NOTES: UNLESS OTHERWISE SPECIFIED

1. THIS DRAWING IS NOT FOR CONSTRUCTION UNTIL ENGINEERING HAS REVIEWED AND STAMPED THIS DOCUMENT.

2. DIMENSIONS SHOWN ARE INCHES.

3. THE SELF-BONDING SYSTEM AND SINGLE GROUND LUG IS FOR USE WITH PV MODULES THAT HAVE A MAXIMUM SERIES FUSE RATING OF 30A.

4. MATERIALS ARE AS SPECIFIED OR EQUIVALENT:
   HARDWARE: 304 STAINLESS STEEL
   FABRICATED EXTRUDED PARTS: 6005-T5 ALUMINUM ALLOY
   FABRICATED DIE CAST PARTS: ANSI/AA A380 ALUMINUM ALLOY
   STEEL PIPE: SCHEDULE 40 GALVANIZED
   ALUMINUM PIPE: SCHEDULE 10 ANODIZED

5. THE MAXIMUM PERMISSIBLE LENGTH OF ANY STRUCTURE SHALL BE 200 FT. FOR SYSTEMS USING A SHARED RAIL CONFIGURATION, A THERMAL BREAK IS REQUIRED IN THE RAIL EVERY 40 FT. PER THE DRAWING DETAILS.

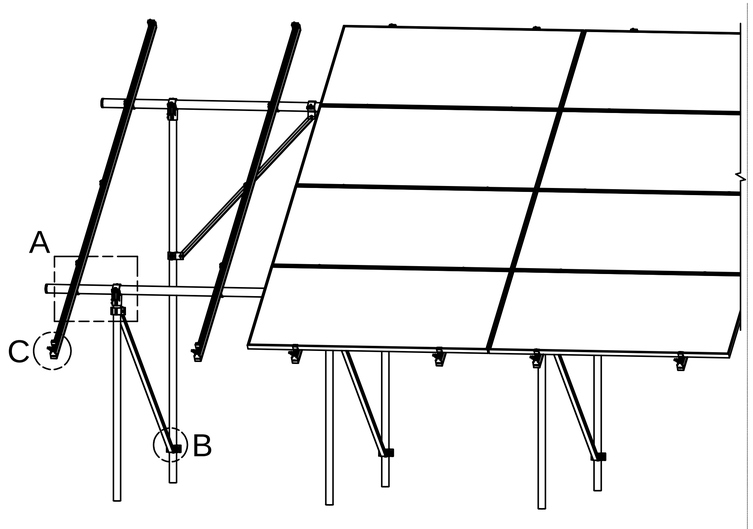
6. SUNTURF SYSTEM CONFIGURATIONS:
   PANEL ARRANGEMENT: 4LXN, 3LXN, OR 2PXN.
   TILT ANGLE: UP TO 35DEG.
   FOUNDATION TYPE: GSM, AGM, BGM, OR PGM.

7. PANEL DIMENSIONS ARE AS FOLLOWS:
   STANDARD PANEL (SP): MAX AREA: 3444 in²
   LARGE FORMAT (LF): MAX AREA: 3825 in²
   PANEL FRAME HEIGHTS: 30mm TO 50mm.

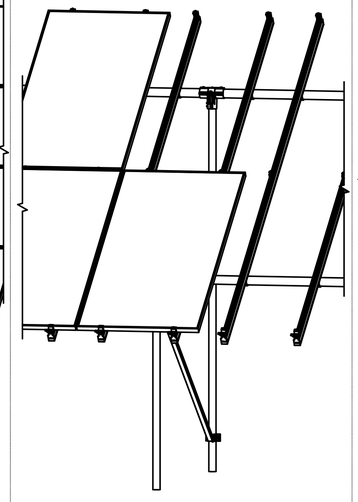
8. FOUNDATION TYPES:
   GSM = GROUND SCREW GROUND MOUNT
   AGM = HELICAL AUGER GROUND MOUNT
   PGM = POST-IN-CONCRETE GROUND MOUNT
   BSM = BALLAST GROUND MOUNT

