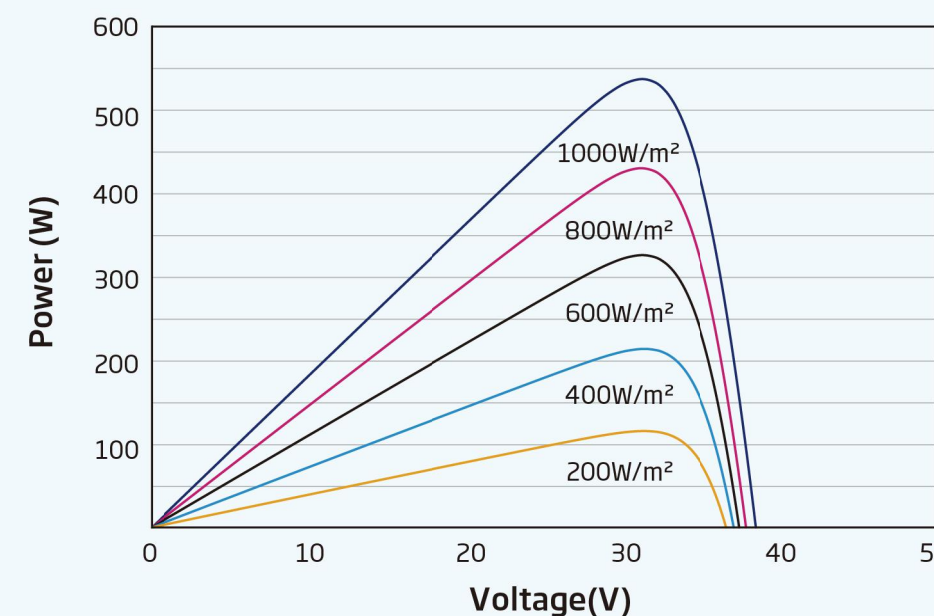
DIMENSIONS OF PV MODULE(mm)



I-V CURVES OF PV MODULE(540 W)



P-V CURVES OF PV MODULE(540 W)



ELECTRICAL DATA (STC)

Peak Power Watts-P _{MAX} (Wp)*	525	530	535	540	545	550
Power Tolerance-P _{MAX} (W)			0	+5		
Maximum Power Voltage-V _{MPP} (V)	30.8	31.0	31.2	31.4	31.6	31.8
Maximum Power Current-I _{MPP} (A)	17.04	17.11	17.16	17.21	17.24	17.29
Open Circuit Voltage-V _{OC} (V)	37.1	37.3	37.5	37.7	37.9	38.1
Short Circuit Current-I _{SC} (A)	18.14	18.19	18.24	18.30	18.35	18.39
Module Efficiency η_m (%)	20.1	20.3	20.5	20.7	20.9	21.0

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%

Electrical characteristics with different power bin (reference to 10% Irradiance ratio)

Total Equivalent power -P _{MAX} (Wp)	562	567	573	578	583	589
Maximum Power Voltage-V _{MPP} (V)	30.8	31.0	31.2	31.4	31.6	31.8
Maximum Power Current-I _{MPP} (A)	18.23	18.31	18.36	18.41	18.45	18.50
Open Circuit Voltage-V _{OC} (V)	37.1	37.3	37.5	37.7	37.9	38.1
Short Circuit Current-I _{SC} (A)	19.41	19.45	19.52	19.58	19.63	19.68

Irradiance ratio (rear/front)

Power Bifaciality:70±5%

ELECTRICAL DATA (NOCT)

Maximum Power-P _{MAX} (Wp)	398	401	405	409	413	416
Maximum Power Voltage-V _{MPP} (V)	28.6	28.8	29.0	29.2	29.4	29.5
Maximum Power Current-I _{MPP} (A)	13.88	13.93	13.97	14.02	14.08	14.10
Open Circuit Voltage-V _{OC} (V)	35.0	35.1	35.3	35.5	35.7	35.9
Short Circuit Current-I _{SC} (A)	14.62	14.65	14.70	14.75	14.79	14.82

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline
No. of cells	110 cells
Module Dimensions	2384×1096×35 mm (93.86×43.15×1.38 inches)
Weight	32.6 kg (71.9 lb)
Front Glass	2.0 mm (0.08 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	EVA/POE
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass (White Grid Glass)
Frame	35mm(1.38 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²), Portrait: 280/280 mm(11.02/11.02 inches) Landscape: 1400/1400 mm(55.12/55.12 inches)
Connector	TS4

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P _{MAX}	-0.34%/°C
Temperature Coefficient of V _{OC}	-0.25%/°C
Temperature Coefficient of I _{SC}	0.04%/°C

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC)
	1500V DC (UL)
Max Series Fuse Rating	35A

WARRANTY

12 year Product Workmanship Warranty
30 year Power Warranty
2% first year degradation
0.45% Annual Power Attenuation

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per box: 31 pieces
Modules per 40' container: 620 pieces

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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Version number: TSM_EN_2020_APAC_A

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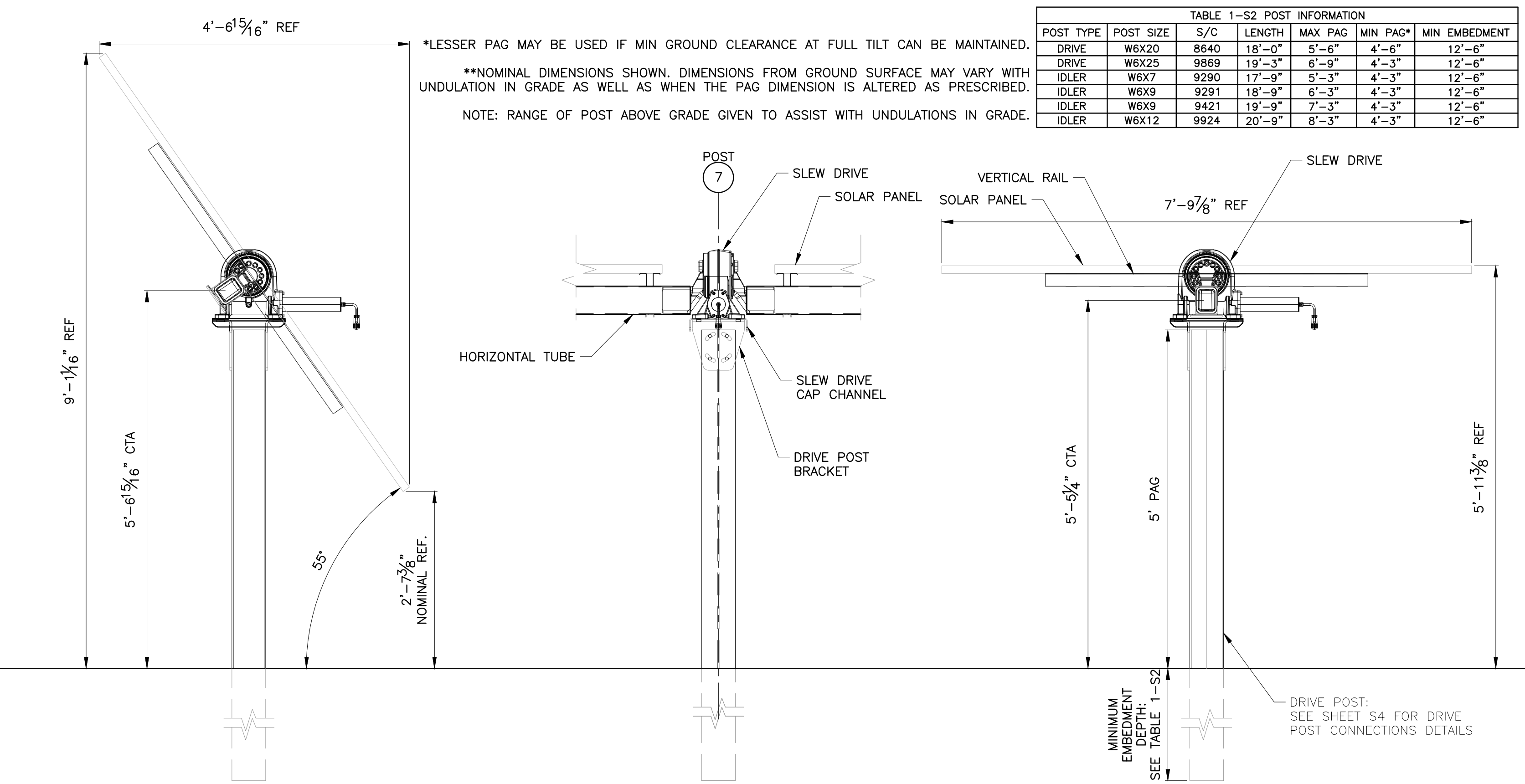
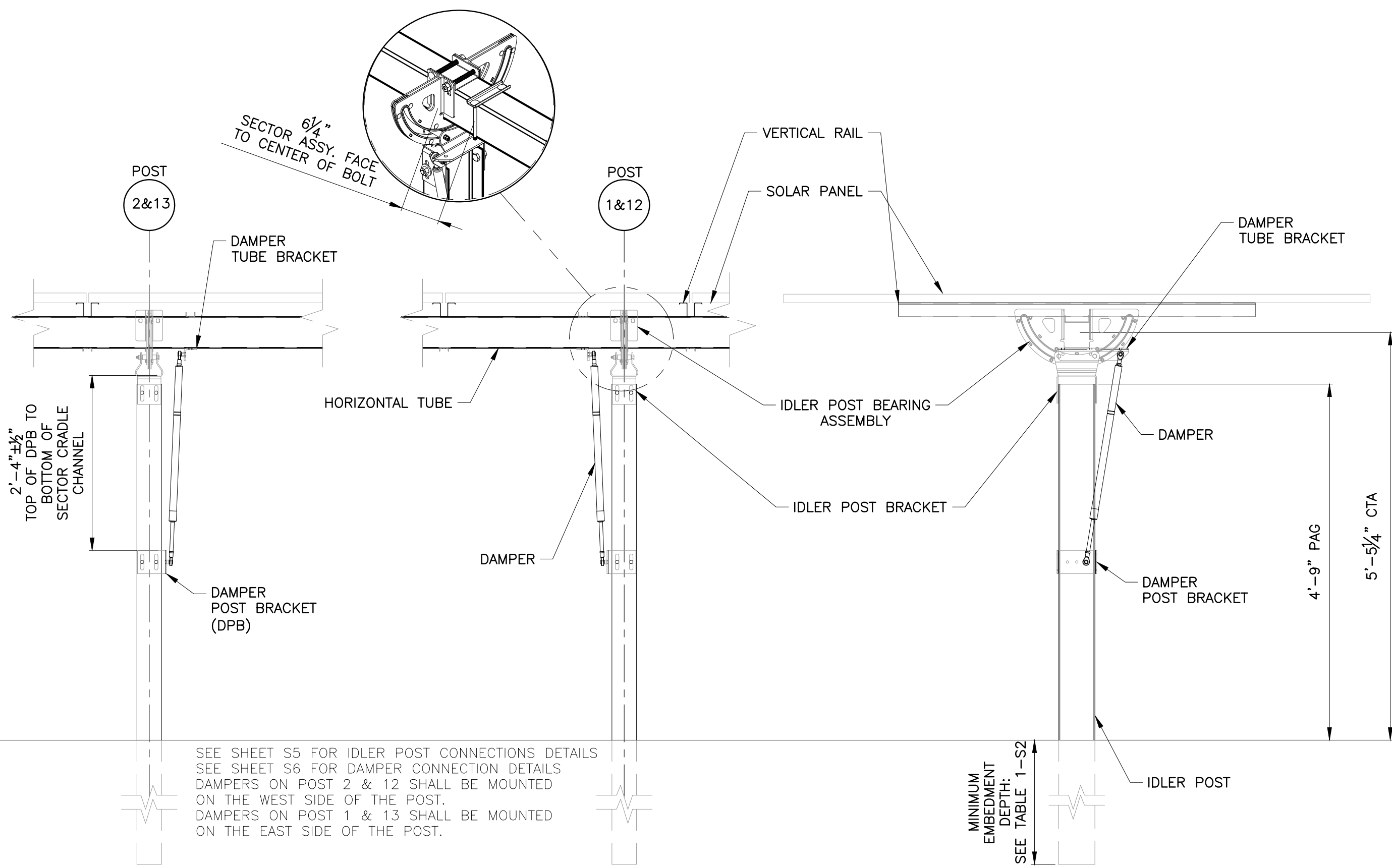
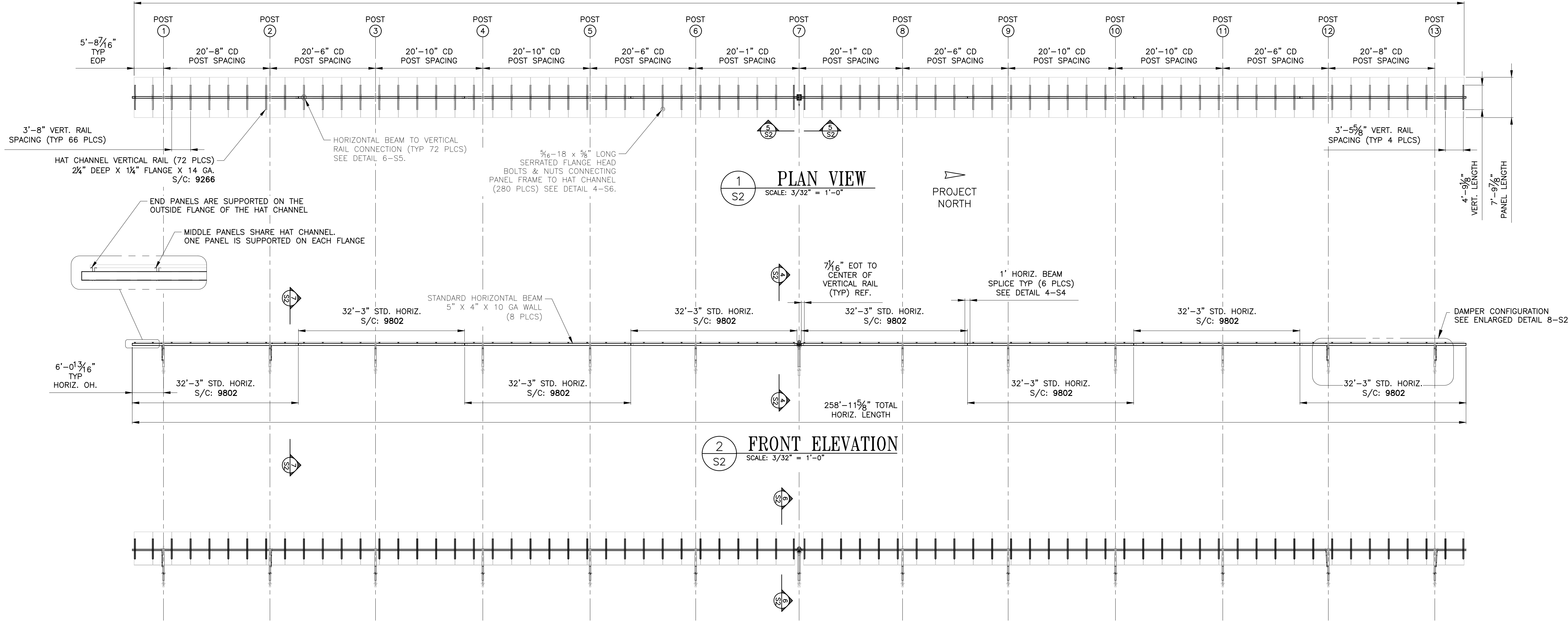
PV MODULE SPECIFICATION SHEETS

