

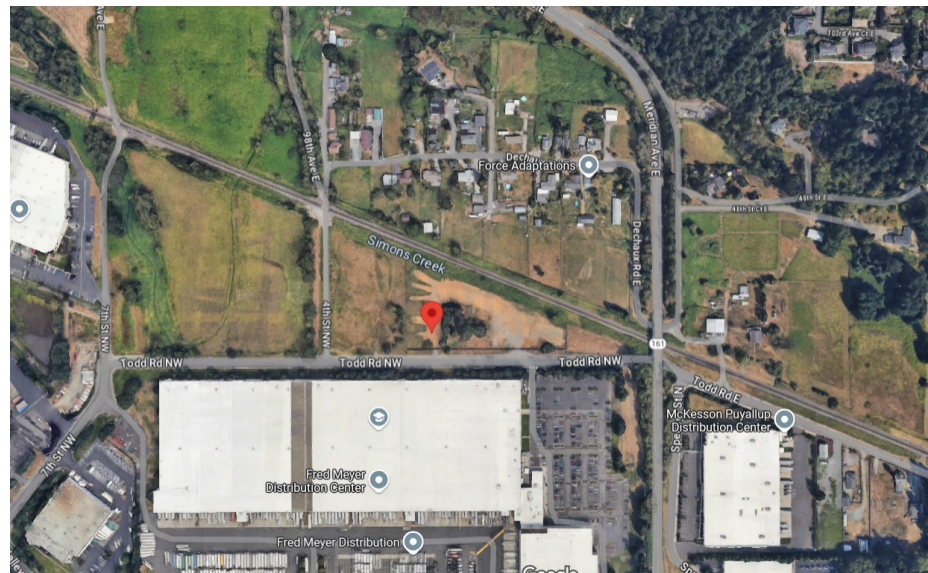
**PSE TODD ROAD
OPERATIONAL TRAINING CENTER
SCOPE OF WORK**
 SYSTEM SIZE: 17.3 kW AC, 15.08 kW DC
 MODULES: (29) SILFAB SIL-520 QM
 INVERTERS: (1)
 SOLAREEDGE SE17.3KUS
 DUAL OPTIMIZERS:
 (29) SOLAREEDGE U650
 RACKING:
 PANELCLAW CLAWFR10

TABLE OF CONTENTS:

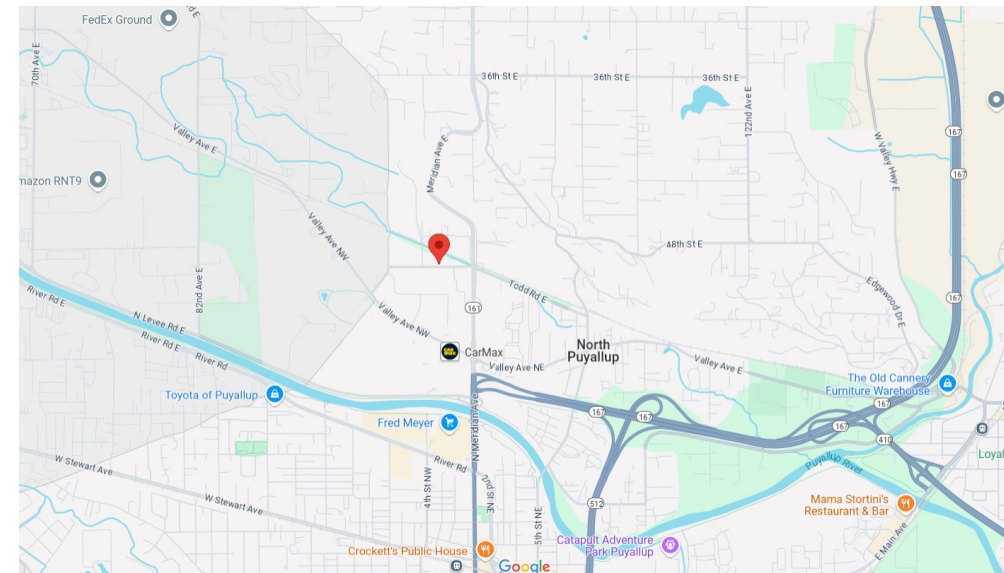
- A0.0 COVER PAGE
- A1.10 SITE OVERVIEW
- A2.10 ROOF LAYOUT
- A3.10 EQUIPMENT ELEVATIONS
- A4.10 RACKING
- A4.11 RACKING ATTACHMENT
- A5.12 RACKING DETAILS
- E1.10 SINGLE LINE
- E2.10 ELECTRICAL CALCULATIONS
- E3.10 CONDUIT & STRINGING PLAN
- E4.10 MONITORING PLAN
- G1.10 AS-BUILT OVERALL
- G1.11 AS-BUILT
- G2.10 OPTIMIZER MAP
- G3.10 PLACARDS
- G3.11 PLACARDS
- G4.10 EQUIPMENT BOM

APPLICABLE CODES AND LISTINGS:

- 2023 NATIONAL ELECTRICAL CODE (NEC)
- 2021 WASHINGTON STATE INT. FIRE CODE (IFC)
- ASCE 7-16
- UL 61730 (MODULES)
- UL 1730 (MODULES)
- UL 1741 (INVERTERS)
- UL 2703 (RACKING & GROUNDING)

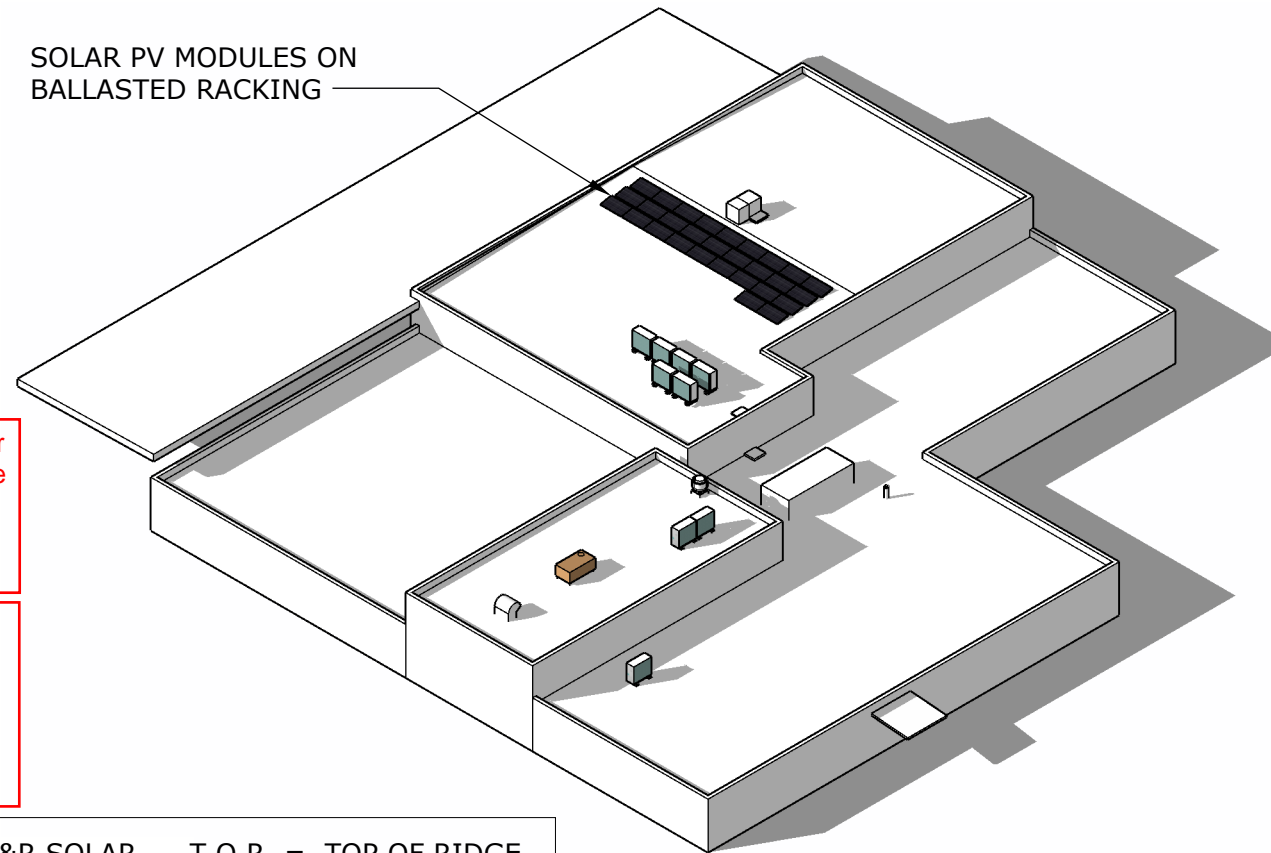


SATELLITE MAP



VICINITY MAP

SOLAR PV MODULES ON BALLASTED RACKING



Approval of submitted plans is not an approval of omissions or oversights by this office or non compliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable codes and regulations of the local government.

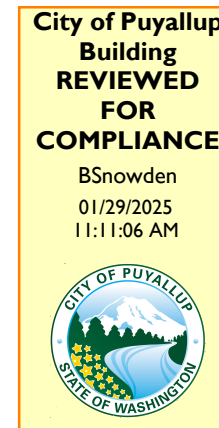
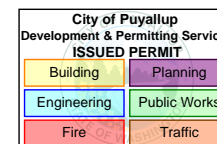
The approved construction plans, documents, and all engineering must be posted on the job at all inspections in a visible and readily accessible location.

Full sized legible color plans are required to be provided by the permittee on site for inspection.

SYMBOL LEGEND

	PHOTOVOLTAIC MODULE		CIRCUIT CALLOUT		NON-FUSED DISCONNECT
	RAPID SHUTDOWN OR OPTIMIZER UNIT		EQUIPMENT CALLOUT		FUSED DISCONNECT
	MICRO INVERTER		METER		BREAKER
	PV INVERTER W/ INTEGRATED DC DISCONNECT		JUNCTION BOX		AVAILABLE FAULT CURRENT
			GROUNDING ELECTRODE		

1 SITE ISO VIEW



A&R SOLAR
 9700 Martin Luther King Jr Way S.
 Seattle, WA 98118 (206)707-9937
PRSOL20250112

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**PSE TODD ROAD
OPERATIONAL TRAINING CENTER**
 17.3 kW AC, 15.08 kW DC

PREPARED FOR:
 PSE TODD ROAD
 OPERATIONAL TRAINING CENTER
 325 TODD ROAD NW, PUYALLUP, WA 98371

REVISIONS

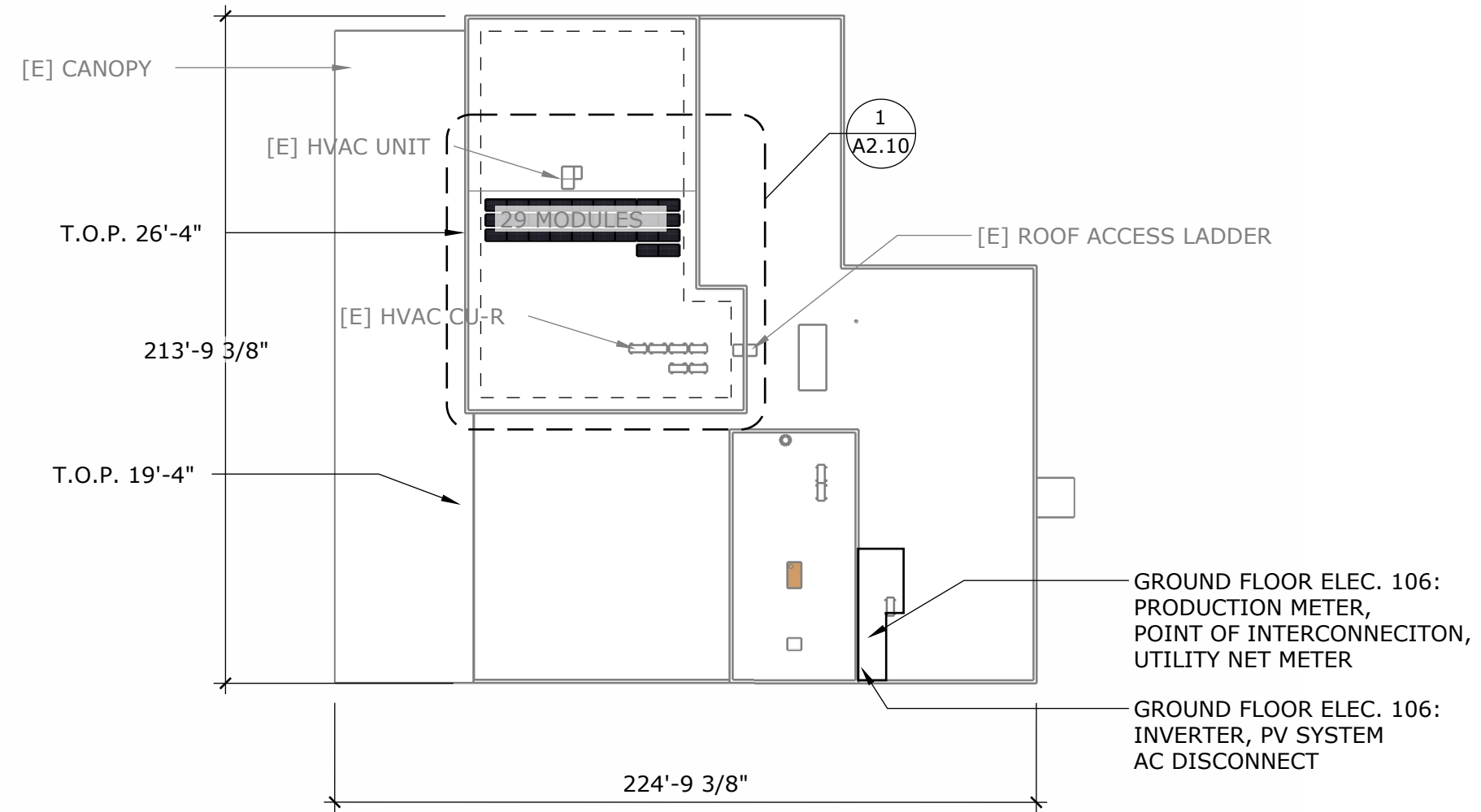
REV. #	DATE:
0	Dec 20, 2024
1	Jan 17, 2025

DESIGNED: DANIEL H.

PM: GAGE WEAIVING
 CELL: (253) 359-3509

A0.0 COVER PAGE

[2021 Washington State Building Code, section 1505.9]
Rooftop Mounted Photovoltaic (PV) Panel Systems
Rooftop mounted photovoltaic (PV) panel systems shall be tested, listed and identified with a fire classification in accordance with UL 2703. Listed systems shall be installed in accordance with the manufacturer's installation instructions and their listing. The fire classification shall comply with Table 1505.1 based on the type of construction of the building.



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**PSE TODD ROAD
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17.3 kW AC, 15.08 kW DC

PREPARED FOR:
PSE TODD ROAD
OPERATIONAL TRAINING CENTER
325 TODD ROAD NW, PUYALLUP, WA 98371

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A1.10 SITE OVERVIEW

1 SITE OVERVIEW
SCALE: 1" : 50'



City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

MIN. SETBACK FROM EAVE:	48"
ROOF MEMBRANE MAKE/ MODEL/ TYPE/ COLOR	JOHNS MANVILLE
	JM TPO - 60 MIL
	TPO GREY
ROOF SLOPE	2°(.25:12)
MODULE TILT	11°
ROOF AREA	41,763 ft ²
ARRAY AREA	953 ft ²
ARRAY TO ROOF COVERAGE	2.3%
ARRAY AZIMUTH	180°

Layout is compliant with the 2021 Washington State Fire Code:

1205.3.1 Perimeter pathways:

6-foot clear perimeter around the edges of the roof.

