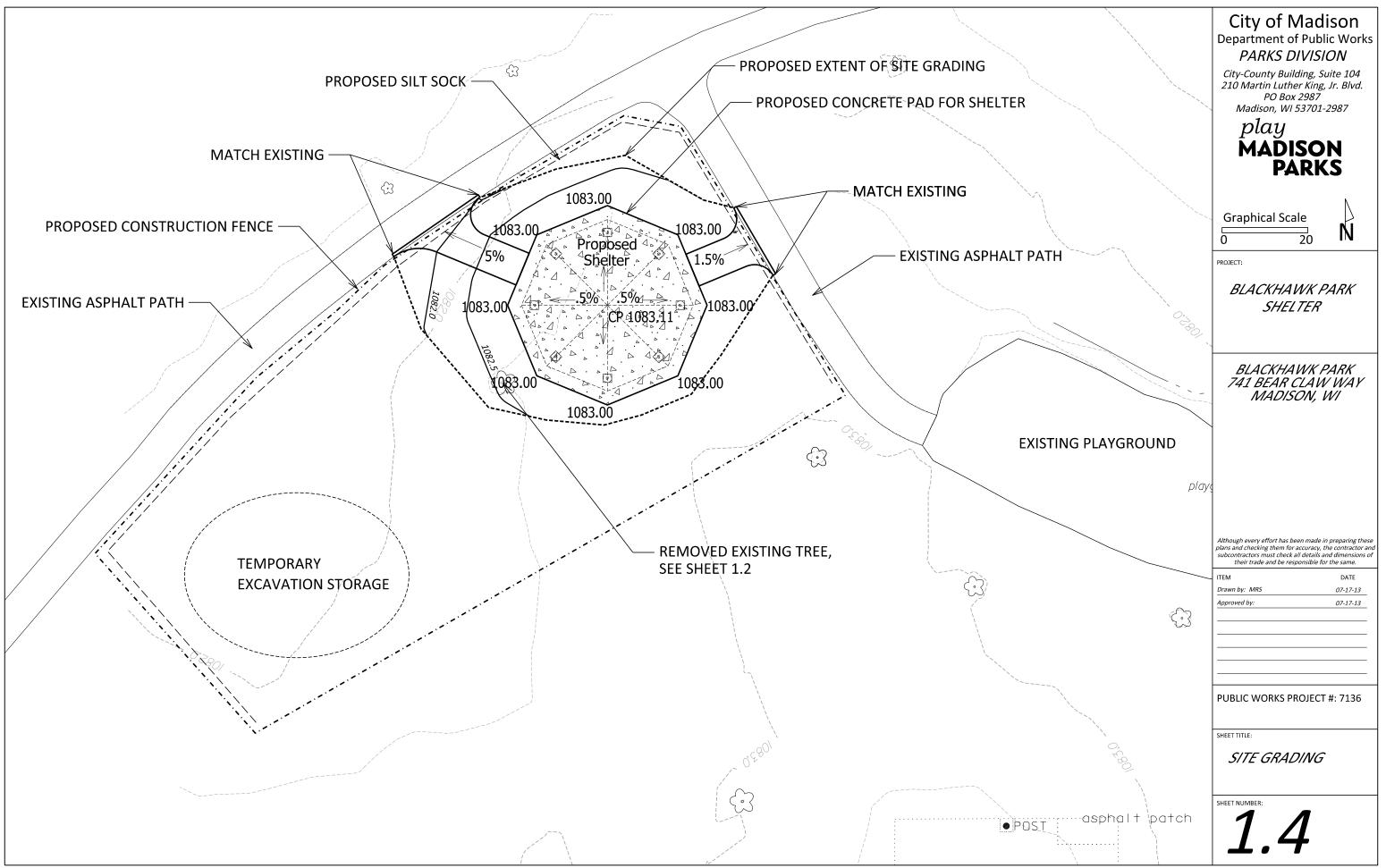


M: |Maps|parks|Blackhawk|2013 Shelter|Shelter Install 2013.dgn



	City o	of Madisc	on, WI Public Works Contract	7136								
			7/17/2013									-
	Date											
	Notes	S:										
			nes are cuts, negative volumes are fill	s								
				Aodels) are used for computations or intended for ac	tual construction							
	Not u											
Area IF		ID# gro	ups									
	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 pacto Volut (cu y
					Blackhawk Survey2011-12		1-4-9		(1	1. 7	1
1.1		1	Topsoil Place	North area: Place topsoil on existing grass	29.dtm	dtm	693	varies	-189	-7.0	0%	,
					Blackhawk_Survey2011-12	-Blackhawk Shelter Pro1.						1
2.1		2	Topsoil Place	South area: Place topsoil on existing grass	29.dtm	dtm	1139	varies	-224	-8.3	0%	,
3.1		3	Topsoil Excavate	Shelter: strip 4in topsoil	n/a	n/a	1601	0.33	534			
				Shelter: remove subsoil to bottom of gravel								
3.2		3	Subsoil Excavate	base	Ex-4in.dtm	Pro-11in.dtm	1601	varies	257	9.5	0%	,
				Shelter: place subsoil to bottom of gravel								<u> </u>
3.3		3	Subsoil Place	base	Ex-4in.dtm	Pro-11in.dtm	1601	varies	-36	-1.3	0%	,
		-		Shelter: place 6in gravel to 6in outside edge								-
3.4		3	Gravel Place	of concrete	n/a	n/a	1601	-0.50	-801	-29.6	0%	
3.5		3	Concrete Place	Shelter: place 5in concrete	n/a	n/a	1529	-0.42	-637	-23.6		
0.0				Shelter: place 5in topsoil over 6in wide	100	100	1020	0.12		20.0	070	-
3.6		3	Topsoil Place	gravel edge	n/a	n/a	72	-0.42	-30	-1.1	0%	,
4.1		4	Topsoil Excavate	West path: strip 4in topsoil	n/a	n/a	247	0.33	82			
				West path: remove subsoil to 8in below	100	100	2.11	0.00	02	0.0	070	1
4.2		4	Subsoil Excavate	finished asphalt	Ex-4in.dtm	Pro-8in.dtm	247	varies	22	0.8	0%	
1.2				West path: place subsoil to 8in below			2.11	Valleo		0.0	070	
4.3		4	Subsoil Place	finished asphalt	Ex-4in.dtm	Pro-8in.dtm	247	varies	-29	-1.1	0%	,
4.0				West path: place 6in gravel to 6in outside			211	Valleo	20	1.1	0,0	1