9. SEE LETTER PROVIDED BY VECTOR STRUCTURAL ENGINEERING, LLC FOR FOUNDATION DESIGN AND LOAD TESTING REQUIREMENTS.

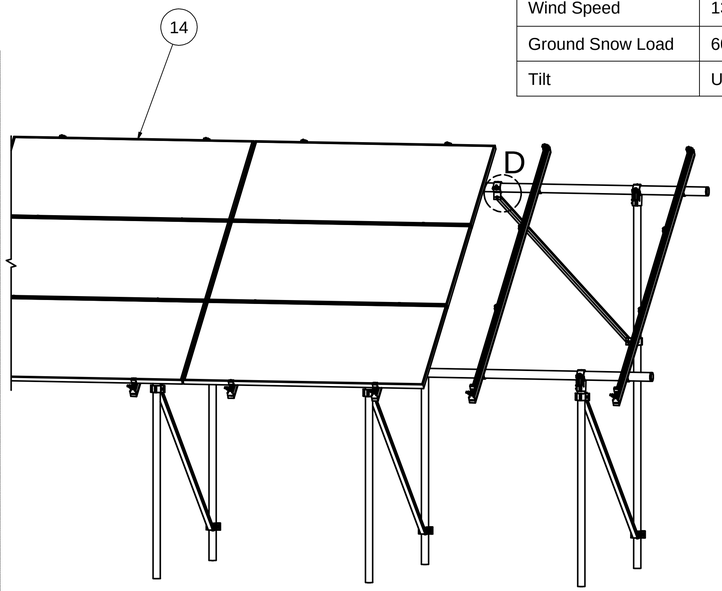
Packet A3	
Model Code	**ASCE 7-16**
Exposure Category	C
Wind Speed	135 mph and Lower
Ground Snow Load	60 PSF and Lower
Tilt	UP TO 35 DEG



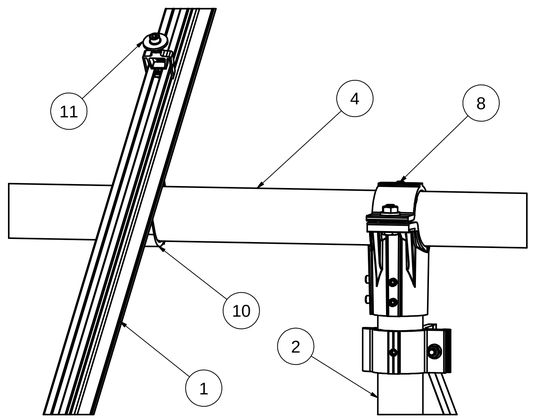
4L
4-IN-LANDSCAPE



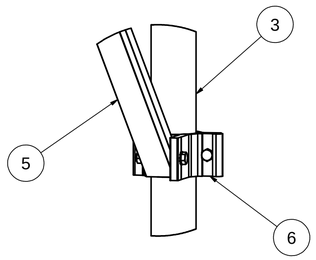
2P
2-IN-PROTRAIT



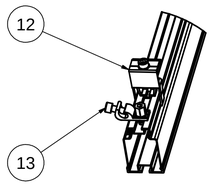
3L
3-IN-LANDSCAPE



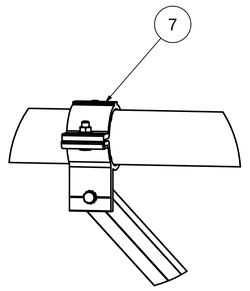
DETAIL A



DETAIL B



DETAIL C



DETAIL D

REGISTERED PROFESSIONAL ENGINEER
RUSSELL N. EMERY
PE–27513
DATE 09/08/2022
NORTH DAKOTA

VECTOR engineers
651 W. GALENA PARK BLVD, STE. 101
DRAPER, UTAH 84020
PHONE (801) 990-1775
www.vectorse.com

VECTOR PROJECT #: U2716.0350.221
ND FIRM LICENSE #: 1051PE

ITEM	PART NUMBER	DESCRIPTION	QTY
14		PANEL	
13	K10469-001	SMR GROUND LUG KIT	
12	K10418-XXX	SMR POP-ON END CLAMP KIT,CLEAR	
11	K10417-XXX	MID CLAMP,SMR POP-ON,CLEAR	
10	K10343-005	2.5" AL PIPE U-CLAMP KIT	
9	K10342-001	2.5" PIPE SPLICE KIT	
8	K10341-002	2.5" PIPE TEE KIT	
7	K10222-001	2.5" PIPE CLAMP KIT	
6	K10219-001	2" AL PIPE CLAMP KIT	
5	A50164-XXX	1.5" SQ. STL TUBE BRACE, L=XXX	
4	A21168-XXX	PIPE, HSS, 2.875" OD X 12 GAUGE,L=XXX	
3	A21165-XXX (REAR)	PIPE, HSS, 2.375" OD X 12 GAUGE,L=XXX	
2	A21165-XXX (FRONT)	PIPE, HSS, 2.375" OD X 12 GAUGE,L=XXX	
1	A20444-XXX	SMR300 RAIL, L=XXX	

MATERIAL: SEE BOM
Third Angle Projection:
GENERAL SPECIFICATIONS:
All Dimensions in inches [millimeters]
Tolerances:
X.XX ±0.01 [0.25mm]
X.XXX ±0.005 [0.10mm]
Unless otherwise specified
Break all sharp edges .010-.020 unless otherwise specified.
DRAWN BY: KYY
DATE: 08/15/2022
CHECKED BY:
APPROVALS:

SunModo Corp.
14800 NE 65TH STREET, VANCOUVER WA 98682

TITLE: PACKET A3
DRAWING NUMBER: D
SCALE:
SHEET 1 of 5

THIS DRAWING IS CONFIDENTIAL PROPERTY OF SUNMODO AND ITS CONTENTS MAY NOT BE DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF SUNMODO CORP.