(Exception) If either axis of the building is 250 feet or less, reducing clear perimeter pathway to 4 -feet is acceptable.

1205.3.2 Interior Pathways between array sections:

[1. Pathways at intervals 150-feet or less throughout the length & width of the roof]

[2. A straight-line pathway 4-feet to roof standpipes or ventilation hatches]

[3. A 4-foot pathway around roof access hatches, including one 4-foot pathway to a parapet or roof edge]

PRSOL20250112

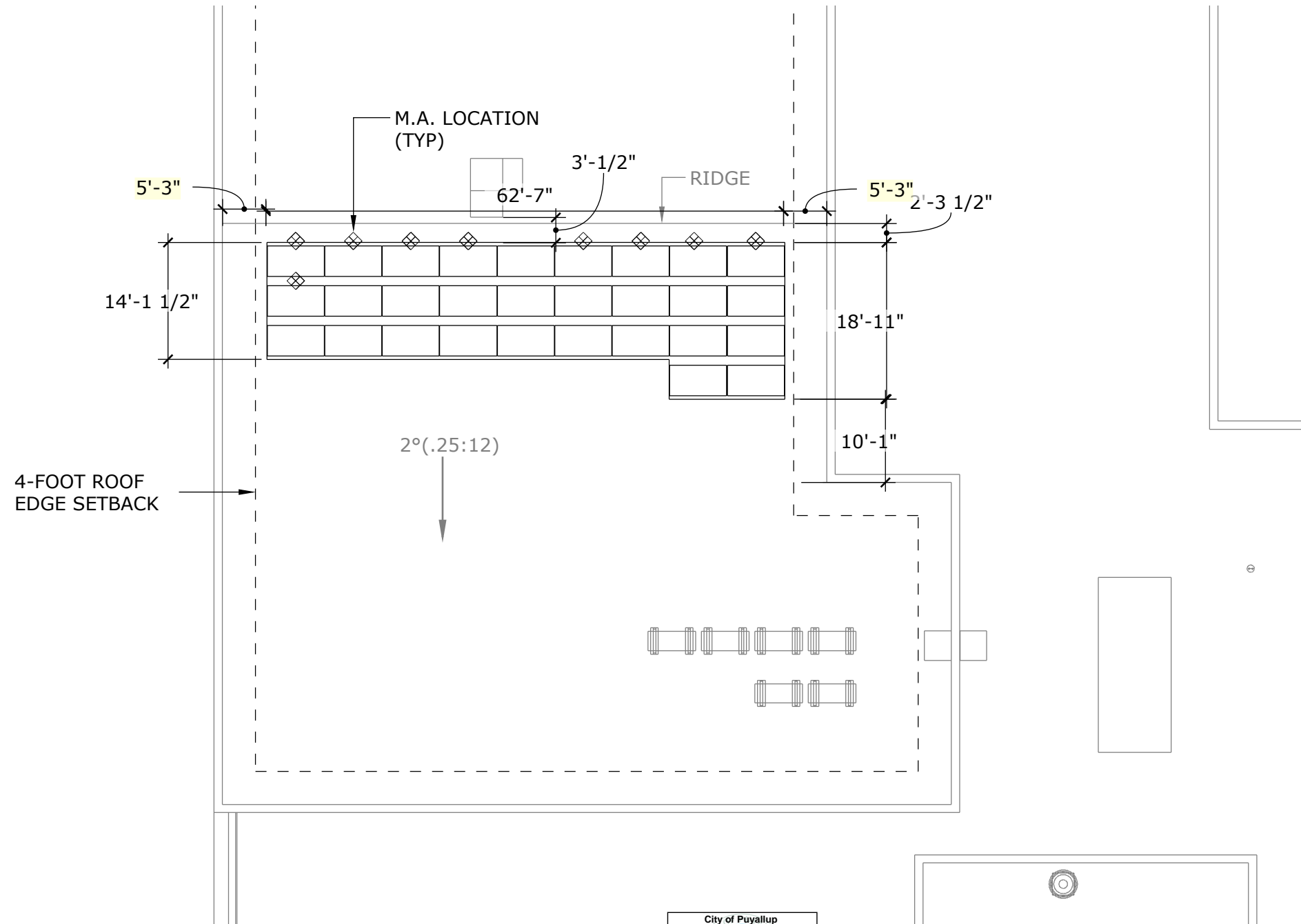


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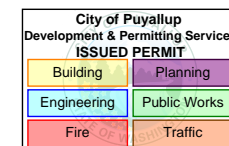


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1 ROOF LAYOUT
SCALE: 1/16" : 1'



**PSE TODD ROAD
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17.3 kW AC, 15.08 kW DC

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REVISIONS	
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0	Dec 20, 2024

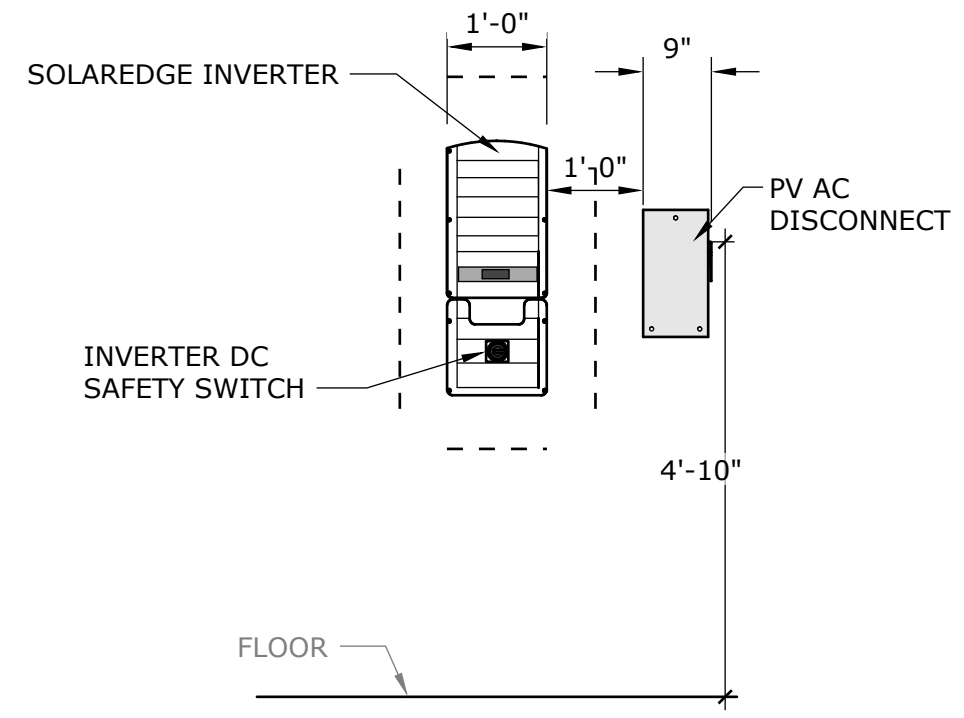
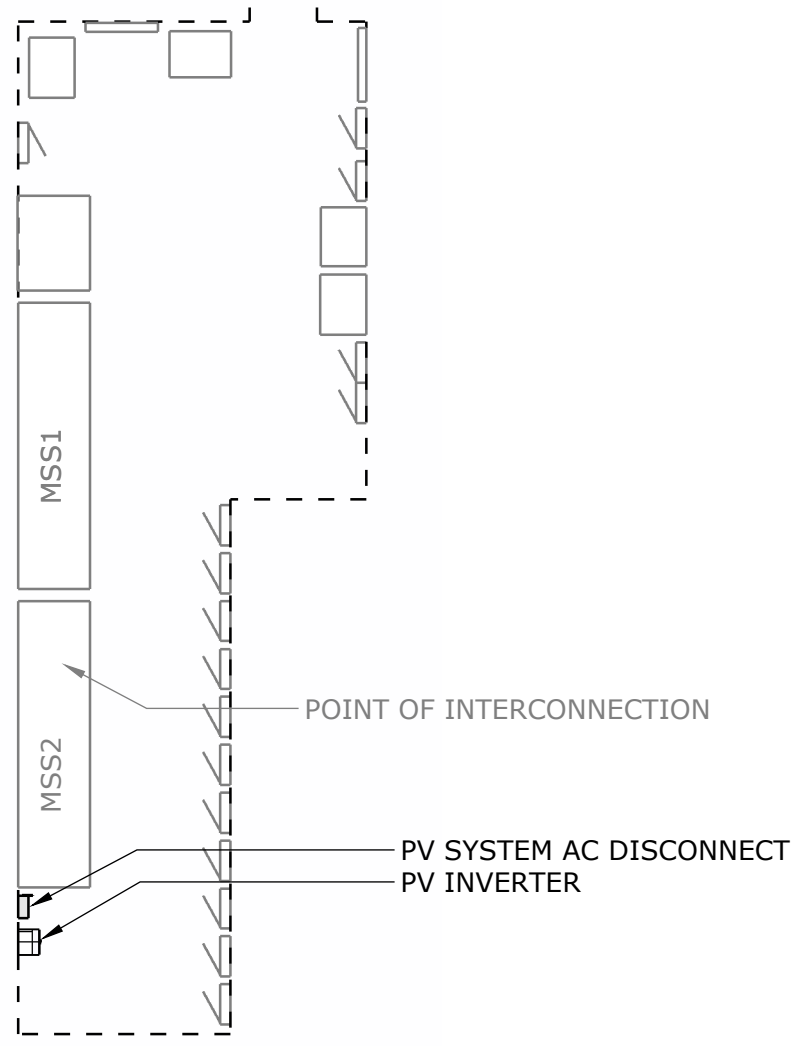
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A2.10 ROOF LAYOUT

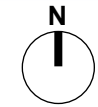
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1 MAIN ELECTRICAL ROOM LAYOUT
SCALE: 1/8" : 1'



2 SOLAREEDGE COMMERCIAL INVERTER ELEVATION (120/208V)
SCALE: 1/2" : 1'

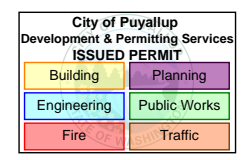
**PSE TODD ROAD
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PREPARED FOR:
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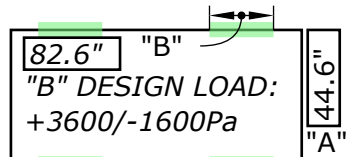
A3.10 EQUIPMENT ELEVATIONS



LOAD ASSUMPTIONS:

- WIND EXPOSURE: "C"
- WIND SPEED (3-SECOND GUST): 98 MPH
- SNOW LOAD: 25 PSF

- ROOF TYPE: TPO
- RACKING WEIGHT: 526 LBS
- BALLAST WEIGHT: 2,543 LBS
- MODULE WEIGHT: 1,676 LBS
- TOTAL WEIGHT: 4,745 LBS
- DISTRIBUTED LOAD: 4.98 PSF



Silfab SIL-520 QM	44.6 x 82.6
Clamp Zone "A"	N/A"
Clamp Zone "B"	14.75 - 16.5"
Min. Gap Side "A"	0.375"
Min. Gap Side "B"	0.375"

ARRAY 1
PANELCLAW CLAW FR10

PRSOL20250112

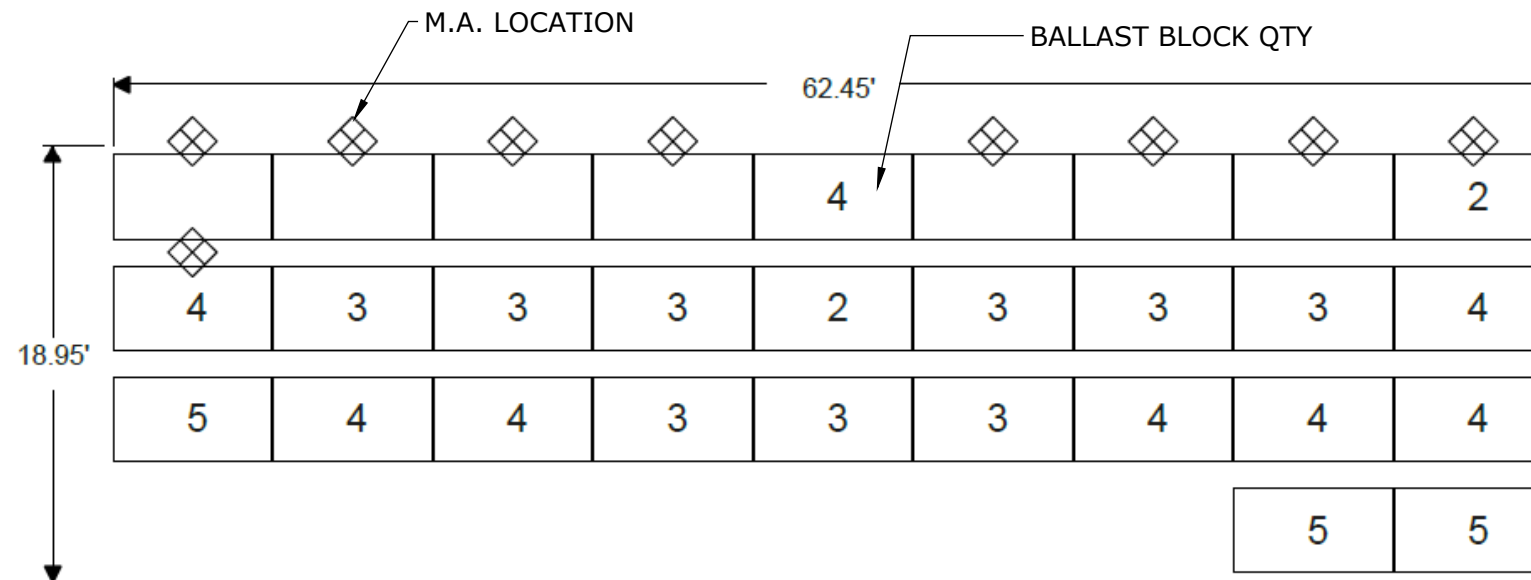


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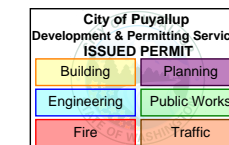
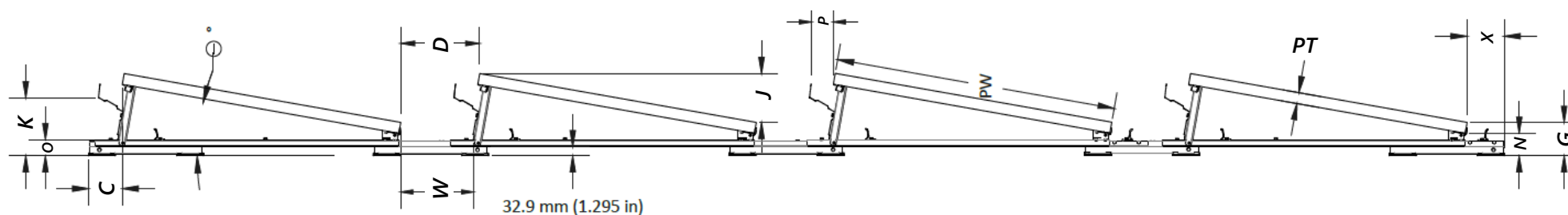


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1 BALLAST MAP
SCALE: NTS



INSTALLATION MEASUREMENTS					
		AEBE	S	L	CAM SPACING*
UNITS	mm	375	1217	900	59
	inches	14.7638	47 15/16	35 7/16	2 5/16

*CAM SPACING SHOWN ON ASSEMBLIES PAGE.

