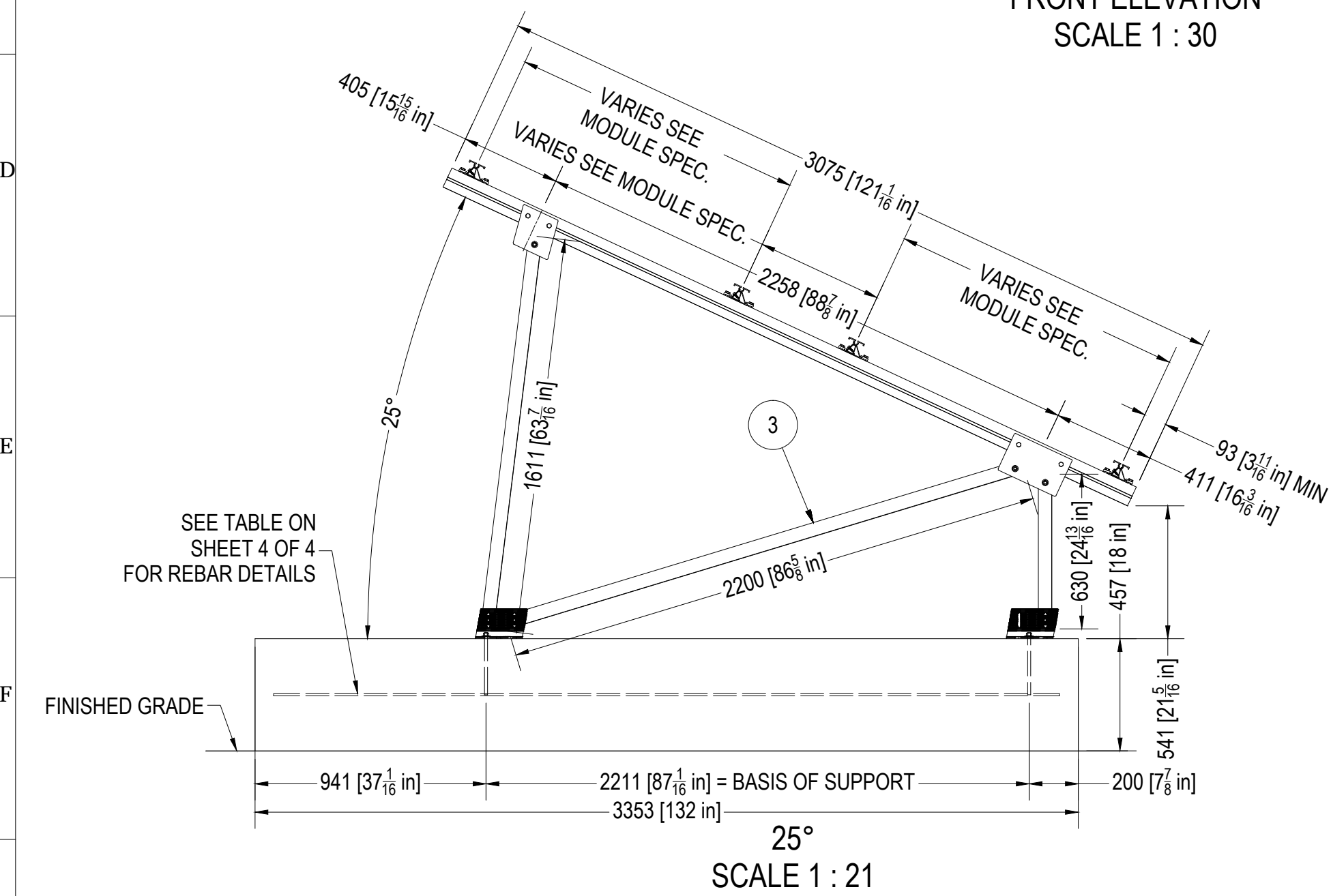
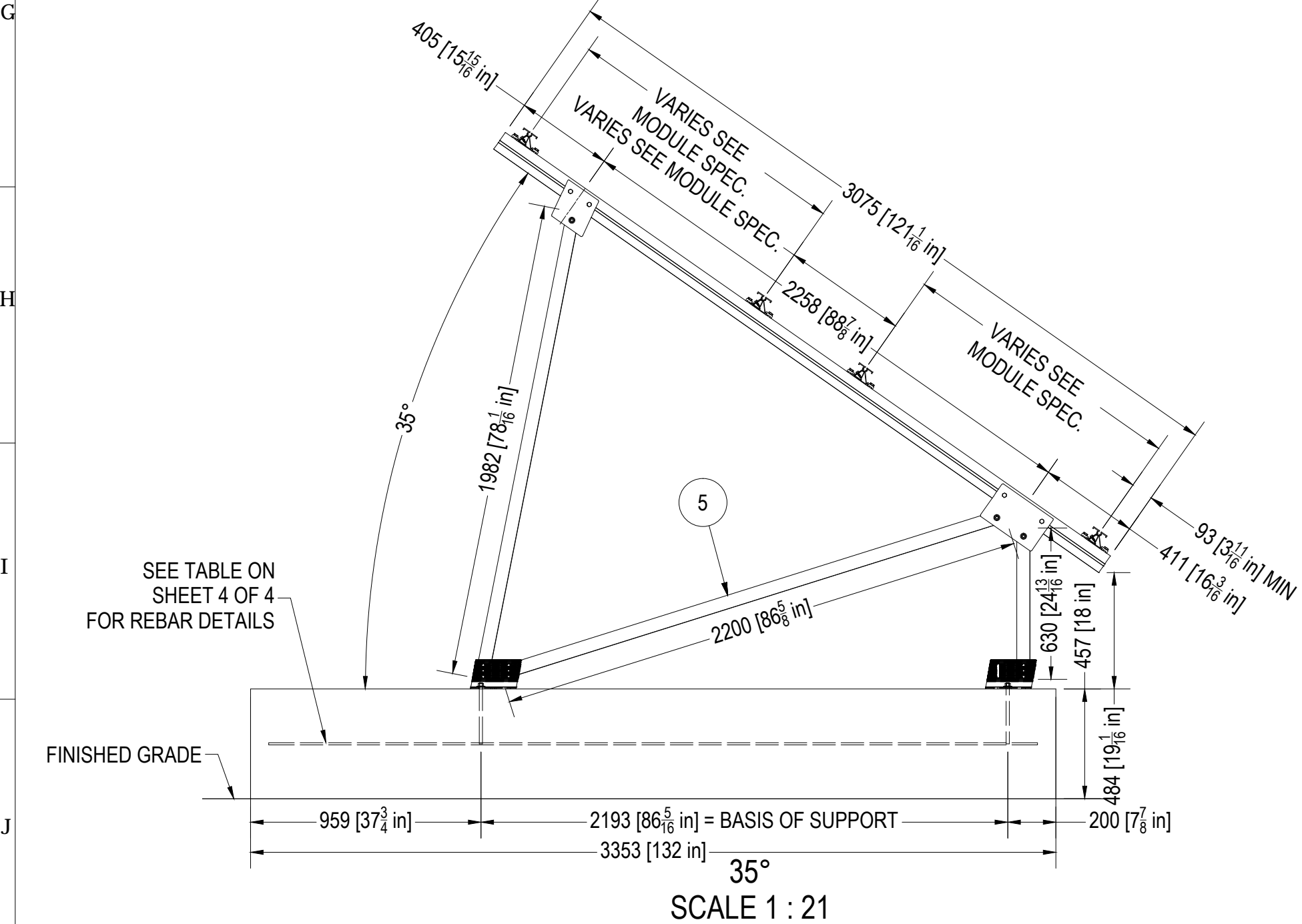


