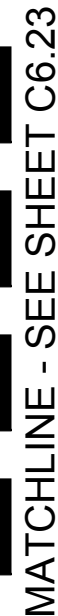


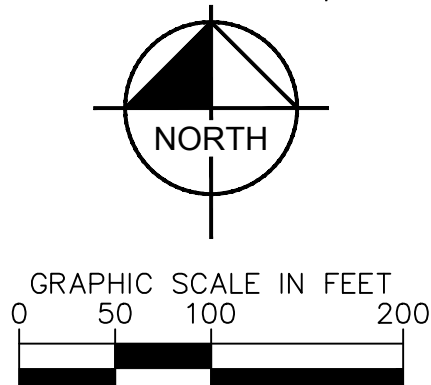
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CONSTRUCTION NOTES:

- GENERAL NOTES:

- Call before you Dig**
Avoid cutting underground utility lines. It's costly.
- CALL
811
OR
1-800-362-2764



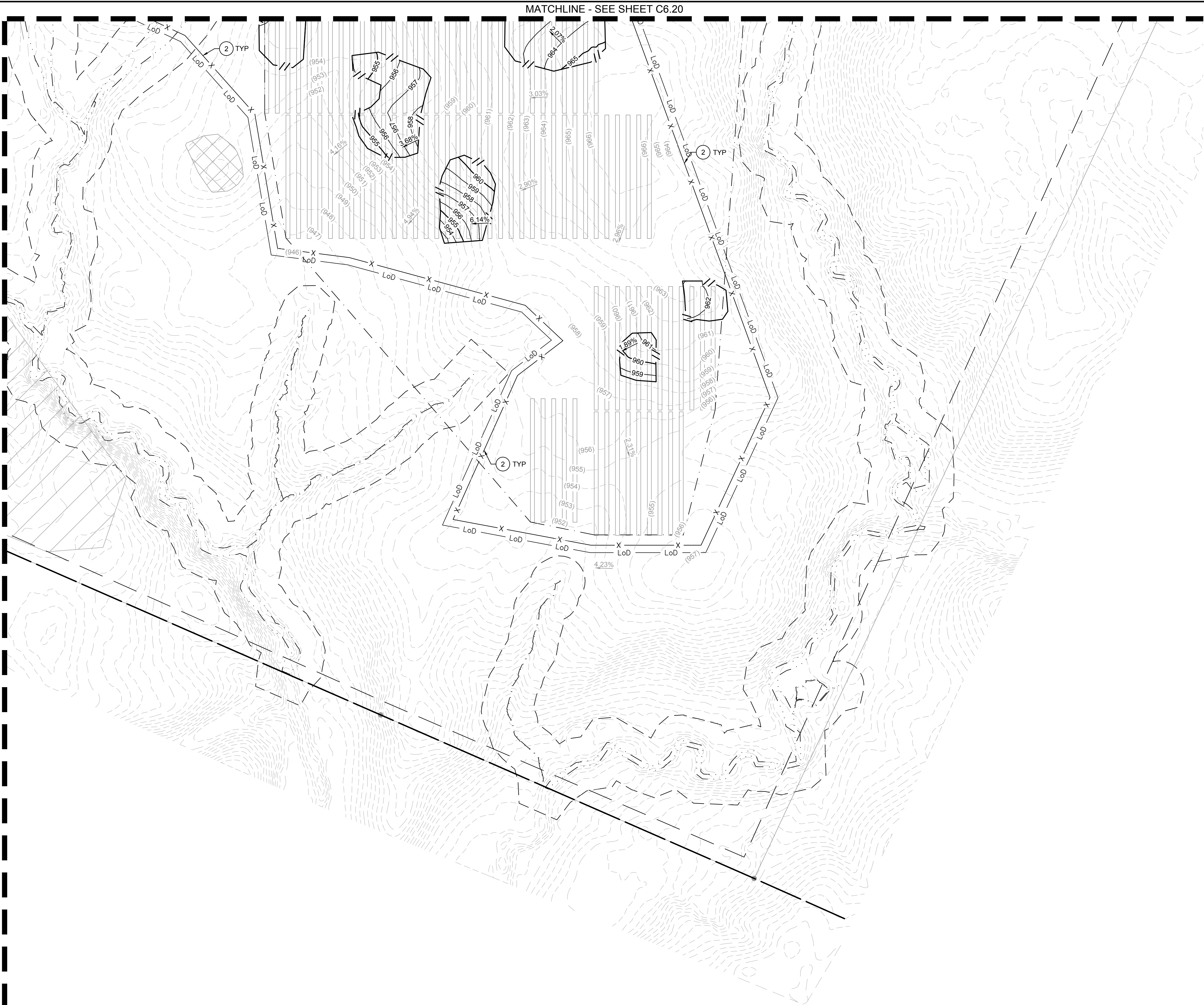
SHEET NUMBER C6.22	196 MWAC BIG PLAIN SOLAR PROJECT MADISON COUNTY, OH	GRADING PLAN	KHA PROJECT 192017028		Kimley»Horn © 2022 KIMLEY-HORN AND ASSOCIATES, INC. 7965 NORTH HIGH STREET SUITE 200, COLUMBUS, OH 43235 PHONE: (614) 454-6899 WWW.KIMLEY-HORN.COM		<div>4 REVISION 4</div> <div>3 REVISION 3</div> <div>2 REVISION 2</div> <div>1 REVISION 1</div> <div>No. REVISIONS</div>	DATE
			DATE 07/08/2022					
			SCALE AS SHOWN					
			DESIGNED BY NEL					
			DRAWN BY AMC					
			CHECKED BY JCC					

CIVIL IMPROVEMENT PLAN - JULY 8, 2022 - ISSUED FOR CONSTRUCTION

Plotted By: Zade, Jod Sheet Set: Kha Layout: C6.23 July 07, 2022 05:59:22pm K:\LAV Civil\192017028-Big Plain Solar\CAD\PlanSheets\C6.23_BigPlain.dwg

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MATCHLINE - SEE SHEET C6.22



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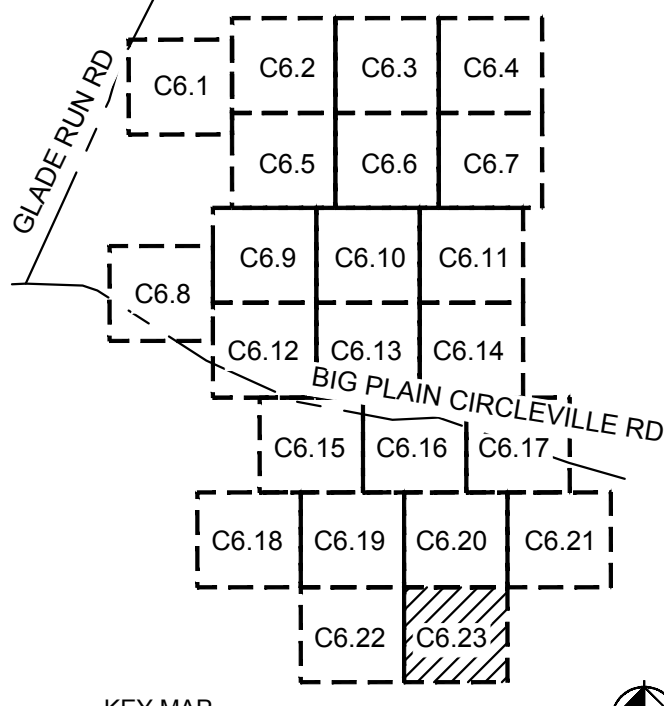
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- PROPERTY LINE
- LEASE LINE
- TOWNSHIP LINE
- SETBACK
- EXISTING CONTOUR
- PROPOSED CONTOUR
- EASEMENT LINE
- CONSERVATION EASEMENT
- EXISTING TELEPHONE LINE
- EXISTING OVERHEAD POWER LINE
- EXISTING FENCE
- EXISTING DRAIN TILE MAIN
- EXISTING GROUNDWATER WELL
- PROPOSED SECURITY FENCE
- PROPOSED AGGREGATE ACCESS ROAD
- PROPOSED MATERIAL LAYDOWN AREA
- PROPOSED ARRAY BLOCK OUTLINE
- DAYLIGHT LINE
- FEMA ZONE A
- NESTING AREA
- ARCHAEOLOGICAL RESOURCE AREA
- EXISTING WETLAND
- WETLAND BUFFER
- APPROXIMATE CIVIL LIMIT OF WORK

CONSTRUCTION NOTES:

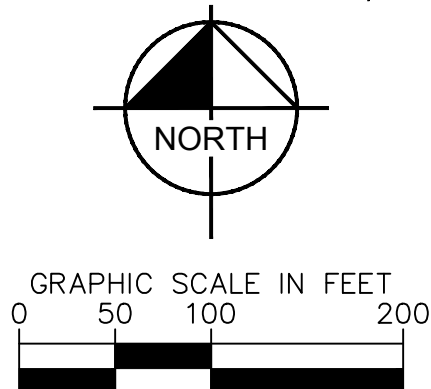
- AGGREGATE BASE ACCESS ROAD WITH SHOULDERS, SEE DETAIL 1, SHEET C7.0
- 8' TALL DEER FENCE PER DETAIL 1, SHEET C7.1
- 24' WIDE VEHICLE MANUAL SWING GATE PER DETAIL 3, SHEET C7.1
- INVERTER SKID (SHOWN FOR REFERENCE ONLY), SEE DETAIL 4, SHEET C7.0 FOR GRADING DETAIL AND DETAIL 3, SHEET C7.0 FOR MAXIMUM SWITCH HEIGHT
- SUBSTATION TO BE CONSTRUCTED UNDER SEPARATE PLAN SET, SEE SHEET C6.24 FOR GRADING DETAIL
- AGGREGATE BASE ACCESS ROAD, SEE DETAIL 2, SHEET C7.0
- LOW WATER CROSSING, SEE DETAIL 2, SHEET C7.2
- INSTALL 18" CMP CULVERT
- CONSTRUCT SUBSTATION DITCH, SEE DETAIL 1, SHEET C6.24
- INSTALL RIP RAP PIPE OUTLET PROTECTION, SEE DETAIL 3, SHEET C7.2
- INSTALL RIP RAP DITCH OUTLET, SEE DETAIL 4, SHEET C7.2
- INSTALL CHECK DAM AT MINIMUM EVERY 100', SEE DETAIL 4, SHEET C5.30
- INSTALL 12" CMP CULVERT
- INSTALL 24" CMP CULVERT
- INSTALL 30" CMP CULVERT
- INSTALL 36" CMP CULVERT

GENERAL NOTES:

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CALL 811
OR 1-800-362-2764



196 MWAC
BIG PLAIN
SOLAR PROJECT
MADISON COUNTY, OH

GRADING PLAN

SHEET NUMBER
C6.23

192017028
DATE
07/08/2022
SCALE
AS SHOWN
DESIGNED BY
NEL
DRAWN BY
AMC
CHECKED BY
JCC

PROJECT
DATE
SCALE
DESIGNED BY
DRAWN BY
CHECKED BY

192017028
07/08/2022
AS SHOWN
NEL
AMC
JCC

REVISION 4
07/08/2022
REVISION 3
06/03/2022
REVISION 2
04/29/2022
REVISION 1
04/20/2022

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No.
REVISIONS
DATE

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ENERGY

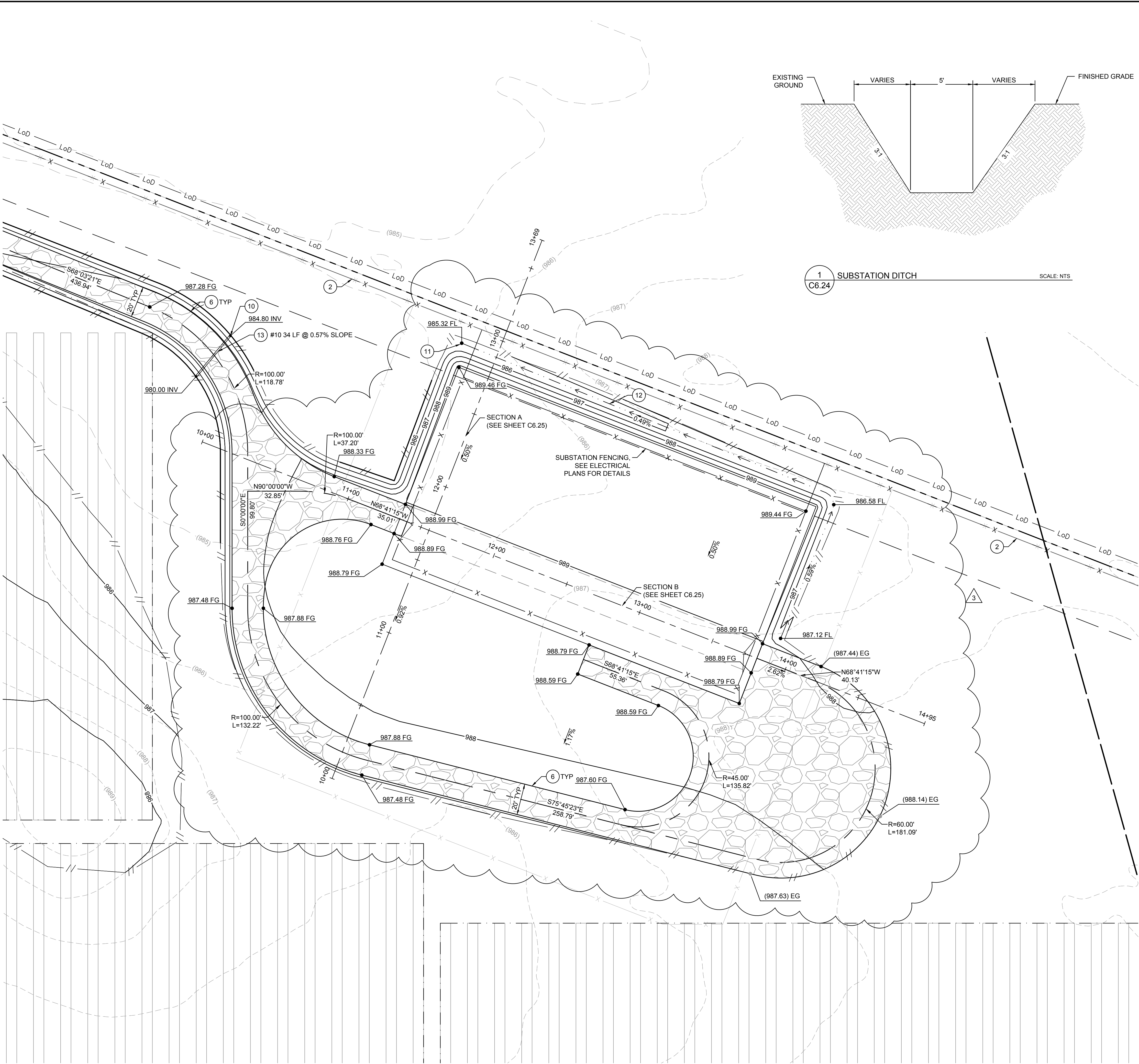
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7965 NORTH HIGH STREET SUITE 200, COLUMBUS, OH 43235
PHONE: (614) 454-6699
WWW.KIMLEY-HORN.COM

STATE OF OHIO
JASON C. COOPER
87591
REGISTERED PROFESSIONAL ENGINEER

CIVIL IMPROVEMENT PLAN - JULY 8, 2022 - ISSUED FOR CONSTRUCTION

Plotted By: Zades, Jod Sheet: Set:Kha Layout: C6.24 July 07, 2022 06:01:21pm K:\JAV-Civil\192017028-Big Plain Solar\CAD\PlanSheets\004-Substation.dwg This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



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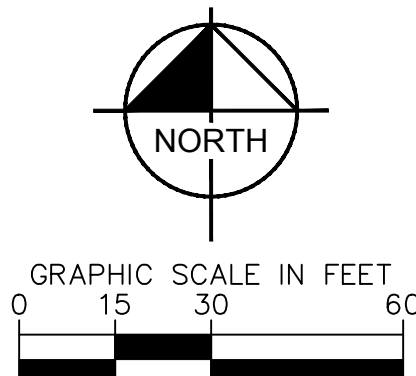
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	LEASE LINE
	TOWNSHIP LINE
	SETBACK
	EXISTING CONTOUR
	PROPOSED CONTOUR
	EASEMENT LINE
	CONSERVATION EASEMENT
	EXISTING TELEPHONE LINE
	EXISTING OVERHEAD POWER LINE
	EXISTING FENCE
	EXISTING DRAIN TILE MAIN
	EXISTING GROUNDWATER WELL
	PROPOSED SECURITY FENCE
	PROPOSED AGGREGATE ACCESS ROAD
	PROPOSED MATERIAL LAYDOWN AREA
	PROPOSED ARRAY BLOCK OUTLINE
	DAYLIGHT LINE
	FEMA ZONE A
	NESTING AREA
	ARCHAEOLOGICAL RESOURCE AREA
	EXISTING WETLAND
	WETLAND BUFFER
	APPROXIMATE CIVIL LIMIT OF WORK




CONSTRUCTION NOTES:

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- 2 8' TALL DEER FENCE PER DETAIL 1, SHEET C7.1
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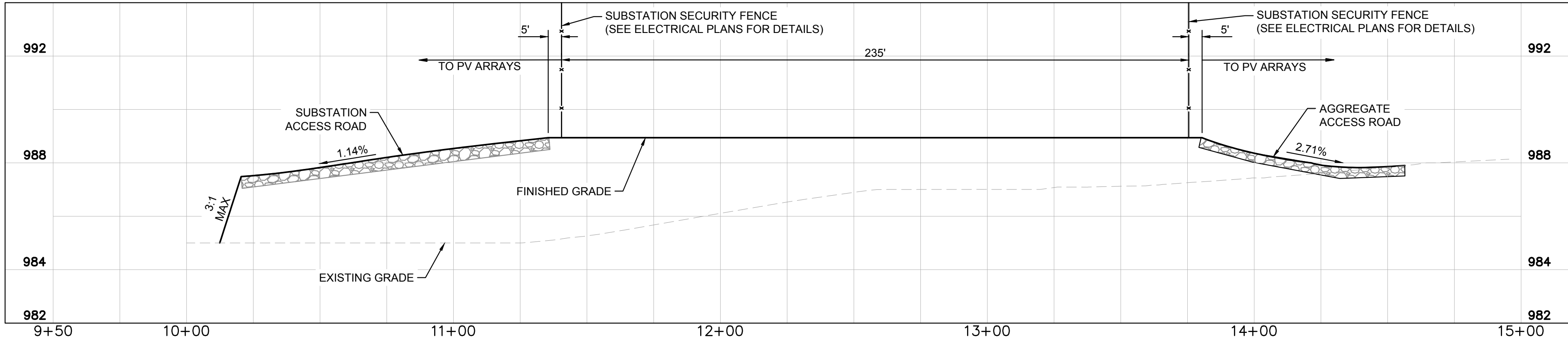
GENERAL NOTES:

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4. CONTRACTOR TO REPAIR OR REPLACE ALL DRAIN TILE DAMAGED DURING GRADING ACTIVITIES PER DETAIL 3, SHEET C7.3.