MODULE DIMENSIONS				
		PL	PW	PT
UNITS	mm	2098	1133	35
	inches	82.60	44.61	1.38

INSTALLED ARRAY DIMENSIONS																		
		A	B	C	D	G	J	K	M	N	O	P	R	W	X	Theta (DEG)	D/J (#:1)	G.C.R.*
UNITS	mm	2117	1470	123	351	116	177	211	1119	82	61	87	405	335	136	8.99	1.98	0.77
	inches	83.35	57.88	4.84	13.82	4.58	6.97	8.30	44.06	3.21	2.39	3.42	15.9449	13.21	5.35	8.99	1.98	0.77

* G.C.R. = (PW) / B

3 INSTALLATION DIMENSIONS
Scale: NTS

PSE TODD ROAD
OPERATIONAL TRAINING CENTER
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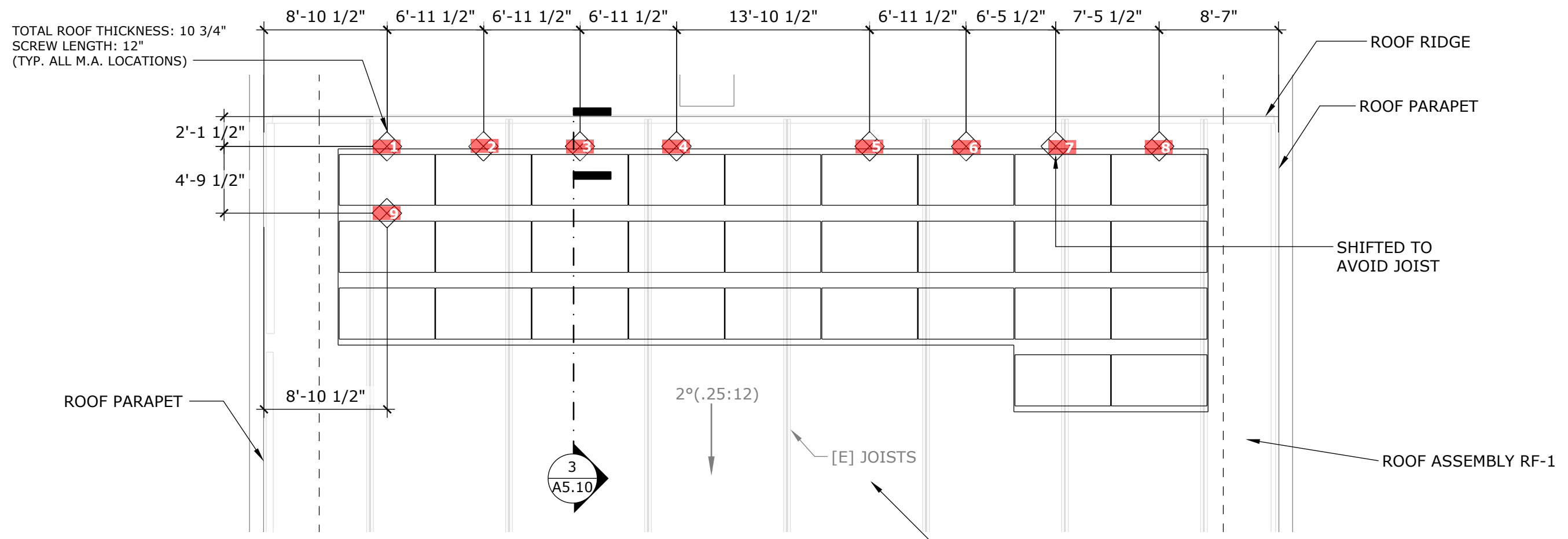
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A4.10 RACKING

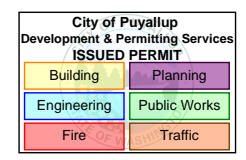


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#	SCREW LENGTH (INCHES)	SCREW QTY
1	12	4
2	12	4
3	12	4
4	12	4
5	12	4
6	12	4
7	12	4
8	12	4
9	12	4
		36

1 MECHANICAL ATTACHMENT MAP
SCALE: 1/8" : 1'



PSE TODD ROAD OPERATIONAL TRAINING CENTER
17.3 kW AC, 15.08 kW DC

PREPARED FOR:
PSE TODD ROAD OPERATIONAL TRAINING CENTER
325 TODD ROAD NW, PUYALLUP, WA 98371

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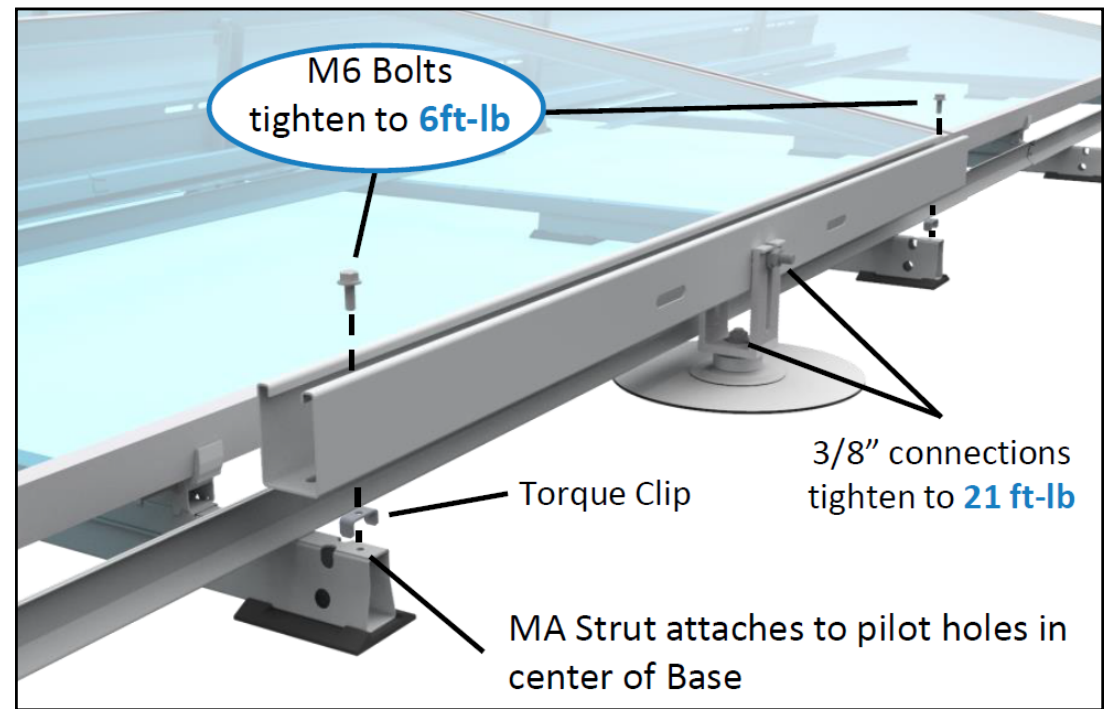
A4.11 RACKING ATTACHMENT



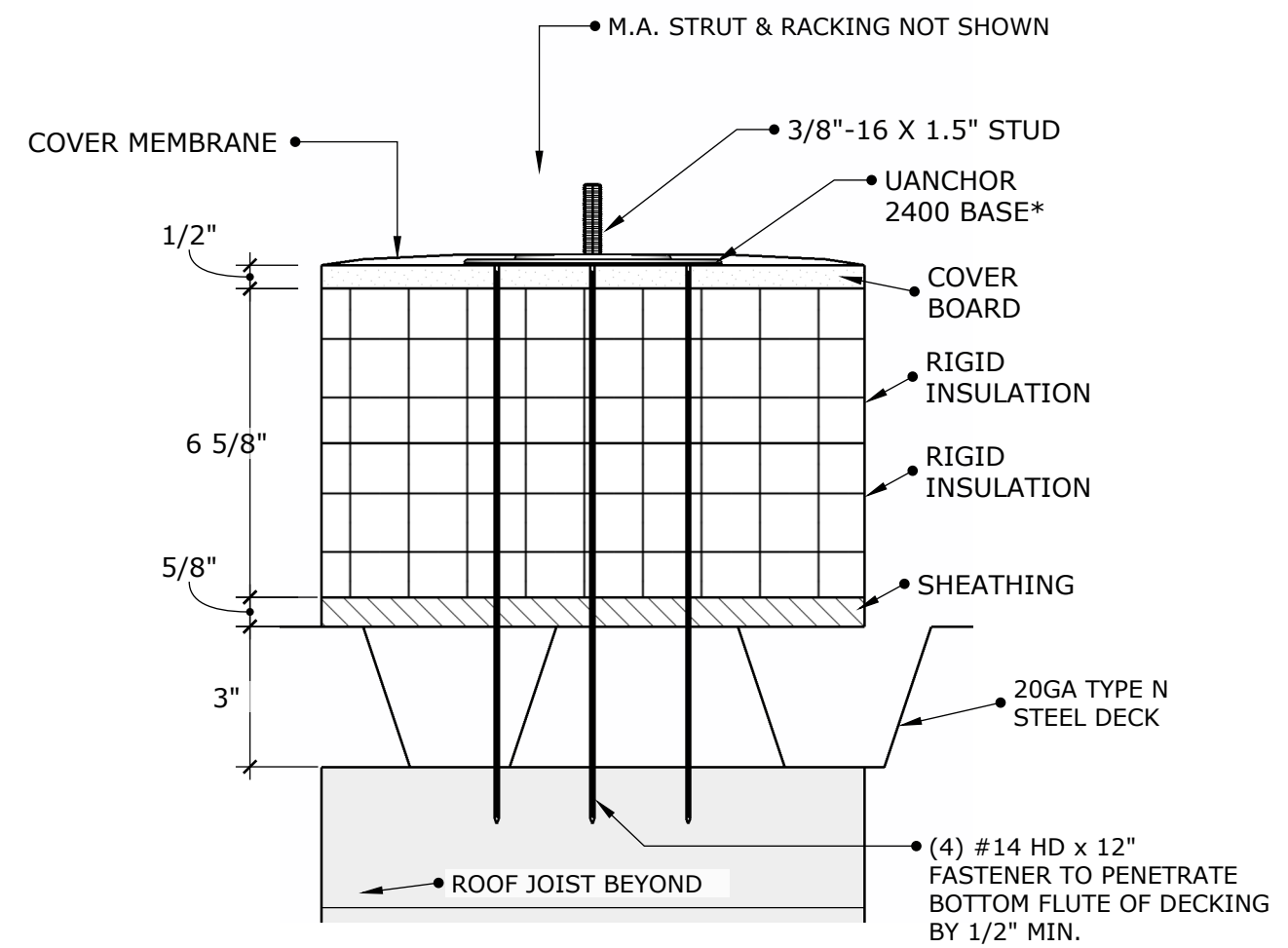
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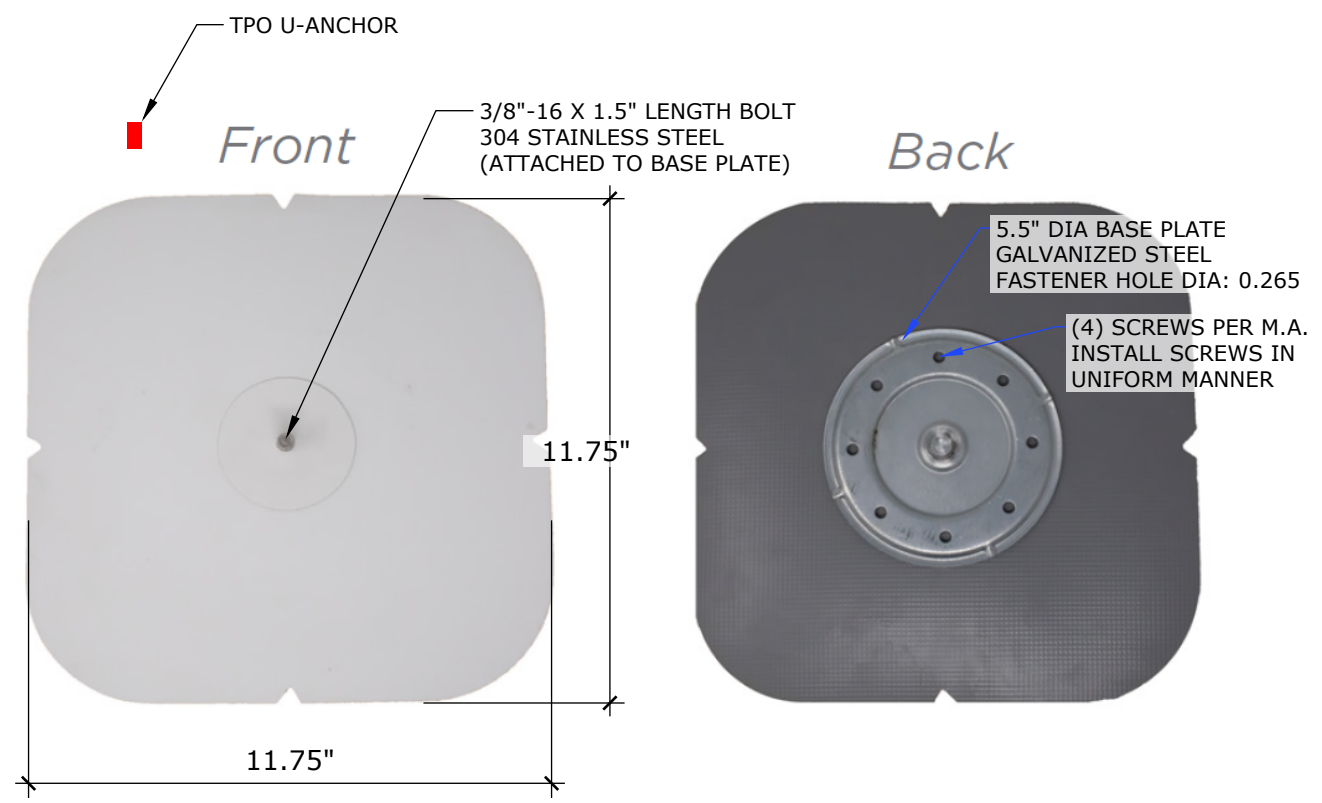
PREPARED FOR:
 PSE TODD ROAD OPERATIONAL TRAINING CENTER
 325 TODD ROAD NW, PUYALLUP, WA 98371



1 ATTACHMENT DETAIL
 SCALE: NTS

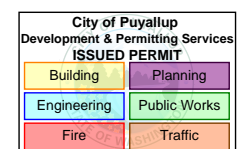


3 UANCHOR U-2400 MECHANICAL ATTACHMENT
 SCALE: 3" = 1'-0"



2 EQUIPMENT DETAIL
 SCALE: NTS

UANCHOR U2400 TPO



REVISIONS	
REV. #	DATE:
0	Dec 20, 2024

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 PM: GAGE WEAVING
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A5.10 ATTACHMENT DETAIL

PRSOL20250112



THIS DRAWING HAS BEEN PREPARED BY OTHERS AND REVIEWED BY: CARUSO TURLEY SCOTT, INC. CONSULTING STRUCTURAL ENGINEERS FOR CORRECTNESS OF STRUCTURAL ITEMS ONLY CTS PROJECT NUMBER 24832428 1-1

panelclaw logo and RACKING CONSTRUCTION SET information: 1600 OSGOOD ST. SUITE 2023 NORTH ANDOVER, MA 01845 TEL: 978.688.4900 www.panelclaw.com

ALL INFORMATION CONTAINED WITHIN THIS DOCUMENT IS PROPERTY OF PANELCLAW, INC. THE PURPOSE OF THIS DOCUMENT IS TO FACILITATE THE INSTALLATION OF PANELCLAW SOLAR PHOTOVOLTAIC MOUNTING SYSTEMS. DO NOT COPY OR DISTRIBUTE WITHOUT PERMISSION.

Revision table with columns: REV, DESCRIPTION, DATE, CHECK. Includes entries for PSE Todd Road Rev. 0 through Rev. 3.