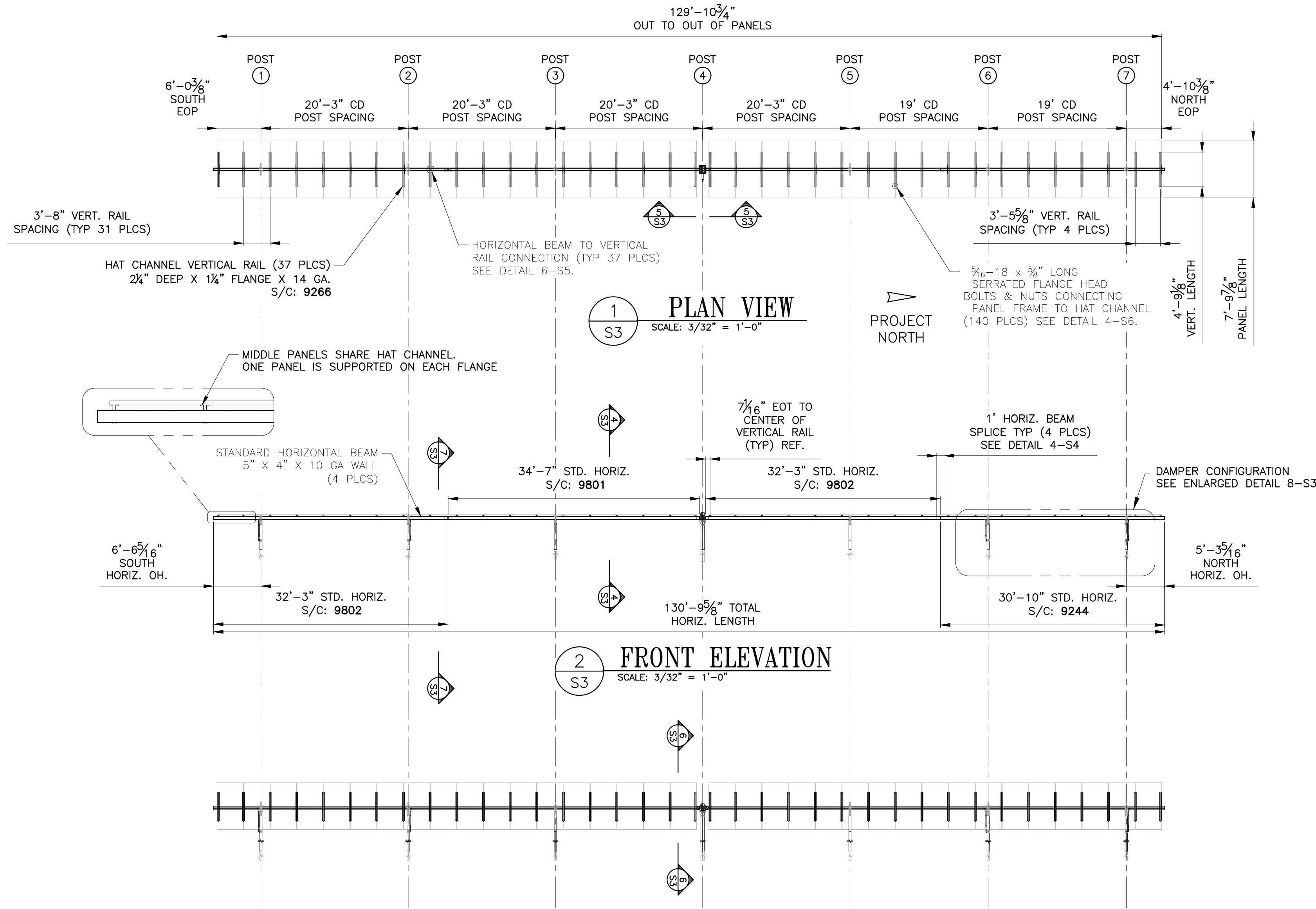
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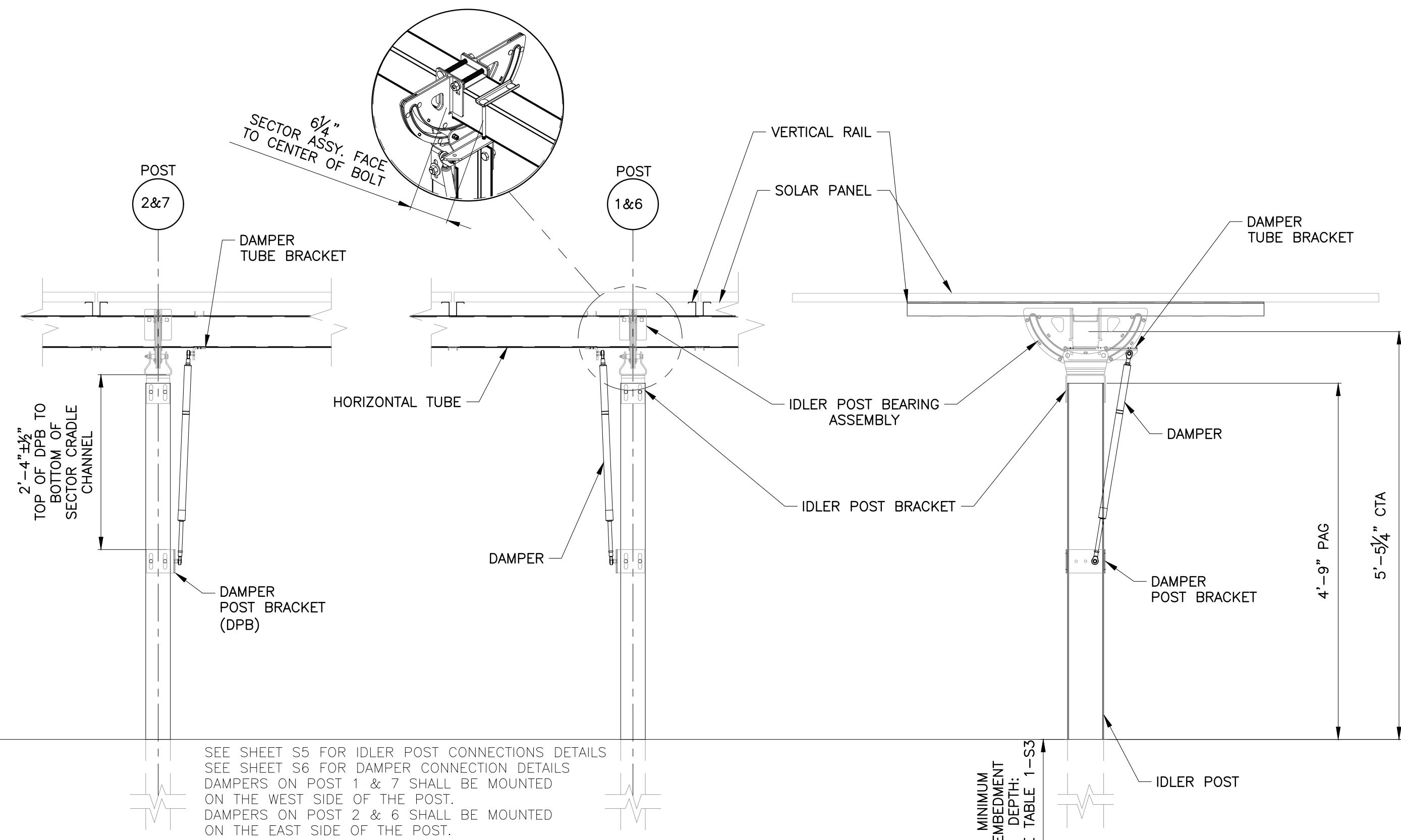


258'-2 7/8"
OUT TO OUT OF PANELS

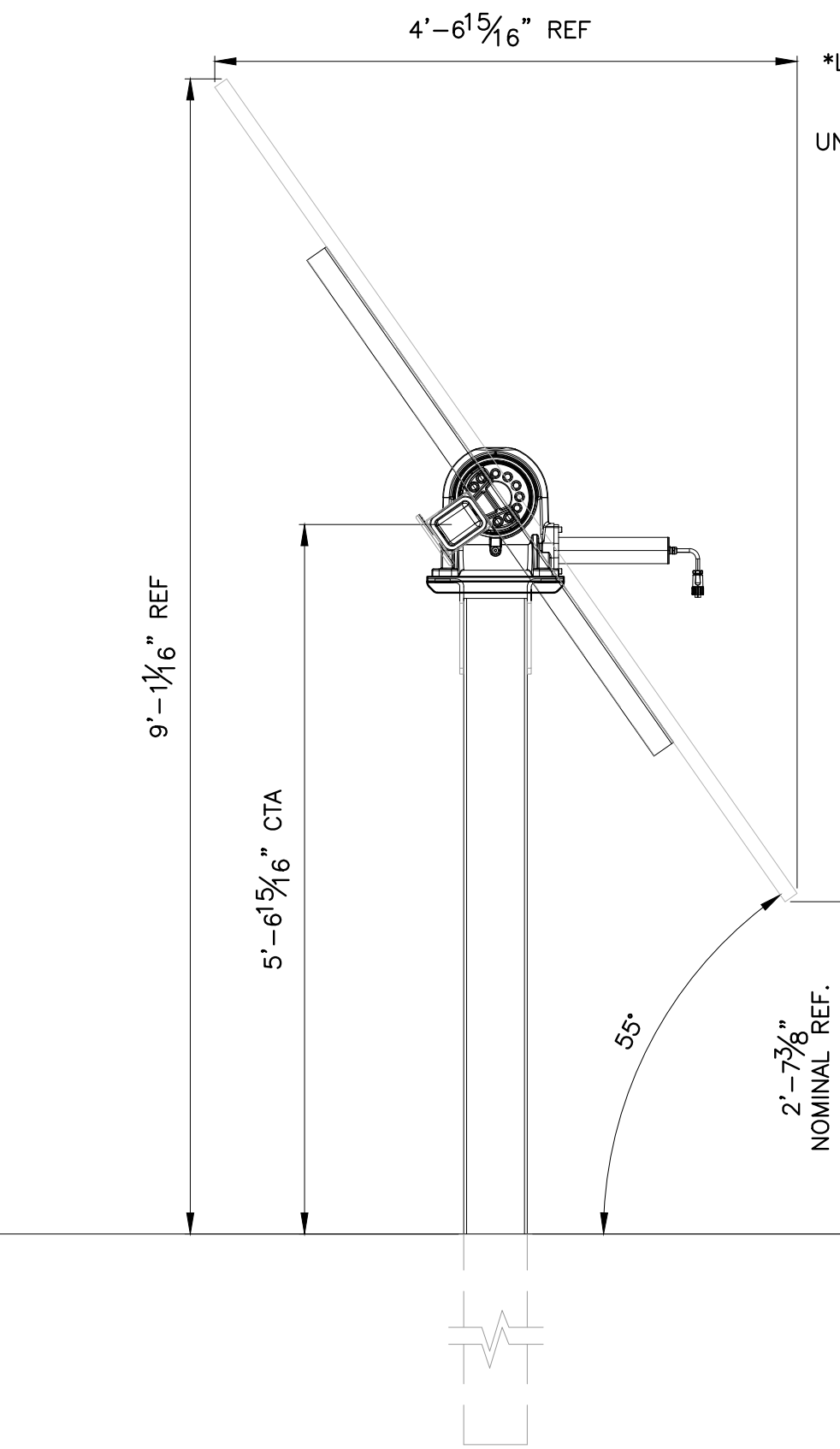




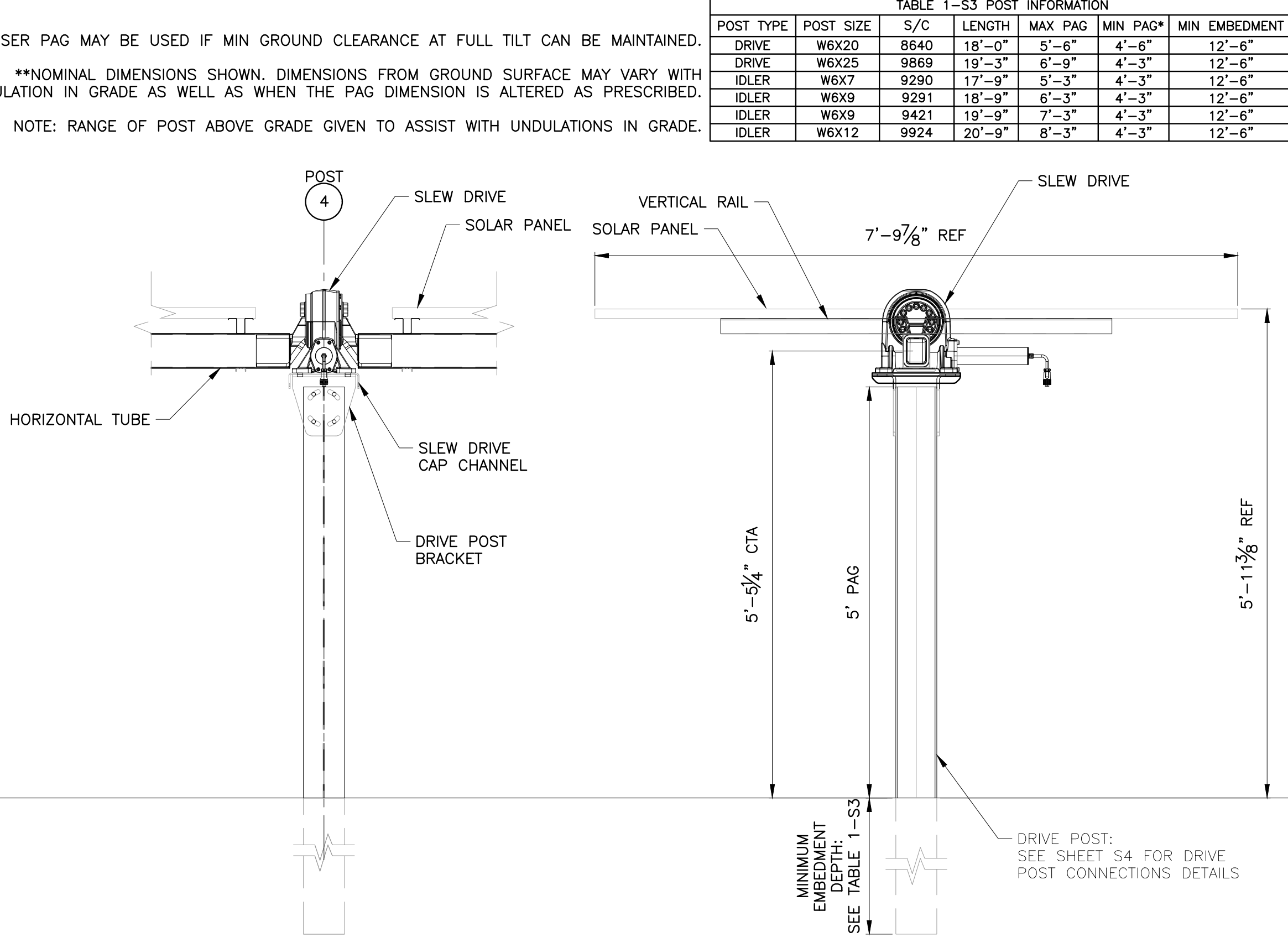
3 FRONT ELEVATION - 55°
SCALE: 3/32" = 1'-0"



