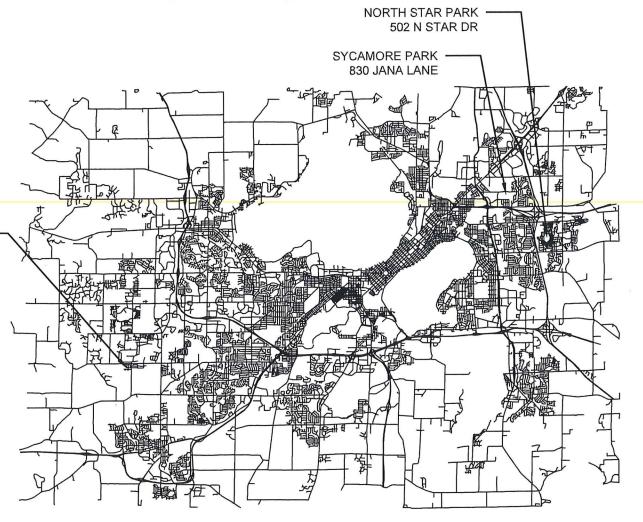
LEGEND © EX. ELECTRICAL HAND HOLE EX. ELECTRICAL PEDESTAL EX. TELEPHONE PEDESTAL EX. TREE EX. WATER HYDRANT EX. PROPERTY LINE EX. EASEMENT EX. FENCE LINE EX. TREE LINE EX. CONTOUR (INDEX) EX. CONTOUR (INTER) EX. ABANDONED UTILITY EX. ELECTRIC EX. FIBER OPTIC EX. NATURAL GAS EX. OVERHEAD LINE EX. SANITARY SEWER EX. STORM SEWER EX. CABLE TV EX. UNDERGROUND TELEPHONE EX. WATER LINE EX. GRAVEL EX. CONCRETE KESTREL PARK 9702 GREY KESTREL DR ###.## PRO. SPOT ELEVATION PRO. CONTOUR (INDEX) PRO. CONTOUR (INTER) PRO. SILT SOCK PRO. CONSTRUCTION FENCE

PRO. CONCRETE

PARKS SUN SHELTER
INSTALLATIONS
MUNIS NUMBERS:
12853-51-140, 14598-51-130,
15050-51-140



DESIGNED BY:



City of Madison
Department of Public Works
PARKS DIVISION

330 E. Lakeside St. Madison, WI 53715

play MADISON PARKS



SHEET SCHEDULE

KESTREL PARK

C1.0 PROJECT LOCATION AND ACCESS

C1.1 EXISTING CONDITIONS

C1.2 SITE PLAN

C1.3 GRADING AND EROSION CONTROL

C1.4 DESIGN COMPUTATIONS

NORTH STAR PARK

C2.0 PROJECT LOCATION AND ACCESS

C2.1 EXISTING CONDITIONS

C2.2 SITE PLAN

C2.3 GRADING AND EROSION CONTROL PLAN

C2.4 DESIGN COMPUTATIONS

SYCAMORE PARK

C3.0 PROJECT LOCATION AND ACCESS

C3.1 EXISTING CONDITIONS

C3.2 SITE PLAN

C3.3 GRADING AND EROSION CONTROL PLAN

C3.4 DESIGN COMPUTATIONS

*SHEETS CS-7.2: PRELIMINARY DRAWINGS OF POLIGON HXE 28 FOR REFERENCE ONLY PROJECT:

PARKS SUN SHELTER INSTALLATIONS

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for

ITEM	DATE			
ADVERTISED FOR BIDS	01/23/202			

PUBLIC WORKS PROJECT #:

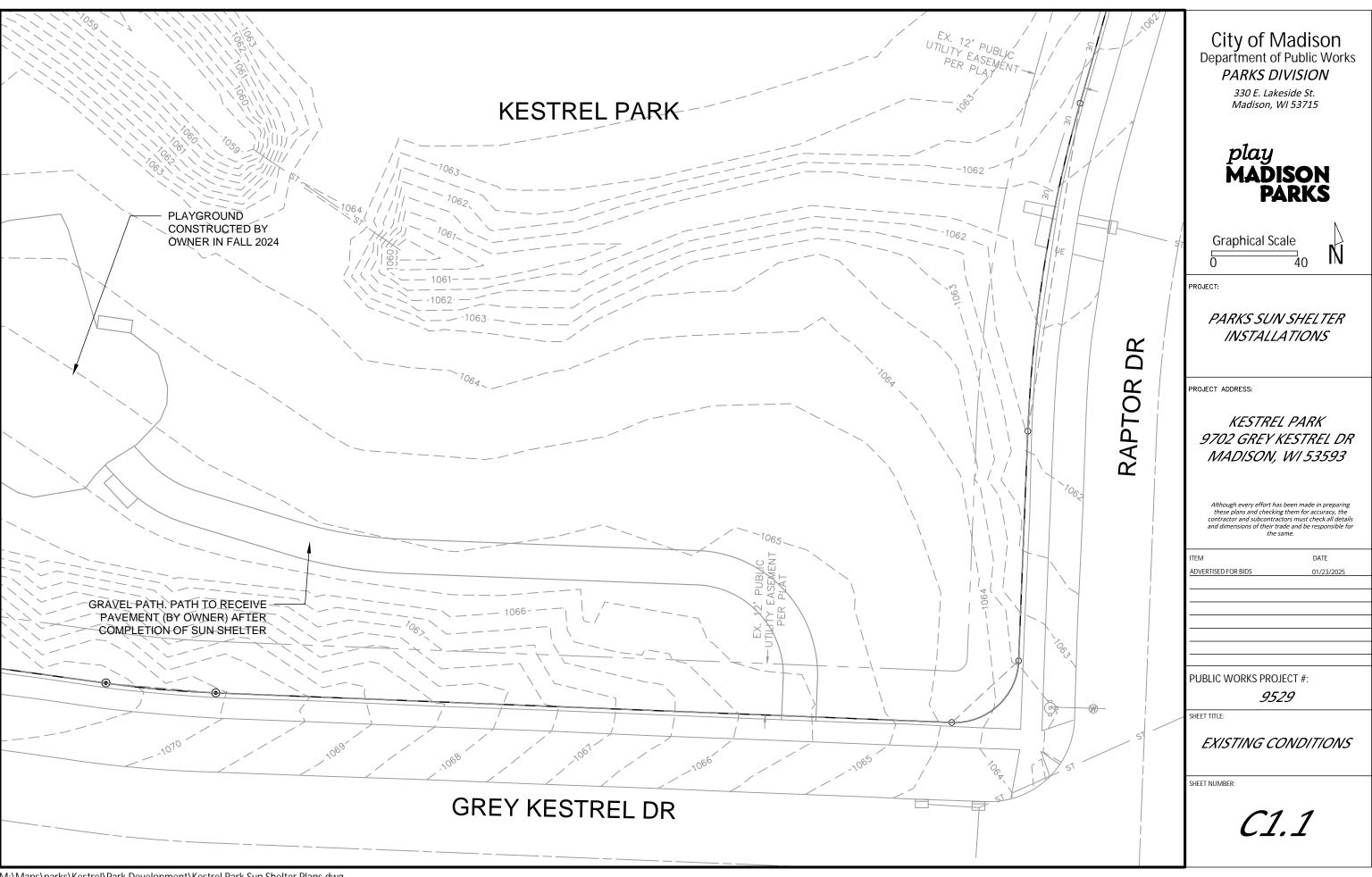
9529

SHEET TITLE:

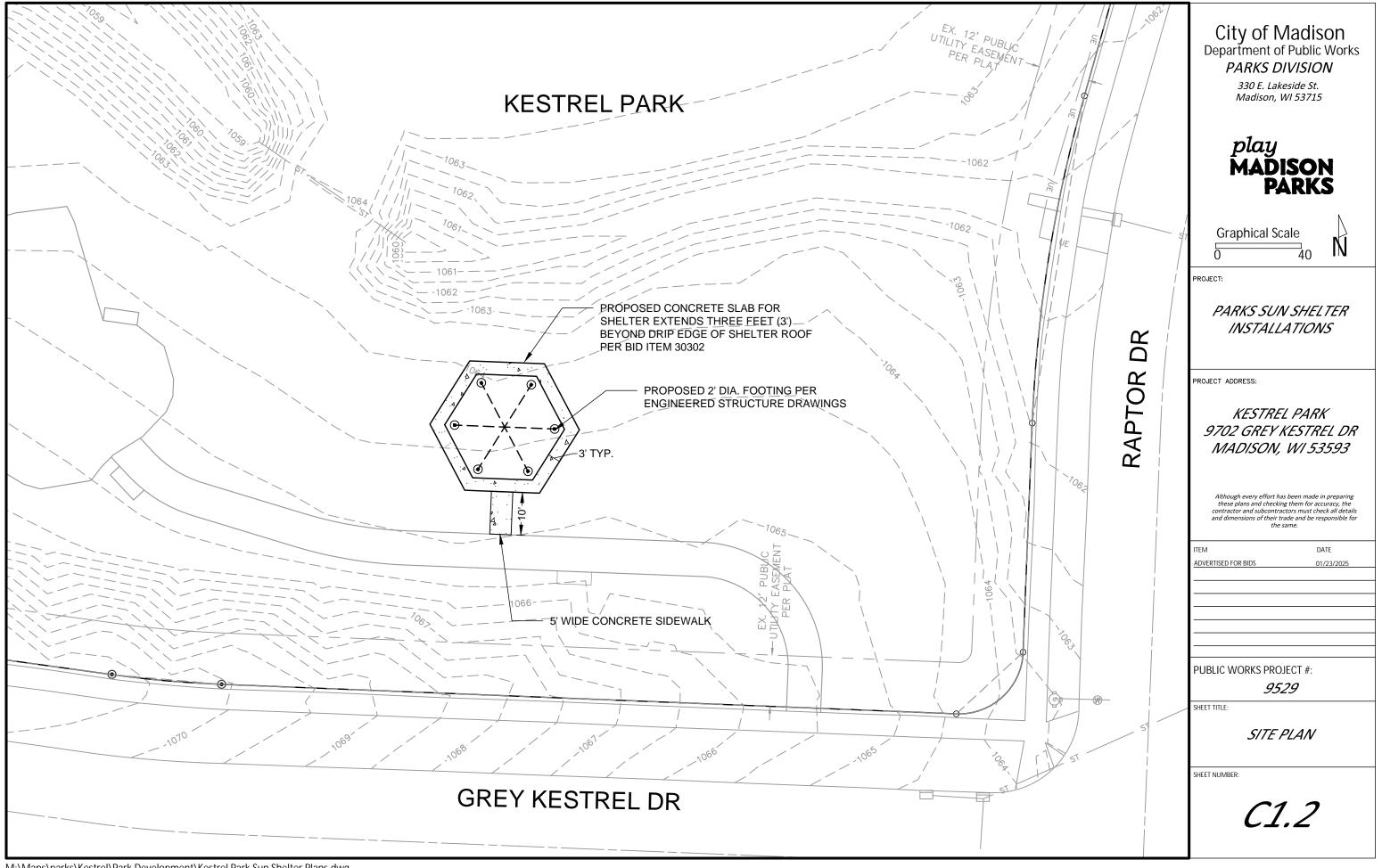
COVER SHEET

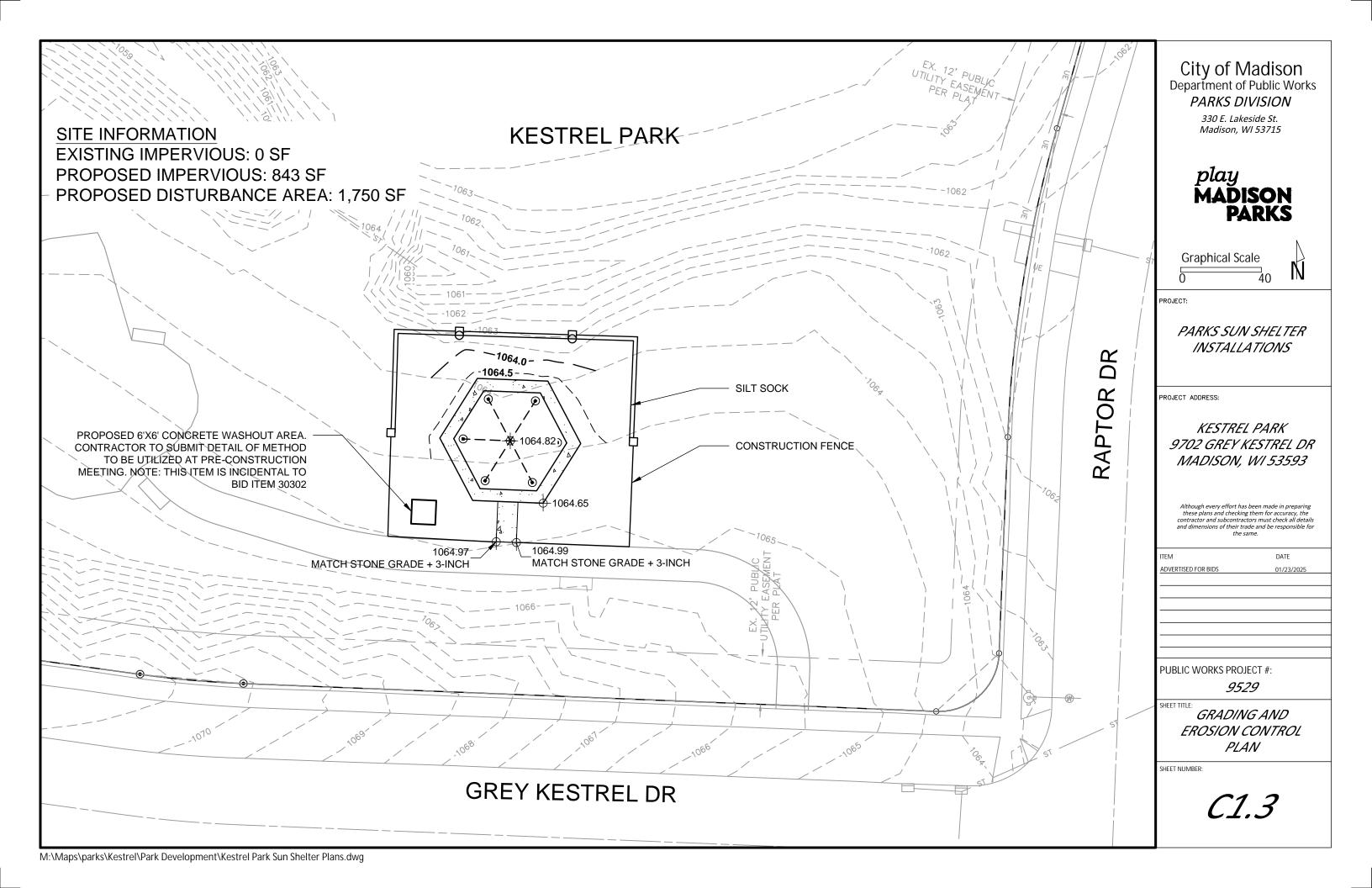
SHEET NUMBER:





M:\Maps\parks\Kestrel\Park Development\Kestrel Park Sun Shelter Plans.dwg





	Kestrel Park	Sun Shelter - Earthw	ork Quantities								
	City of Madison,	WI Public Works Contract									
	Date Revised:12	-12-2024									
	Notes:										
	Positive volumes	are cuts, negative volumes	are fills.								
	Not all parts of a	II surface models (Digital To	errain Models) are used for co	omputations of	or intended for	or actual o	onstruction	on.			
Sort	Grp	Material	ltem .	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfac- tored volume (cu ft)	Unfac-tored volume (cu yd)	Expan- sion Factor (%)	Facto (Unco pacte Volum (cu y
	,							` ′	,	, ,	<u> </u>
1.1	Grass to Grass	Topsoil Excavate	Strip 9in topsoil	n/a	n/a	905	0.75	679	25.1	0%	;
			Cut subsoil to proposed								
1.2	Grass to Grass	Subsoil Excavate	subgrade	Ex-9in	Pro-9in	905	varies	10	0.4	0%	
		No. 8 NO. 1750	Fill subsoil to proposed	200					vii. 100	20.00	
1.3	Grass to Grass	Subsoil Place	subgrade	Ex-9in	Pro-9in	905	varies	-166	-6.1	0%	
1.4	Grass to Grass	Topsoil Place	Place 9in topsoil	n/a	n/a	905	-0.75	-679	-25.1	0%	-
	Grass to										
2.1		Topsoil Excavate	Strip 9in topsoil	n/a	n/a	843	0.75	632	23.4	0%	
	Grass to		Cut subsoil to proposed	_	_						
2.2		Subsoil Excavate	subgrade	Ex-9in	Pro-13in	843	varies	92	3.4	0%	
2.2	Grass to	Cubasil Dlass	Fill subsoil to proposed	Ev. Oir	D== 42i==	040		70	2.0	00/	
2.3		Subsoil Place	subgrade	Ex-9in	Pro-13in	843	varies	-78	-2.9	0%	
2.4	Grass to Concrete	Gravel (for Pavement) Place	Place 6in gravel base	n/a	n/a	843	-0.50	-422	-15.6	0%	_
2.4	Grass to	T Idoc	I lace off graver base	TI/ C	II/U	043	-0.50	-422	-13.0	0 /6	
	Concrete	Concrete Pavement	Place 7in concrete	n/a	n/a	843	-0.58	-492	-18.2	0%	_

Kestrel Park Sun Sh	iel	ter - Earthwork Quantities
City of Madison, WI Public	V	9529
Date Revise	ed:	12/12/2024
Dervied from more detailed	s	preadsheet available from Parks Div
Computation Summan		
Computation Summary		
Positive volumes are cuts	(m	aterial available), negative volumes
are fills (material needed)		
Row Labels	Ţ,	Sum of Unfactored volume (cu yd)
Gravel (for Pavement) Place	e	-15.6
Subsoil Excavate		3.8
Subsoil Place		-9.0
Topsoil Excavate		48.6
Topsoil Place		-25.1
Concrete Pavement		-18.2
Grand Total		-15.7

Reorganized into bid table items			
Bid Item	Quantity	Units	Relation to Table (above)
20101 Excavation Cut	52	CY	= Subsoil Excavate + Topsoil Excavate
20202 Fill Borrow	5	CY	= Subsoil Excavate + Subsoil Place
20221 Topsoil	151	SY	= (Topsoil Place)/167
40102 Crushed Aggregate Base			= (Gravel for Pavement Place) * -2
Course Gradation No. 2	31	tons	ton/cubic yard

City of Madison Department of Public Works PARKS DIVISION

330 E. Lakeside St. Madison, WI 53715



PROJECT:

PARKS SUN SHELTER INSTALLATIONS

PROJECT ADDRESS:

KESTREL PARK 9702 GREY KESTREL DR MADISON, WI 53593

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

ITEM	DATE
ADVERTISED FOR BIDS	01/23/2025
PUBLIC WORKS PROJECT	Γ#:
9529	

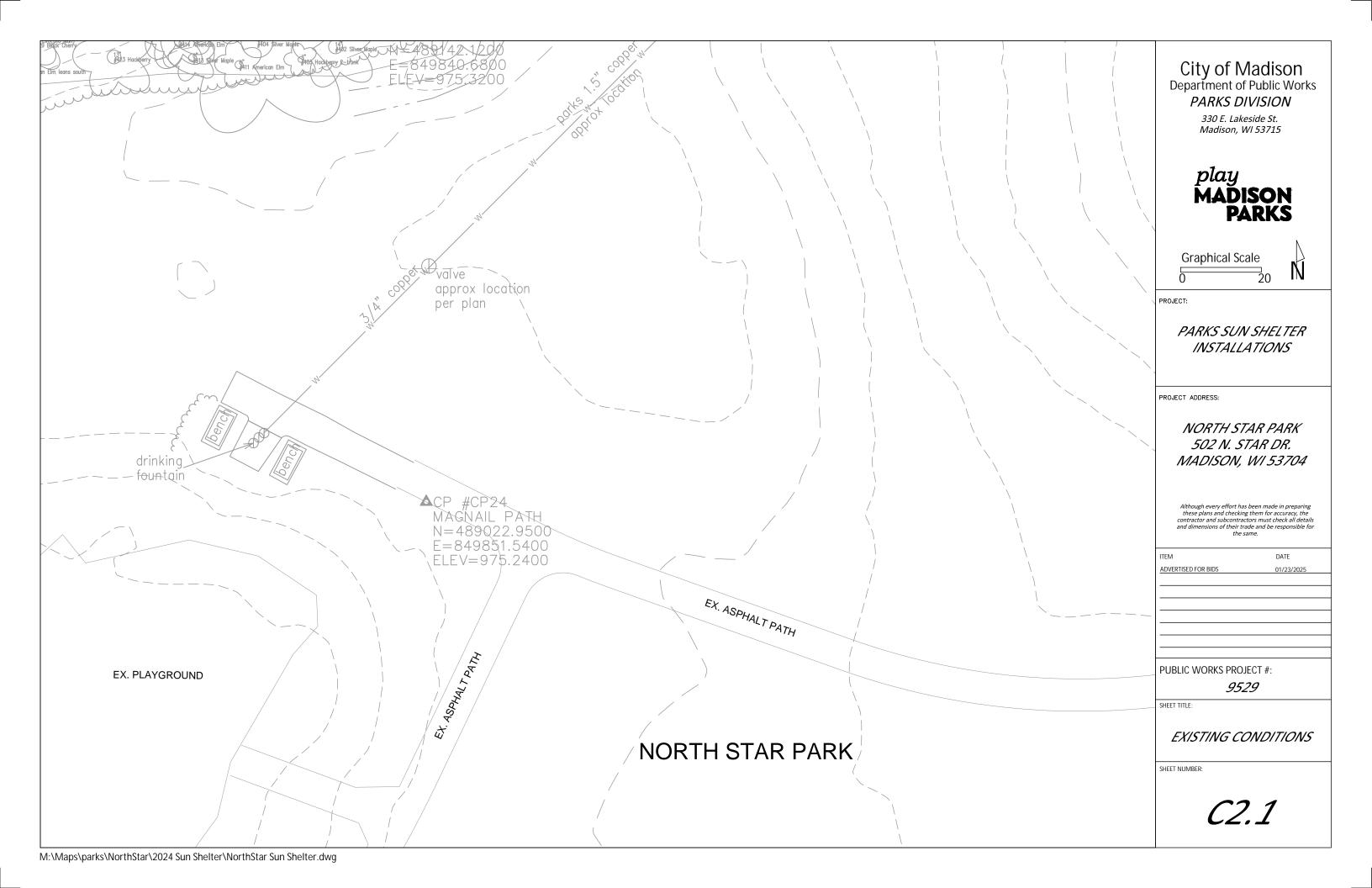
SHEET TITLE:

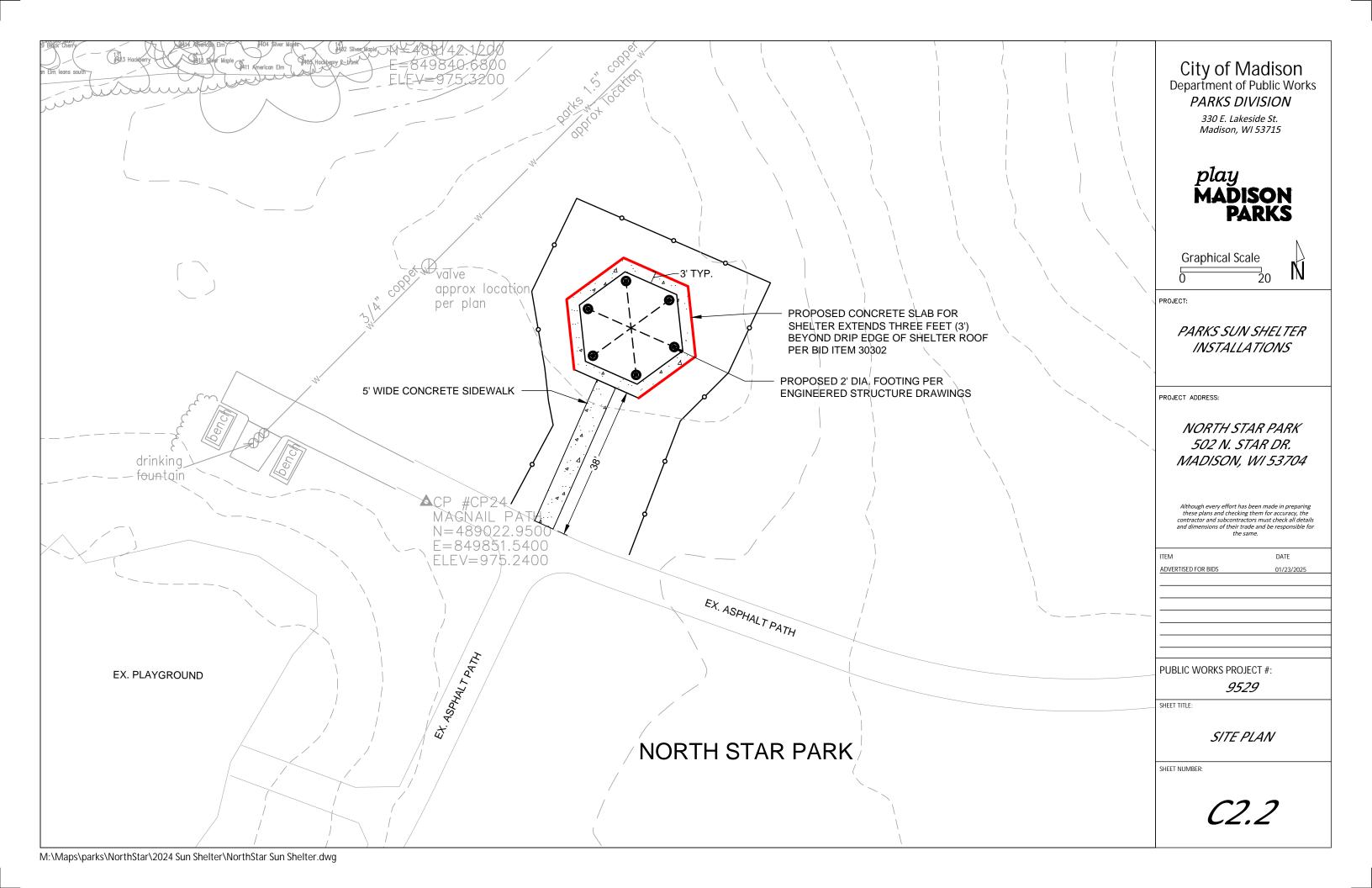
DESIGN COMPUTATIONS

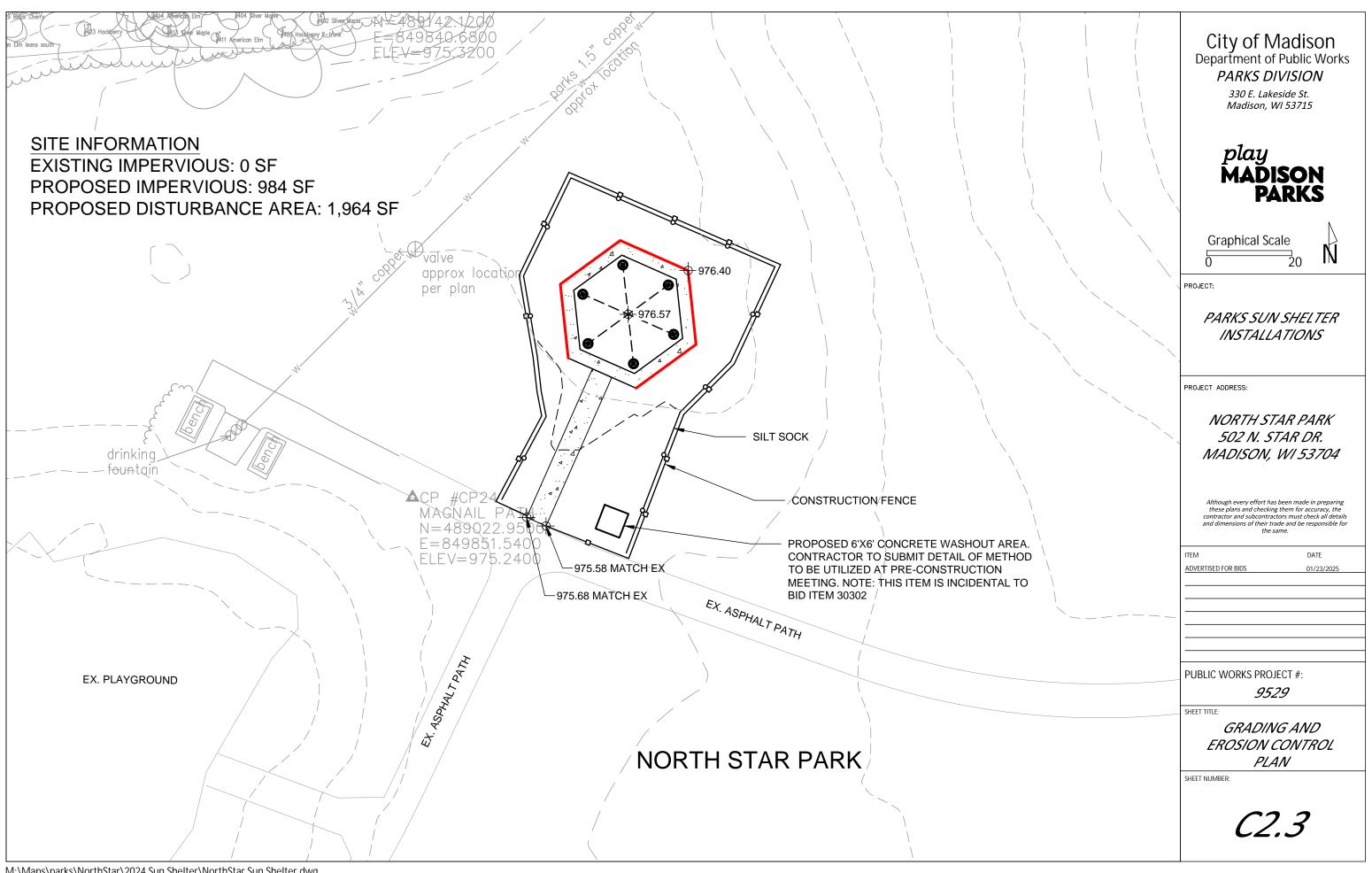
SHEET NUMBER:

C1.4









	City of Madison,	WI Public Works Contrac	t								
	Date Revised:12	-12-2024									
	Notes:										
	Positive volumes	are cuts, negative volume	s are fills.								
	Not all parts of a	ll surface models (Digital 7	Terrain Models) are used for c	omputations of	or intended for	or actual o	onstruction	on.			
											Facto
				From Surface	To Surface	area	depth	Unfac- tored volume	Unfac-tored volume (cu	Expan- sion Factor	(Unco
Sort	Grp	Material	Item	Model	Model	(sq ft)	(ft)	(cu ft)	yd)	(%)	(cu)
1.1	Grass to Grass	Topsoil Excavate	Strip 9in topsoil	n/a	n/a	763	0.75	572	21.2	0%	
		at the particular operation of the particular operations and the particular operations of the particular operations operations of the particular operations operati	Cut subsoil to proposed								
1.2	Grass to Grass	Subsoil Excavate	subgrade	Ex-9in	Pro-9in	763	varies	7	0.3	0%	
			Fill subsoil to proposed								
1.3	Grass to Grass	Subsoil Place	subgrade	Ex-9in	Pro-9in	763	varies	-278	-10.3	0%	
14	Grass to Grass	Topsoil Place	Place 9in topsoil	n/a	n/a	763	-0.75	-572	-21.2	0%	_
	Grass to	тороси тисо	i ida a ani tapa an				3.1.5				
2.1	Concrete	Topsoil Excavate	Strip 9in topsoil	n/a	n/a	984	0.75	738	27.3	0%	
	Grass to		Cut subsoil to proposed								
2.2	Concrete	Subsoil Excavate	subgrade	Ex-9in	Pro-13in	984	varies	135	5.0	0%	
	Grass to		Fill subsoil to proposed								
2.3	Concrete	Subsoil Place	subgrade	Ex-9in	Pro-13in	984	varies	0	0.0	0%	
	Grass to	Gravel (for Pavement)									
2.4		Place	Place 6in gravel base	n/a	n/a	984	-0.50	-492	-18.2	0%	-
	Grass to	all to the									
2.5	Concrete	Concrete Pavement	Place 7in concrete	n/a	n/a	984	-0.58	-574	-21.3	0%	-

North Star Park Sun S	helter - Earthwork Quantities
City of Madison, WI Public V	9529
Date Revised:	12/12/2024
Dervied from more detailed s	preadsheet available from Parks Div
Computation Summary	
Positive volumes are cuts (m	aterial available), negative volumes
are fills (material needed)	
Row Labels	Sum of Unfactored volume (cu yd)
Gravel (for Pavement) Place	-18.2
Subsoil Excavate	5.3
Subsoil Place	-10.3
Topsoil Excavate	48.5
Topsoil Place	-21.2
Concrete Pavement	-21.3
Grand Total	-17.2

Reorganized into bid table items			
Bid Item	Quantity	Units	Relation to Table (above)
20101 Excavation Cut	54	CY	= Subsoil Excavate + Topsoil Excavate
20202 Fill Borrow	5	CY	= Subsoil Excavate + Subsoil Place
20221 Topsoil	127	SY	= (Topsoil Place)/167
40102 Crushed Aggregate Base			= (Gravel for Pavement Place) * -2
Course Gradation No. 2	36	tons	ton/cubic yard

City of Madison Department of Public Works PARKS DIVISION

330 E. Lakeside St. Madison, WI 53715



PROJECT:

PARKS SUN SHELTER INSTALLATIONS

PROJECT ADDRESS:

NORTH STAR PARK 502 N. STAR DR. MADISON, WI 53704

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

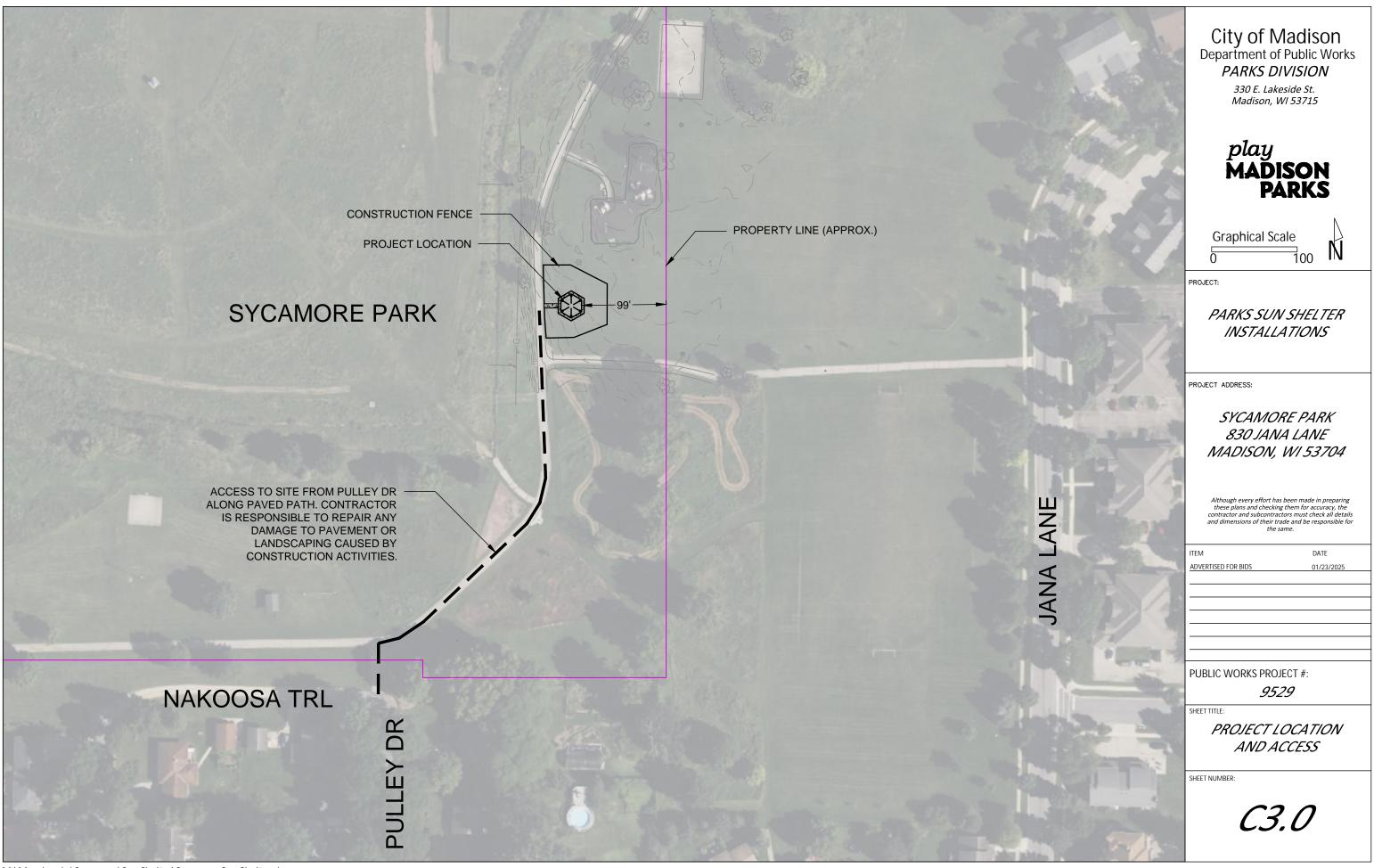
IIEM	DATE
ADVERTISED FOR BIDS	01/23/2025
PUBLIC WORKS PROJ	ECT #:
957	29
<i>95</i> 2	.9

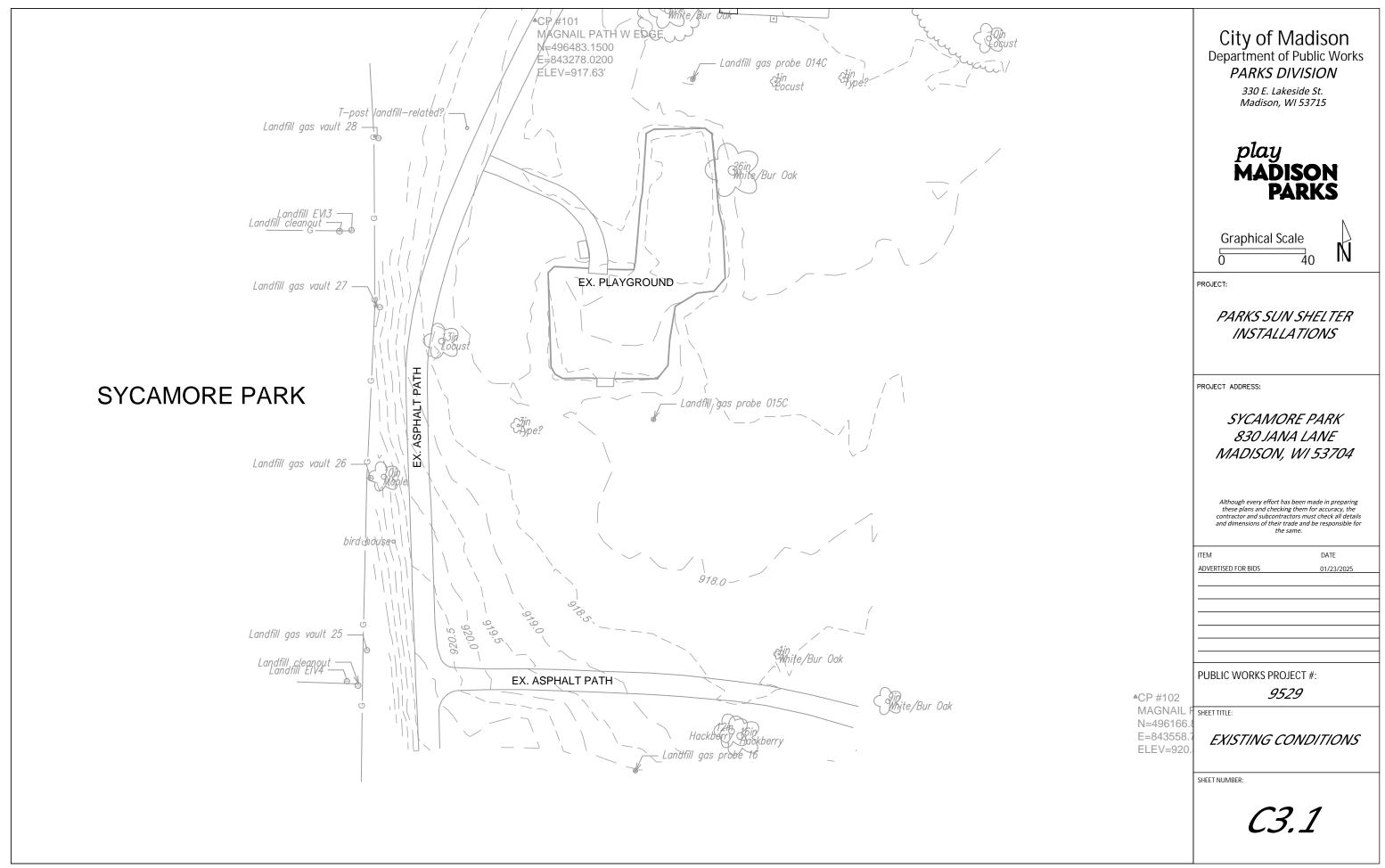
SHEET TITLE:

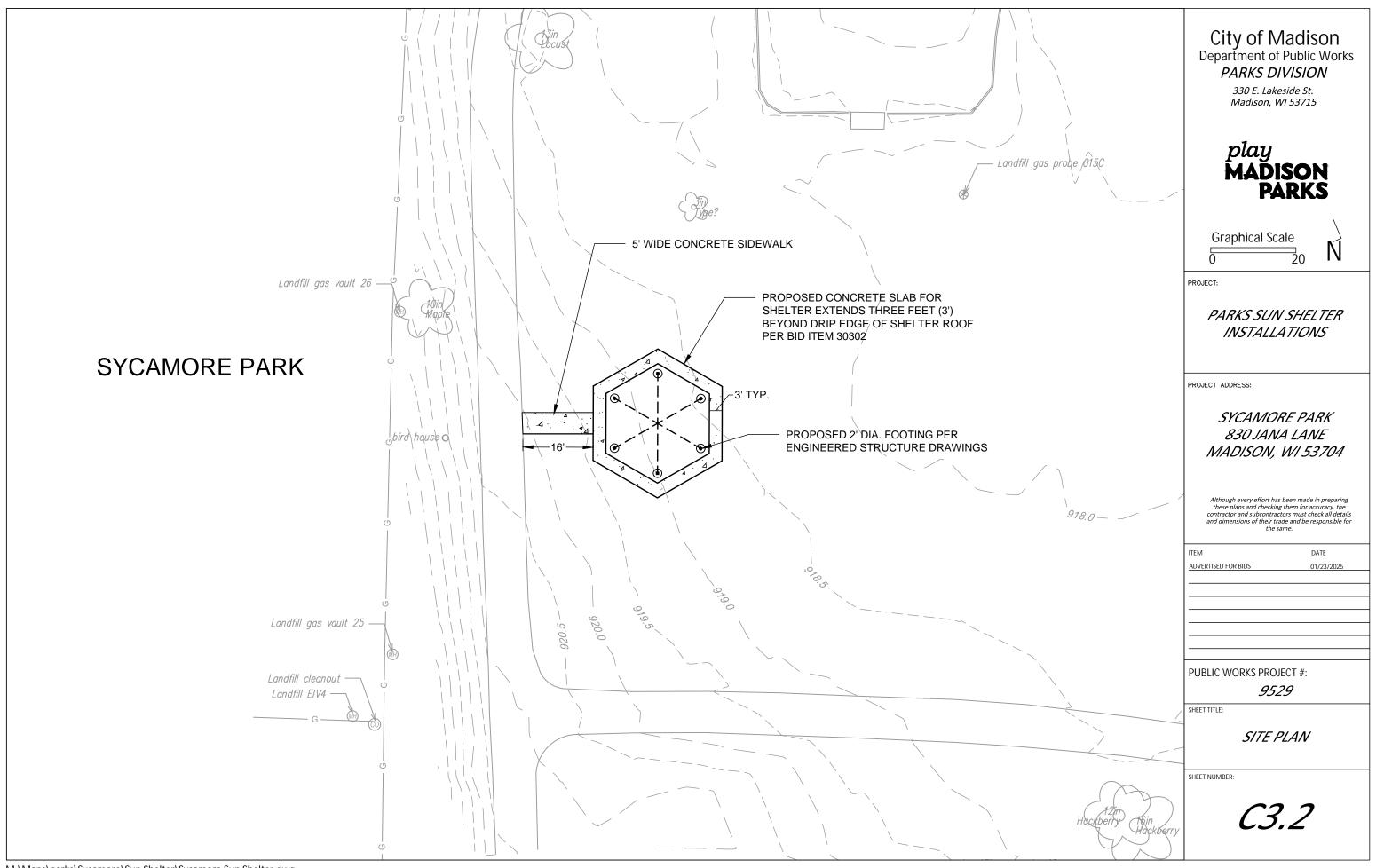
DESIGN COMPUTATIONS

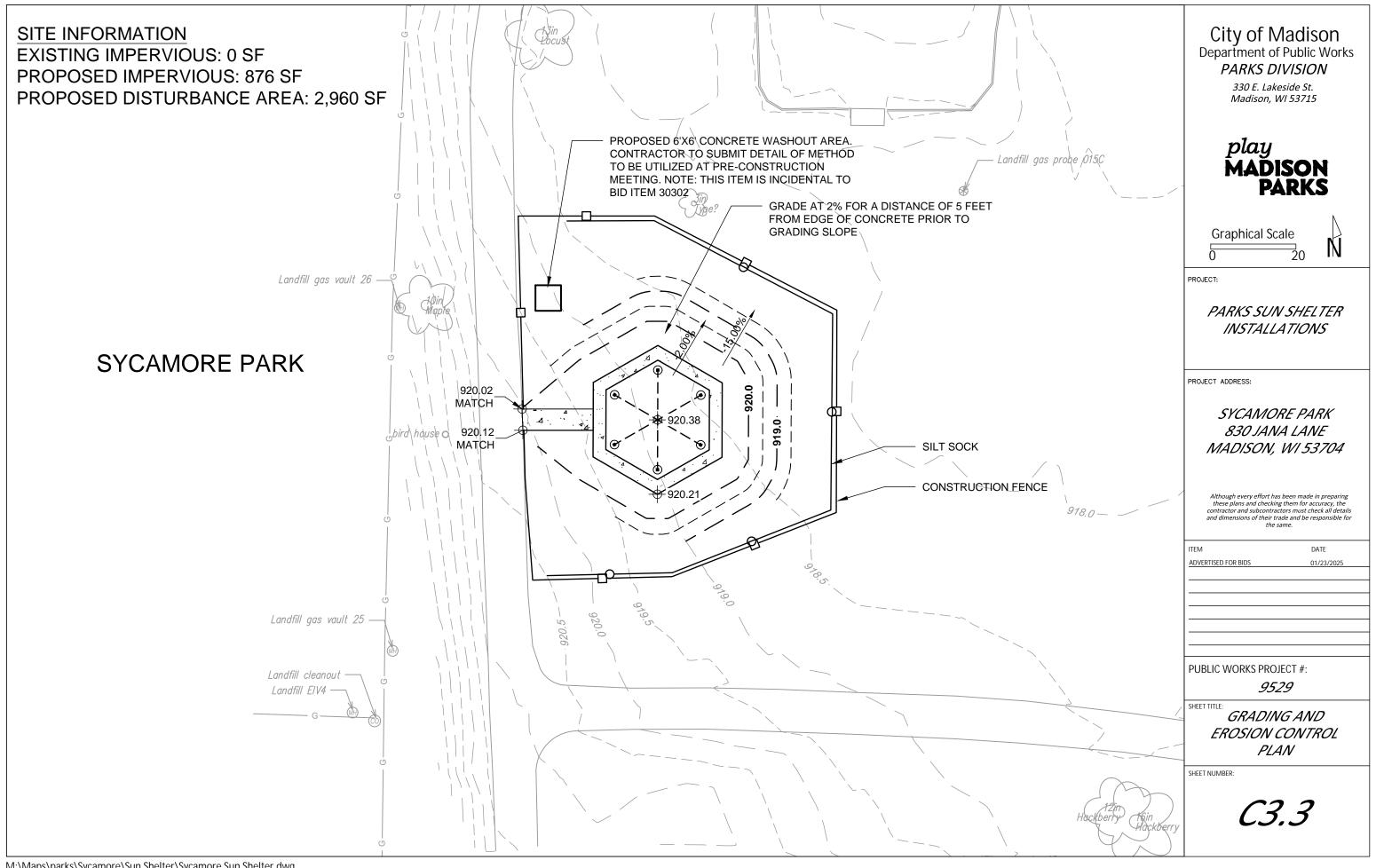
SHEET NUMBER:

C2.4









	City of Madison,	WI Public Works Contract	ot								
	Date Revised:12	-12-2024									
	Notes:										
	Positive volumes	are cuts, negative volume	es are fills.								
	Not all parts of a	Il surface models (Digital	Terrain Models) are used for c	omputations of	or intended for	or actual c	onstruction	on.			
Sort	Grp	Material	ltem	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfac- tored volume (cu ft)	Unfac-tored volume (cu yd)	Expansion Factor	Fac (Ui pa Vo
	-										Ť
1.1	Grass to Grass	Topsoil Excavate	Strip 9in topsoil	n/a	n/a	2078	0.75	1559	57.7	0%	1
			Cut subsoil to proposed								
1.2	Grass to Grass	Subsoil Excavate	subgrade	Ex-9in	Pro-9in	2078	varies	0	0.0	0%	ŕ
			Fill subsoil to proposed								
1.3	Grass to Grass	Subsoil Place	subgrade	Ex-9in	Pro-9in	2078	varies	-1724	-63.9	0%	4
1.4	Grass to Grass	Topsoil Place	Place 9in topsoil	n/a	n/a	2078	-0.75	-1559	-57.7	0%	į.
2.1	Grass to Concrete	Topsoil Excavate	Strip 9in topsoil	n/a	n/a	876	0.75	657	24.3	0%	
Z. I	Grass to	Topodii Extravate	Cut subsoil to proposed	11/4	TI/ CI	070	0.75	031	24.3	076	
2.2		Subsoil Excavate	subgrade	Ex-6in	Pro-13in	876	varies	5	0.2	0%	
2.2	Grass to	Cabon Exoducto	Fill subsoil to proposed	LX OIII	1 10 10111	070	varies	J	0.2	070	
2.3		Subsoil Place	subgrade	Ex-6in	Pro-13in	876	varies	-858	-31.8	0%	,
	Grass to	Gravel (for Pavement)									
2.4	Concrete	Place	Place 5in gravel base	n/a	n/a	876	-0.50	-438	-16.2	0%	
2.4	Concrete	1 lacc	i lade dili giavei base	TI/ G	i ii G	010	0.00	130	10.2	0 70	`

n/a

n/a

Place 7in concrete

ı S	helter - Earthwork Quantities
ic V	9529
ed:	12/12/2024
d s	preadsheet available from Parks Div
(m	aterial available), negative volumes
)	
Ţ,	Sum of Unfactored volume (cu yd)
ce	-16.2
	0.2
	-95.6
	82.1
	-57.7
	-18.9
	-106.2
	ic V sed: ed s s (m

Concrete Pavement

Reorganized into bid table items			
Bid Item	Quantity	Units	Relation to Table (above)
20101 Excavation Cut	83	CY	= Subsoil Excavate + Topsoil Excavate
20202 Fill Borrow	96	CY	= Subsoil Excavate + Subsoil Place
20221 Topsoil	346	SY	= (Topsoil Place)/167
40102 Crushed Aggregate Base			= (Gravel for Pavement Place) * -2
Course Gradation No. 2	32	tons	ton/cubic yard

876 -0.58

-511

-18.9

0%

-18.9

City of Madison Department of Public Works PARKS DIVISION

330 E. Lakeside St. Madison, WI 53715



PROJECT:

PARKS SUN SHELTER INSTALLATIONS

PROJECT ADDRESS:

SYCAMORE PARK 830 JANA LANE MADISON, WI 53704

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

ITEM	DATE
ADVERTISED FOR BIDS	01/23/2025
PUBLIC WORKS PROJ	IECT #:
952	<i>29</i>

SHEET TITLE:

DESIGN COMPUTATIONS

SHEET NUMBER:

C3.4

Concrete

A Division of PORTERCORP 4240 N. 136th AVE HOLLAND, MI 49424 (616) 888-3500

PROJECT NAME: SUN SHELTERS - KESTREL PARK

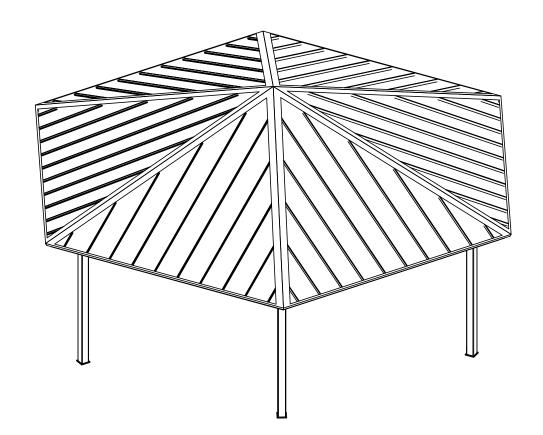
PROJECT LOCATION: MADISON, WI

BUILDING TYPE: HXE 28

ROOF TYPE: STANDING SEAM (24 GA) OVER STAINED T & G

BUILDING NUMBER: P19792

79984 ORDER NUMBER:



DRAWING LIST:

SHEET NUMBER	DRAWING DESCRIPTION
CS	COVER SHEET
1	ARCHITECTURAL ELEVATIONS
2-2.1	ANCHOR AND FOOTING LAYOUT / DETAILS
3	STRUCTURAL FRAMING PLAN
4-4.1	FRAME CONNECTION DETAILS
5	ELECTRICAL VIEWS-N/A
6-6.2	ROOF LAYOUT
7-7.2	ROOF CONNECTION DETAILS

MANUFACTURER NOTES:

MATERIALS:

DESCRIPTION TUBE STEEL ASTM DESIGNATION A500 (GRADE C) A53 (GRADE B) SCHEDULE PIPE **RMT PIPE** LIGHT GAGE COLD FORMED STRUCTURAL STEEL PLATE A1003 (GRADE 50) ROOF PANELS (STEEL) SEE SHEET 2.1 ANCHOR BOLTS

GENERAL NOTES:

 UNLESS NOTED OTHERWISE, THIS STRUCTURE WAS DESIGNED TO ONLY SUPPORT WHAT IS SHOWN ON THESE DRAWINGS. POLIGON MUST BE CONTACTED IF ANYTHING ELSE IS TO BE ATTACHED TO THIS STRUCTURE (WALLS, COLUMN WRAPS, RAILINGS, ETC.) SO THE DESIGN OF THIS STRUCTURE CAN BE REVIEWED AND POSSIBLY REVISED.

 THE ENGINEERING SEAL FOR THE STRUCTURE DETAILED IN THESE DRAWINGS IS ONLY VALID IF PORTER CORP DESIGNS AND FABRICATES THE STEEL COMPONENTS. FABRICATING THE STEEL COMPONENTS ELSEWHERE VOIDS THE ENGINEERING PROVIDED BY PORTER CORP.

UNLESS NOTED OTHERWISE, THIS STRUCTURE WAS DESIGNED ASSUMING A 20'
SEPARATION BETWEEN ANY ADJACENT STRUCTURE WITH AN EAVE HEIGHT EQUAL TO OR
GREATER THAN THE EAVE HEIGHT OF THIS STRUCTURE (SEE SNOW DESIGN DATA). IF THAT
SEPARATION DOES NOT EXIST AND THE GROUND SNOW LOAD [Pg] IS GREATER THAN 0 PSF, POLIGON MUST BE CONTACTED SO THE DESIGN OF THIS STRUCTURE CAN BE REVIEWED AND POSSIBLY REVISED.

STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION MANUAL REFERENCED IN THE GOVERNING BUILDING CODE.

ALL WELDING IS PERFORMED BY AMERICAN WELDING SOCIETY (AWS) CERTIFIED WELDERS AND CONFORMS TO AWS D1.1 OR D1.3 AS REQUIRED.
PARTS SHOWN MAY BE UPGRADED DUE TO STANDARDIZED FABRICATION. REFER TO THE

SHIPPING BILL OF MATERIALS AND FINAL INSTALLATION INSTRUCTIONS INCLUDED WITH THE STRUCTURE FOR POSSIBLE SUBSTITUTIONS AND IMPROVEMENTS.

FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT THE PRIMARY FRAME INSTALLER AND THE ROOF INSTALLER HAVE A MINIMUM FIVE (5) YEARS DOCUMENTED EXPERIENCE INSTALLING THIS TYPE OF PRODUCT.

THE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, AND SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, TECHNIQUES, SEQUENCES AND PROCEDURES, INCLUDING BRACING, SHORING, LAYDOWN AND PROTECTION OF CONSTRUCTION MATERIALS, ETC. TEMPORARY SHORING AND BRACING SHALL BE THE RESPONSIBILITY OF THE

FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT ELECTRIC WIRING, IF REQUIRED, BE RUN THROUGH THE STRUCTURAL MEMBERS BEFORE THE

MAKING HOLES, CUTS OR MODIFICATIONS TO THE STRUCTURAL STEEL MEMBERS IS NOT PERMITTED IN THE FIELD WITHOUT SPECIFIC APPROVAL OF POLIGON.