4.4		4	Gravel Place	edge of asphalt	n/a	n/a	247	-0.50	-124	-4.6	0%	,
4.5		4	Ashpalt Place	West path: place 2in asphalt	n/a	n/a	221	-0.17	-37			
4.0				West path: place 2in topsoil over 6in wide	100	100	221	0.17	01	1.4	0,0	
4.6		4	Topsoil Place	gravel edge	n/a	n/a	26	-0.17	-4	-0.2	0%	
5.1		5	Topsoil Excavate	East path: strip 4in topsoil	n/a	n/a	163	0.33	54			
0.1				East path: remove subsoil to 8in below	100	100	100	0.00	04	2.0	070	
5.2		5	Subsoil Excavate	finished asphalt	Ex-4in.dtm	Pro-8in.dtm	163	varies	28	1.0	0%	
0.2				East path: place subsoil to 8in below			100	Valles	20	1.0	070	+
5.3		5	Subsoil Place	finished asphalt	Ex-4in.dtm	Pro-8in.dtm	163	varies	0	0.0	0%	.
0.0				East path: place 6in gravel to 6in outside			100	Valleo	0	0.0	0 /0	1
5.4		5	Gravel Place	edge of asphalt	n/a	n/a	163	-0.50	-82	-3.0	0%	,
5.5		5	Ashpalt Place	East path: place 2in asphalt	n/a	n/a	149	-0.30	-02			
0.0				East path: place 2in asphalt			1-10	0.17	-23	-0.9	0 /0	+
56		5			n/a	n/a	14	0.17	2	01	00/	
5.6		5	Topsoil Place	gravel edge	n/a	n/a	14	-0.17 TOTALS	-2	-0.1 -46.0	_	0%

BLACKHAWK	CPARK SHELTER - Earthwork Quantities
Date Revised:	7/17/2013
	e (gravel) and soil quantities in the Bid Table.
Dervied from more	detailed spreadsheet available from Parks Div
Computation Su	mmary
	are cuts (material available), negative volumes are fills mes 4" of existing strippable topsoil, and placement o
Row Labels	Sum of Factored (Uncom-pacted) Volume (cu vd
Ashpalt Place	oun off actored (oncom-pacted) volume (cu ya
Concrete Place	
Gravel Place	
Subsoil Excavate	
Subsoil Place	
Topsoil Excavate	
Topsoil Place	
Grand Total	
Reorganized inte	o Bid Table Items:
Bid Item #20101	
Excavation Cut	Subsoil Excavate + Topsoil Excavate
Bid Item #20201	·
Fill	Subsoil Place + Subsoil Excavate
Bid Item #20221	
Topsoil	= Topsoil Place

gative volumes are fills (material needed) opsoil, and placement of 6" of topsoil.

cted) Volume (cu yd)

