

2023 GREEN INFRASTRUCTURE UPGRADES

FREDERICK J GAENSLEN K-8 SCHOOL

SITE #185

1250 E. BURLEIGH STREET, MILWAUKEE, WI 53212

FINAL PLAN SET

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PRIME CONSULTANT

Stormwater Solutions Engineering, LLC.
 247 W Freshwater Way, Suite 410
 Milwaukee WI 53204
 Phone: 414-810-1245
 Kara Koch, P.E., ENV. SP
 Senior Project Engineer
 kara@stormwater-solutions-engineering.com



LANDSCAPE ARCHITECT CONSULTANT

Learning Landscapes Design, LLC
 4241 SW Tunnelwood Street
 Portland, OR 97221

ALTERNATE NOTES:

**MANDATORY ALTERNATE BID #1
 OVERHEAD STRUCTURE:**
 INSTALL OVERHEAD STRUCTURE WITH FOOTINGS PRIOR TO THE INSTALLATION OF THE CONCRETE PAD. INSTALL IN ENTIRETY, METAL POLYGON STRUCTURE WITH THE GUTTER AND DOWNSPOUT. COORDINATE WITH ENGINEER ON LOCATION FOR DOWNSPOUT AND ROOF PITCH.

**MANDATORY ALTERNATE BID #2
 NATURE PLAY:**
 BASE BID INCLUDES THE INSTALLATION OF THE CONCRETE CURB AND ENGINEERED WOOD FIBER SURFACING. ADD ALTERNATE FOR THE INSTALLATION OF NATURE PLAY AS SPECIFIED.

**MANDATORY ALTERNATE BID #3
 MILL AND OVERLAY BASKETBALL COURT:**
 AS ALTERNATE, MILL BASKETBALL COURT AREA AND OVERLAY ASPHALT SURFACE.

CONSTRUCTION BARRICADE NOTES:

FOR CONSTRUCTION BARRICADING WHERE A SEPARATION IS NEEDED BETWEEN AN AREA TO BE RECONSTRUCTED AND AN AREA TO REMAIN, BUT THERE IS NO EXISTING FENCING, A TEMPORARY 6 FOOT HIGH CHAIN LINK FENCE, SELF SUPPORTED, FREE STANDING SHALL BE USED AND MAINTAINED UNTIL THE PROJECT IS COMPLETE.

CONSTRUCTION BARRICADING SHALL BE MAINTAINED ON A DAILY BASIS TO ASSURE THAT AT THE END OF EACH WORK DAY THE SITE IS SECURED.



MGIS SITE MAP

DEPOSIT LOCATION FOR CUT MATERIAL AT MILWAUKEE GERMAN IMMERSION SCHOOL (MGIS) REFER TO C002, C005, C201

PROJECT NUMBER: 8176 (DIVISION 2)

PROJECT APPROVAL BY:



MILWAUKEE PUBLIC SCHOOLS
 DIVISION OF FACILITIES AND MAINTENANCE SERVICES
 1124 NORTH 11TH STREET
 MILWAUKEE, WI 53205-0259
 PHONE: 414-283-4600
 FAX: 414-283-4682



Sheet L405 Boardwalk only

LEGEND:

SECTION LINE	----
PLAT LINE	----
FENCE LINE	—X—X—
PROPERTY LINE	----
RIGHT-OF-WAY	----
EASEMENT LIMITS	----
C/L ROAD	----
1' CONTOUR MAJOR	----
1' CONTOUR MINOR	----
FIBER OPTIC BURIED	FO
CATV BURIED	CTV
TELEPHONE BURIED	ATF
GAS SERVICE	GAS
ELECTRIC BURIED	E
HAND RAIL	—+—+—
OVERHEAD WIRES	—OHW—
SANITARY SEWER	—SAN—
COMBINED SEWER	—CMB—
STORM SEWER	—SIM—
WATER SERVICE	—WM—

CONIFEROUS TREE	
DECIDUOUS TREE	
BUSH	
NSE CONTROL	
SPOT GRADE	
PROPERTY CORNER	
CONCRETE NAIL	
CONCRETE MONUMENT	
GUARD POST	
SIGN	
YARD LIGHT	
STREET LIGHT	
ELECTRIC MANHOLE	
ELECTRIC PEDESTAL	
ELECTRIC POLE	
ELECTRIC METER	
GUY ANCHOR	
FLOOD LIGHT	
BASKETBALL HOOP	
WATER VALVE	
SPRINKLER HEAD	
FIRE HYDRANT	
SHUTOFF VALVE	
DRILL HOLE	
CATCH BASIN/INLET	
MANHOLE	
TELEPHONE MANHOLE	
TELEPHONE PEDESTAL	
CATV PEDESTAL	
HANDHOLE	
GAS VALVE	
GAS METER	

	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	STONE
	LAWN OR CHIP AREAS
	RETAINING WALL

-----	PROPERTY BOUNDARY
-----	EXISTING MAJOR CONTOUR (5' INTERVAL)
-----	EXISTING MINOR CONTOUR (1' INTERVAL)
-----	PROPOSED MAJOR CONTOUR (5' INTERVAL)
-----	PROPOSED MINOR CONTOUR (1' INTERVAL)
	ASPHALT CURB
	CONCRETE CURB
	COBBLE CHANNEL INLET
	BEEHIVE GRATE
	CLEANOUT
	STORM INLET
	PROPOSED STORM MANHOLE
	TRENCH DRAIN
-----	PERFORATED UNDERDRAIN
-----	STORM SEWER PIPE
-----	ALTERNATE/FUTURE WORK
	NEW ASPHALT SURFACE
-----	LIMIT OF WORK

-----	DRAINAGE SWALE
-----	GRADE BREAK
	STORMWATER DRAINAGE DIRECTION
X 82.1	EXISTING SPOT GRADE
80.7	PROPOSED SPOT GRADE
-----	EQUIPMENT USE ZONE - EXTEND A MIN. 6' OF IMPACT SURFACING BEYOND EDGE OF PLAY EQUIPMENT, SEE SPECS
	DECORATIVE FENCE AS SPECIFIED
	CHAIN-LINK FENCE AS SPECIFIED
	ROPE FENCE AS SPECIFIED
-----	ENTRY ARCH

	PROPOSED TREE SEE PLANTING PLAN
	PROPOSED MULTI-STEMMED TREE SEE PLANTING PLAN
	EXISTING TREE

	PLANTING AREA 1 - LAWN/MICROCLOVER
	PLANTING AREA 2 - URBAN UPLANDS
	12" ENGINEERED WOOD FIBER SURFACE
	OPEN LAWN
	BIOSWALE PLANTING
	PERMEABLE PAVERS SURFACE
	CONCRETE PAVING

	RAIN MEASURING POST
	SIGN POST
	COMMUNICATION BOARD SEE SPECS
	MUSICAL INSTRUMENTS SEE SPECS
	SENSORY PANEL SEE SPECS
	ADA COMPANION SEATING 36"x48" CLEAR SPACE
	PICNIC TABLE & ADA PICNIC TABLE AS SPECIFIED
	LOG BORDER
	STEPPING STONE PATH AT BIOSWALE AND UPLAND PLANTING AREAS
	WOOD BENCHES
	CONCRETE ADA RAMP
	BOARDWALK
	NATURE PLAYGROUND - LOG CLIMBERS ARE COMPOSED OF BLACK LOCUST (ROBINIA) LOGS AND STRUCTURAL SUPPORTS AS NEEDED. LOGS MUST BE INSTALLED IN A STABLE POSITION FULLY SUPPORTING ITS OWN WEIGHT. CONTRACTOR HAS FLEXIBILITY IN INSTALLATION METHODS AS LONG AS IT MEETS SAFETY REGULATIONS AND PROJECT SPECIFICATIONS. PLAY COMPONENTS MUST MEET ASTM AND CSPC SAFETY GUIDELINES. ALL SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
	OVERHEAD STRUCTURE

SURVEY NOTES:

- 1) SURVEY PREPARED BY NORTH SHORE ENGINEERING, INC. REFER TO PLAT OF SURVEY FOR ALL EXISTING CONDITION DETAILS.
- 2) UTILITIES MARKED BY DIGGERS HOTLINE AND ALL LINES UTILITY SERVICE.