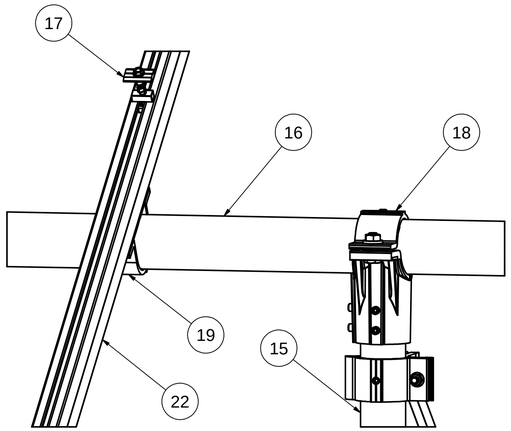
NOTES: UNLESS OTHERWISE SPECIFIED

1. APPROVED RAIL PROFILES - STANDARD PANELS
   A20288-XXX (HR300 RAIL), A20297-001 (END CAP),
   K10343-002 (U-CLAMP KIT);
   A20145-XXX (HR350 RAIL), A20285-001 (END CAP),
   K10343-001 (U-CLAMP KIT).

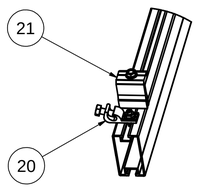
2. APPROVED RAIL PROFILES - OVERSIZE PANELS
   * A20288-XXX (HR300 RAIL), A20297-001 (END CAP),
     K10343-002 (U-CLAMP KIT);
   * A20145-XXX (HR350 RAIL), A20285-001 (END CAP),
     K10343-001 (U-CLAMP KIT).

3. K10224-XXX END CLAMP KIT OR K10299-XXX ADJ.
   END CLAMP KIT.

ALTERNATE(ALT) DETAILS
HR300, HR350 RAIL PROFILES



DETAIL A-ALT



DETAIL C-ALT

REGISTERED PROFESSIONAL ENGINEER
RUSSELL N. EMERY
PE-27513
DATE 09/08/2022
NORTH DAKOTA

VECTOR engineers
651 W. GALENA PARK BLVD. STE. 101 PHONE (801) 990-1775
DRAPER, UTAH 84020 WWW.VECTORAE.COM
VECTOR PROJECT #: U2716.0350.221
ND FIRM LICENSE #: 1051PE

ITEM	PART NUMBER	DESCRIPTION	QTY
22		HELIORAIL.VARIES PER NOTE 1 & 2	
21		END CLAMP KIT. VARIES PER NOTE 3	
20	K10469-003	HR GROUNDING LUG KIT	
19	K10343-XXX	2.5” AL PIPE U-CLAMP KIT	
18	K10341-002	2.5" PIPE TEE KIT	
17	K10180-001	GROUNDING MID-CLAMP KIT WITH T COLLAR BOLT AND GROUNDING BASE	
16	A21168-XXX	PIPE, HSS, 2.875” OD X 12 GAUGE,L=XXX	
15	A21165-XXX	PIPE, HSS, 2.375” OD X 12 GAUGE,L=XXX	

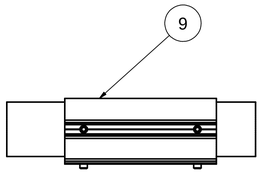
SunModo Corp.