	-2.3
	-23.6
	-37.2
	11.4
	-2.4
	24.8
	-16.7
	-46.0
avate	
ate	

City of Madison Department of Public Works PARKS DIVISION

City-County Building, Suite 104 210 Martin Luther King, Jr. Blvd. PO Box 2987 Madison, WI 53701-2987



PROJECT:

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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 Drawn by: MRS Approved by:

DATE 07-17-13

07-17-13

PUBLIC WORKS PROJECT #: 7136

SHEET TITLE:

DESIGN COMPUTATIONS

SHEET NUMBER: 1.5



A Division of PORTERCORP 4240 N. 136th AVE HOLLAND, MI 49424 (616) 399-1963 Designs and calculations of Poligon buildings are protected under copyright laws and patents and may not be used in the construction or design of a building that is not supplied by Poligon. Copyright laws protect the style and visual appearance of the structure while patents may protect other parts of the design. PATENTED AND/OR PATENTS PENDING COPYRIGHT 2013 PORTERCORP HOLLAND, MI 49424

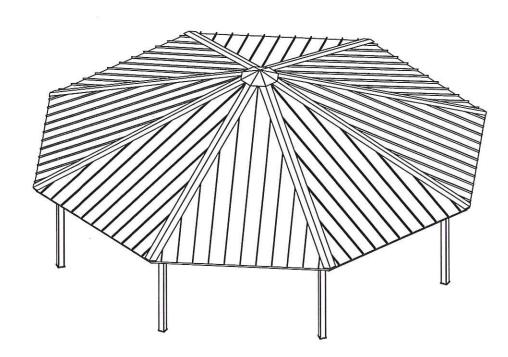
PROJECT NAME: BLACKHAWK PARK

PROJECT LOCATION: MADISON, WI

BUILDING TYPE: OTC 40

ROOF TYPE: STANDING SEAM OVER T & G

JOB NUMBER: 50339



DRAWING LIST:

SHEET NUMBER	DRAWING DESCRIPTION
CS	COVER SHEET
1	ARCHITECTURAL ELEVATIONS
2-2.1	ANCHOR AND FOOTING LAYOUT / DETAILS
3-3.1	STRUCTURAL FRAMING PLAN
4-4.1	FRAME CONNECTION DETAILS
5-5.2	ROOF LAYOUT
6	ROOF CONNECTION DETAILS

MANUFACTURER NOTES:

MATERIALS:

DESCRIPTION
TUBE STEEL
SCHEDULE PIPE
RMT PIPE
LIGHT GAGE COLD FORMED
STRUCTURAL STEEL PLATE
ROOF PANELS (STEEL)
ANCHOR BOLTS

IGNATION A500 (GRADE B) A53 (GRADE B) A519 A1003 (GRADE 50) A36 A653 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.

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. IF THAT SEPARATION DOES NOT EXIST, 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 LATEST EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION MANUAL.

ALL WELDING IS PERFORMED BY AMERICAN WELDING SOCIETY CERTIFIED WELDERS AND CONFORMS TO THE LATEST EDITION OF AWS D1.1 OR D1.3 AS REQUIRED.

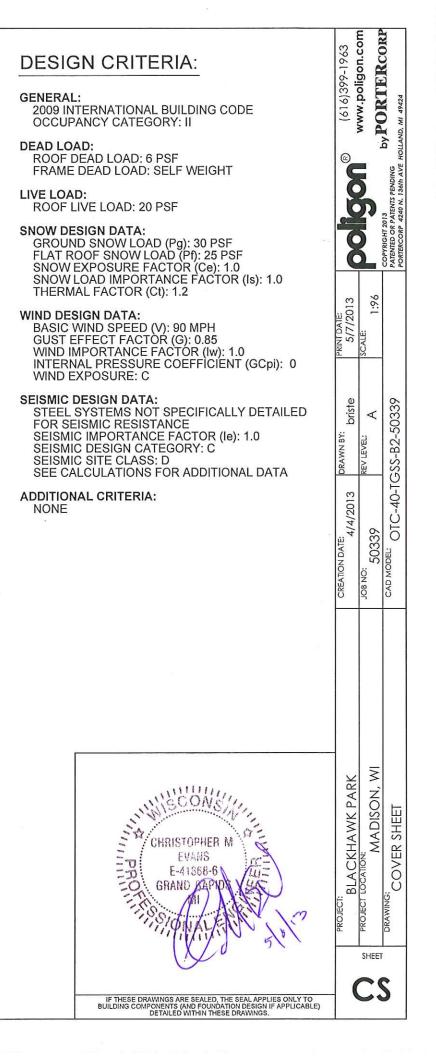
PARTS SHOWN MAY BE UPGRADED DUE TO STANDARDIZED FABRICATION. REFER TO THE SHIPPING BILL OF MATERIALS FOR POSSIBLE SUBSTITUTIONS.