Scale bar showing 0", 1/2", 1", 2" and text: ORIGINAL SIZE 36"X24" SHEET SIZE ARCH "D"

PREPARED FOR: AR Solar SPC

PROJECT: PSE Todd Road

LOCATION: 325 Todd Road Northwest, Puyallup, WA, USA

SHEET TITLE: COVER SHEET

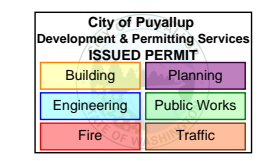
REVISION: 3 SHEET: PC-1

SHEET INDEX table with columns: NO., DESCRIPTION. Lists sheets PC-1 through PC-9.

GENERAL NOTES:

- 1. ALL SITE, PROJECT, AND BUILDING DETAILS ARE PROVIDED BY CUSTOMER OR GENERATED VIA SATELLITE IMAGERY FROM INFORMATION PROVIDED BY CUSTOMER. PANELCLAW IS NOT RESPONSIBLE FOR SITE INACCURACIES THAT COULD LEAD TO CHANGES TO THESE DRAWING DETAILS AND ARRAY LAYOUT CONFIGURATIONS. ALL INFORMATION CONTAINED WITHIN THESE DOCUMENTS ARE TO BE FIELD VERIFIED BY CUSTOMER AND INSTALLER. ANY CHANGES OR MODIFICATIONS TO THESE DOCUMENTS, CONTAINED INFORMATION, OR FINAL ARRAY AND MOUNTING SYSTEM INSTALLATIONS MUST BE SUBMITTED TO PANELCLAW AND OTHER PROJECT AUTHORITIES FOR APPROVAL.
2. REFER TO AND FOLLOW THE APPROPRIATE PANELCLAW INSTALLATION MANUALS AND PROCEDURES DURING THE INSTALLATION PROCESS. NOT FOLLOWING SUCH PROCEDURES AND METHODS COULD RESULT IN DAMAGE TO THE COMPONENTS OR MAY VOID THE PRODUCT WARRANTY.
3. ARRAY SETBACKS: ALL ARRAYS ARE REQUIRED TO BE SETBACK 4-FEET FROM ALL ROOF EDGES UNLESS OTHERWISE SPECIFIED AND CALLED OUT ON THE ARRAY DIAGRAMS ON THIS PAGE OR ON ADDITIONAL ARRAY BALLAST PAGES
4. REFER TO THE SPECIFIC ARRAY BALLAST SHEETS FOR BALLASTING REQUIREMENTS BASED ON THE PROVIDED SITE INFORMATION
5. SYSTEM PSF INCLUDES ALL PANELCLAW RACKING COMPONENTS, MECHANICAL ATTACHMENTS (IF APPLICABLE), PV MODULE AND BALLAST BLOCKS. FOR MAXIMUM SYSTEM POINT LOAD SUMMARY (PLS), REFER TO CALCULATIONS.
6. PANELCLAW AND/OR PANELCLAW CONSULTING ENGINEERS ARE NOT RESPONSIBLE FOR DETERMINING THE ADEQUACY OF THE STRUCTURE TO SUPPORT LOADS IMPOSED BY THE ARRAY AND MOUNTING SYSTEM. SUPPORT STRUCTURE TO BE CHECKED BY OTHERS
7. ALWAYS ALLOW A MINIMUM OF 6" CLEARANCE BETWEEN NEIGHBORING SUBARRAYS, 6" BETWEEN SUBARRAYS AND ALL FIXED ROOF OBJECTS AND 4' BETWEEN SUBARRAYS AND ROOF EDGES. REFER TO LOCAL FIRE CODES AND ELECTRICAL CODES FOR ADDITIONAL REQUIREMENTS WHICH MAY GOVERN DESIGN. SUBARRAYS THAT USE A SEISMIC ANALYSIS METHOD OF DELTA MPV PREDICTED MOVEMENT HAVE THEIR OWN CLEARANCE REQUIREMENTS. REFER TO THE BALLAST LAYOUT SHEETS WITHIN THIS DOCUMENT FOR DETAILS. REFER TO THE BALLAST LAYOUT SHEETS WITHIN THIS DOCUMENT FOR DETAILS.
8. BALLAST BLOCK DIMENSIONS MUST CONFORM TO THE FOLLOWING SPECIFICATIONS: 3-3/4" THICK MAX., 7-5/8" ± 1/8" WIDTH, 15-5/8" ± 1/8" LENGTH.
9. IF AN ARRAY CLEARANCES TABLE APPEARS BELOW ON THIS PAGE, THE DESIGN UTILIZES THIRD PARTY SEISMIC NON-LINEAR RESPONSE ANALYSIS TO ESTIMATE MAXIMUM ARRAY SEISMIC DISPLACEMENT. THE PREDICTED MOVEMENT IS ONLY AN ESTIMATE. PANELCLAW IS NOT RESPONSIBLE OR LIABLE FOR ANY DAMAGES OR COSTS ASSOCIATED WITH PV ARRAY MOVEMENT INCLUDING MOVEMENT IN EXCESS OF THE CLEARANCES NOTED IN THIS DOCUMENT OR ANY REQUIREMENT TO REPOSITION THE ARRAYS IF MOVEMENT OCCURS.
10. DEFLECTORS MUST BE INSTALLED WHEN WINDS ARE EXPECTED TO EXCEED APPROX. 25% OF WIND SPEED DOCUMENTED IN SITE DESIGN CRITERIA TABLE. DEFLECTORS ARE REQUIRED ON ALL MODULES UNLESS OTHERWISE NOTED ON BALLAST LAYOUT PAGES.

Site Design Criteria - Flat Roof PV System Basis of Design table with columns: Parameter, Value. Includes Roof Live Load, Ground Snow Pg, Wind Design Data, Earthquake Design Data, and Design Code.

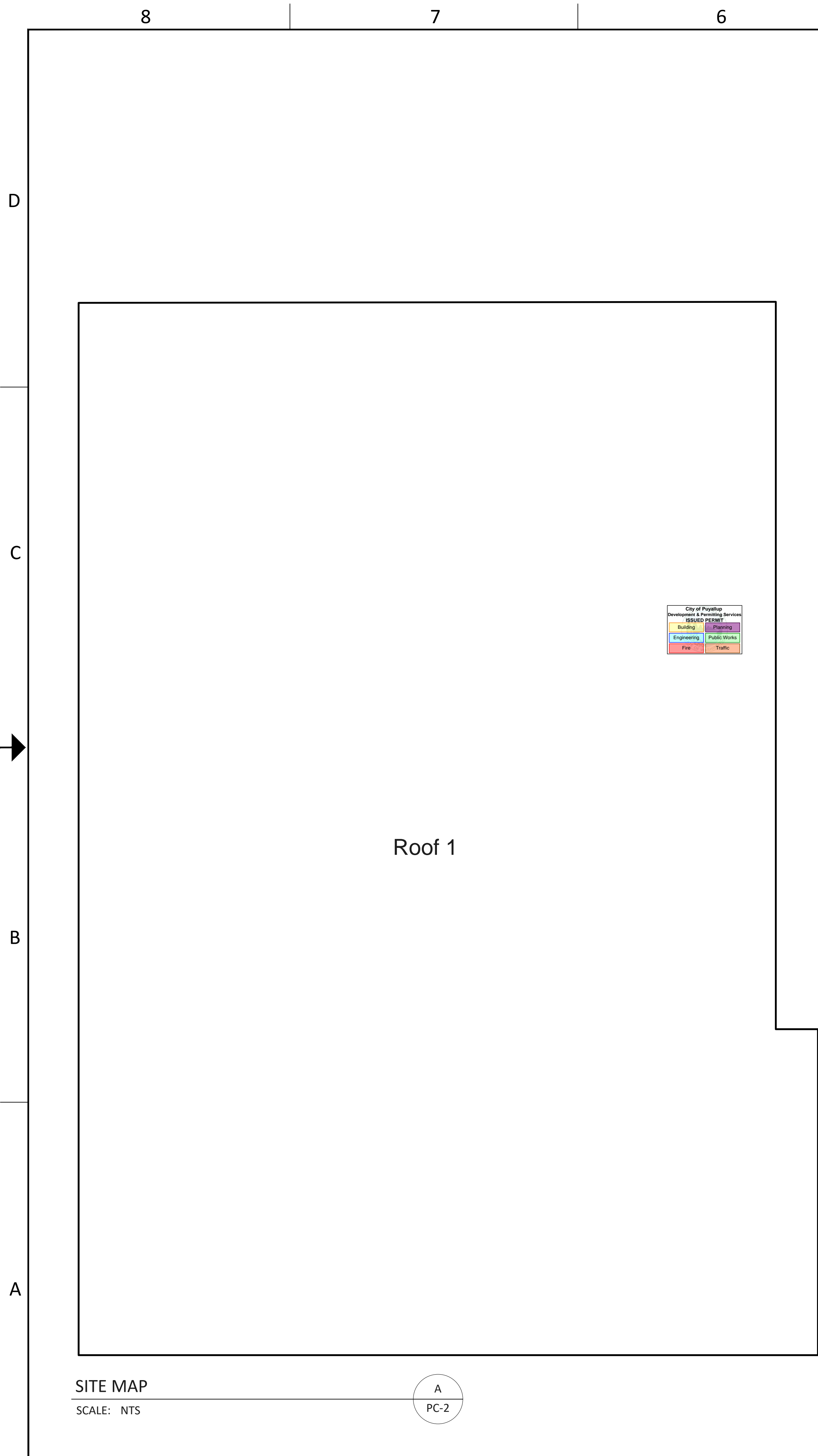


AERIAL PHOTO / SITE DIAGRAM

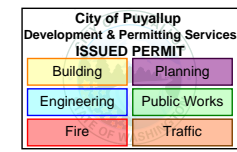
THIS CONSTRUCTION SET PROVIDES THE RACKING LAYOUT FOR ALL ARRAYS WITH NUMBER OF BALLAST BLOCKS AND/OR MECHANICAL ATTACHMENTS BASED ON THE APPROVED STRUCTURAL CALCULATIONS FOR THE COMPLETED INSTALLED CONDITION OF THE SOLAR ARRAY. THE INSTALLER IS RESPONSIBLE FOR THE SAFETY AND CARE OF THE ARRAY DURING ALL PHASES OF INSTALLATION. THEREFORE, THE INSTALLER MUST MONITOR THE WEATHER FORECAST AND TAKE NECESSARY PRECAUTIONS (SEE GENERAL NOTE #10) TO TEMPORARILY SHORE/BRACE ALL ARRAYS DURING CONSTRUCTION UNTIL INSTALLATION IS COMPLETED IN CONFORMANCE WITH THIS APPROVED CONSTRUCTION SET AND THE PRODUCT INSTALLATION MANUAL (SEE GENERAL NOTE #2). THE INSTALLER HAS SOLE RESPONSIBILITY FOR THE MEANS, METHODS, AND TECHNIQUES OF CONSTRUCTION OF THE SOLAR ARRAY FOR COMPLIANCE WITH LAWS, REGULATIONS, AND CODES, AND FOR THE SAFETY OF CONSTRUCTION APPLICABLE TO THIS WORK.

APPROVED FOR CONSTRUCTION

Overall drawing frame with grid lines 1-8 and A-D, and various annotations.



SITE MAP
SCALE: NTS



Roof 1

PROJECT SUMMARY	
MODULE TYPE	SILFAB SIL-520 QM
MODULE DIMENSIONS (IN.)	82.60 X 44.61 X 1.38
NUMBER OF MODULES	29
MODULE WATTAGE (W STC)	520
SYSTEM SIZE (kW STC)	15.08
SYSTEM WEIGHT (LB)	5190
SYSTEM AREA (SQ. FT.)	953
AGGREGATE SYSTEM LOAD (PSF)	5.45
NUMBER OF ARRAYS	1
ARRAY TILT (DEG)	8.99

PR SOL20250112

PROJECT PART QUANTITY		
ITEM	PART NUMBER	QTY
Base	500050203	76
BASE, 03, CFR		
Module Connector	500050704	58
MODULE CONNECTOR, 1150, 10D, CFR		
Rail	2000695	96
RAIL, CFR		
Cam	5000500	58
CAM, 10D, CFR		
Cam Claw	2000673	58
CAM CLAW, CFR		
Deflector	200088703	29
DEFLECTOR, 10D, 2100, CFR		
Bolt	2000697	315
BLT, HEX FLG, TRI, M6X16, GR8.8, PATCH		
Base Pad	2000678	0
PAD, BASE, CFR		
CONCRETE MASONRY UNIT	N/A	92
BLOCK, CONCRETE, 32.6 LB - X in x 8 in x 16 in NOMINAL, PARTNER SUPPLIED, SEE INSTALLATION MANUAL		

MECHANICAL ATTACHMENT PART QUANTITY		
ITEM	PART NUMBER	QTY
MA Hardware Kit	5000423	1
HW KIT, MA STRUT, 2500, CFR		
MA Strut	2000830	7
MA STRUT, CFR		
Mechanical Attachment	TBD	7
To Be Determined (TBD)		
TOTAL MECHANICAL ATTACHMENT COUNT		7



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CARUSO TURLEY SCOTT, INC.
CONSULTING STRUCTURAL ENGINEERS
FOR CORRECTNESS OF STRUCTURAL ITEMS ONLY
CTS PROJECT NUMBER 24832428 1-1

panelclaw
RACKING CONSTRUCTION SET
1600 OSGOOD ST. SUITE 2023
NORTH ANDOVER, MA 01845
TEL: 978.688.4900
www.panelclaw.com

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REV	DESCRIPTION	DATE	CHECK
0	PSE Todd Road Rev. 0		
1	PSE Todd Road Rev. 0 - AE Edits	2024-10-16	DH
2	PSE Todd Road Rev. 0 - AE Edits	2024-11-12	KG
3	PSE Todd Road Rev. 0 - AE Edits - MA reduction	2024-11-15	KG
		2024-11-15	KG

SCALE:
0" 1/2" 1" 2"
ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:
AR Solar SPC

PROJECT:
PSE Todd Road

LOCATION:
325 Todd Road Northwest,
Puyallup, WA, USA

SHEET TITLE:
PROJECT SUMMARY

REVISION: 3 SHEET: PC-2

APPROVED FOR CONSTRUCTION

PRSOL20250112



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3	PSE Todd Road Rev. 0 - AE Edits - MA reduction	2024-11-15		KG

SCALE:
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ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