8 DAMPER FRONT ELEVATION DETAIL
SCALE: 3/4" = 1'-0"



6 DRIVE POST SECTION VIEW - 55°
SCALE: 3/4" = 1'-0"

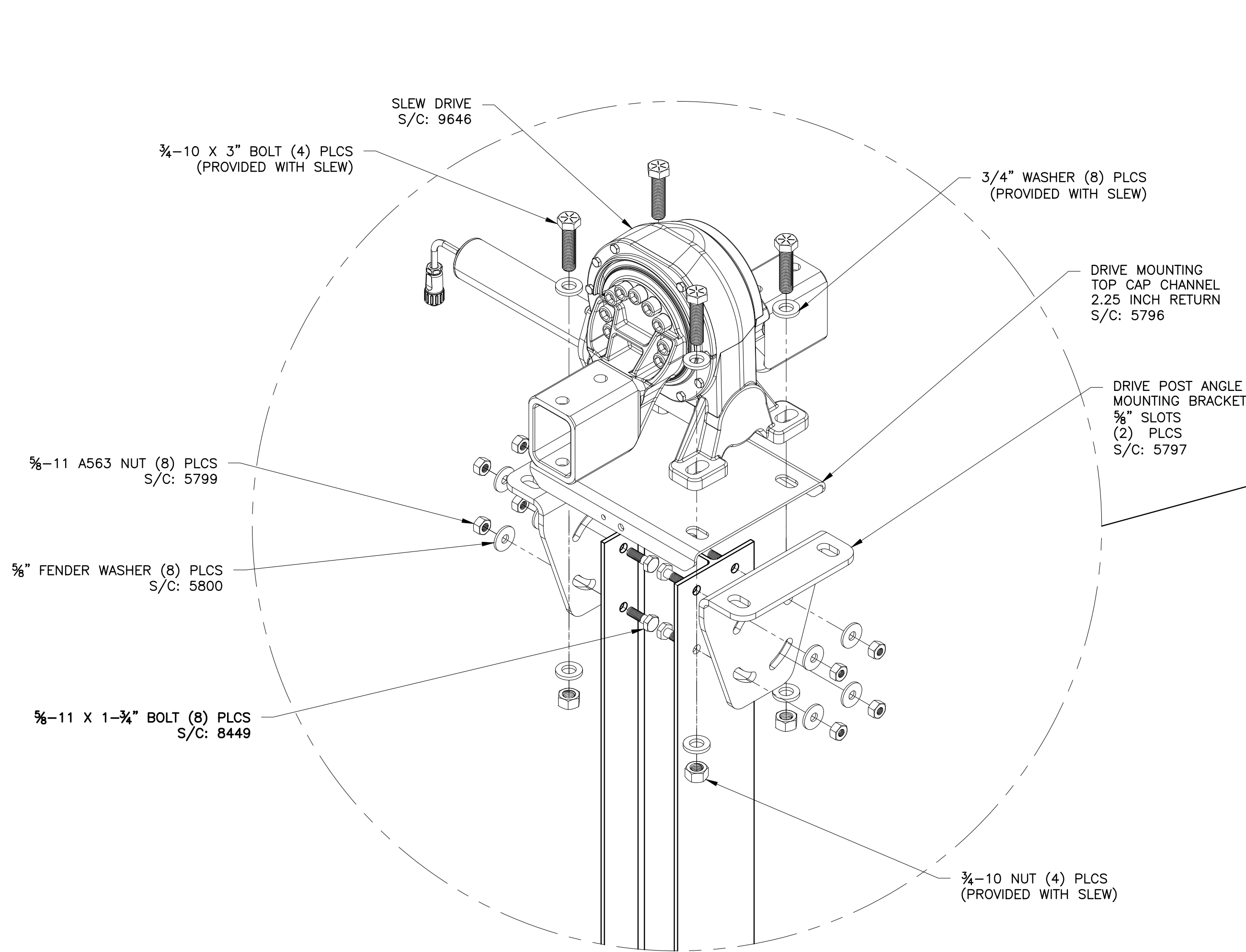


4 DRIVE POST SECTION VIEW - 0°
SCALE: 3/4" = 1'-0"

7 IDLER POST DAMPER SECTION VIEW - 0°
SCALE: 3/4" = 1'-0"

5 DRIVE POST FRONT ELEVATION VIEW
SCALE: 3/4" = 1'-0"

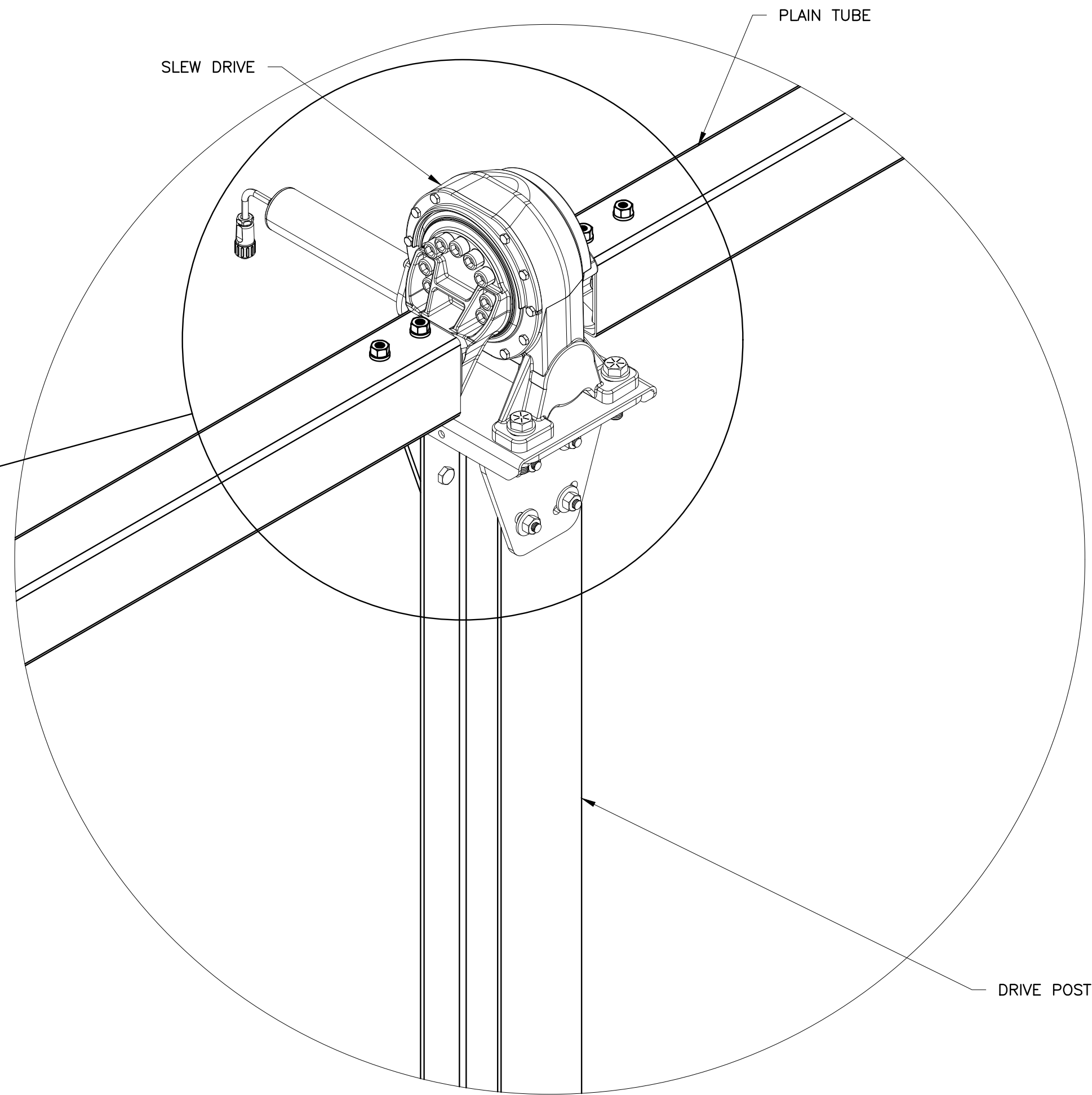
TABLE 1-S3 POST INFORMATION						
POST TYPE	POST SIZE	S/C	LENGTH	MAX PAG	MIN PAG*	MIN EMBEDMENT
DRIVE	W6X20	8640	18'-0"	5'-6"	4'-6"	12'-6"
DRIVE	W6X25	9869	19'-3"	6'-9"	4'-3"	12'-6"
IDLER	W6X7	9290	17'-9"	5'-3"	4'-3"	12'-6"
IDLER	W6X9	9291	18'-9"	6'-3"	4'-3"	12'-6"
IDLER	W6X9	9421	19'-9"	7'-3"	4'-3"	12'-6"
IDLER	W6X12	9924	20'-9"	8'-3"	4'-3"	12'-6"



3
S4

DRIVE POST SLEW DRIVE CONNECTION

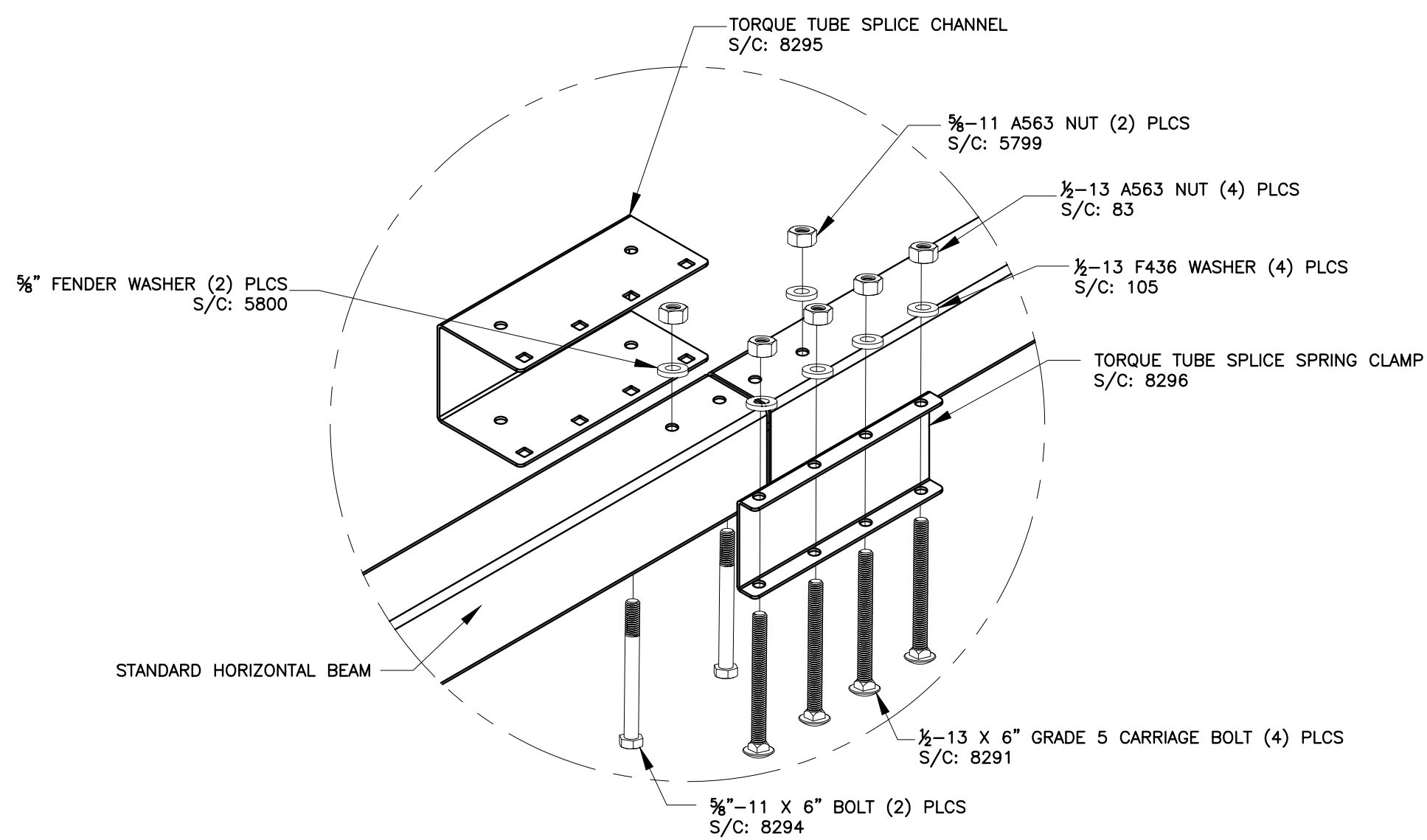
SCALE: NTS
TORQUE VALUE:
100-120 FT-LBS FOR 5/8" BOLTS
175-200 FT-LBS FOR 3/4" BOLTS



1
S4

DRIVE POST ISOMETRIC VIEW

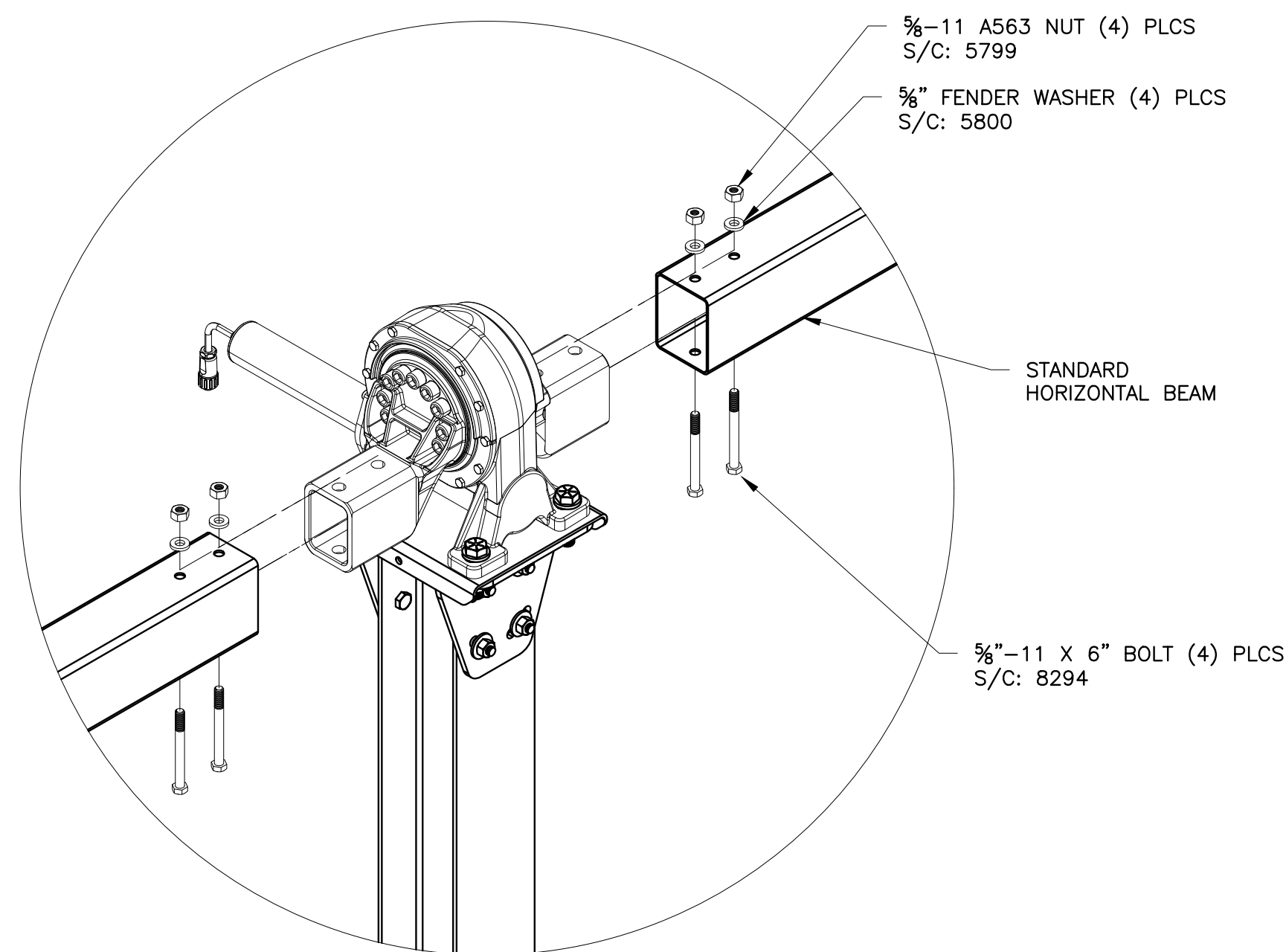
SCALE: NTS



4
S4

HORIZ. BEAM SPLICE EXPLODED

SCALE: NTS
HORIZONTAL BEAM SPLICE MUST BE ORIENTED WITH THE BOLTS INSTALLED VERTICALLY.
TORQUE VALUE:
40-45 FT-LBS FOR 1/2" BOLTS
65-75 FT-LBS FOR 5/8" BOLTS