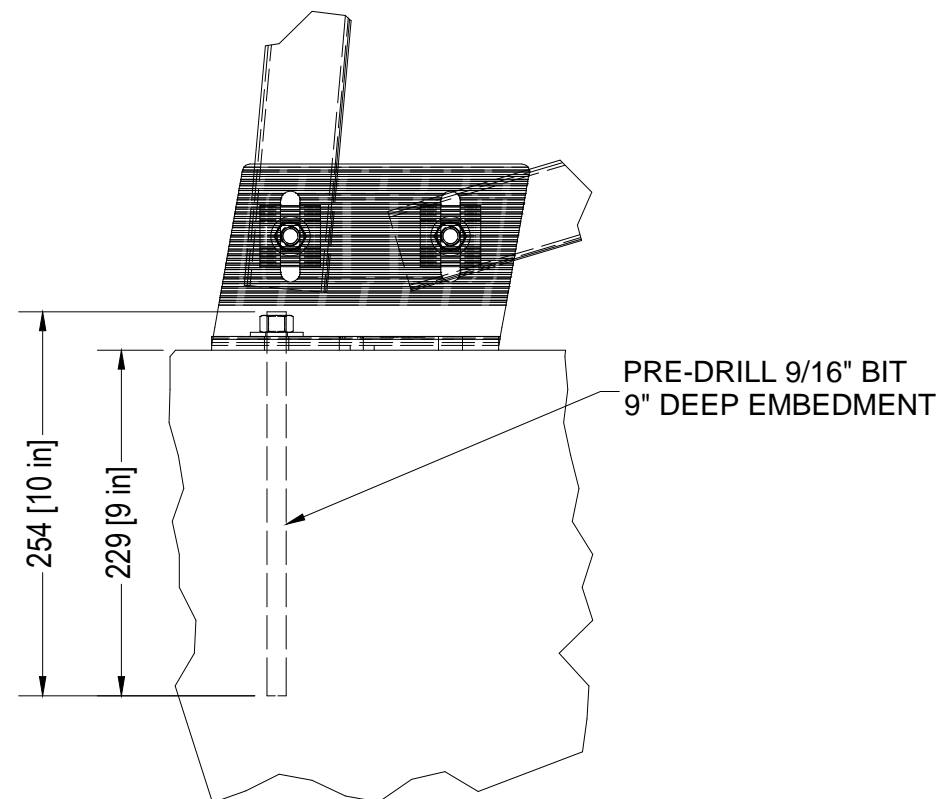
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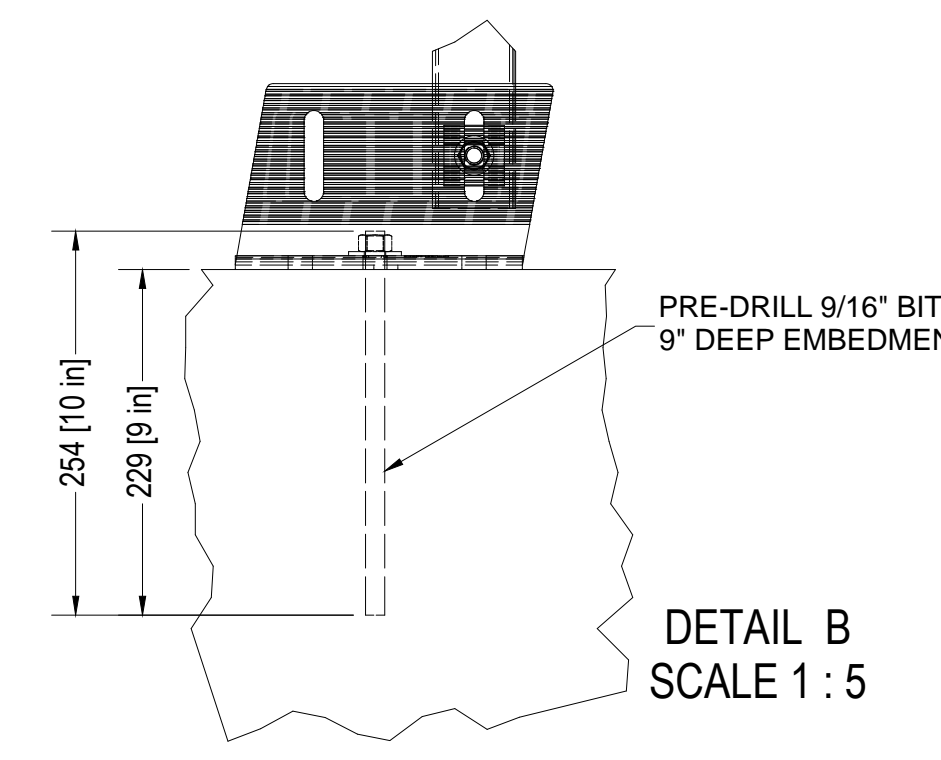
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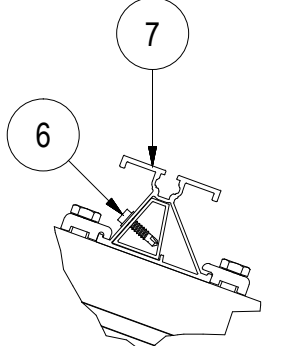
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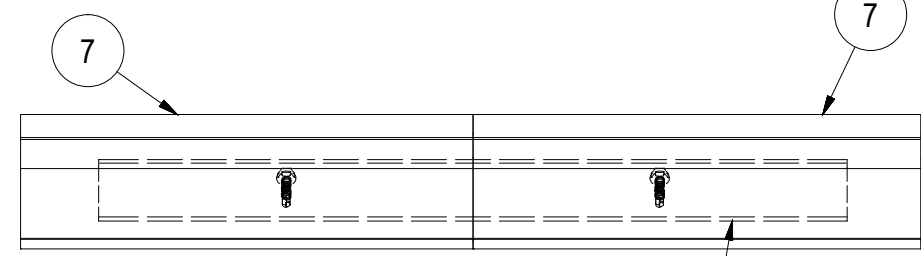
DETAIL A
SCALE 1 : 5



DETAIL B
SCALE 1 : 5



DETAIL C
SCALE 1 : 5



SPLICE DETAIL
SCALE 1 : 5

PARTS LIST			
ITEM	PART NUMBER	DESCRIPTION	
1	146002-215	Standard, PvMax3, 60 Cell, 15°, Triangle	
2	146002-220	Standard, PvMax3, 60 Cell, 20°, Triangle	
3	146002-225	Standard, PvMax3, 60 Cell, 25°, Triangle	
4	146002-230	Standard, PvMax3, 60 Cell, 30°, Triangle	
5	146002-235	Standard, PvMax3, 60 Cell, 35°, Triangle	
6	129301-000	Splice, S1, Kit	
7	124302-001	Rail, S1 Interior, Custom	

NO.	DRAWN:	CHECKED:	REVIEWED:	APPROVED:	REVISIONS:
0	BushBr 9/27/2014				New Drawing
1					
2					
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Client:
Schletter Inc
3761 E Farnum Place
Tucson, AZ 85760

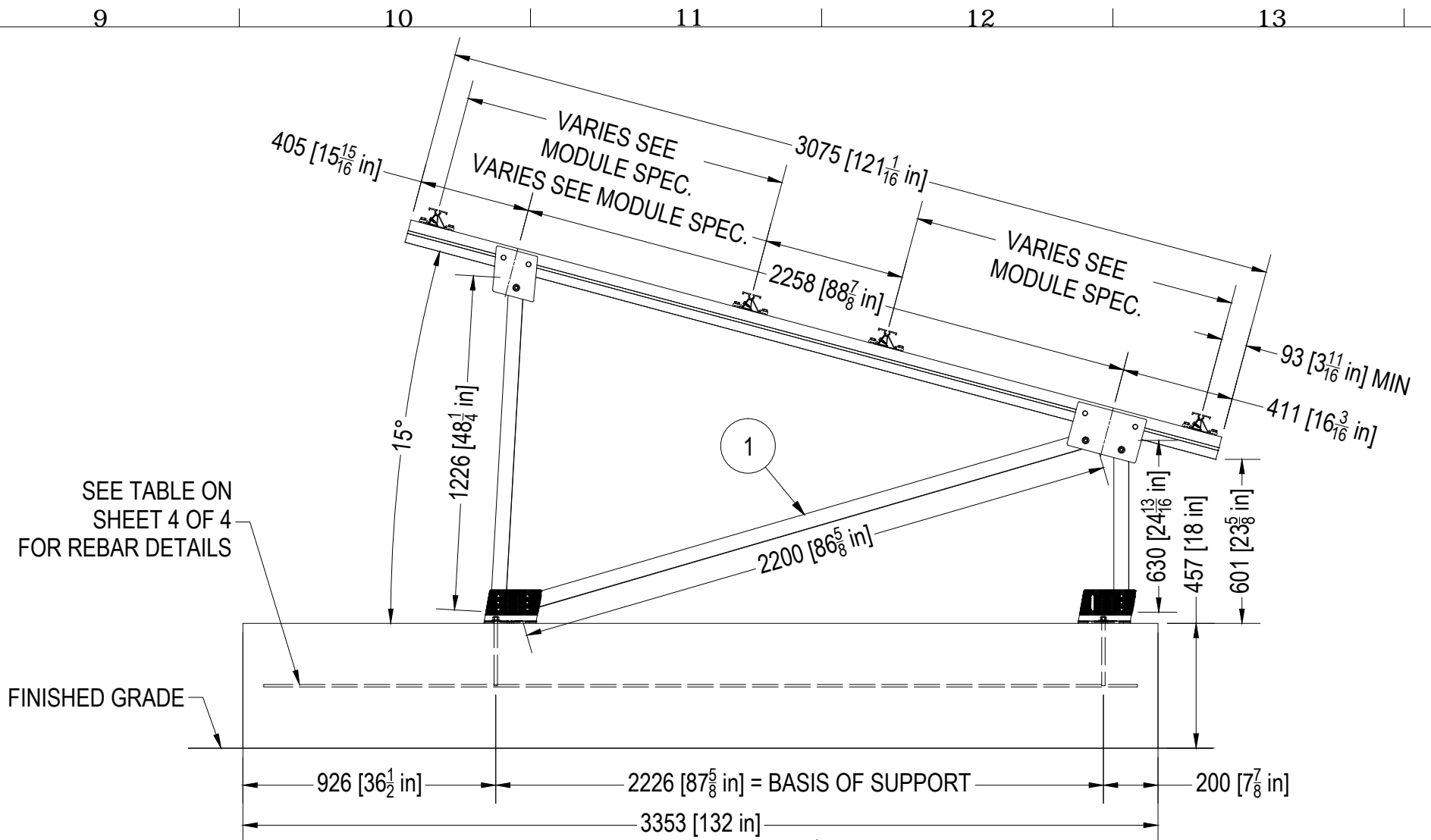


Standard PvMax, 60 Cell, 15° - 35°
Racking Structure
Dimensions and Specifications
ISSUED BY: SCHLETTER INC.
PROPRIETARY AND CONFIDENTIAL