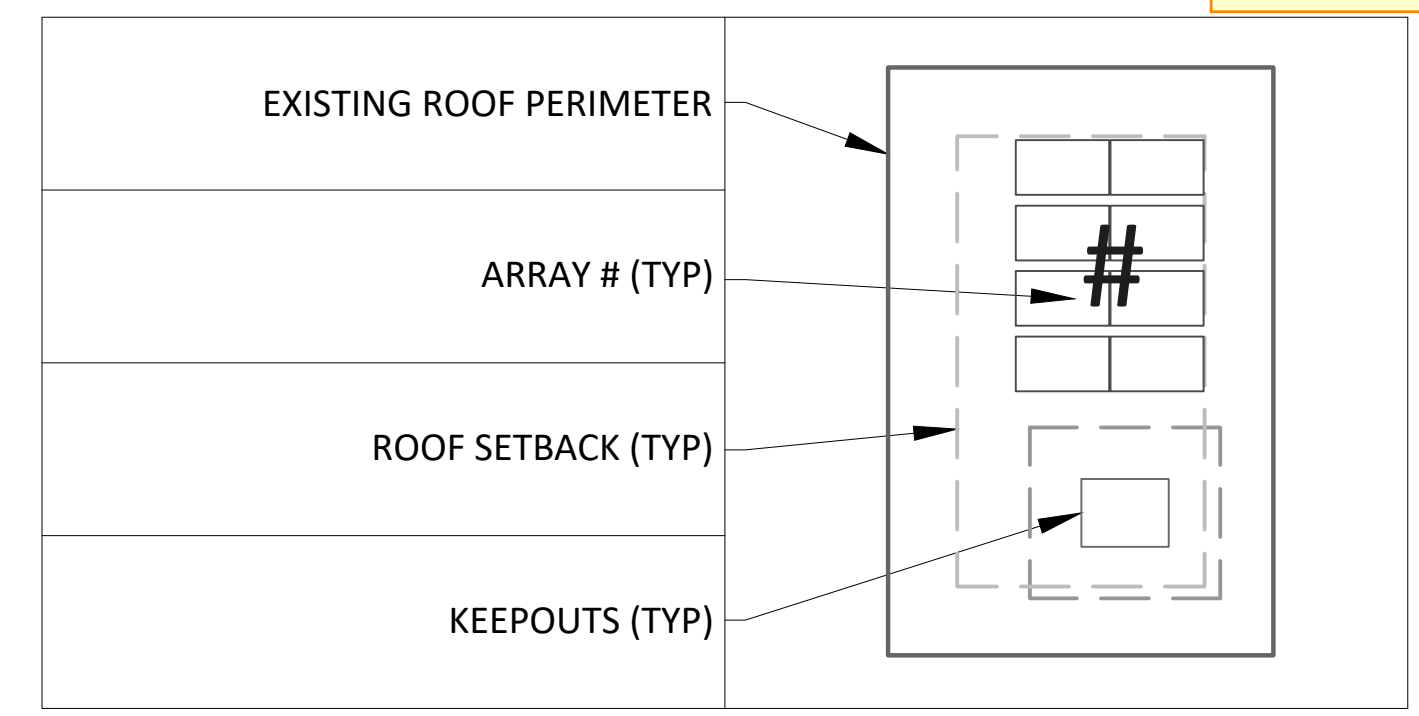
PREPARED FOR:
AR Solar SPC

PROJECT:
PSE Todd Road

LOCATION:
325 Todd Road Northwest,
Puyallup, WA, USA

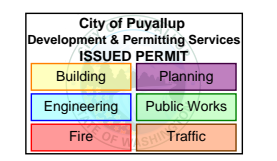
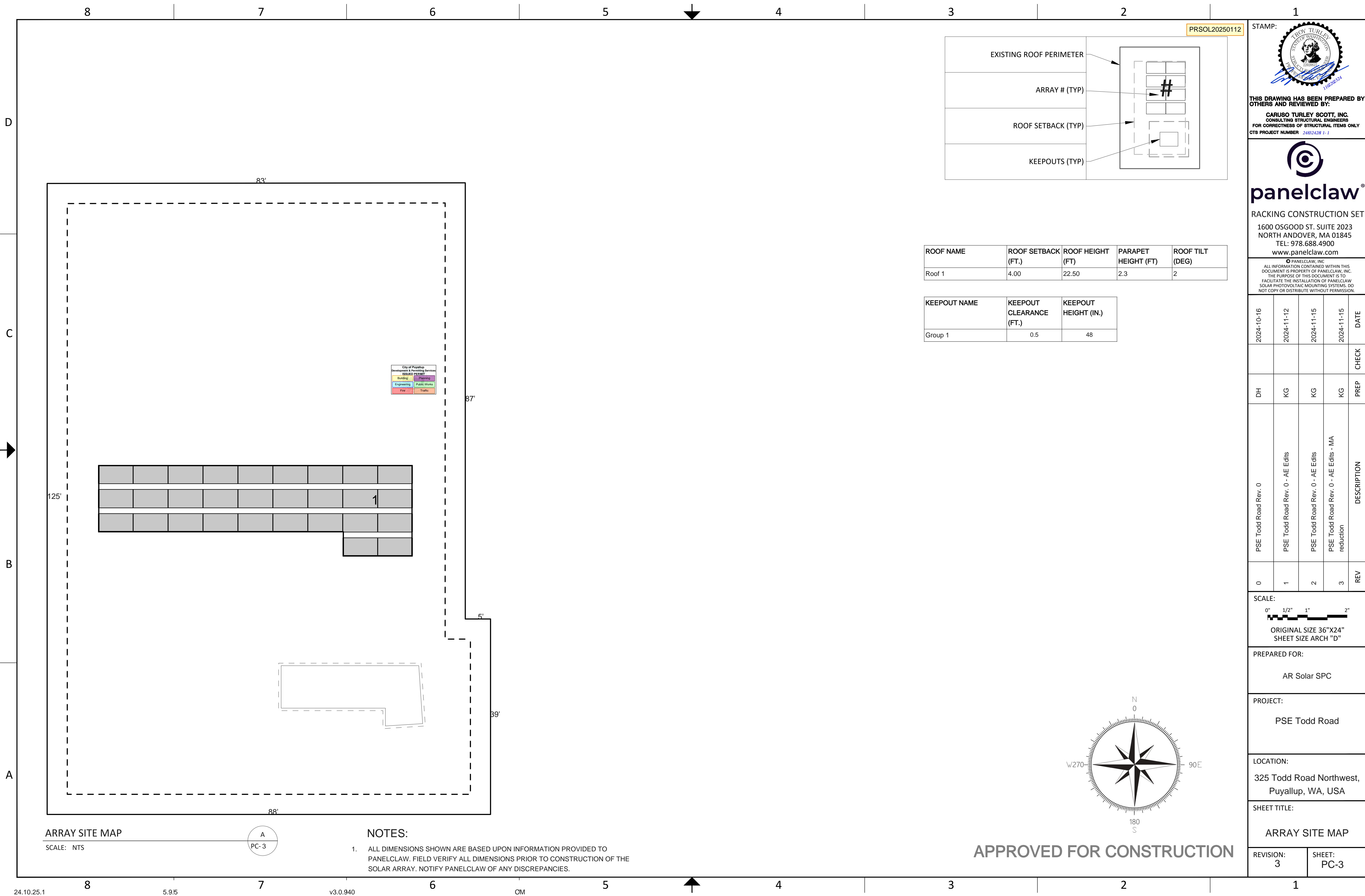
SHEET TITLE:
ARRAY SITE MAP

REVISION: 3 SHEET: PC-3



ROOF NAME	ROOF SETBACK (FT.)	ROOF HEIGHT (FT)	PARAPET HEIGHT (FT)	ROOF TILT (DEG)
Roof 1	4.00	22.50	2.3	2

KEEPOUT NAME	KEEPOUT CLEARANCE (FT.)	KEEPOUT HEIGHT (IN.)
Group 1	0.5	48

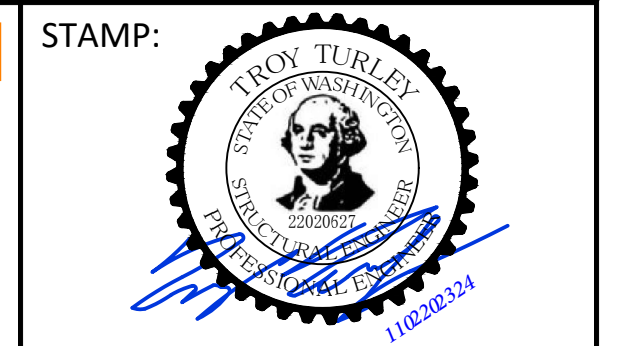


ARRAY SITE MAP
SCALE: NTS
A
PC-3

NOTES:
1. ALL DIMENSIONS SHOWN ARE BASED UPON INFORMATION PROVIDED TO PANELCLAW. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION OF THE SOLAR ARRAY. NOTIFY PANELCLAW OF ANY DISCREPANCIES.

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DATE	DATE	DATE	DATE	DATE
2024-10-16	2024-11-12	2024-11-15	2024-11-15	
DH	KG	KG	KG	PREP
PSE Todd Road Rev. 0	PSE Todd Road Rev. 0 - AE Edits	PSE Todd Road Rev. 0 - AE Edits	PSE Todd Road Rev. 0 - AE Edits - MA reduction	DESCRIPTION
0	1	2	3	REV

SCALE: 0" 1/2" 1" 2"
 ORIGINAL SIZE 36"X24"
 SHEET SIZE ARCH "D"