2
S4

BEAM TO SLEW CONNECTION EXPLODED

SCALE: NTS
CONNECTION MUST BE ORIENTED WITH THE BOLTS INSTALLED VERTICALLY.
TORQUE VALUE: 65-75 FT-LBS FOR 5/8" BOLTS

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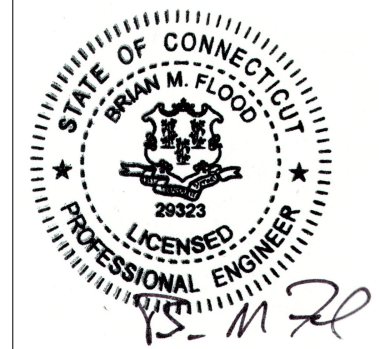
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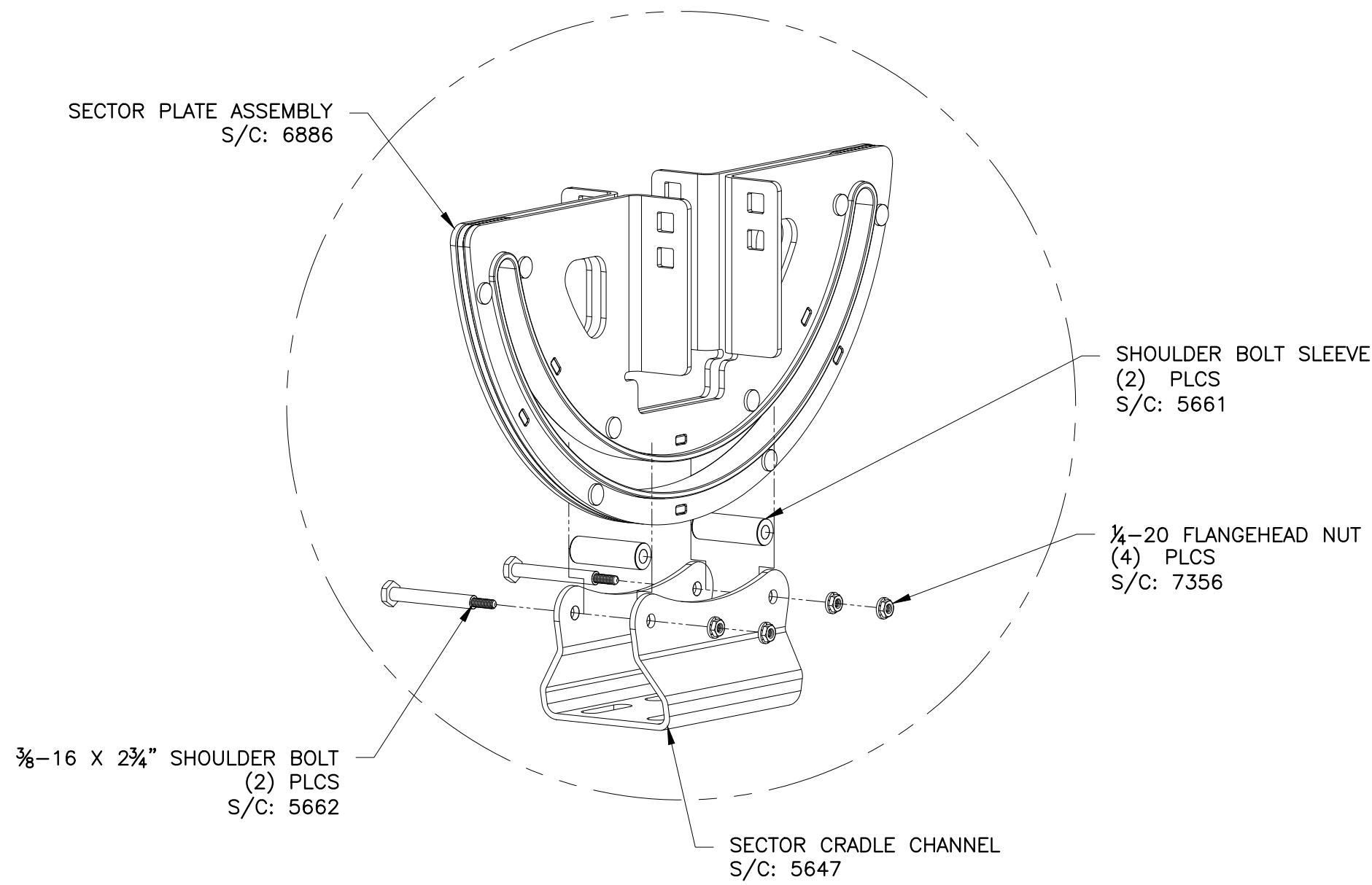
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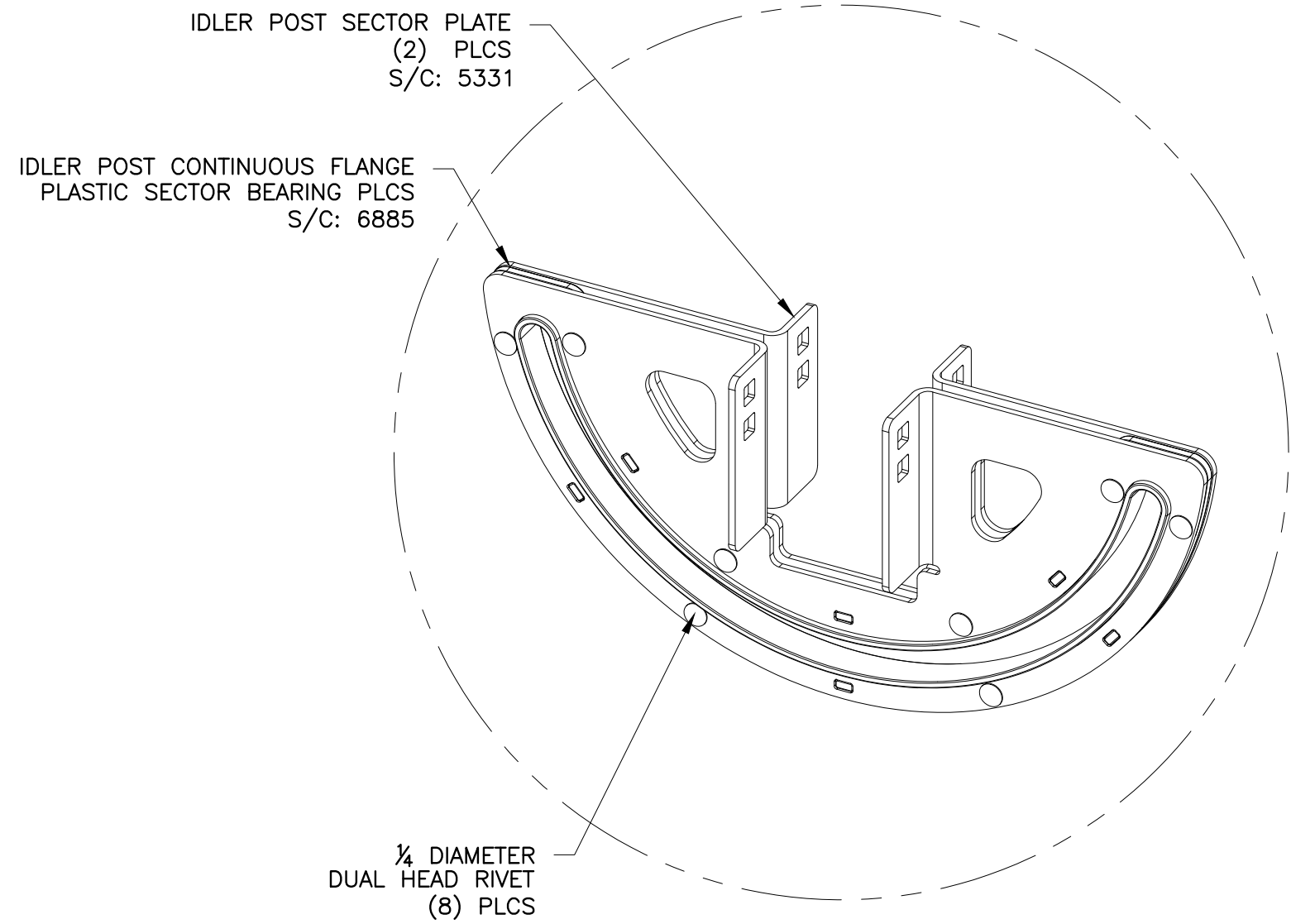
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Sheet **S4**

**DRIVE POST & SPLICE
CONNECTION DETAILS**

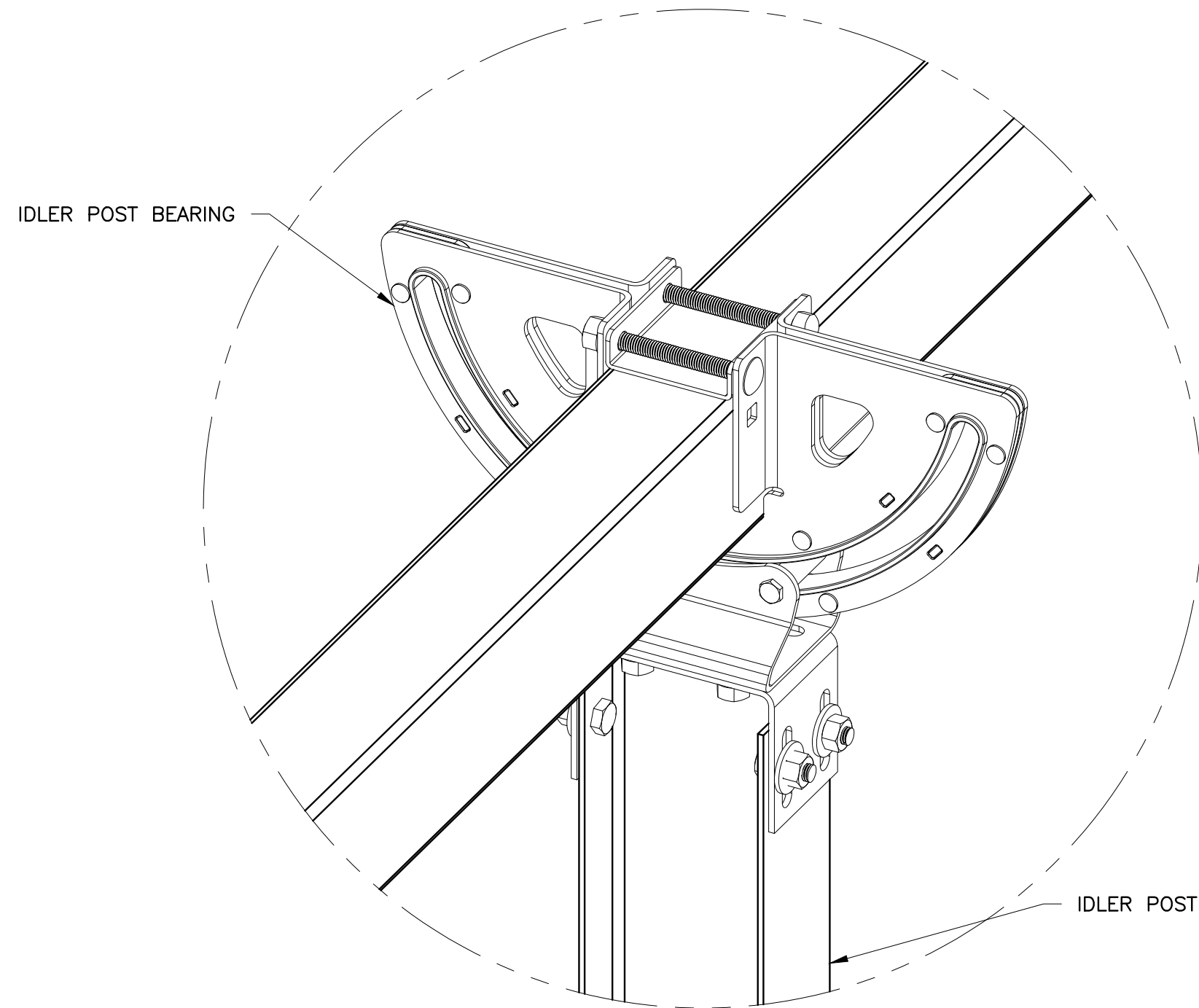




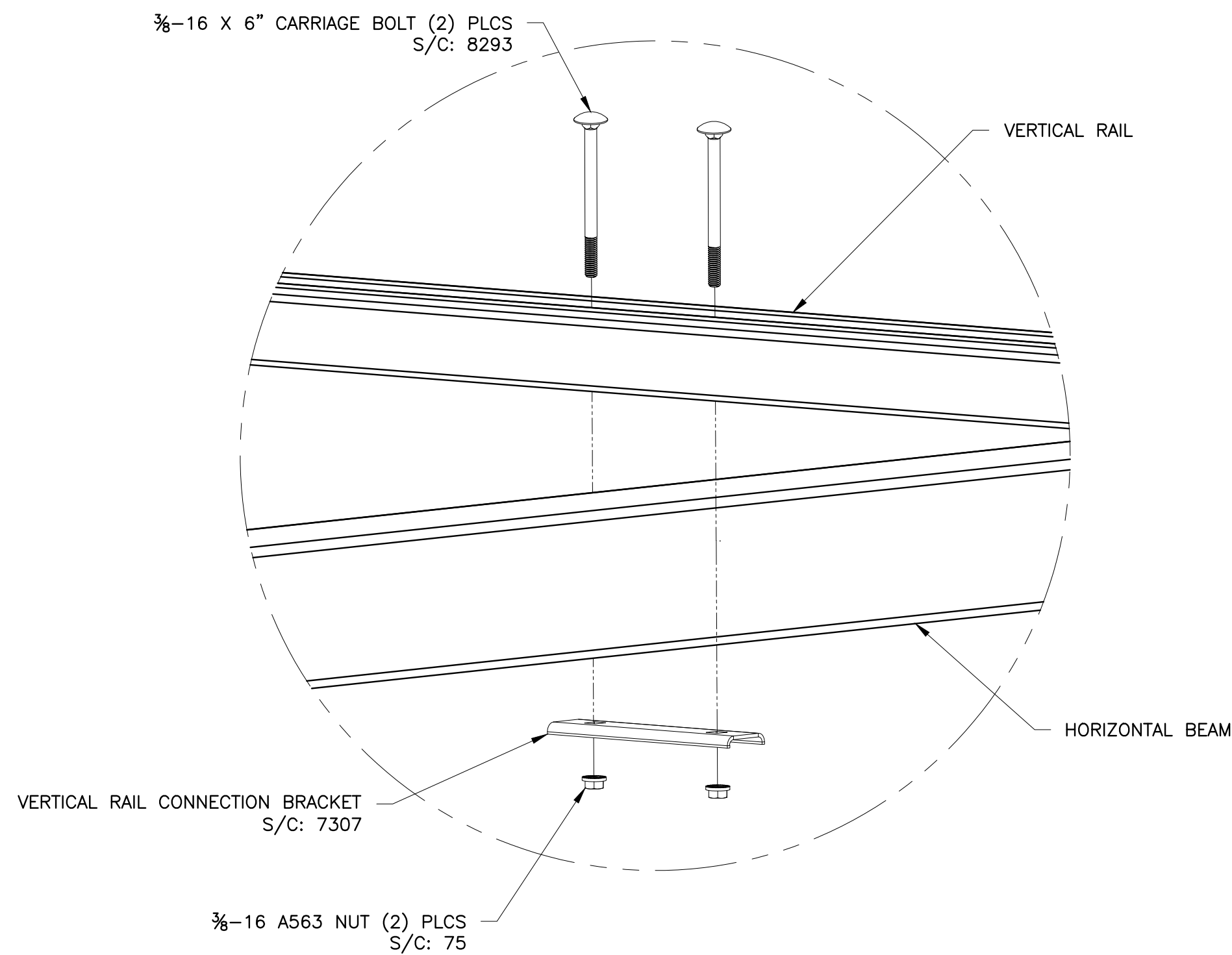
5 BEARING CRADLE ASSEMBLY EXPLODED
SCALE: NTS
SHOULDER OF BOLT MUST EXTEND THROUGH BOTH FACES OF THE SECTOR CRADLE CHANNEL, SUCH THAT NO FORCE IS BEING EXERTED VERTICALLY ON THE THREADS.