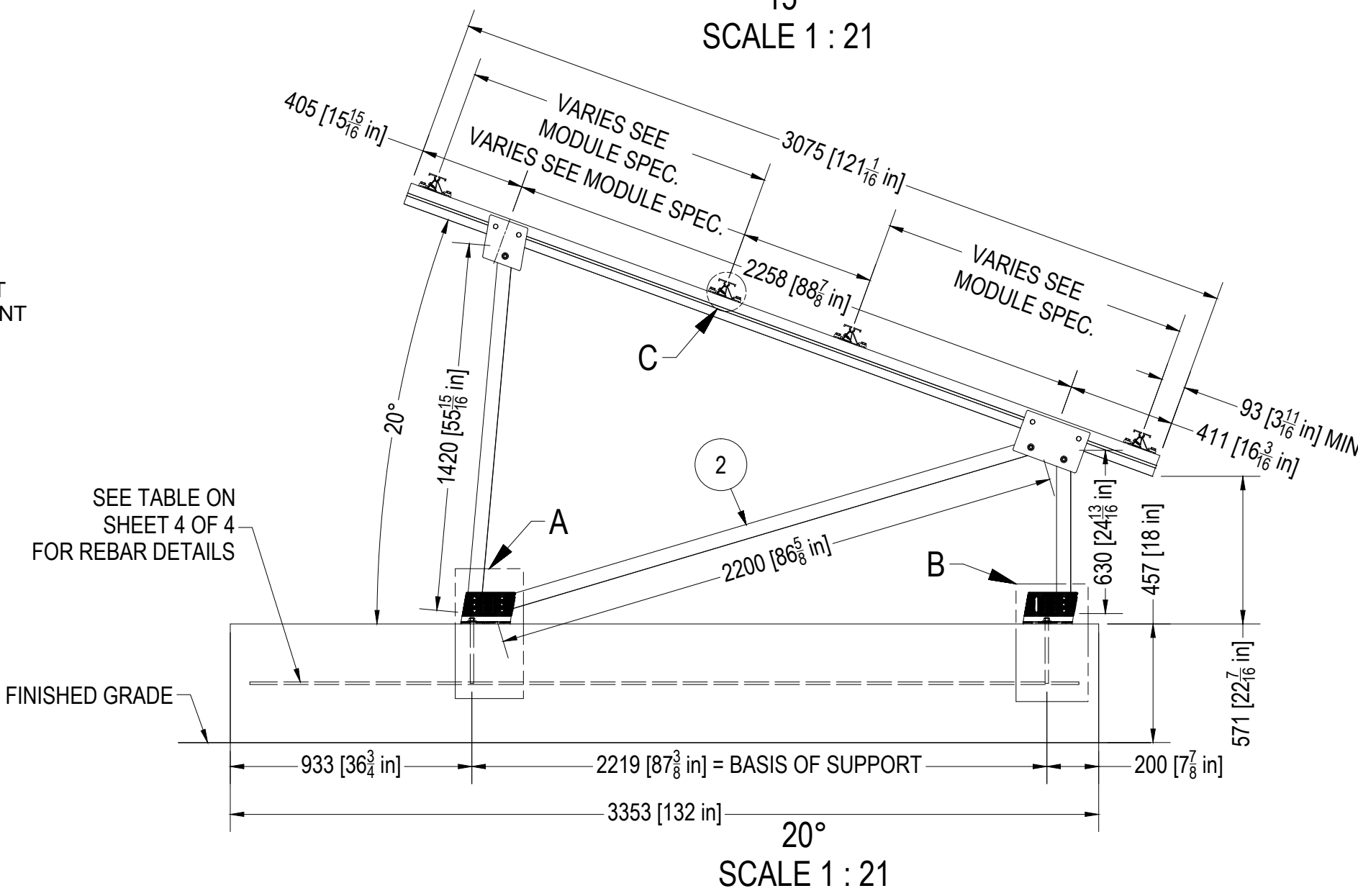
Project Site:
Schletter Inc
1001 Commerce Center Dr
Shelby, NC 28150

Drawing Number:
v.01
JOB NUMBER: v
SHEET: 1 of 4
SCALE:
SEE DRAWING VIEWS

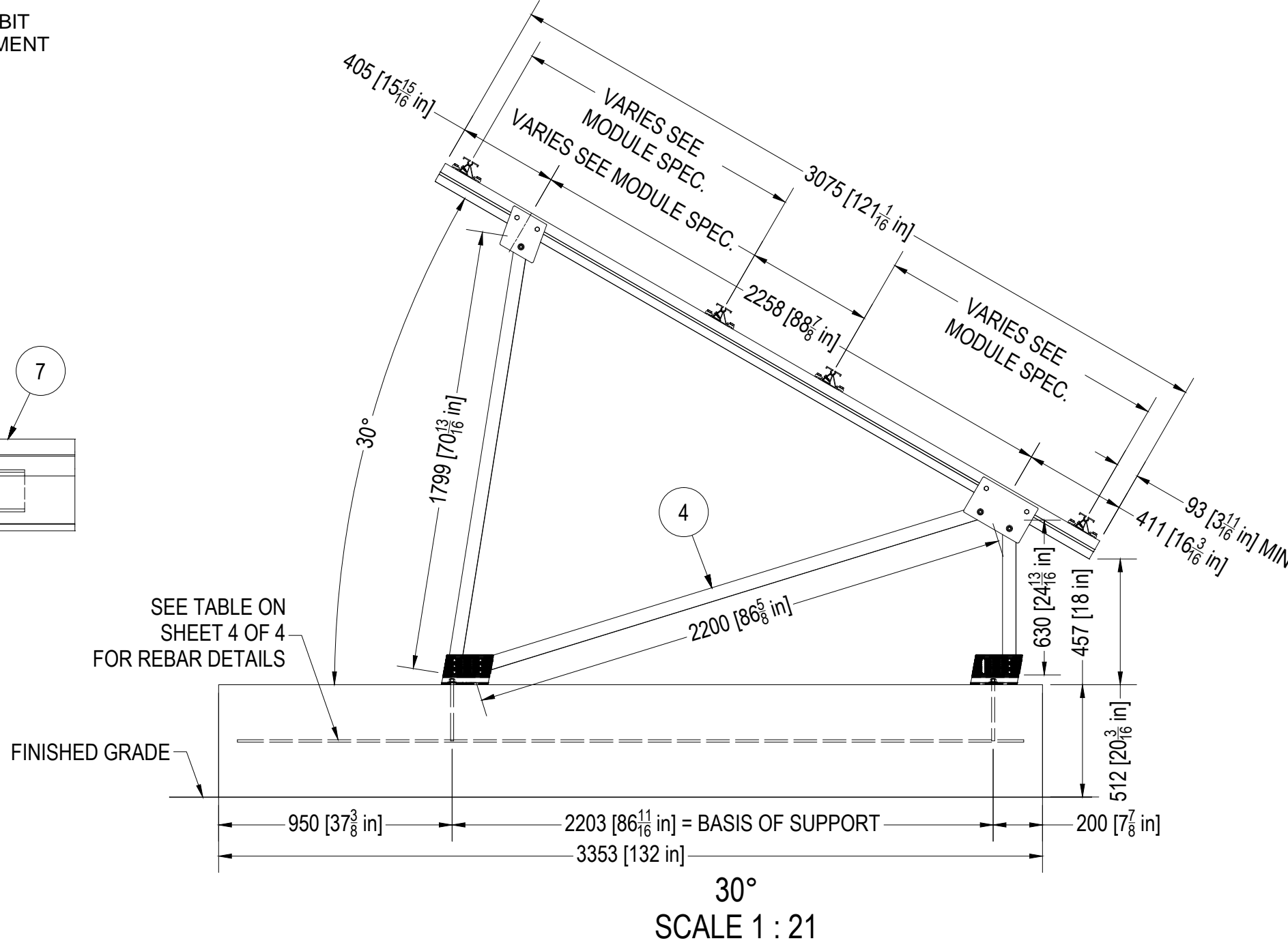
PRELIMINARY
UNLESS THIS DRAWING IS SIGNED
AND SEALED BY A LICENSED
STRUCTURAL ENGINEER, IT IS
A PRELIMINARY DESIGN AND SHALL
NOT BE USED FOR CONSTRUCTION.



15°
SCALE 1 : 21



20°
SCALE 1 : 21



30°
SCALE 1 : 21

DESIGN CRITERIA:
FOR STRUCTURAL DESIGN INFORMATION AND APPLICABLE BUILDING CODES,
REFERENCE ACCOMPANYING LETTER OF ACCEPTANCE AND CALCULATIONS.

LOADS:
MODULE DEAD LOAD = MAX 3.6 PSF, MIN 1.75 PSF
SNOW LOAD = SEE TABLE FOR SPECIFIC SNOW LOAD (Is = 1.00, Ct= 1.20, Ce = 0.90, Cs = SEE TABLE)

WIND DESIGN:
BASIC WIND SPEED = SEE TABLE FOR SPECIFIC WIND SPEED
EXPOSURE: C
RISK CATEGORY = II (ASCE 7-10)
Iw = 1.0 (ASCE 7-05)

INSTALLATION TOLERANCES:
ARRAY TILT ANGULAR TOLERANCE ±1.0°
LATERAL SUPPORT PLACEMENT IS ±2.5°
SUPPORT HEIGHT VARIATION TOLERANCE IS ±0.5°
TOTAL LATERAL DEVIATION OF SUPPORTS WITHIN AN ARRAY IS ±2.5°

GENERAL:
1. THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OR SEQUENCE OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERE TO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS). THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF ALL SCAFFOLDING, BRACING AND SHORING.
2. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDA.