PREPARED FOR:
 AR Solar SPC

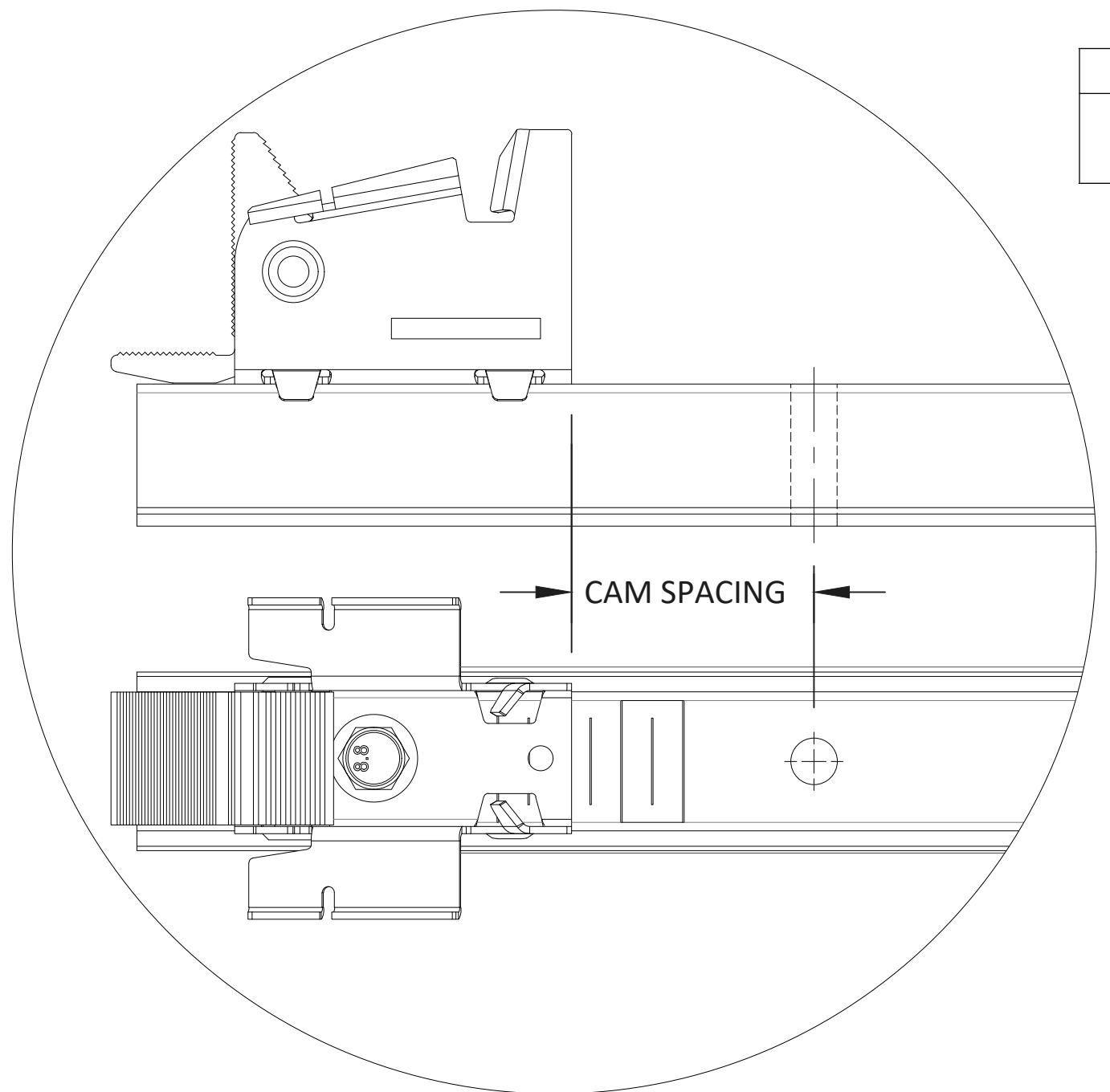
PROJECT:
 PSE Todd Road

LOCATION:
 325 Todd Road Northwest,
 Puyallup, WA, USA

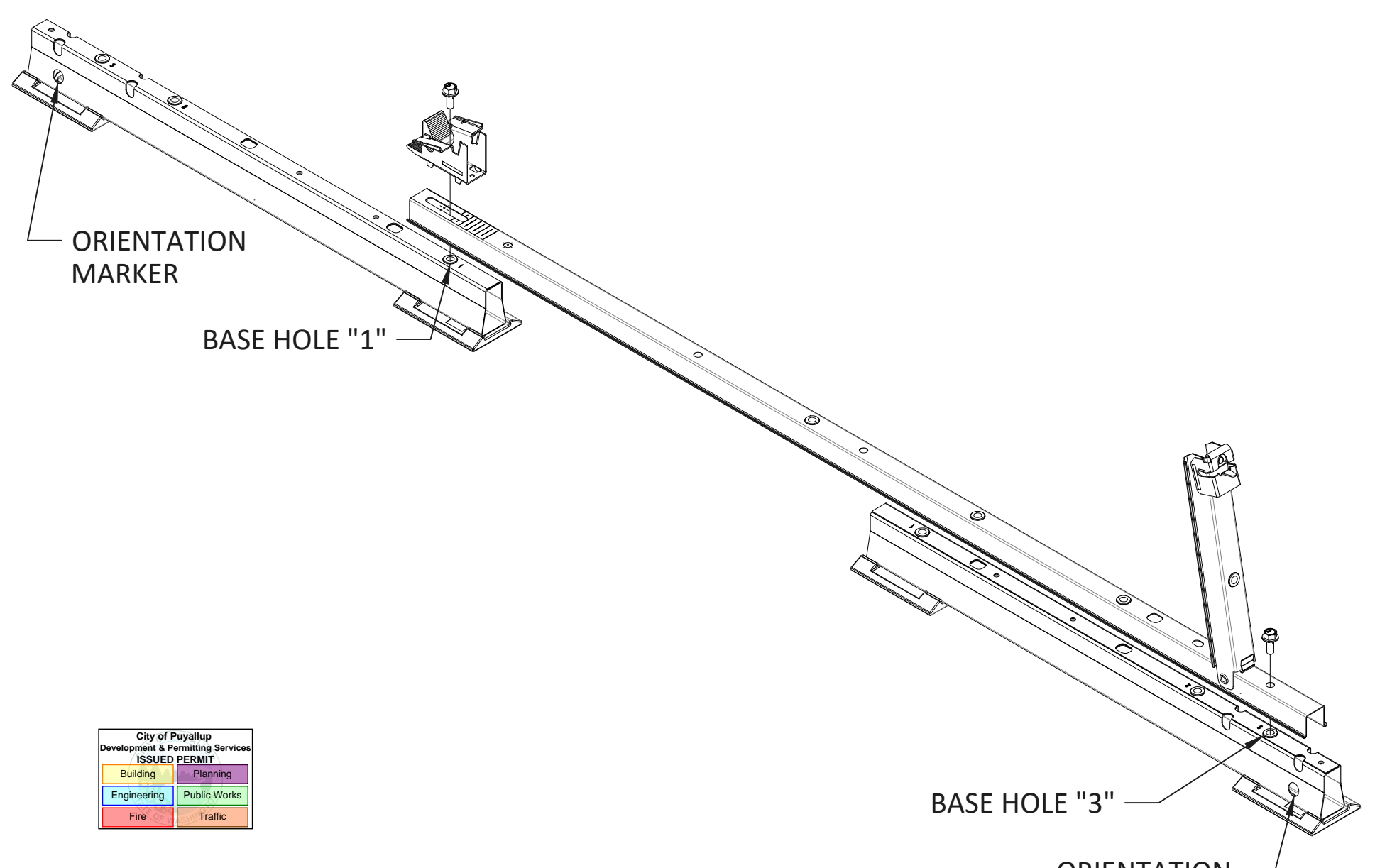
SHEET TITLE:
 ASSEMBLIES

REVISION: 3 SHEET: PC-5

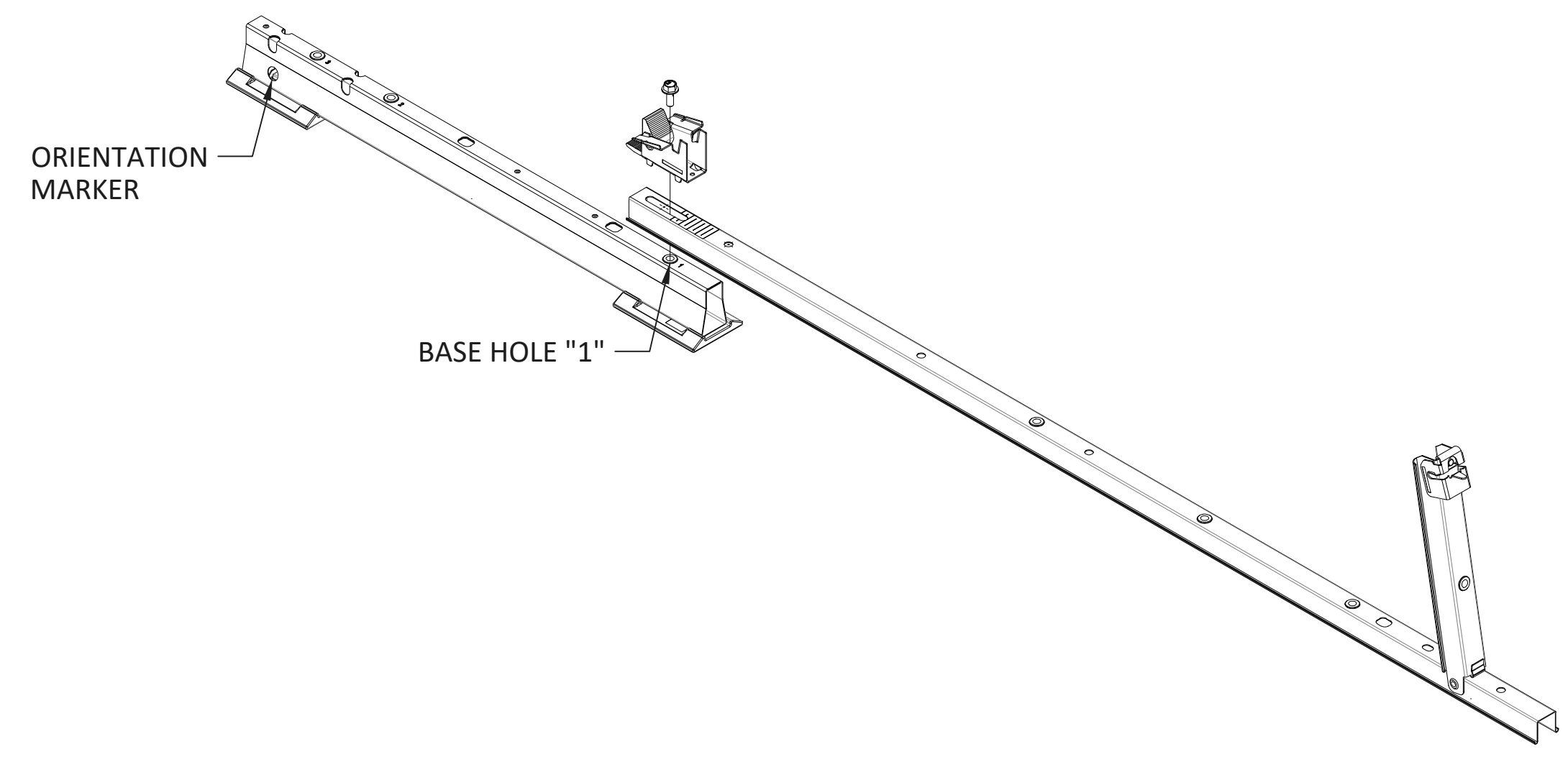
UNITS		CAM SPACING
	mm	59
	inches	2 5/16



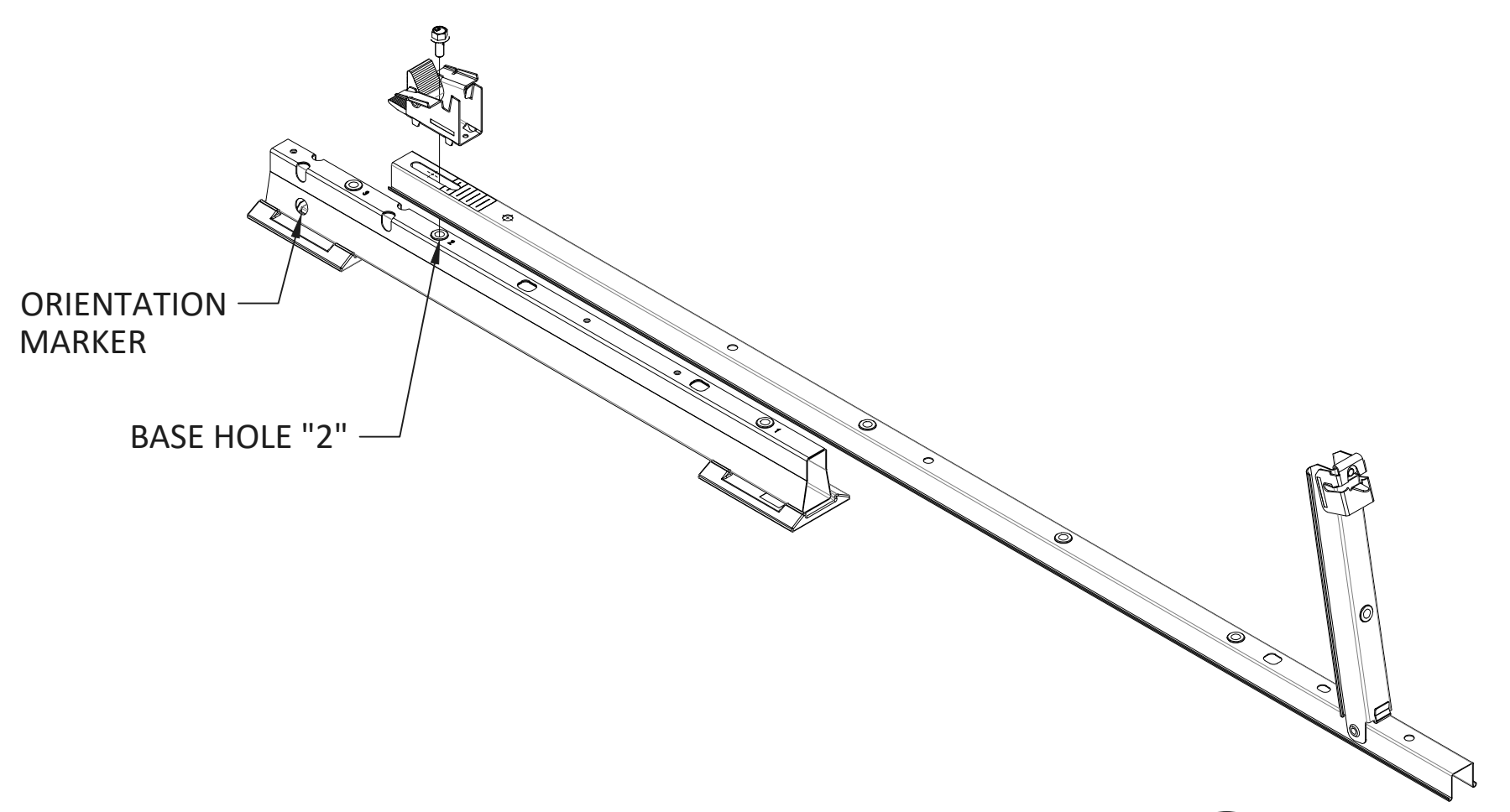
CAM SPACING DETAIL
 SCALE: NTS
 A
 PC-5



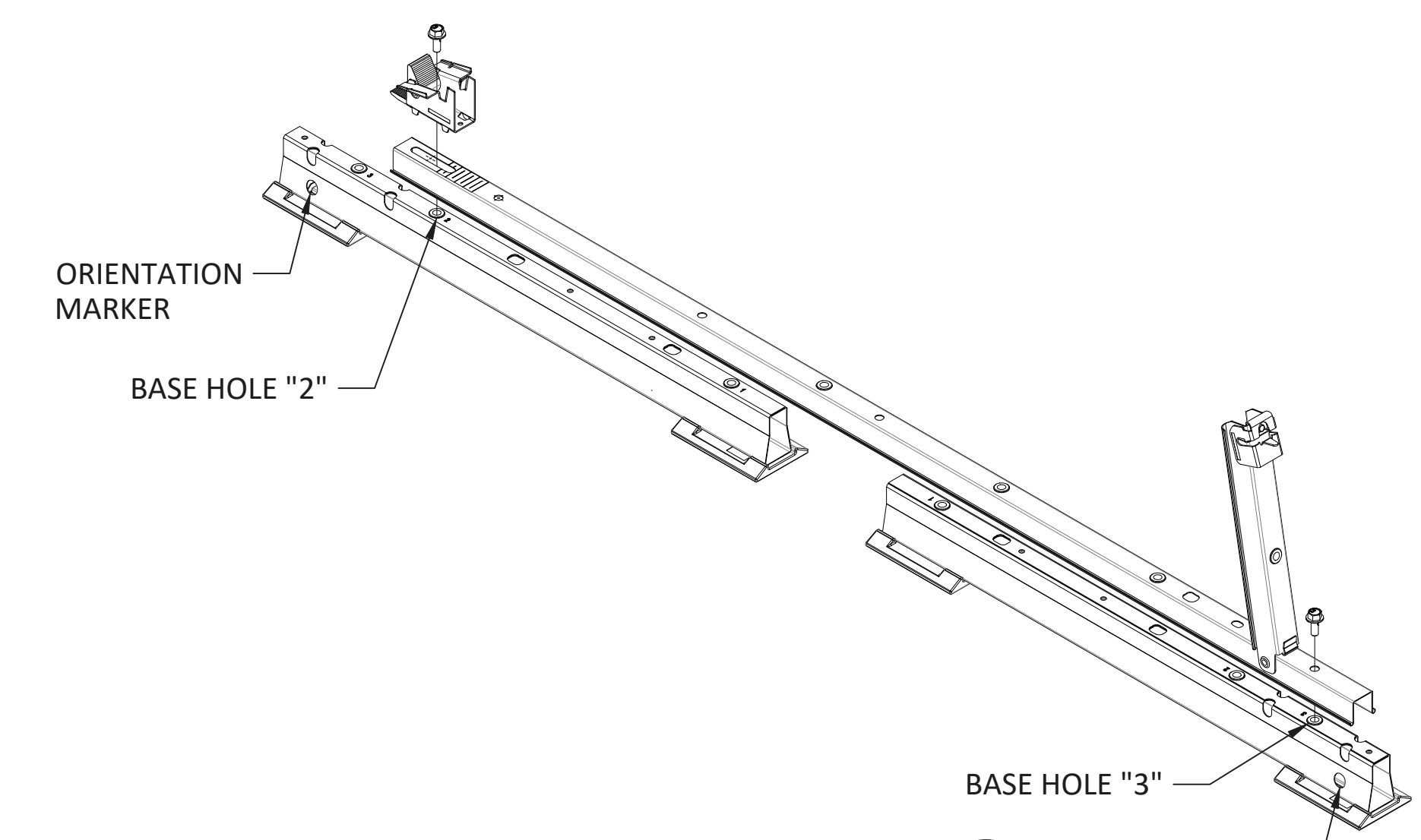
NORTH ASSEMBLY
 SCALE: NTS
 B
 PC-5



MIDDLE ASSEMBLY
 SCALE: NTS
 C
 PC-5



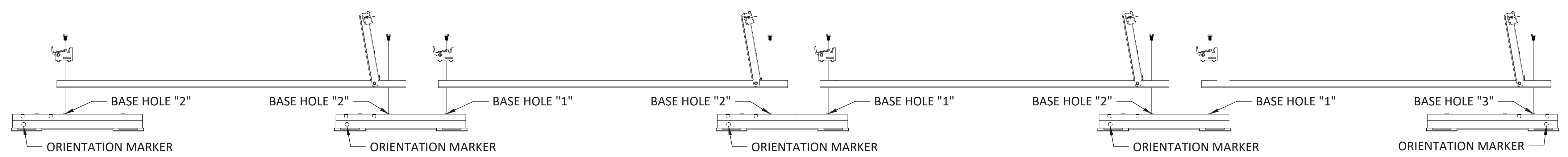
SOUTH ASSEMBLY
 SCALE: NTS
 D
 PC-5



NORTH SOUTH ASSEMBLY
 SCALE: NTS
 E
 PC-5

STANDARD ASSEMBLY QUANTITY	
NORTH ASSEMBLY	18
SOUTH ASSEMBLY	18
MIDDLE ASSEMBLY	22
NORTH SOUTH ASSEMBLY	0

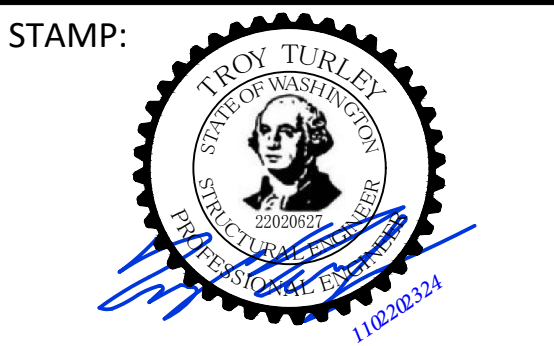
NOTE: ASSEMBLIES IN THIS TABLE USE THE STANDARD 2-PAD BASE



EXAMPLE ARRAY CONSTRUCTION
 SCALE: NTS
 F
 PC-5

APPROVED FOR CONSTRUCTION

PR SOL20250112



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DATE	2024-10-16	2024-11-12	2024-11-15	2024-11-15	DATE
PREP	DH	KG	KG	KG	CHECK
DESCRIPTION	PSE Todd Road Rev. 0	PSE Todd Road Rev. 0 - AE Edits	PSE Todd Road Rev. 0 - AE Edits	PSE Todd Road Rev. 0 - AE Edits - MA reduction	REV
REV	0	1	2	3	