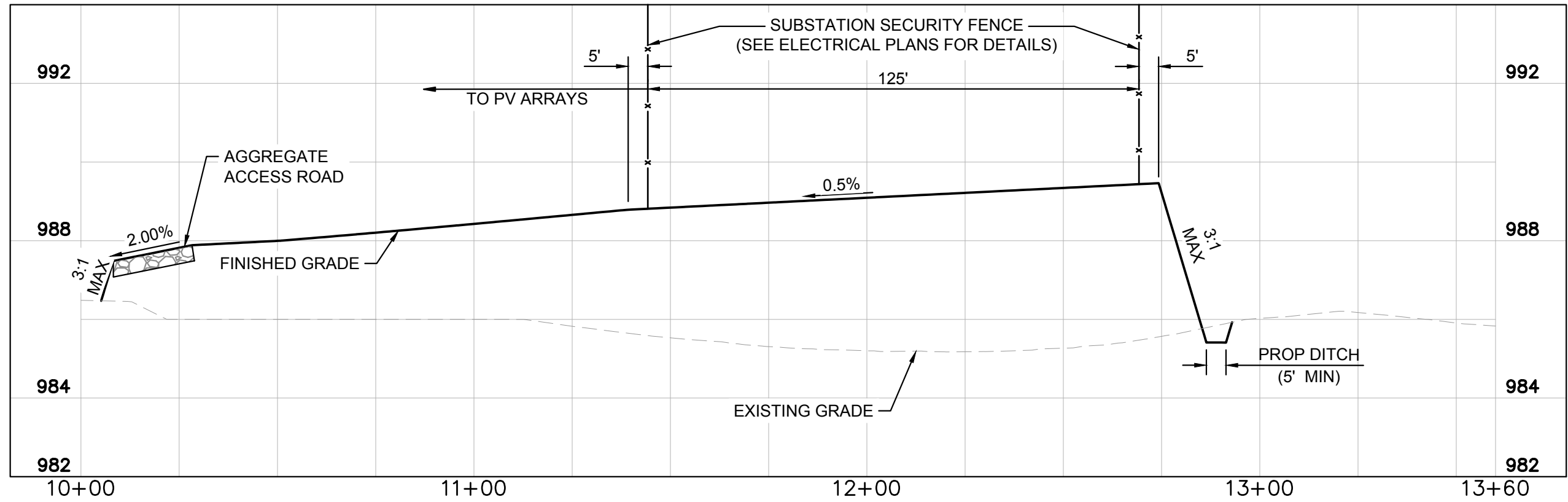


196 MWAC BIG PLAIN SOLAR PROJECT MADISON COUNTY, OH	SUBSTATION GRADING PLAN	KHA PROJECT 192017028							
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		DESIGNED BY NEL					3	REVISION 3	06/03/2022
		DRAWN BY AMC					2	REVISION 2	04/29/2022
CHECKED BY JCC	1	REVISION 1	04/20/2022						
SHEET NUMBER C6.24			No.		REVISIONS		DATE		

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SECTION B



SECTION A

LEGEND

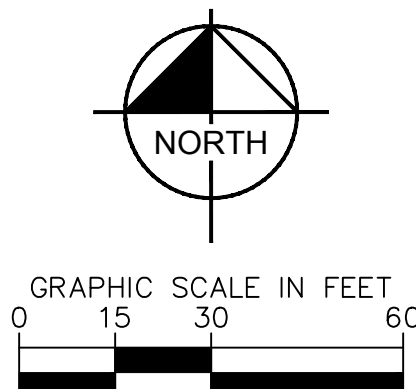
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	SETBACK
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	PROPOSED CONTOUR
	EASEMENT LINE
	CONSERVATION EASEMENT
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	EXISTING FENCE
	EXISTING DRAIN TILE MAIN
	EXISTING GROUNDWATER WELL
	PROPOSED SECURITY FENCE
	PROPOSED AGGREGATE ACCESS ROAD
	PROPOSED MATERIAL LAYDOWN AREA
	PROPOSED ARRAY BLOCK OUTLINE
	DAYLIGHT LINE
	FEMA ZONE A
	NESTING AREA
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	EXISTING WETLAND
	WETLAND BUFFER
	APPROXIMATE CIVIL LIMIT OF WORK

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GENERAL NOTES:

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196 MWAC
BIG PLAIN
SOLAR PROJECT

MADISON COUNTY, OH

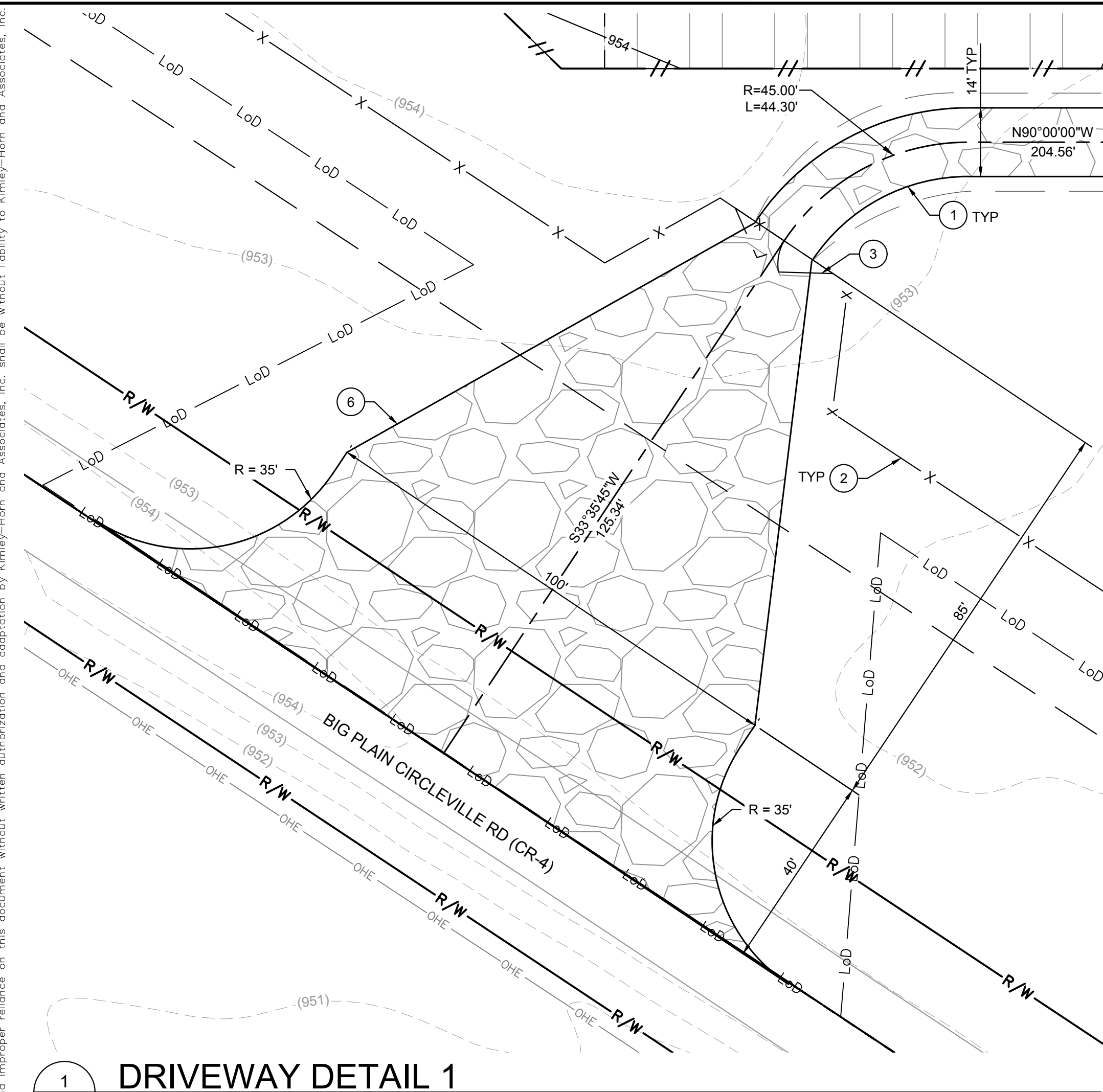
SUBSTATION
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SHEET NUMBER
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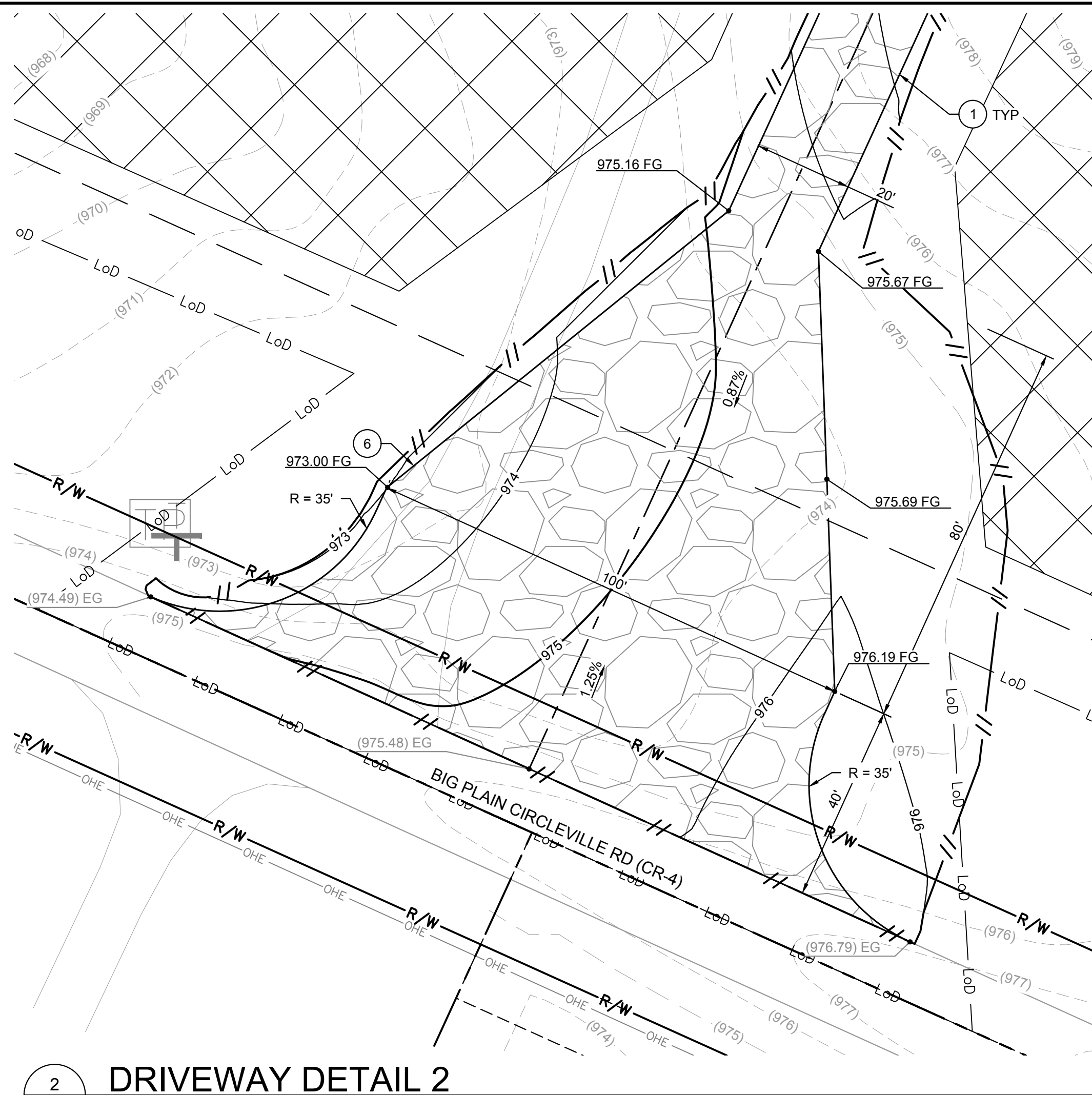
KHA PROJECT 19207028	DATE 07/08/2022	SCALE AS SHOWN	DESIGNED BY NEL	DRAWN BY AMC	CHECKED BY JCC
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Kimley-Horn					
REVISIONS					
No.	1	2	3	4	DATE
REVISIONS	REVISION 1	REVISION 2	REVISION 3	REVISION 4	04/20/2022