GENERAL NOTES:

1. THE CONTRACTOR TO COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS OF AUTHORITIES HAVING JURISDICTION OVER THE WORK.
2. CONTRACTOR TO VERIFY DIMENSIONS INDICATED ON DRAWINGS WITH FIELD MEASUREMENTS BEFORE FABRICATION OR ORDERING OF MATERIALS PRIOR TO COMMENCEMENT OF ANY DEMOLITION OR CONSTRUCTION. DO NOT SCALE DRAWINGS.
3. CONTRACTOR TO NOTIFY ENGINEER OF EXISTING CONDITIONS DIFFERING FROM THOSE INDICATED ON THE DRAWINGS.
4. CONTRACTOR TO CONTACT PUBLIC AND PRIVATE UNDERGROUND UTILITY LOCATING SERVICES TO HAVE THE SITE MARKED PRIOR TO ANY DIGGING OR EARTHWORK.
5. CONTRACTOR TO REPLACE ANY INSTALLED MATERIAL NOT MEETING THE SPECIFICATION OR PLAN REQUIREMENTS WITHOUT ADDITIONAL COST TO THE OWNER.
6. CONTRACTOR TO REPLACE PAVEMENT, CURB AND GUTTER, TREES, LAWN AREA, ANY ABOVE GROUND APPARATUS, OR ANY OTHER ITEM THAT WAS DAMAGED AS A RESULT OF CONSTRUCTION RELATED ACTIVITIES AS DEEMED BY OWNERS REPRESENTATIVE THAT WAS NOT CALLED OUT FOR REMOVAL OR REPLACEMENT. CONTRACTOR TO REPLACE/REPAIR DAMAGED ITEM TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.
7. SURVEY PREPARED BY NORTH SHORE ENGINEERING, INC. REFER TO PLAT OF SURVEY FOR FULL EXISTING CONDITION DETAILS.
9. FOR CONSTRUCTION BARRICADING WHERE A SEPARATION IS NEEDED BETWEEN AN AREA TO BE RECONSTRUCTED AND AN AREA TO REMAIN, BUT THERE IS NO EXISTING FENCING, A TEMPORARY 6 FOOT HIGH CHAIN LINK FENCE, SELF SUPPORTED, FREE STANDING SHALL BE USED AND MAINTAINED UNTIL THE PROJECT IS COMPLETE.
9. CONSTRUCTION BARRICADING SHALL BE MAINTAINED ON A DAILY BASIS TO ASSURE THAT AT THE END OF EACH WORK DAY THE SITE IS SECURED.
10. CONTRACTOR IS TO SECURE CONSTRUCTION AREA FOR SAFETY, INCLUDING BUT NOT LIMITED TO, TRAFFIC CONTROL SIGNAGE, BARRICADE ENTRANCE, AND PLACE CONSTRUCTION FENCE AROUND OPEN TRENCHES AND SAWCUT AREAS.

ABBREVIATIONS

@	PERCENT SLOPE, '1', FT/FT
%	ABANDONED
ABDN	ABANDONED
AGGR	AGGREGATE
ALT	ALTERNATE
APPROX	APPROXIMATE
APVD	APPROVED
ASTM	THE AMERICAN SOCIETY OF TESTING AND MATERIALS
AVE	AVENUE
BLDG	BUILDING
BM	BENCHMARK
CB	CATCH BASIN
CJ	CONSTRUCTION JOINT
C/L	CENTERLINE
DIA	DIAMETER
DSGN	DESIGNER
DWG	DRAWING
E	EASTING, EAST
EA	EACH
EG	EXISTING GRADE
EL	ELEVATION
ELEV	ELEVATION
EQL	EQUAL
EJ	EXPANSION JOINT
EX	EXISTING
FT	FOOT, FEET
GN	GROUND
GR	GRADE
HORIZ	HORIZONTAL
HP	HIGH POINT
HYD	HYDRANT
INV	INVERT
LF	LINEAL FEET
LT	LEFT
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MMSD	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
N	NORTH, NORTHING
NE	NORTHEAST
NO	NUMBER
#	NUMBER
NTS	NOT TO SCALE
NW	NORTHWEST
PROP	PROPOSED
PVMT	PAVEMENT
RT	RIGHT
RMV	REMOVE
ROW	RIGHT OF WAY
R/W	RIGHT OF WAY
S	SOUTH, SLOPE
SE	SOUTHEAST
SPEC	SPECIFICATIONS
SO	SQUARE
ST	STREET
STA	STATION
STD	STANDARD
SW	SOUTHWEST
T&B	TOP AND BOTTOM
TOC	TOP OF CURB
TOS	TOP OF SLOPE
TOPO	TOPOGRAPHIC
TYP	TYPICAL
W	WITH
WS	WATER SURFACE

QUANTITY NOTES:

- 1) THE BELOW QUANTITIES ARE APPROXIMATIONS AND ARE NOT INTENDED TO BE USED DURING CONSTRUCTION ACTIVITIES. CONTRACTORS ARE RESPONSIBLE FOR QUANTIFYING ITEMS PRIOR TO COMMENCING WORK.
- 2) DISCREPANCIES TO BE COMMUNICATED WITH MPS AND THE PROJECT ENGINEER.
- 3) VOLUMES PROVIDED ARE MEASURED AS IN-PLACE CUBIC YARDS.

Item	Quantity	Unit
BASE BID		
GENERAL & SITE PREP		
Mobilization	1	LS
Provide, install, maintain, and remove silt sock	495	LF
Provide, install, and maintain inlet protection	1	EA
Chain Link Fence Removal	102	LF
Remove basketball backboard and hoops	2	EA
Sawcutting	1107	LF
Asphalt removal	29245	SF
Stone base course removal	243	CY
Rough & fine grading	29248	SF
Clearing understorey of invasive species	1865	SF
Storm sewer pipe removal	83	LF
Storm catch basin removal	2	EA
Haul to MGS excess material	553	CY
UTILITIES		
6" perforated PVC underdrain and fittings	105	LF
6" solid PVC storm sewer pipe and fittings	170	LF
6" Clean out with cast iron lid and fitting	2	EA
18 in diameter standpipe (Nyloplast)	1	EA
Metal lockable beehive grate (Nyloplast)	1	EA
Fabco Beehive Overflow Filter	1	EA
36 in diameter Catch Basin	1	EA
Neenah rim and solid lid for catch basin	0	EA
Dura slope trench with galvanized grate	8	LF
NDS 9" catch basin kit with galvanized grate and risers	1	EA
Core into existing trapped manhole	0	EA
2" Stilling well attached to standpipe	1	EA
6" gate valve, extension stem, and associated fittings	1	EA
Adjust rim elevation of existing catch basin	0	EA
BIOSWALE		
Bioswale engineered media	103	CY
Bioswale No. 1 clear stone	96	TONS
Bioswale pea gravel	27	TONS
Bioswale jute mat	504	SY
Cobble drain inlet	1	EA
6" Animal guard	2	EA
Cobble channel inlet	3	EA
UNDERGROUND CISTERN		
Cistern Geotextile Fabric, M200 for tank	363	SY
Cistern Geotextile Fabric, M200 for excavation	488	SY
Cistern sand bedding layer	20	TONS
Cistern backfill, No. 1 stone	22	TONS
Underground storage tanks (Single R-Tank LD, stacked double)	430	EA
Maintenance ports, boots, misc. materials	1	LS
Cistern - Freight	1	LS
PERMEABLE PAVERS		
Permeable paver, setting bed, and joint stone	955	SF
Permeable paver No. 1 clear stone	23	TONS
Permeable paver metal edging (see Landscape)		
HARDSCAPE		
Asphalt curb	134	LF
Asphalt paving / patch	3394	SF
5" concrete slab / walkway	2077	SF
Raised concrete curb	86	LF
ADA concrete ramp	1	EA
Stone stepping stones	51	LF
12" engineered wood fiber (EWF)	955	SF
EWF aggregate subbase	15	TONS
Crack fill & clean asphalt surface	4724	SF
Painted Play	1	LS
FURNITURE & EQUIPMENT		
Basketball Hoops	2	EA
Musical Instruments	2	LS
Wood bench	24	EA
Picnic Tables	2	EA
Sensory Panel	3	LS
Existing Play Structure Improvements - Slide	1	LS
Existing Play Structure Improvements - Panels (3)	1	LS
Rain Measuring Post	1	EA
Wood Boardwalk	1	LS
Entrance Arch	1	EA
Sign Post	1	EA
LANDSCAPE		
Metal edging, steel	350	LF
Log border - horizontal (assumes 8' ave. length)	113	LF
Topsoil, imported and placed	346	CY
Soil	828	SY
Bioswale seed	1520	SF
No-Mow Lawn / Microcover Seed	6637	SF
Shade trees, 3" cal.	33	EA
Perennials and grasses, plugs	3141	EA
Tree protection staking	24	EA
Urban Erosion Control Mat for Urban Planting areas	252	SY
FENCING		
Cedar mesh fence	22	LF
4' ht Chainlink Fence	132	LF
Low Rope Fence	100	LF