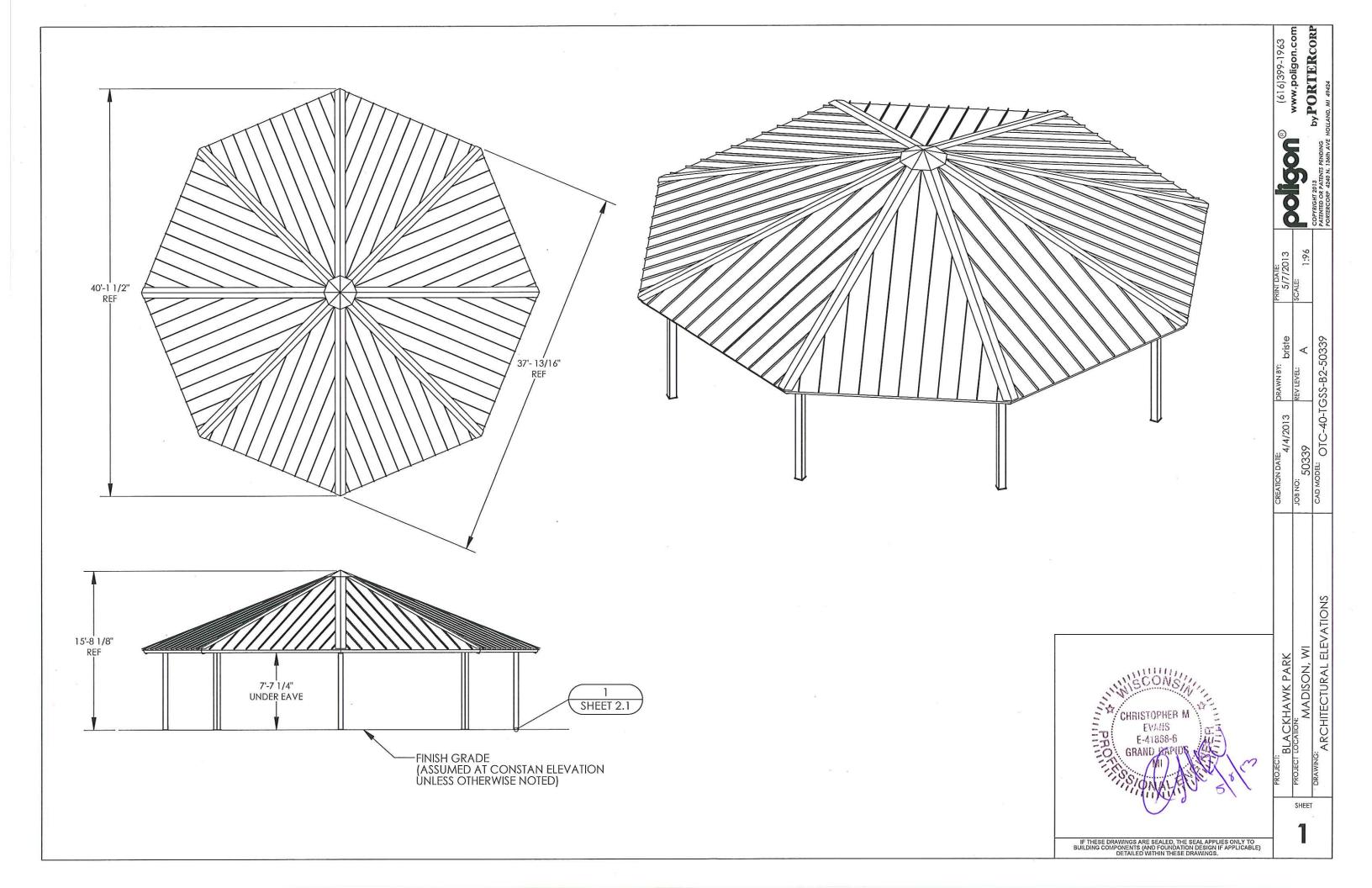
FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT THE PRIMARY FRAME INSTALLER AND THE ROOF INSTALLER HAVE A MINIMUM FIVE (5) YEARS DOCUMENTED EXPERIENCE INSTALLING THIS TYPE OF PRODUCT.