CIVIL IMPROVEMENT PLAN - JULY 8, 2022 - ISSUED FOR CONSTRUCTION

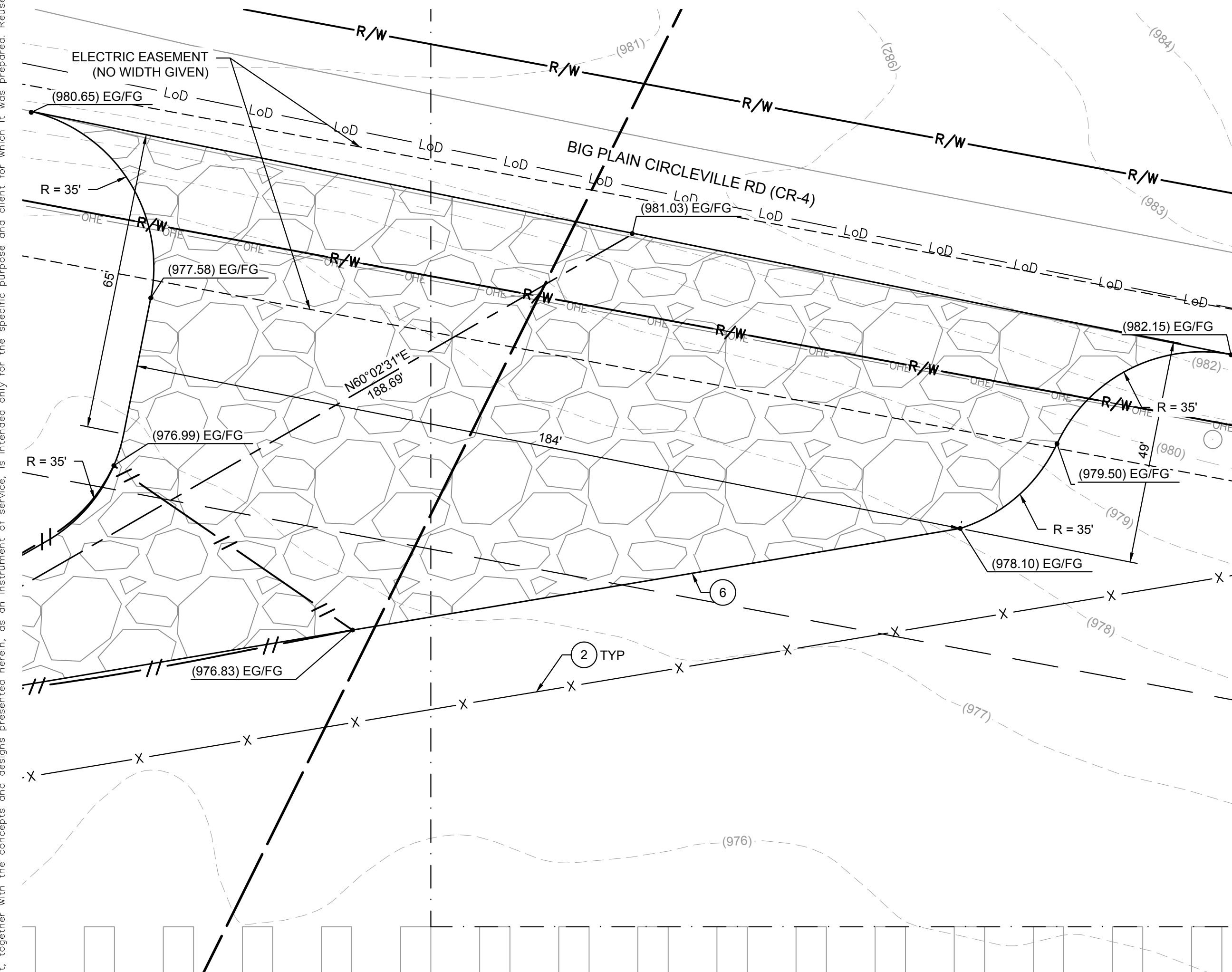
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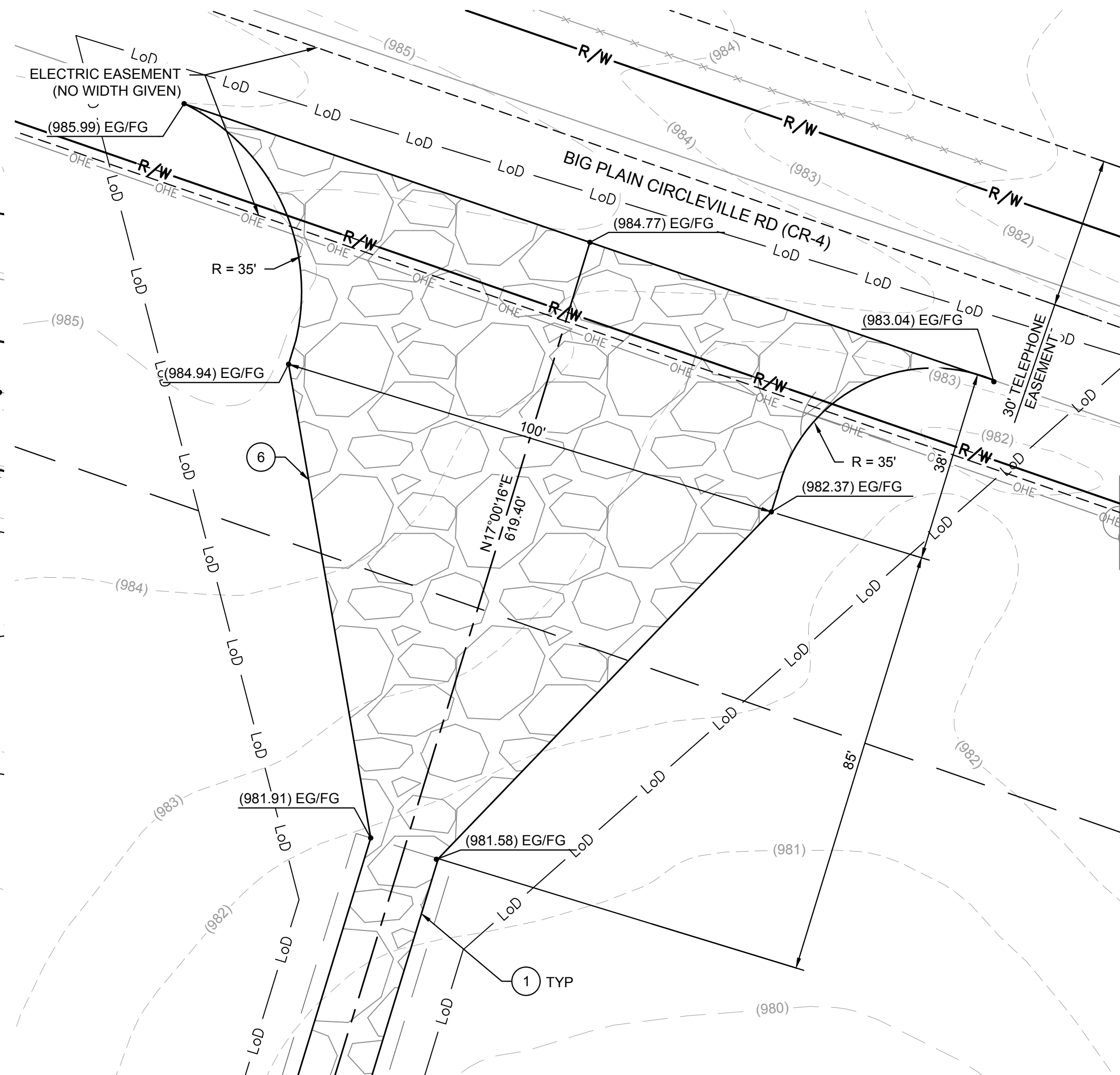
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DRIVEWAY DETAIL 2



3 DRIVEWAY DETAIL 3



4 DRIVEWAY DETAIL 4

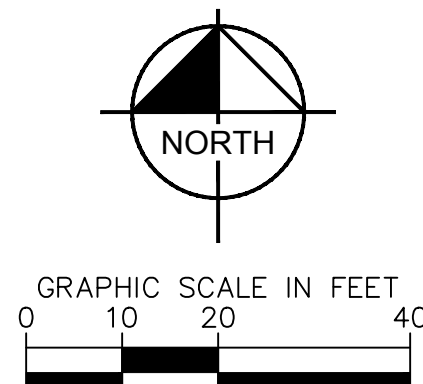
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- | | |
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| | SETBACK |
| | EXISTING CONTOUR |
| | PROPOSED CONTOUR |
| | EASEMENT LINE |
| | CONSERVATION EASEMENT |
| | EXISTING TELEPHONE LINE |
| | EXISTING OVERHEAD POWER LINE |
| | EXISTING FENCE |
| | EXISTING DRAIN TILE MAIN |
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| | PROPOSED SECURITY FENCE |
| | PROPOSED AGGREGATE ACCESS ROAD |
| | PROPOSED MATERIAL LAYDOWN AREA |
| | PROPOSED ARRAY BLOCK OUTLINE |
| | DAYLIGHT LINE |
| | FEMA ZONE A |
| | NESTING AREA |
| | ARCHAEOLOGICAL RESOURCE AREA |
| | EXISTING WETLAND |
| | WETLAND BUFFER |
| | APPROXIMATE CIVIL LIMIT OF WORK |




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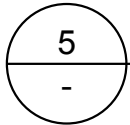
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<div>196 MW/AC BIG PLAIN SOLAR PROJECT</div> <div>MADISON COUNTY, OH</div>	DRIVEWAY DETAILS	KMA PROJECT 192017028		 <p>© 2022 KIMLEY-HORN AND ASSOCIATES, INC. 7965 NORTH HIGH STREET SUITE 200, COLUMBUS, OH 43235 PHONE: (614) 454-6699 WWW.KIMLEY-HORN.COM</p>		4	REVISION 4	07/08/2022
						3	REVISION 3	06/03/2022
						2	REVISION 2	04/29/2022
						1	REVISION 1	04/20/2022
						No.	REVISIONS	DATE

Plotted By: Zinda, Jod Sheet Set: KHA Layout: 06.27 July 07, 2022 06:03:47pm K:_LAW_Civil\202017028-Big Plain Solar\CAD\PlanSheets\005_DrivewayDetails_BigPlain.dwg

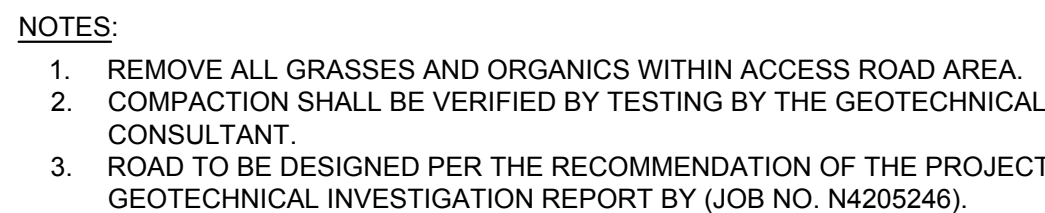
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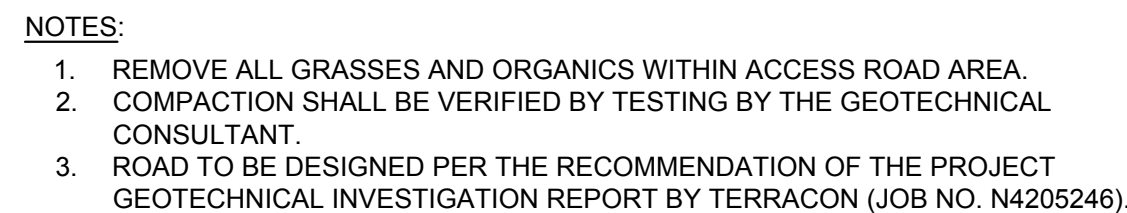
A compass rose with a circle divided into four quadrants by a vertical and horizontal line. The word "NORTH" is written in the upper-left quadrant. A small black triangle is in the upper-right quadrant. Below the compass rose is a graphic scale bar labeled "GRAPHIC SCALE IN FEET". The bar has markings at 0, 10, 20, and 40 feet, with alternating black and white segments.

SHEET NUMBER C6.27		196 MWAC BIG PLAIN SOLAR PROJECT		MADISON COUNTY, OH	
DRIVEWAY DETAILS		KHA PROJECT 192017028			
		DATE 07/08/2022		 © 2022 KIMLEY-HORN AND ASSOCIATES, INC. 7965 NORTH HIGH STREET SUITE 200, COLUMBUS, OH 43235 PHONE: (614) 454-6899 WWW.KIMLEY-HORN.COM	
		SCALE AS SHOWN			
		DESIGNED BY NEL			
		DRAWN BY AMC			
		CHECKED BY JCC			
				No.	
				REVISIONS	
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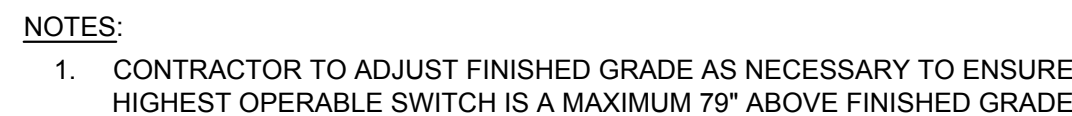
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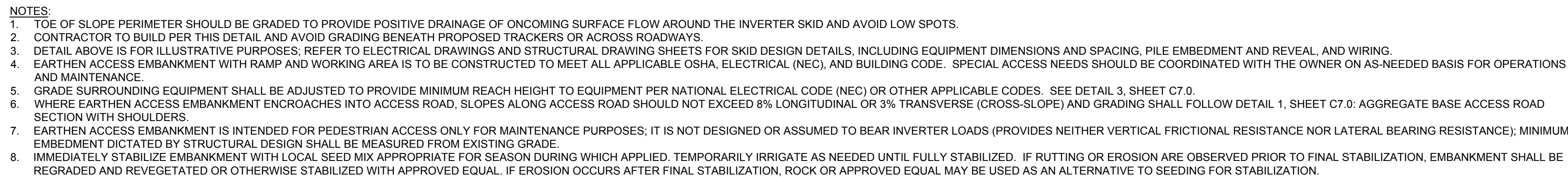
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SCALE: NTS



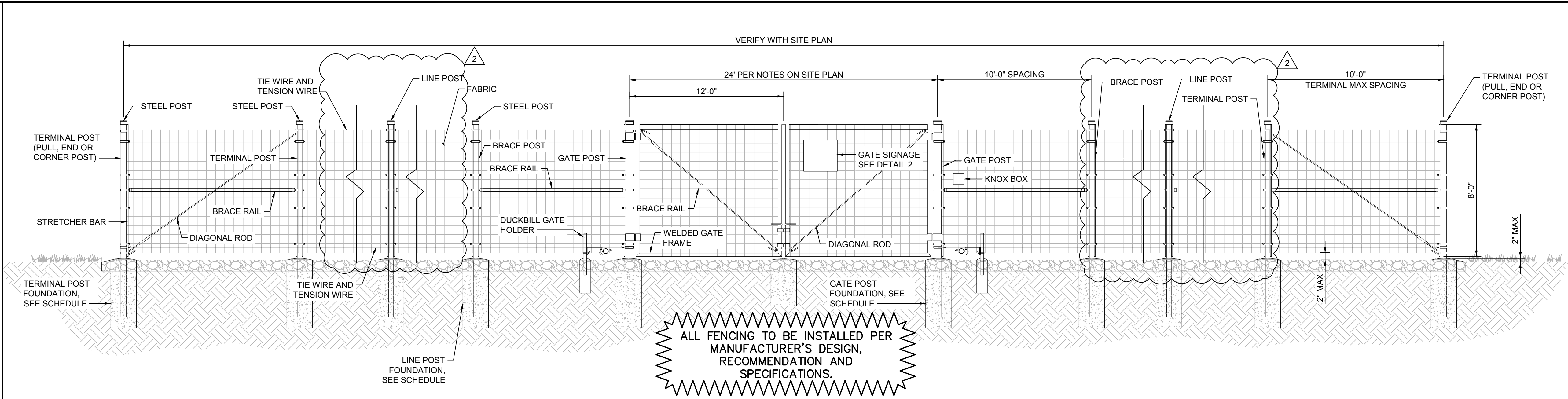
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SCALE: NTS

196 MW/AC BIG PLAIN SOLAR PROJECT	CIVIL DETAILS	KHA PROJECT 192017028		 <p>© 2022 KIMLEY-HORN AND ASSOCIATES, INC. 7965 NORTH HIGH STREET SUITE 200, COLUMBUS, OH 43229 PHONE: (614) 454-6899 WWW.KIMLEY-HORN.COM</p>					
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		SCALE AS SHOWN				3	REVISION 3	06/03/2022	
		DESIGNED BY NEL				2	REVISION 2	04/29/2022	
		DRAWN BY AMC				1	REVISION 1	04/20/2022	
MADISON COUNTY, OH		CHECKED BY JCC	No.	REVISIONS	DATE				
SHEET NUMBER C7.0									

Plotted By: Zade, Jod Sheet Set: KHA Layout: C7.1 July 07, 2022 06:04:07pm K:\XAV-Civil\192017028-Big Plain Solar\CAD\PlanSheets\GD-Details-BigPlain.dwg This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