ALTERNATE BID		
1 OVERHEAD STRUCTURE		
Overhead Structure		1 EA
2 NATURE PLAY		
Nature Play (log steppers and balancing logs)		1 LS
3 MILL AND OVERLAY BASKETBALL COURT		
Mill and Overlay		2816 SF

STORMWATER SOLUTIONS ENGINEERING, LLC
 247 W. FRESHWATER WAY, SUITE 410
 MILWAUKEE, WI 53204
 PHONE: (414) 810-1245
 WWW.STORMWATER-SOLUTIONS-ENGINEERING.COM

Learning Landscapes
 LEARNING LANDSCAPES DESIGN, LLC
 4241 SW TUNNELWOOD STREET
 PORTLAND, OR 97221

MPS MILWAUKEE PUBLIC SCHOOLS

DIVISION OF FACILITIES AND MAINTENANCE SERVICES
 1124 NORTH 11TH STREET
 MILWAUKEE, WI 53205-0259
 PHONE: 414-283-4600
 FAX: 414-283-4682

SHEET NAME: LEGEND AND NOTES
PROJECT NAME: 2023 GREEN INFRASTRUCTURE UPGRADES
PROJECT ADDRESS: FREDERICK J GAENSLER K-8 SCHOOL, 1250 E. BURLEIGH STREET, MILWAUKEE, WI 53212

ISSUED FOR:	REV:	DATE:
50% CD		11/14/2022
90% CD		12/22/2022
100% CD		1/23/2023

DRAWN BY:	EMP
REVIEWED BY:	KLK
APPROVED BY:	CBG
DATE:	January 2023

SEAL AND SIGNATURE

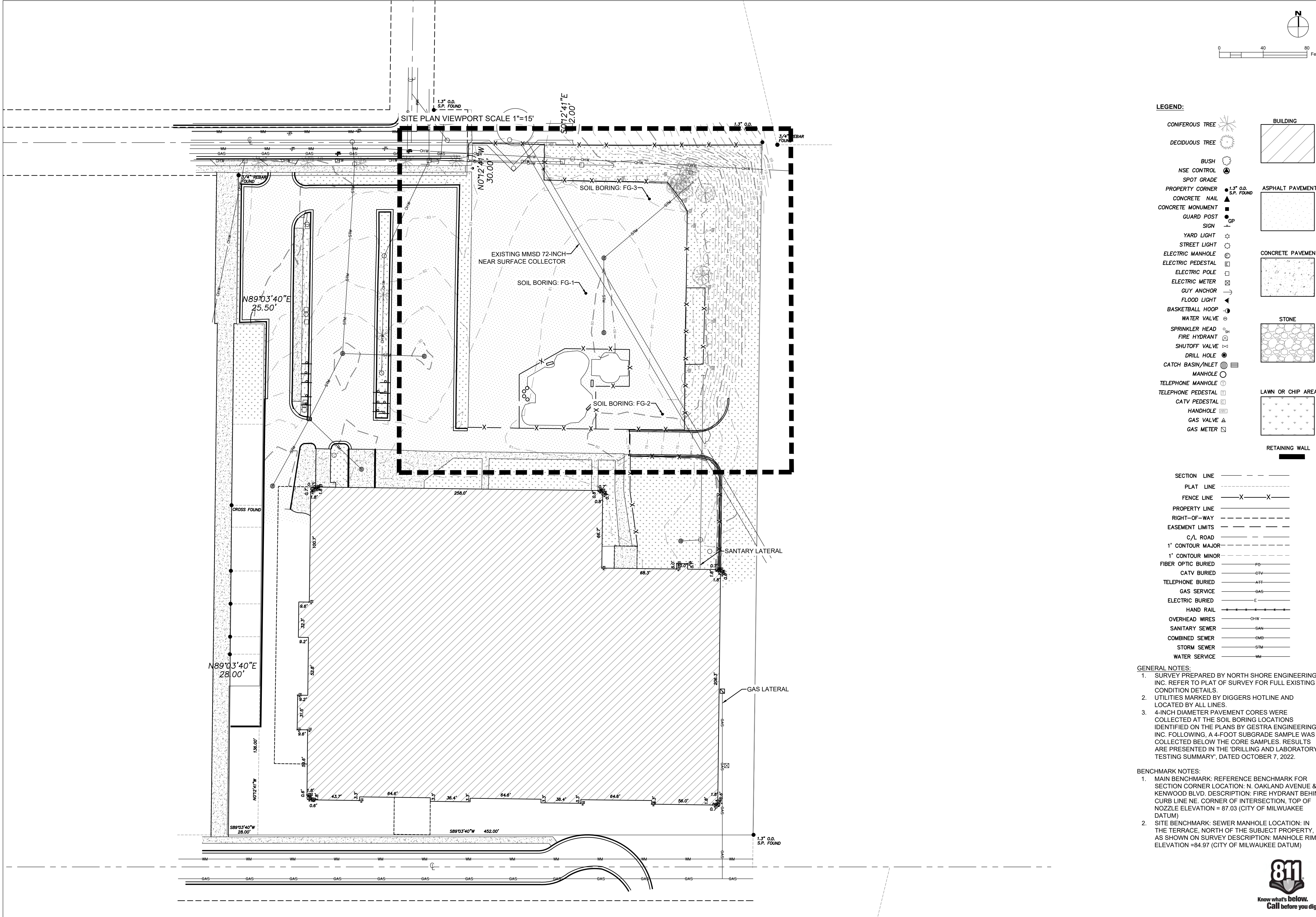
PROJECT NUMBER: 8176 (DIVISION 2)
 SITE NUMBER: 146
 SHEET: **G001**



ISSUED FOR:	REV:	DATE:
50% CD		11/14/2022
90% CD		12/22/2022
100% CD		1/23/2023

DRAWN BY:	EMP
REVIEWED BY:	KLK
APPROVED BY:	CBG
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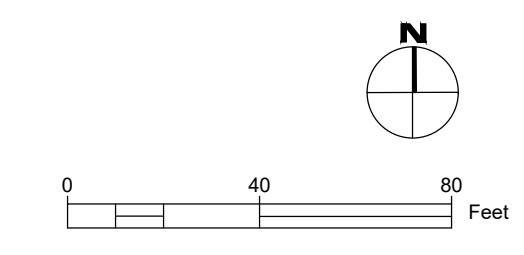
SEAL AND SIGNATURE	
PROJECT NUMBER: 8176 (DIVISION 2)	
SITE NUMBER: 185	
SHEET:	C001