TITLE: PACKET A3

DRAWING NUMBER: D

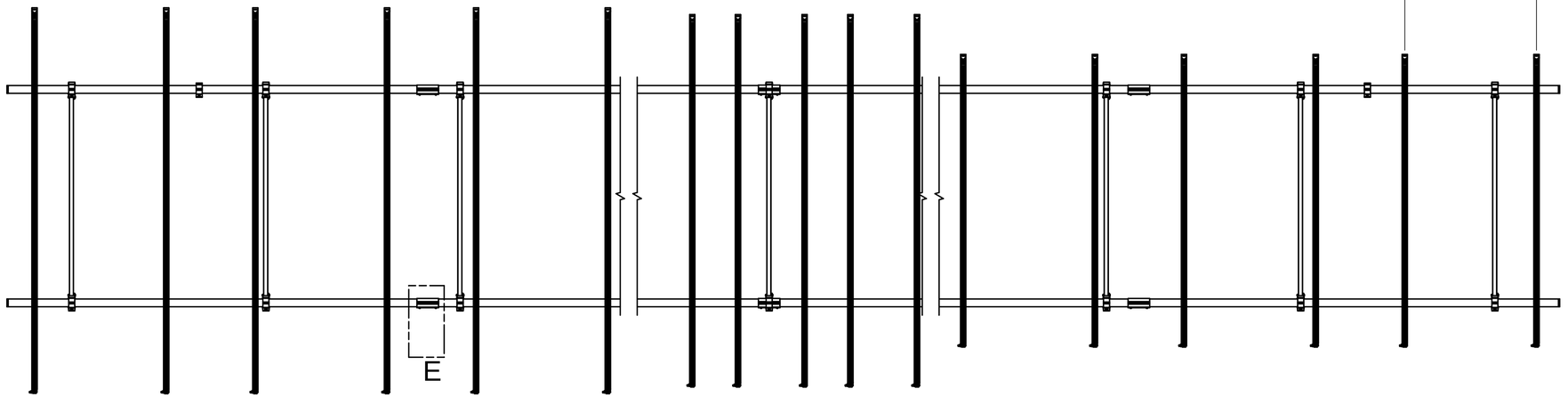
SCALE: | SHEET 2 of 5 | REV

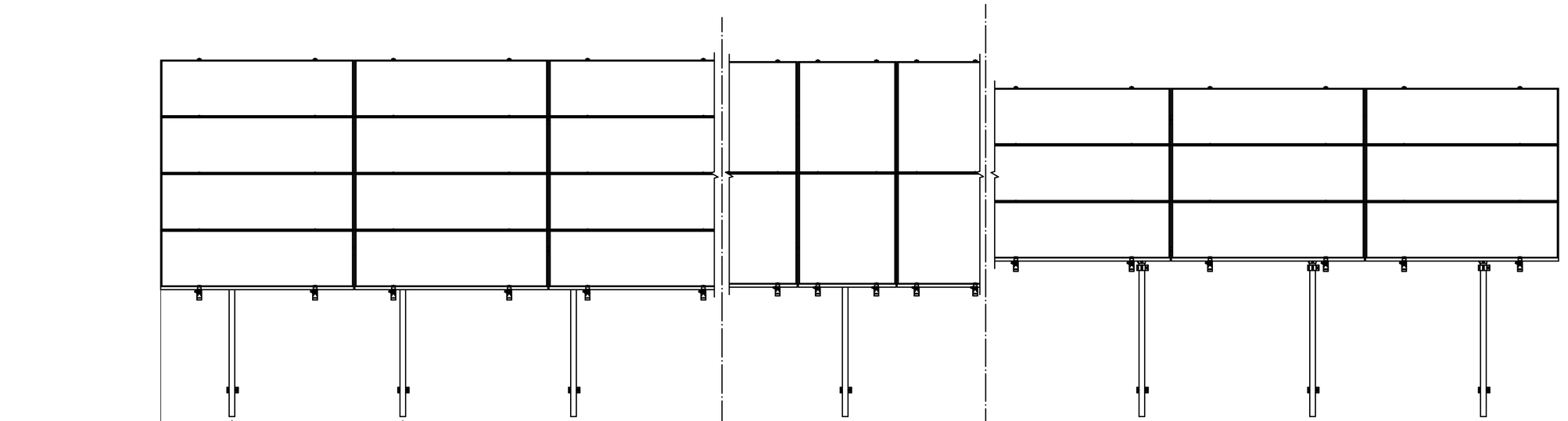
NOTES:
1. DIMENSIONS LABELED AS MAX ARE MAXIMUM ALLOWABLE AND MAY RESULT IN END POSTS BEING OUTSIDE ARRAY EDGES. MAXIMUM DIMENSIONS MAY BE REDUCED IF DESIRED.
2. SEE NOTE 7 OF COVER PAGE FOR PANEL SIZES.