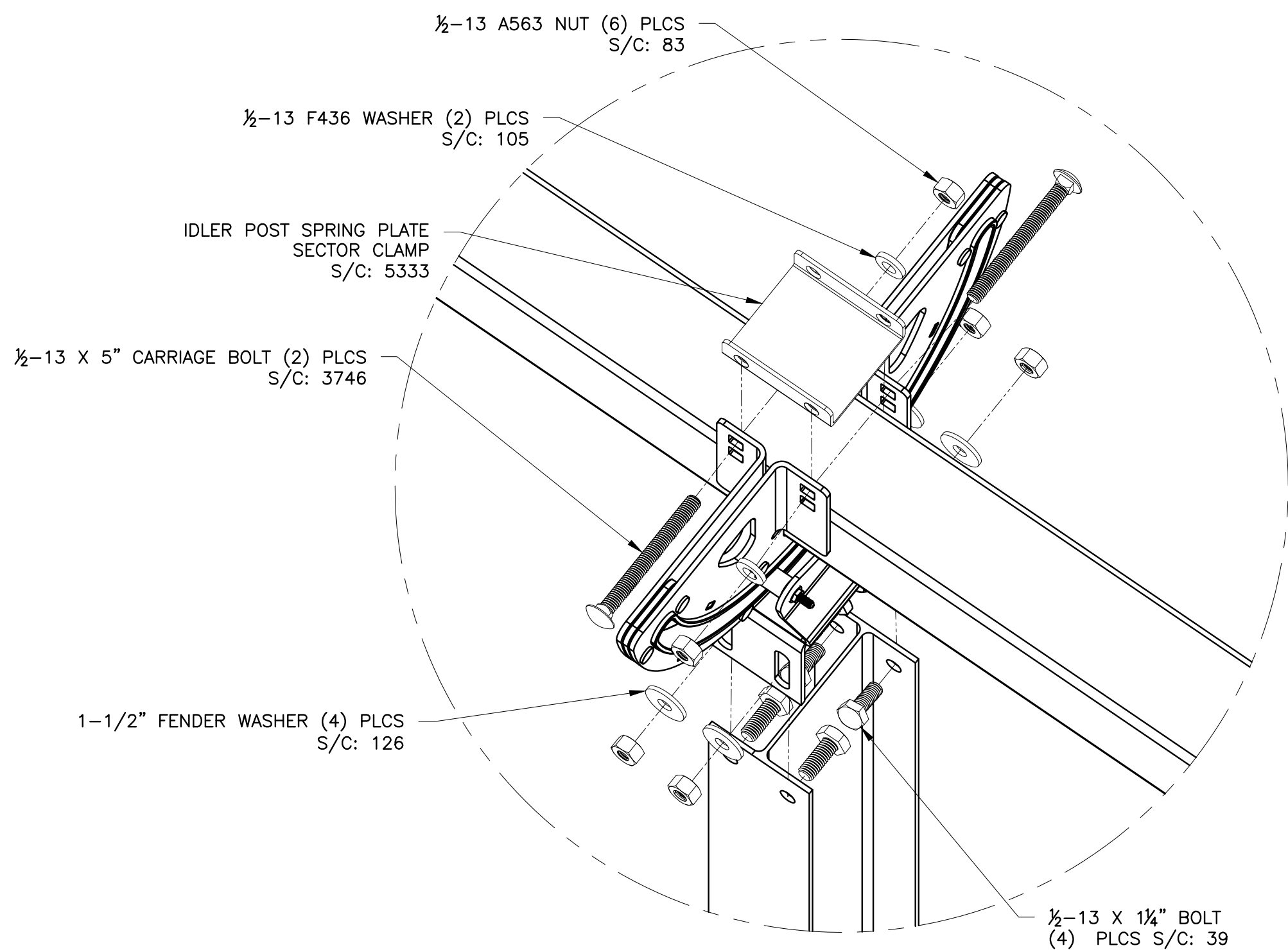
3 SECTOR PLATE PRE-ASSEMBLY
SCALE: NTS
PRE-ASSEMBLY (S/C: 6886)



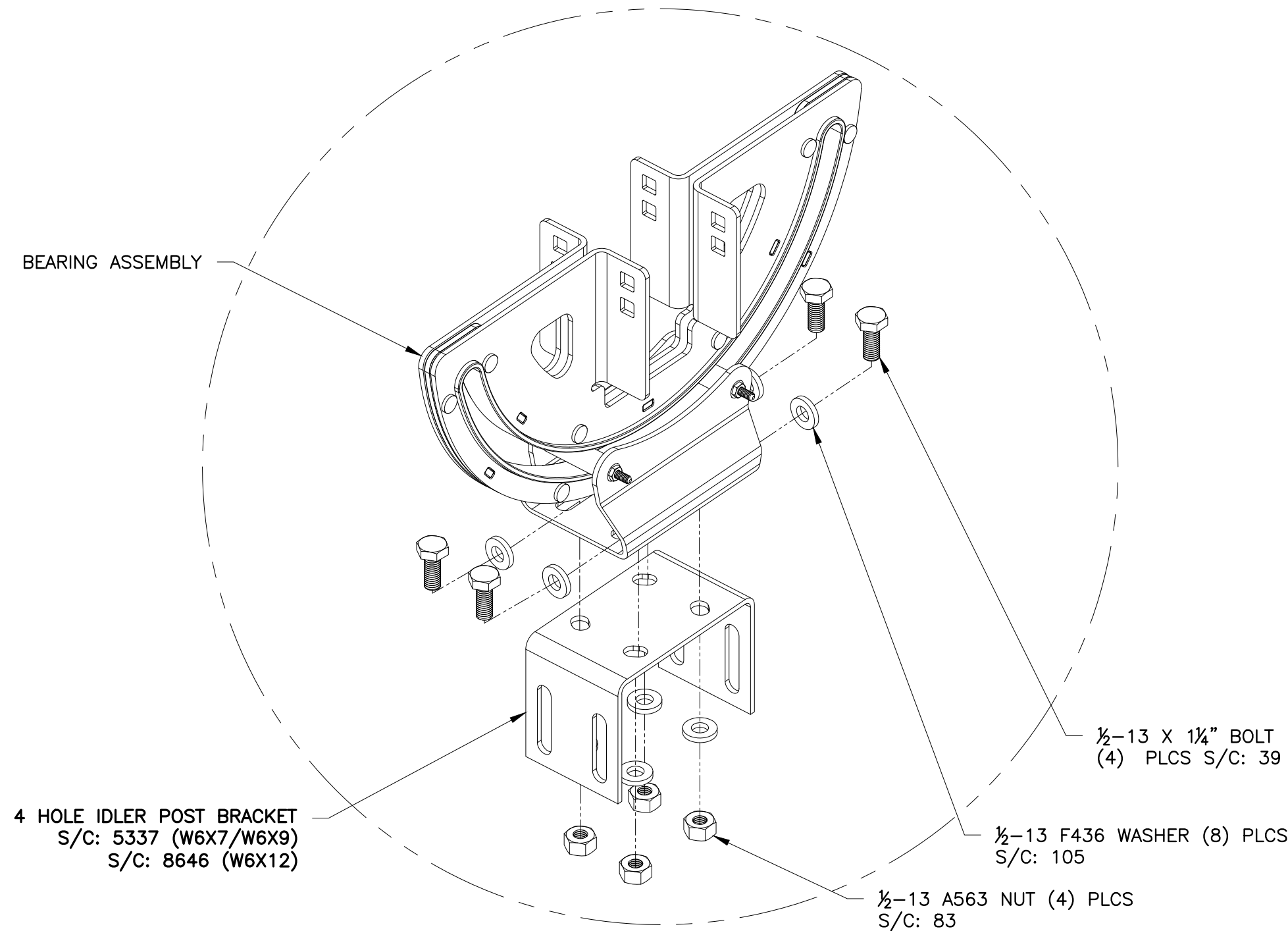
1 IDLER POST ISOMETRIC VIEW
SCALE: NTS



6 VERT. RAIL TO HORIZ. BEAM EXPLODED
SCALE: NTS
TORQUE VALUE:
20-25 FT-LBS FOR 3/8-16 BOLTS



4 IDLER POST TO BEARING ASSEMBLY EXPLODED
SCALE: NTS
TORQUE VALUE:
90-100 FT-LBS FOR 1/2-13 x 1 1/4" BOLTS
25-30 FT-LBS FOR 1/2-13 x 5" CARRAIGE BOLTS
*SPRING PLATE TO BE INSTALLED IN TOP SET OF HOLES
*ALL PLIES WITHIN THE CONNECTION SHALL BE PULLED INTO FIRM CONTACT BY THE BOLTS IN THE JOINT



2 IDLER BEARING ASSEMBLY EXPLODED
SCALE: NTS
TORQUE VALUE:
50-60 FT-LBS FOR 1/2-13 x 1 1/4" BOLTS

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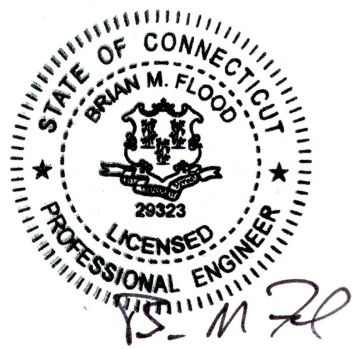
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Sheet **S5**