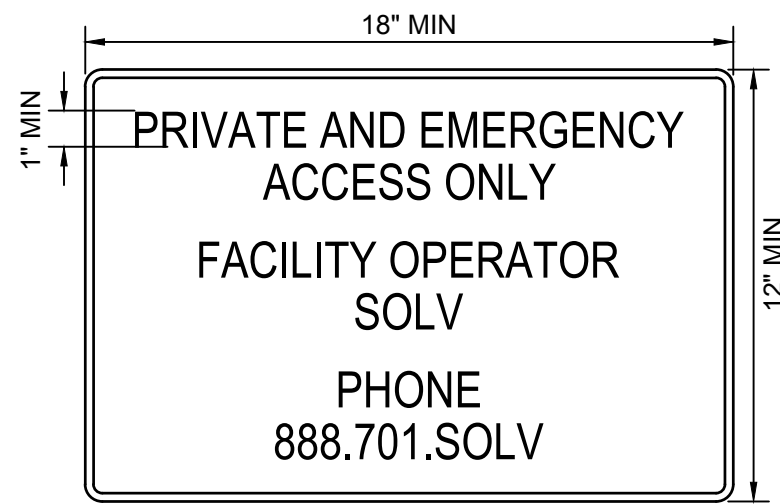


1 TYPICAL FENCING DETAIL

SCALE: NTS

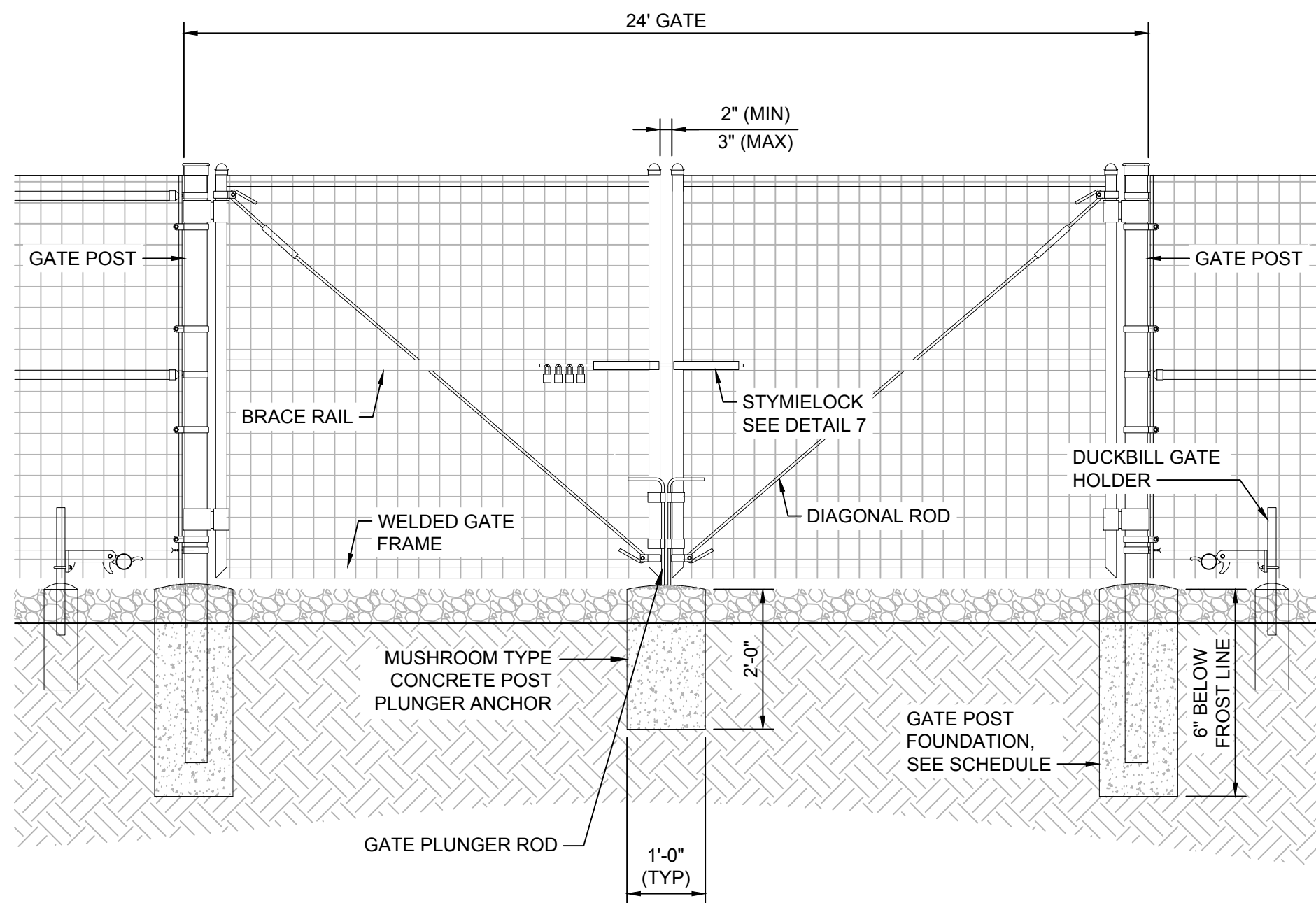
2 GATE SIGNAGE

SCALE: NTS



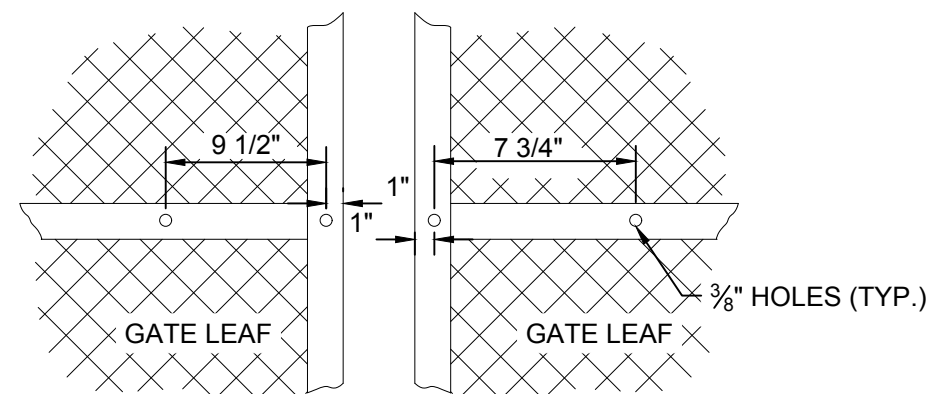
NOTES:

1. TO BE PLACED AT ALL ENTRANCE GATES TO THE SITE
2. SIGN BACKING TO BE REFLECTIVE SHEETING, ASTM TYPE I REFLECTIVE SHEETING ALSO KNOWN AS ENGINEER GRADE SCOTCHLITE OR BETTER
3. MINIMUM TEXT HEIGHT TO BE 1"



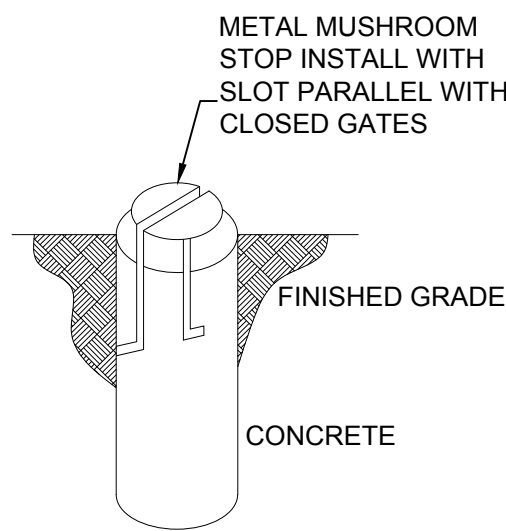
3 DOUBLE SWING GATE DETAIL

SCALE: NTS



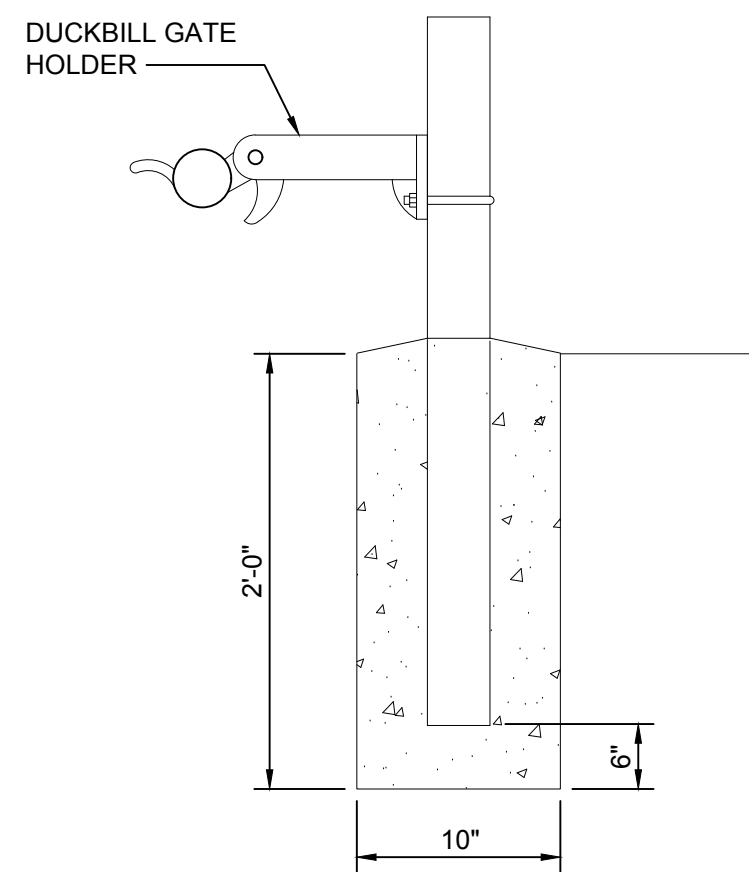
4 GATE FACE

SCALE: NTS



5 MUSHROOM ANCHOR DETAIL

SCALE: NTS



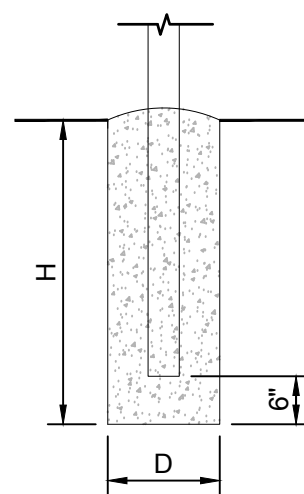
6 GATE HOLDER FOUNDATION DETAIL

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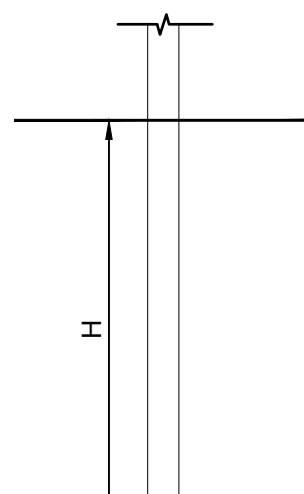
7 NOT USED

FENCE POST NOTES

1. CONTRACTOR MAY ELECT TO USE FENCE POSTS IN ACCORDANCE WITH ASTM F1083, SCHEDULE 40 OR ASTM F1043, GROUP C AS LISTED IN THE PIPE DIMENSIONS TABLE.
2. FOUNDATIONS SHALL BE TYPE A - CONCRETE, UNLESS NOTED OTHERWISE AND APPROVED BY THE ENGINEER.
 - 2.1. CONCRETE STRENGTH SHALL BE A MINIMUM 2500 PSI.
 - 2.2. TOPS OF CONCRETE FOUNDATIONS TO BE CROWNED AND 1" ABOVE FINISHED GRADE.
 - 2.3. DEPTH SHALL BE AS SHOWN IN THE FENCE POST SCHEDULE OR 6" BELOW FROST DEPTH, WHICHEVER IS GREATER.
3. SOIL AROUND FOUNDATIONS SHALL BE UNDISTURBED OR REGRADED AND COMPACTED TO 95% PROCTOR.



FOUNDATION TYPE A
CONCRETE



FOUNDATION TYPE B
DRIVEN

8 FENCE POST SCHEDULE

FENCE POST SCHEDULE				
FENCE POST	NOMINAL POST SIZE (NPS)	FOUNDATION TYPE A		FOUNDATION TYPE B
		H	D	H
LINE POST	1-1/2"	3'-0"	1'-0"	3'-6"
TERMINAL POST	2-1/2"	3'-0"	1'-2"	3'-6"
STEEL GATE POST - VEHICLE	4"	4'-0"	1'-4"	4'-0"
BRACE RAIL	1-1/4"	N/A	N/A	N/A
WELDED GATE FRAME	1-1/2"	N/A	N/A	N/A

THE POSTS ABOVE ARE MINIMUM SIZES. LARGER/THICKER POSTS MAY BE USED.

PIPE DIMENSIONS			
NPS (NOMINAL PIPE SIZE)	OUTSIDE DIAMETER	ASTM F1083 SCHEDULE 40 F _y = 30 KSI	ASTM F1043 GROUP 1C F _y = 50 KSI
		PIPE WALL THICKNESS (IN)	PIPE WALL THICKNESS (IN)
1-1/4"	1-5/8"	0.140	0.111
1-1/2"	1-7/8"	0.145	0.120
2"	2-3/8"	0.154	0.130
2-1/2"	2-7/8"	0.203	0.160
3"	3-1/2"	0.216	0.160
3-1/2"	4"	0.226	0.160
4"	4-1/2"	0.237	N/A
5"	5-3/8"	0.258	N/A
6"	6-3/8"	0.280	N/A

GENERAL NOTES

1. STATE AND LOCAL STANDARDS AND SPECIFICATIONS PERTAINING TO A SPECIFIC SITE TAKE PRECEDENCE OVER THIS DRAWING.
2. SITE CONDITIONS SHALL MEET THE MINIMUM CRITERIA SPECIFIED IN THIS DRAWING. CONTRACTOR SHALL NOTIFY ENGINEER IF THERE ARE DISCREPANCIES WITH EXISTING SITE CONDITIONS.
3. FABRIC SHALL BE 8" HIGH 2096-6 DEER FENCE. FABRIC MAY BE GALVANIZED. ALL OTHER FABRIC TYPES MUST BE APPROVED.
4. DIAGONAL ROD: 3/8" ROD WITH GALVANIZED STEEL TURNBUCKLE OR OR DIAGONAL THREADED ROD.
5. STRETCHER BAR: 3/16" X 3/4" (MIN.) FULL HEIGHT.
6. TIE WIRE: 10 GA. STEEL. A SINGLE WRAP OF FABRIC TIE AND AT TENSION WIRE BY HOG RINGS SPACED 12" O.C. POSTS/GATES AND 16" RAILS/WIRE.
7. TENSION WIRE: 7 GA. COIL SPRING TENSION WIREINSTALL FENCING PER ASTM F-967.
8. INSTALL SWING GATES PER ASTM F-900.
9. ALL GATE FRAMES SHALL BE WELDED. ALL WELDING SHALL BE COATED WITH (2) COATS OF X-O RUST PROFESSIONAL ALUMINUM PAINT.
10. ALL PIPE AND FENCE HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM-A123 AFTER FABRICATION.
11. ALL OPEN POSTS SHALL HAVE END-CAPS.
12. INTERMEDIATE POST ASSEMBLIES SHALL BE SPACED AT 500' INTERVALS OR MIDWAY BETWEEN PULL POSTS WHEN THE DISTANCE BETWEEN SUCH POSTS IS LESS THAN 1,000' AND MORE THAN 500'.
13. THE POSTS AND HARDWARE OUTLINED IN THIS DRAWING ARE A MINIMUM SIZE FOR NON-SLATTED FENCE. LARGER OR HEAVIER POSTS AND HARDWARE SIZES MAY BE USED UPON APPROVAL. SLAT USED FOR VISUAL SCREENING MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
14. USE GALVANIZED HOG-RING WIRE TO MOUNT ALL SIGNS.
15. ALL SIGNS MUST BE MOUNTED ON INSIDE OF FENCE FABRIC.
16. MUSHROOM ANCHOR & PLUNGER REQUIRED FOR GATE.
17. GENERAL CONTRACTOR IS RESPONSIBLE FOR GATE LOCK.
18. THE KNOX BOX SHALL BE LOCATED AT OR NEAR THE RECOGNIZED PUBLIC ENTRANCE TO THE PROPERTY.
19. IN NO CASE SHALL THE KNOX BOX BE LOCATED AT A HEIGHT OF LESS THAN FOUR (4) FEET FROM THE GROUND OR MORE THAN SIX (6) FEET FROM THE GROUND; ALL OTHER LOCATIONS FOR THE KNOX BOX SHALL BE APPROVED BY THE FIRE MARSHALL.
20. PROVIDE ACCESS KEYS TO THE FIRE MARSHALL TO BE SECURED INTO THE KNOX BOX. A SEPARATE KEY SHALL BE PROVIDED TO THE POLICE CHIEF, AND A SEPARATE SUB-MASTERED KEY SHALL BE PROVIDED TO THE CHIEF OF POLICE, AND A SEPARATE KEY TO THE DIRECTOR OF THE EMERGENCY MEDICAL SERVICES.
21. REFER TO ELECTRICAL PLANS FOR GROUNDING DETAILS.