ALUMINUM:
1. ALL ALUMINUM SHALL CONFORM WITH THE LATEST ALUMINUM DESIGN HANDBOOK.
2. ALL ALUMINUM SECTIONS SHALL BE:
a. SEMI-HOLLOW AND HOLLOW SHALL BE 6105-T5, 6005A-T6, OR 6005-T5
b. SOLIDS SHALL BE 6063-T6

STEEL:
1. ALL BOLTS AND WASHERS SHALL BE 304 STAINLESS STEEL CLASS 2 (A2-70).
2. ALL NUTS SHALL BE 316 STAINLESS STEEL CLASS 2 (A4-70).

TORQUE:
TORX BOLT FOR RAPID 2+ MODULE CLAMPS IS 14 N-M (10.5 FT-LBS)
M6 AND 1/4" BOLT TORQUE IS 6 N-M (4.5 FT-LBS)
M8 AND 5/16" BOLT TORQUE IS 14 N-M (10.5 FT-LBS)
M10 AND 3/8" BOLT TORQUE IS 30 N-M (23 FT-LBS)
M12 AND 1/2" BOLT TORQUE IS 50 N-M (37 FT-LBS)
M16 AND 5/8" BOLT TORQUE IS 121 N-M (89 FT-LBS)
M20 AND 3/4" BOLT TORQUE IS 244 N-M (180 FT-LBS)

MODULE SIZE:
RACKING SYSTEM DESIGNED FOR MODULE SIZE: MINIMUM = 1550 X 970
VERTICAL MODULE GAP: 23 mm MAXIMUM = 1700 X 1050
HORIZONTAL MODULE GAP: 5 mm