DETAIL E

RAIL SPACING
PER PANEL MANUFACTURER





4L
4-IN-LANDSCAPE

2P
2-IN-PROTRAIT

3L
3-IN-LANDSCAPE

REGISTERED PROFESSIONAL ENGINEER
RUSSELL N. EMERY
PE-27513
DATE 09/08/2022
NORTH DAKOTA

VECTOR ENGINEERS
651 W. GALENA PARK BLVD. STE. 101 DRAPER, UTAH 84020 PHONE (801) 990-1775 WWW.VECTORSE.COM

VECTOR PROJECT #: U2716.0350.221
ND FIRM LICENSE #: 1051PE

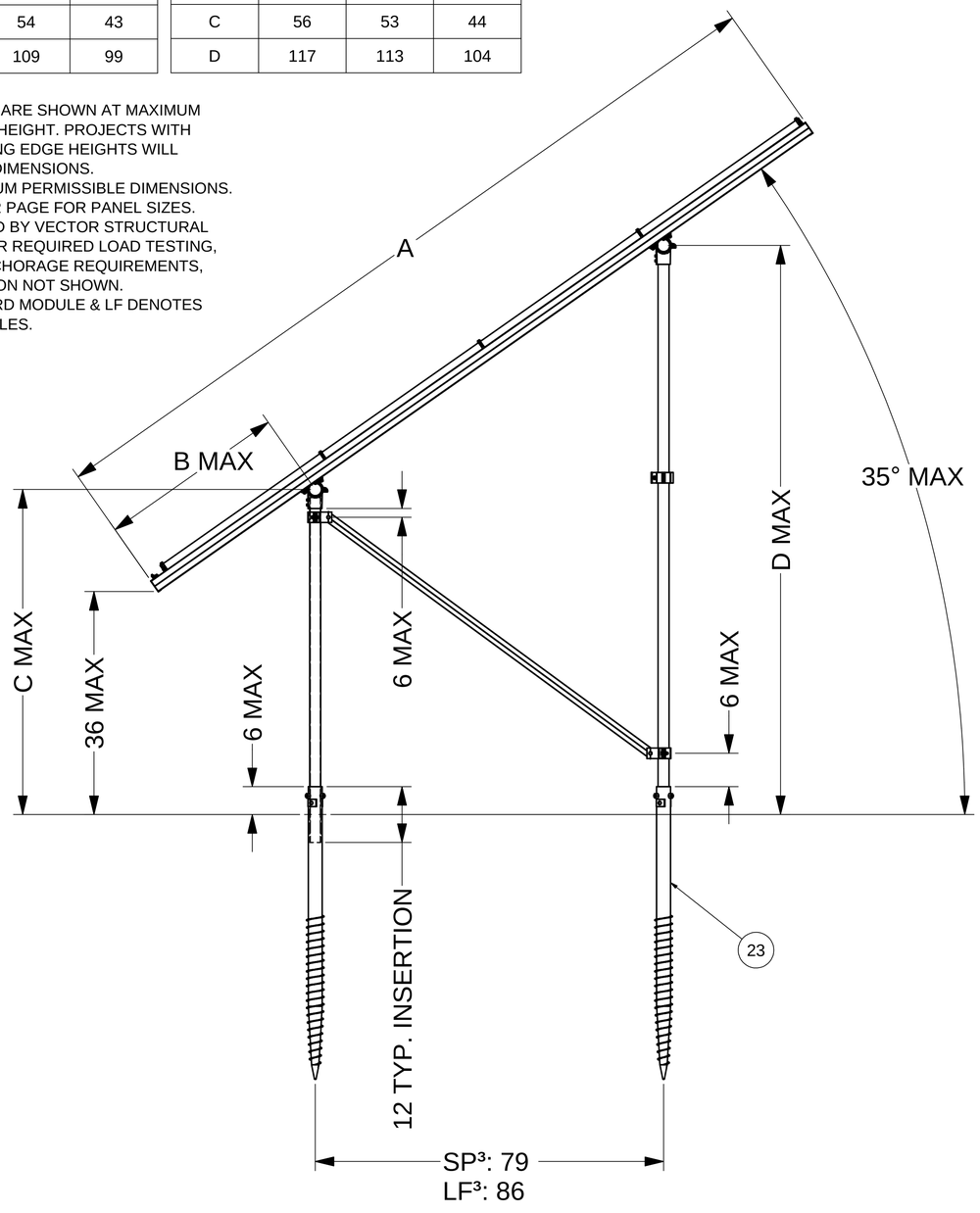
SunModo Corp.	
TITLE	PACKET A3
D	DRAWING NUMBER
SCALE:	SHEET 3 of 5 REV