9 NOTES

SCALE: NTS

REVISIONS

No.	REVISIONS	DATE
4	REVISION 4	07/08/2022
3	REVISION 3	06/03/2022
2	REVISION 2	04/29/2022
1	REVISION 1	04/20/2022

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RHK PROJECT

192017028	DATE	07/08/2022
SCALE	AS SHOWN	NEL
DESIGNED BY	NEL	AMC
DRAWN BY	AMC	JCC
CHECKED BY	JCC	

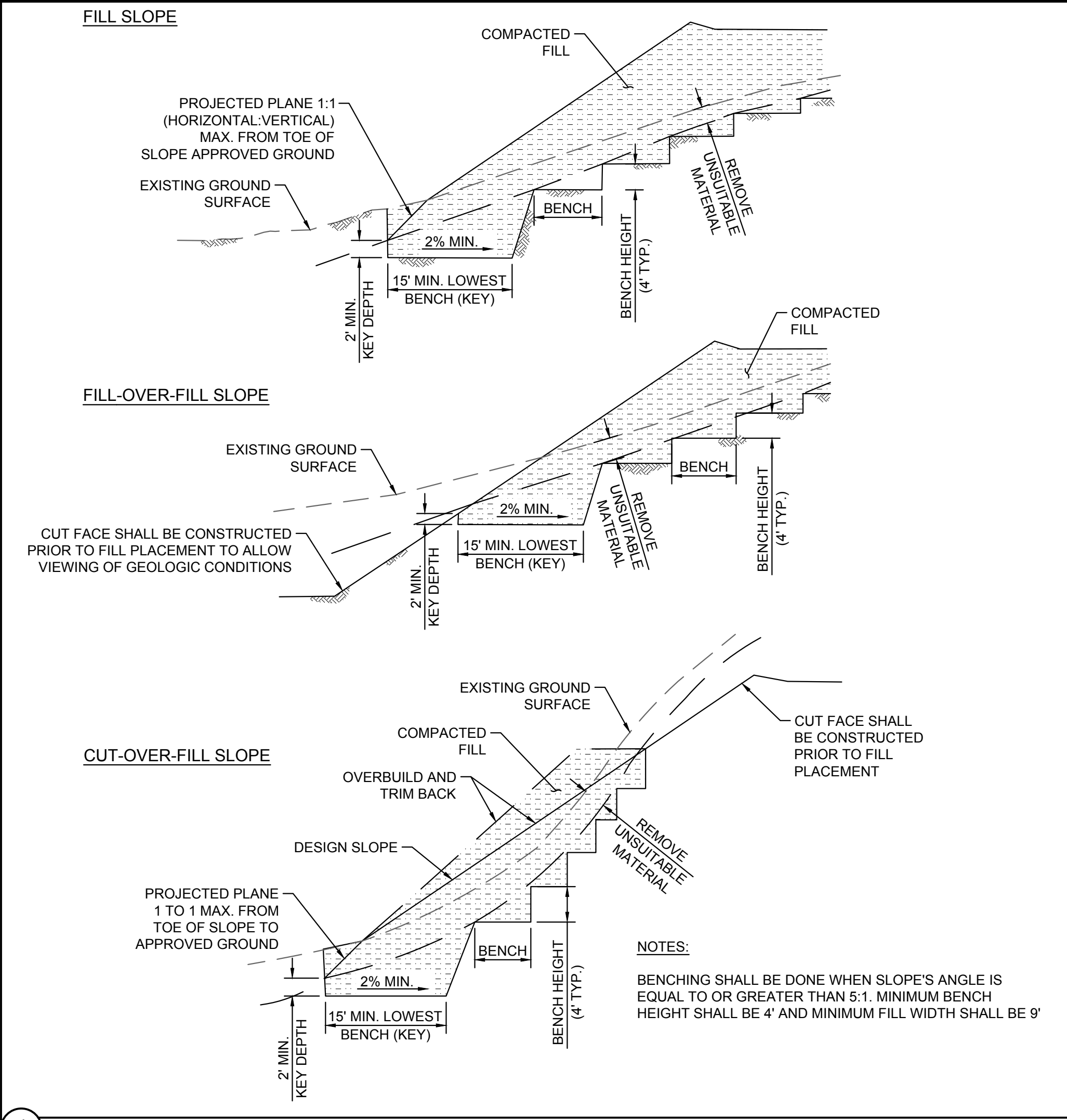
CIVIL DETAILS

196 MWAC
BIG PLAIN
SOLAR PROJECT

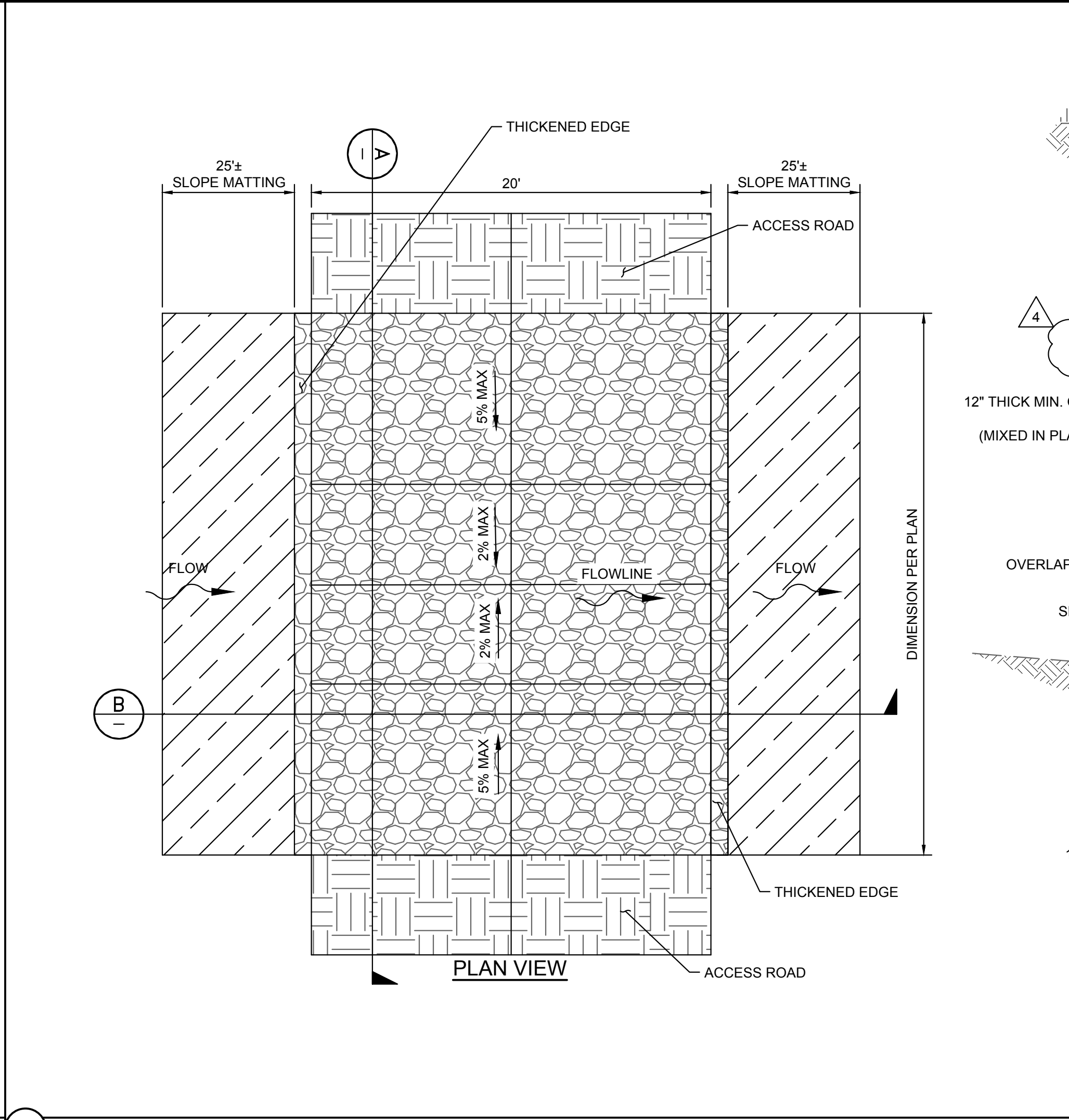
MADISON COUNTY, OH

SHEET NUMBER
C7.1

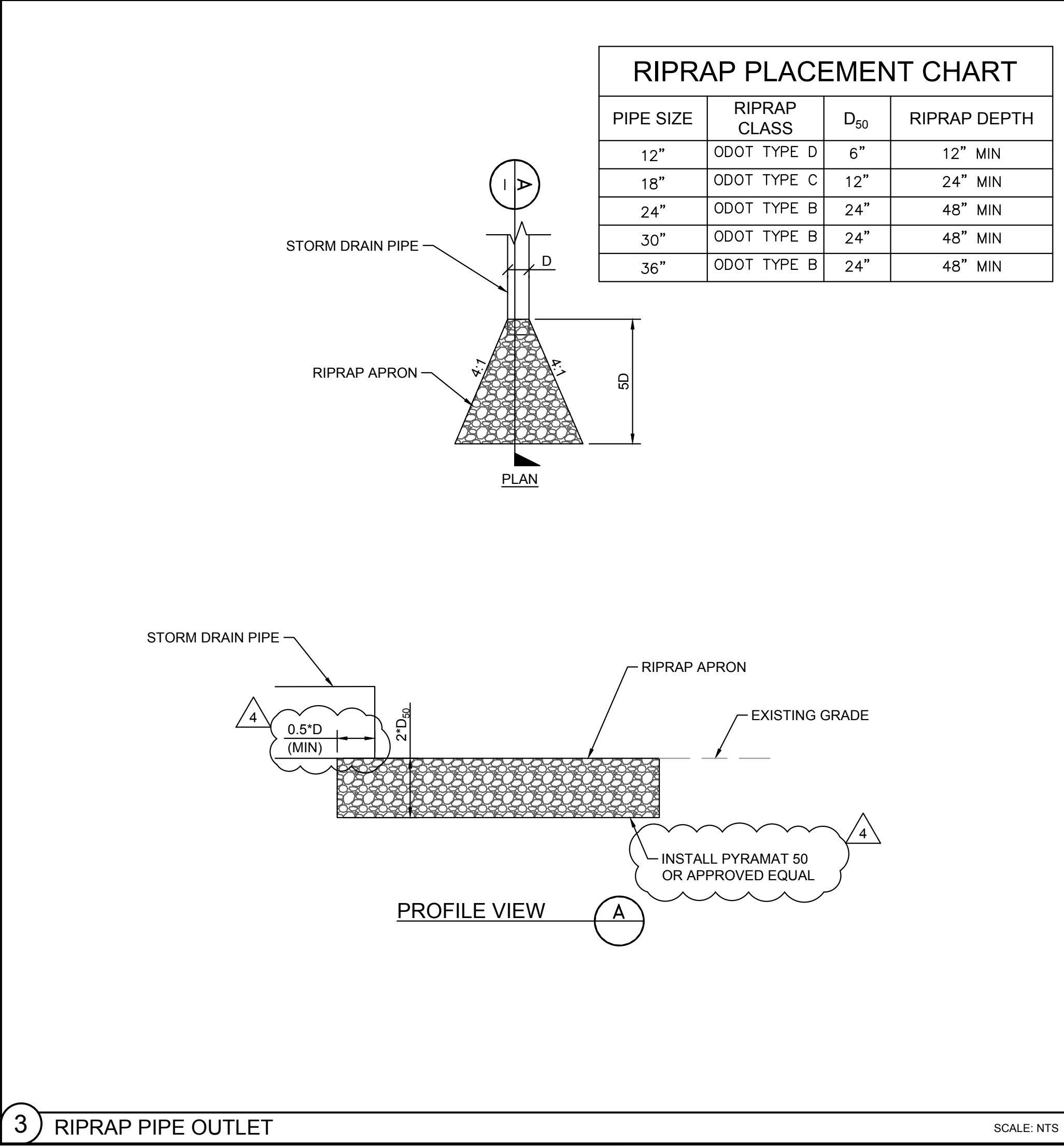
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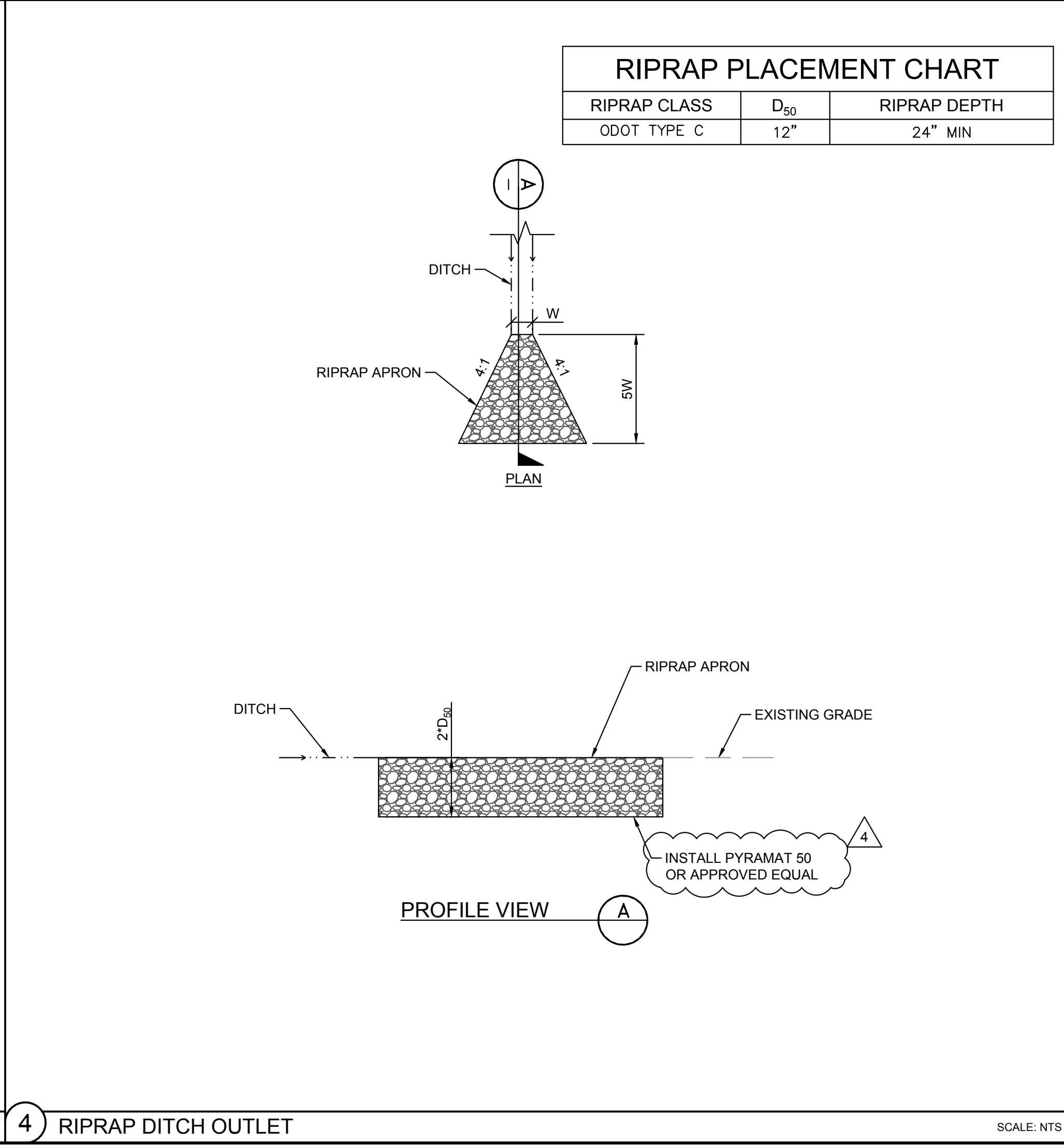
1 SLOPE BENCHING DETAIL



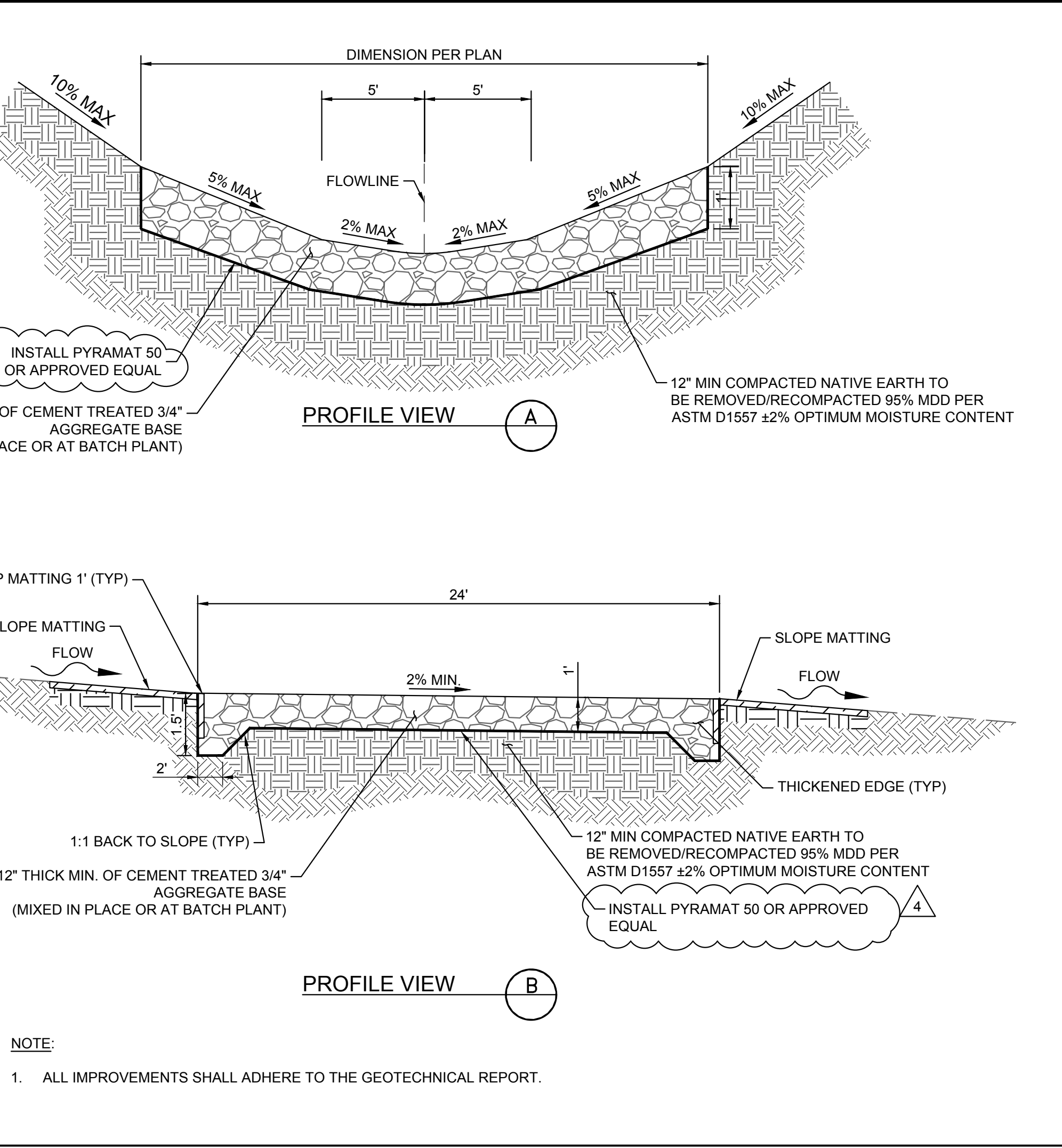
2 LOW WATER CROSSING



3 RIPRAP PIPE OUTLET



4 RIPRAP DITCH OUTLET



5 ELEVATED ROAD SECTION

REVISIONS		DATE	
No.	REVISIONS	No.	DATE
4	REVISION 4	07/08/2022	
3	REVISION 3	06/03/2022	
2	REVISION 2	04/29/2022	
1	REVISION 1	04/20/2022	

SOLV ENERGY

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STATE OF OHIO
JASON C. COOPER
87591
REGISTERED PROFESSIONAL ENGINEER