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

FABRICATOR APPROVALS: CITY OF PHOENIX, AZ APPROVED FABRICATOR #C08-2010 CITY OF LOS ANGELES, CA APPROVED FABRICATOR #1596 CITY OF RIVERSIDE, CA APPROVED FABRICATOR #SP06-0033 CITY OF HOUSTON, TX APPROVED FABRICATOR #470 CLARK COUNTY, NV APPROVED FABRICATOR #264 STATE OF UTAH APPROVED FABRICATOR 02008-14

CERTIFICATES: MIAMI-DADE COUNTY CERTIFICATE OF COMPETENCY NO. 12-0905.07 PCI (POWDER COATING INSTITUTE) 4000 CERTIFIED

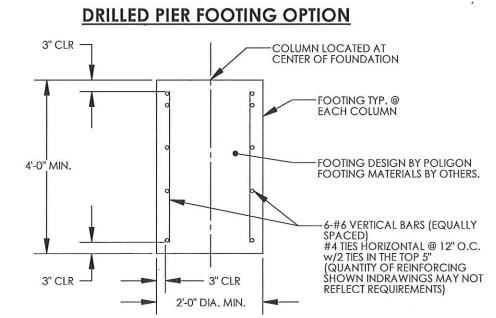




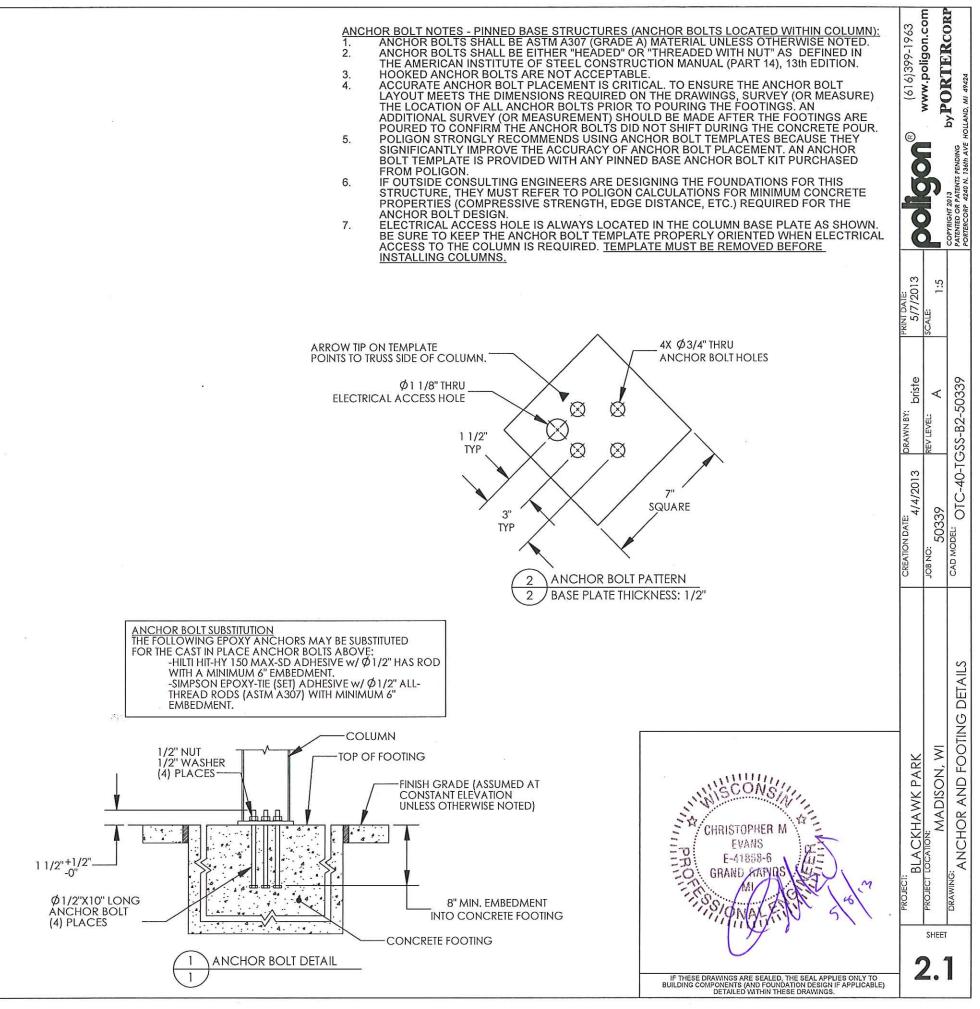
FOUNDATION NOT

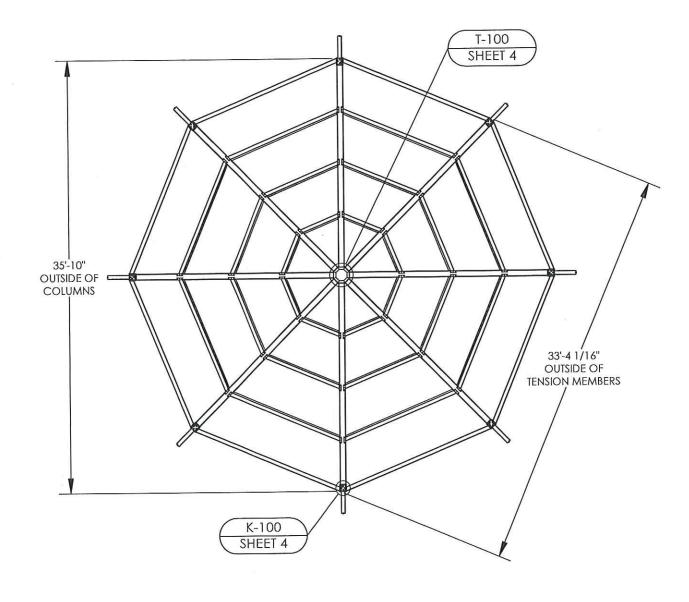
- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE BUILDING CODE, AMERICAN CONCRETE INSTITUTE, AND ALL APPLICABLE STATE AND LOCAL ORDINANCES AND REQUIREMENTS.
- 2. THE CONCRETE DESIGN IS BASED ON THE FOLLOWING PROPERTIES: 28 DAY STRENGTH OF 3000 psi.
 - SLUMP OF 4" (+/-1")