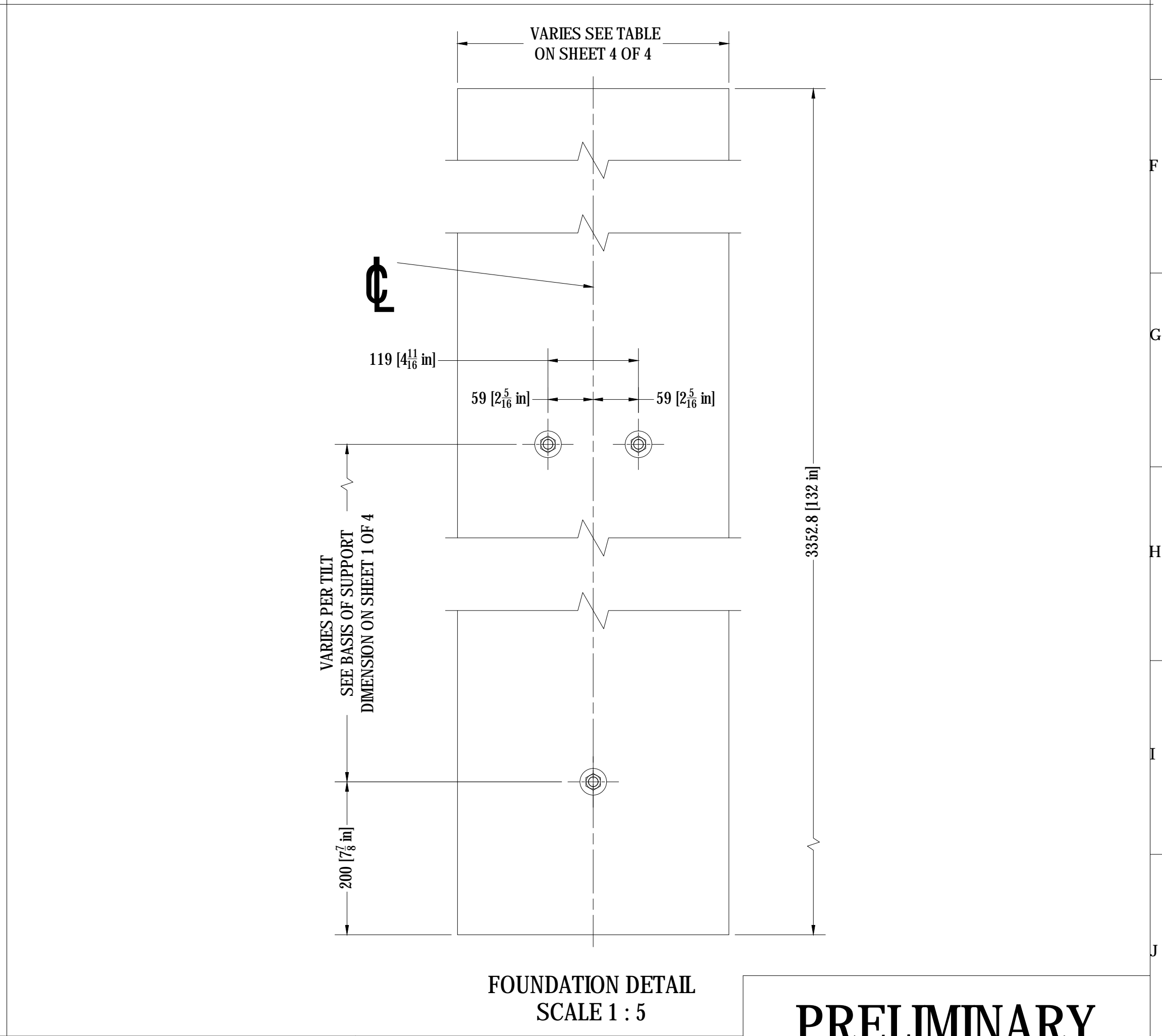
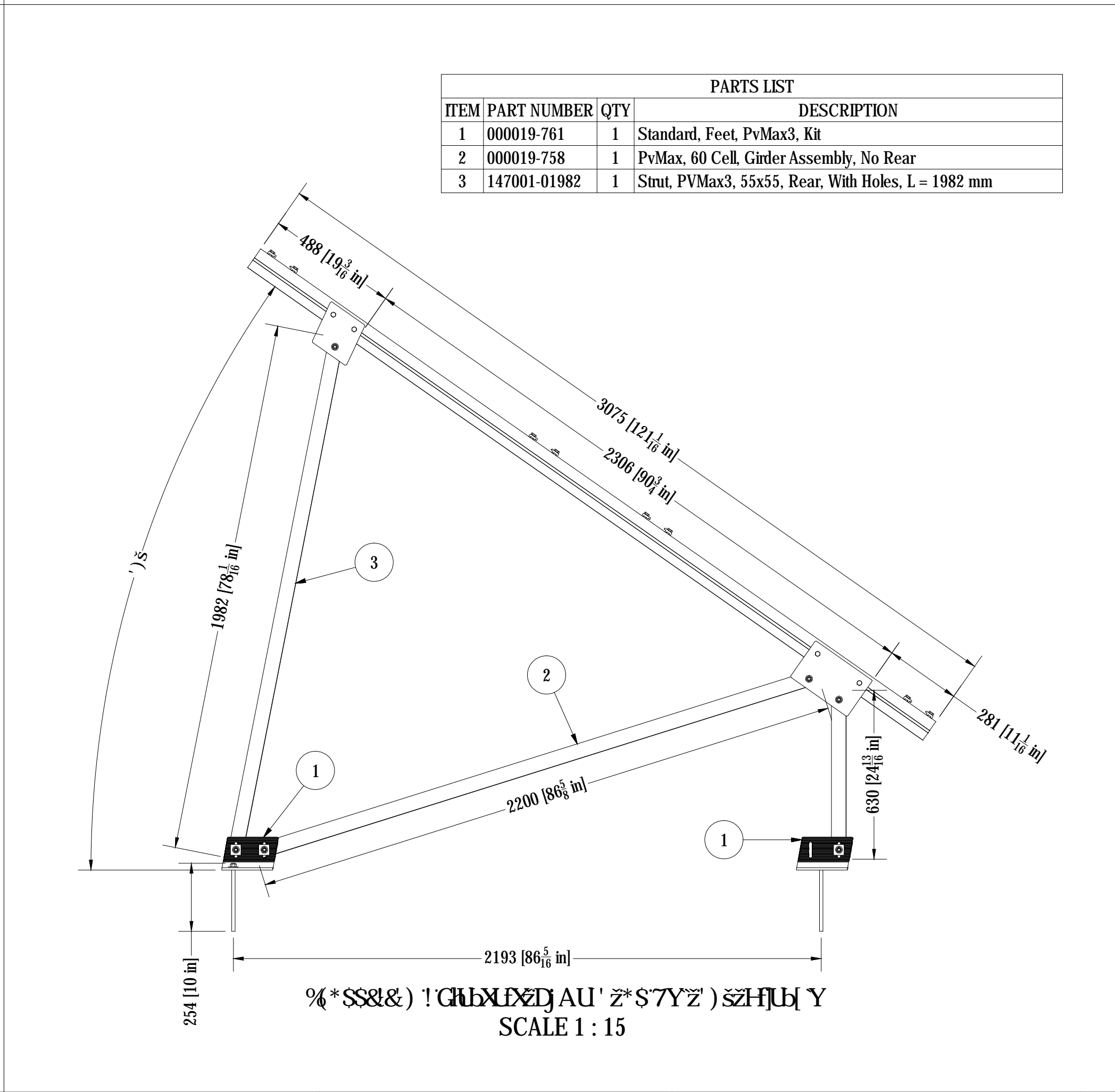
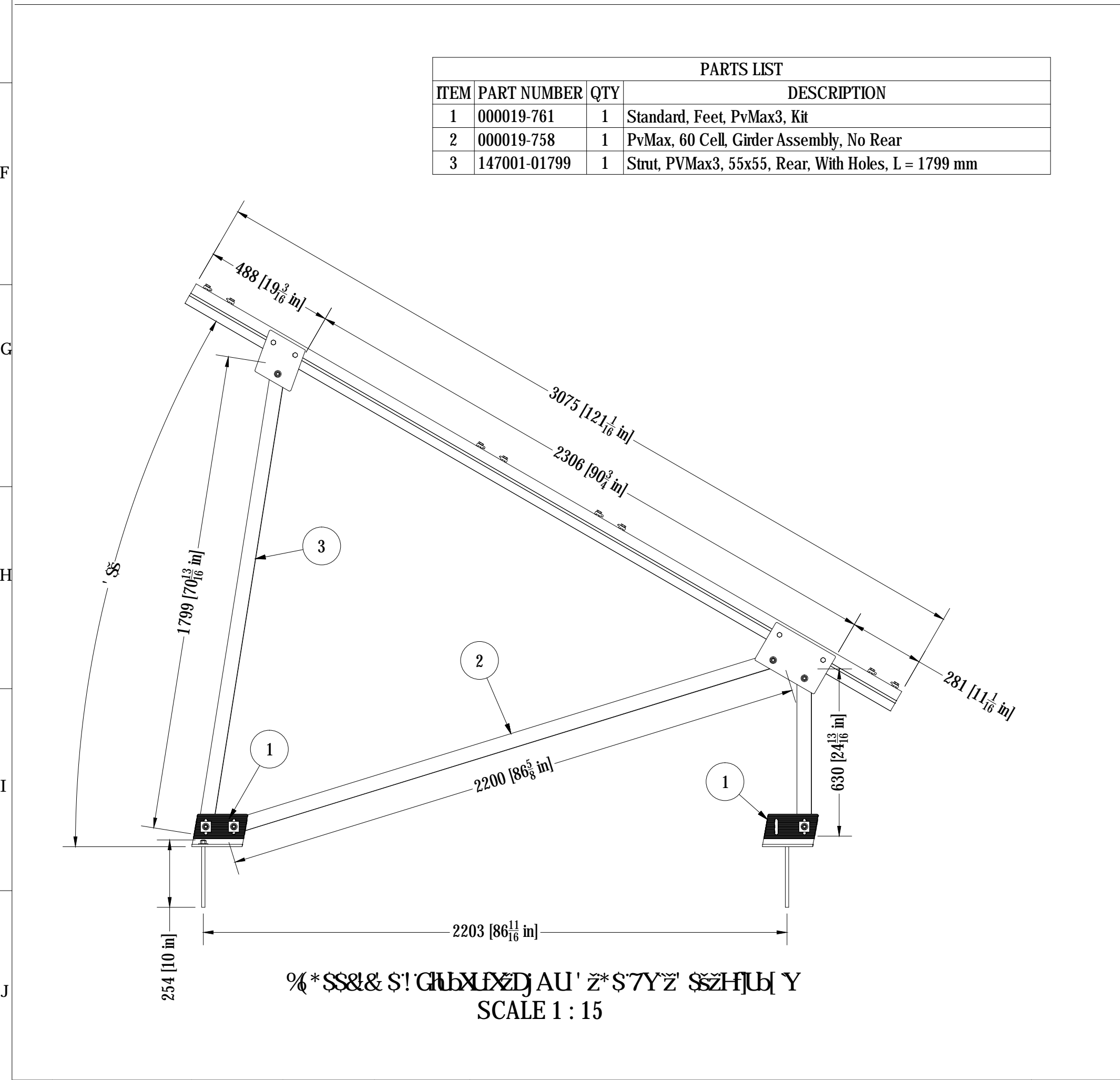
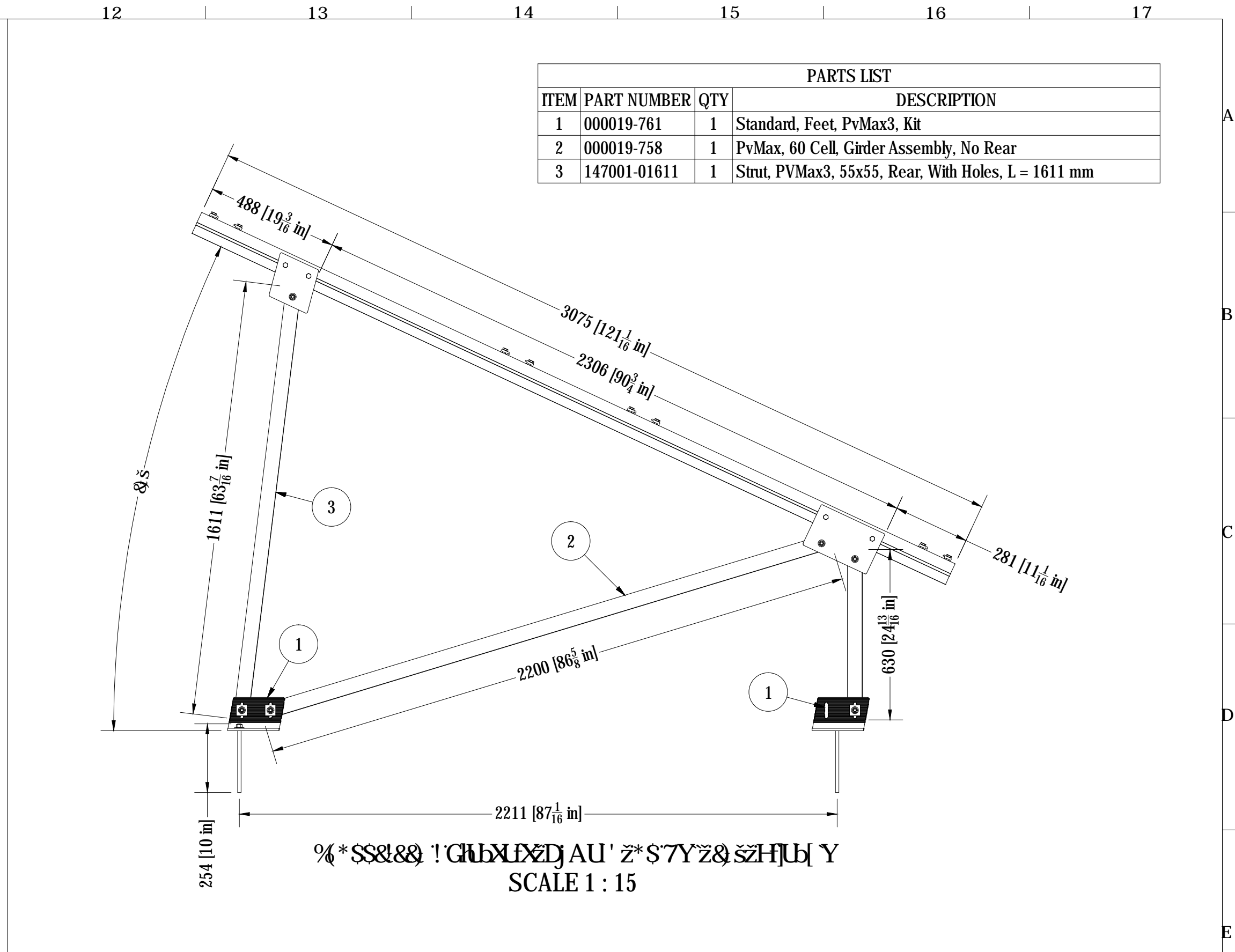
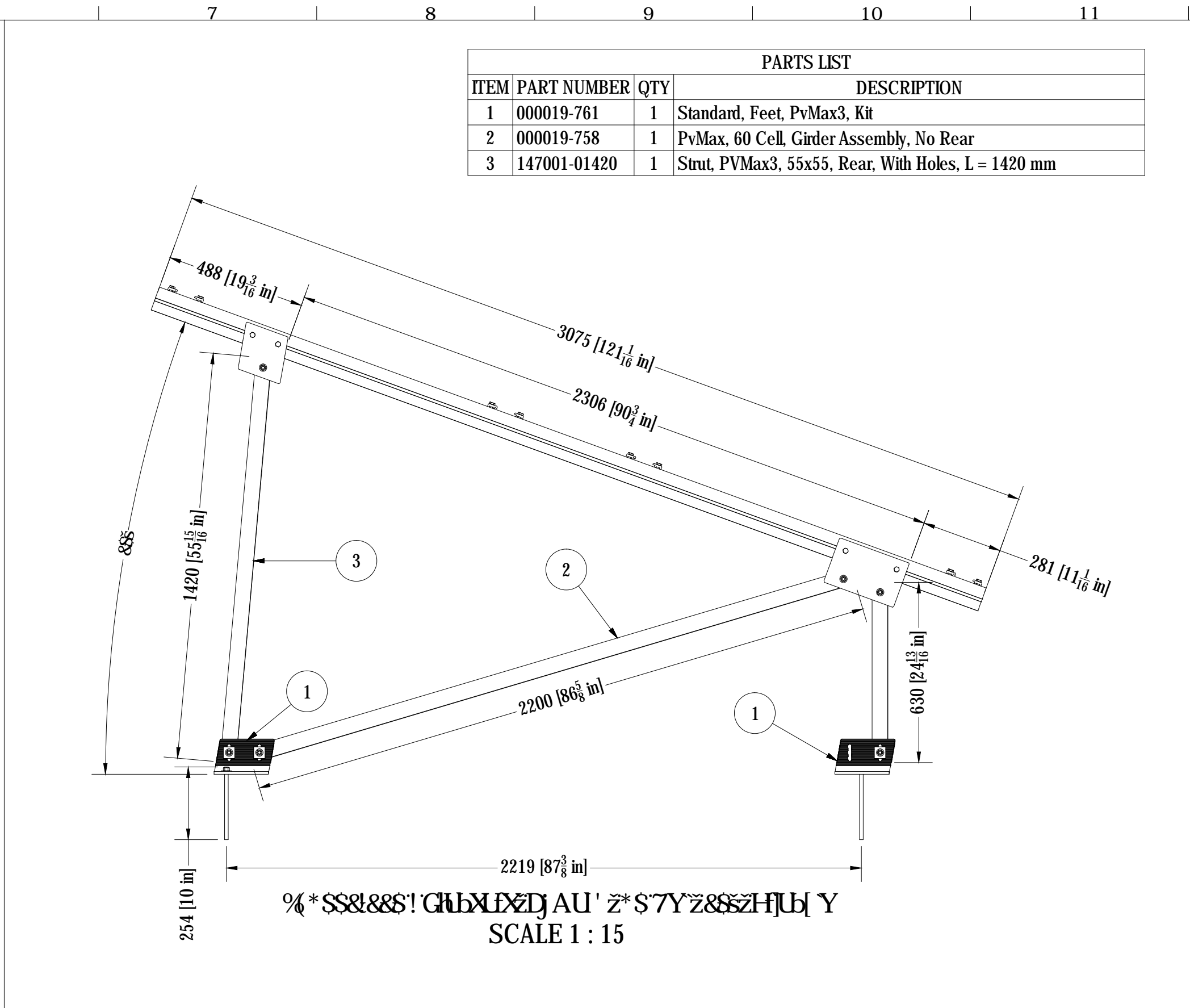
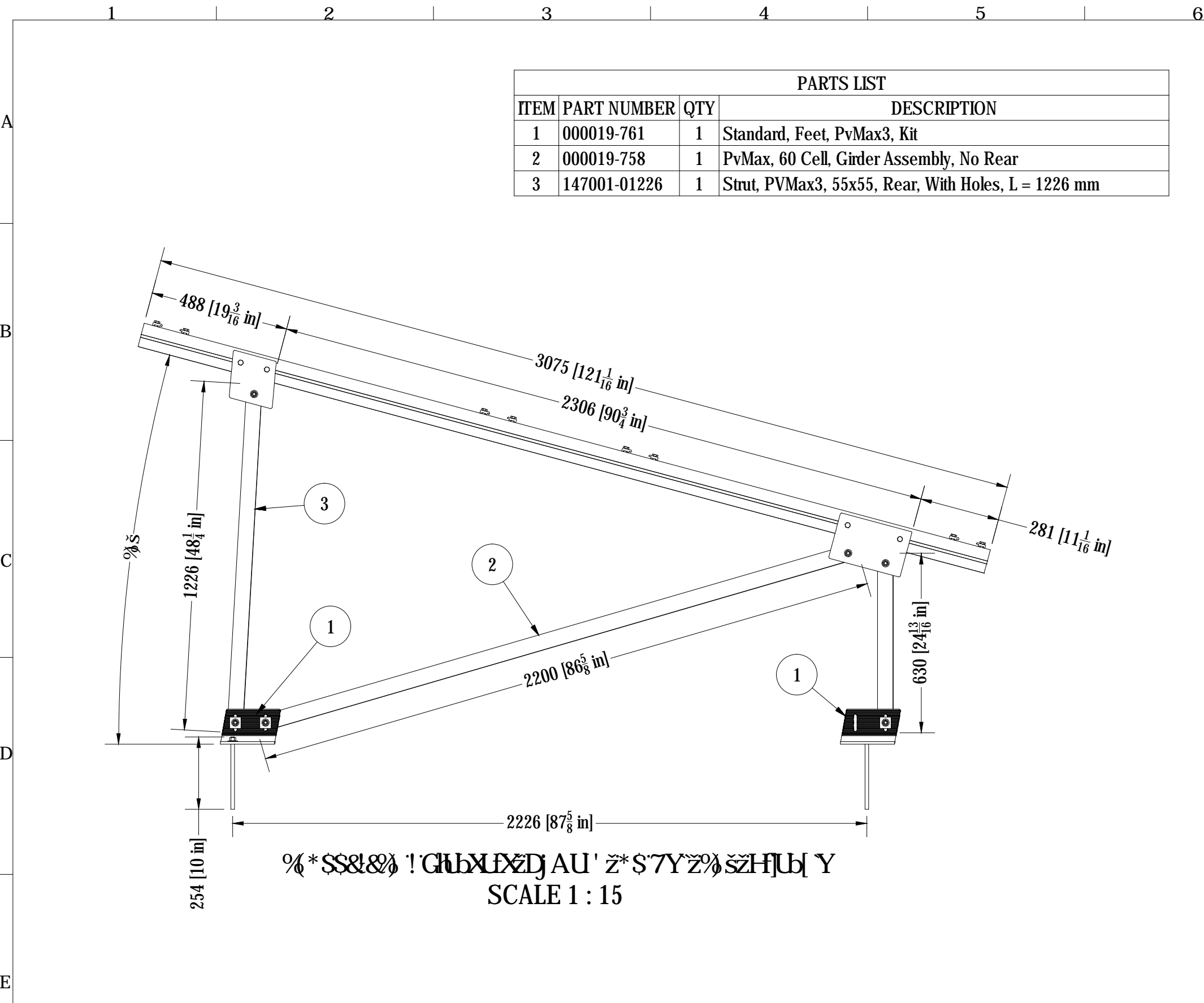
NOTE:
1. MODULES MUST BE CENTERED ON ARRAY
2. ARRAY LENGTH NOT TO EXCEED 150 FT
3. RECOMMENDED SPEED FOR INSTALLATION OF SELF-DRILLING 1/4" DIAMETER SCREWS IS 1200-1800 RPMs.