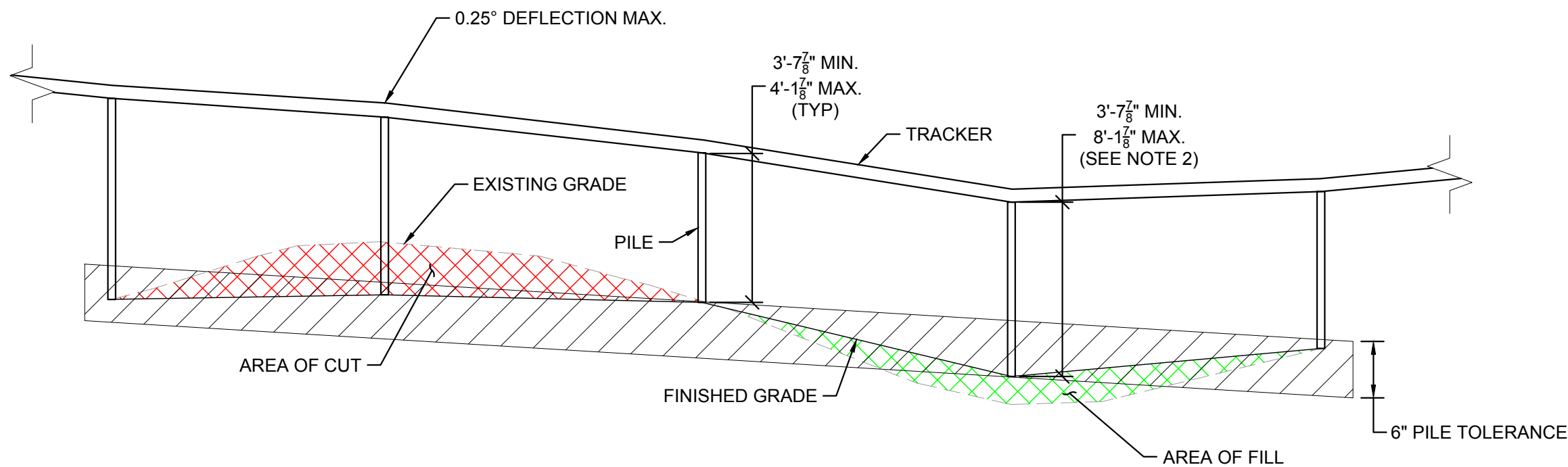
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192017028	07/08/2022	AS SHOWN		NEL		AMC		JCC	

CIVIL DETAILS

196 MWAC BIG PLAIN SOLAR PROJECT
MADISON COUNTY, OH

SHEET NUMBER
C7.2

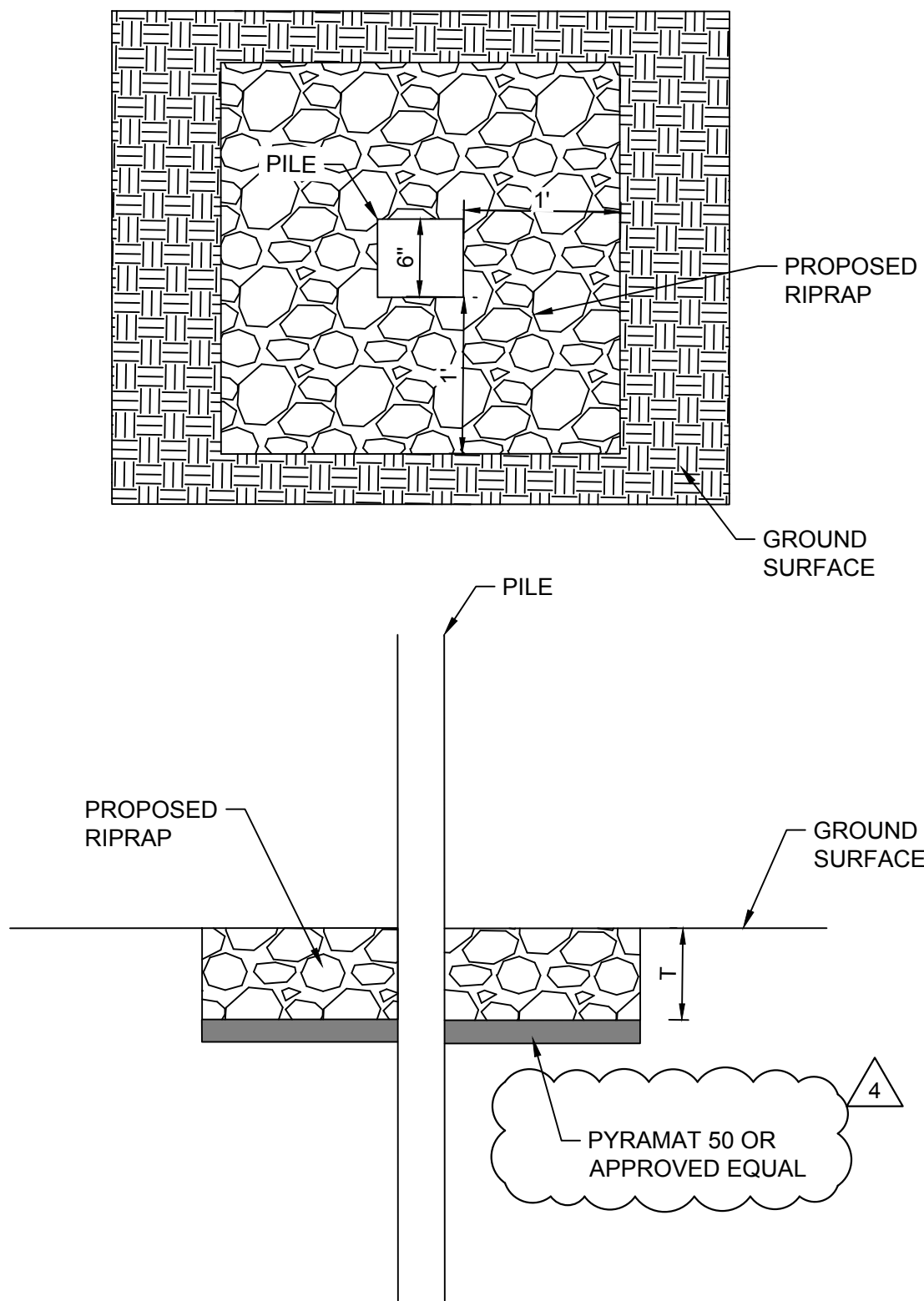
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- NOTE:
1. DETAIL SHOWN FOR REFERENCE ONLY. REFER TO STRUCTURAL AND RACKING PLANS FOR MORE DETAIL.
 2. EXTENDED PILES LENGTHS ARE REQUIRED IN FARMED WETLANDS WHERE GRADING IS NOT ALLOWED.

1 TYPICAL TRACKER GRADING DETAIL

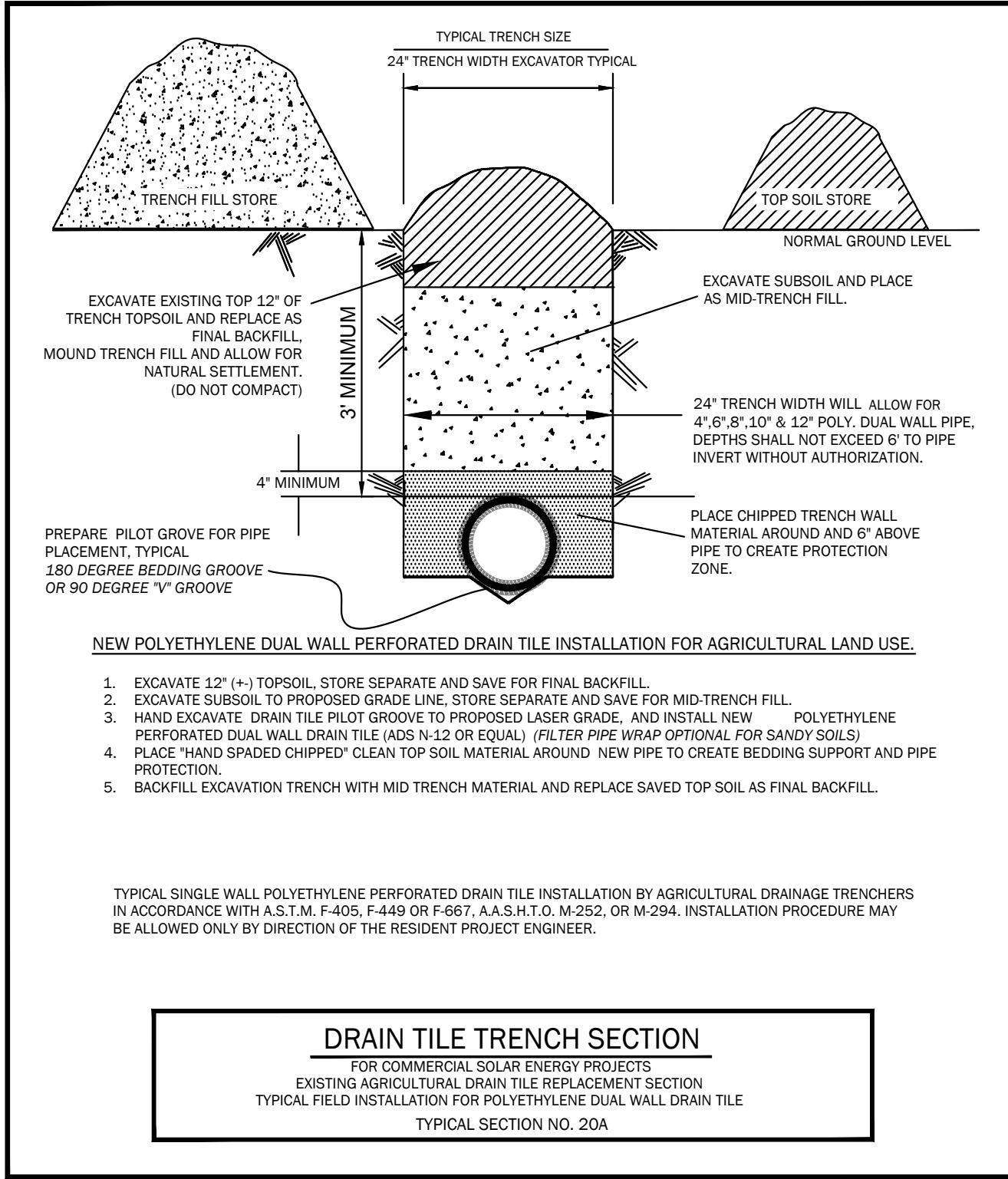
SCALE: NTS



- NOTES:
1. MINIMUM RIPRAP THICKNESS IS T=3D. D=DEPTH OF SCOUR ON THIS PLAN OR 6", WHICHEVER IS GREATER.
 2. THE FILTER FABRIC SHALL MEET THE REQUIREMENTS IN MATERIAL SPECIFICATION 592 GEOTEXTILE 1 OR CLASS I, II, OR III.
 3. REFER TO HYDROLOGY REPORT. PILES LOCATED WITHIN >1.5 FT SHALL INCLUDE RIPRAP PIER SCOUR.