- THE FOOTING 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, INSTALLATION OF THE FOUNDATION MUST BE DISCONTINUED AND A SOILS ENGINEER CONTACTED. 3.
- THE REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615, 4 GRADE 60.
- IF FOOTING DEPTH SHOWN DOES NOT MEET LOCAL FROST REQUIREMENTS, THE DRILLED PIER FOOTING MAY BE EXTENDED. EXTEND VERTICAL BARS AS REQUIRED AND PROVIDE ADDITIONAL TIES TO MEET SPACING REQUIREMENTS AS SHOWN. IF LOCAL FROST DEPTH 5. REQUIREMENTS ARE NOT MET AND NO DRILLED PIER FOOTING OPTION IS GIVEN, CONTACT POLIGON ENGINEERING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCAL FROST LINE DEPTH BELOW GRADE PRIOR TO CONSTRUCTION.

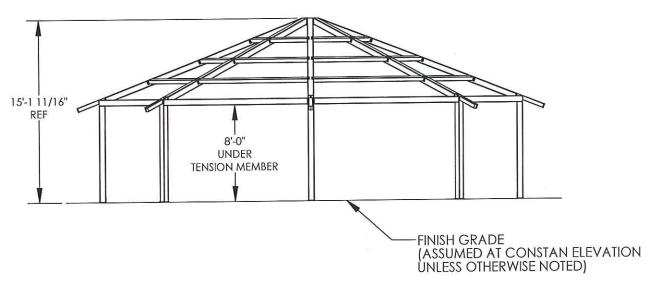
THE FOUNDATION DESIGN CONTAINED HEREIN IS SITE SPECIFIC, AND IS BASED ON ELECTRONIC CORRESPONDANCE REGARDING BLACKHAWK PARK SHELTER, MADISON, WI, BY CGC INC. DATED JANUARY 25, 2013.