ISSUED FOR:	REV:	DATE:
50% CD		11/14/2022
90% CD		12/22/2022
100% CD		1/23/2023

DRAWN BY:	KLK
REVIEWED BY:	CNH
APPROVED BY:	CBG
DATE:	January 2023
SEAL AND SIGNATURE	

PROJECT NUMBER:	
SITE NUMBER:	
SHEET:	C002

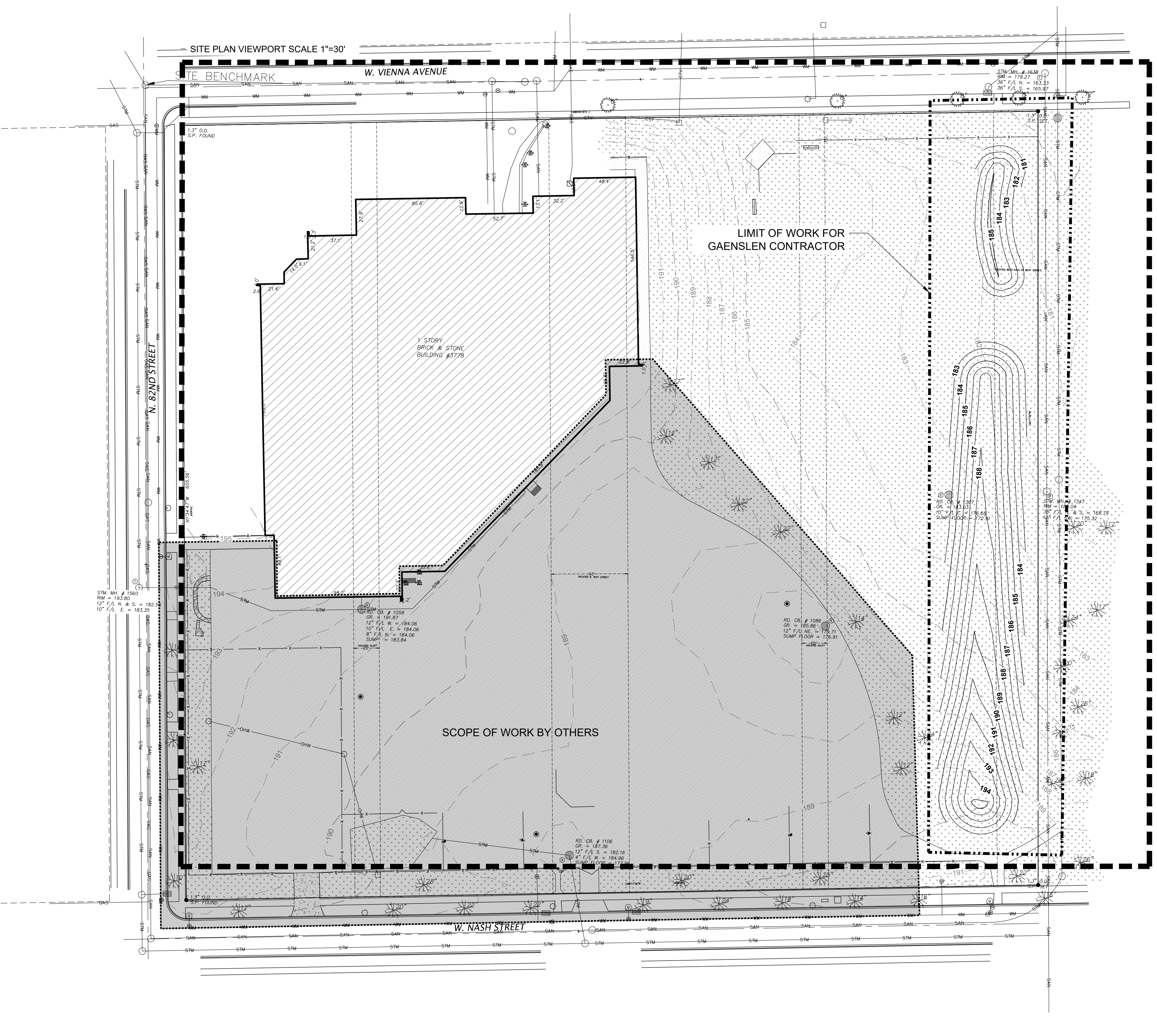


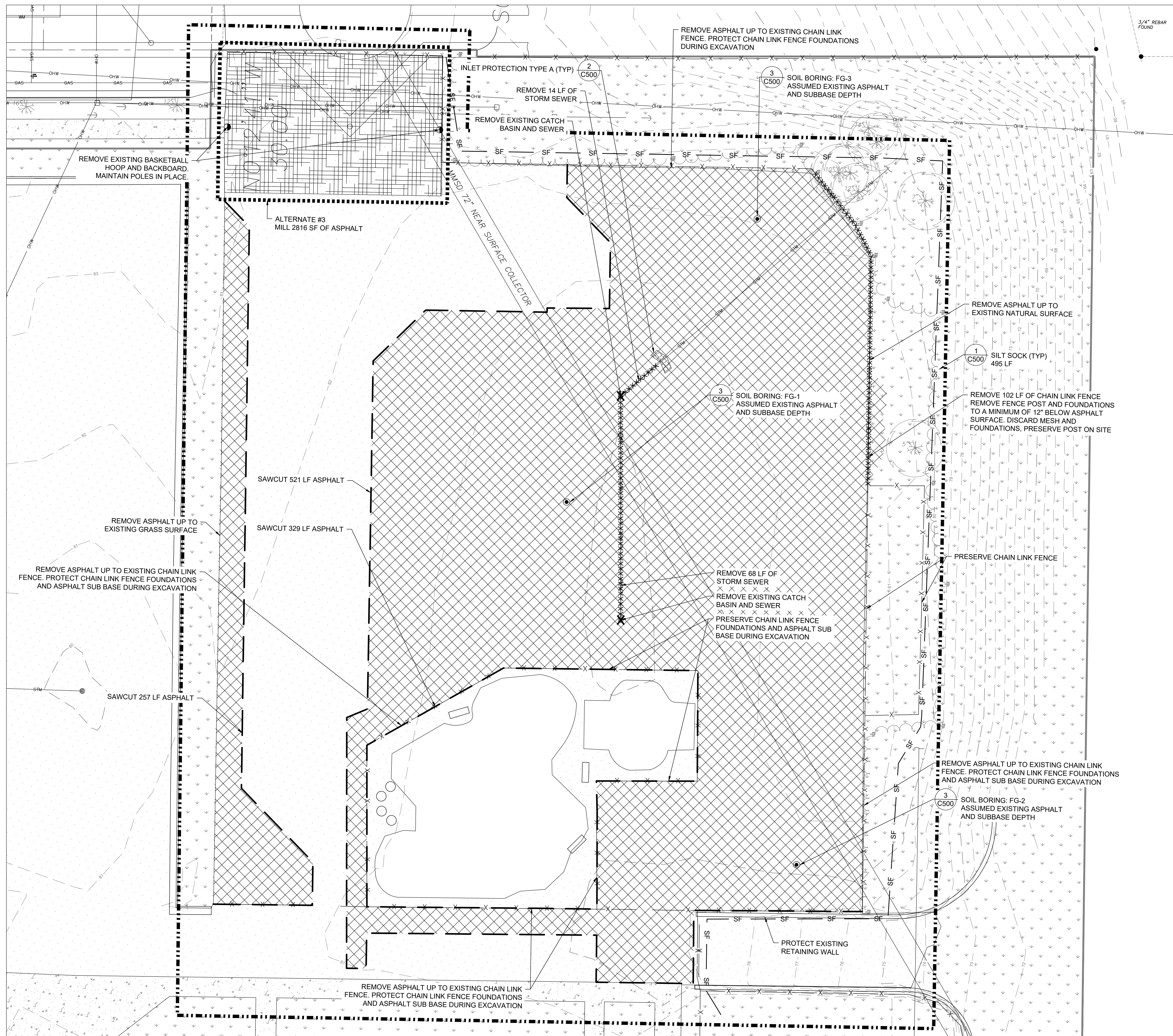
LEGEND:

CONIFEROUS TREE		BUILDING	
DECIDUOUS TREE		ASPHALT PAVEMENT	
BUSH		CONCRETE PAVEMENT	
NSE CONTROL		STONE	
SPOT GRADE		LAWN OR CHIP AREAS	
PROPERTY CORNER			
CONCRETE NAIL			
CONCRETE MONUMENT			
GUARD POST			
SIGN			
YARD LIGHT			
STREET LIGHT			
ELECTRIC MANHOLE			
ELECTRIC PEDESTAL			
ELECTRIC POLE			
ELECTRIC METER			
GUY ANCHOR			
FLOOD LIGHT			
BASKETBALL HOOP			
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MANHOLE			
TELEPHONE MANHOLE			
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CATV PEDESTAL			
HANDHOLE			
GAS VALVE			
GAS METER			

PLAT LINE	
FENCE LINE	
PROPERTY LINE	
RIGHT-OF-WAY	
EASEMENT LIMITS	
C/L ROAD	
1' CONTOUR MAJOR	
1' CONTOUR MINOR	
FIBER OPTIC BURIED	
CATV BURIED	
TELEPHONE BURIED	
GAS SERVICE	
ELECTRIC BURIED	
HAND RAIL	
OVERHEAD WIRES	
SANITARY SEWER	
COMBINED SEWER	
STORM SEWER	
WATER SERVICE	

- GENERAL NOTES:**
- SURVEY PREPARED BY NORTH SHORE ENGINEERING, INC.
 - UTILITIES MARKED BY DIGGERS HOTLINE AND LOCATED BY ALL LINES.
- BENCHMARK NOTES:**
- MAIN BENCHMARK: REFERENCE BENCHMARK FOR SECTION CORNER LOCATION: N. 84TH STREET & W. CAPITOL DRIVE DESCRIPTION: FIRE HYDRANT BEHIND CURB LINE SE. CORNER OF INTERSECTION, TOP OF NOZZLE ELEVATION = 192.02 (CITY OF MILWAUKEE DATUM)
 - SITE BENCHMARK: SANITARY MANHOLE LOCATION: INTERSECTION OF N. 82ND STREET AND W. VIENNA AVENUE, AS SHOWN ON SURVEY DESCRIPTION: MANHOLE RIM ELEVATION = 189.93 (CITY OF MILWAUKEE DATUM)

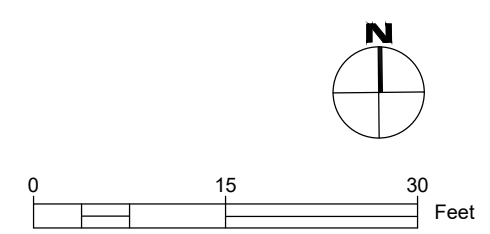




- LEGEND:**
- — — — — PROPERTY BOUNDARY
 - - - - - EXISTING MAJOR CONTOUR (5' INTERVAL)
 - - - - - EXISTING MINOR CONTOUR (1' INTERVAL)
 - — — — — ASPHALT SAW CUT LINE
 - XXXXXX ASPHALT REMOVAL
 - XXXXXX ASPHALT MILLING
 - XXXXXXXXXXXXX REMOVALS (AS NOTED)
 - X REMOVALS (AS NOTED)
 - — — — — SILT SOCK / SILT FENCE
 - INLET PROTECTION TYPES B AND C
 - INLET PROTECTION TYPE A
 - ALTERNATE/FUTURE WORK
 - — — — — LIMIT OF WORK