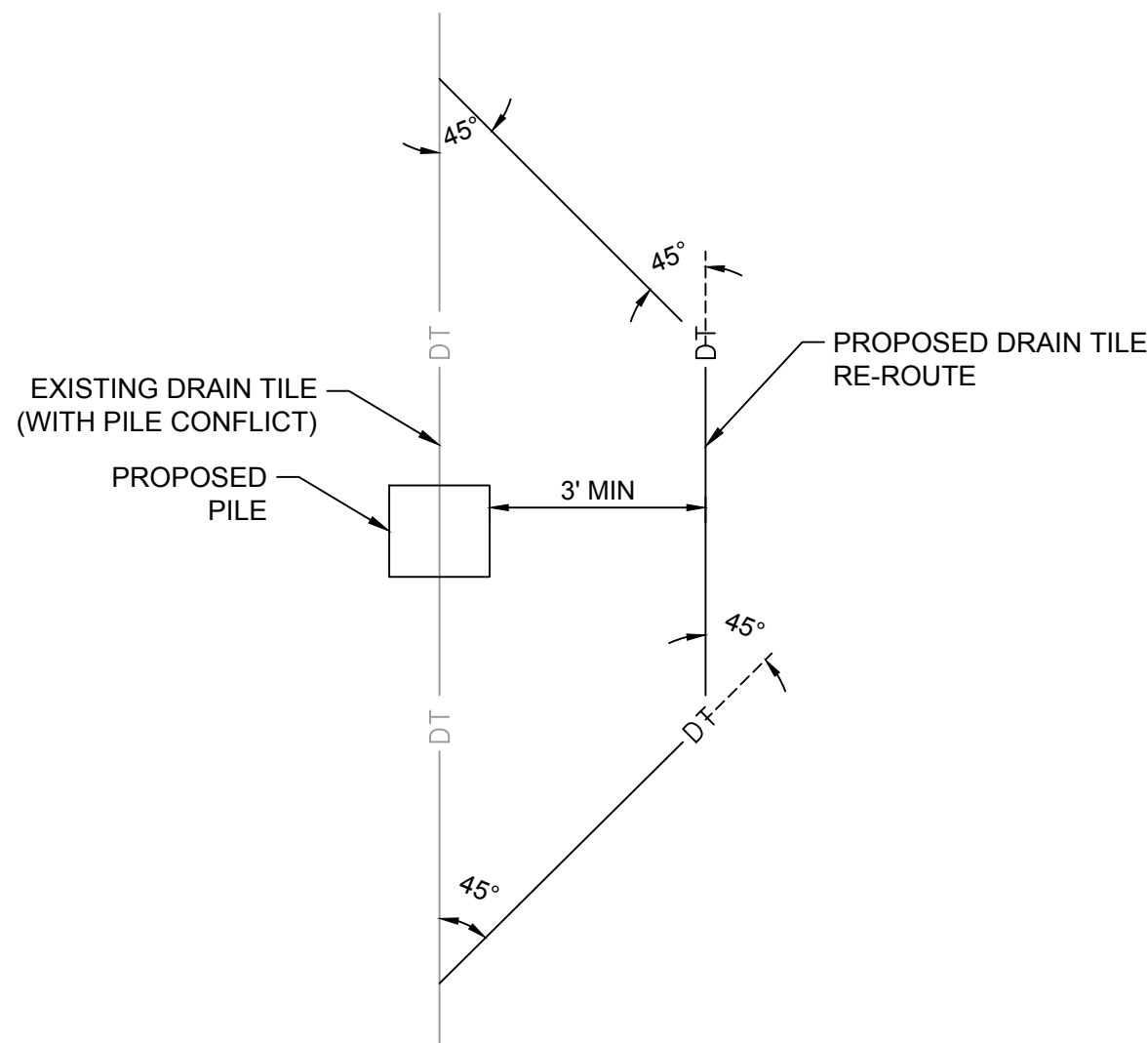
2 RIPRAP PIER SCOUR PROTECTION DETAIL

SCALE: NTS



3 DRAIN TILE REPLACEMENT DETAIL

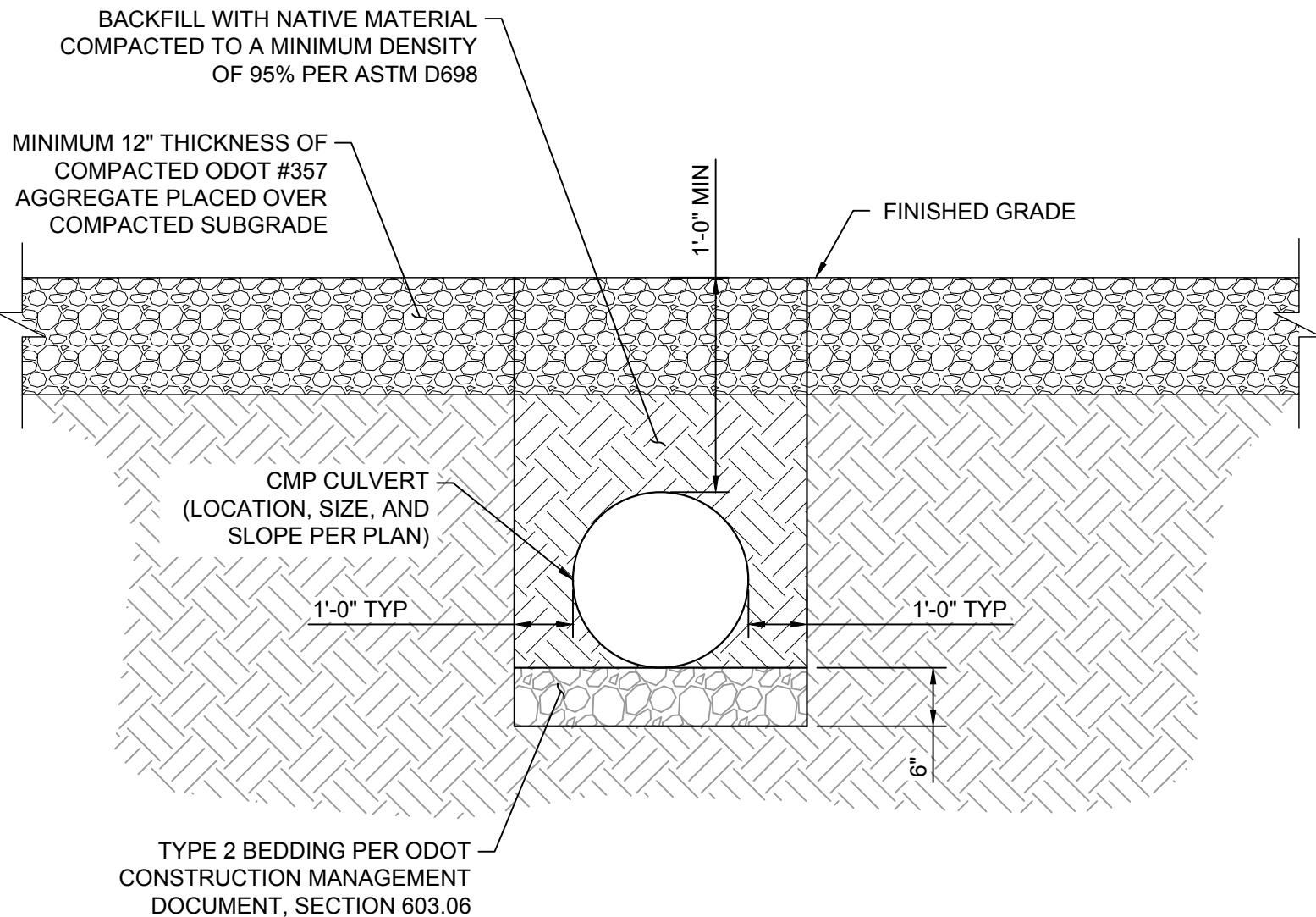
SCALE: NTS



- NOTES:
1. TILE REPAIR AND REPLACEMENT SHALL MAINTAIN ORIGINAL ALIGNMENT GRADIENT AND WATER FLOW TO THE GREATEST EXTENT POSSIBLE. IF THE TILE NEEDS TO BE RELOCATED, THE INSTALLATION ANGLE MAY VARY DUE TO SITE SPECIFIC CONDITIONS AND LANDOWNER RECOMMENDATIONS.
 2. 1'-0" MINIMUM LENGTH OF CHANNEL OR RIGID PIPE (OPEN OR SLOTTED CORRUGATED GALVANIZED, PVC, OR ALUMINUM CRADLE) SHALL BE SUPPORTED BY UNDISTURBED SOIL, OR IF CROSSING IS NOT AT RIGHT ANGLES TO PIPELINE, EQUIVALENT LENGTH PERPENDICULAR TO TRENCH. SHIM WITH SAND BAGS TO UNDISTURBED SOIL FOR SUPPORT AND DRAINAGE GRADIENT MAINTENANCE (TYPICAL BOTH SIDES)
 3. DRAIN TILES WILL BE PERMANENTLY CONNECTED TO EXISTING DRAIN TILES A MINIMUM OF THREE FEET OUTSIDE OF EXCAVATED TRENCH LINE USING INDUSTRY STANDARDS TO ENSURE PROPER SEAL OF REPAIRED DRAIN TILES INCLUDING SLIP COUPLINGS. DIAMETER OF RIGID PIPE SHALL BE OF ADEQUATE SIZE TO ALLOW FOR THE INSTALLATION OF THE TILE FOR THE FULL LENGTH OF THE RIGID PIPE.
 4. OTHER METHODS OF SUPPORTING DRAIN TILE MAY BE USED IF ALTERNATE PROPOSED IS EQUIVALENT IN STRENGTH TO THE CHANNEL/PIPE SECTIONS SHOWN AND IF APPROVED BY COMPANY REPRESENTATIVES AND LANDOWNER IN ADVANCE. SITE SPECIFIC ALTERNATE SUPPORT SYSTEM TO BE DEVELOPED BY COMPANY REPRESENTATIVES AND FURNISHED TO CONTRACTOR FOR SPANS IN EXCESS OF 20', TILE GREATER THAN 10" DIAMETER, AND FOR "HEADER" SYSTEMS.
 5. ALL MATERIAL TO BE FURNISHED BY CONTRACTOR.
 6. PRIOR TO REPAIRING TILE, CONTRACTOR SHALL PROVE LATERALLY INTO THE EXISTING TILE TO FULL WIDTH OF THE RIGHTS OF WAY TO DETERMINE IF ADDITIONAL DAMAGE HAS OCCURRED. ALL DAMAGED/DISTURBED TILE SHALL BE REPAIRED AS NEAR AS PRACTICABLE TO ITS ORIGINAL OR BETTER CONDITION.

4 DRAIN TILE REROUTING DETAIL




SCALE: NTS



5 CULVERT INSTALLATION DETAIL

SCALE: NTS

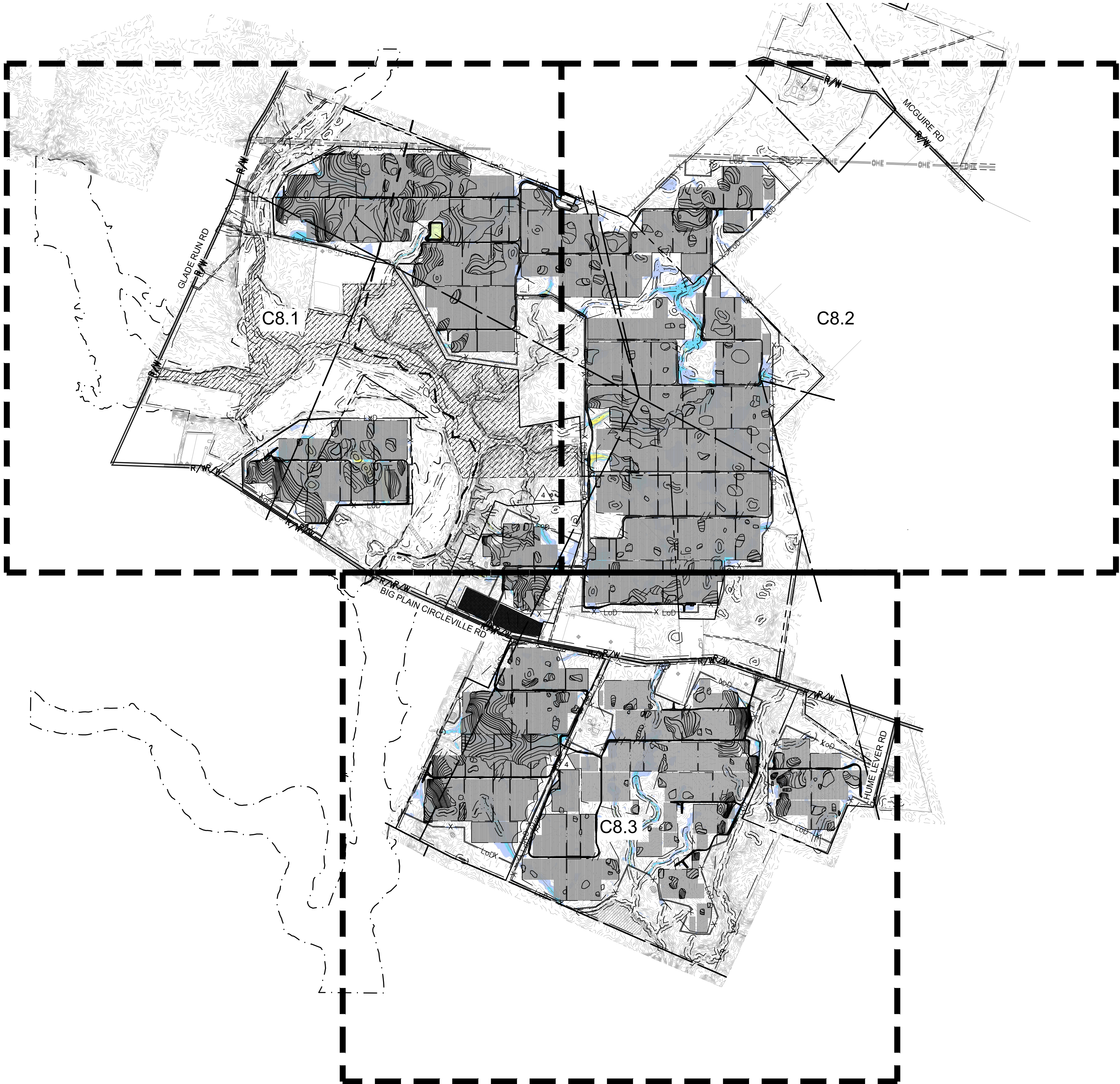
6 NOT USED

196 MWAC BIG PLAIN SOLAR PROJECT	CIVIL DETAILS	KHA PROJECT	192017028			 © 2022 KIMLEY-HORN AND ASSOCIATES, INC. 7965 NORTH HIGH STREET SUITE 200, COLUMBUS, OH 43235 PHONE: (614) 454-6699 WWW.KIMLEY-HORN.COM				
		DATE	07/08/2022					4	REVISION 4	07/08/2022
		SCALE	AS SHOWN					3	REVISION 3	06/03/2022
		DESIGNED BY	NEL					2	REVISION 2	04/29/2022
		DRAWN BY	AMC					1	REVISION 1	04/20/2022
MADISON COUNTY, OH		CHECKED BY	JCC		No.	REVISIONS	DATE			
SHEET NUMBER C7.3										

CIVIL IMPROVEMENT PLAN - JULY 8, 2022 - ISSUED FOR CONSTRUCTION

Plotted By: Click, Andrew Sheet Set: kha_SheetSet.kha Layout: C8.0 July 08, 2022 12:26:10pm K:\XAV-Civil\192017028-Big Plain Solar\CAD\PlanSheets\FLOOD-BigPlain.dwg

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LEGEND

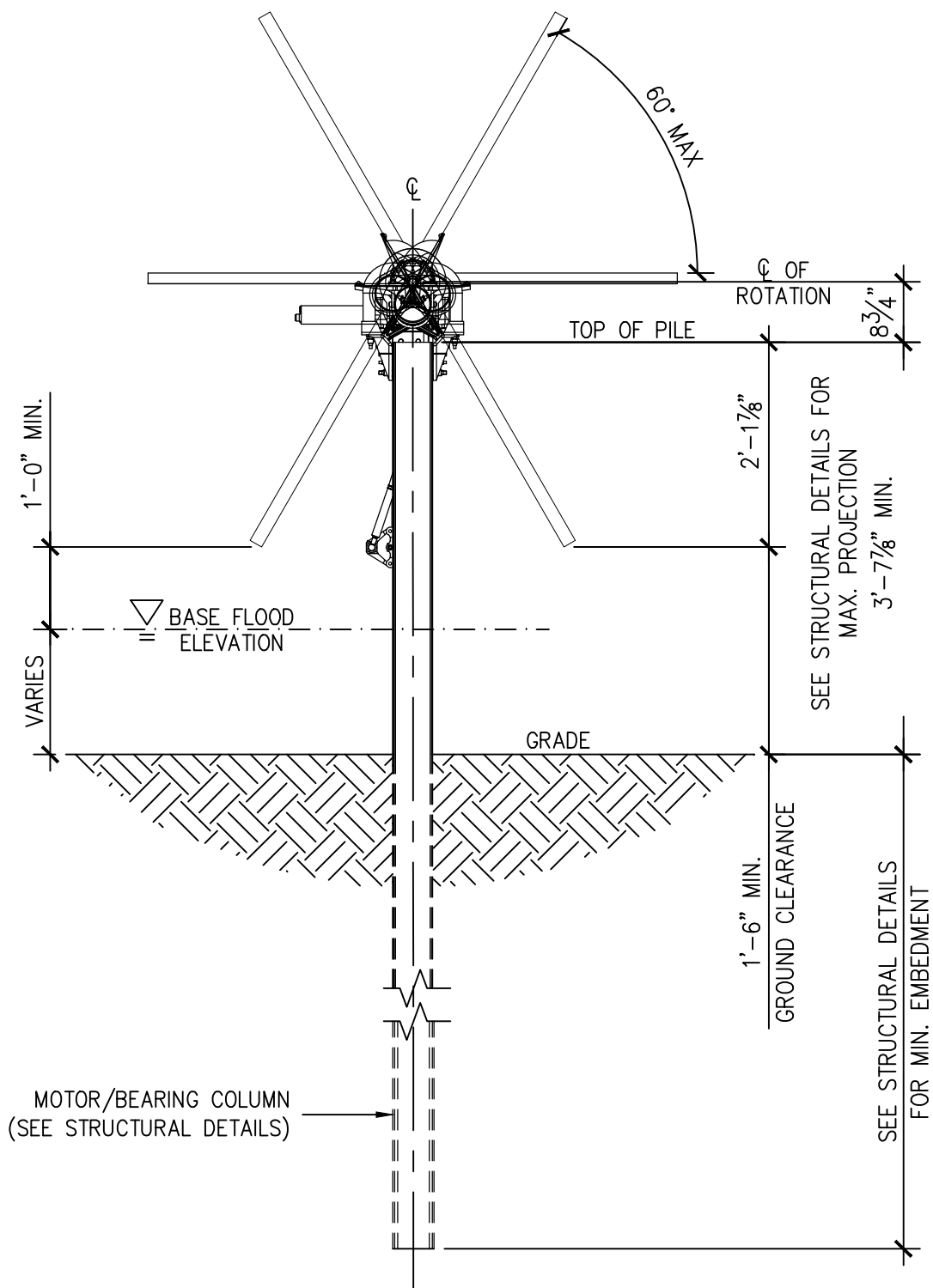
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	PROPERTY LINE
	LEASE LINE
	TOWNSHIP LINE
	SETBACK
	EASEMENT LINE
	CONSERVATION EASEMENT
	EXISTING TELEPHONE LINE
	EXISTING OVERHEAD POWER LINE
	EXISTING FENCE
	EXISTING DRAIN TILE MAIN
	EXISTING GROUNDWATER WELL
	PROPOSED SECURITY FENCE
	PROPOSED AGGREGATE ACCESS ROAD
	PROPOSED MATERIAL LAYDOWN AREA
	FEMA ZONE A
	NESTING AREA
	ARCHAEOLOGICAL RESOURCE AREA
	EXISTING WETLAND
	WETLAND BUFFER
	APPROXIMATE CIVIL LIMIT OF WORK

GENERAL NOTES:

1. PHOTOVOLTAIC PANELS, INVERTERS, AND INTERCONNECTION EQUIPMENT LOCATIONS SHOWN FOR REFERENCE ONLY. DESIGN AND FINAL LAYOUT PER DRAWINGS BY ELECTRICAL ENGINEER.

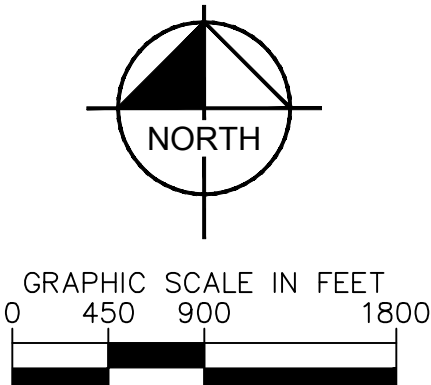
FLOOD DEPTH LEGEND:

	0.5' - 1.0'
	1.0' - 1.5'
	1.5' - 2.0'
	2.0' - 3.0'
	3.0' - 5.0'
	5.0' - 10.0'
> 10.0' flood depth color swatch"/>	> 10.0'



1 C8.0 TYPICAL TRACKER DETAIL
SCALE: NTS

Call before you Dig
Avoid cutting underground utility lines. It's costly.
CALL 811
OR 1-800-362-2764



196 MWAC
BIG PLAIN
SOLAR PROJECT
MADISON COUNTY, OH

SHEET NUMBER
C8.0

KHA PROJECT
192017028

DATE
07/08/2022

SCALE AS SHOWN

DESIGNED BY
NEL

DRAWN BY
AMC

CHECKED BY
JCC

FLOOD DEPTH PLAN
INDEX SHEET

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REVISIONS	No.	1	2	3	4	DATE
REVISION 1	1	04/20/2022				
REVISION 2	2	04/29/2022				
REVISION 3	3	06/03/2022				
REVISION 4	4	07/08/2022				

Plotted By: Zlode, Jod Sheet Set: Khs Layout: C8.1 July 07, 2022 06:05:52pm K:\AV_Civil\1920170208-Big Plain Solar\CAD\PlanSheets\F1000_BigPlain.dwg