CERTIFICATES:
MIAMI-DADE COUNTY CERTIFICATE OF COMPETENCY NO. 23-0915.11 PCI (POWDER COATING INSTITUTE) 4000 CERTIFIED

FABRICATOR APPROVALS:
CITY OF PHOENIX, AZ APPROVED FABRICATOR #C08-2010
CITY OF LOS ANGELES, CA APPROVED FABRICATOR #FB01596
CITY OF RIVERSIDE, CA APPROVED FABRICATOR #SF_000042 CITY OF HOUSTON, TX APPROVED FABRICATOR #470 CLARK COUNTY, NV APPROVED FABRICATOR #264 STATE OF UTAH APPROVED FABRICATOR 02008-14 AISC APPROVED FABRICATOR C-00024530 AWS CERTIFIED WELDING FABRICATOR #221003F



DESIGN CRITERIA:

GENERAL: 2015 INTERNATIONAL BUILDING CODE RISK CATEGORY: II

ROOF DEAD LOAD: 6 PSF FRAME DEAD LOAD: SELF WEIGHT

LIVE LOAD:

ROOF LIVE LOAD: 20 PSF

SNOW DESIGN DATA:
GROUND SNOW LOAD (Pg): 30 PSF
FLAT ROOF SNOW LOAD (Pf): 25 PSF SNOW EXPOSURE FACTOR (Ce): 1.0 SNOW LOAD IMPORTANCE FACTOR (Is): 1.0 THERMAL FACTOR (Ct): 1.2 ROOF SLOPE FACTOR (Cs): 1.0 DRIFT SURCHARGE LOAD (Pd): 0 PSF WIDTH OF SNOW DRIFT (w): 0 FT MINIMUM HORIZONTAL SEPARATION DISTANCE (s): 20 FT

BASIC WIND SPEED (V): 115 MPH ALLOWABLE STRESS DESIGN WIND SPEED (Vasd): 89 MPH GUST EFFECT FACTOR (G): 0.85
INTERNAL PRESSURE COEFFICIENT (GCpi): 0 WIND EXPOSURE: C

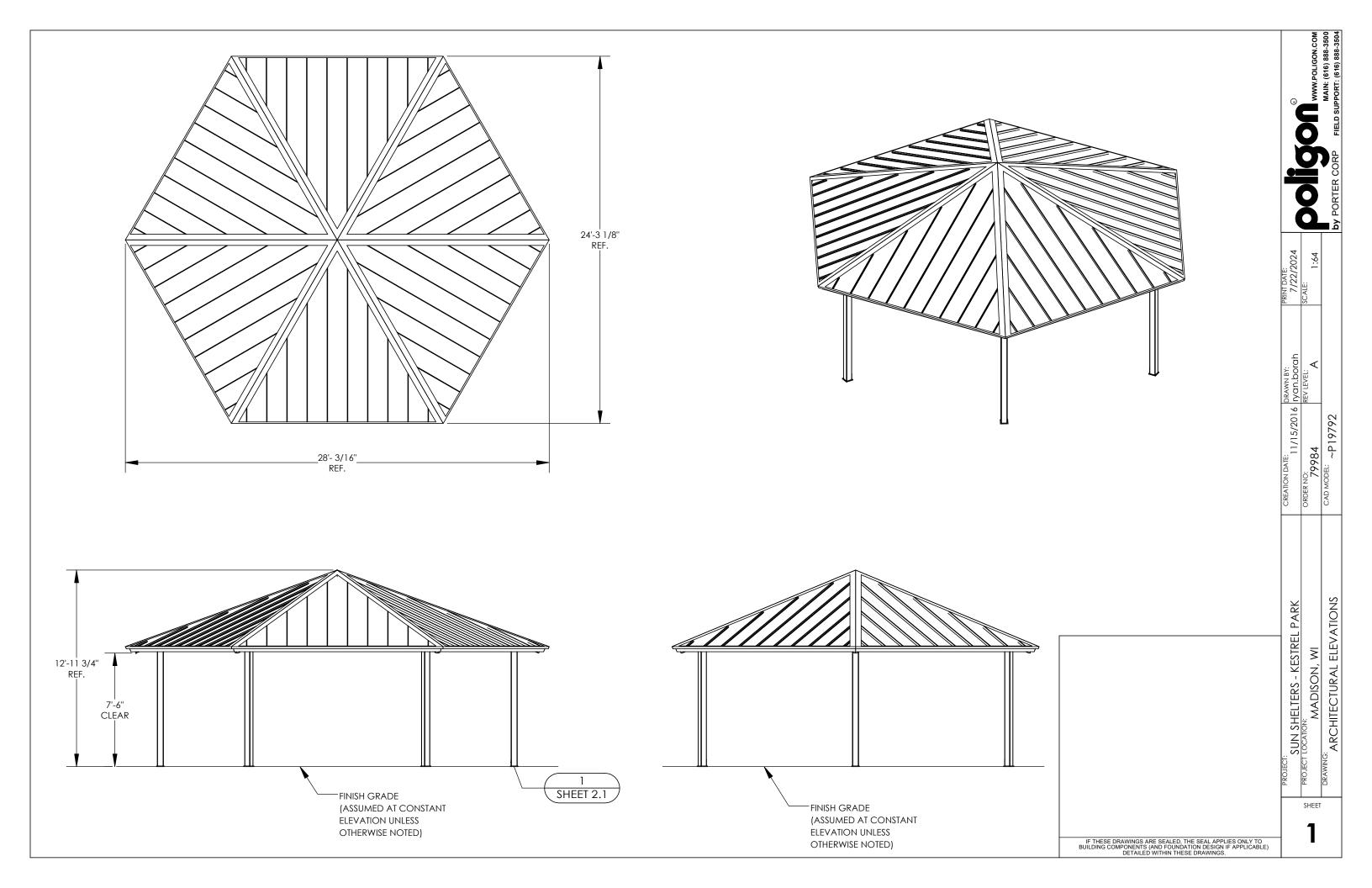
SEISMIC DESIGN DATA:

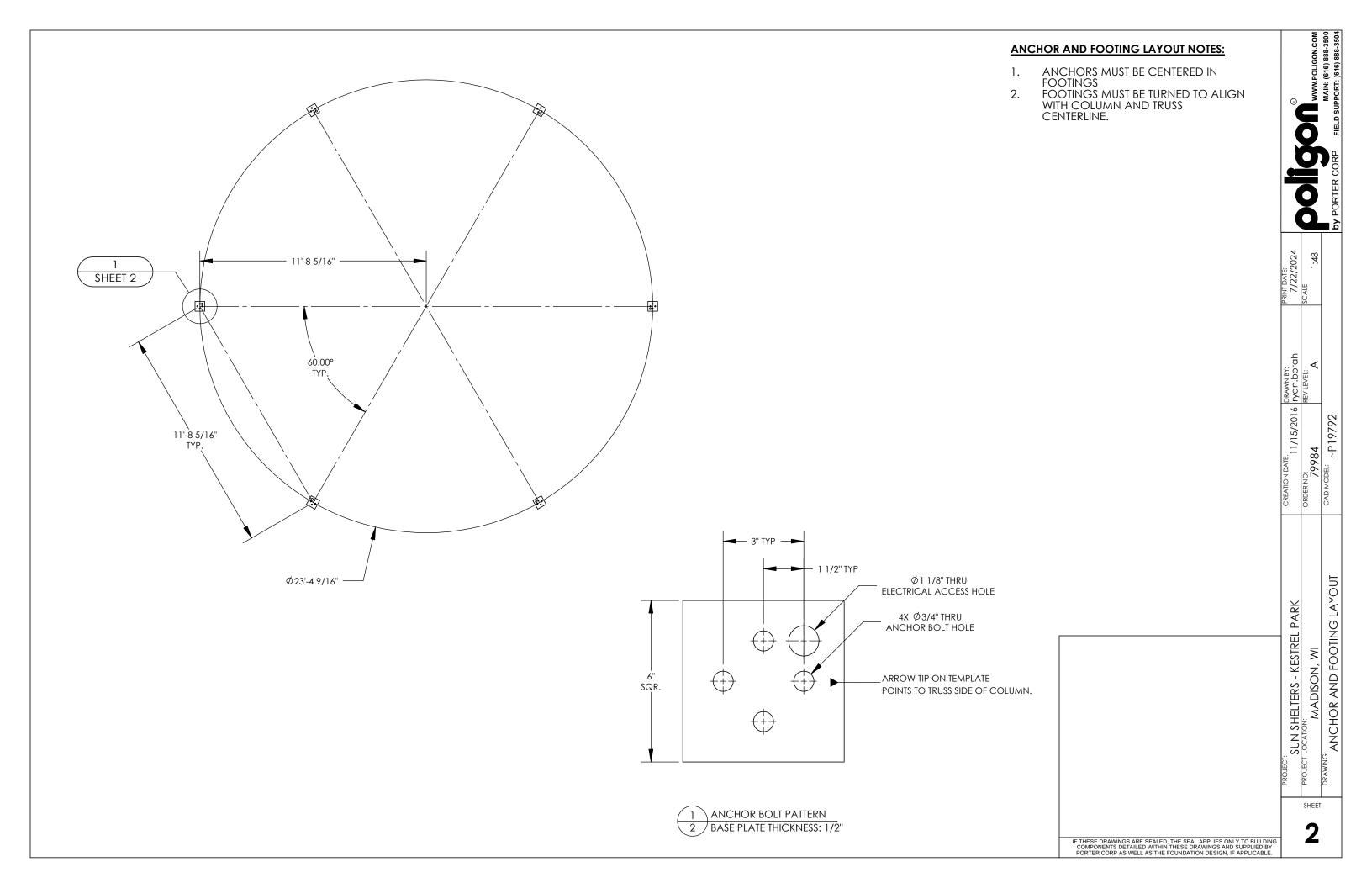
STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE SEISMIC IMPORTANCE FACTOR (Ie): 1.0 SEISMIC DESIGN CATEGORY: B SEISMIC DESIGN CATEGORY: B
SEISMIC SITE CLASS: D
SHORT SPECTRAL RESPONSE (SS): 0.32
1-SEC SPECTRAL RESPONSE (S1): 0.08
DESIGN SHORT SPECTRAL RESPONSE (SDS): 0.33
DESIGN 1-SEC SPECTRAL RESPONSE (SD1): 0.13
SEISMIC RESPONSE COEFFICIENT (CS): 0.11
RESPONSE MODIFICATION COEFFICIENT (R): 3.00
EQUIVALENT LATERAL FORCE PROCEDURE
SEE CALCULATIONS FOR ADDITIONAL DATA

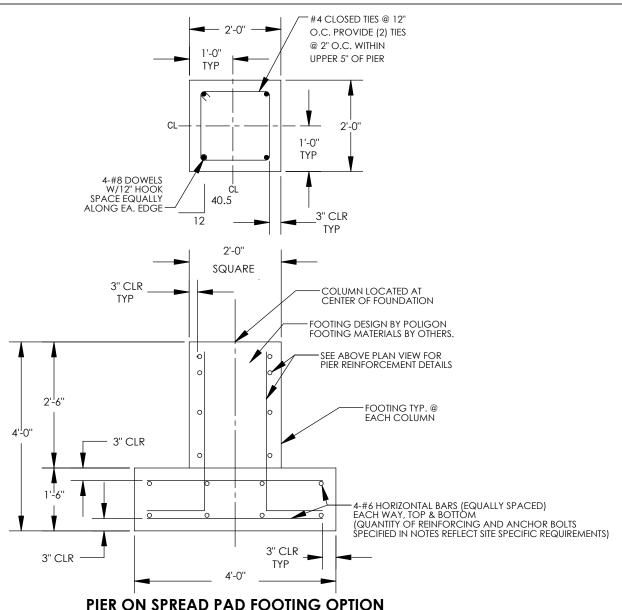
ADDITIONAL CRITERIA:

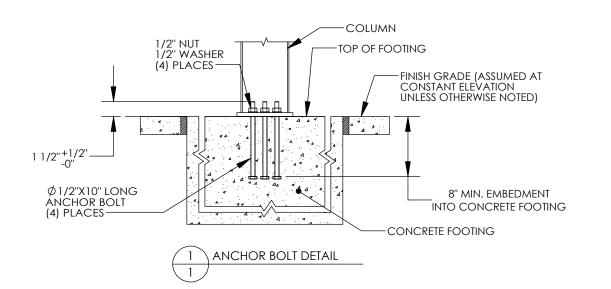
11/15/2016 ~P19792 SUN SHELTERS - KESTREL PARK LOCATION: ₹ MADISON,

IF THESE DRAWINGS ARE SEALED. THE SEAL APPLIES ONLY TO BUILDING COMPONENTS DETAILED WITHIN THESE DRAWINGS AND SUPPLIED BY PORTER CORP AS WELL AS THE FOUNDATION DESIGN, IF APPLICABLE.









ANCHOR BOLT NOTES - INTERNAL (ANCHOR BOLTS LOCATED WITHIN COLUMN):

- ANCHOR BOLTS SHALL BE ASTM A307 (GRADE A) MATERIAL UNLESS OTHERWISE NOTED.
- 2. ANCHOR BOLTS SHALL BE EITHER "HEADED" OR "THREADED WITH NUT" AS DEFINED IN THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL.
- HOOKED ANCHOR BOLTS ARE NOT ACCEPTABLE.
- 4. ACCURATE ANCHOR BOLT PLACEMENT IS CRITICAL. TO ENSURE THE ANCHOR BOLT LAYOUT MEETS THE DIMENSIONS REQUIRED ON THE DRAWINGS, SURVEY (OR MEASURE) THE LOCATION OF ALL ANCHOR BOLTS PRIOR TO POURING THE FOOTINGS. AN ADDITIONAL SURVEY (OR MEASUREMENT) SHOULD BE MADE AFTER THE FOOTINGS ARE POURED TO CONFIRM THE ANCHOR BOLTS DID NOT SHIFT DURING THE CONCRETE POUR.
- THE MANUFACTURER STRONGLY RECOMMENDS USING ANCHOR BOLT TEMPLATES BECAUSE THEY SIGNIFICANTLY IMPROVE THE ACCURACY OF ANCHOR BOLT PLACEMENT. AN ANCHOR BOLT TEMPLATE IS PROVIDED WITH ANY ANCHOR BOLT KIT PURCHASED.
- 6. IF OUTSIDE CONSULTING ENGINEERS ARE DESIGNING THE FOUNDATIONS FOR THIS STRUCTURE, THEY MUST REFER TO THE MANUFACTURER'S CALCULATIONS FOR MINIMUM CONCRETE PROPERTIES (COMPRESSIVE STRENGTH, EDGE DISTANCE, ETC.) REQUIRED FOR THE ANCHOR BOLT DESIGN.
- 7. ELECTRICAL ACCESS HOLE IS ALWAYS LOCATED IN THE COLUMN BASE PLATE AS SHOWN. BE SURE TO KEEP THE ANCHOR BOLT TEMPLATE PROPERLY ORIENTED WHEN ELECTRICAL ACCESS TO THE COLUMN IS REQUIRED. <u>TEMPLATE MUST BE REMOVED BEFORE INSTALLING COLUMNS.</u>
- 8. THE CALCULATIONS FOR THIS STRUCTURE ASSUME A PINNED COLUMN BASE.
- 9. THE FOLLOWING ADHESIVE ANCHORS MAY BE SUBSTITUTED FOR THE CAST-IN-PLACE ANCHOR BOLTS: -HILTI HIT-HY 200 (A OR R) V3 ADHESIVE WITH Ø 1/2" HAS-E ROD WITH 6" EFFECTIVE EMBEDMENT. CONTRACTOR SHALL FOLLOW ALL INSTALLATION SPECIFICATIONS AND REQUIREMENTS OF ANCHOR MANUFACTURER.

CONCRETE NOTES:

- 1. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE CURRENT "ACI MANUAL OF CONCRETE PRACTICE".
- 2. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150 TYPE II OR TYPE V.
- 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE CONCRETE MIX DESIGN MEETS THE "ACI MANUAL OF CONCRETE PRACTICE" REQUIREMENTS FOR CONCRETE BY EXPOSURE CLASS.
- 4. THE USE OF CHLORIDE ACCELERATORS IS NOT PERMITTED.
- 5. COARSE AGGREGATE SHALL BE #57 OR LARGER.
- 6. CONCRETE AT PLACEMENT SHALL HAVE A SLUMP OF 4" +/- 1".
- 7. MINIMUM CONCRETE COMPRESSIVE STRENTGH AT 28 DAYS: 4500 PSI.
- 8. REINFORCING STEEL SHALL BE DEFORMED STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A615 (DEFORMATIONS SHALL BE IN ACCORDANCE WITH ASTM A305) AS FOLLOWS:

GRADE 60: #4 BARS AND LARGER

GRADE 40: #3 BARS

- 9. PRIOR TO PLACING OF CONCRETE, REINFORCING STEEL AND EMBEDDED ITEMS SHALL BE WELL SECURED IN POSITION.
- 10. MAINTAIN 3" CONCRETE COVERAGE TO FACE OF BARS UNLESS OTHERWISE NOTED.
- 11. BARS SHALL BE CLEAN OF RUST, GREASE OR OTHER MATERIAL LIKELY TO IMPAIR BOND, BENDS SHALL BE MADE COLD.
- WELDING OF REINFORCEMENT IS NOT ALLOWED.
- 13. ALL EXPOSED EXTERNAL CORNER OF FOUNDATIONS TO BE CHAMFERED BY 3/4" BY 45 DEGREES UNLESS NOTED OTHERWISE.
- 14. ALL NEW CONCRETE SHALL BE CURED IMMEDIATELY AFTER FINISHING OF REMOVING FORMWORK. CURING SHALL BE EITHER A MOIST CURE METHOD OR THE USE OF A CURING COMPOUND.

FOUNDATION NOTES:

- 1. FOUNDATIONS SHALL BEAR ON COMPETENT, UNDISTURBED SOIL OR 95% COMPACTED FILL. IF SIGNS OF ORGANIC MATERIAL, UNCONTROLLED FILL, CLAY OR SILT, HIGH WATER TABLE OR OTHER POSSIBLE DETRIMENTAL CONDITIONS ARE FOUND, CONSTRUCTION OF THE FOUNDATIONS MUST BE STOPPED AND A GEOTECHNICAL ENGINEER BE CONTACTED.
- 2. NO FOUNDATIONS SHALL BE PLACED INTO OR ADJACENT TO SUBGRADE CONTAINING WATER, ICE, FROST, ORGANIC OR LOOSE MATERIAL.
- 3. WATER SHALL NOT BE PERMITTED TO ACCUMULATE IN FOUNDATION EXCAVATIONS.
- 4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCAL FROST DEPTH REQUIREMENT PRIOR TO CONSTRUCTION.
- IF FOUNDATIONS SHOWN DO NOT MEET LOCAL FROST DEPTH REQUIREMENTS, EXTEND THE DRILLED PIER FOUNDATION AS REQUIRED, EXTENDING THE VERTICAL BARS AND PROVIDING ADDITIONAL TIES TO MEET SPACING REQUIREMENTS AS SHOWN. IF FROST DEPTH REQUIREMENTS ARE NOT MET, AND NO DRILLED PIER DESIGN IS PROVIDED, CONTACT POLIGON.
- S. ALLOWABLE SOIL PRESSURES (AS APPLICABLE)

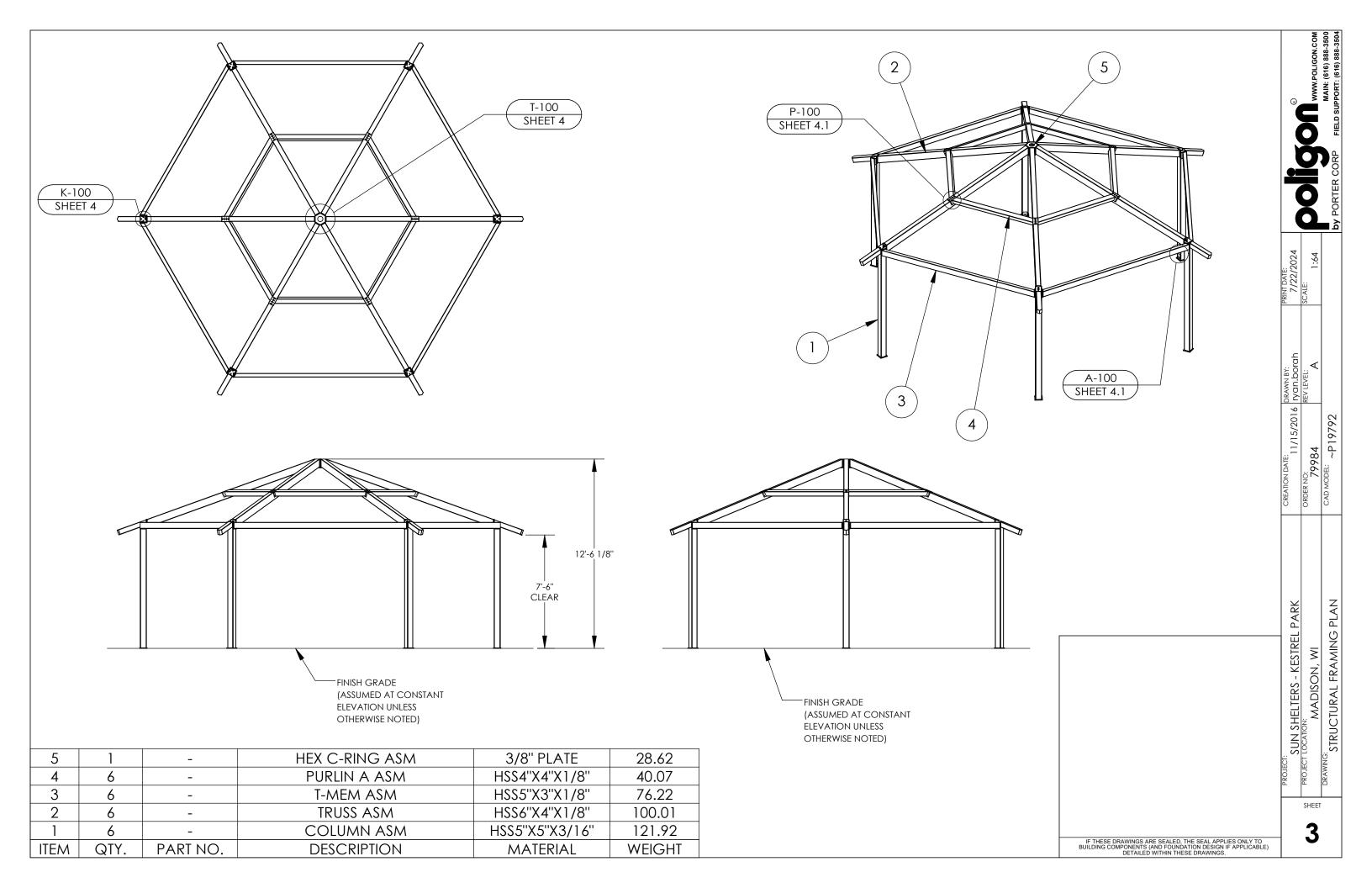
SPREAD PAD	
VERTICAL BEARING	2000 PSF
LATERAL COHESION	130 PSF

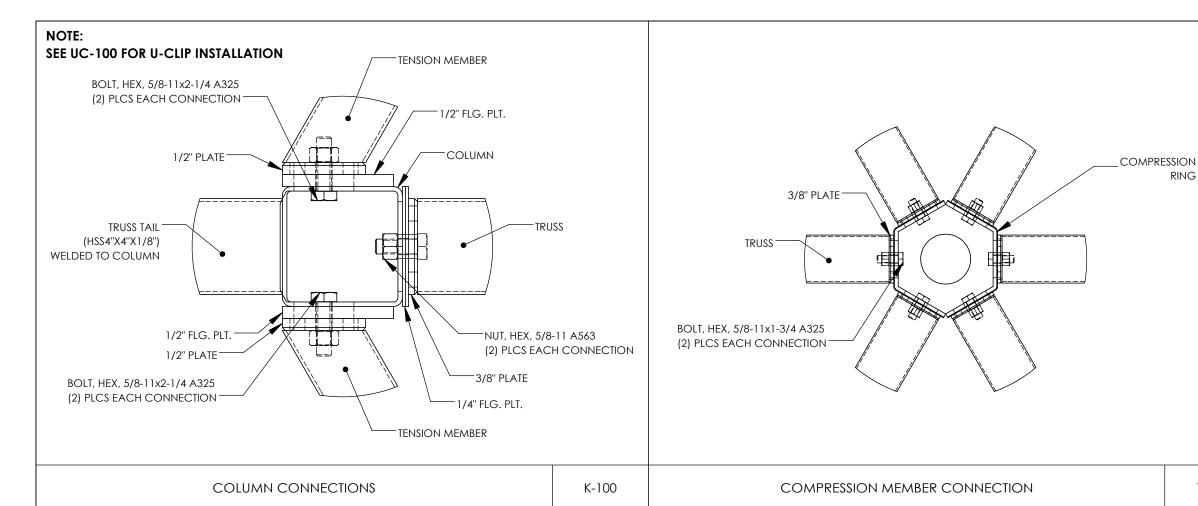
THE FOUNDATION DESIGN CONTAINED HEREIN IS SITE SPECIFIC, AND IS BASED ON KESTRAL PARK GEOTECH C24051-7 PLAYGROUND & SHELTER, KESTRAL PARK, BY CGC INC. DATED 6/8/2024. REPORT NO. C24051.

PROPER CARE MUST BE TAKEN TO ENSURE ANY AND ALL RECOMMENDATIONS, OF THE ABOVE-MENTIONED REPORT, FOR SITE PREPARATION, SOIL PERFORMANCE AND FOUNDATION DESIGN ARE MET. IF CONDITIONS ARE PRESENT THAT DO NOT ALLOW FOR THESE RECOMMENDATIONS TO BE MET, THE GEOTECHNICAL ENGINEER MUST BE CONTACTED.

PROJECT: SUN SHELTERS - KESTREL PARK SUN SHELTERS - KESTREL PARK SUN SHELTERS - KESTREL PARK PROJECT LOCATION: MADISON, WI DRAWN BY: 1/22/2024 7/22/2024 SCALE: CAD MODEI: CAD MODEI: A 1:12 A 1:12			ð	by PO	
IELTERS - KESTREL PARK CREATION DATE: DRAWN BY: 11/15/2016 ryan.borah order NO: 79984 REV LEVEL: A A OR AND FOOTING DETAILS CAD MODEL: ~P19792		PRINT DATE: 7/22/2024			
IELTERS - KESTREL PARK MADISON, WI OR AND FOOTING DETAILS CREATION C CREATION C CREATION C CREATION C CREATION C CREATION C	S	orawn BY: Yan.borah	EV LEVEL:		
IELTERS - KESTREL PARK MADISON, WI OR AND FOOTING DETAILS		CREATION DATE: 11/15/2016 1	ORDER NO: R 79984	CAD MODEL: ~P19792	
		Щ	MADISON, WI		
) 1	1	

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS DETAILED WITHIN THESE DRAWINGS AND SUPPLIED BY PORTER CORP AS WELL AS THE FOUNDATION DESIGN, IF APPLICABLE.

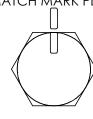




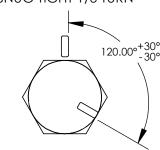
TURN-OF-NUT PRETENSIONING METHOD:

THESE STEPS ILLUSTRATE THE REQUIREMENTS OUTLINED IN THE AISC SPECIFICATION. THE ROTATION INDICATED IS ACCURATE FOR MOST BOLT DIAMETERS AND LENGTHS BUT IT IS THE RESPONSIBILITY OF THE INSTALLER TO MEET AISC REQUIREMENTS.

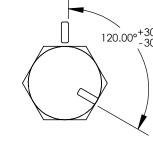
> STEP ONE: AFTER SNUG TIGHT, MATCH MARK PLATE



STEP TWO: THEN TURN BOLT/NUT PAST



SNUG TIGHT 1/3 TURN



CONNECTION NOTES:

- HIGH STRENGTH BOLTS SHALL BE ASTM F3125 (A325, TYPE 1) MATERIAL.
- HIGH STRENGTH NUTS SHALL BE ASTM A563 (GRADE DH) MATERIAL.
- HIGH STRENGTH WASHERS SHALL CONFORM TO ASTM F436.
- UNLESS A SNUG-TIGHT JOINT IS PERMITTED IN THE CONNECTION DETAIL, ALL BOLTS ARE TO BE INSTALLED BY ONE OF THE FOLLOWING PRETENSIONING METHODS AS SPECIFIED IN THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS", SECTION 8: A. TURN-OF-NUT PRETENSIONING
 - B. CALIBRATED WRENCH PRETENSIONING
- THE SNUG-TIGHT CONDITION IS THE TIGHTNESS THAT IS ATTAINED WITH A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.
- ANCHOR BOLTS NEED NOT BE TIGHTENED PAST SNUG-TIGHT.
- "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS" FOR GUIDANCE.
- LOCAL JURISDICTIONS MAY REQUIRE AN INSPECTOR TO BE PRESENT TO WITNESS HARDWARE INSTALLATION AND INDEPENDENT TESTING. INSPECTION REQUIREMENTS
- ERECTION OF THE FRAMING MEMBERS WILL REQUIRE THE MAIN COLUMNS TO BE PLUMB SQUARE AND TIGHTENED TO THE TRUSSES AND/OR TENSION MEMBERS BEFORE INSTALLING
- TEMPORARY SHORING OR BRACING SHALL BE USED TO COMPACT THE JOINTS UNTIL THE CONNECTED PLIES ARE IN FIRM CONTACT PRIOR TO PRETENSIONING.
- TAP STRUCTURAL HARDWARE.
- 12. ALL BOLTS MUST BE LUBRICATED WITH WAX TO ASSIST IN PROPER TIGHTENING. TO LUBRICATE A BOLT IN THE FIELD, APPLY THE WAX STICK DOWN THE LENGTH OF THE BOLT'S
- TO PREVENT RUST STAINING OF FINISH, ALL METAL SHAVINGS MUST BE REMOVED AFTER 13.
- TOUCH-UP PAINT MUST BE APPLIED TO ALL EXPOSED FASTENERS. PERIODIC TOUCH-UP AT THESE CONNECTIONS IS REQUIRED.