SCALE:
0" 1/2" 1" 2"
ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

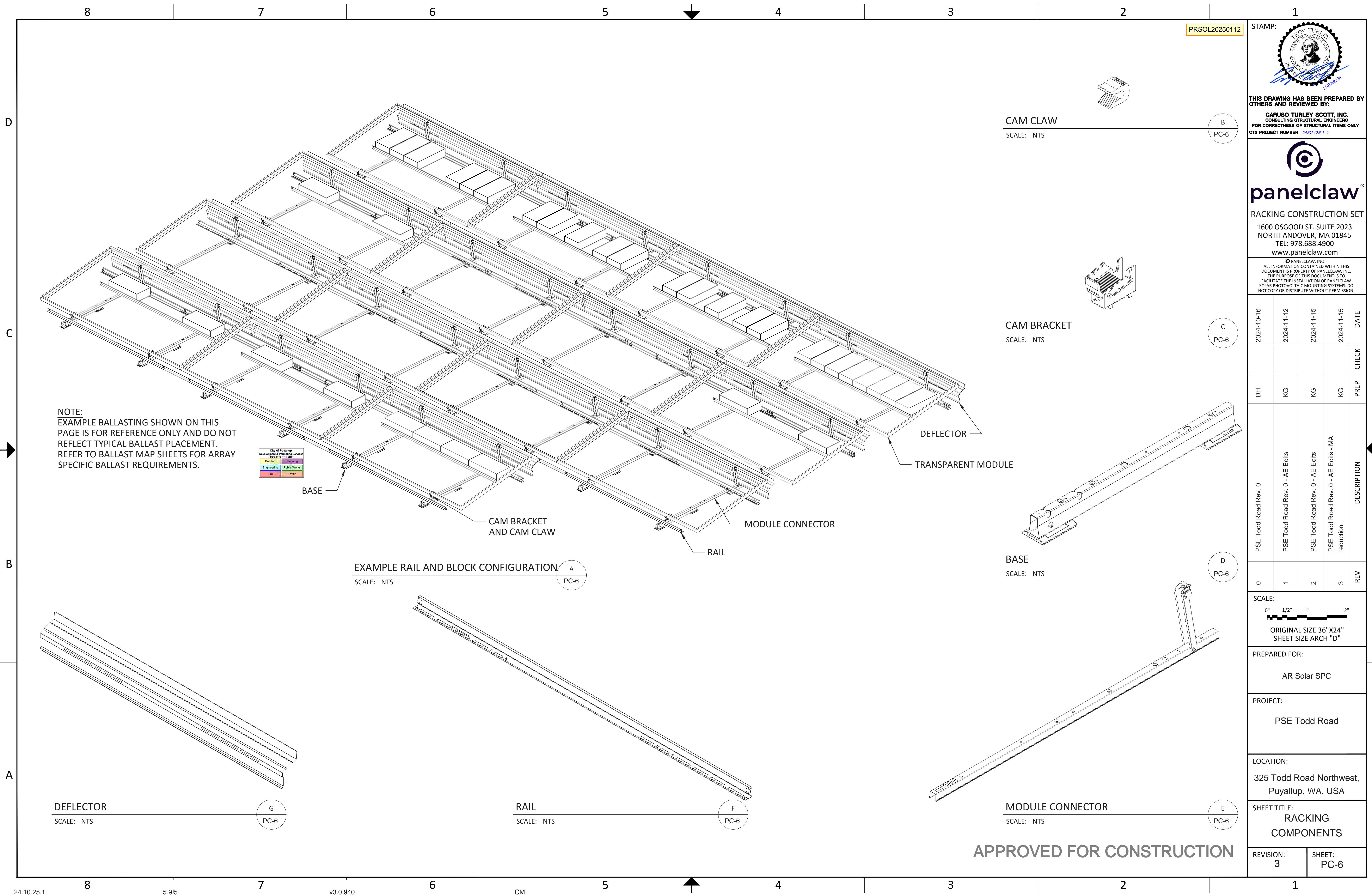
PREPARED FOR:
AR Solar SPC

PROJECT:
PSE Todd Road

LOCATION:
325 Todd Road Northwest,
Puyallup, WA, USA

SHEET TITLE:
RACKING
COMPONENTS

REVISION: 3 SHEET: PC-6



CAM CLAW
SCALE: NTS
B
PC-6

CAM BRACKET
SCALE: NTS
C
PC-6

EXAMPLE RAIL AND BLOCK CONFIGURATION
SCALE: NTS
A
PC-6

BASE
SCALE: NTS
D
PC-6

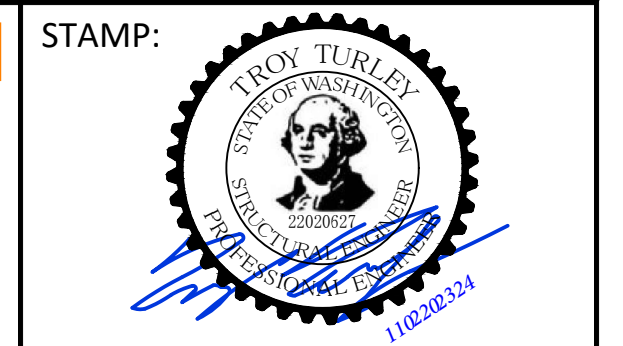
DEFLECTOR
SCALE: NTS
G
PC-6

RAIL
SCALE: NTS
F
PC-6

MODULE CONNECTOR
SCALE: NTS
E
PC-6

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DATE	CHECK	PREP	DESCRIPTION	REV
2024-10-16		DH	PSE Todd Road Rev. 0	0
2024-11-12		KG	PSE Todd Road Rev. 0 - AE Edits	1
2024-11-15		KG	PSE Todd Road Rev. 0 - AE Edits	2
2024-11-15		KG	PSE Todd Road Rev. 0 - AE Edits - MA reduction	3

SCALE:
0" 1/2" 1" 2"
ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

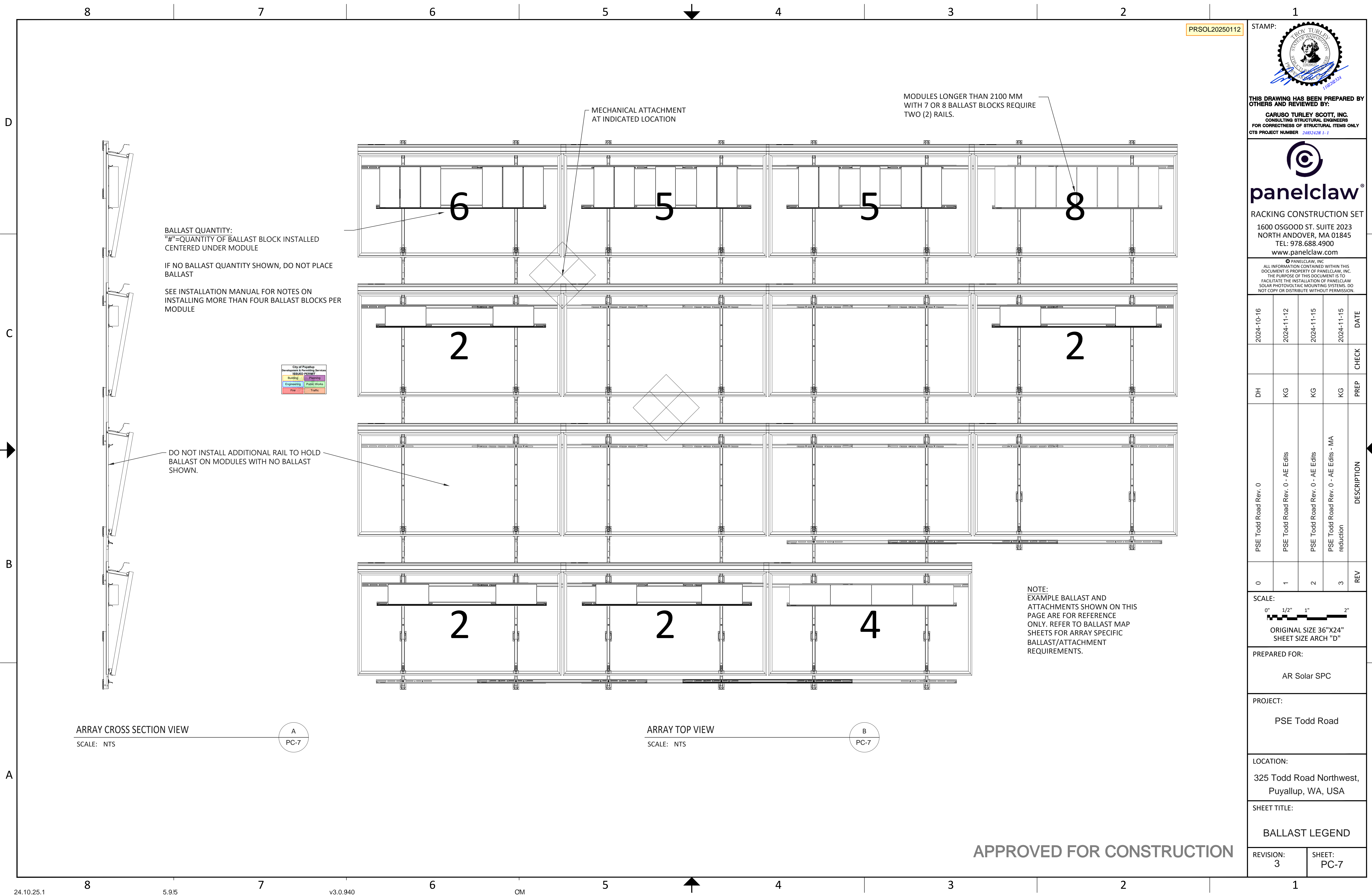
PREPARED FOR:
AR Solar SPC

PROJECT:
PSE Todd Road

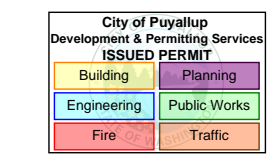
LOCATION:
325 Todd Road Northwest,
Puyallup, WA, USA

SHEET TITLE:
BALLAST LEGEND

REVISION: 3 SHEET: PC-7



BALLAST QUANTITY:
"# "=QUANTITY OF BALLAST BLOCK INSTALLED CENTERED UNDER MODULE
IF NO BALLAST QUANTITY SHOWN, DO NOT PLACE BALLAST
SEE INSTALLATION MANUAL FOR NOTES ON INSTALLING MORE THAN FOUR BALLAST BLOCKS PER MODULE



DO NOT INSTALL ADDITIONAL RAIL TO HOLD BALLAST ON MODULES WITH NO BALLAST SHOWN.

NOTE:
EXAMPLE BALLAST AND ATTACHMENTS SHOWN ON THIS PAGE ARE FOR REFERENCE ONLY. REFER TO BALLAST MAP SHEETS FOR ARRAY SPECIFIC BALLAST/ATTACHMENT REQUIREMENTS.

ARRAY CROSS SECTION VIEW
SCALE: NTS

ARRAY TOP VIEW
SCALE: NTS

APPROVED FOR CONSTRUCTION

PRSOL20250112



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ARRAY 1.1	
ROOF INFORMATION	
ROOF HEIGHT (FT)	22.50
PARAPET HEIGHT (FT)	2.3
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	29
MODULE POWER (W)	520
ARRAY OUTPUT (Kw)	15.08
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	76
Module Connector	58
Rail	96
Cam	58
Cam Claw	58
Deflector	29
Base Pad	0
Ballast Block	92
Mechanical Attachment	7
LOADING DETAILS	
SINGLE MODULE WT (LB)	57.8
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	5190
ARRAY AREA (SQ. FT)	953
ARRAY LOAD (PSF)	5.45

ASSEMBLY QUANTITIES	
ASSEMBLY	QTY
NORTH ASSEMBLY	18
SOUTH ASSEMBLY	18
MIDDLE ASSEMBLY	22
NORTH SOUTH ASSEMBLY	0

DATE	CHECK	PREP	DESCRIPTION
2024-10-16		DH	PSE Todd Road Rev. 0
2024-11-12		KG	PSE Todd Road Rev. 0 - AE Edits
2024-11-15		KG	PSE Todd Road Rev. 0 - AE Edits
2024-11-15		KG	PSE Todd Road Rev. 0 - AE Edits - MA reduction
REV	DESCRIPTION	REV	DESCRIPTION
0			
1			
2			
3			

SCALE: 0" 1/2" 1" 2" ORIGINAL SIZE 36"X24" SHEET SIZE ARCH "D"

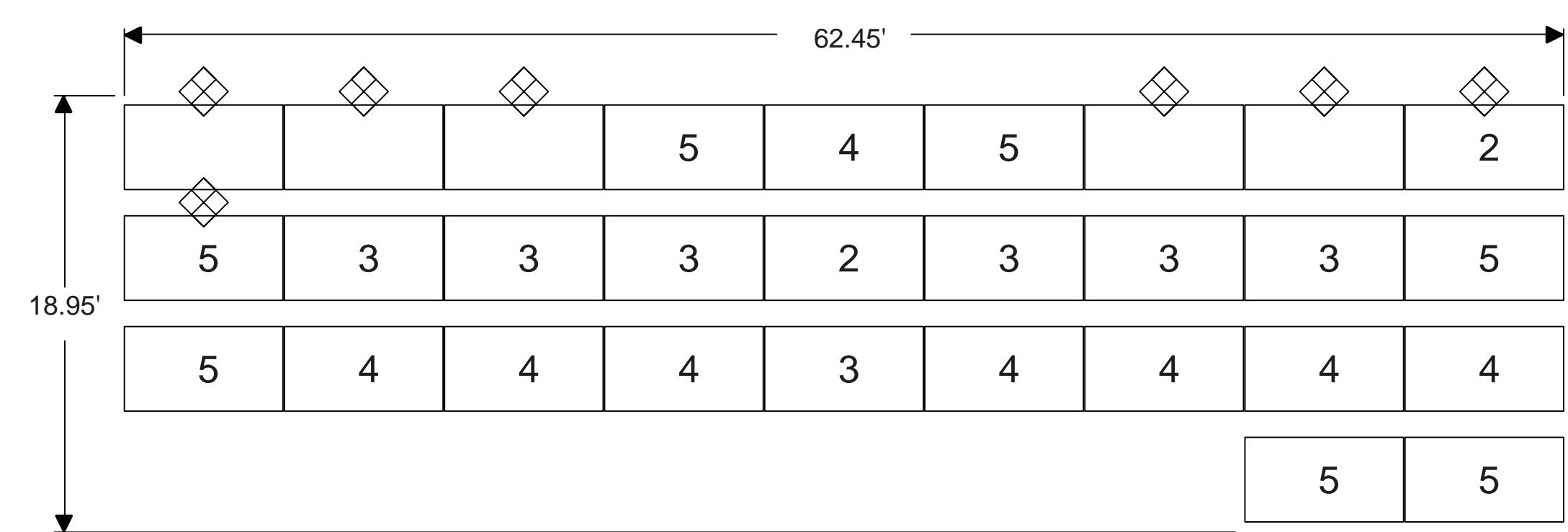
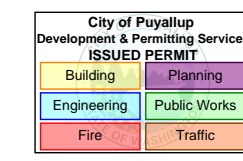
PREPARED FOR: AR Solar SPC

PROJECT: PSE Todd Road

LOCATION: 325 Todd Road Northwest, Puyallup, WA, USA

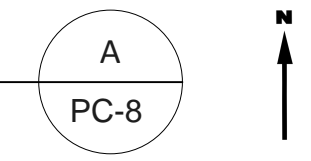
SHEET TITLE: BALLAST LAYOUT - 1.1

REVISION: 3 SHEET: PC-8



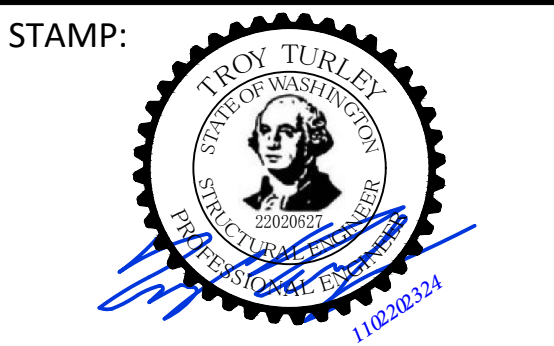
BALLAST LAYOUT - 1.1

SCALE: 1/8" = 1'-0"