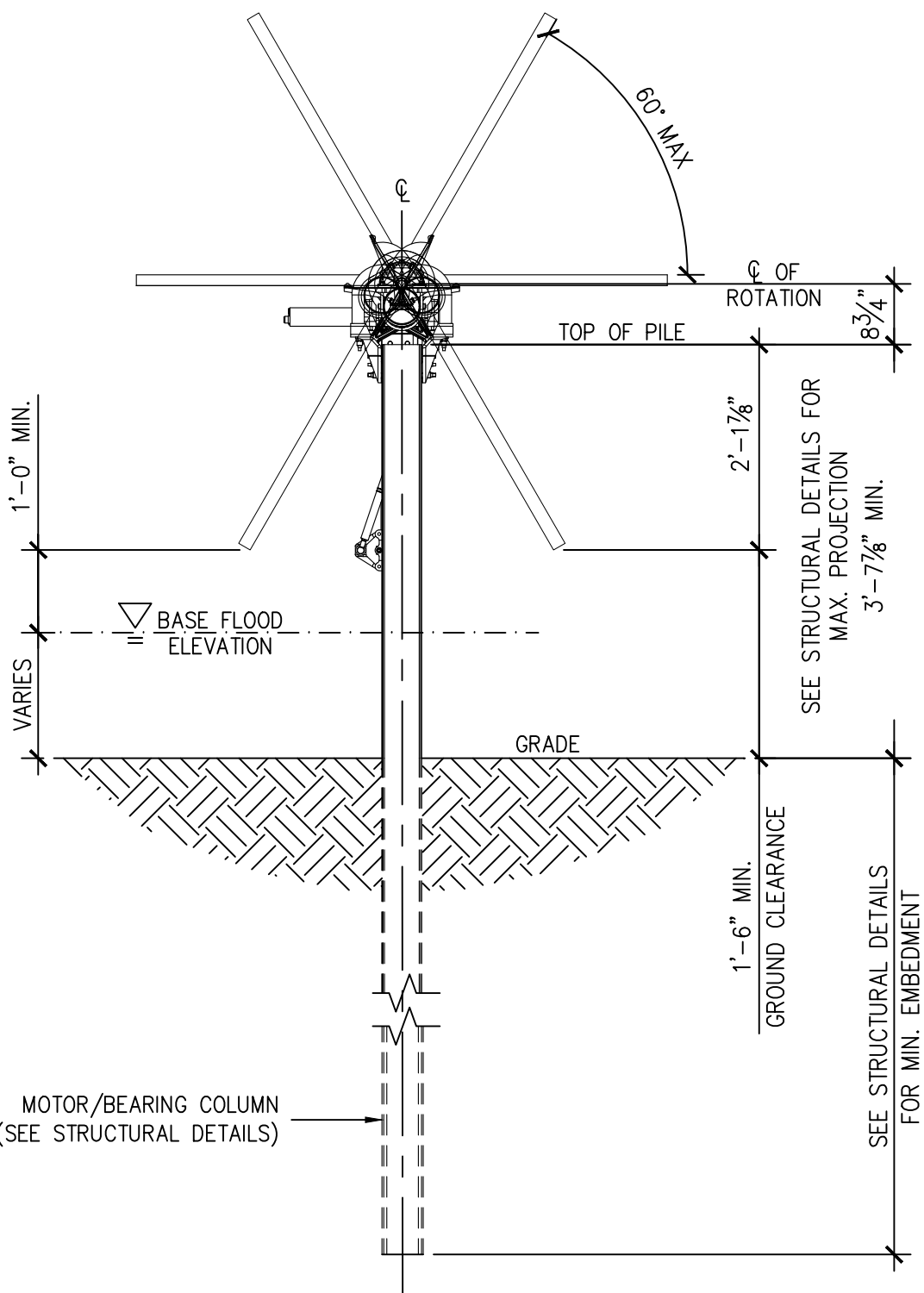
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Figure 1 is a schematic diagram of a multi-layered structure. The layers are labeled from top to bottom: R/W (Resist/Underlayer), O/E (Organic Electrolyte), T (Top Electrode), O/E (Organic Electrolyte), X (X-ray transparent substrate), DT (Dielectric Top Layer), a central circle with a cross (representing a microstructure), X (X-ray transparent substrate), and another O/E (Organic Electrolyte) layer. The bottom layer is labeled L/D (Lithographic/Dielectric). The diagram shows various patterns including horizontal lines, dashed lines, and cross-hatching.

1. PHOTOVOLTAIC PANELS, INVERTERS, AND INTERCONNECTION EQUIPMENT
LOCATIONS SHOWN FOR REFERENCE ONLY. DESIGN AND FINAL LAYOUT PER
DRAWINGS BY ELECTRICAL ENGINEER.

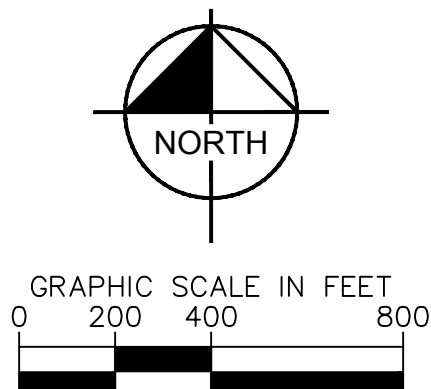
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	3.0' - 5.0'
	5.0' - 10.0'
	> 10.0'






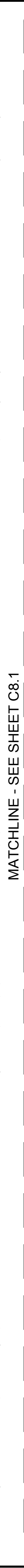
Call before you Dig
Avoid cutting underground utility lines. It's costly.

CALL
811

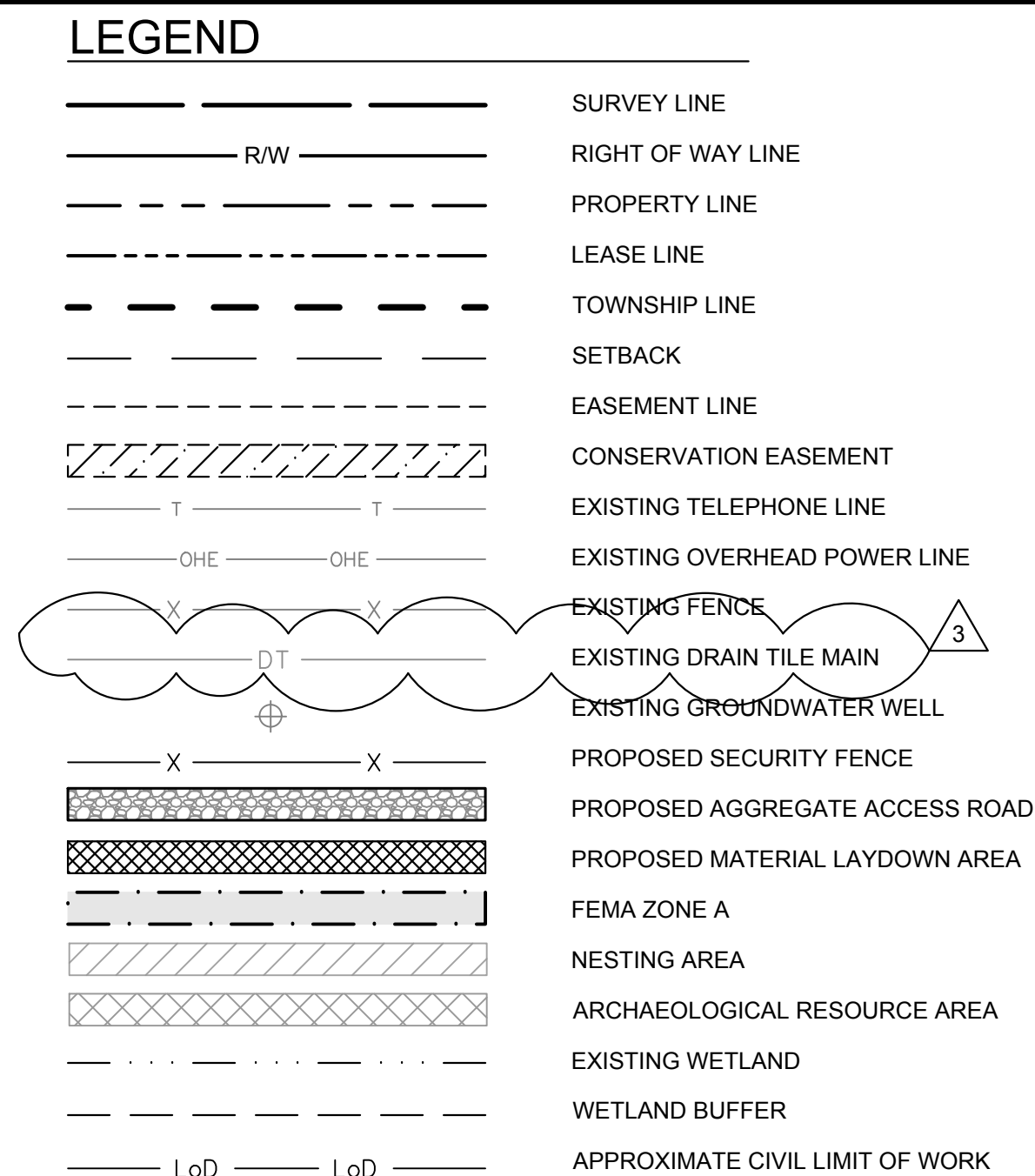
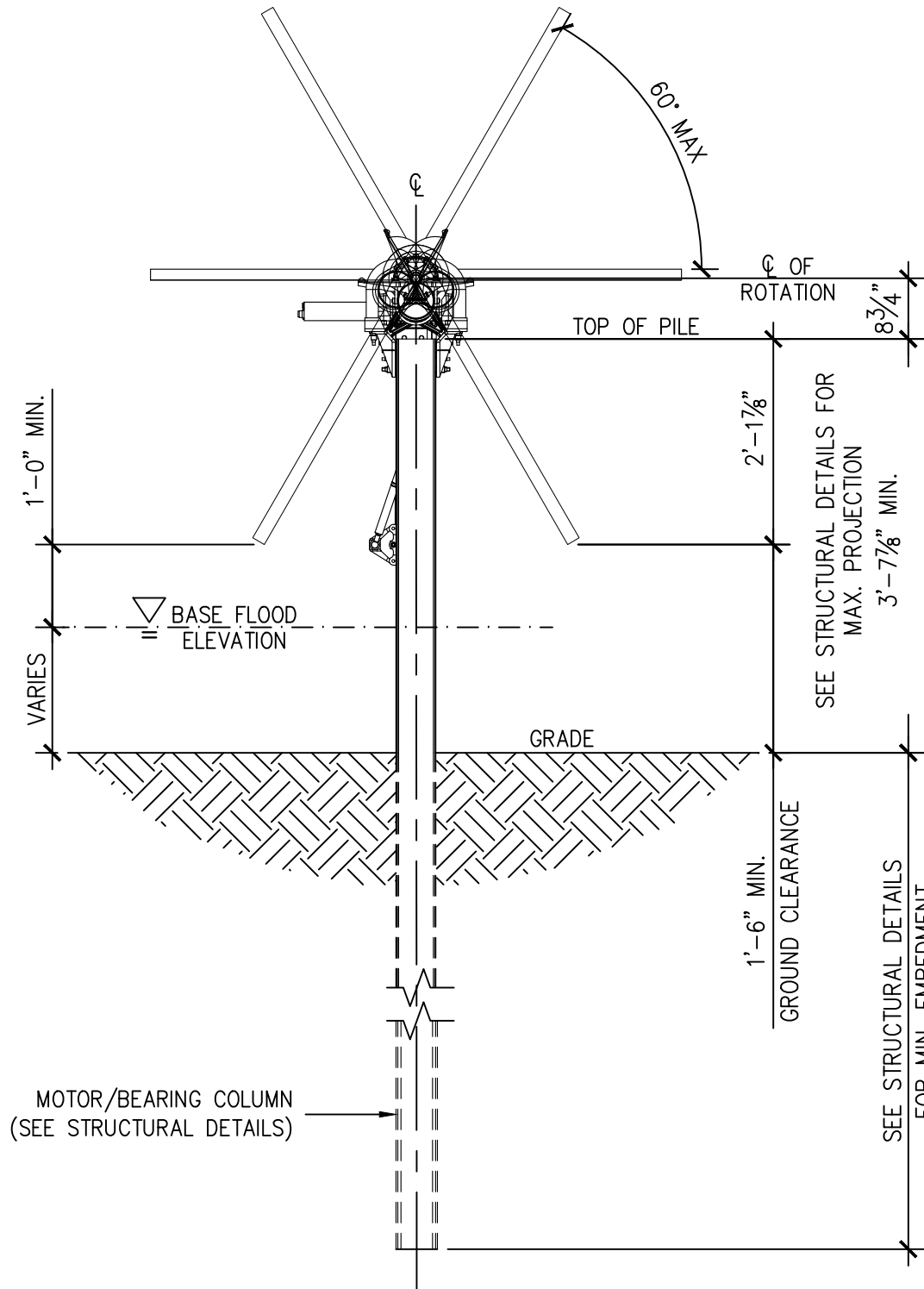
OR
1-800-362-2764



196 MWAC BIG PLAIN SOLAR PROJECT		FLOOD DEPTH PLAN		KHA PROJECT 192017028									
MADISON COUNTY, OH				DATE 07/08/2022									
		SCALE AS SHOWN		SCALE AS SHOWN								4 REVISION 4	
		DESIGNED BY NEL		DESIGNED BY NEL								3 REVISION 3	
		DRAWN BY AMC		DRAWN BY AMC								2 REVISION 2	
		CHECKED BY JCC		CHECKED BY JCC								1 REVISION 1	
												07/08/2022	
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												DATE	
SHEET NUMBER		C8.1											

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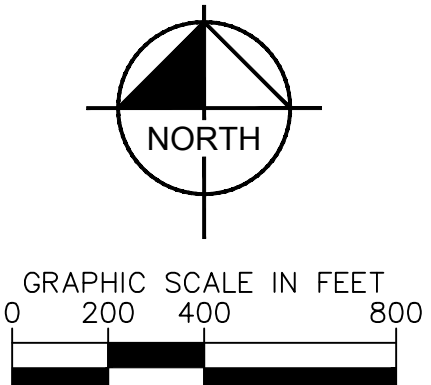
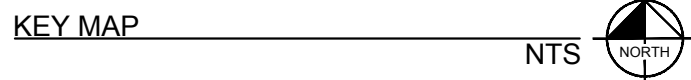
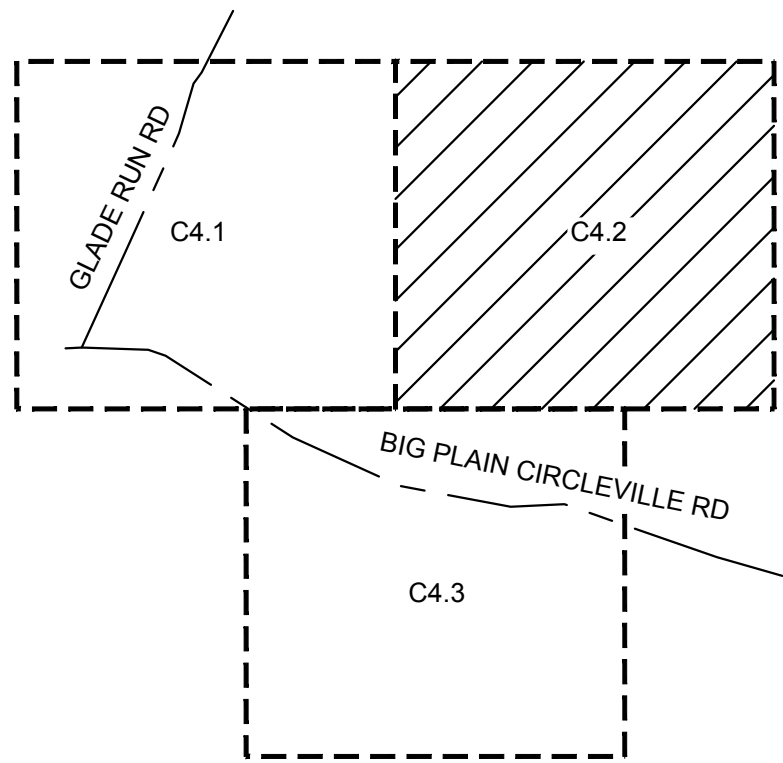
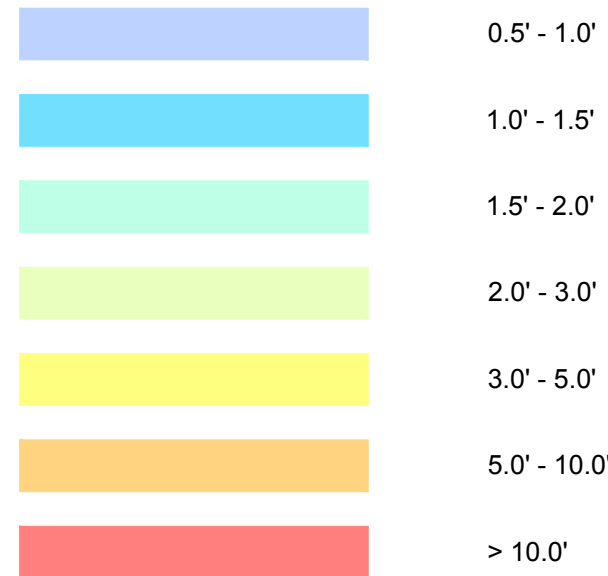
1 TYPICAL
C8.2 SCALE: NTS



GENERAL NOTES:

1. PHOTOVOLTAIC PANELS, INVERTERS, AND INTERCONNECTION EQUIPMENT
LOCATIONS SHOWN FOR REFERENCE ONLY. DESIGN AND FINAL LAYOUT PER
DRAWINGS BY ELECTRICAL ENGINEER.

FLOOD DEPTH LEGEND:



SHEET NUMBER	196 MWAC BIG PLAIN SOLAR PROJECT	FLOOD DEPTH PLAN	KHA PROJECT 192017028
C8.2	MADISON COUNTY, OH	DATE 07/08/2022	SCALE AS SHOWN
		DESIGNED BY NEL	DRAWN BY AMC
		CHECKED BY JCC	
<p>JASON C. COOPER 87591 REGISTERED PROFESSIONAL ENGINEER STATE OF OHIO</p>			
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No.	Revisions	4	REVISION 4
		3	REVISION 3
		2	REVISION 2
		1	REVISION 1
Date			07/08/2022
			06/03/2022
			04/29/2022
			04/20/2022

**This foregoing document was electronically filed with the Public Utilities
Commission of Ohio Docketing Information System on**

9/22/2022 2:39:24 PM

in

Case No(s). 21-1196-EL-BGA, 19-1823-EL-BGN

Summary: Notice Compliance with Condition 8 - filing of detailed engineering drawings electronically filed by Mr. Joseph D Jordan on behalf of Big Plain Solar, LLC