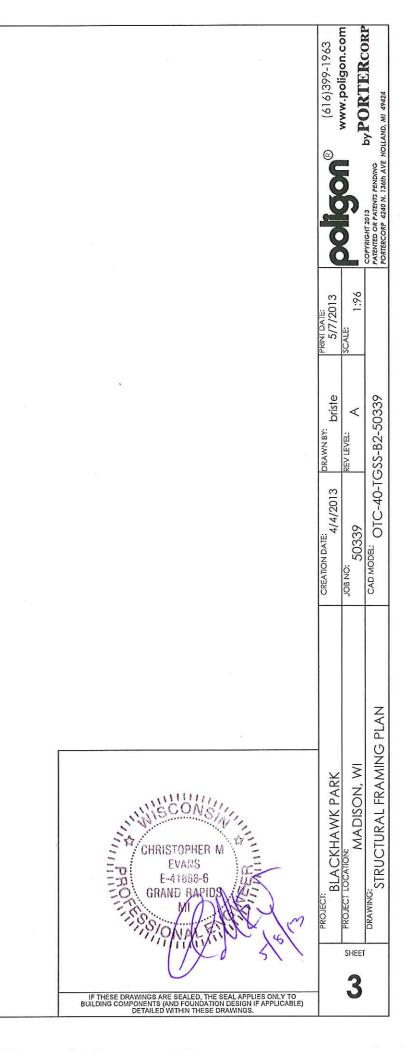


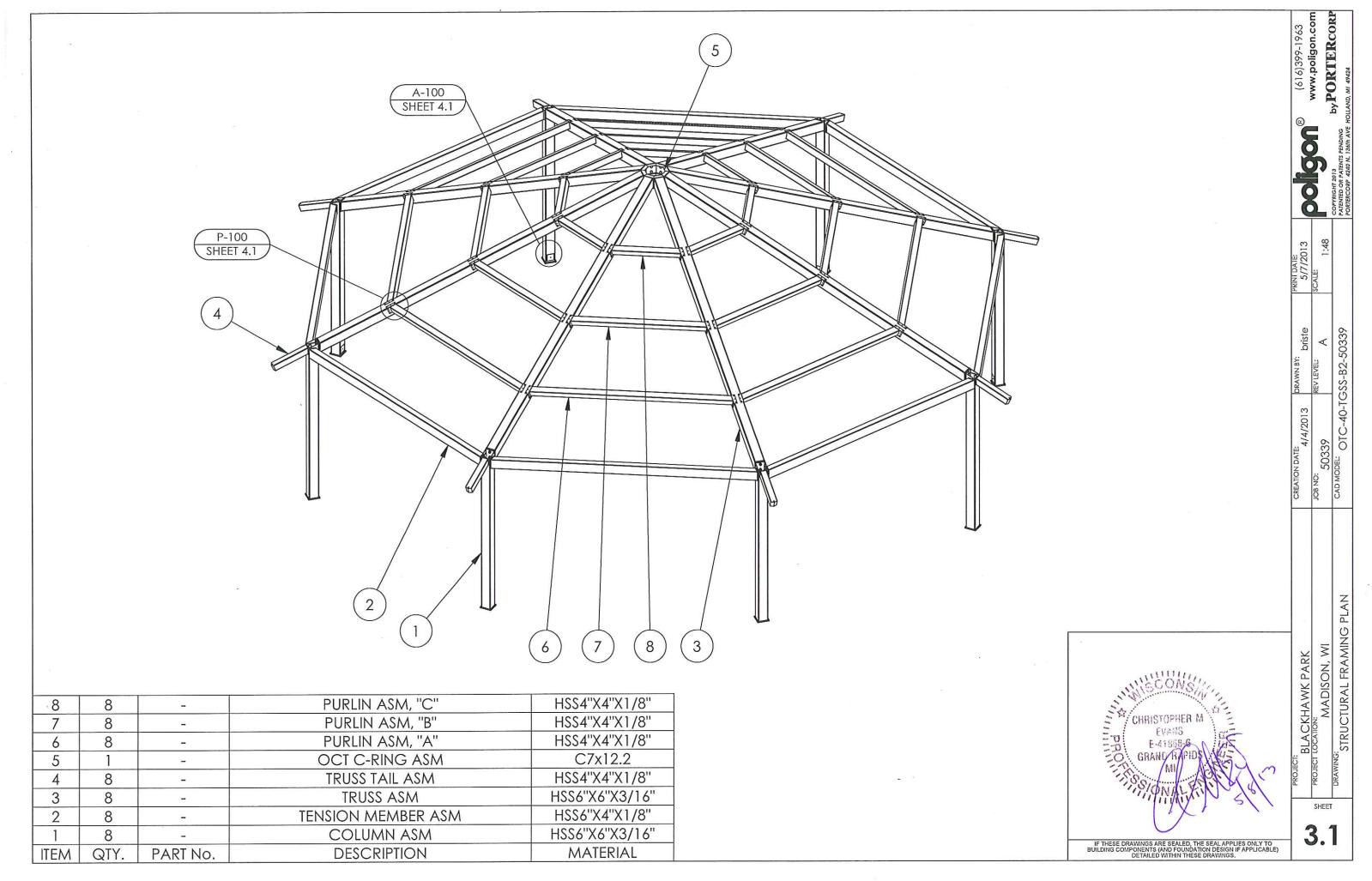
- INSTALLING COLUMNS.