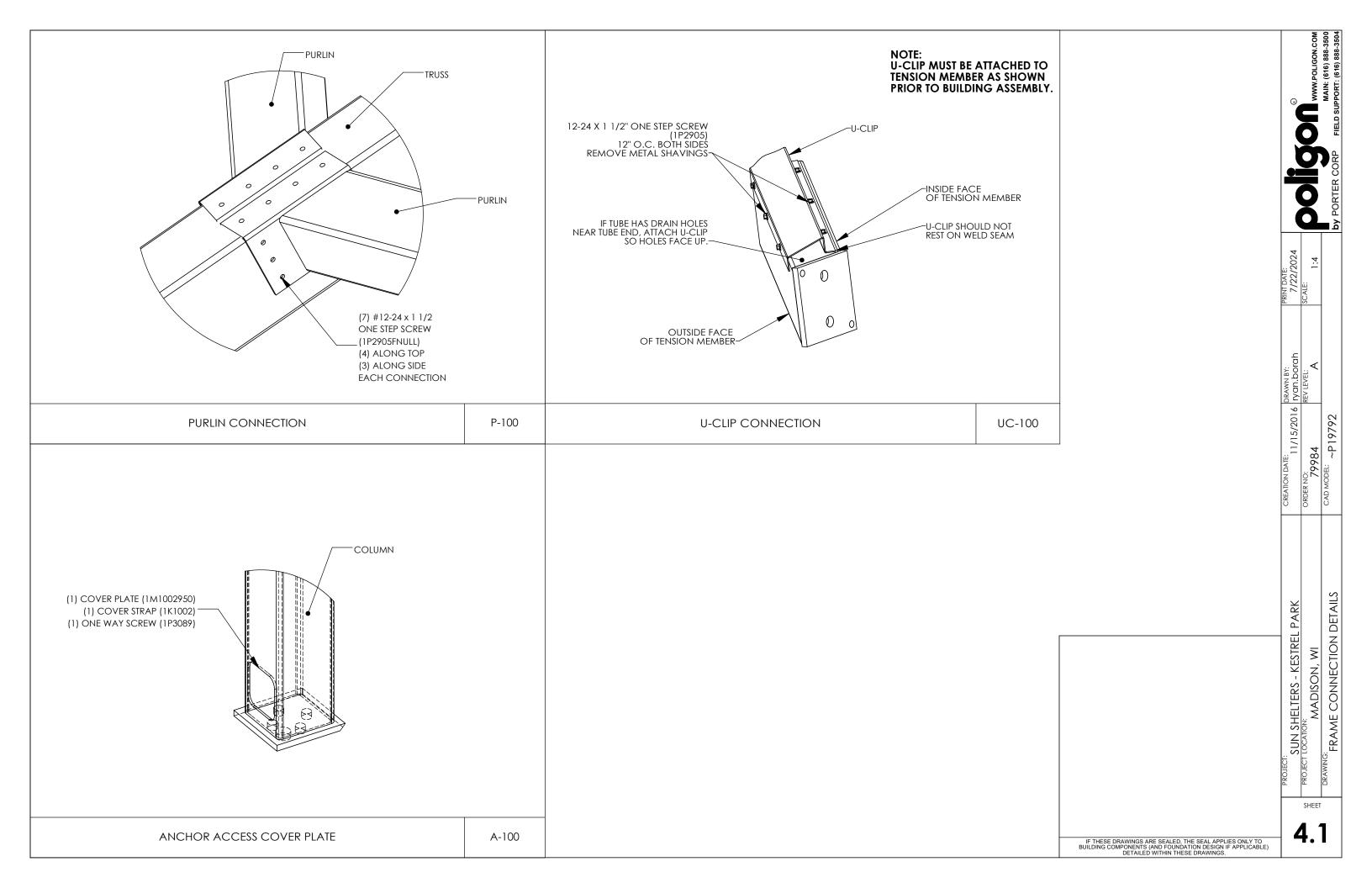
T-100

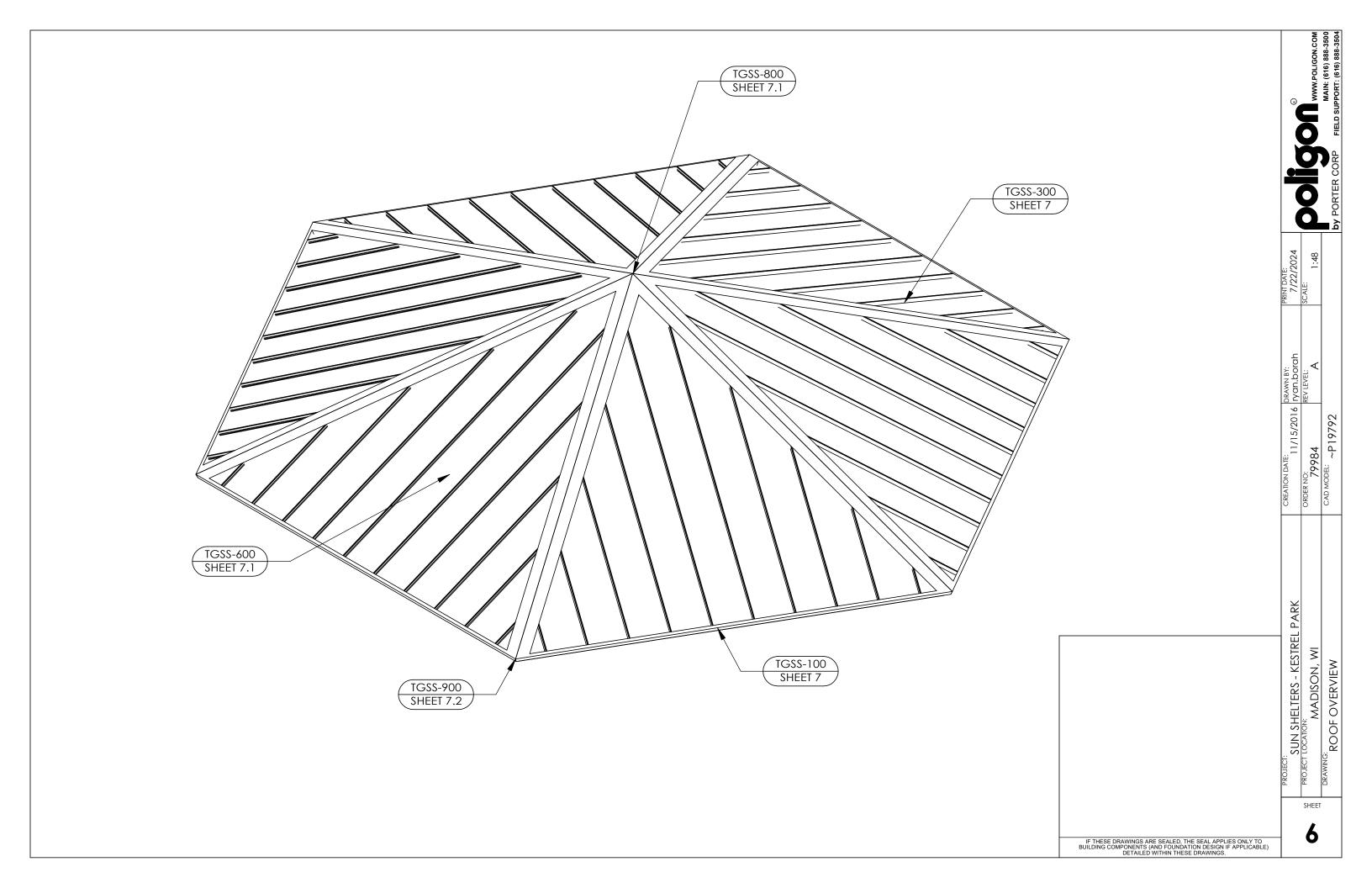
WHEN INSTALLING BOLTS REFER TO SECTIONS 8.4.1, 8.4.2, AND 8.4.3 OF THE

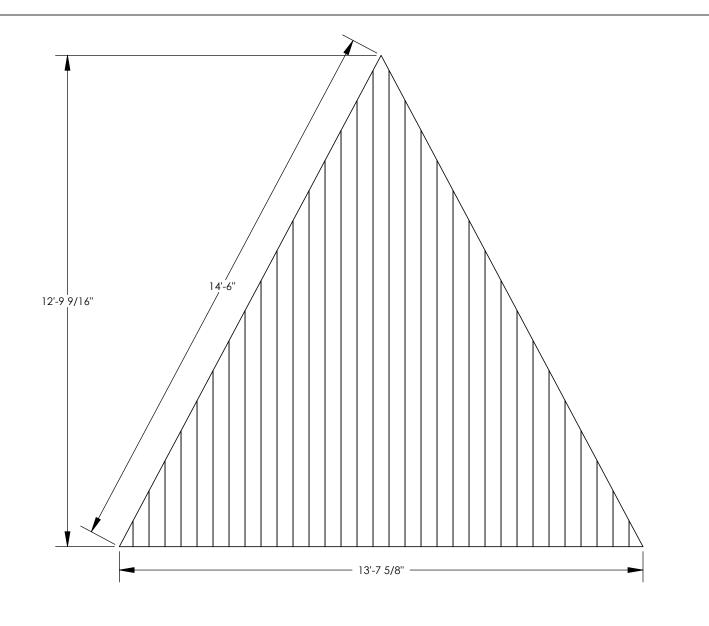
SHOULD BE VERIFIED BY INSTALLER PRIOR TO STEEL ERECTION.

- THE PURLINS. PURLINS, IF REQUIRED, MUST BE AS SHOWN IN FRAMING PLAN.
- PRIOR TO THE ERECTION OF SHELTER COMPONENTS, IT IS RECOMMENDED TO CHASE AND
- INSTALLATION. ENSURE NO SHAVING ARE TRAPPED BETWEEN MATING SURFACES.
 - IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS (AND FOUNDATION DESIGN IF APPLICABLE) DETAILED WITHIN THESE DRAWINGS.

11/15/2016 -P19792 CONNECTION DETAILS SUN SHELTERS - KESTREL PARK LOCATION: ₹ MADISON, SHEET





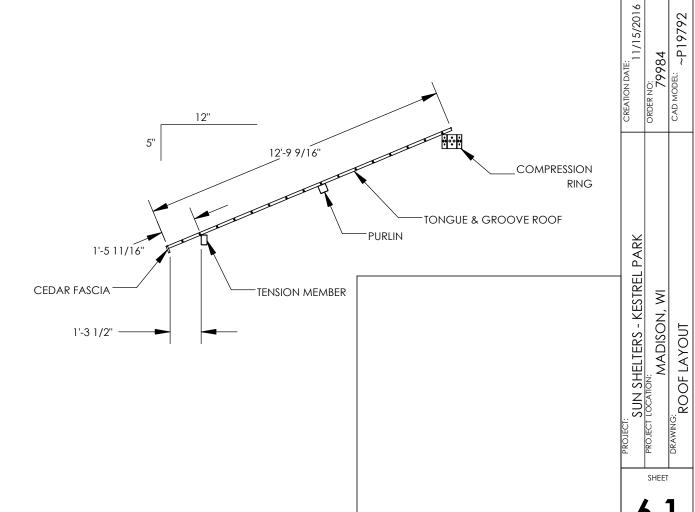


TONGUE & GROOVE NOTES:

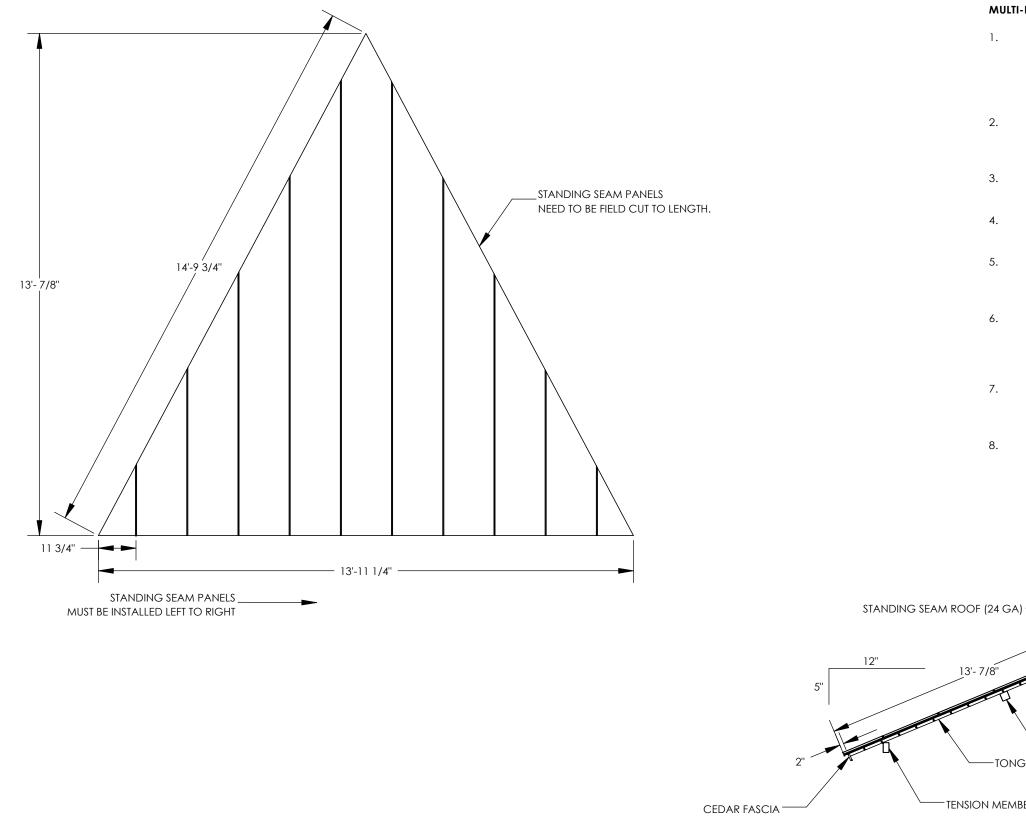
- THE FIRST PLANK SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK. MAKE SURE PLANKS EXTEND ENOUGH TO COVER EAVE, TRUSSES, AND/OR THE CENTER OF THE PEAK.
- 2. THE T&G PROVIDED MAY CONTAIN SOME MINOR IMPERFECTIONS.
 REMOVE THESE IMPERFECTIONS AS REQUIRED AND USE REMAINDER OF
 MATERIAL TO ATTAIN MAXIMUM YIELD.
- 3. NO END JOINTS IN DECKING BETWEEN STRUCTURAL FRAMING AND EAVE OF DECKING.
- 4. A MINIMUM OF 24" SPACING IS REQUIRED BETWEEN ALL ADJACENT END JOINTS. BOARD LAYOUT MAY REQUIRE VISIBLE SPLICES.
- 5. IF PRE-STAINED T&G IS ORDERED, TOUCH-UP AT FIELD CUT EDGES MAY BE NECESSARY.
- 6. POLIGON RECOMMENDS ALL T&G BE STAINED/SEALED TO IMPROVE LONG TERM PERFORMANCE.

1:48





IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS (AND FOUNDATION DESIGN IF APPLICABLE) DETAILED WITHIN THESE DRAWINGS.



MULTI-RIB NOTES:

- 1. THE DETAILS SHOWN ARE SUGGESTIONS OR GUIDELINES ON HOW TO ERECT THE SYSTEMS. THE INFORMATION SHOWN IS ACCURATE, BUT IT IS NOT INTENDED TO COVER ALL INSTANCES, BUILDING REQUIREMENTS, DESIGNS OR CODES. THE DETAILS MAY REQUIRE CHANGES OR REVISIONS DUE TO FIELD CONDITIONS.
- 2. IT SHALL BE THE RESPONSIBILITY OF THE ERECTOR TO ENSURE THAT THE DETAILS MEET PARTICULAR BUILDING REQUIREMENTS AND TO ASSURE ADEQUATE WATER TIGHTNESS.
- THE ERECTOR SHOULD THOROUGHLY FAMILIARIZE HIMSELF/HERSELF WITH ALL ERECTION INSTRUCTIONS BEFORE STARTING WORK.
- 4. THE PANELS SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK.
- 5. FLASHING AND TRIM SHALL BE INSTALLED TRUE, AND IN PROPER ALIGNMENT, WITH ANY EXPOSED FASTENERS EQUALLY SPACED FOR THE BEST APPEARANCE.

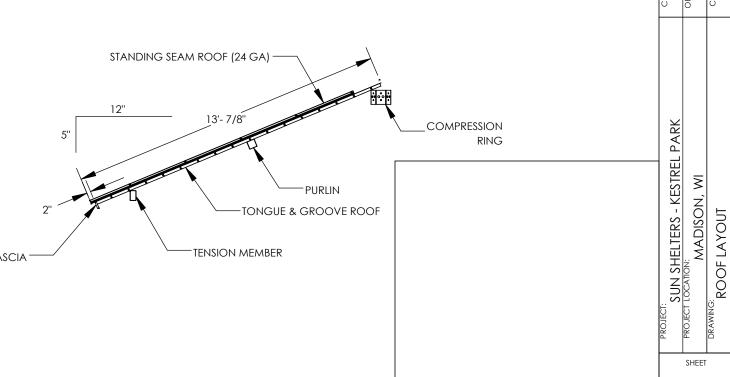
1:48

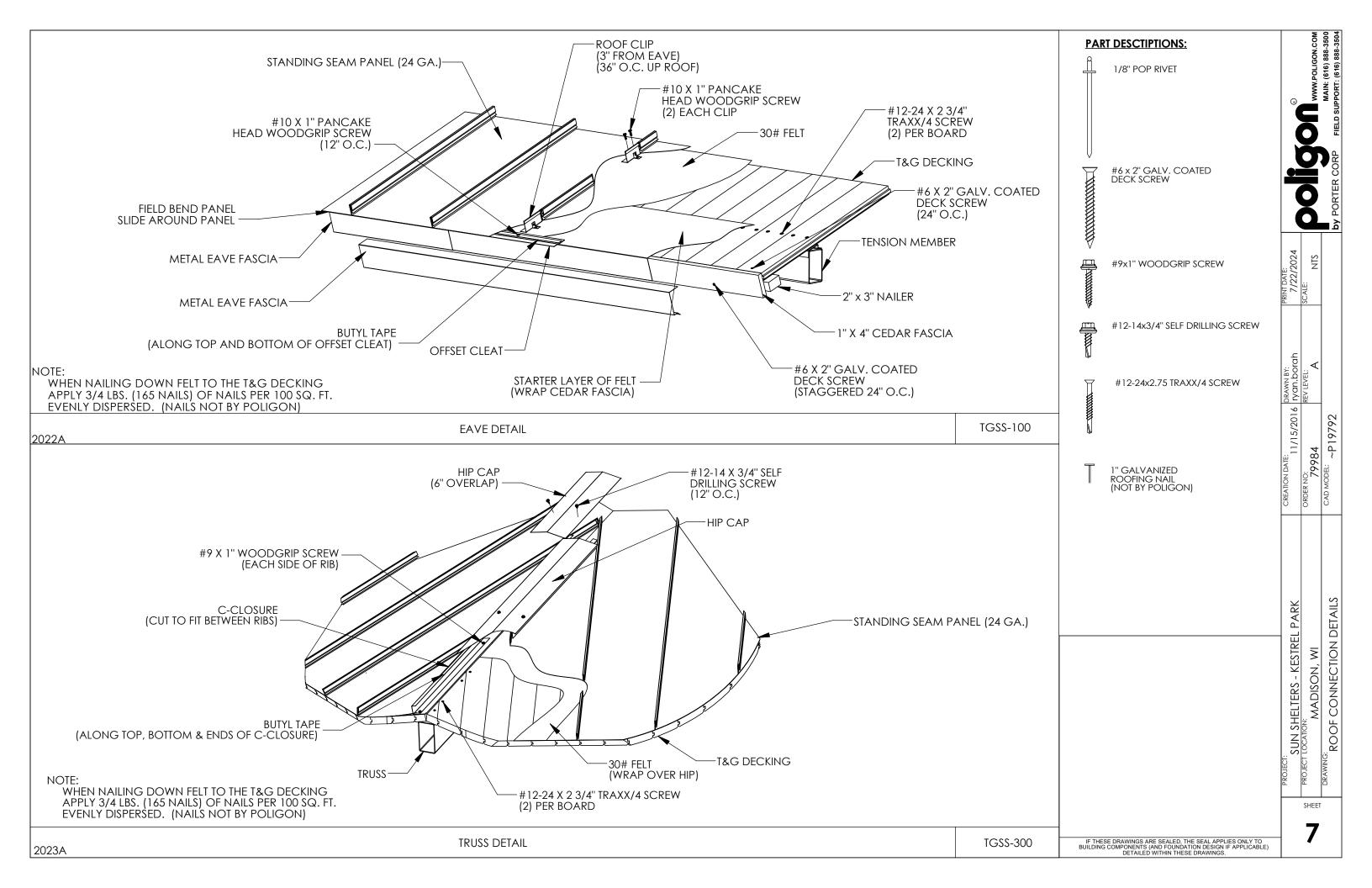
11/15/2016

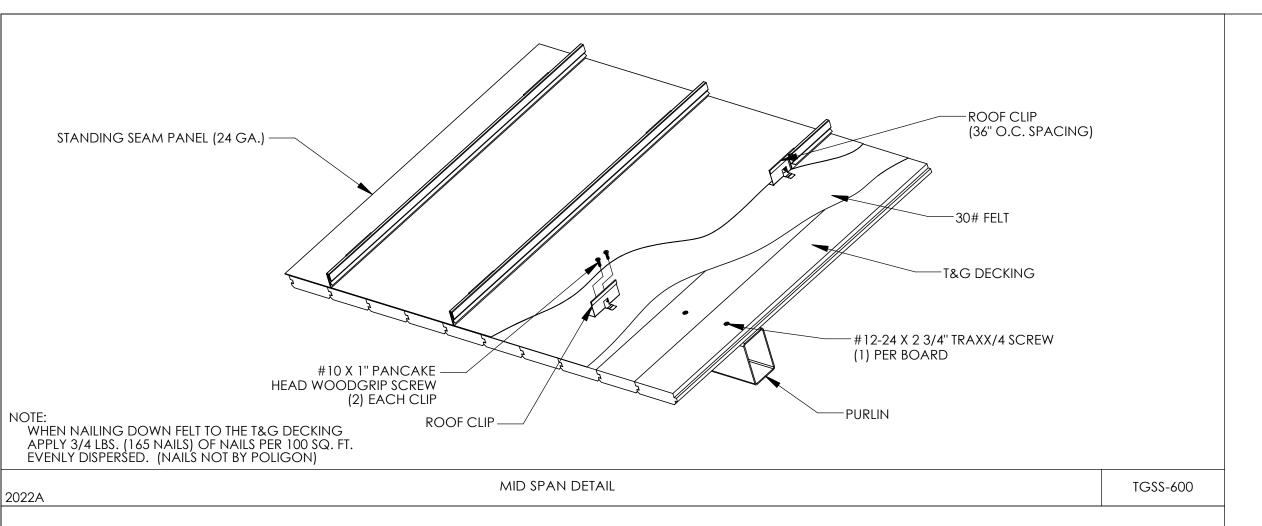
10: 79984 ODEL: ~P19792

- 6. SEALANT SHALL BE FIELD APPLIED ON DRY, CLEAN SURFACES. SOME FIELD CUTTING AND FITTING OF PANELS AND FLASHING IS TO BE EXPECTED BY THE ERECTOR AND MINOR FIELD CORRECTIONS ARE A PART OF NORMAL ERECTION WORK.
- 7. WORKMANSHIP SHALL BE OF THE BEST INDUSTRY STANDARDS AND INSTALLATION SHALL BE PERFORMED BY EXPERIENCED METAL CRAFTSMEN.
- 8. METAL SHAVINGS FROM DRILLING OR INSTALLATION OF ROOF FASTENERS MUST BE CAREFULLY REMOVED FROM THE ROOF BY BRUSHING OR SWEEPING AT THE END OF EACH DAY DURING INSTALLATION. SHAVINGS LEFT ON THE ROOF WILL QUICKLY RUST AND STAIN THE ROOF FINISH.

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS (AND FOUNDATION DESIGN IF APPLICABLE) DETAILED WITHIN THESE DRAWINGS.







#12-14 X 3/4" SELF DRILLING SCREW
(EACH CORNER OF ROOF PEAK CAP)

STANDING SEAM PANEL (24 GA.)

NOTE:
WHEN NAILING DOWN FELT TO THE T&G DECKING
APPLY 3/4 LBS. (165 NAILS) OF NAILS PER 100 SO. FT.

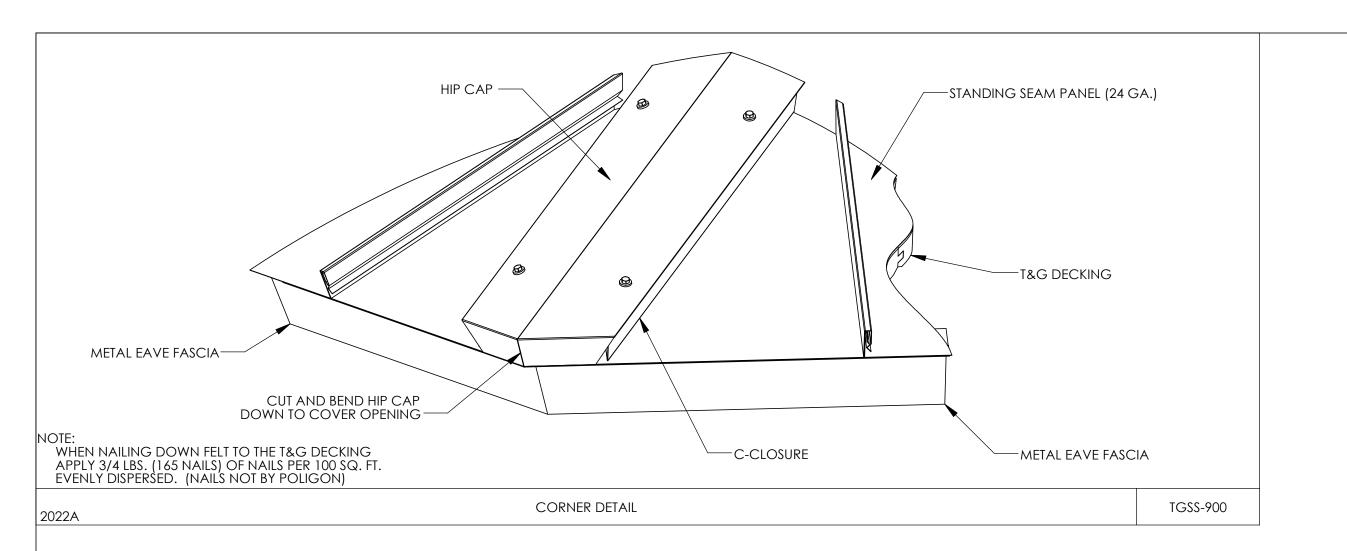
in Drawn BY: 11/15/2016 ryan.borah REV LEVEL: ORDER NO: 79984

CAD MODEI: ~P19792 ROOF CONNECTION DETAILS SUN SHELTERS - KESTREL PARK LOCATION: MADISON, WI

TGSS-800

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS (AND FOUNDATION DESIGN IF APPLICABLE) DETAILED WITHIN THESE DRAWINGS.

EVENLY DISPERSED. (NAILS NOT BY POLIGON)



NTS CREATION DATE: DRAWN BY:
11/15/2016 ryan.borah
ORDER NO: REV LEVEI. ORDER NO: 79984

CAD MODEL: ~P19792 DRAWING: MADISON, WI
ROOF CONNECTION DETAILS SUN SHELTERS - KESTREL PARK ROJECT LOCATION:

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS (AND FOUNDATION DESIGN IF APPLICABLE) DETAILED WITHIN THESE DRAWINGS.

A Division of PORTERCORP 4240 N. 136th AVE HOLLAND, MI 49424 (616) 888-3500

PROJECT NAME: SUN SHELTERS - NORTH STAR PARK

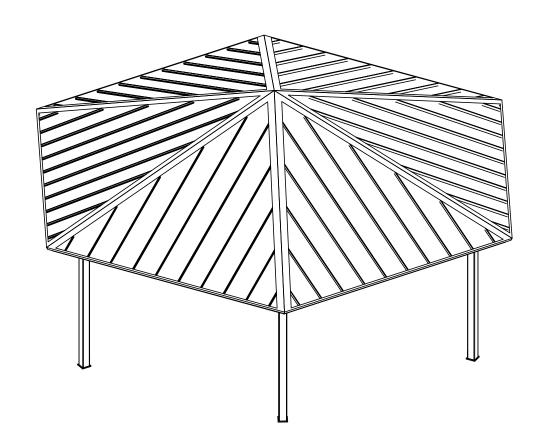
PROJECT LOCATION: MADISON, WI

BUILDING TYPE: HXE 28

ROOF TYPE: STANDING SEAM (24 GA) OVER STAINED T & G

BUILDING NUMBER: P19799

79993 ORDER NUMBER:



DRAWING LIST:

SHEET NUMBER	DRAWING DESCRIPTION
CS	COVER SHEET
1	ARCHITECTURAL ELEVATIONS
2-2.1	ANCHOR AND FOOTING LAYOUT / DETAILS
3	STRUCTURAL FRAMING PLAN
4-4.1	FRAME CONNECTION DETAILS
5	ELECTRICAL VIEWS-N/A
6-6.2	ROOF LAYOUT
7-7.2	ROOF CONNECTION DETAILS

MANUFACTURER NOTES:

MATERIALS:

DESCRIPTION TUBE STEEL ASTM DESIGNATION A500 (GRADE C) A53 (GRADE B) SCHEDULE PIPE **RMT PIPE** LIGHT GAGE COLD FORMED STRUCTURAL STEEL PLATE A1003 (GRADE 50) ROOF PANELS (STEEL) ANCHOR BOLTS SEE SHEET 2.1

GENERAL NOTES:

 UNLESS NOTED OTHERWISE, THIS STRUCTURE WAS DESIGNED TO ONLY SUPPORT WHAT IS SHOWN ON THESE DRAWINGS. POLIGON MUST BE CONTACTED IF ANYTHING ELSE IS TO BE ATTACHED TO THIS STRUCTURE (WALLS, COLUMN WRAPS, RAILINGS, ETC.) SO THE DESIGN OF THIS STRUCTURE CAN BE REVIEWED AND POSSIBLY REVISED.

 THE ENGINEERING SEAL FOR THE STRUCTURE DETAILED IN THESE DRAWINGS IS ONLY VALID IF PORTER CORP DESIGNS AND FABRICATES THE STEEL COMPONENTS. FABRICATING THE STEEL COMPONENTS ELSEWHERE VOIDS THE ENGINEERING PROVIDED BY PORTER CORP.

UNLESS NOTED OTHERWISE, THIS STRUCTURE WAS DESIGNED ASSUMING A 20'
SEPARATION BETWEEN ANY ADJACENT STRUCTURE WITH AN EAVE HEIGHT EQUAL TO OR
GREATER THAN THE EAVE HEIGHT OF THIS STRUCTURE (SEE SNOW DESIGN DATA). IF THAT
SEPARATION DOES NOT EXIST AND THE GROUND SNOW LOAD [Pg] IS GREATER THAN 0 PSF, POLIGON MUST BE CONTACTED SO THE DESIGN OF THIS STRUCTURE CAN BE REVIEWED AND POSSIBLY REVISED.

STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION MANUAL REFERENCED IN THE GOVERNING BUILDING CODE.

ALL WELDING IS PERFORMED BY AMERICAN WELDING SOCIETY (AWS) CERTIFIED

WELDERS AND CONFORMS TO AWS D1.1 OR D1.3 AS REQUIRED.
PARTS SHOWN MAY BE UPGRADED DUE TO STANDARDIZED FABRICATION. REFER TO THE SHIPPING BILL OF MATERIALS AND FINAL INSTALLATION INSTRUCTIONS INCLUDED WITH THE STRUCTURE FOR POSSIBLE SUBSTITUTIONS AND IMPROVEMENTS.

FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT THE PRIMARY FRAME INSTALLER AND THE ROOF INSTALLER HAVE A MINIMUM FIVE (5) YEARS DOCUMENTED EXPERIENCE INSTALLING THIS TYPE OF PRODUCT.

THE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, AND SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, TECHNIQUES, SEQUENCES AND PROCEDURES, INCLUDING BRACING, SHORING, LAYDOWN AND PROTECTION OF CONSTRUCTION MATERIALS, ETC. TEMPORARY SHORING AND BRACING SHALL BE THE RESPONSIBILITY OF THE

FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT ELECTRIC WIRING, IF REQUIRED, BE RUN THROUGH THE STRUCTURAL MEMBERS BEFORE THE

MAKING HOLES, CUTS OR MODIFICATIONS TO THE STRUCTURAL STEEL MEMBERS IS NOT PERMITTED IN THE FIELD WITHOUT SPECIFIC APPROVAL OF POLIGON.

CERTIFICATES:
MIAMI-DADE COUNTY CERTIFICATE OF COMPETENCY NO. 23-0915.11 PCI (POWDER COATING INSTITUTE) 4000 CERTIFIED

FABRICATOR APPROVALS:
CITY OF PHOENIX, AZ APPROVED FABRICATOR #C08-2010
CITY OF LOS ANGELES, CA APPROVED FABRICATOR #FB01596
CITY OF RIVERSIDE, CA APPROVED FABRICATOR #SF_000042 CITY OF HOUSTON, TX APPROVED FABRICATOR #470 CLARK COUNTY, NV APPROVED FABRICATOR #264 STATE OF UTAH APPROVED FABRICATOR 02008-14 AISC APPROVED FABRICATOR C-00024530 AWS CERTIFIED WELDING FABRICATOR #221003F



DESIGN CRITERIA:

GENERAL: 2015 INTERNATIONAL BUILDING CODE RISK CATEGORY: II

ROOF DEAD LOAD: 6 PSF FRAME DEAD LOAD: SELF WEIGHT

LIVE LOAD:

ROOF LIVE LOAD: 20 PSF

SNOW DESIGN DATA:
GROUND SNOW LOAD (Pg): 30 PSF
FLAT ROOF SNOW LOAD (Pf): 25 PSF SNOW EXPOSURE FACTOR (Ce): 1.0 SNOW LOAD IMPORTANCE FACTOR (Is): 1.0 THERMAL FACTOR (Ct): 1.2 ROOF SLOPE FACTOR (Cs): 1.0 DRIFT SURCHARGE LOAD (Pd): 0 PSF WIDTH OF SNOW DRIFT (w): 0 FT MINIMUM HORIZONTAL SEPARATION DISTANCE (s): 20 FT

BASIC WIND SPEED (V): 115 MPH ALLOWABLE STRESS DESIGN WIND SPEED (Vasd): 89 MPH GUST EFFECT FACTOR (G): 0.85
INTERNAL PRESSURE COEFFICIENT (GCpi): 0 WIND EXPOSURE: C

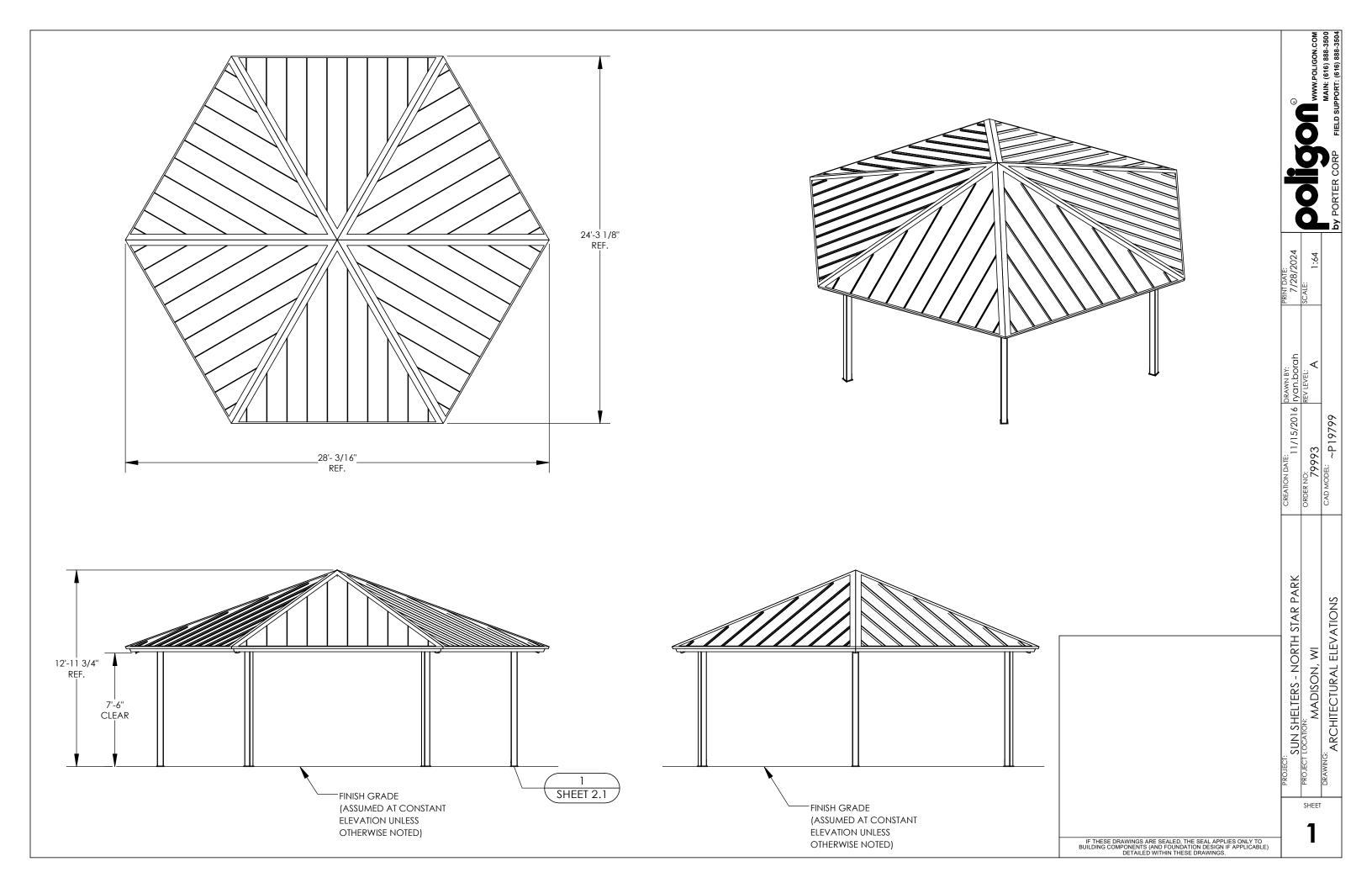
SEISMIC DESIGN DATA:

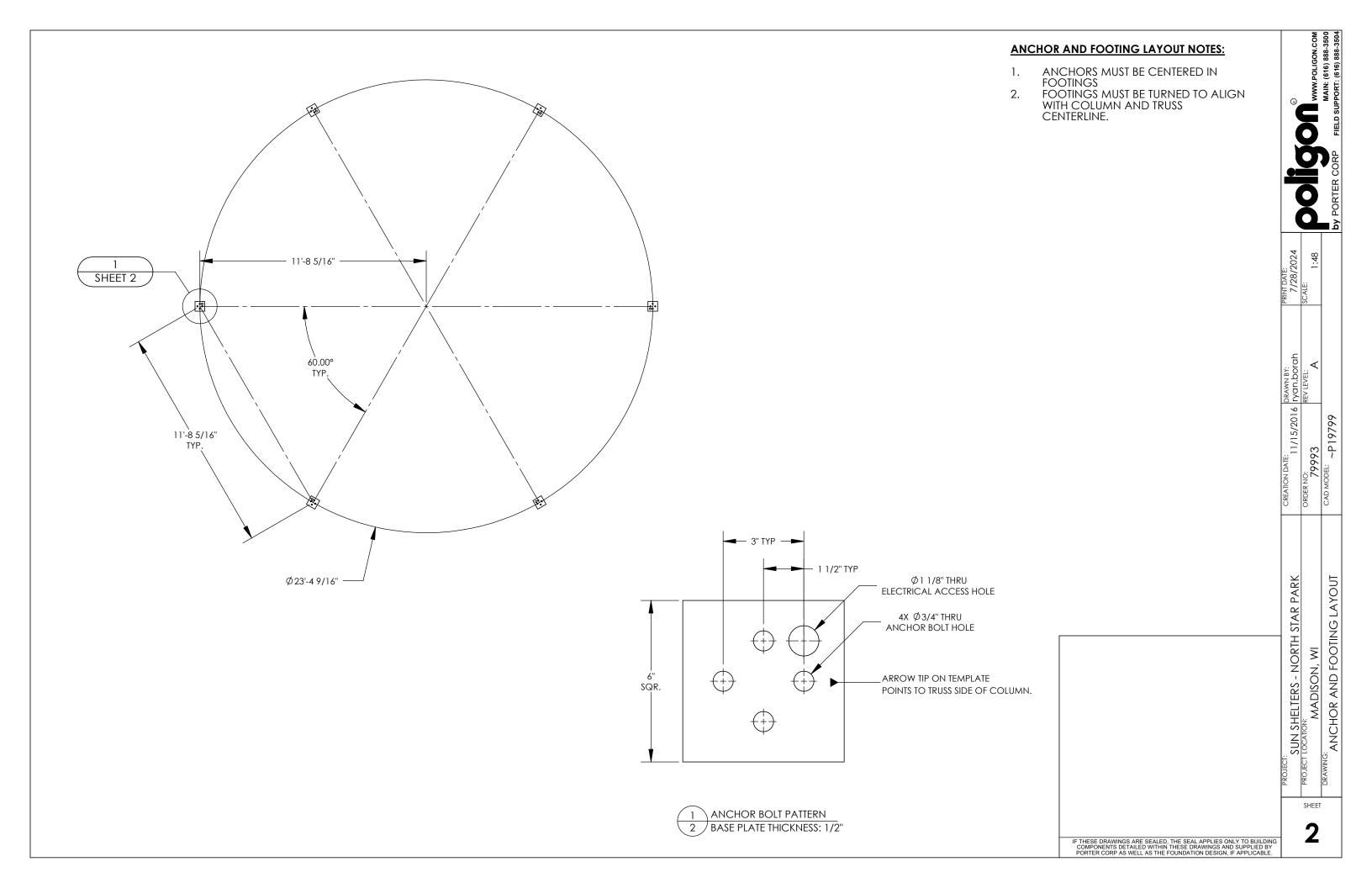
STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE SEISMIC IMPORTANCE FACTOR (Ie): 1.0 SEISMIC DESIGN CATEGORY: B SEISMIC DESIGN CATEGORY: B
SEISMIC SITE CLASS: D
SHORT SPECTRAL RESPONSE (SS): 0.32
1-SEC SPECTRAL RESPONSE (S1): 0.08
DESIGN SHORT SPECTRAL RESPONSE (SDS): 0.33
DESIGN 1-SEC SPECTRAL RESPONSE (SD1): 0.13
SEISMIC RESPONSE COEFFICIENT (CS): 0.11
RESPONSE MODIFICATION COEFFICIENT (R): 3.00
EQUIVALENT LATERAL FORCE PROCEDURE
SEE CALCULATIONS FOR ADDITIONAL DATA

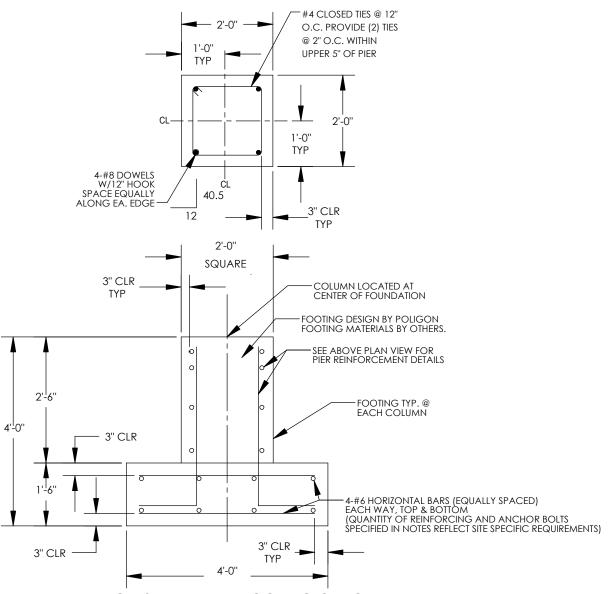
ADDITIONAL CRITERIA:

11/15/2016 ~P19799 SUN SHELTERS - NORTH STAR PARK ₹ MADISON,

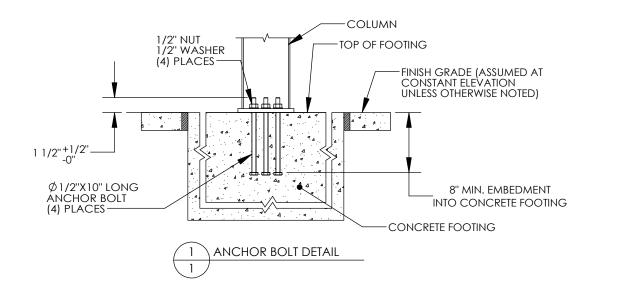
IF THESE DRAWINGS ARE SEALED. THE SEAL APPLIES ONLY TO BUILDING COMPONENTS DETAILED WITHIN THESE DRAWINGS AND SUPPLIED BY PORTER CORP AS WELL AS THE FOUNDATION DESIGN, IF APPLICABLE.







PIER ON SPREAD PAD FOOTING OPTION



ANCHOR BOLT NOTES - INTERNAL (ANCHOR BOLTS LOCATED WITHIN COLUMN):

- ANCHOR BOLTS SHALL BE ASTM A307 (GRADE A) MATERIAL UNLESS OTHERWISE NOTED.
- 2. ANCHOR BOLTS SHALL BE EITHER "HEADED" OR "THREADED WITH NUT" AS DEFINED IN THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL.
- HOOKED ANCHOR BOLTS ARE NOT ACCEPTABLE.
- 4. ACCURATE ANCHOR BOLT PLACEMENT IS CRITICAL. TO ENSURE THE ANCHOR BOLT LAYOUT MEETS THE DIMENSIONS REQUIRED ON THE DRAWINGS, SURVEY (OR MEASURE) THE LOCATION OF ALL ANCHOR BOLTS PRIOR TO POURING THE FOOTINGS. AN ADDITIONAL SURVEY (OR MEASUREMENT) SHOULD BE MADE AFTER THE FOOTINGS ARE POURED TO CONFIRM THE ANCHOR BOLTS DID NOT SHIFT DURING THE CONCRETE POUR.
- 5. THE MANUFACTURER STRONGLY RECOMMENDS USING ANCHOR BOLT TEMPLATES BECAUSE THEY SIGNIFICANTLY IMPROVE THE ACCURACY OF ANCHOR BOLT PLACEMENT. AN ANCHOR BOLT TEMPLATE IS PROVIDED WITH ANY ANCHOR BOLT KIT PURCHASED.
- 6. IF OUTSIDE CONSULTING ENGINEERS ARE DESIGNING THE FOUNDATIONS FOR THIS STRUCTURE, THEY MUST REFER TO THE MANUFACTURER'S CALCULATIONS FOR MINIMUM CONCRETE PROPERTIES (COMPRESSIVE STRENGTH, EDGE DISTANCE, ETC.) REQUIRED FOR THE ANCHOR BOLT DESIGN.
- 7. ELECTRICAL ACCESS HOLE IS ALWAYS LOCATED IN THE COLUMN BASE PLATE AS SHOWN. BE SURE TO KEEP THE ANCHOR BOLT TEMPLATE PROPERLY ORIENTED WHEN ELECTRICAL ACCESS TO THE COLUMN IS REQUIRED. <u>TEMPLATE MUST BE REMOVED BEFORE INSTALLING COLUMNS</u>.
- 8. THE CALCULATIONS FOR THIS STRUCTURE ASSUME A PINNED COLUMN BASE.
- 9. THE FOLLOWING ADHESIVE ANCHORS MAY BE SUBSTITUTED FOR THE CAST-IN-PLACE ANCHOR BOLTS: -HILTI HIT-HY 200 (A OR R) V3 ADHESIVE WITH Ø 1/2" HAS-E ROD WITH 6" EFFECTIVE EMBEDMENT. CONTRACTOR SHALL FOLLOW ALL INSTALLATION SPECIFICATIONS AND REQUIREMENTS OF ANCHOR MANUFACTURER.

CONCRETE NOTES:

- 1. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE CURRENT "ACI MANUAL OF CONCRETE PRACTICE".
- 2. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150 TYPE II OR TYPE V.
- 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE CONCRETE MIX DESIGN MEETS THE "ACI MANUAL OF CONCRETE PRACTICE" REQUIREMENTS FOR CONCRETE BY EXPOSURE CLASS.
- 4. THE USE OF CHLORIDE ACCELERATORS IS NOT PERMITTED.
- 5. COARSE AGGREGATE SHALL BE #57 OR LARGER.
- 6. CONCRETE AT PLACEMENT SHALL HAVE A SLUMP OF 4" +/- 1".
- 7. MINIMUM CONCRETE COMPRESSIVE STRENTGH AT 28 DAYS: 4500 PSI.
- 8. REINFORCING STEEL SHALL BE DEFORMED STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A615 (DEFORMATIONS SHALL BE IN ACCORDANCE WITH ASTM A305) AS FOLLOWS:

GRADE 60: #4 BARS AND LARGER

GRADE 40: #3 BARS

- 9. PRIOR TO PLACING OF CONCRETE, REINFORCING STEEL AND EMBEDDED ITEMS SHALL BE WELL SECURED IN POSITION.
- 10. MAINTAIN 3" CONCRETE COVERAGE TO FACE OF BARS UNLESS OTHERWISE NOTED.
- 11. BARS SHALL BE CLEAN OF RUST, GREASE OR OTHER MATERIAL LIKELY TO IMPAIR BOND, BENDS SHALL BE MADE COLD.
- WELDING OF REINFORCEMENT IS NOT ALLOWED.
- 13. ALL EXPOSED EXTERNAL CORNER OF FOUNDATIONS TO BE CHAMFERED BY 3/4" BY 45 DEGREES UNLESS NOTED OTHERWISE.
- 14. ALL NEW CONCRETE SHALL BE CURED IMMEDIATELY AFTER FINISHING OF REMOVING FORMWORK. CURING SHALL BE EITHER A MOIST CURE METHOD OR THE USE OF A CURING COMPOUND.

FOUNDATION NOTES:

- 1. FOUNDATIONS SHALL BEAR ON COMPETENT, UNDISTURBED SOIL OR 95% COMPACTED FILL. IF SIGNS OF ORGANIC MATERIAL, UNCONTROLLED FILL, CLAY OR SILT, HIGH WATER TABLE OR OTHER POSSIBLE DETRIMENTAL CONDITIONS ARE FOUND, CONSTRUCTION OF THE FOUNDATIONS MUST BE STOPPED AND A GEOTECHNICAL ENGINEER BE CONTACTED.
- 2. NO FOUNDATIONS SHALL BE PLACED INTO OR ADJACENT TO SUBGRADE CONTAINING WATER, ICE, FROST, ORGANIC OR LOOSE MATERIAL.
- 3. WATER SHALL NOT BE PERMITTED TO ACCUMULATE IN FOUNDATION EXCAVATIONS.
- 4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCAL FROST DEPTH REQUIREMENT PRIOR TO CONSTRUCTION.
- IF FOUNDATIONS SHOWN DO NOT MEET LOCAL FROST DEPTH REQUIREMENTS, EXTEND THE DRILLED PIER FOUNDATION AS REQUIRED, EXTENDING THE VERTICAL BARS AND PROVIDING ADDITIONAL TIES TO MEET SPACING REQUIREMENTS AS SHOWN. IF FROST DEPTH REQUIREMENTS ARE NOT MET, AND NO DRILLED PIER DESIGN IS PROVIDED, CONTACT POLIGON.
- 6. ALLOWABLE SOIL PRESSURES (AS APPLICABLE)

_		
	SPREAD PAD	
	VERTICAL BEARING	2000 PSF
Г	LATERAL COHESION	130 PSF

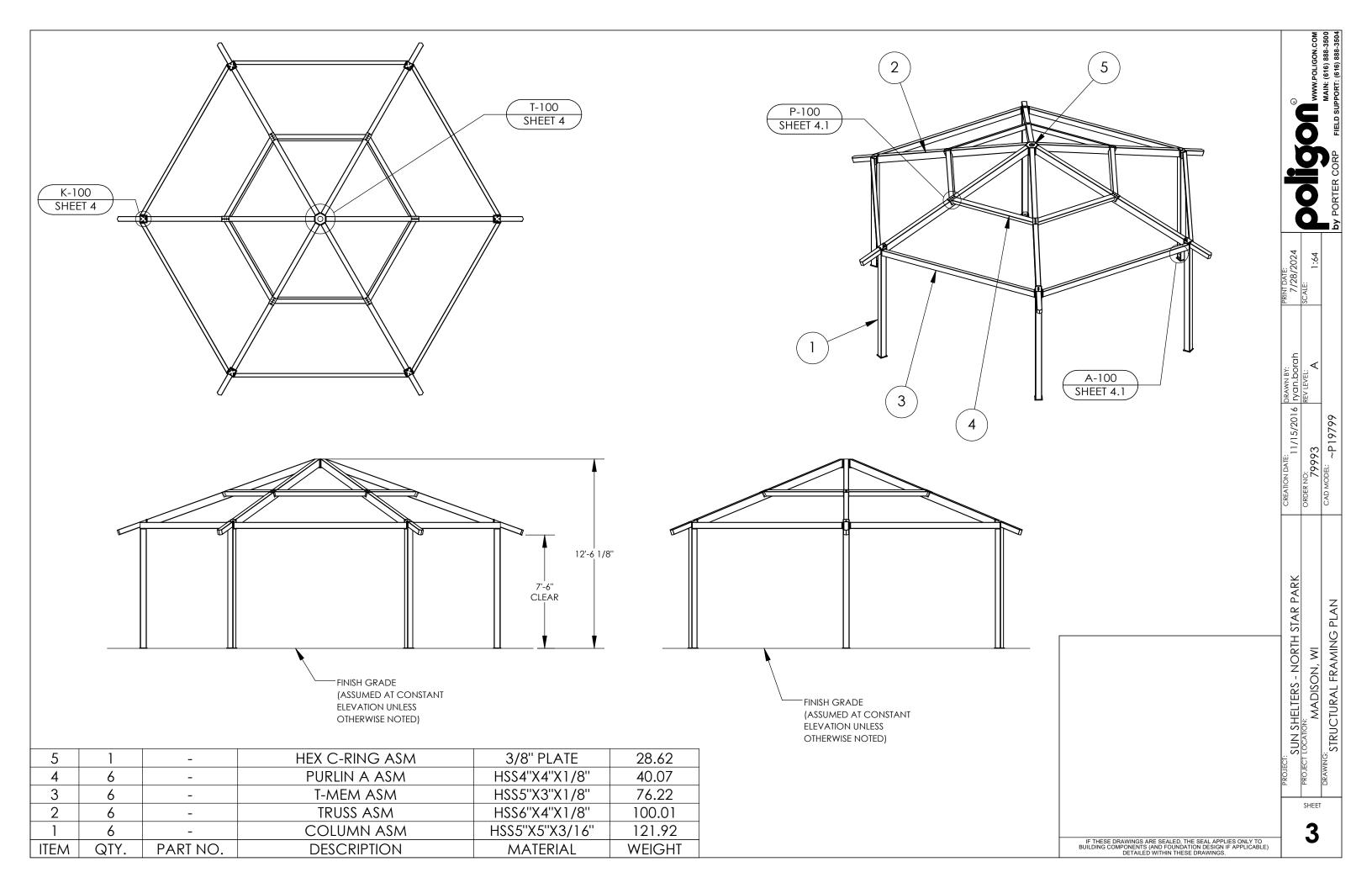
THE FOUNDATION DESIGN CONTAINED HEREIN IS SITE SPECIFIC, AND IS BASED ON NORTH STAR PARK GEOTECH C24051-6 SHELTER, KESTRAL PARK, BY CGC INC. DATED 6/8/2024. REPORT NO. C24051.

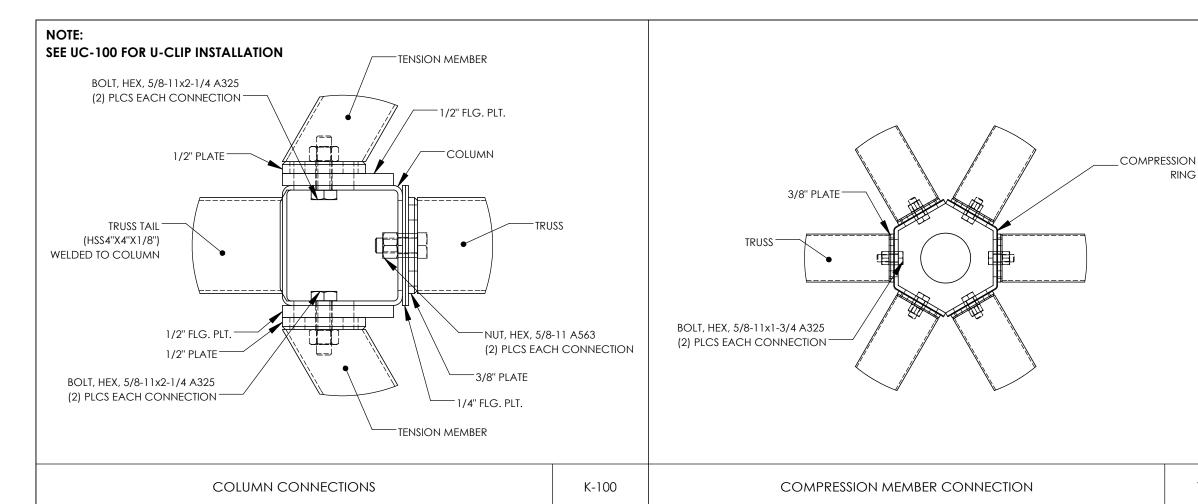
PROPER CARE MUST BE TAKEN TO ENSURE ANY AND ALL RECOMMENDATIONS, OF THE ABOVE-MENTIONED REPORT, FOR SITE PREPARATION, SOIL PERFORMANCE AND FOUNDATION DESIGN ARE MET. IF CONDITIONS ARE PRESENT THAT DO NOT ALLOW FOR THESE RECOMMENDATIONS TO BE MET, THE GEOTECHNICAL ENGINEER MUST BE CONTACTED.

				S	
		PROJECT: SUN SHELTERS - NORTH STAR PARK	CREATION DATE: DRAWN BY: 11/15/2016 ryan.borah	DRAWN BY: ryan.borah	PRINT DATE: 7/28/2024
2.	SHEET	PROJECT LOCATION: MADISON, WI	ORDER NO: 79993	REV LEVEL:	SCALE: 1:12
1		DRAWING: ANCHOR AND FOOTING DETAILS	CAD MODEL: ~P19799		

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS DETAILED WITHIN THESE DRAWINGS AND SUPPLIED BY PORTER CORP AS WELL AS THE FOUNDATION DESIGN, IF APPLICABLE.

0

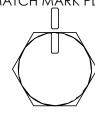




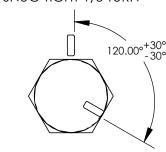
TURN-OF-NUT PRETENSIONING METHOD:

THESE STEPS ILLUSTRATE THE REQUIREMENTS OUTLINED IN THE AISC SPECIFICATION. THE ROTATION INDICATED IS ACCURATE FOR MOST BOLT DIAMETERS AND LENGTHS BUT IT IS THE RESPONSIBILITY OF THE INSTALLER TO MEET AISC REQUIREMENTS.