- GENERAL NOTES:**
1. THE CONTRACTOR TO COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS OF AUTHORITIES HAVING JURISDICTION OVER THE WORK.
 2. CONTRACTOR TO VERIFY DIMENSIONS INDICATED ON DRAWINGS WITH FIELD MEASUREMENTS BEFORE FABRICATION OR ORDERING OF MATERIALS PRIOR TO COMMENCEMENT OF ANY DEMOLITION OR CONSTRUCTION. DO NOT SCALE DRAWINGS.
 3. CONTRACTOR TO NOTIFY ENGINEER OF EXISTING CONDITIONS DIFFERING FROM THOSE INDICATED ON THE DRAWINGS.
 4. CONTRACTOR TO CONTACT PUBLIC AND PRIVATE UNDERGROUND UTILITY LOCATING SERVICES TO HAVE THE SITE MARKED PRIOR TO ANY DIGGING OR EARTHWORK.
 5. CONTRACTOR TO REPLACE ANY INSTALLED MATERIAL NOT MEETING THE SPECIFICATION OR PLAN REQUIREMENTS WITH MATERIAL THAT MEETS THESE REQUIREMENTS WITHOUT ADDITIONAL COST TO THE OWNER.
 6. CONTRACTOR TO REPLACE PAVEMENT, CURB AND GUTTER, TREES, LAWN AREA, ANY ABOVE GROUND APPARATUS, OR ANY OTHER ITEM THAT WAS DAMAGED AS A RESULT OF CONSTRUCTION RELATED ACTIVITIES AS DEEMED BY OWNERS REPRESENTATIVE THAT WAS NOT CALLED OUT FOR REMOVAL OR REPLACEMENT. CONTRACTOR TO REPLACE/REPAIR DAMAGED ITEM TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.
 7. SURVEY PREPARED BY NORTH SHORE ENGINEERING, LLC. REFER TO PLAT OF SURVEY FOR FULL EXISTING CONDITION DETAILS.
 8. FOR CONSTRUCTION BARRICADING WHERE A SEPARATION IS NEEDED BETWEEN AN AREA TO BE RECONSTRUCTED AND AN AREA TO REMAIN, BUT THERE IS NO EXISTING FENCING, A TEMPORARY 6 FOOT HIGH CHAIN LINK FENCE, SELF SUPPORTED, FREE STANDING SHALL BE USED AND MAINTAINED UNTIL THE PROJECT IS COMPLETE.
 9. CONSTRUCTION BARRICADING SHALL BE MAINTAINED ON A DAILY BASIS TO ASSURE THAT AT THE END OF EACH WORK DAY THE SITE IS SECURED.
 10. CONTRACTOR IS TO SECURE CONSTRUCTION AREA FOR SAFETY, INCLUDING BUT NOT LIMITED TO: TRAFFIC CONTROL SIGNAGE, BARRICADE ENTRANCE, AND PLACE CONSTRUCTION FENCE AROUND OPEN TRENCHES AND SAWCUT AREAS.

- GENERAL EROSION CONTROL NOTES**
1. CONSTRUCTION SITE EROSION CONTROL AND SEDIMENTATION CONTROL TO COMPLY WITH THE REQUIREMENTS OF THE CITY OF MILWAUKEE. CONTRACTOR TO EMPLOY EROSION CONTROL METHODS AS SHOWN AND SPECIFIED.
 2. TEMPORARY EROSION CONTROL DEVICES TO BE INSTALLED PRIOR TO LAND DISTURBANCE ACTIVITIES.
 3. CONTRACTOR TO CONDUCT ALL ACTIVITIES ON THE SITE IN A LOGICAL SEQUENCE TO MINIMIZE THE AREA OF UNSTABILIZED SOIL AT ANY ONE TIME.
 4. EROSION CONTROL MEASURES TO REMAIN IN PLACE AND BE MAINTAINED UNTIL SUCH TIME WHEN CONSTRUCTION HAS BEEN COMPLETED AND FINAL STABILIZATION HAS BEEN ESTABLISHED.
 5. CONTRACTOR TO PERFORM PERIODIC STREET, PLAYGROUND, AND PARKING LOT SWEEPING TO MAINTAIN THE PUBLIC STREET FREE OF DUST AND SOIL.
 6. ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN OR MORE DAYS TO BE STABILIZED BY TEMPORARY OR PERMANENT SEEDING, MULCHING, SODDING, COVERING WITH TARPS, OR EQUIVALENT BEST MANAGEMENT PRACTICES. IF TEMPORARY SEEDING IS USED, CONTRACTOR TO INSTALL A PERMANENT COVER AS PART OF THE FINAL SITE STABILIZATION.
 7. CONTRACTOR TO NOTIFY PERMITTING AGENCIES IN ACCORDANCE WITH PERMIT REQUIREMENTS.
 8. CONTRACTOR TO REPAIR ANY SILTATION OR EROSION DAMAGE TO ADJOINING SURFACES AND DRAINAGE WAYS RESULTING FROM LAND DEVELOPMENT OR LAND DISTURBING ACTIVITIES.
 9. KEEP A COPY OF THE EROSION CONTROL PLAN ON SITE FOR THE DURATION OF THE PROJECT.



STORMWATER SOLUTIONS ENGINEERING, LLC
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 MILWAUKEE, WI 53204
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 FAX: 414-283-4682

SHEET NAME: SITE PREPARATION AND EROSION CONTROL
PROJECT NAME: 2023 GREEN INFRASTRUCTURE UPGRADES
PROJECT ADDRESS: FREDERICK J GAENSLER K-8 SCHOOL
 1250 E. BURLINGHAM STREET, MILWAUKEE, WI 53212

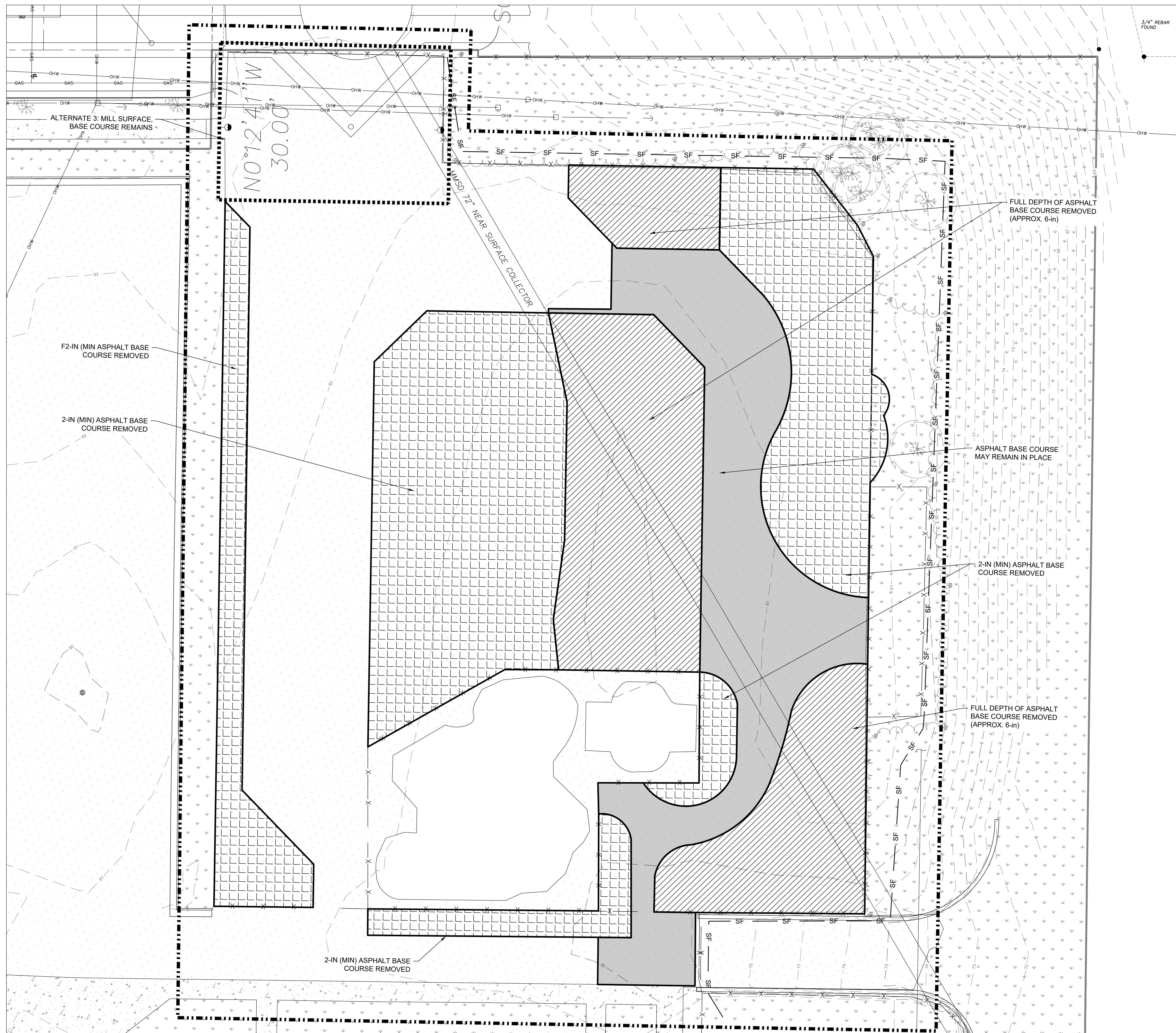
ISSUED FOR:	REV:	DATE:
50% CD		11/14/2022
90% CD		12/22/2022
100% CD		1/23/2023