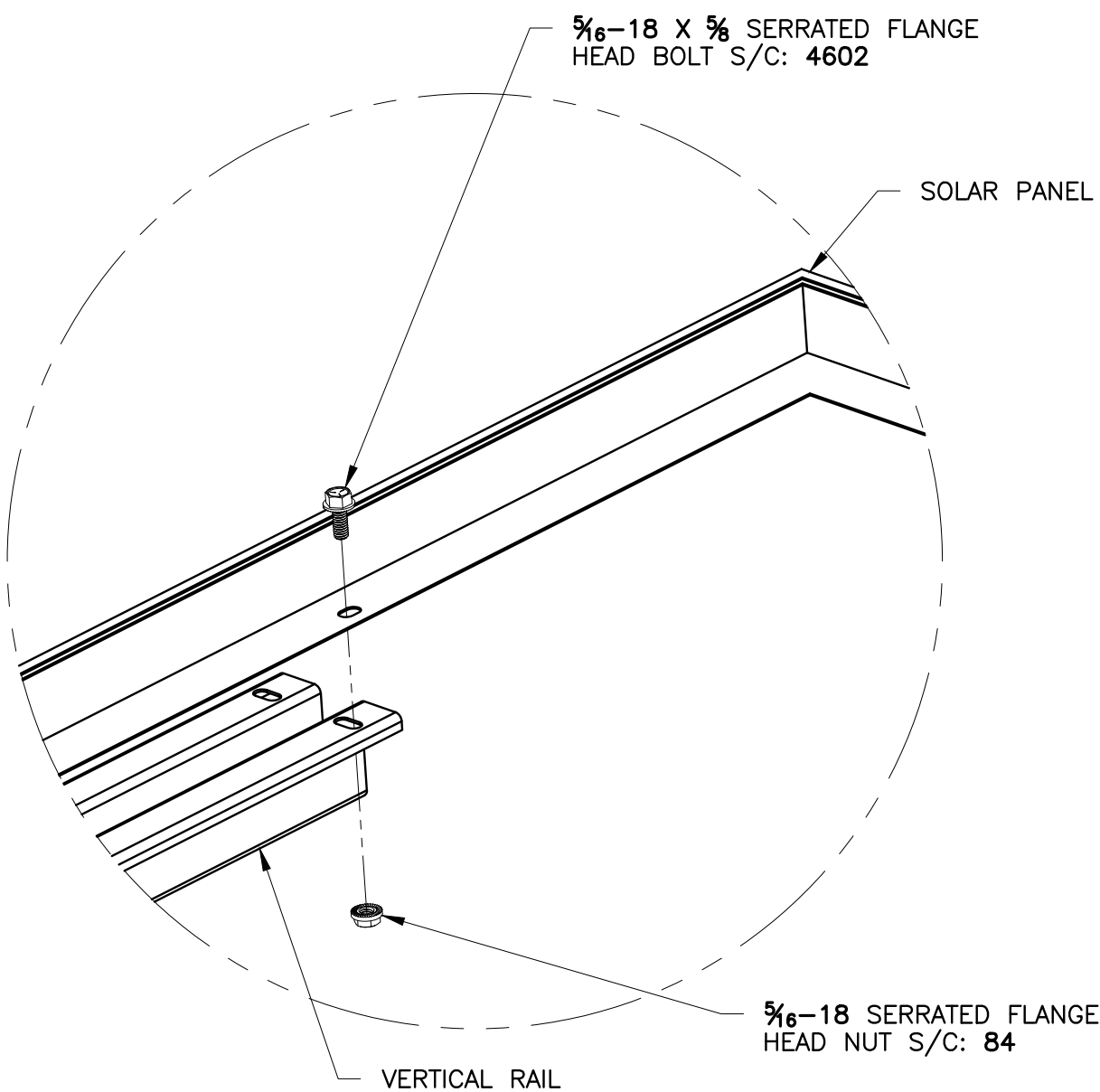
IDLER POST & VERTICAL RAIL
CONNECTION DETAILS



4
S6

SOLAR PANEL TO VERT. RAIL CONN. EXPLODED

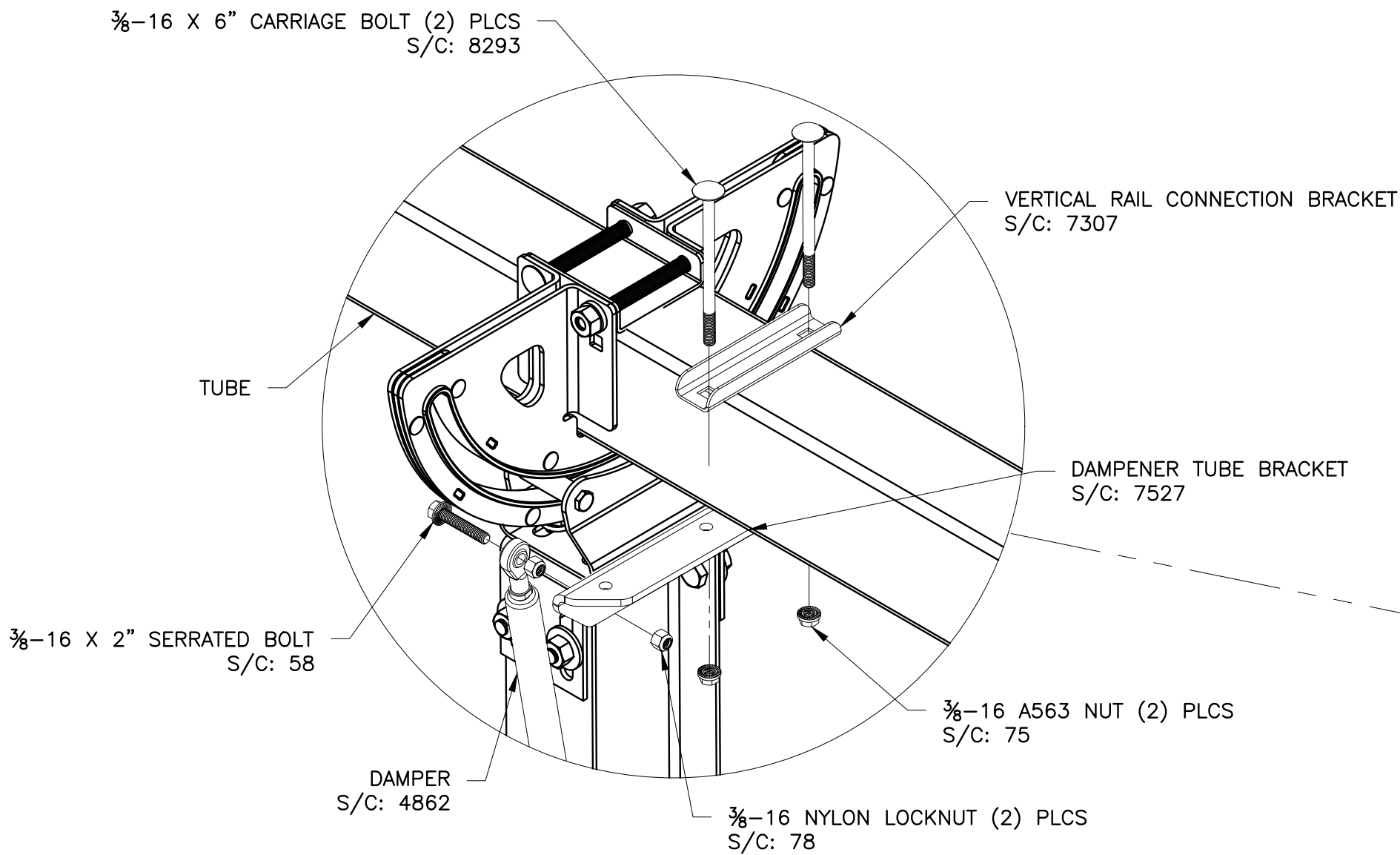
SCALE: NTS
TORQUE VALUE:
8-14 FT-LBS



2
S6

DAMPER CONNECTION TO TUBE EXPLODED

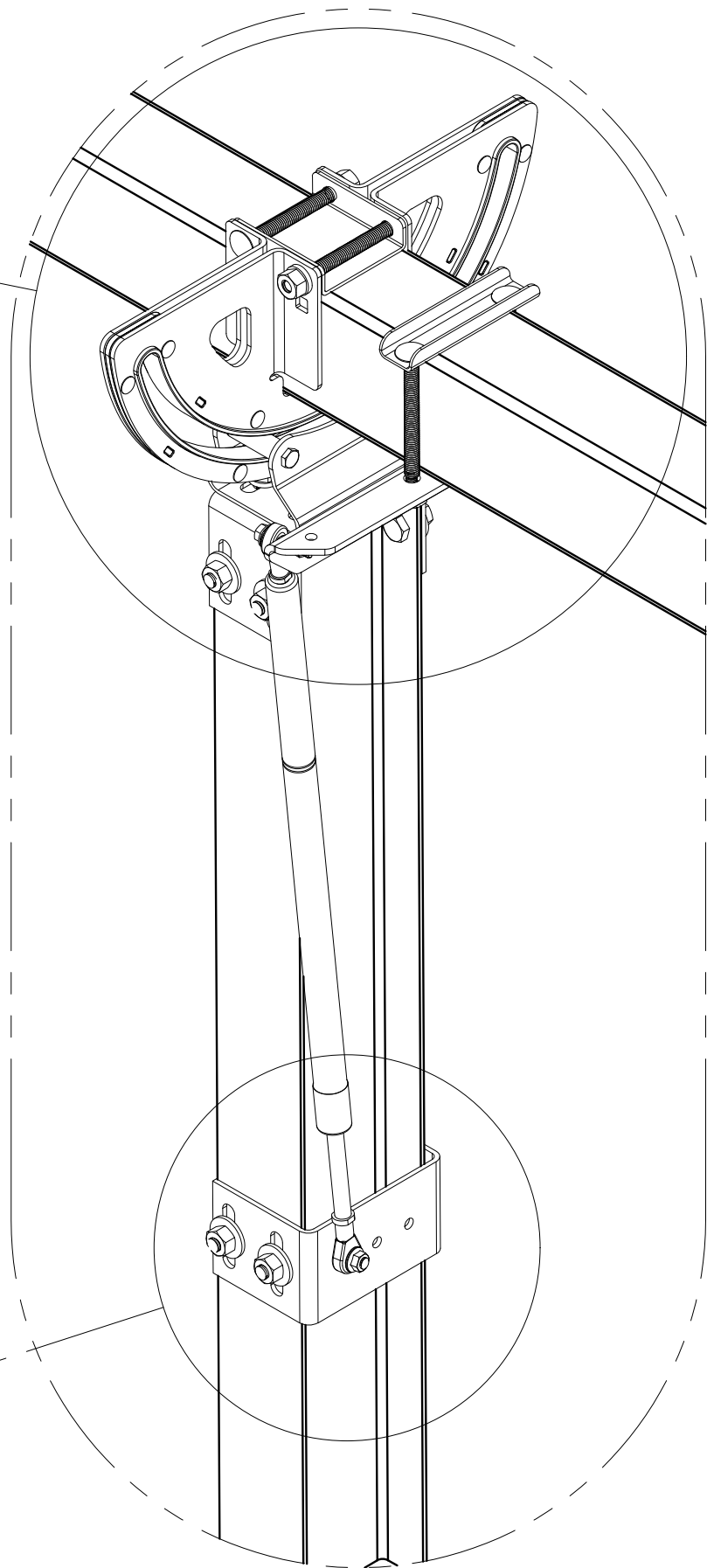
SCALE: NTS
TORQUE VALUE:
10-12 FT-LBS FOR 3/8-16 SERRATED BOLTS
20-25 FT-LBS FOR 3/8-16 CARRIAGE BOLTS



1
S6

DAMPER CONNECTION ISOMETRIC VIEW

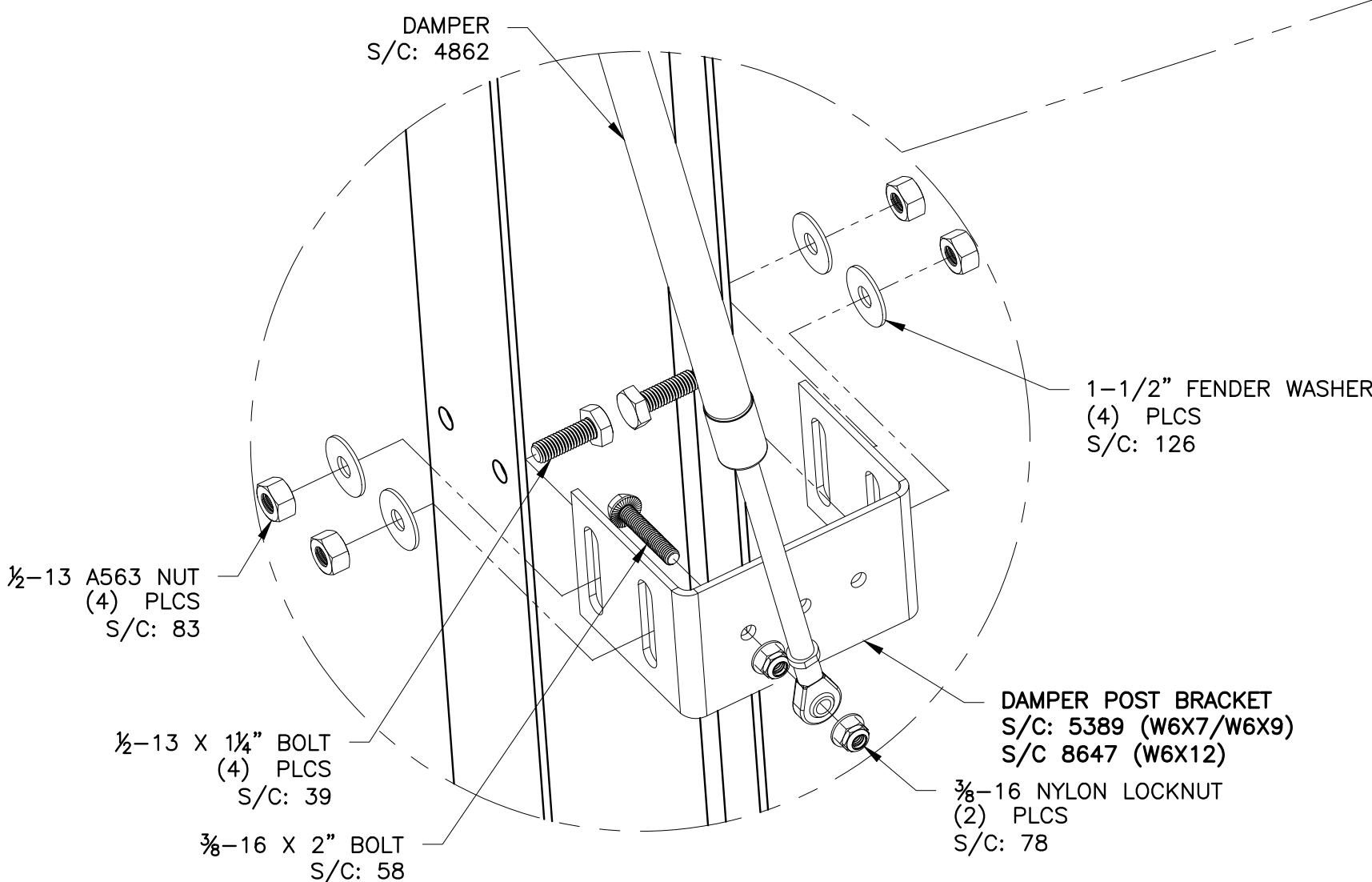
SCALE: NTS



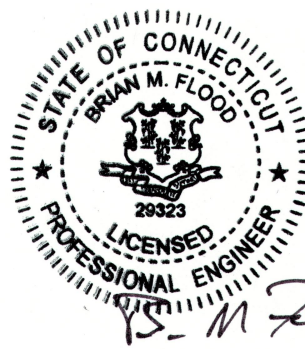
3
S6

DAMPER CONNECTION TO POST EXPLODED

SCALE: NTS
TORQUE VALUE:
90-100 FT-LBS FOR 1/2 inch BOLTS
10-12 FT-LBS FOR 3/8-16 BOLTS



FIRST 3/8-16 NYLON LOCK NUT MUST BE TIGHTENED TO
SNUG TIGHT PRIOR TO THE INSTALLATION OF THE DAMPENER IN THE POST BRACKET.



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DAMPER & PANEL
CONNECTION DETAILS