> STEP ONE: AFTER SNUG TIGHT, MATCH MARK PLATE



STEP TWO: THEN TURN BOLT/NUT PAST SNUG TIGHT 1/3 TURN

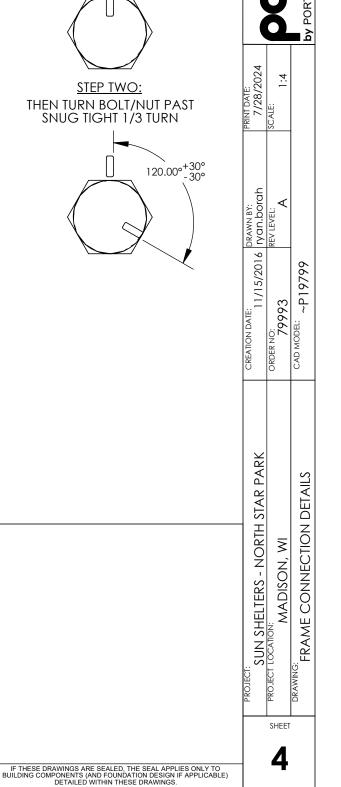


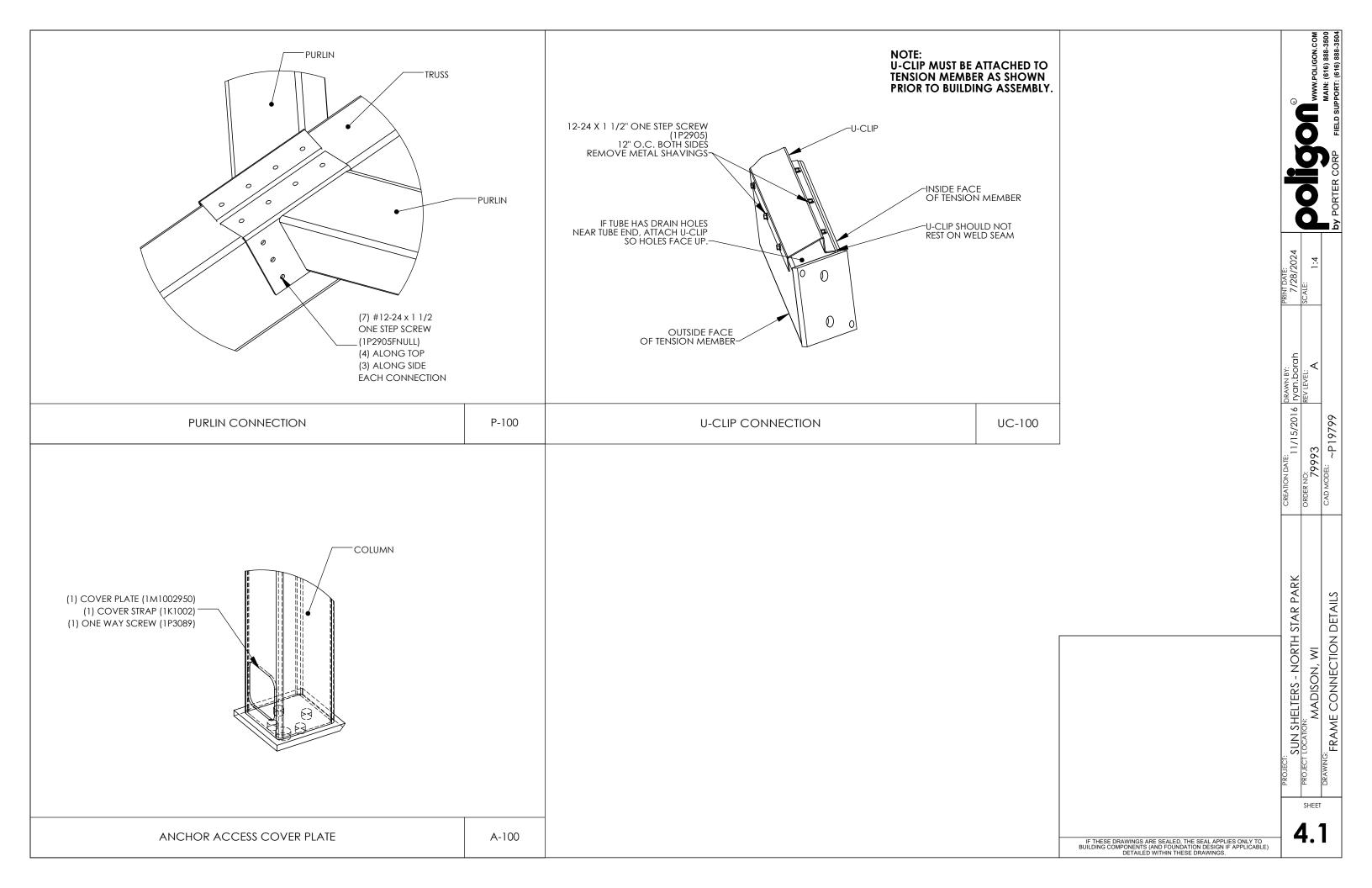
T-100

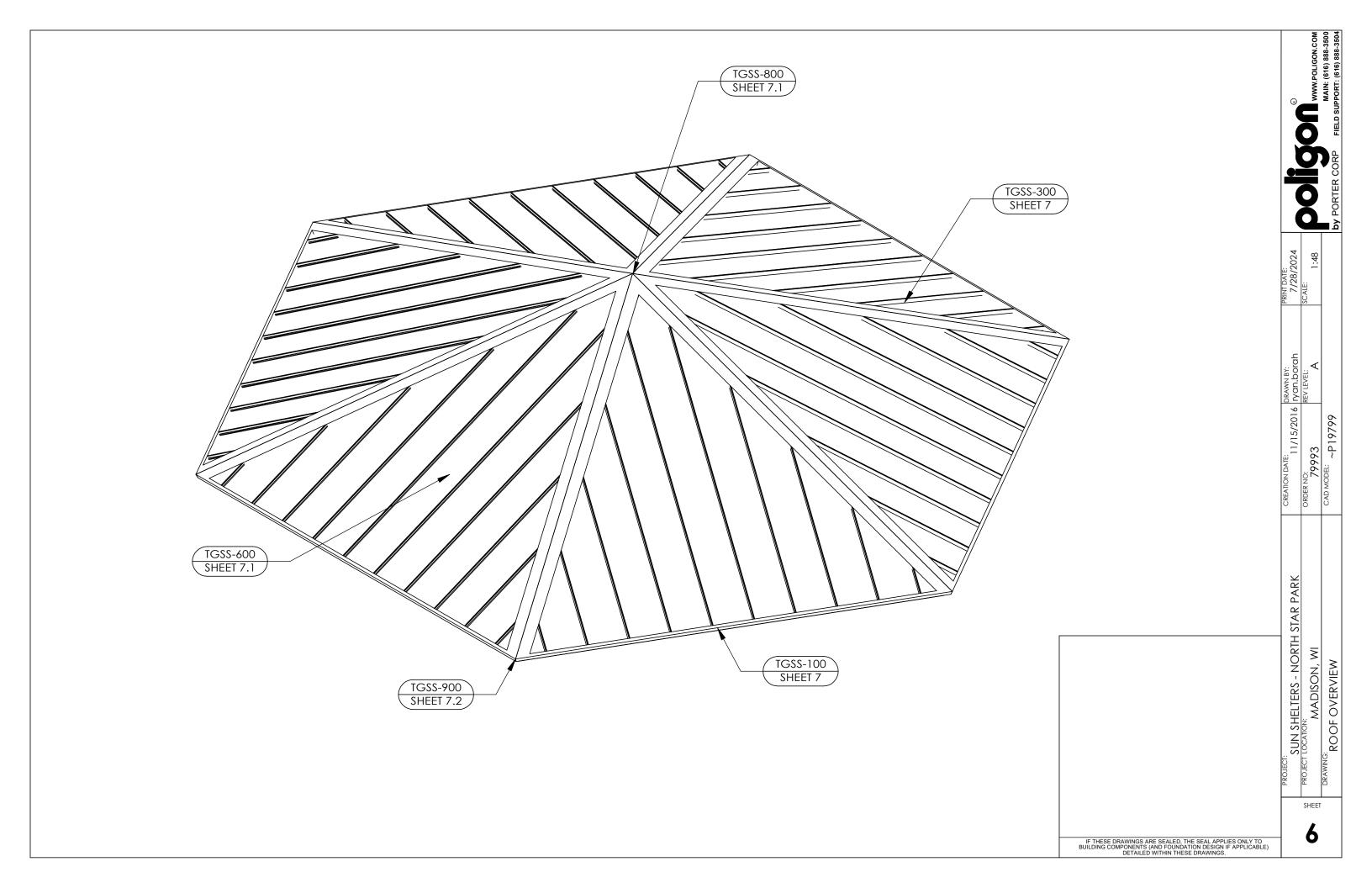
RING

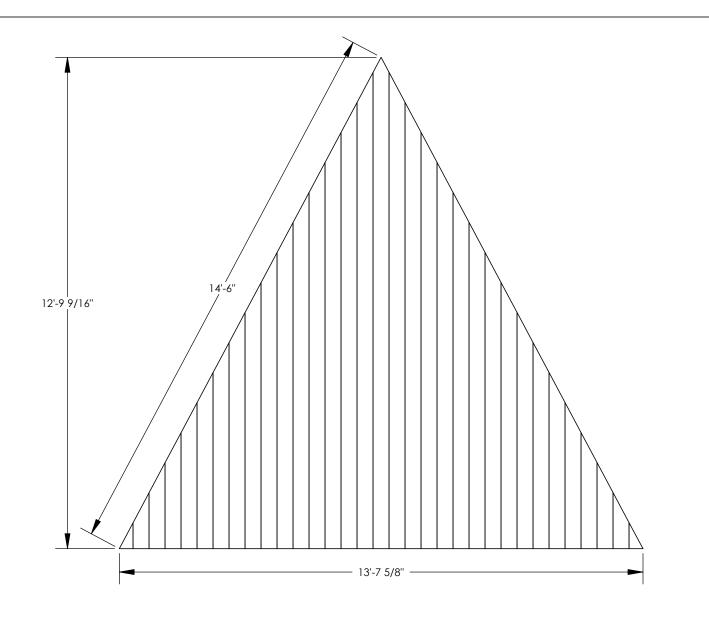
CONNECTION NOTES:

- HIGH STRENGTH BOLTS SHALL BE ASTM F3125 (A325, TYPE 1) MATERIAL.
- HIGH STRENGTH NUTS SHALL BE ASTM A563 (GRADE DH) MATERIAL.
- HIGH STRENGTH WASHERS SHALL CONFORM TO ASTM F436.
- UNLESS A SNUG-TIGHT JOINT IS PERMITTED IN THE CONNECTION DETAIL, ALL BOLTS ARE TO BE INSTALLED BY ONE OF THE FOLLOWING PRETENSIONING METHODS AS SPECIFIED IN THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS", SECTION 8: A. TURN-OF-NUT PRETENSIONING
 - B. CALIBRATED WRENCH PRETENSIONING
- THE SNUG-TIGHT CONDITION IS THE TIGHTNESS THAT IS ATTAINED WITH A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.
- ANCHOR BOLTS NEED NOT BE TIGHTENED PAST SNUG-TIGHT.
- WHEN INSTALLING BOLTS REFER TO SECTIONS 8.4.1, 8.4.2, AND 8.4.3 OF THE "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS" FOR GUIDANCE.
- LOCAL JURISDICTIONS MAY REQUIRE AN INSPECTOR TO BE PRESENT TO WITNESS HARDWARE INSTALLATION AND INDEPENDENT TESTING. INSPECTION REQUIREMENTS SHOULD BE VERIFIED BY INSTALLER PRIOR TO STEEL ERECTION.
- ERECTION OF THE FRAMING MEMBERS WILL REQUIRE THE MAIN COLUMNS TO BE PLUMB SQUARE AND TIGHTENED TO THE TRUSSES AND/OR TENSION MEMBERS BEFORE INSTALLING THE PURLINS. PURLINS, IF REQUIRED, MUST BE AS SHOWN IN FRAMING PLAN.
- TEMPORARY SHORING OR BRACING SHALL BE USED TO COMPACT THE JOINTS UNTIL THE CONNECTED PLIES ARE IN FIRM CONTACT PRIOR TO PRETENSIONING.
- PRIOR TO THE ERECTION OF SHELTER COMPONENTS, IT IS RECOMMENDED TO CHASE AND TAP STRUCTURAL HARDWARE.
- 12. ALL BOLTS MUST BE LUBRICATED WITH WAX TO ASSIST IN PROPER TIGHTENING. TO LUBRICATE A BOLT IN THE FIELD, APPLY THE WAX STICK DOWN THE LENGTH OF THE BOLT'S
- TO PREVENT RUST STAINING OF FINISH, ALL METAL SHAVINGS MUST BE REMOVED AFTER 13. INSTALLATION. ENSURE NO SHAVING ARE TRAPPED BETWEEN MATING SURFACES.
- TOUCH-UP PAINT MUST BE APPLIED TO ALL EXPOSED FASTENERS. PERIODIC TOUCH-UP AT THESE CONNECTIONS IS REQUIRED.





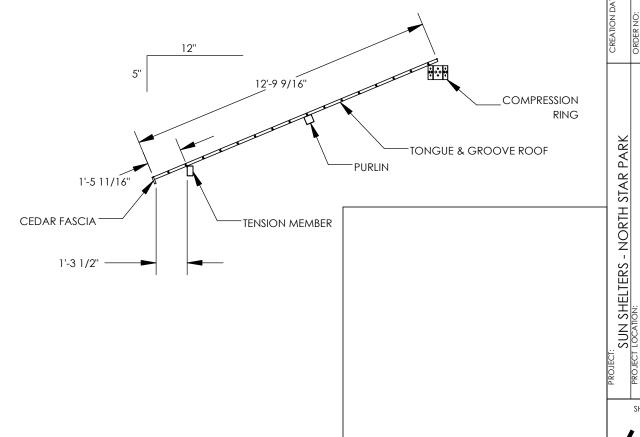




TONGUE & GROOVE NOTES:

- 1. THE FIRST PLANK SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK. MAKE SURE PLANKS EXTEND ENOUGH TO COVER EAVE, TRUSSES, AND/OR THE CENTER OF THE PEAK.
- 2. THE T&G PROVIDED MAY CONTAIN SOME MINOR IMPERFECTIONS.
 REMOVE THESE IMPERFECTIONS AS REQUIRED AND USE REMAINDER OF
 MATERIAL TO ATTAIN MAXIMUM YIELD.
- 3. NO END JOINTS IN DECKING BETWEEN STRUCTURAL FRAMING AND EAVE OF DECKING.
- 4. A MINIMUM OF 24" SPACING IS REQUIRED BETWEEN ALL ADJACENT END JOINTS. BOARD LAYOUT MAY REQUIRE VISIBLE SPLICES.
- 5. IF PRE-STAINED T&G IS ORDERED, TOUCH-UP AT FIELD CUT EDGES MAY BE NECESSARY.
- 6. POLIGON RECOMMENDS ALL T&G BE STAINED/SEALED TO IMPROVE LONG TERM PERFORMANCE.





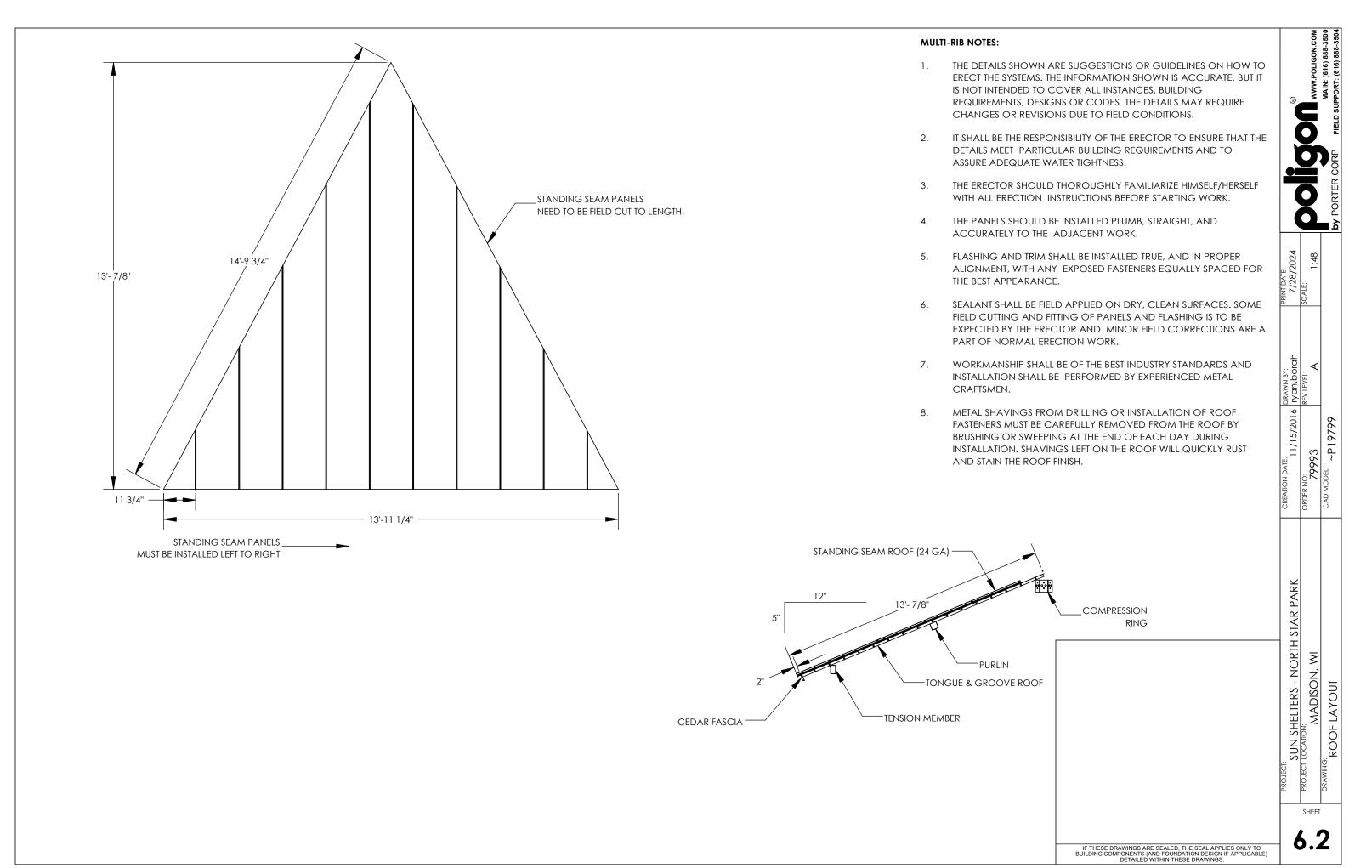
IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS (AND FOUNDATION DESIGN IF APPLICABLE) DETAILED WITHIN THESE DRAWINGS.

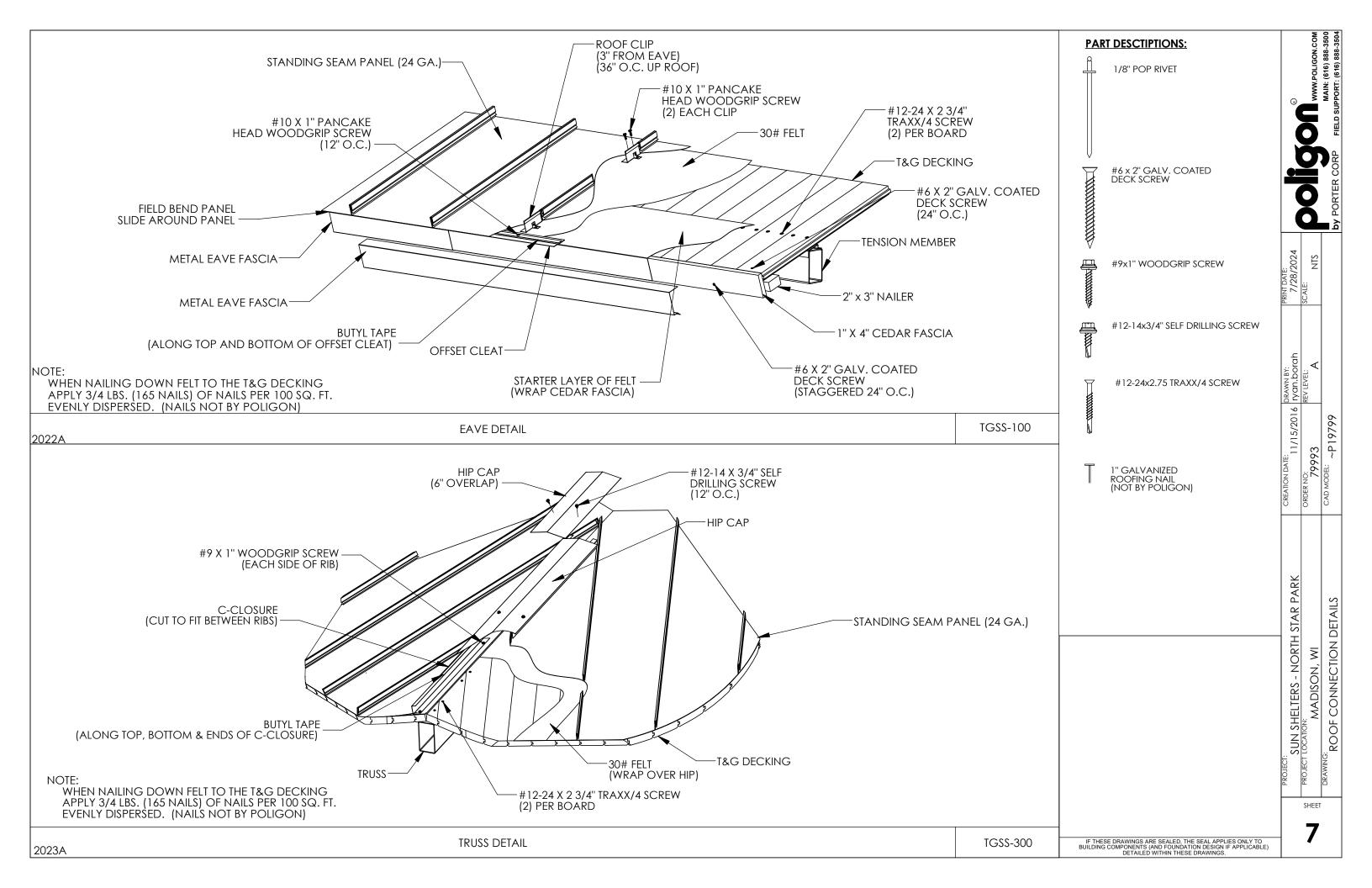
1:48

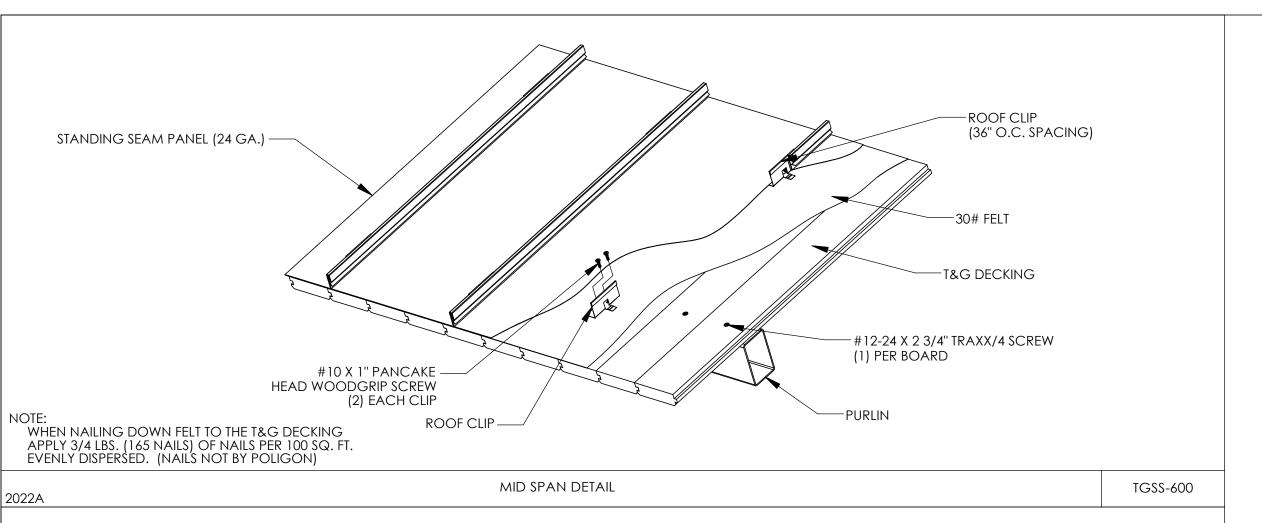
11/15/2016

10: 79993 ODEL: ~P19799

MADISON, WI







#12-14 X 3/4" SELF DRILLING SCREW
(EACH CORNER OF ROOF PEAK CAP)

STANDING SEAM PANEL (24 GA.)

NOTE:
WHEN NAILING DOWN FELT TO THE T&G DECKING
APPLY 3/4 LBS.; [165 NAILS] OF NAILS PER 100 SO. FT.

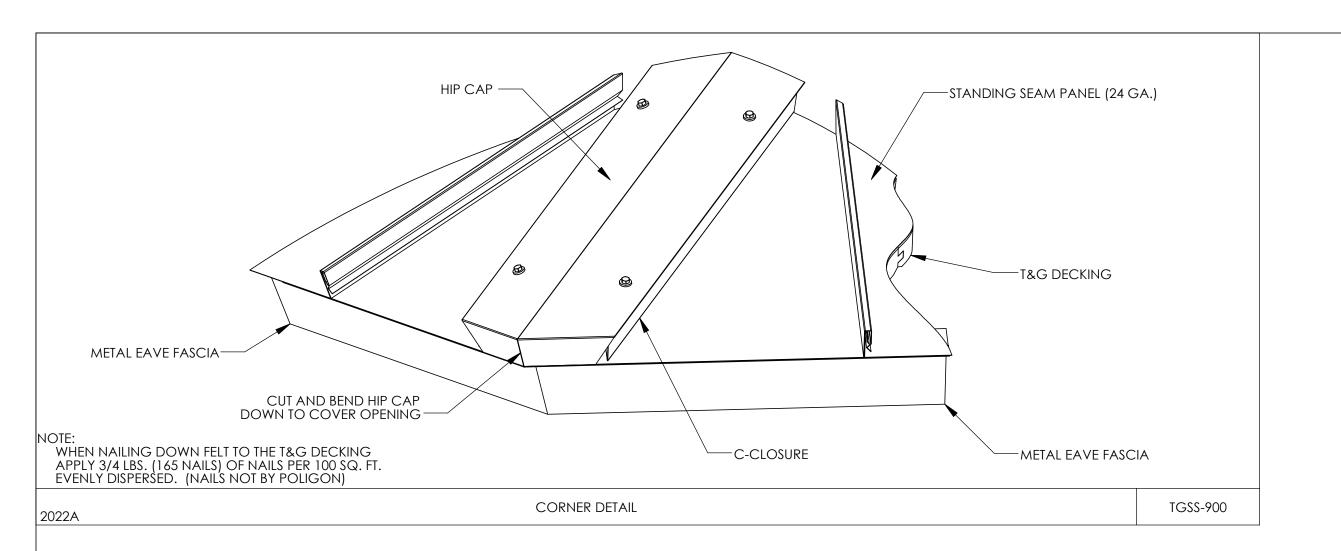
ROOF PEAK DETAIL

EVENLY DISPERSED. (NAILS NOT BY POLIGON)

2022A

11/15/2016 ryan.borah REV LEVEL: ORDER NO: 79993 CAD MODEI: ~P19799 SUN SHELTERS - NORTH STAR PARK LOCATION: MADISON, WI IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS (AND FOUNDATION DESIGN IF APPLICABLE) DETAILED WITHIN THESE DRAWINGS.

TGSS-800



NTS CREATION DATE: DRAWN BY:
11/15/2016 ryan.borah
ORDER NO: REV LEVEI. ORDER NO: 79993
CAD MODEL: ~P19799 SUN SHELTERS - NORTH STAR PARK ROJECT LOCATION: DRAWING: MADISON, WI
ROOF CONNECTION DETAILS

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS (AND FOUNDATION DESIGN IF APPLICABLE) DETAILED WITHIN THESE DRAWINGS.

A Division of PORTERCORP 4240 N. 136th AVE HOLLAND, MI 49424 (616) 888-3500

PROJECT NAME: SUN SHELTERS - SYCAMORE PARK

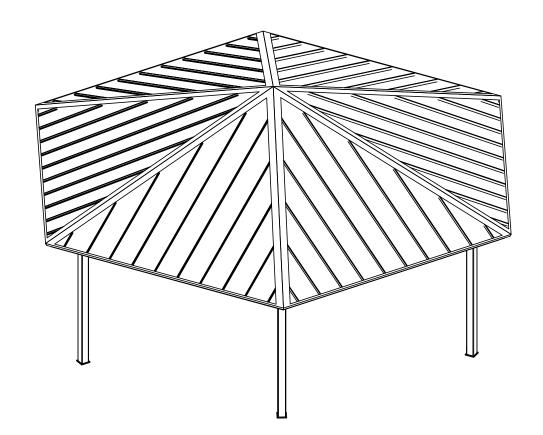
PROJECT LOCATION: MADISON, WI

BUILDING TYPE: HXE 28

ROOF TYPE: STANDING SEAM (24 GA) OVER STAINED T & G

BUILDING NUMBER: P19801

79995 ORDER NUMBER:



DRAWING LIST:

SHEET NUMBER	DRAWING DESCRIPTION
CS	COVER SHEET
1	ARCHITECTURAL ELEVATIONS
2-2.1	ANCHOR AND FOOTING LAYOUT / DETAILS
3	STRUCTURAL FRAMING PLAN
4-4.1	FRAME CONNECTION DETAILS
5	ELECTRICAL VIEWS-N/A
6-6.2	ROOF LAYOUT
7-7.2	ROOF CONNECTION DETAILS

MANUFACTURER NOTES:

MATERIALS:

DESCRIPTION TUBE STEEL ASTM DESIGNATION A500 (GRADE C) A53 (GRADE B) SCHEDULE PIPE **RMT PIPE** LIGHT GAGE COLD FORMED STRUCTURAL STEEL PLATE A1003 (GRADE 50) ROOF PANELS (STEEL) ANCHOR BOLTS SEE SHEET 2.1

GENERAL NOTES:

 UNLESS NOTED OTHERWISE, THIS STRUCTURE WAS DESIGNED TO ONLY SUPPORT WHAT IS SHOWN ON THESE DRAWINGS. POLIGON MUST BE CONTACTED IF ANYTHING ELSE IS TO BE ATTACHED TO THIS STRUCTURE (WALLS, COLUMN WRAPS, RAILINGS, ETC.) SO THE DESIGN OF THIS STRUCTURE CAN BE REVIEWED AND POSSIBLY REVISED.