DIMENSIONS - STANDARD PANEL			
ITEM	**4L**	**2P**	**3L**
A	172	166	130
B	38	35	17
C	55	54	43
D	111	109	99

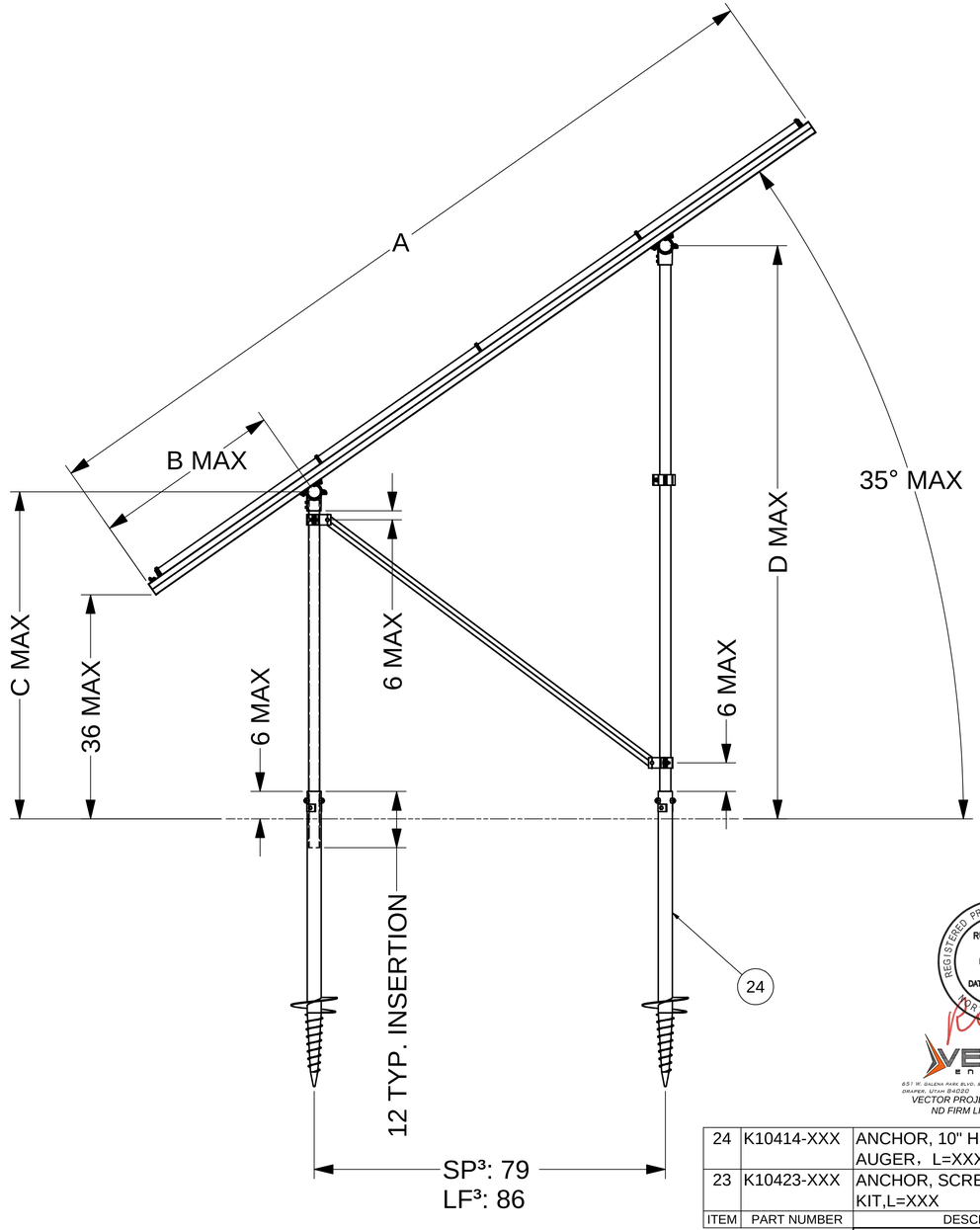
DIMENSIONS - LARGE FORMAT PANEL			
ITEM	**4L**	**2P**	**3L**
A	184	172	140
B	40	34	18
C	56	53	44
D	117	113	104

NOTES

1. DIMENSIONS IN TABLE ARE SHOWN AT MAXIMUM TILT & LEADING EDGE HEIGHT. PROJECTS WITH LOWER TILTS & LEADING EDGE HEIGHTS WILL RESULT IN REDUCED DIMENSIONS.
2. MAX DENOTES MAXIMUM PERMISSIBLE DIMENSIONS.
3. SEE NOTE 7 OF COVER PAGE FOR PANEL SIZES.
4. SEE LETTER PROVIDED BY VECTOR STRUCTURAL ENGINEERING, LLC FOR REQUIRED LOAD TESTING, FOUNDATION AND ANCHORAGE REQUIREMENTS, AND OTHER INFOMATION NOT SHOWN.
5. SP DENOTES STANDARD MODULE & LF DENOTES LARGE FORMAT MODULES.



GROUND SCREW GOUND MOUNT (GSM)⁴



AUGER GROUND MOUNT (AGM)⁴

VECTOR ENGINEERS
651 W. GALENA PARK BLVD. STE. 101 DRAPER, UTAH 84020
PHONE (801) 990-1778
WWW.VECTORSE.COM

VECTOR PROJECT #: U2716.0350.221
ND FIRM LICENSE #: 1051PE

ITEM	PART NUMBER	DESCRIPTION	QTY
24	K10414-XXX	ANCHOR, 10" HELIX SCREW AUGER，L=XXX	
23	K10423-XXX	ANCHOR, SCREW AUGER KIT,L=XXX	

SunModo Corp.