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0	1	2	3	REV	

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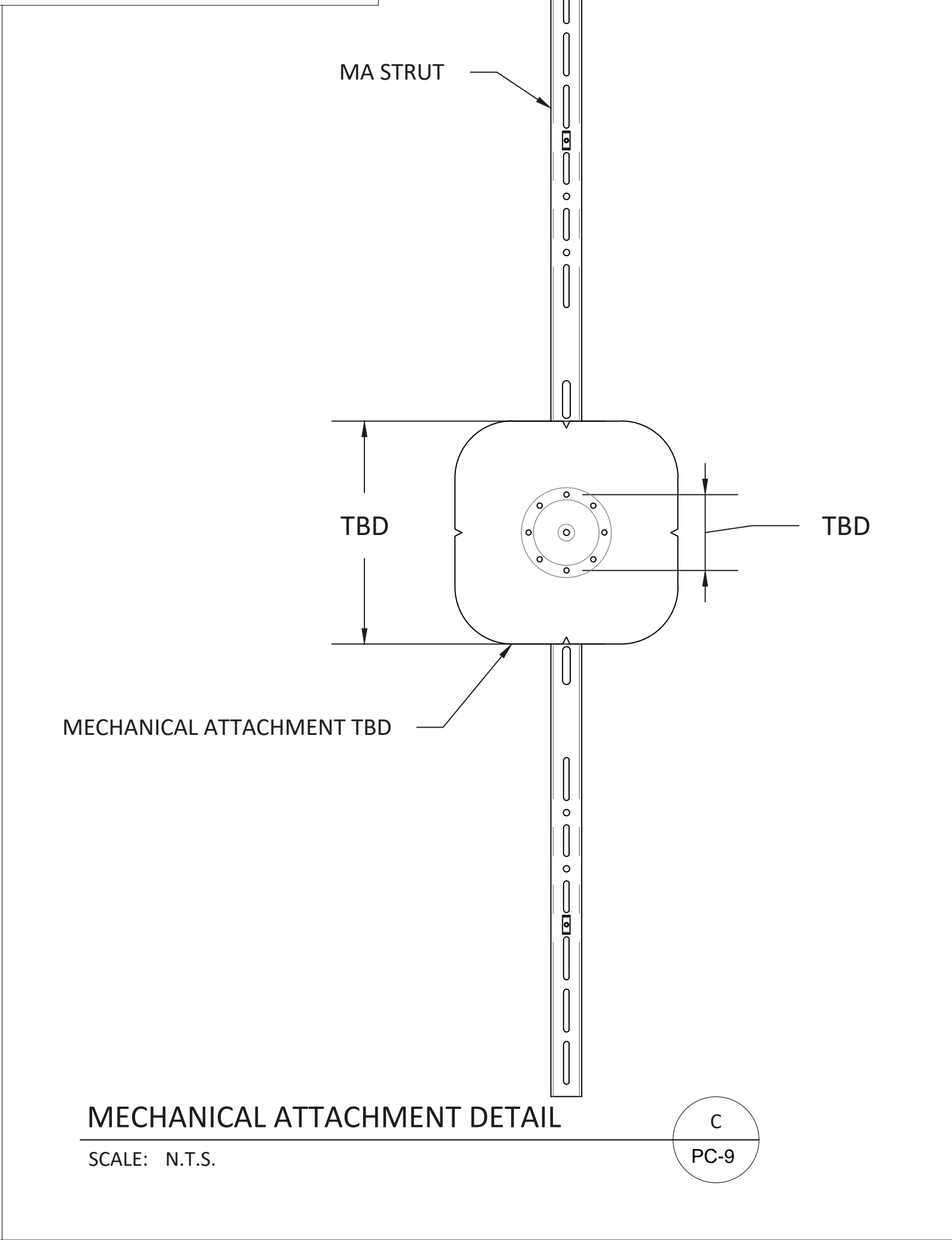
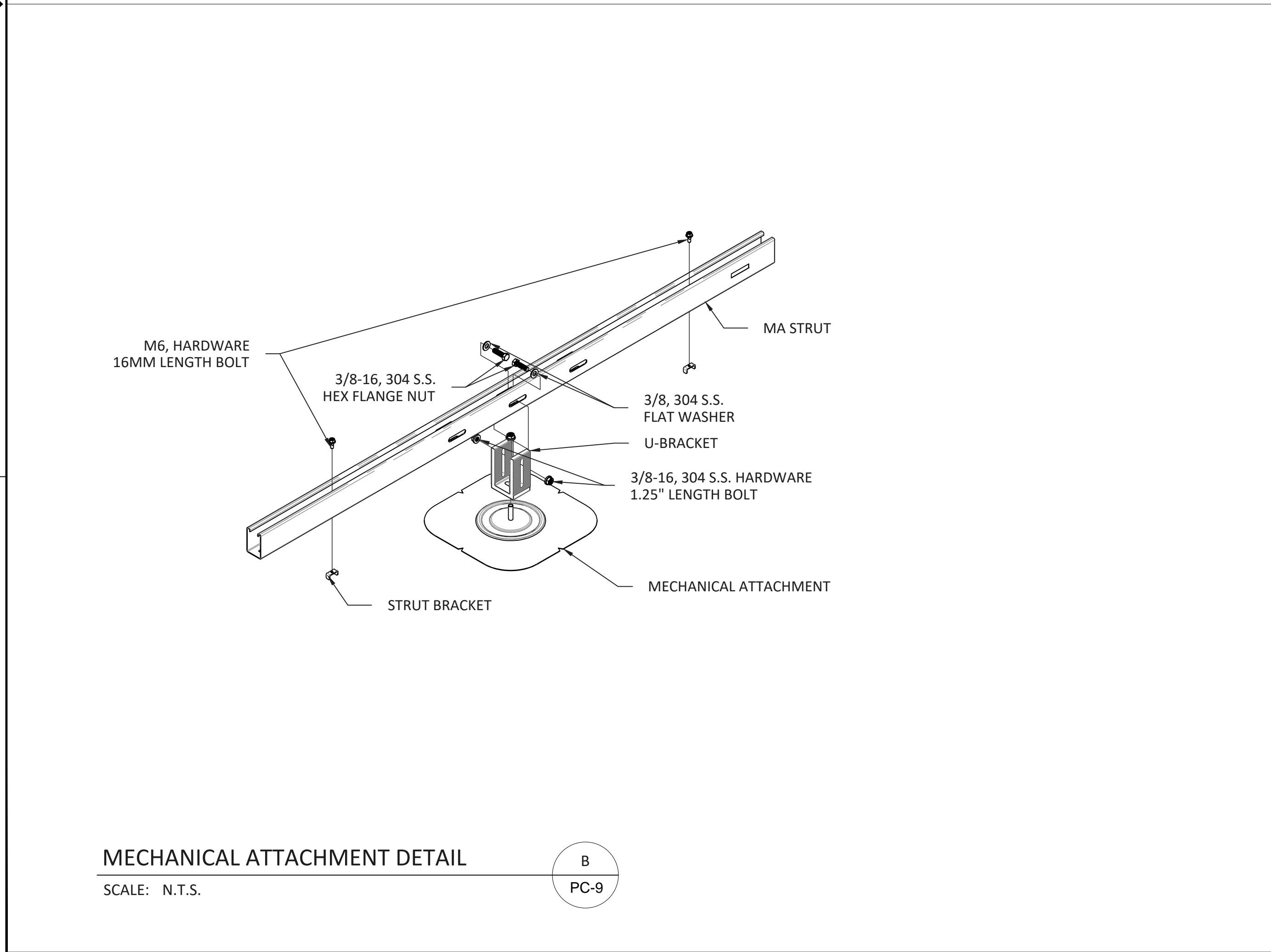
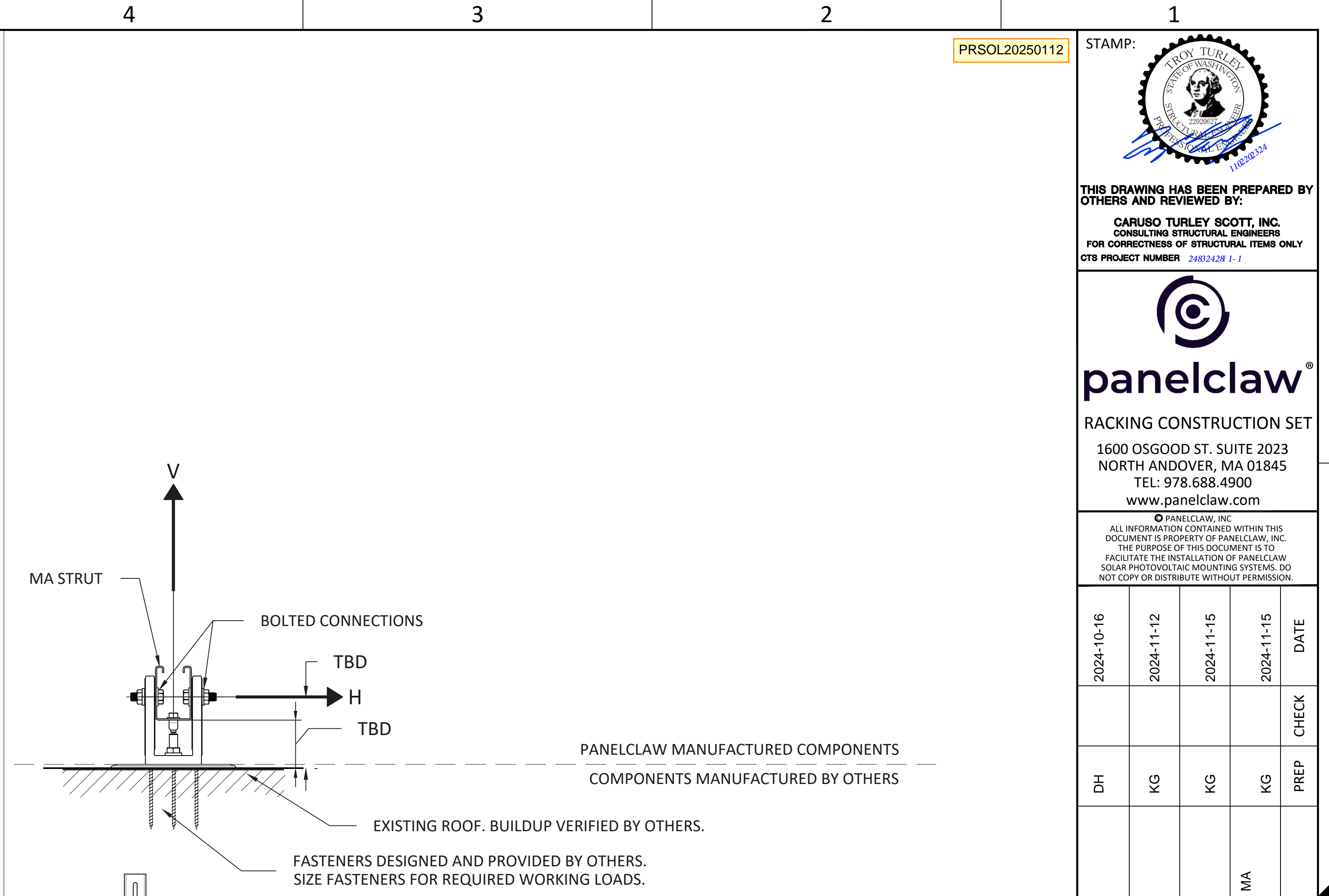
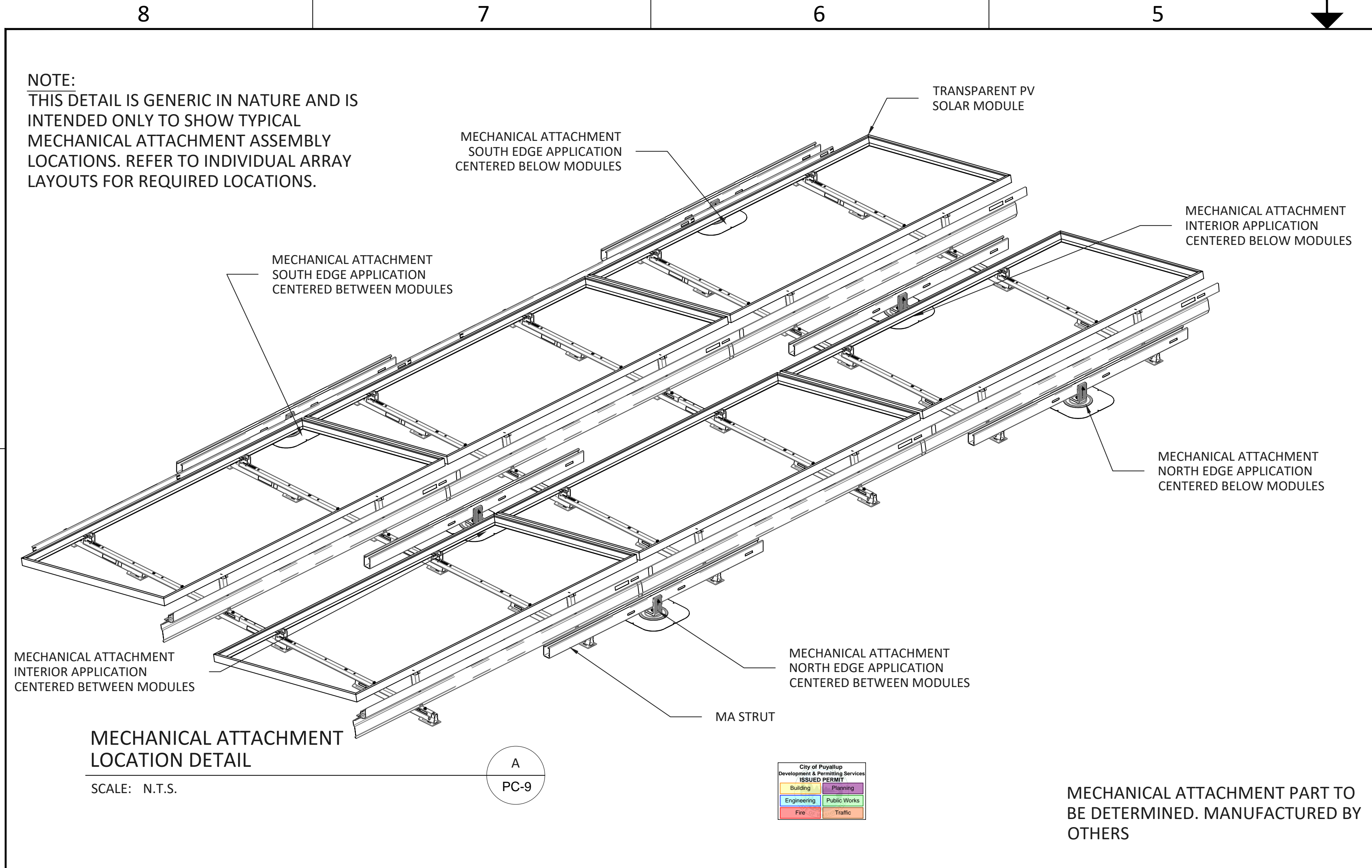
PREPARED FOR:
 AR Solar SPC

PROJECT:
 PSE Todd Road

LOCATION:
 325 Todd Road Northwest,
 Puyallup, WA, USA

SHEET TITLE:
 MECHANICAL
 ATTACHMENT DETAIL

REVISION: 3 SHEET: PC-9



MECHANICAL ATTACHMENT		
WORST-CASE SERVICE LOAD (LB)		
HORIZONTAL (H)		VERTICAL (V)
WIND	SEISMIC	WIND
0	255	207
MAXIMUM ALLOWABLE LOAD (LB)		
HORIZONTAL (H)		VERTICAL (V)
650		525

- HORIZONTAL LOAD H MAY ACT IN ANY DIRECTION
- WORKING LOADS = ALLOWABLE LOADS (i.e. NON-FACTORED)

NOTE: MECHANICAL ATTACHMENT COMPONENT DIMENSIONS ARE PROVIDED FOR REFERENCE ONLY AND SHOULD BE VERIFIED WITH ATTACHMENT MANUFACTURER PRIOR TO FASTENER DESIGN.

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