 THE ENGINEERING SEAL FOR THE STRUCTURE DETAILED IN THESE DRAWINGS IS ONLY VALID IF PORTER CORP DESIGNS AND FABRICATES THE STEEL COMPONENTS. FABRICATING THE STEEL COMPONENTS ELSEWHERE VOIDS THE ENGINEERING PROVIDED BY PORTER CORP.

UNLESS NOTED OTHERWISE, THIS STRUCTURE WAS DESIGNED ASSUMING A 20'
SEPARATION BETWEEN ANY ADJACENT STRUCTURE WITH AN EAVE HEIGHT EQUAL TO OR
GREATER THAN THE EAVE HEIGHT OF THIS STRUCTURE (SEE SNOW DESIGN DATA). IF THAT
SEPARATION DOES NOT EXIST AND THE GROUND SNOW LOAD [Pg] IS GREATER THAN 0 PSF, POLIGON MUST BE CONTACTED SO THE DESIGN OF THIS STRUCTURE CAN BE REVIEWED AND POSSIBLY REVISED.

STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION MANUAL REFERENCED IN THE GOVERNING BUILDING CODE.

ALL WELDING IS PERFORMED BY AMERICAN WELDING SOCIETY (AWS) CERTIFIED

WELDERS AND CONFORMS TO AWS D1.1 OR D1.3 AS REQUIRED.
PARTS SHOWN MAY BE UPGRADED DUE TO STANDARDIZED FABRICATION. REFER TO THE SHIPPING BILL OF MATERIALS AND FINAL INSTALLATION INSTRUCTIONS INCLUDED WITH THE STRUCTURE FOR POSSIBLE SUBSTITUTIONS AND IMPROVEMENTS.

FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT THE PRIMARY FRAME INSTALLER AND THE ROOF INSTALLER HAVE A MINIMUM FIVE (5) YEARS DOCUMENTED EXPERIENCE INSTALLING THIS TYPE OF PRODUCT.

THE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, AND SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, TECHNIQUES, SEQUENCES AND PROCEDURES, INCLUDING BRACING, SHORING, LAYDOWN AND PROTECTION OF CONSTRUCTION MATERIALS, ETC. TEMPORARY SHORING AND BRACING SHALL BE THE RESPONSIBILITY OF THE

FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT ELECTRIC WIRING, IF REQUIRED, BE RUN THROUGH THE STRUCTURAL MEMBERS BEFORE THE

MAKING HOLES, CUTS OR MODIFICATIONS TO THE STRUCTURAL STEEL MEMBERS IS NOT PERMITTED IN THE FIELD WITHOUT SPECIFIC APPROVAL OF POLIGON.

CERTIFICATES:
MIAMI-DADE COUNTY CERTIFICATE OF COMPETENCY NO. 23-0915.11 PCI (POWDER COATING INSTITUTE) 4000 CERTIFIED

FABRICATOR APPROVALS:
CITY OF PHOENIX, AZ APPROVED FABRICATOR #C08-2010
CITY OF LOS ANGELES, CA APPROVED FABRICATOR #FB01596
CITY OF RIVERSIDE, CA APPROVED FABRICATOR #SF_000042 CITY OF HOUSTON, TX APPROVED FABRICATOR #470 CLARK COUNTY, NV APPROVED FABRICATOR #264 STATE OF UTAH APPROVED FABRICATOR 02008-14 AISC APPROVED FABRICATOR C-00024530 AWS CERTIFIED WELDING FABRICATOR #221003F



DESIGN CRITERIA:

GENERAL: 2015 INTERNATIONAL BUILDING CODE RISK CATEGORY: II

ROOF DEAD LOAD: 6 PSF FRAME DEAD LOAD: SELF WEIGHT

LIVE LOAD:

ROOF LIVE LOAD: 20 PSF

SNOW DESIGN DATA:
GROUND SNOW LOAD (Pg): 30 PSF
FLAT ROOF SNOW LOAD (Pf): 25 PSF SNOW EXPOSURE FACTOR (Ce): 1.0 SNOW LOAD IMPORTANCE FACTOR (Is): 1.0 THERMAL FACTOR (Ct): 1.2 ROOF SLOPE FACTOR (Cs): 1.0 DRIFT SURCHARGE LOAD (Pd): 0 PSF WIDTH OF SNOW DRIFT (w): 0 FT MINIMUM HORIZONTAL SEPARATION DISTANCE (s): 20 FT

BASIC WIND SPEED (V): 115 MPH ALLOWABLE STRESS DESIGN WIND SPEED (Vasd): 89 MPH GUST EFFECT FACTOR (G): 0.85
INTERNAL PRESSURE COEFFICIENT (GCpi): 0 WIND EXPOSURE: C

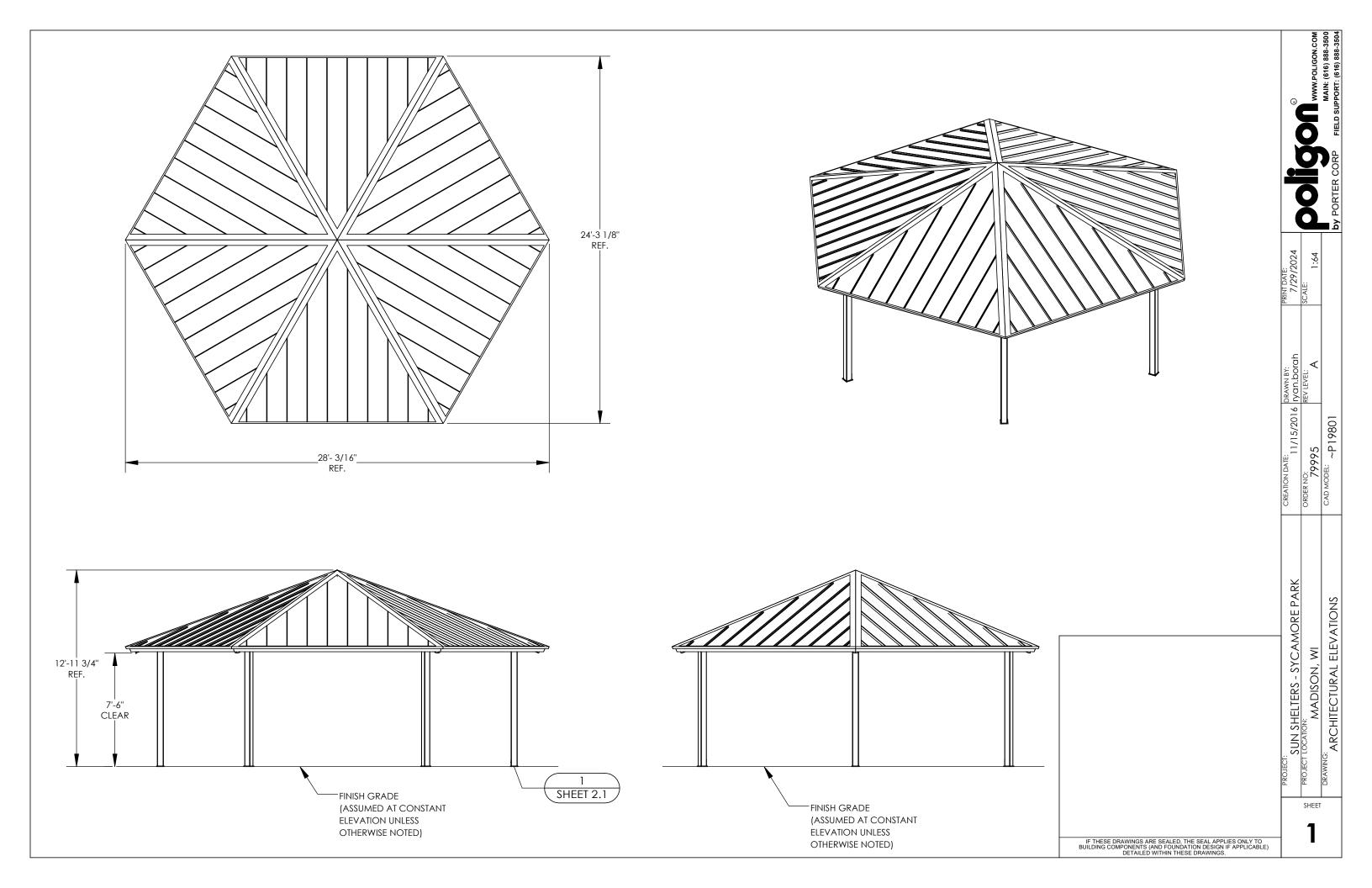
SEISMIC DESIGN DATA:

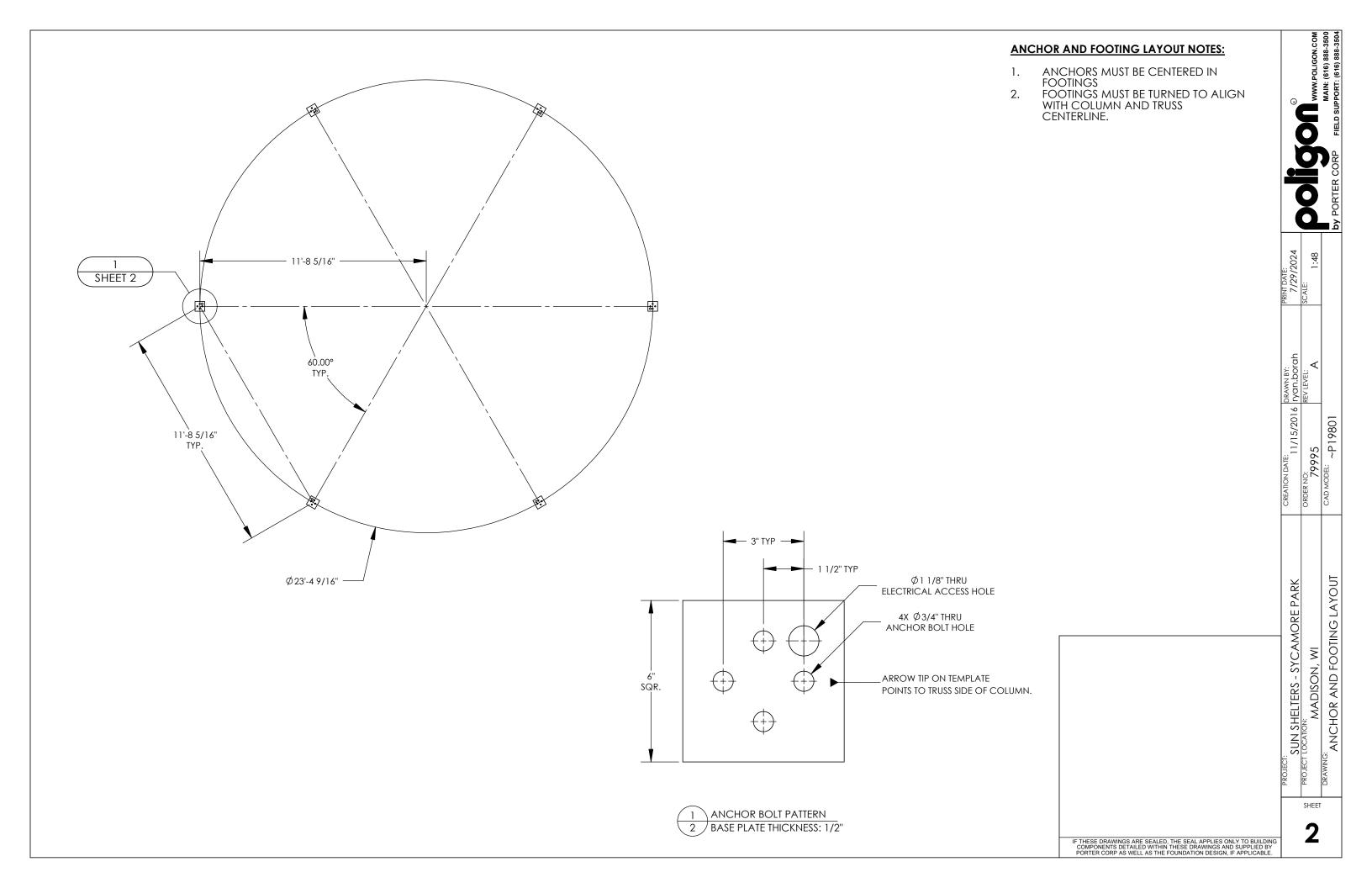
STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE SEISMIC IMPORTANCE FACTOR (Ie): 1.0 SEISMIC DESIGN CATEGORY: B SEISMIC DESIGN CATEGORY: B
SEISMIC SITE CLASS: D
SHORT SPECTRAL RESPONSE (SS): 0.32
1-SEC SPECTRAL RESPONSE (S1): 0.08
DESIGN SHORT SPECTRAL RESPONSE (SDS): 0.33
DESIGN 1-SEC SPECTRAL RESPONSE (SD1): 0.13
SEISMIC RESPONSE COEFFICIENT (CS): 0.11
RESPONSE MODIFICATION COEFFICIENT (R): 3.00
EQUIVALENT LATERAL FORCE PROCEDURE
SEE CALCULATIONS FOR ADDITIONAL DATA

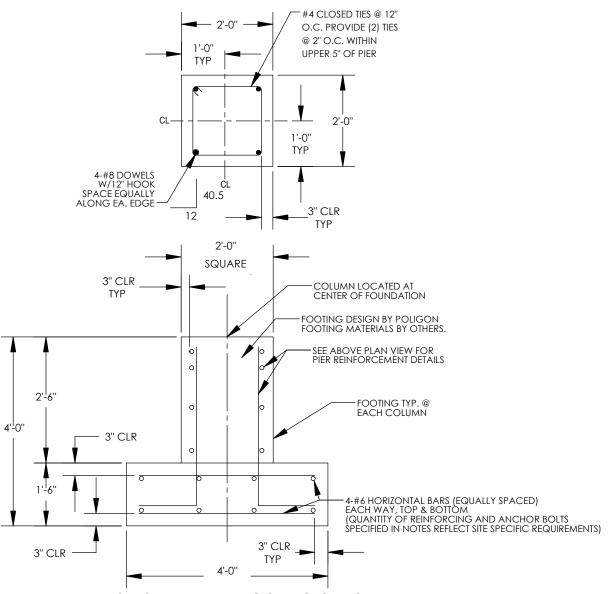
ADDITIONAL CRITERIA:

11/15/2016 ~P19801 79995 SUN SHELTERS - SYCAMORE PARK LOCATION: ₹ MADISON,

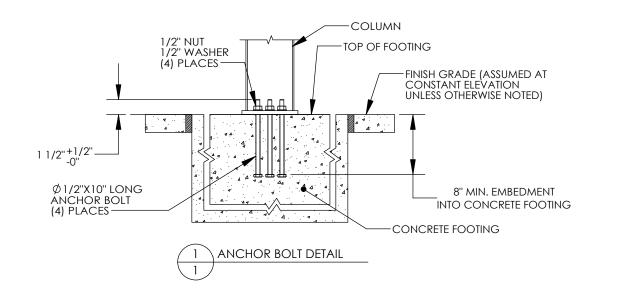
IF THESE DRAWINGS ARE SEALED. THE SEAL APPLIES ONLY TO BUILDING COMPONENTS DETAILED WITHIN THESE DRAWINGS AND SUPPLIED BY PORTER CORP AS WELL AS THE FOUNDATION DESIGN, IF APPLICABLE.







PIER ON SPREAD PAD FOOTING OPTION



ANCHOR BOLT NOTES - INTERNAL (ANCHOR BOLTS LOCATED WITHIN COLUMN):

- ANCHOR BOLTS SHALL BE ASTM A307 (GRADE A) MATERIAL UNLESS OTHERWISE NOTED.
- 2. ANCHOR BOLTS SHALL BE EITHER "HEADED" OR "THREADED WITH NUT" AS DEFINED IN THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL.
- 3. HOOKED ANCHOR BOLTS ARE NOT ACCEPTABLE.
- 4. ACCURATE ANCHOR BOLT PLACEMENT IS CRITICAL. TO ENSURE THE ANCHOR BOLT LAYOUT MEETS THE DIMENSIONS REQUIRED ON THE DRAWINGS, SURVEY (OR MEASURE) THE LOCATION OF ALL ANCHOR BOLTS PRIOR TO POURING THE FOOTINGS. AN ADDITIONAL SURVEY (OR MEASUREMENT) SHOULD BE MADE AFTER THE FOOTINGS ARE POURED TO CONFIRM THE ANCHOR BOLTS DID NOT SHIFT DURING THE CONCRETE POUR.
- THE MANUFACTURER STRONGLY RECOMMENDS USING ANCHOR BOLT TEMPLATES BECAUSE THEY SIGNIFICANTLY IMPROVE THE ACCURACY OF ANCHOR BOLT PLACEMENT. AN ANCHOR BOLT TEMPLATE IS PROVIDED WITH ANY ANCHOR BOLT KIT PURCHASED.
- 6. IF OUTSIDE CONSULTING ENGINEERS ARE DESIGNING THE FOUNDATIONS FOR THIS STRUCTURE, THEY MUST REFER TO THE MANUFACTURER'S CALCULATIONS FOR MINIMUM CONCRETE PROPERTIES (COMPRESSIVE STRENGTH, EDGE DISTANCE, ETC.) REQUIRED FOR THE ANCHOR BOLT DESIGN
- 7. ELECTRICAL ACCESS HOLE IS ALWAYS LOCATED IN THE COLUMN BASE PLATE AS SHOWN. BE SURE TO KEEP THE ANCHOR BOLT TEMPLATE PROPERLY ORIENTED WHEN ELECTRICAL ACCESS TO THE COLUMN IS REQUIRED. TEMPLATE MUST BE REMOVED BEFORE INSTALLING COLUMNS.
- 8. THE CALCULATIONS FOR THIS STRUCTURE ASSUME A PINNED COLUMN BASE.
- 9. THE FOLLOWING ADHESIVE ANCHORS MAY BE SUBSTITUTED FOR THE CAST-IN-PLACE ANCHOR BOLTS: -HILTI HIT-HY 200 (A OR R) V3 ADHESIVE WITH Ø 1/2" HAS-E ROD WITH 6" EFFECTIVE EMBEDMENT. CONTRACTOR SHALL FOLLOW ALL INSTALLATION SPECIFICATIONS AND REQUIREMENTS OF ANCHOR MANUFACTURER.

CONCRETE NOTES:

- 1. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE CURRENT "ACI MANUAL OF CONCRETE PRACTICE".
- 2. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150 TYPE II OR TYPE V.
- 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE CONCRETE MIX DESIGN MEETS THE "ACI MANUAL OF CONCRETE PRACTICE" REQUIREMENTS FOR CONCRETE BY EXPOSURE CLASS.
- 4. THE USE OF CHLORIDE ACCELERATORS IS NOT PERMITTED.
- 5. COARSE AGGREGATE SHALL BE #57 OR LARGER.
- 6. CONCRETE AT PLACEMENT SHALL HAVE A SLUMP OF 4" +/- 1".
- 7. MINIMUM CONCRETE COMPRESSIVE STRENTGH AT 28 DAYS: 4500 PSI.
- 8. REINFORCING STEEL SHALL BE DEFORMED STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A615 (DEFORMATIONS SHALL BE IN ACCORDANCE WITH ASTM A305) AS FOLLOWS:

GRADE 60: #4 BARS AND LARGER

GRADE 40: #3 BARS

- 9. PRIOR TO PLACING OF CONCRETE, REINFORCING STEEL AND EMBEDDED ITEMS SHALL BE WELL SECURED IN POSITION.
- 10. MAINTAIN 3" CONCRETE COVERAGE TO FACE OF BARS UNLESS OTHERWISE NOTED.
- 11. BARS SHALL BE CLEAN OF RUST, GREASE OR OTHER MATERIAL LIKELY TO IMPAIR BOND. BENDS SHALL BE MADE COLD.
- WELDING OF REINFORCEMENT IS NOT ALLOWED.
- 13. ALL EXPOSED EXTERNAL CORNER OF FOUNDATIONS TO BE CHAMFERED BY 3/4" BY 45 DEGREES UNLESS NOTED OTHERWISE.
- 14. ALL NEW CONCRETE SHALL BE CURED IMMEDIATELY AFTER FINISHING OF REMOVING FORMWORK. CURING SHALL BE EITHER A MOIST CURE METHOD OR THE USE OF A CURING COMPOUND.

FOUNDATION NOTES:

- 1. FOUNDATIONS SHALL BEAR ON COMPETENT, UNDISTURBED SOIL OR 95% COMPACTED FILL. IF SIGNS OF ORGANIC MATERIAL, UNCONTROLLED FILL, CLAY OR SILT, HIGH WATER TABLE OR OTHER POSSIBLE DETRIMENTAL CONDITIONS ARE FOUND, CONSTRUCTION OF THE FOUNDATIONS MUST BE STOPPED AND A GEOTECHNICAL ENGINEER BE CONTACTED.
- 2. NO FOUNDATIONS SHALL BE PLACED INTO OR ADJACENT TO SUBGRADE CONTAINING WATER, ICE, FROST, ORGANIC OR LOOSE MATERIAL.
- 3. WATER SHALL NOT BE PERMITTED TO ACCUMULATE IN FOUNDATION EXCAVATIONS.
- 4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCAL FROST DEPTH REQUIREMENT PRIOR TO CONSTRUCTION.
- IF FOUNDATIONS SHOWN DO NOT MEET LOCAL FROST DEPTH REQUIREMENTS, EXTEND THE DRILLED PIER FOUNDATION AS REQUIRED, EXTENDING THE VERTICAL BARS AND PROVIDING ADDITIONAL TIES TO MEET SPACING REQUIREMENTS AS SHOWN. IF FROST DEPTH REQUIREMENTS ARE NOT MET, AND NO DRILLED PIER DESIGN IS PROVIDED, CONTACT POLIGON.
- 6. ALLOWABLE SOIL PRESSURES (AS APPLICABLE)

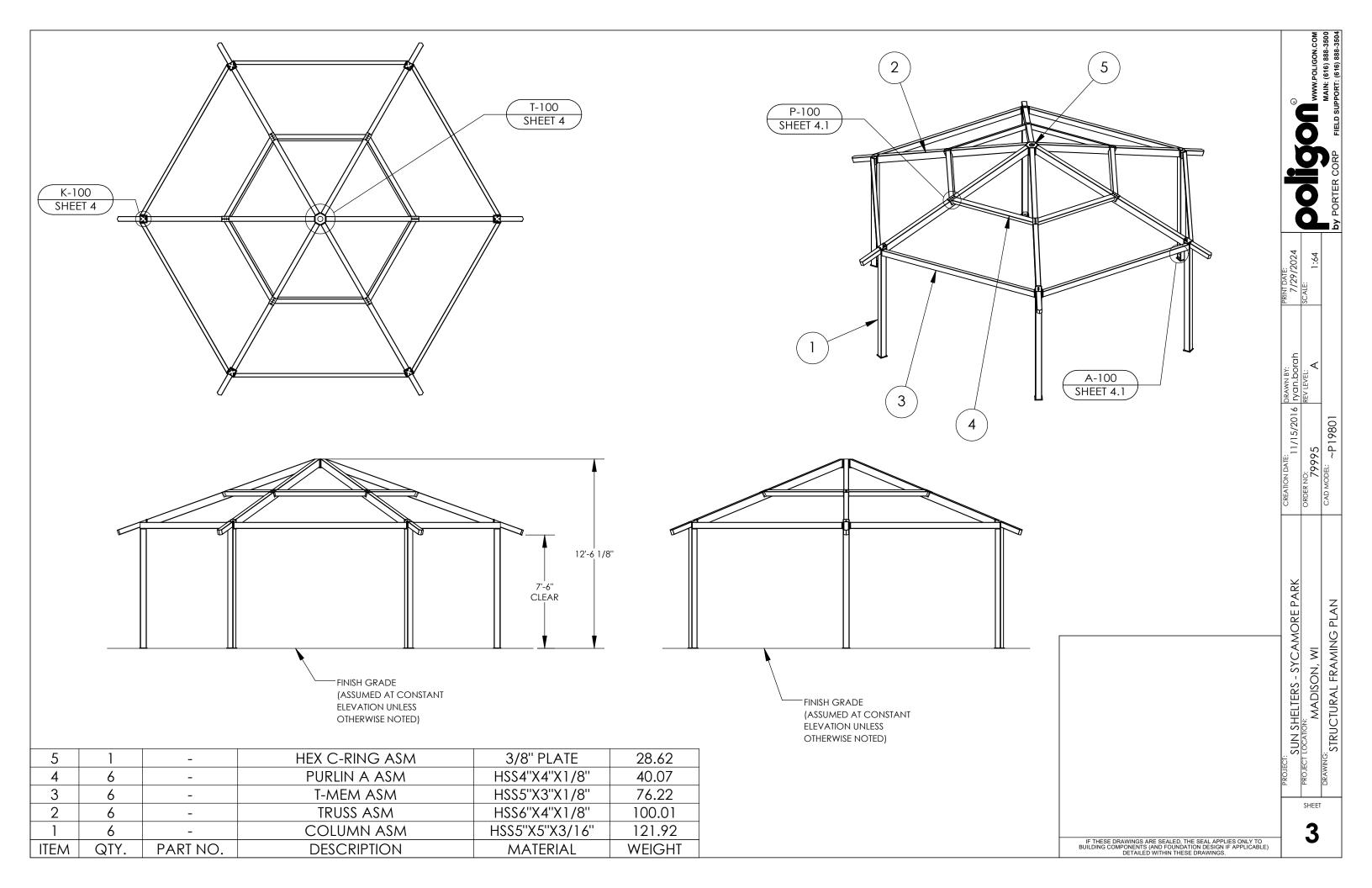
SPREAD PAD	
VERTICAL BEARING	1000 PSF
LATERAL COHESION	130 PSF

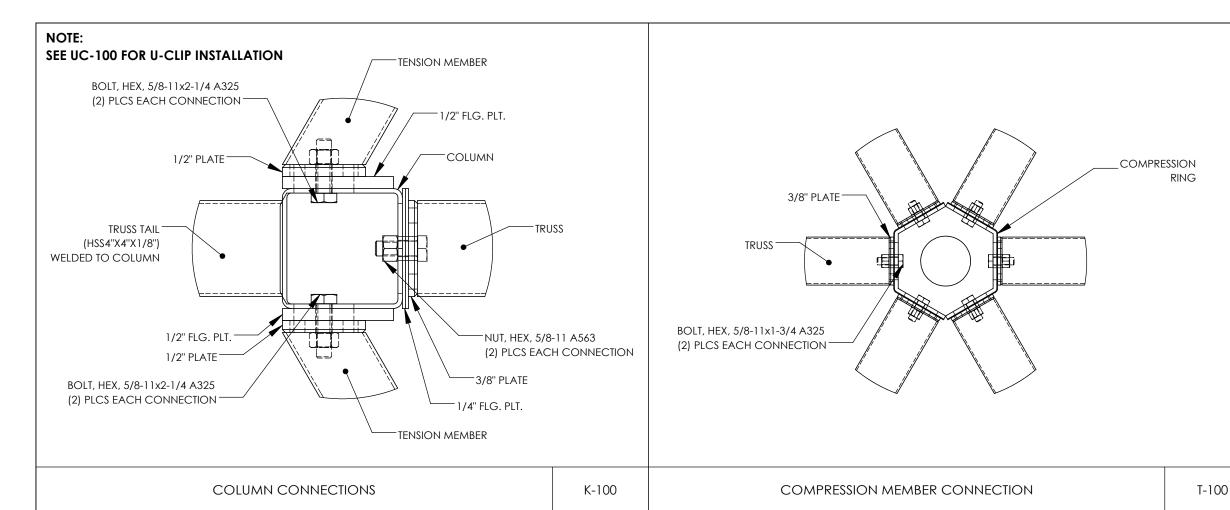
THE FOUNDATION DESIGN CONTAINED HEREIN IS SITE SPECIFIC, AND IS BASED ON SYCAMORE PARK SHELTER GEOTECH C19051-18, SYCAMORE PARK, BY CGC INC. DATED 2/1/2020. REPORT NO. C19051-18.

PROPER CARE MUST BE TAKEN TO ENSURE ANY AND ALL RECOMMENDATIONS, OF THE ABOVE-MENTIONED REPORT, FOR SITE PREPARATION, SOIL PERFORMANCE AND FOUNDATION DESIGN ARE MET. IF CONDITIONS ARE PRESENT THAT DO NOT ALLOW FOR THESE RECOMMENDATIONS TO BE MET, THE GEOTECHNICAL ENGINEER MUST BE CONTACTED.

	CREATION DATE:	DRAWN BY:	PRINT DATE:
RS - SYCAMORE PARK	11/15/2016	11/15/2016 ryan.borah	7/29/2024
	ORDER NO:	REV LEVEL:	SCALE:
ISON, WI	79995	∢	1:12
IND FOOTING DETAILS	CAD MODEL: ~P19801		

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS DETAILED WITHIN THESE DRAWINGS AND SUPPLIED BY PORTER CORP AS WELL AS THE FOUNDATION DESIGN, IF APPLICABLE.





MATCH MARK PLATE

STEP TWO:

THESE STEPS ILLUSTRATE THE

REQUIREMENTS OUTLINED IN THE AISC SPECIFICATION. THE ROTATION

INDICATED IS ACCURATE FOR MOST

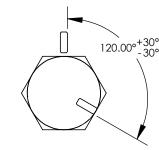
BOLT DIAMETERS AND LENGTHS BUT IT IS

THE RESPONSIBILITY OF THE INSTALLER TO MEET AISC REQUIREMENTS.