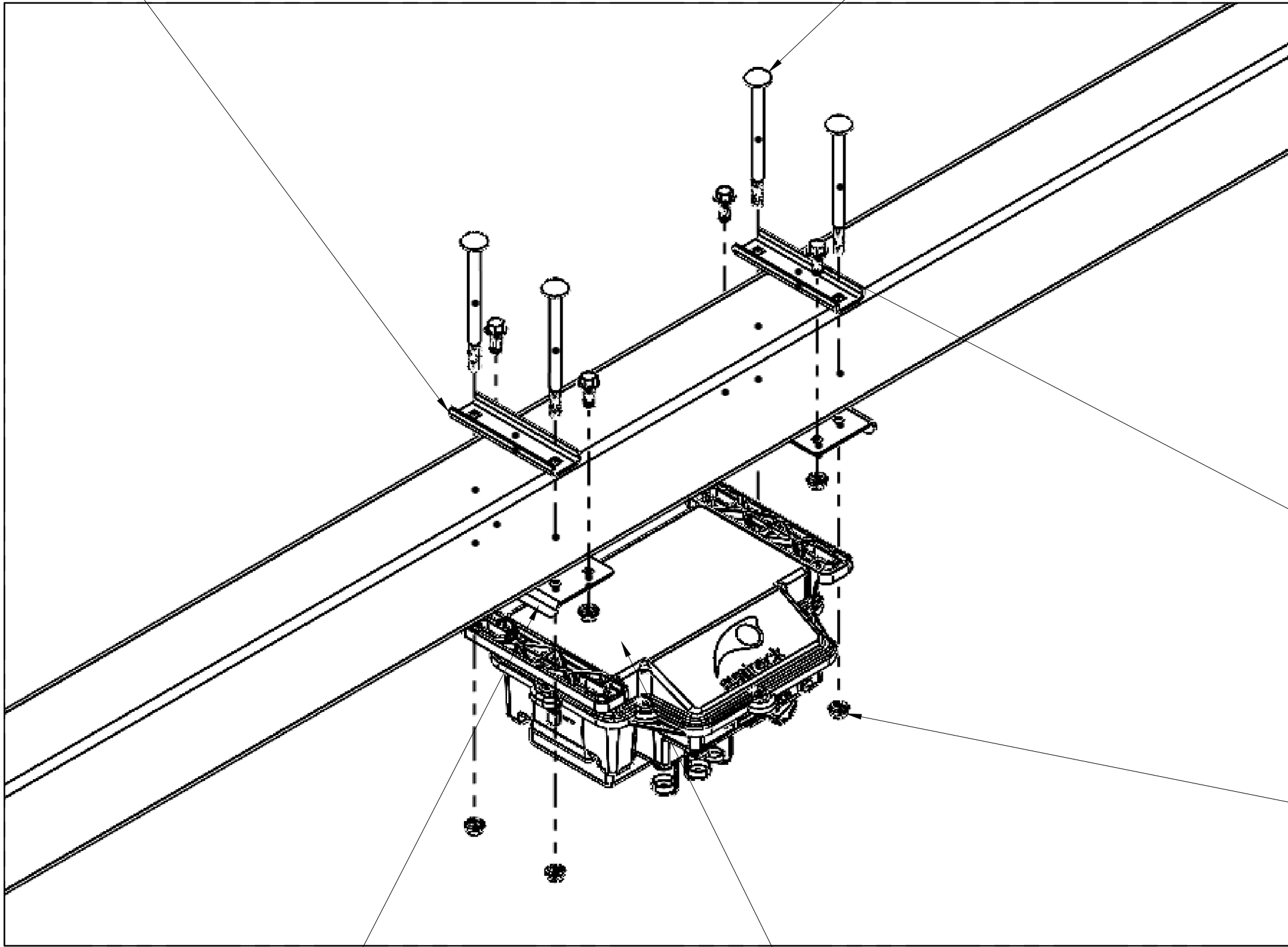
CUSTOMER: **HORTON ELECTRICAL SERVICES**
37 HUNTERS LANE
SOUTHINGTON, CT 06489

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S6

VERTICAL RAIL CONNECTION BRACKET
(2) PLCS
S/C: 7307

$\frac{3}{8}$ "-16 X 6" CARRIAGE BOLT
(4) PLCS
S/C: 8293



$\frac{3}{8}$ "-16 X 1" SERRATED BOLT
(4) PLCS
S/C: 29

$\frac{3}{8}$ "-16 FLANGEHEAD NUT
(8) PLCS
S/C: 75

TCU BRACKET
(2) PLCS
S/C: 8399

TCU - GRID POWERED
S/C: 9204

2
S7

TCU TO TORQUE TUBE CONNECTION ISOMETRIC VIEW

SCALE: NTS
TORQUE VALUE:
20-25 FT-LBS FOR $\frac{3}{8}$ "-16 CARRIAGE BOLT

$\frac{3}{8}$ "-16 SERRATED FLANGEHEAD NUT
(2) PLCS
S/C: 75

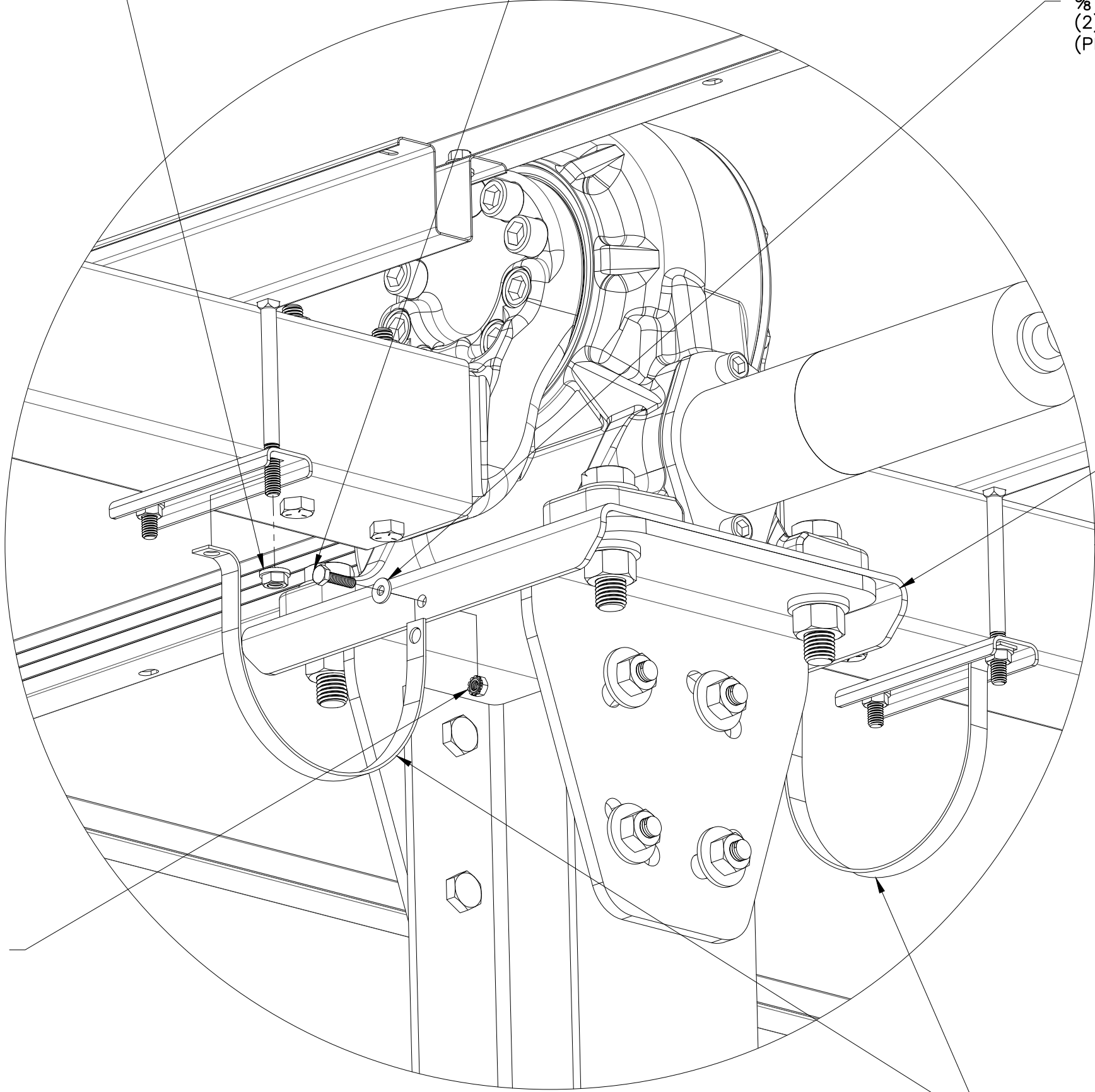
$\frac{3}{8}$ "-16 X 1" BOLT
(2) PLCS
(PROVIDED WITH BONDING STRAP)

$\frac{3}{8}$ " WASHER
(2) PLCS
(PROVIDED WITH BONDING STRAP)

DRIVE MOUNTING TOP CAP CHANNEL
S/C: 5796

BONDING STRAP
(2) PLCS
S/C: 7582

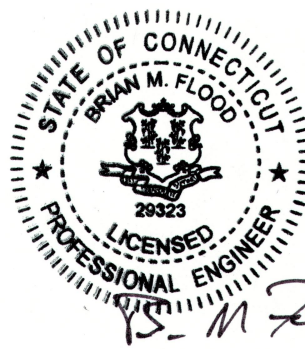
$\frac{3}{8}$ "-16 HEX NUT WITH TOOTH WASHER
(2) PLCS
(PROVIDED WITH BONDING STRAP)



1
S7

BONDING STRAP CONNECTION ISOMETRIC VIEW

SCALE: NTS
TORQUE VALUE:
5-6 FT-LBS FOR $\frac{3}{8}$ "-16 X 1" BOLT (BONDING STRAP HARDWARE)
20-25 FT-LBS FOR $\frac{3}{8}$ "-16 CARRIAGE BOLT



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TCU COMPONENTS AND CONNECTION
DETAILS

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ALTERNATE FOUNDATION SOLUTIONS PROVIDED DUE TO POTENTIAL REFUSALS IN THE FIELD.

LOAD TESTING PROCEDURE:

- FOR POSTS THAT REFUSE BETWEEN 0 FEET AND 4 FEET, REMOVE THE OBSTRUCTION, REPLACE AND COMPACT NATIVE SOIL AND ATTEMPT TO RE-DRIVE TO DESIGN EMBEDMENT DEPTH.
- POSTS THAT MEET REFUSAL PRIOR TO ACHIEVING THE MINIMUM DESIGN EMBEDMENT DEPTH BUT ACHIEVING THE ALTERNATE EMBEDMENT DEPTH SHALL BE LOAD TESTED. SEE TABLE 2-S8.
 - TESTING SHOULD BE PERFORMED BETWEEN THREE AND THIRTY DAYS AFTER INSTALLATION.
 - LATERAL LOAD TO BE APPLIED HORIZONTALLY AT 4 FEET ABOVE THE GROUND SURFACE IN THE DIRECTION OF THE STRONG AXIS.
 - AXIAL AND LATERAL LOADS TO BE SUSTAINED FOR A DURATION OF AT LEAST 4 MINUTES.
 - IF THE POSTS RESIST THE LOADS WITHIN THE ALLOWABLE TOLERANCES OF LESS THAN THE FOLLOWING, IT WILL BE DEEMED ACCEPTABLE:
 - 1 INCH AXIAL DISPLACEMENT
 - 0.75 INCH LATERAL DEFLECTION AT GRADE
- FOR POSTS THAT PASS BOTH THE AXIAL AND LATERAL LOAD TEST, THE POST SHALL BE CUT (IF APPLICABLE), RE-DRILLED, AND PUT INTO SERVICE.
- FOR POSTS THAT FAIL THE AXIAL OR LATERAL LOAD TEST, OR POSTS THAT DO NOT ACHIEVE A MINIMUM ALTERNATE EMBEDMENT DEPTH REQUIRED FOR LOAD TESTING, THE ALTERNATE FOUNDATION SHALL BE USED.
- PLEASE CONFIRM ALTERNATE MINIMUM EMBEDMENT DEPTH AND TEST LOADS AND PROCEDURES WITH THE GEOTECHNICAL ENGINEER.

ALTERNATE FOUNDATION INSTALLATION: CONCRETE COLLAR (1-S8 THRU 6-S8):

- WITH THE POST REMAINING IN PLACE, EXCAVATE A PIT TO THE DIMENSIONS SHOWN. THE POST MAY, BUT NEED NOT EXTEND BEYOND THE BOTTOM OF THE CONCRETE FOUNDATION.
- COMPACT THE NATIVE BASE OF THE COMPLETED EXCAVATION AS REQUIRED TO PRODUCE A FIRM NON-YIELDING SURFACE.
- POUR CONCRETE COLLAR, FOLLOWING CONCRETE NOTES BELOW.
- WHEN CONCRETE IS SET, BACKFILL OVER COLLAR TO GRADE AS REQUIRED WITH COMPACT, CLEAN NATIVE MINERAL SOIL OR IMPORTED STRUCTURAL FILL.

CONCRETE NOTES:

- ALL CONCRETE SHALL BE 3000 PSI @ 28 DAYS.
- CONCRETE TEST CYLINDERS SHALL BE TAKEN IN ACCORDANCE WITH THE ACI CODE.
 - PER ACI 5.6.2.3, WHEN TOTAL QUANTITY OF CONCRETE USED ON A PROJECT IS LESS THAN 50 CY, STRENGTH TESTS ARE NOT REQUIRED WHEN EVIDENCE OF SATISFACTORY STRENGTH IS SUBMITTED TO AND APPROVED BY THE BUILDING OFFICIAL.
 - ONE SET OF FIVE CYLINDERS SHALL BE TAKEN FOR EACH DAYS POUR OR EACH 150 CY OF CONCRETE POURED.
 - ONE SLUMP TEST SHALL BE TAKEN FOR EACH SET OF CYLINDERS.
 - TWO CYLINDERS SHALL BE TESTED AT SEVEN DAYS AND AT 28 DAYS. SUBMIT TEST REPORTS TO THE ENGINEER.
 - PLEASE VERIFY ACCEPTANCE OF CONCRETE WITH ACI 318-11 (SECTION 5.6)
- CONCRETE SHALL BE AIR ENTRAINED PER TABLE 19.3.3.1 OF ACI:

TABLE 1-S8	
NOMINAL MAXIMUM AGGREGATE SIZE, IN	TARGET AIR CONTENT, PERCENT
	F2 AND F3
3/8	7.5
1/2	7
3/4	6
1	6
1 1/2	5.5

- MAXIMUM AGGREGATE SIZE TO BE USED SHALL BE 1-1/2IN.
- IF APPLICABLE: COLD WEATHER CONCRETING PRACTICES IN ACCORDANCE WITH THE ACI CODE SHALL BE FOLLOWED WHEN THE OUTDOOR AIR TEMPERATURE IS PREDICTED TO BE 40 DEGREE F AND FALLING. NO CALCIUM CHLORIDE SHALL BE ADDED TO ANY CONCRETE.
- NORMAL WEIGHT CONCRETE, MIN 145 PCF, TO BE USED UNLESS OTHERWISE NOTED.
- MAXIMUM WATER TO CEMENT RATIO OF 0.45 MUST BE USED UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL PLACE CONCRETE IN A MANNER THAT PROHIBITS VOIDS WITHIN THE FOUNDATION.
- CONTRACTOR SHALL PLACE CONCRETE IN SUCH A WAY THAT MAINTAINS THE MINIMUM DIMENSIONS SHOWN.

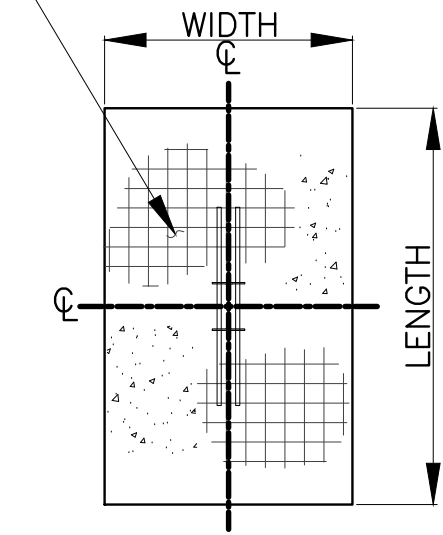
GENERAL NOTES:

- DE-WATERING MAY BE REQUIRED.
- ALL DISTURBED NATIVE SOIL AND/OR IMPORTED FILL TO BE COMPACTED TO MINIMUM 95% OF ITS STANDARD PROCTOR MAXIMUM DRY DENSITY PER ASTM D698.