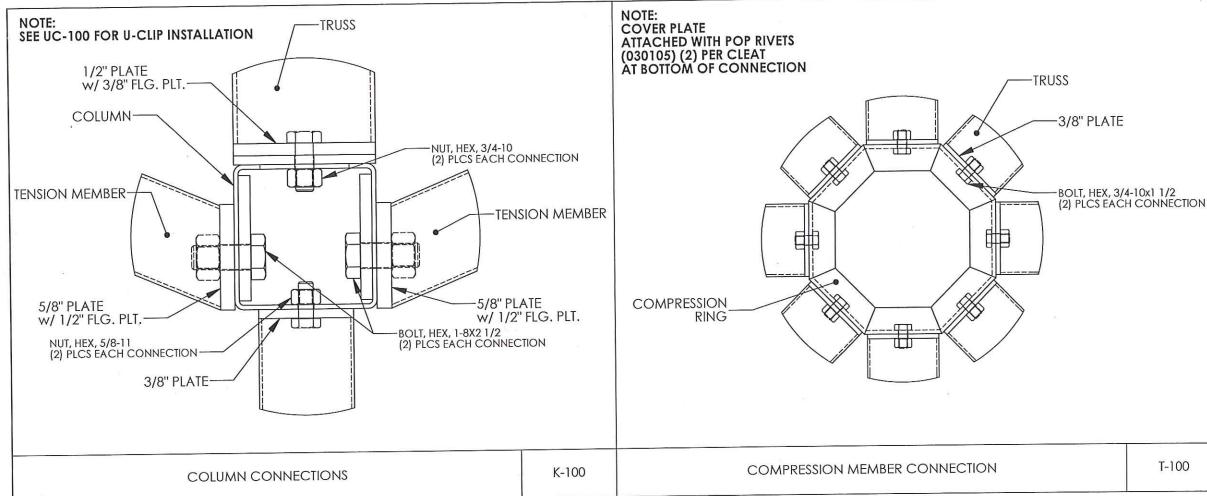








8	8	-	PURLIN ASM, "C"	HSS4"X4"X1/8"
7	7 8 -		PURLIN ASM, "B"	HSS4"X4"X1/8"
6	8	-	purlin ASM, "A"	HSS4"X4"X1/8"
5	1	-	OCT C-RING ASM	C7x12.2
4	8	-	TRUSS TAIL ASM	HSS4"X4"X1/8"
3	8	-	TRUSS ASM	HSS6"X6"X3/16"
2	8	-	TENSION MEMBER ASM	HSS6"X4"X1/8"
1	8	-	COLUMN ASM	HSS6"X6"X3/16"
ITEM	QTY.	PART No.	DESCRIPTION	MATERIAL



- CONNECTION NOTES: 1. ALL HIGH STRENGTH BOLTS ARE A325 BOLTS AND TO BE INSTALLED BY THE "TURN -OF-NUT" PRETENSIONING METHOD AS SPECIFIED IN THE 13TH EDITION OF THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", SECTION 8 (SEE ILLUSTRATION). A325 BOLTS ASTM A325 OR A490 BOLTS", SECTION 8 (SEE ILLUSTRATION). A325 BOLTS MAY BE INSTALLED WITHOUT WASHERS WHEN TIGHTENED BY THE "TURN-OF-NUT" PRETENSIONING METHOD. IT IS THE RESPONSIBILITY OF THE ERECTOR TO INSURE PROPER TIGHTNESS. THIS METHOD IS ONLY REQUIRED ON 5/8" DIAMETER AND LARGER BOLTS. ANCHOR BOLTS NEED NOT BE TIGHTENED PAST SNUG TIGHT.
- LOCAL JURISDICTIONS MAY REQUIRE AN INSPECTOR TO BE PRESENT TO WITNESS HARDWARE INSTALLATION AND INDEPENDENT TESTING. INSPECTION REQUIREMENTS SHOULD BE VERIFIED PRIOR TO STEEL 2. ERECTION.
- ERECTION OF THE FRAMING MEMBERS WILL REQUIRE THE MAIN COLUMNS TO BE PLUMB SQUARE AND TIGHTENED TO THE TRUSSES AND TENSION MEMBERS BEFORE INSTALLING THE PURLINS, PURLINS, IF REQUIRED, MUST BE 3. PARALLEL TO THE EAVE BEAMS AND TENSION MEMBERS
- TOUCH-UP PAINT MUST BE APPLIED TO ALL EXPOSED BOLTS & NUTS. 4. PERIODIC TOUCH-UP AT THESE BOLTED CONNECTIONS IS REQUIRED.
- UNLESS THE BUILDING HAS A FACTORY APPLIED POWDERCOAT, E-COAT OR GALVANIZING, THE FRAME WILL BE PRIME PAINTED AND WILL BE REQUIRED TO BE FINISH PAINTED IN THE FIELD WITH ALL PAINT, MATERIALS AND LABOR NOT BY POLIGON (PORTERCORP). REFER TO FINAL SALES 5. ORDFR.
- PRIOR TO THE ERECTION OF SHELTER COMPONENTS, IT IS RECOMMENDED TO CHASE AND TAP STRUCTURAL HARDWARE. EVEN THOUGH POLIGON MAKES EVERY EFFORT TO PROTECT THE HARDWARE DURING THE PROCESS OF PRODUCTION, FINISH, AND SHIPPING, THE ON-SITE CHASING AND TAPPING OF THREADS IS ALWAYS GOOD POLICY. 6.
- TO PREVENT RUST STAINING OF FINISH, ALL METAL SHAVINGS MUST BE REMOVED AFTER INSTALLATION. ENSURE NO SHAVING ARE TRAPPED 7. BETWEEN MEMBER SURFACES.