STEP ONE:

AFTER SNUG TIGHT,

THEN TURN BOLT/NUT PAST SNUG TIGHT 1/3 TURN

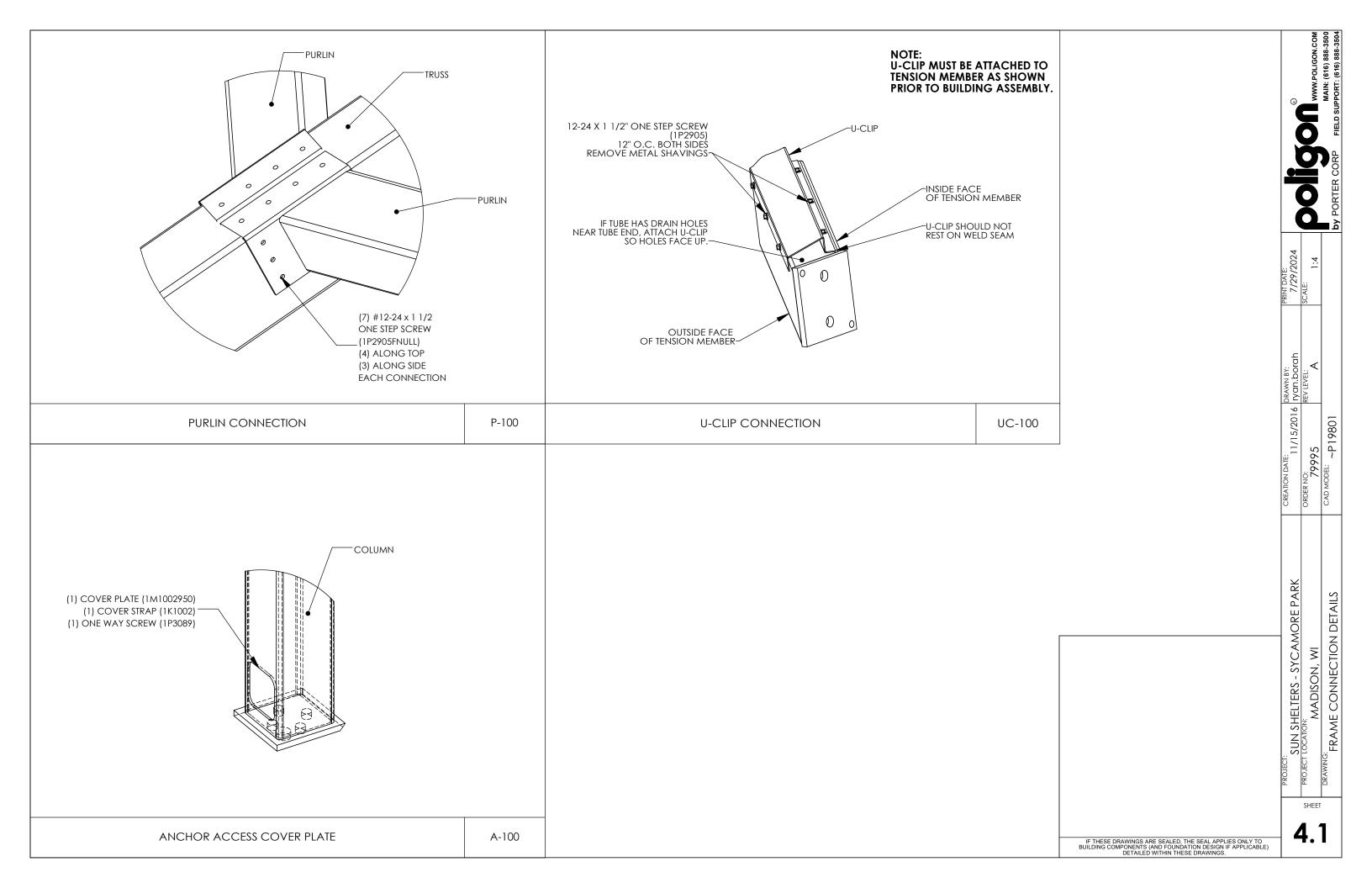


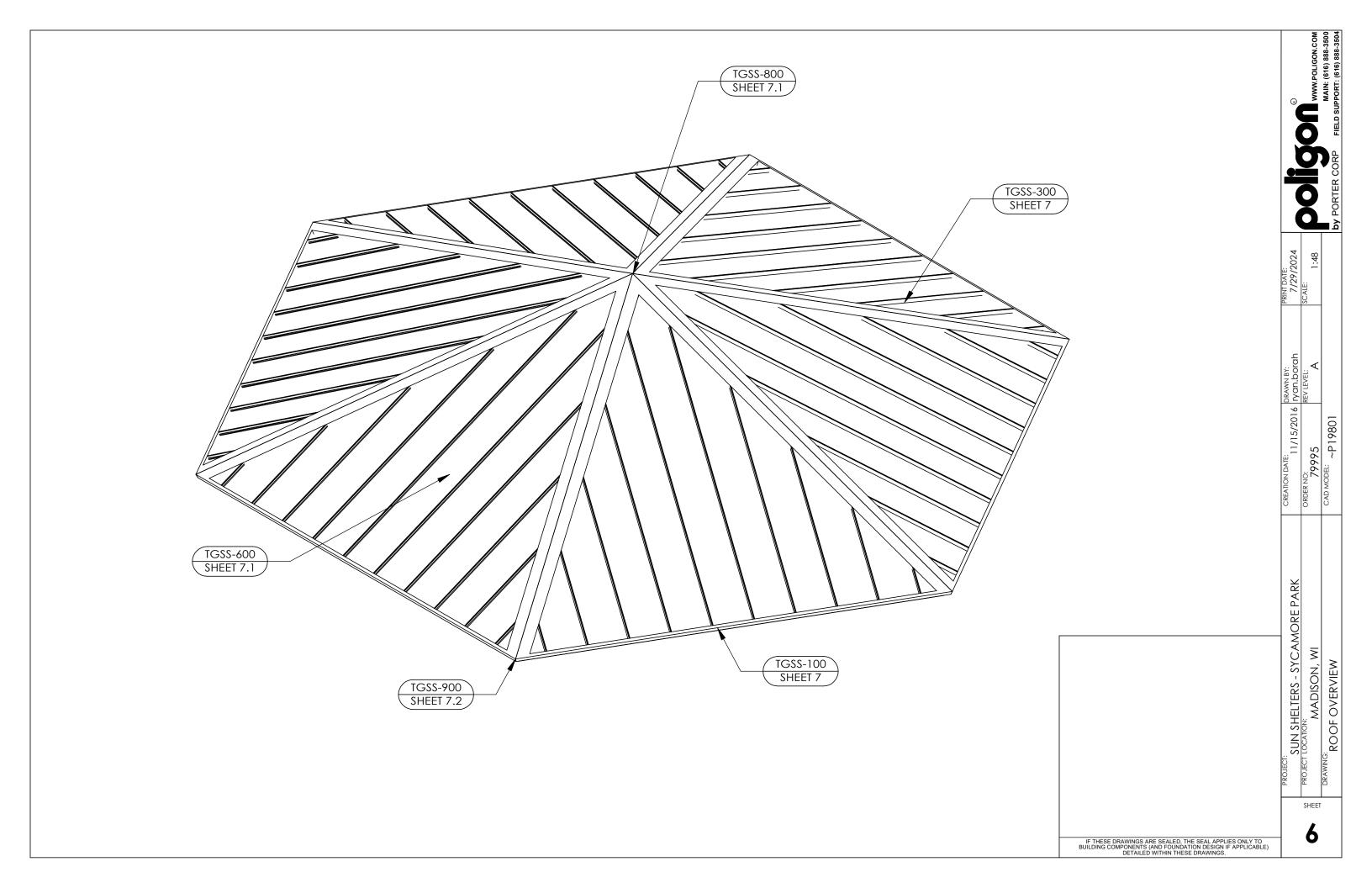
IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS (AND FOUNDATION DESIGN IF APPLICABLE) DETAILED WITHIN THESE DRAWINGS.

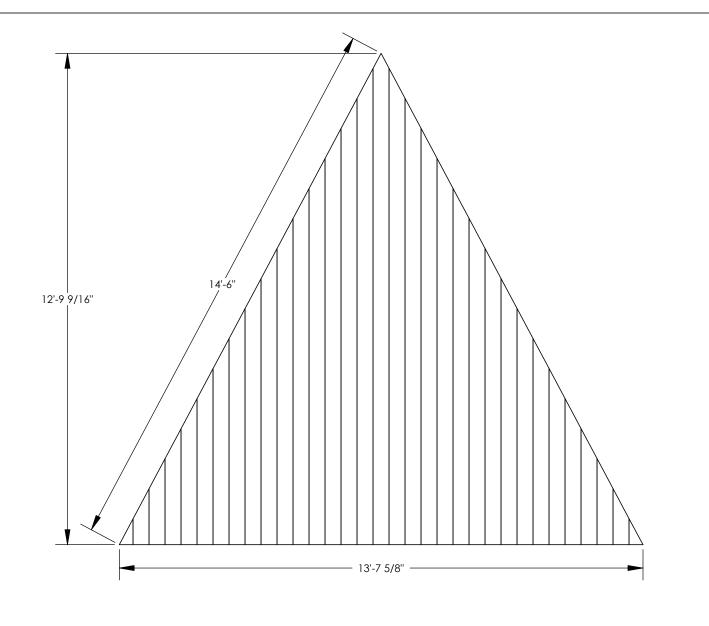
CONNECTION NOTES:

- 1. HIGH STRENGTH BOLTS SHALL BE ASTM F3125 (A325, TYPE 1) MATERIAL.
- 2. HIGH STRENGTH NUTS SHALL BE ASTM A563 (GRADE DH) MATERIAL.
- 3. HIGH STRENGTH WASHERS SHALL CONFORM TO ASTM F436.
- 4. UNLESS A SNUG-TIGHT JOINT IS PERMITTED IN THE CONNECTION DETAIL, ALL BOLTS ARE TO BE INSTALLED BY ONE OF THE FOLLOWING PRETENSIONING METHODS AS SPECIFIED IN THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS", SECTION 8: A. TURN-OF-NUT PRETENSIONING
 - B. CALIBRATED WRENCH PRETENSIONING
- THE SNUG-TIGHT CONDITION IS THE TIGHTNESS THAT IS ATTAINED WITH A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.
- 6. ANCHOR BOLTS NEED NOT BE TIGHTENED PAST SNUG-TIGHT.
- 7. WHEN INSTALLING BOLTS REFER TO SECTIONS 8.4.1, 8.4.2, AND 8.4.3 OF THE "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS" FOR GUIDANCE.
- 8. LOCAL JURISDICTIONS MAY REQUIRE AN INSPECTOR TO BE PRESENT TO WITNESS HARDWARE INSTALLATION AND INDEPENDENT TESTING. INSPECTION REQUIREMENTS SHOULD BE VERIFIED BY INSTALLER PRIOR TO STEEL ERECTION.
- 9. ERECTION OF THE FRAMING MEMBERS WILL REQUIRE THE MAIN COLUMNS TO BE PLUMB SQUARE AND TIGHTENED TO THE TRUSSES AND/OR TENSION MEMBERS BEFORE INSTALLING THE PURLINS. PURLINS, IF REQUIRED, MUST BE AS SHOWN IN FRAMING PLAN.
- 10. TEMPORARY SHORING OR BRACING SHALL BE USED TO COMPACT THE JOINTS UNTIL THE CONNECTED PLIES ARE IN FIRM CONTACT PRIOR TO PRETENSIONING.
- PRIOR TO THE ERECTION OF SHELTER COMPONENTS, IT IS RECOMMENDED TO CHASE AND TAP STRUCTURAL HARDWARE.
- 12. ALL BOLTS MUST BE LUBRICATED WITH WAX TO ASSIST IN PROPER TIGHTENING. TO LUBRICATE A BOLT IN THE FIELD, APPLY THE WAX STICK DOWN THE LENGTH OF THE BOLT'S THREADS
- 13. TO PREVENT RUST STAINING OF FINISH, ALL METAL SHAVINGS MUST BE REMOVED AFTER INSTALLATION. ENSURE NO SHAVING ARE TRAPPED BETWEEN MATING SURFACES.
- 14. TOUCH-UP PAINT MUST BE APPLIED TO ALL EXPOSED FASTENERS. PERIODIC TOUCH-UP AT THESE CONNECTIONS IS REQUIRED.

11/15/2016 ~P1980 SUN SHELTERS - SYCAMORE PARK LOCATION: ₹ MADISON, SHEET





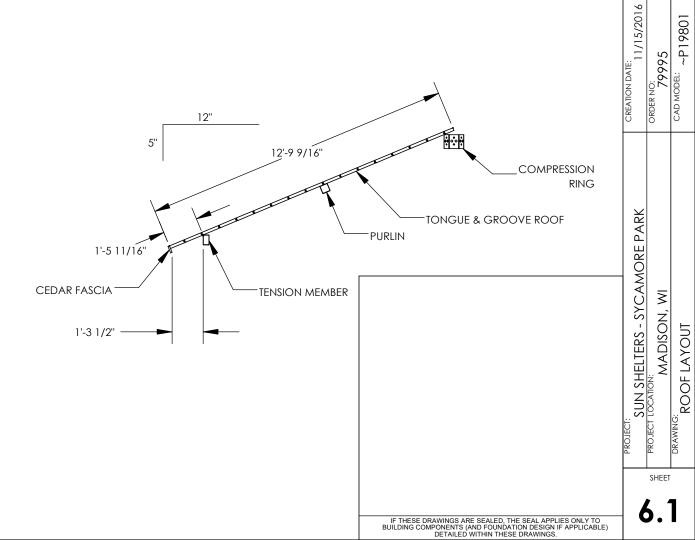


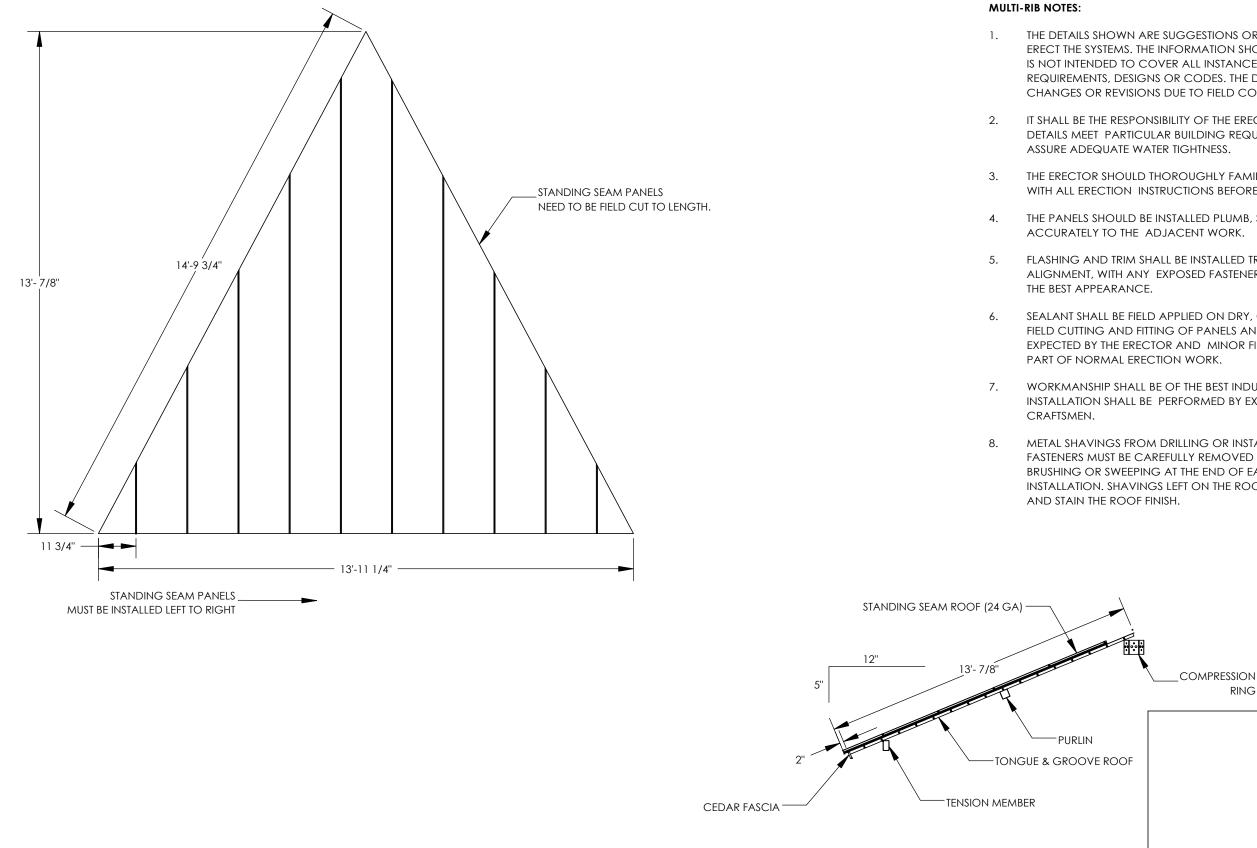
TONGUE & GROOVE NOTES:

- THE FIRST PLANK SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK. MAKE SURE PLANKS EXTEND ENOUGH TO COVER EAVE, TRUSSES, AND/OR THE CENTER OF THE PEAK.
- 2. THE T&G PROVIDED MAY CONTAIN SOME MINOR IMPERFECTIONS.
 REMOVE THESE IMPERFECTIONS AS REQUIRED AND USE REMAINDER OF
 MATERIAL TO ATTAIN MAXIMUM YIELD.
- 3. NO END JOINTS IN DECKING BETWEEN STRUCTURAL FRAMING AND EAVE OF DECKING.
- 4. A MINIMUM OF 24" SPACING IS REQUIRED BETWEEN ALL ADJACENT END JOINTS. BOARD LAYOUT MAY REQUIRE VISIBLE SPLICES.
- 5. IF PRE-STAINED T&G IS ORDERED, TOUCH-UP AT FIELD CUT EDGES MAY BE NECESSARY.
- 6. POLIGON RECOMMENDS ALL T&G BE STAINED/SEALED TO IMPROVE LONG TERM PERFORMANCE.

1:48







THE DETAILS SHOWN ARE SUGGESTIONS OR GUIDELINES ON HOW TO ERECT THE SYSTEMS. THE INFORMATION SHOWN IS ACCURATE, BUT IT IS NOT INTENDED TO COVER ALL INSTANCES, BUILDING REQUIREMENTS, DESIGNS OR CODES. THE DETAILS MAY REQUIRE CHANGES OR REVISIONS DUE TO FIELD CONDITIONS.

IT SHALL BE THE RESPONSIBILITY OF THE ERECTOR TO ENSURE THAT THE DETAILS MEET PARTICULAR BUILDING REQUIREMENTS AND TO ASSURE ADEQUATE WATER TIGHTNESS.

THE ERECTOR SHOULD THOROUGHLY FAMILIARIZE HIMSELF/HERSELF WITH ALL ERECTION INSTRUCTIONS BEFORE STARTING WORK.

THE PANELS SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK.

FLASHING AND TRIM SHALL BE INSTALLED TRUE, AND IN PROPER ALIGNMENT, WITH ANY EXPOSED FASTENERS EQUALLY SPACED FOR

SEALANT SHALL BE FIELD APPLIED ON DRY, CLEAN SURFACES. SOME FIELD CUTTING AND FITTING OF PANELS AND FLASHING IS TO BE EXPECTED BY THE ERECTOR AND MINOR FIELD CORRECTIONS ARE A PART OF NORMAL ERECTION WORK.

WORKMANSHIP SHALL BE OF THE BEST INDUSTRY STANDARDS AND INSTALLATION SHALL BE PERFORMED BY EXPERIENCED METAL

METAL SHAVINGS FROM DRILLING OR INSTALLATION OF ROOF FASTENERS MUST BE CAREFULLY REMOVED FROM THE ROOF BY BRUSHING OR SWEEPING AT THE END OF EACH DAY DURING INSTALLATION. SHAVINGS LEFT ON THE ROOF WILL QUICKLY RUST

.o: 79995 SUN SHELTERS - SYCAMORE PARK LOCATION: ₹ MADISON,

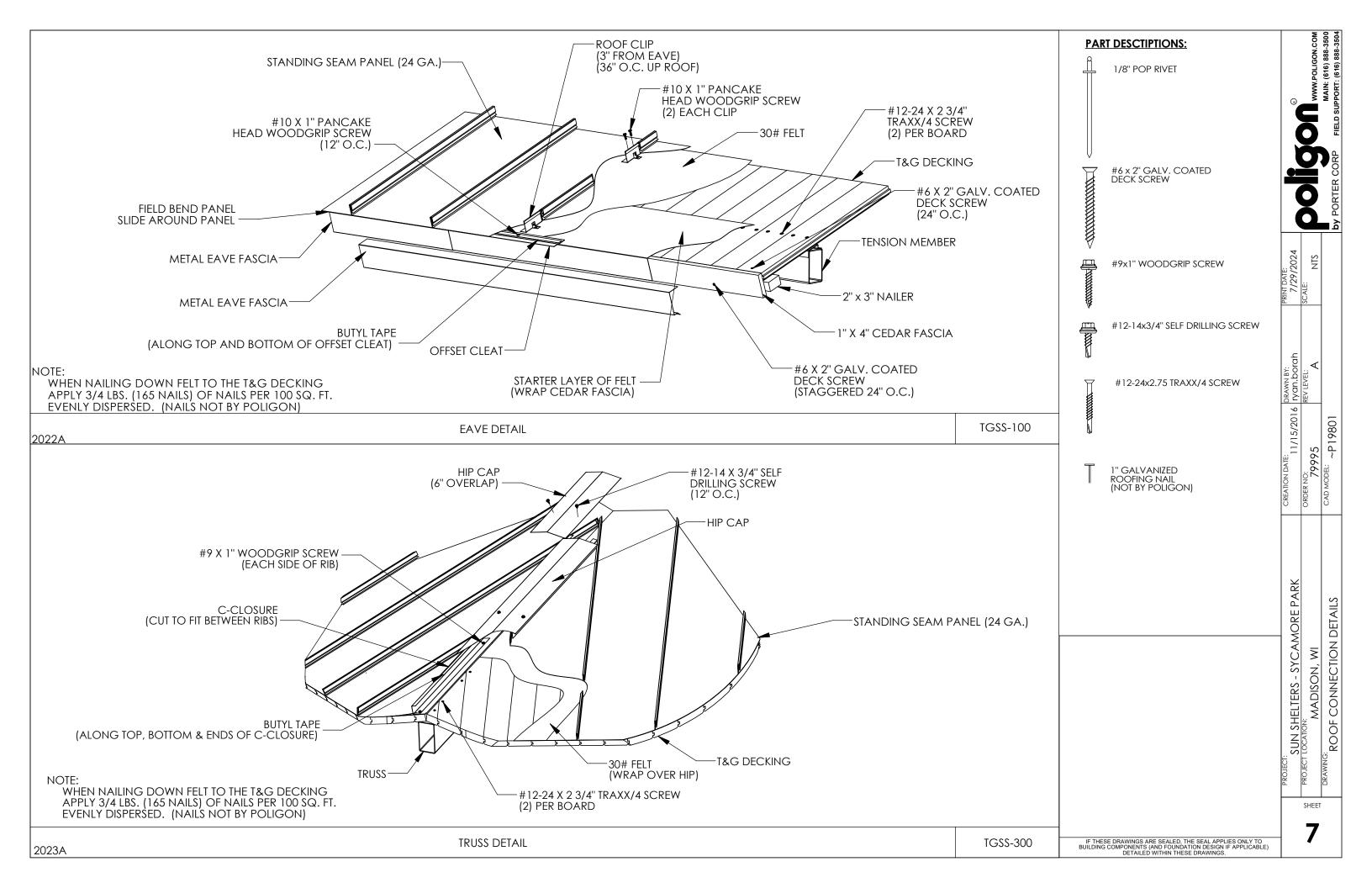
11/15/2016

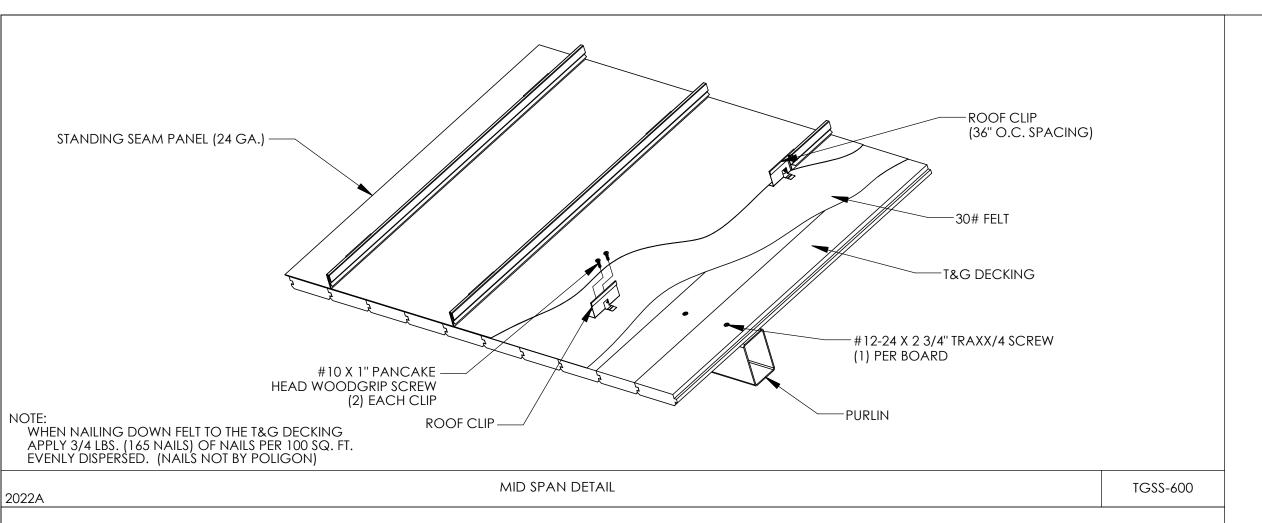
~P19801

1:48

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS (AND FOUNDATION DESIGN IF APPLICABLE) DETAILED WITHIN THESE DRAWINGS.

RING





#12-14 X 3/4" SELF DRILLING SCREW
(EACH CORNER OF ROOF PEAK CAP)

STANDING SEAM PANEL (24 GA.)

HIP CAP

NOTE: WHEN NAILING DOWN FELT TO THE T&G DECKING APPLY 3/4 LBS.; [165 NAILS] OF NAILS PER 100 SO. FT.

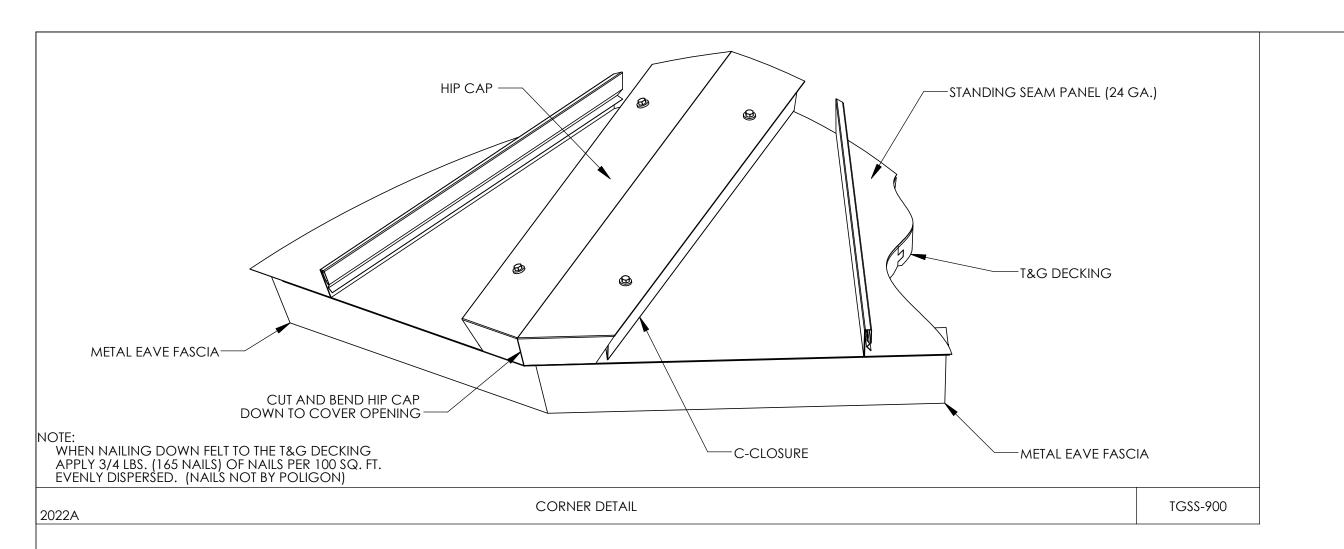
in Drawn BY: 11/15/2016 ryan.borah REV LEVEL: ORDER NO: 79995
CAD MODEI: ~P19801 SUN SHELTERS - SYCAMORE PARK LOCATION: MADISON, WI

ROOF PEAK DETAIL

TGSS-800

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS (AND FOUNDATION DESIGN IF APPLICABLE) DETAILED WITHIN THESE DRAWINGS.

EVENLY DISPERSED. (NAILS NOT BY POLIGON)



NTS CREATION DATE: DRAWN BY:
11/15/2016 ryan.borah
ORDER NO: REV LEVEI. ORDER NO: 79995
CAD MODEL: ~P19801 SUN SHELTERS - SYCAMORE PARK ROJECT LOCATION: DRAWING: MADISON, WI
ROOF CONNECTION DETAILS

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS (AND FOUNDATION DESIGN IF APPLICABLE) DETAILED WITHIN THESE DRAWINGS.

7.2