DRAWN BY: EMP
REVIEWED BY: KLK
APPROVED BY: CBG
DATE: January 2023

SEAL AND SIGNATURE

PROJECT NUMBER: 8176 (DIVISION 2)
 SITE NUMBER: 185
 SHEET: C003



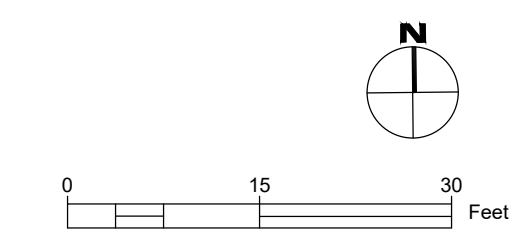


LEGEND:

- PROPERTY BOUNDARY
- - - EXISTING MAJOR CONTOUR (5' INTERVAL)
- - - EXISTING MINOR CONTOUR (1' INTERVAL)
- ALTERNATE/FUTURE WORK
- LIMIT OF WORK
- [Hatched Box] ASPHALT REMOVAL ONLY
- [Grid Box] MIN 2-IN BASE COURSE REMOVED
- [Diagonal Line Box] FULL DEPTH BASE COURSE REMOVED

NOTES:

1. CONTRACTOR TO REMOVE AND HAUL OFF ASPHALT FROM PROPOSED DEPAVING AREAS. ASPHALT ASSUMED TO BE 3 TO 5.3 INCHES ACROSS SITE FROM THE GEOTECHNICAL REPORT.
2. AREAS WHERE GREEN INFRASTRUCTURE OR UPLAND PLANTINGS ARE PROPOSED, BASE COURSE TO BE REMOVED AND HAULED OFF SITE AT FULL DEPTH. THICKNESS OF BASE COURSE IS ASSUMED TO BE 5 TO 6 INCHES FROM GEOTECHNICAL REPORT.
3. AREAS OF SOD OR MICRO CLOVER ARE TO HAVE A MINIMUM OF 4 INCHES OF TOPSOIL, 6 INCHES PREFERRED. BASE COURSE BELOW THE 4-6 INCHES CAN REMAIN IN PLACE.



STORMWATER SOLUTIONS ENGINEERING, LLC
 247 W. FRESHWATER WAY, SUITE 410
 MILWAUKEE, WI 53204
 PHONE: (414) 810-1245
 WWW.STORMWATER-SOLUTIONS-ENGINEERING.COM

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 1124 NORTH 11TH STREET
 MILWAUKEE, WI 53205-0259
 PHONE: 414-283-4600
 FAX: 414-283-4682

SHEET NAME: SITE PREPARATION AND EROSION CONTROL
PROJECT NAME: 2023 GREEN INFRASTRUCTURE UPGRADES
PROJECT ADDRESS: FREDERICK J GAENSLER K-8 SCHOOL
 1250 E. BURLIGH STREET, MILWAUKEE, WI 53212

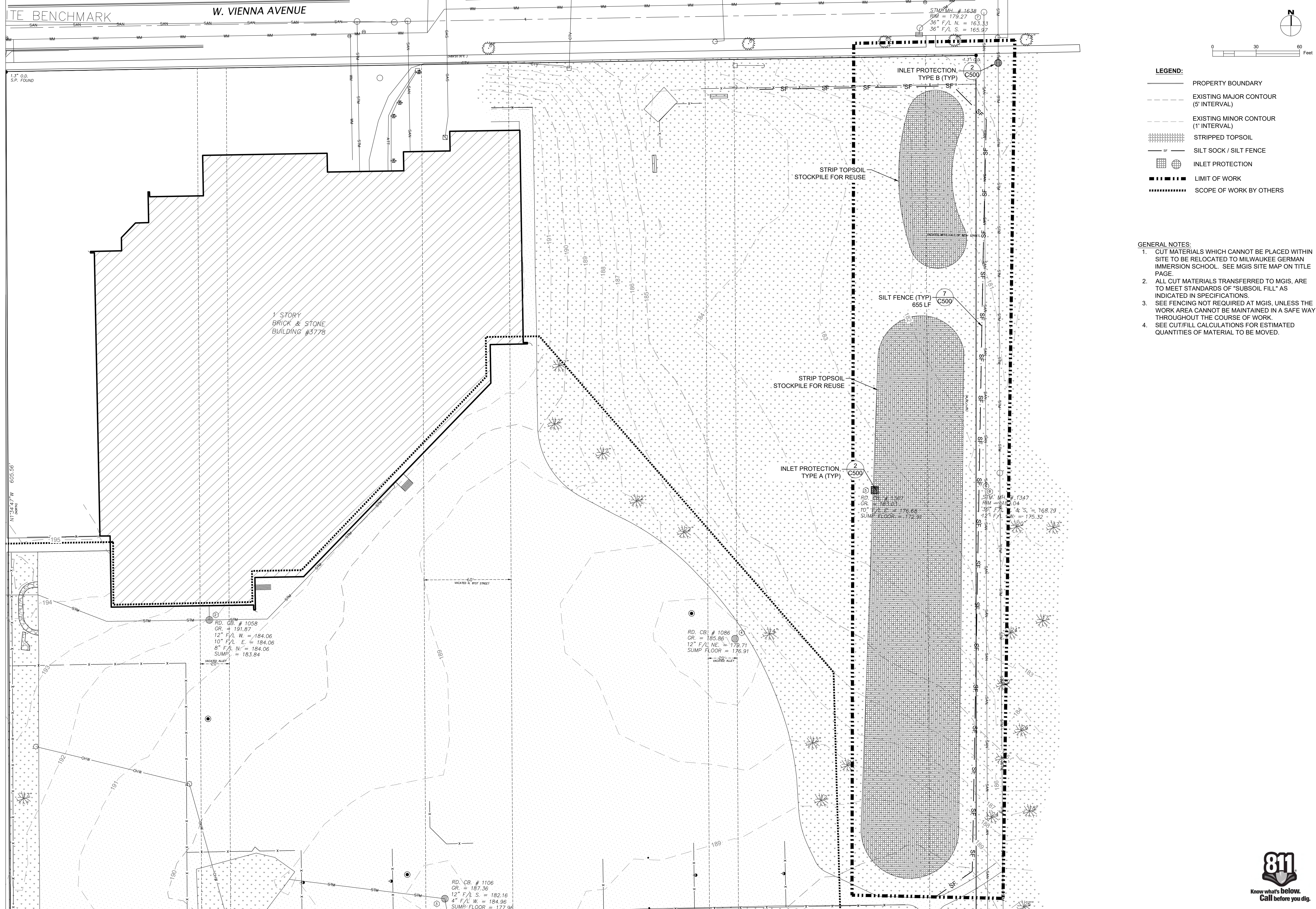
ISSUED FOR:	REV:	DATE:
50% CD		11/14/2022
90% CD		12/22/2022
100% CD		1/23/2023

DRAWN BY:	EMP
REVIEWED BY:	KLK
APPROVED BY:	CBG
DATE:	January 2023

SEAL AND SIGNATURE

PROJECT NUMBER: 8176 (DIVISION 2)
 SITE NUMBER: 185
 SHEET:
C004





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 MILWAUKEE, WI 53205-0259
 PHONE: 414-283-4600
 FAX: 414-283-4682

- LEGEND:**
- PROPERTY BOUNDARY
 - - - EXISTING MAJOR CONTOUR (5' INTERVAL)
 - - - EXISTING MINOR CONTOUR (1' INTERVAL)
 - ▨ STRIPPED TOPSOIL
 - SF — SILT SOCK / SILT FENCE
 - ⊠ INLET PROTECTION
 - — — LIMIT OF WORK
 - ⋯ SCOPE OF WORK BY OTHERS

- GENERAL NOTES:**
1. CUT MATERIALS WHICH CANNOT BE PLACED WITHIN SITE TO BE RELOCATED TO MILWAUKEE GERMAN IMMERSION SCHOOL. SEE MGIS SITE MAP ON TITLE PAGE.
 2. ALL CUT MATERIALS TRANSFERRED TO MGIS, ARE TO MEET STANDARDS OF "SUBSOIL FILL" AS INDICATED IN SPECIFICATIONS.
 3. SEE FENCING NOT REQUIRED AT MGIS, UNLESS THE WORK AREA CANNOT BE MAINTAINED IN A SAFE WAY THROUGHOUT THE COURSE OF WORK.
 4. SEE CUT/FILL CALCULATIONS FOR ESTIMATED QUANTITIES OF MATERIAL TO BE MOVED.