TABLE 2-S8 PROJECT SPECIFIC INFORMATION					
1	TEST LOADS	DRIVE POST		IDLER POST	
		AXIAL	LATERAL	AXIAL	LATERAL
		10,200 LB	3,100 LB	8,100 LB	1,200 LB
2	ALTERNATE MINIMUM EMBEDMENT DEPTH FOR TESTING	10'-6"		8'-6"	
4	COLLAR DIMENSIONS	4-0" WIDTH BY 6'-0" LENGTH BY 2'-0" DEPTH		3'-0" WIDTH BY 4'-6" LENGTH BY 2-0" DEPTH	
5	MIN FROST COVER	2'-6"			
6	WELDED WIRE W.W.F. MIN SPEC (TOTAL)	0.5184 IN ² /FT		0.5184 IN ² /FT	

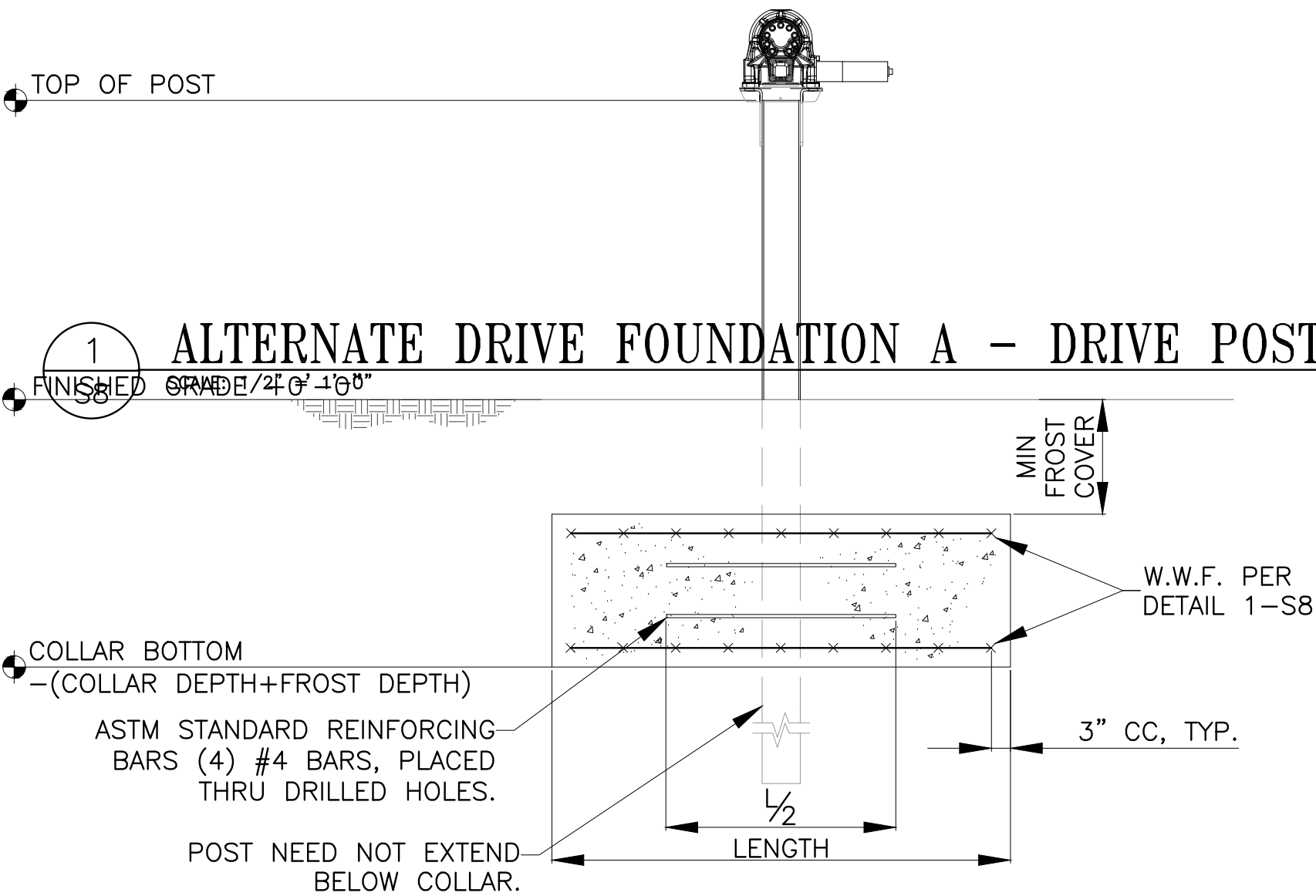
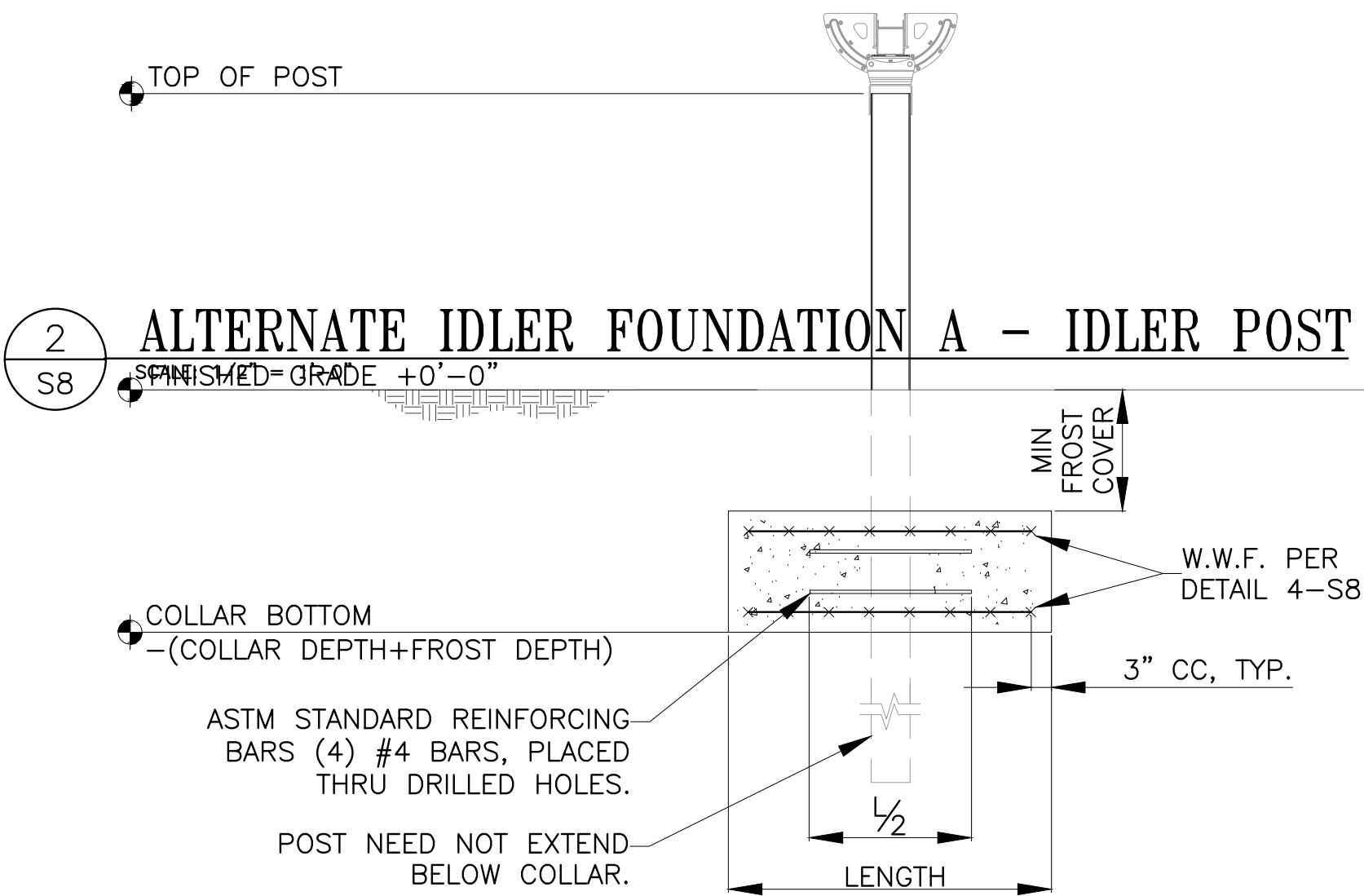
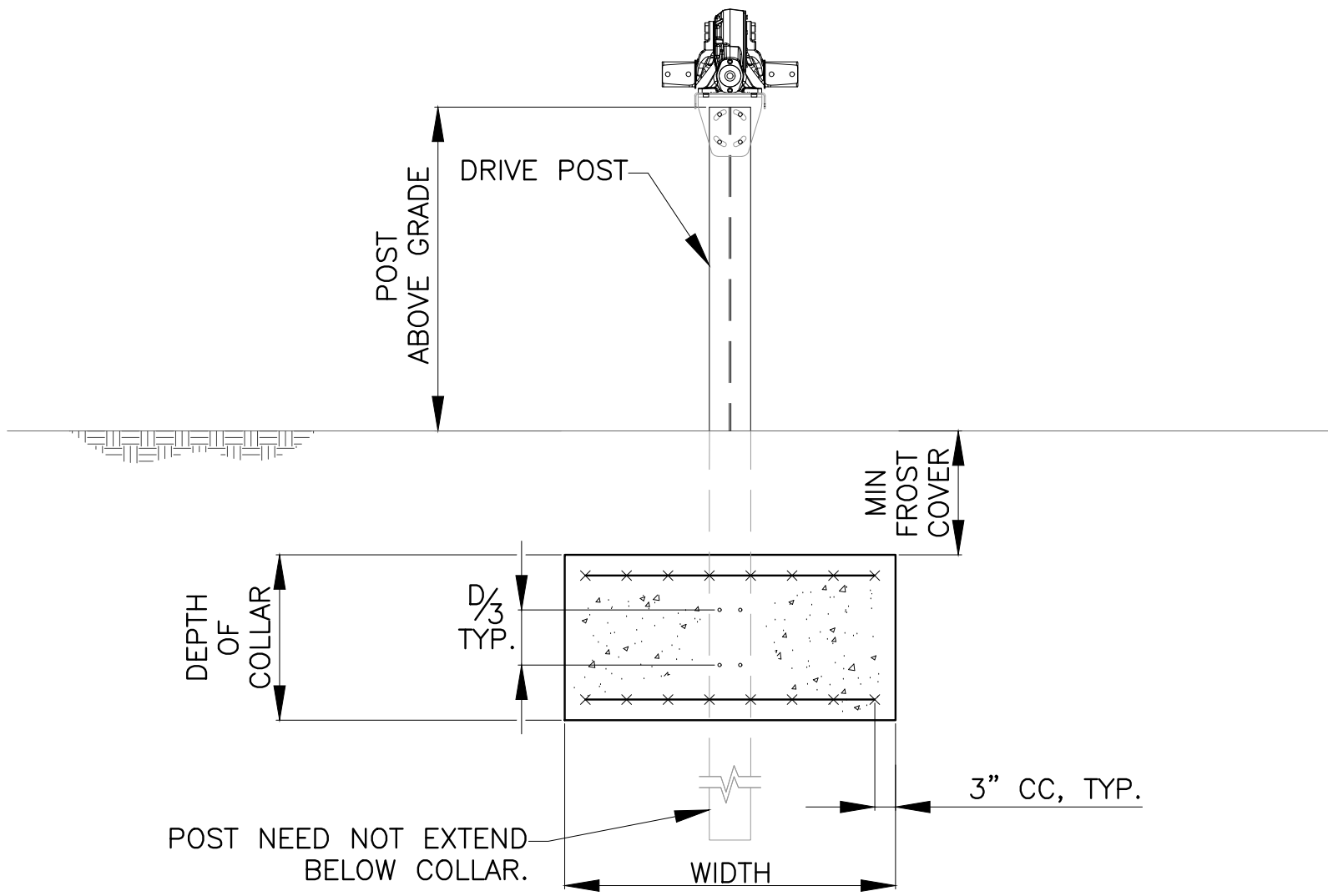
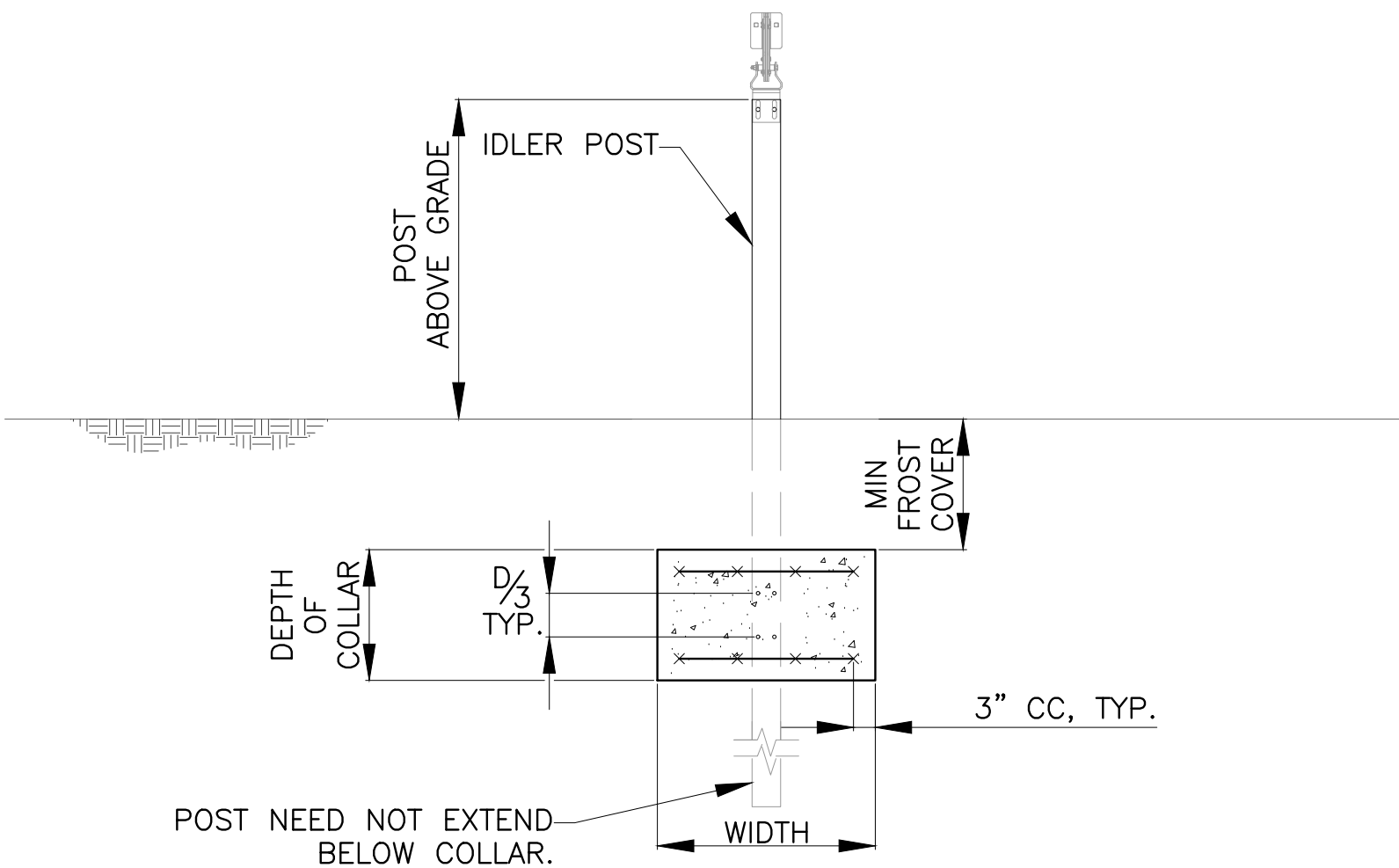
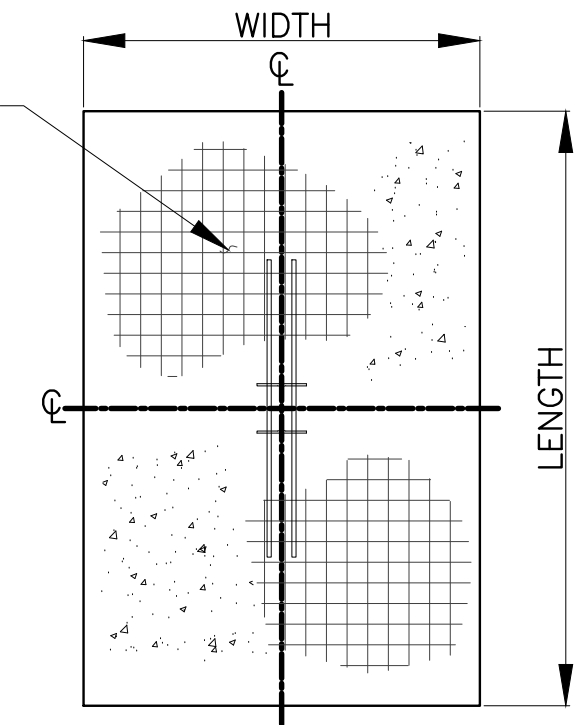
WELDED WIRE MESH REINFORCING EQUAL TO MIN SPEC IN TABLE 2-S8 TO BE PLACED IN TWO LAYERS AND CUT TO PERMIT THE POST TO PENETRATE AS REQUIRED. CLEAR COVER TO BE MIN. 3 INCHES ALL SIDES.

ALTERNATIVELY, CONTRACTOR MAY SUBSTITUTE MACRO FIBER REINFORCING WITH DOSAGE PER MANUFACTURER'S RECOMMENDATION.



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ALTERNATE FOUNDATION

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