FOUNDATIONS:
1. NO SOILS REPORT PROVIDED. FOUNDATION DESIGN IS BASED ON MINIMUM IBC SOIL BEARING VALUE = 1500 PSF PER IBC TABLE 1804.2 (2003, 2006), & 1806.2 (2009, 2012). BALLAST BLOCKS SHALL BE BUILT ON UNDISTURBED SOIL OR COMPACTED FILL MATERIAL NOT LESS THAN 12" IN DEPTH.
2. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR ANY GEOTECHNICAL ASPECTS OF THIS PROJECT. IT IS RECOMMENDED THAT THE OWNER RETAIN A REGISTERED GEOTECHNICAL ENGINEER TO CONDUCT A GEOTECHNICAL INVESTIGATION AND PREPARE A REPORT WITH RECOMMENDATIONS FOR FOUNDATION AND EARTHWORK PROCEDURES.

CONCRETE:
1. ALL CONCRETE WORK SHALL CONFORM WITH THE REQUIREMENTS OF ACI 301 AND ACI 318. CEMENT PER ASTM C150, TYPE II. AGGREGATE PER ASTM C33. CONCRETE SHALL BE READY MIXED IN ACCORDANCE WITH ASTM C94 AND SHALL BE DESIGNED FOR A MINIMUM 28 DAY COMPRESSIVE STRENGTH AS FOLLOWS:
FOUNDATIONS.....3,000 PSI*
*DESIGNED FOR 2,500 PSI
2. FIBER REINFORCEMENT USED IN CONCRETE SHALL BE BASF MASTERFIBER MAC 100 OR EQUIVALENT. THE AMOUNT TO BE MIXED IN CONCRETE IS 3LB/CU.YD

REINFORCING:
1. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (Fy=60ksi) DEFORMED BARS. NO TACK WELDING OF REINFORCING BARS ALLOWED WITHOUT PRIOR REVIEW OF PROCEDURE WITH THE STRUCTURAL ENGINEER. LATEST ACI CODE AND DETAILING MANUAL APPLY.
2. ACCURATELY PLACE OR SUPPORT ALL REINFORCING TO HAVE A CLEAR CONCRETE COVERAGE OF 3"

POST-INSTALLED ANCHORS:
1. ADHESIVE BOLTS OR DOWELS SHALL BE A THREADED ROD OR REINFORCING STEEL INSTALLED WITH THE FOLLOWING APPROVED PRODUCT SATISFYING CRACKED CONCRETE REQUIREMENTS IN ACCORDANCE WITH ACI 318, APPENDIX D.
SIMPSON "AT-XP" IAPMO UES ER - 263
2. THE CONTRACTOR MAY NOT USE SUBSTITUTES FOR ADHESIVE ANCHORS WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
3. FOR MINIMUM EMBEDMENT LENGTH SEE DETAILS. INSTALL ALL BOLTS AS OUTLINED IN MANUFACTURER'S SPECIFICATIONS, UTILIZING PROPER SIZE AND TYPE OF DRILL, CLEANING HOLE, PLACING OF ADHESIVE, INSERTING AND TIGHTENING BOLT.
4. PERIODIC INSPECTION OF POST-INSTALLED ANCHORS IS REQUIRED



NO.	DRAWN:	CHECKED:	REVIEWED:	APPROVED:	REVISIONS:
0	BushBr 9/27/2014				New Drawing
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3					
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6					
7					
8					

Client:

Schletter Inc

3761 E Famum Place

Tucson, AZ 85760

SCHLETTER

3761 E. FARNUM PLACE | TUCSON, AZ 85706
TEL: (520) 289 - 8700 | FAX: (520) 289 - 8695

EMAIL: MAIL@SCHLETTER.US
WWW.SCHLETTER.US

GU'XU'XJ AU'Z* S'7Y'Z') Š

Racking Structure

Details and Parts List

ISSUED BY: SCHLETTER INC.
PROPRIETARY AND CONFIDENTIAL

Project Site:

Schletter Inc

1001 Commerce Center Dr

Shelby, NC 28150

Drawing Number:

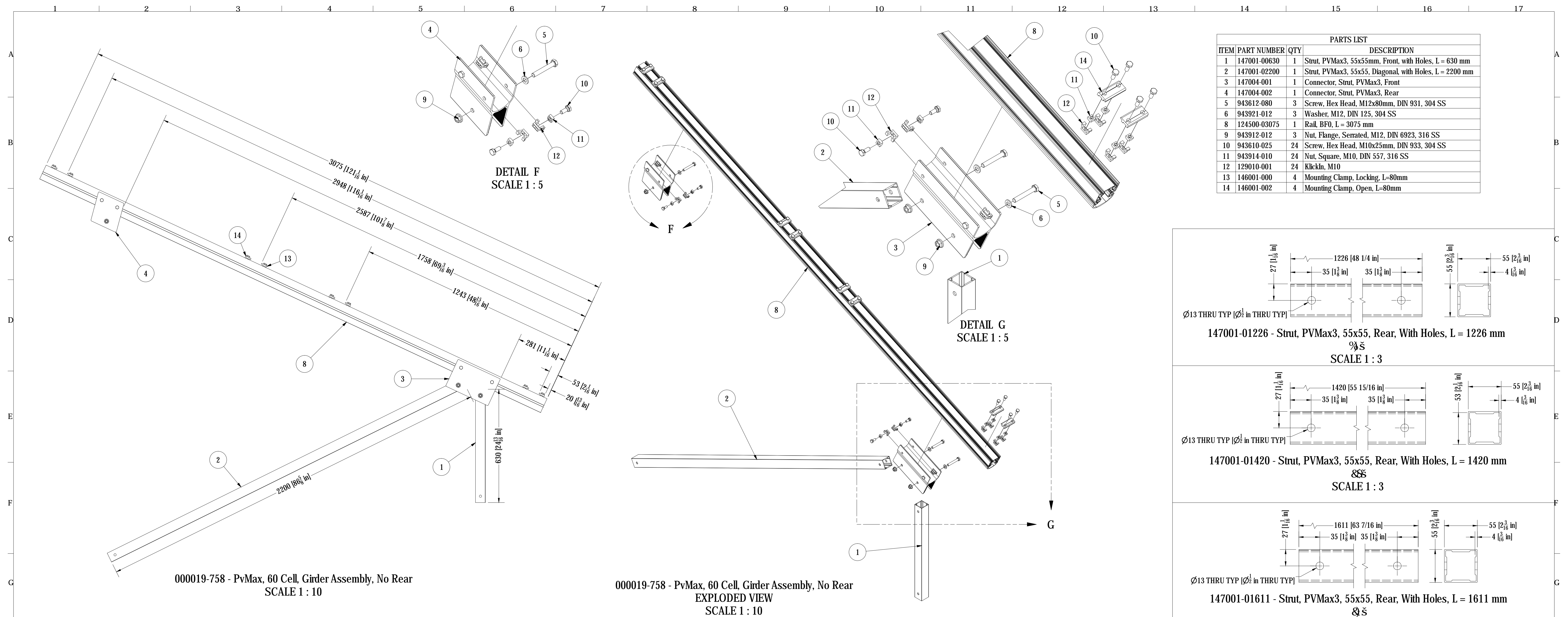
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JOB NUMBER: v
SHEET: 2 of 4