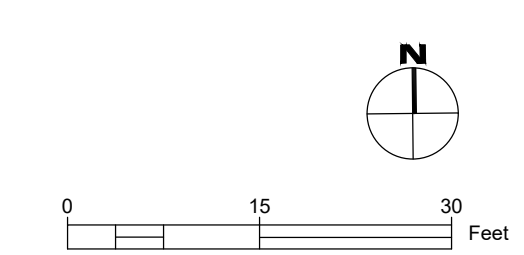
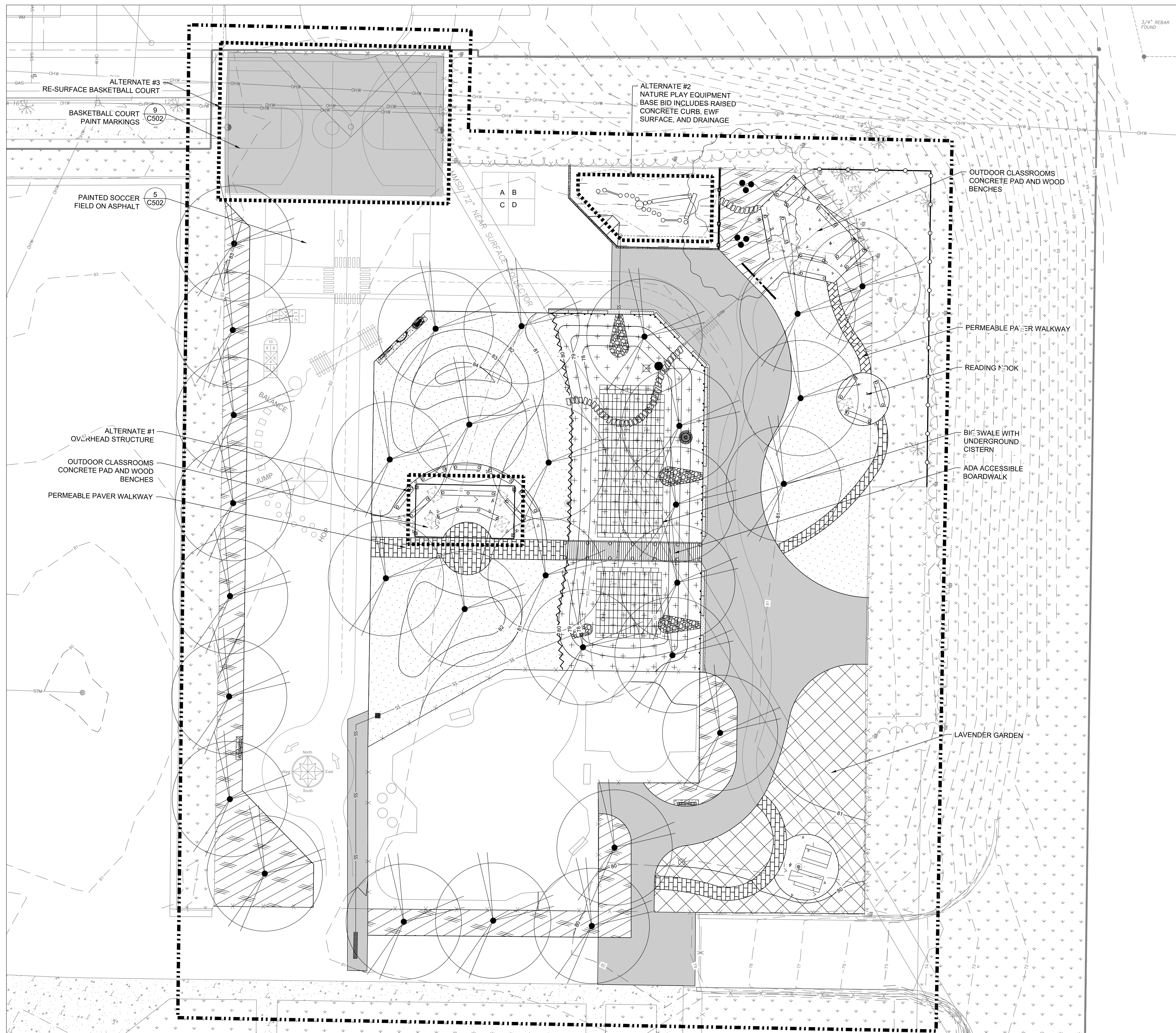
SHEET NAME: MGIS SITE PREPARATION AND EROSION CONTROL PLAN
PROJECT NAME: 2023 GREEN INFRASTRUCTURE UPGRADES
PROJECT ADDRESS: MILWAUKEE GERMAN IMMERSION ELEMENTARY SCHOOL
 3778 N. 82ND STREET, MILWAUKEE, WI 53222

ISSUED FOR:	REV:	DATE:
50% CD		11/14/2022
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100% CD		1/23/2023

DRAWN BY: KLK
REVIEWED BY: CNH
APPROVED BY: CBG
DATE: January 2023
SEAL AND SIGNATURE

PROJECT NUMBER:
SITE NUMBER:
SHEET: C005





- LEGEND:**
- PROPERTY BOUNDARY
 - - - EXISTING MAJOR CONTOUR (5' INTERVAL)
 - - - EXISTING MINOR CONTOUR (1' INTERVAL)
 - PROPOSED MAJOR CONTOUR (5' INTERVAL)
 - PROPOSED MINOR CONTOUR (1' INTERVAL)
 - ▨ ASPHALT CURB
 - ▩ CONCRETE CURB
 - ⊞ COBBLE CHANNEL INLET
 - DECORATIVE WOOD FENCE
 - PROPOSED 6-FT CHAIN LINK FENCE
 - ⋈ DECORATIVE LOW ROPE FENCE
 - ⊙ BEEHIVE GRATE
 - CLEANOUT
 - STORM INLET
 - PROPOSED STORM MANHOLE
 - ▬ TRENCH DRAIN
 - ⋯ PERFORATED UNDERDRAIN
 - SS — STORM SEWER PIPE
 - ⋯ ALTERNATE/FUTURE WORK
 - R-TANK UNDERGROUND CISTERN
 - ▨ PLANTING AREA 1
 - ▩ PLANTING AREA 2
 - ▨ SOD
 - ⊞ BIOSWALE PLANTING
 - ▨ 12" ENGINEERED WOOD FIBER
 - ▨ PERMEABLE PAVERS
 - ▨ CONCRETE PAVING
 - ▨ NEW ASPHALT SURFACE
 - ⋯ LIMIT OF WORK

- GENERAL NOTES:**
- CONTRACTOR IS TO REFER TO SHEET L300 FOR THE PLANTING PLAN.
 - INSTALL TEMPORARY PROTECTIVE FENCING AROUND GREEN INFRASTRUCTURE (BIOSWALES AND NATIVE PLANTINGS) AS DIRECTED BY MPS OR ON-SITE ENGINEER FOR ESTABLISHMENT. TEMPORARY FENCING SHALL BE INSTALLED TO WITHSTAND A YEAR. WOODEN SNOW FENCE WITH HEAVY DUTY POSTS.
 - REFER TO SHEET L200 FOR PAVEMENT MARKING DETAILS. PREPARE ASPHALT SURFACE PRIOR TO PAVEMENT MARKINGS. PRESSURE WASH, SWEEP, AND CRACKFILL.