TITLE: PACKET A3

DRAWING NUMBER: D

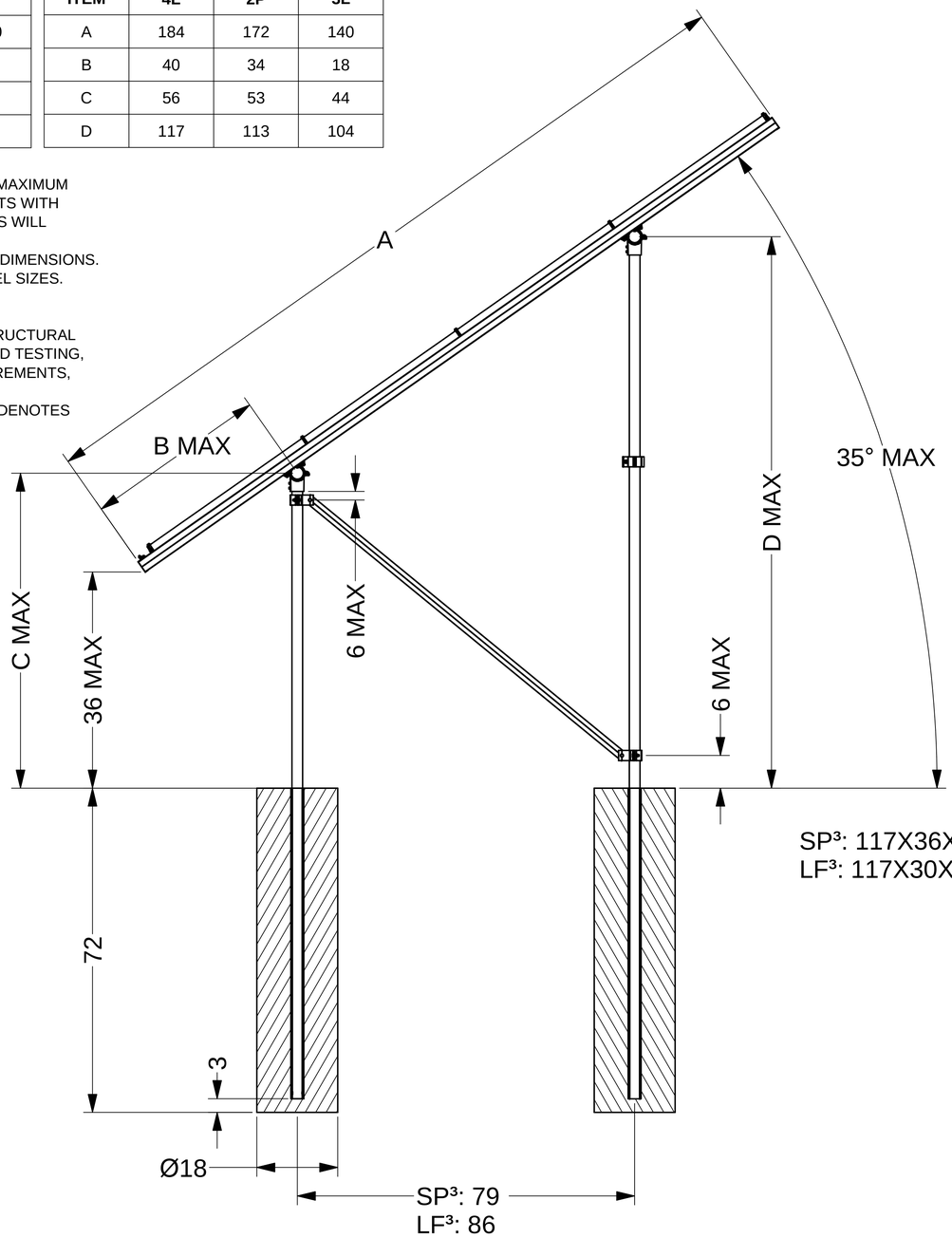
SCALE: | SHEET 4 of 5 | REV

DIMENSIONS - STANDARD PANEL			
ITEM	**4L**	**2P**	**3L**
A	172	166	130
B	38	35	17
C	55	54	43
D	111	109	99

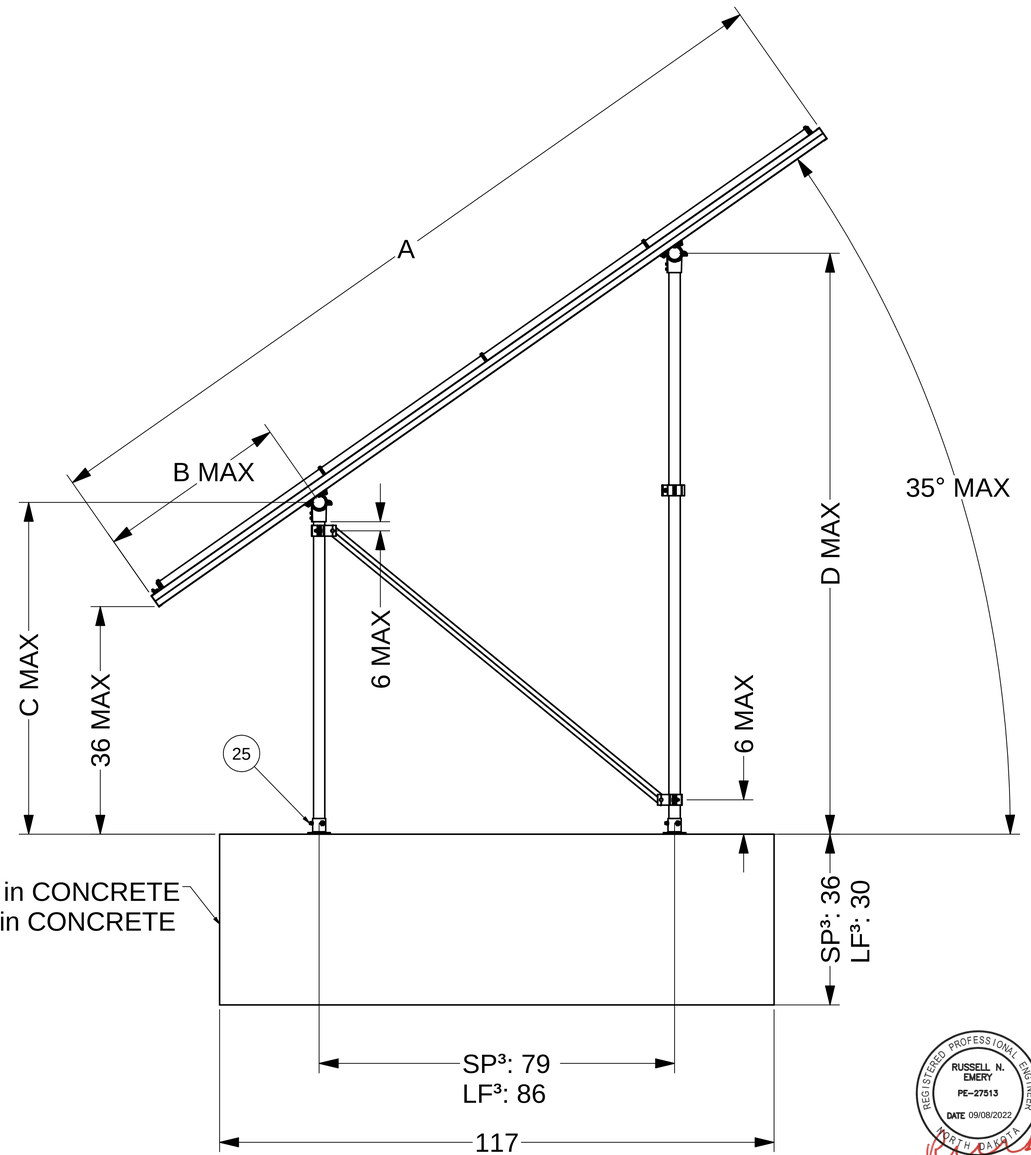
DIMENSIONS - LARGE FORMAT PANEL			
ITEM	**4L**	**2P**	**3L**
A	184	172	140
B	40	34	18
C	56	53	44
D	117	113	104

NOTES

1. DIMENSIONS IN TABLE ARE SHOWN AT MAXIMUM TILT & LEADING EDGE HEIGHT. PROJECTS WITH LOWER TILTS & LEADING EDGE HEIGHTS WILL RESULT IN REDUCED DIMENSIONS.
2. MAX DENOTES MAXIMUM PERMISSIBLE DIMENSIONS.
3. SEE NOTE 7 OF COVER PAGE FOR PANEL SIZES.
4. K10268-005 (2" PIPE BASE KIT) OR K10302-001 (2" PIPE BASE KIT)
5. SEE LETTER PROVIDED BY VECTOR STRUCTURAL ENGINEERING, LLC FOR REQUIRED LOAD TESTING, FOUNDATION AND ANCHORAGE REQUIREMENTS, AND OTHER INFOMATION NOT SHOWN.
6. SP DENOTES STANDARD MODULE & LF DENOTES LARGE FORMAT MODULES.



POST-IN-CONCRETE GROUND MOUNT (PGM)⁵



BALLAST GROUND MOUNT (BGM)⁵

REGISTERED PROFESSIONAL ENGINEER
RUSSELL N. EMERY
PE–27513
DATE 09/08/2022
NORTH DAKOTA

VECTOR engineers
851 W. GLEN PARK BLVD. STE. 101 DRAPER, UTAH 84020
PHONE (801) 990-1775 WWW.VECTORSE.COM

VECTOR PROJECT #: U2716.0350.221
ND FIRM LICENSE #: 1051PE

ITEM	PART NUMBER	DESCRIPTION	QTY
25		POST BASE. VARIES PER NOTE 4	

SunModo Corp.

TITLE: PACKET A3

DRAWING NUMBER: D

SCALE: | SHEET 5 of 5 | REV