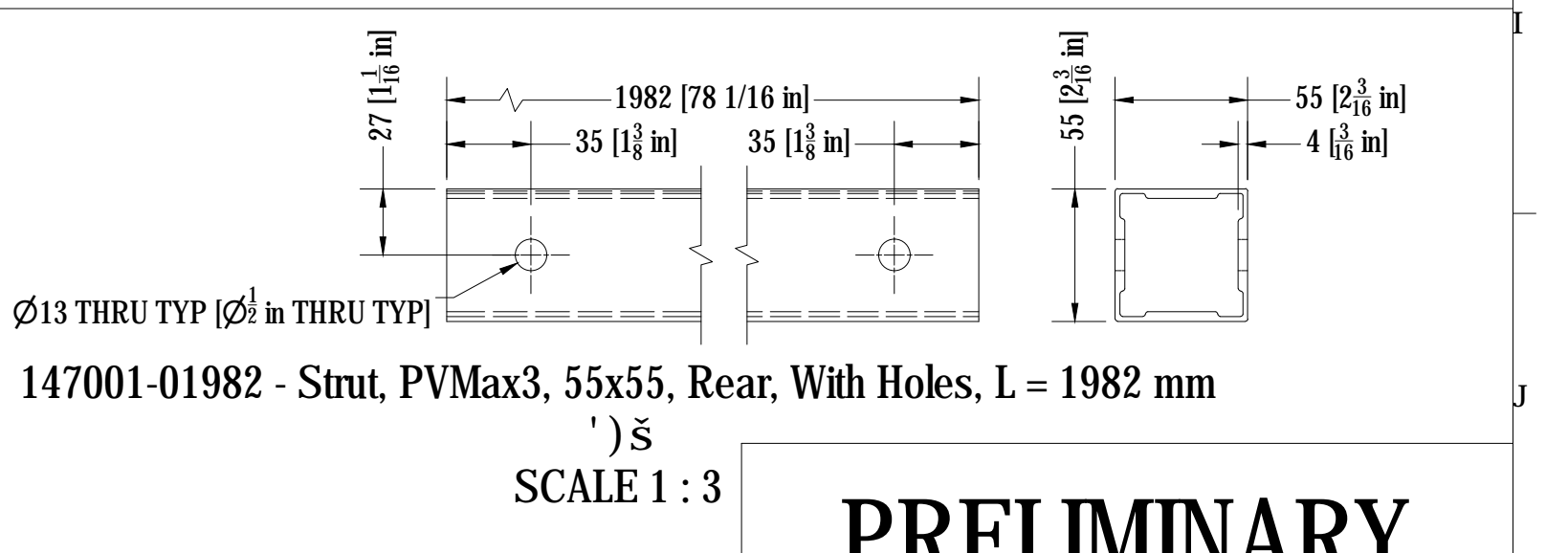
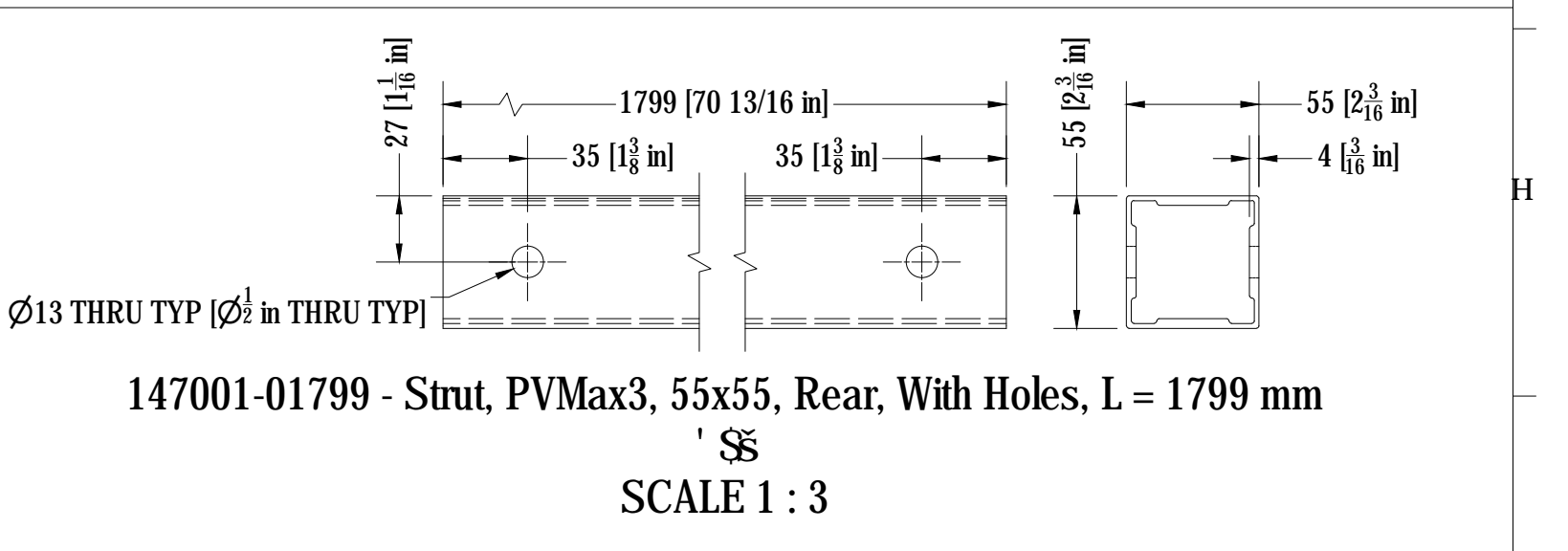
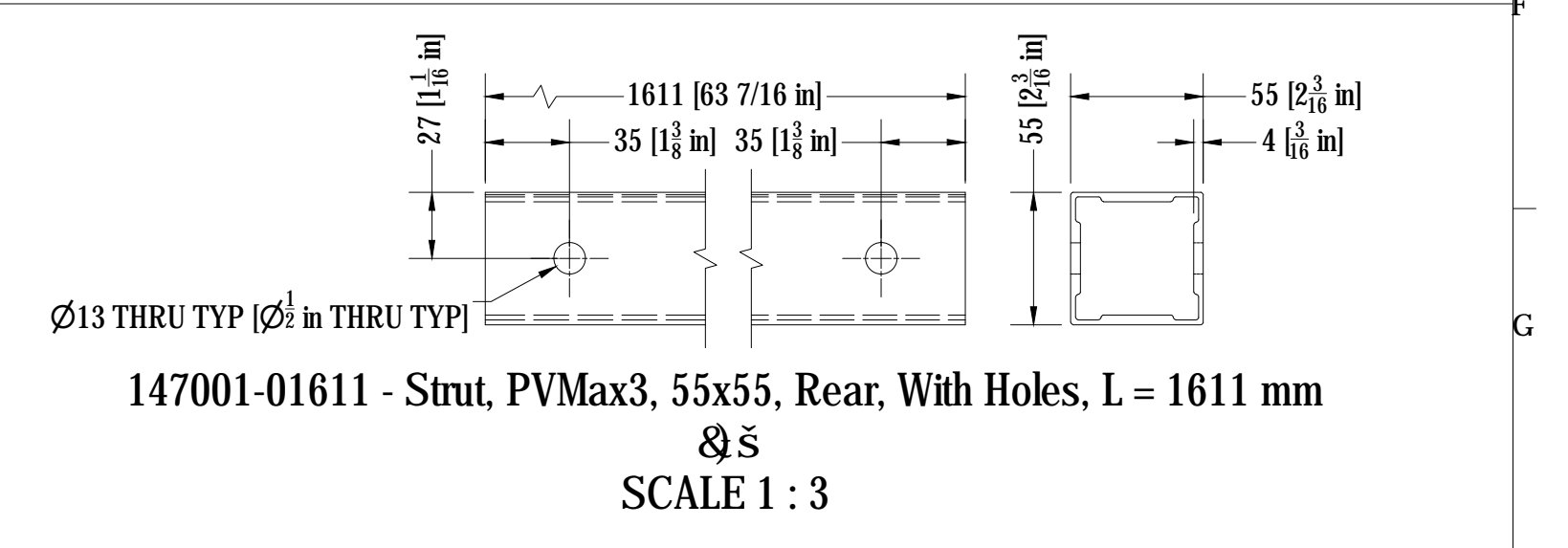
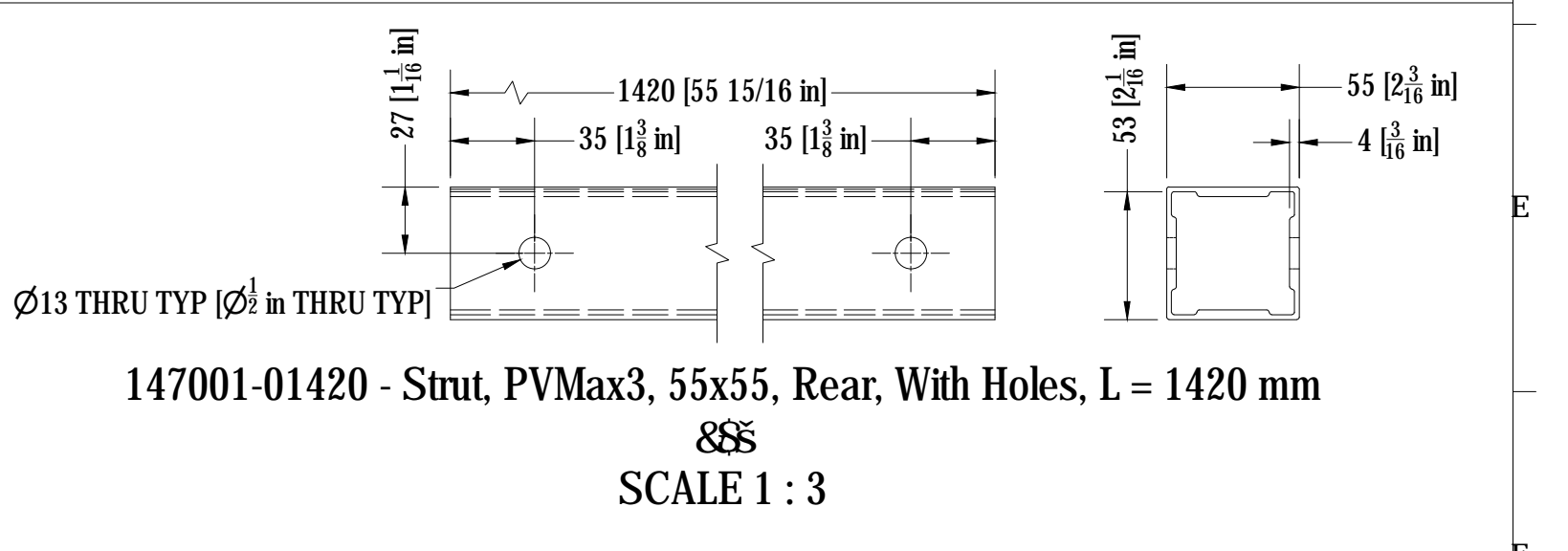
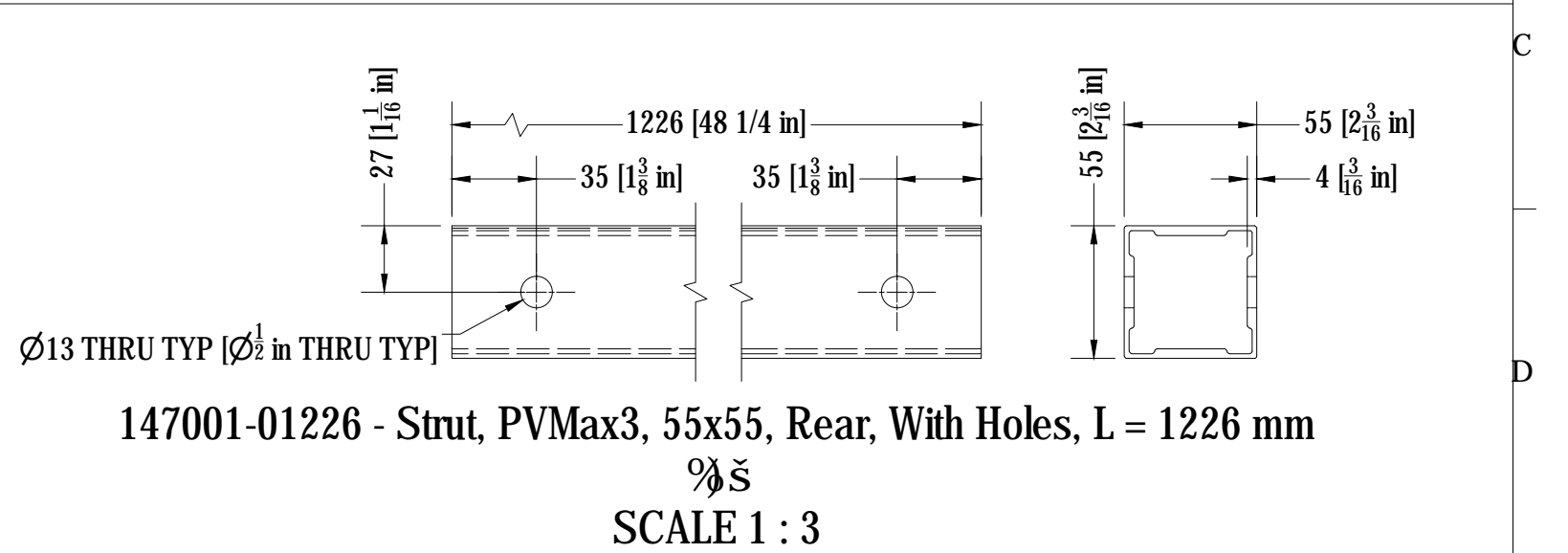
SCALE:
SEE DRAWING VIEWS

PRELIMINARY

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PARTS LIST			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	147001-00630	1	Strut, PVM3x3, 55x55mm, Front, with Holes, L = 630 mm
2	147001-02200	1	Strut, PVM3x3, 55x55, Diagonal, with Holes, L = 2200 mm
3	147004-001	1	Connector, Strut, PVM3x3, Front
4	147004-002	1	Connector, Strut, PVM3x3, Rear
5	943612-080	3	Screw, Hex Head, M12x80mm, DIN 931, 304 SS
6	943921-012	3	Washer, M12, DIN 125, 304 SS
8	124500-03075	1	Rail, BFO, L = 3075 mm
9	943912-012	3	Nut, Flange, Serrated, M12, DIN 6923, 316 SS
10	943610-025	24	Screw, Hex Head, M10x25mm, DIN 933, 304 SS
11	943914-010	24	Nut, Square, M10, DIN 557, 316 SS
12	129010-001	24	Klickin, M10
13	146001-000	4	Mounting Clamp, Locking, L=80mm
14	146001-002	4	Mounting Clamp, Open, L=80mm



PARTS LIST			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	119004-00254	3	Threaded Rod, 1/2in-13 UNC, 304 SS, Grade B8, L=254mm
2	147003-920	2	Base, PVMa33, Univ, 5 Holes, 2 Slots, Pre-Assembly
3	943919-122	3	Nut, 1/2" - 13 UNC, ASME-B18.2.2, 316 SS
4	943929-030	3	Washer, Flat, 1/2", ASME - B18.21.1 A-W, 304 SS
5	147005-000	6	Claw, Base, PVMa33
6	943612-100	3	Screw, Hex Head, M12x100mm, DIN 934, 304 SS
7	943912-012	3	Nut, Flange, Serrated, M12, DIN 6923, 316 SS