STORMWATER SOLUTIONS ENGINEERING, LLC
 247 W. FRESHWATER WAY, SUITE 410
 MILWAUKEE, WI 53204
 PHONE: (414) 810-1245
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 1124 NORTH 11TH STREET
 MILWAUKEE, WI 53205-0259
 PHONE: 414-283-4600
 FAX: 414-283-4682

SHEET NAME: **SITE PLAN**
 PROJECT NAME: **2023 GREEN INFRASTRUCTURE UPGRADES**
 PROJECT ADDRESS: **FREDERICK J GAENSLER K-8 SCHOOL, 1250 E. BURLINGHAM STREET, MILWAUKEE, WI 53212**

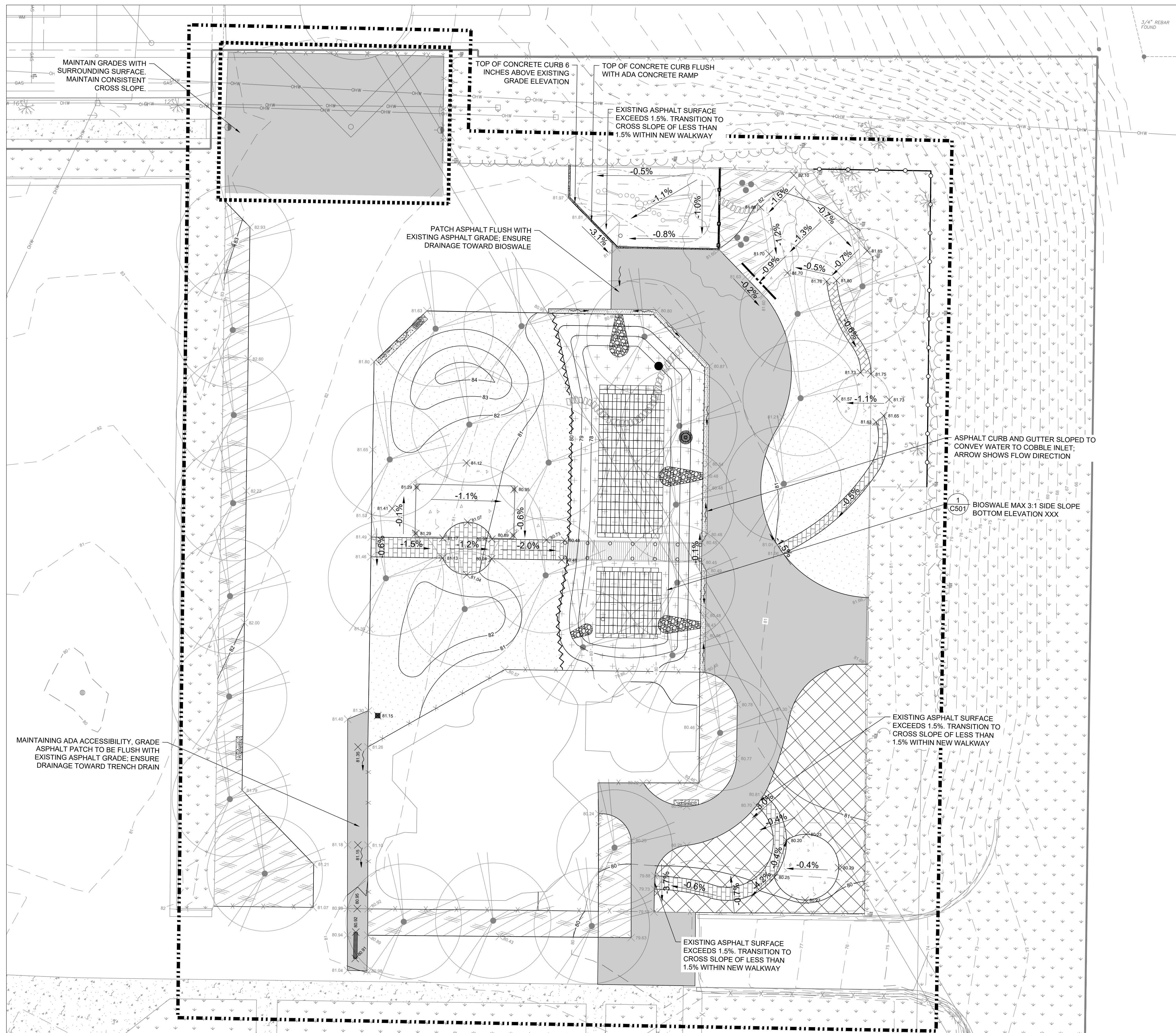
ISSUED FOR:	REV:	DATE:
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100% CD		1/23/2023

DRAWN BY: **EMP**
 REVIEWED BY: **KLK**
 APPROVED BY: **CBG**
 DATE: **January 2023**

SEAL AND SIGNATURE

PROJECT NUMBER: 8176 (DIVISION 2)
 SITE NUMBER: 185
 SHEET: **C100**





- LEGEND:**
- PROPERTY BOUNDARY
 - - - EXISTING MAJOR CONTOUR (5' INTERVAL)
 - - - EXISTING MINOR CONTOUR (1' INTERVAL)
 - PROPOSED MAJOR CONTOUR (5' INTERVAL)
 - PROPOSED MINOR CONTOUR (1' INTERVAL)
 - ▨ ASPHALT CURB
 - ▩ CONCRETE CURB
 - - - DRAINAGE SWALE
 - - - GRADE BREAK
 - STORMWATER DRAINAGE DIRECTION
 - × 82.1 EXISTING SPOT GRADE
 - 80.7 PROPOSED SPOT GRADE
 - BEEHIVE GRATE
 - CLEANOUT
 - STORM INLET
 - PROPOSED STORM MANHOLE
 - ▬ TRENCH DRAIN
 - - - - - ALTERNATE/FUTURE WORK
 - R-TANK UNDERGROUND CISTERN
 - ▨ PLANTING AREA 1
 - ▨ PLANTING AREA 2
 - SOD
 - ▨ BIOSWALE PLANTING
 - ▨ 12" ENGINEERED WOOD FIBER
 - ▨ PERMEABLE PAVERS
 - ▨ CONCRETE PAVING
 - ▨ NEW ASPHALT SURFACE
 - - - - - LIMIT OF WORK

- GENERAL NOTES:**
1. ELEVATIONS SHOWN ON THE PLAN ARE EQUAL TO THE FINISHED TOP OF GRADE.
 2. CUT MATERIALS ARE TO BE MANAGED ON SITE TO THE EXTENT PRACTICABLE. THE DIMENSIONS OF THE FILL MAY ALTER FROM THE PROPOSED GRADES DUE TO THE FINAL VOLUME OF MATERIALS TO BE MANAGED ON SITE. ANY DEVIATIONS FROM THE PLANS MUST BE APPROVED BY THE ENGINEER.
 3. WALKING PATHS ARE GRADED TO MEET THE 2010 ADA STANDARD FOR ACCESSIBLE DESIGN: LONGITUDINAL SLOPES NO GREATER THAN 1:20 FEET AND CROSS SLOPES NO GREATER THAN 1:50 FEET OR BETWEEN 1.5% TO 2% MAXIMUM.
 4. CUT FILL VOLUMES ARE REPRESENTED IN PLACE CUBIC YARD AND DOES NOT ACCOUNT FOR COMPACTION REQUIREMENTS.

STORMWATER SOLUTIONS ENGINEERING, LLC
 247 W. FRESHWATER WAY, SUITE 410
 MILWAUKEE, WI 53204
 PHONE: (414) 810-1245
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 1124 NORTH 11TH STREET
 MILWAUKEE, WI 53205-0259
 PHONE: 414-283-4600
 FAX: 414-283-4682

SHEET NAME: GRADING PLAN
PROJECT NAME: 2023 GREEN INFRASTRUCTURE UPGRADES
PROJECT ADDRESS: FREDERICK J GAENSLER K-8 SCHOOL
 1250 E. BURLINGHAM STREET, MILWAUKEE, WI 53212

ISSUED FOR:	REV:	DATE:
50% CD		11/14/2022
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100% CD		1/23/2023

DRAWN BY:	EMP
REVIEWED BY:	KLK
APPROVED BY:	CBG
DATE:	January 2023

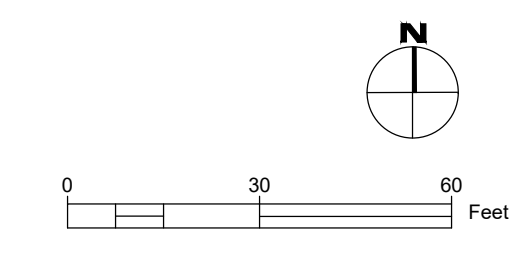
SEAL AND SIGNATURE

PROJECT NUMBER: 8176 (DIVISION 2)
 SITE NUMBER: 185
 SHEET:
C200



TE BENCHMARK

W. VIENNA AVENUE



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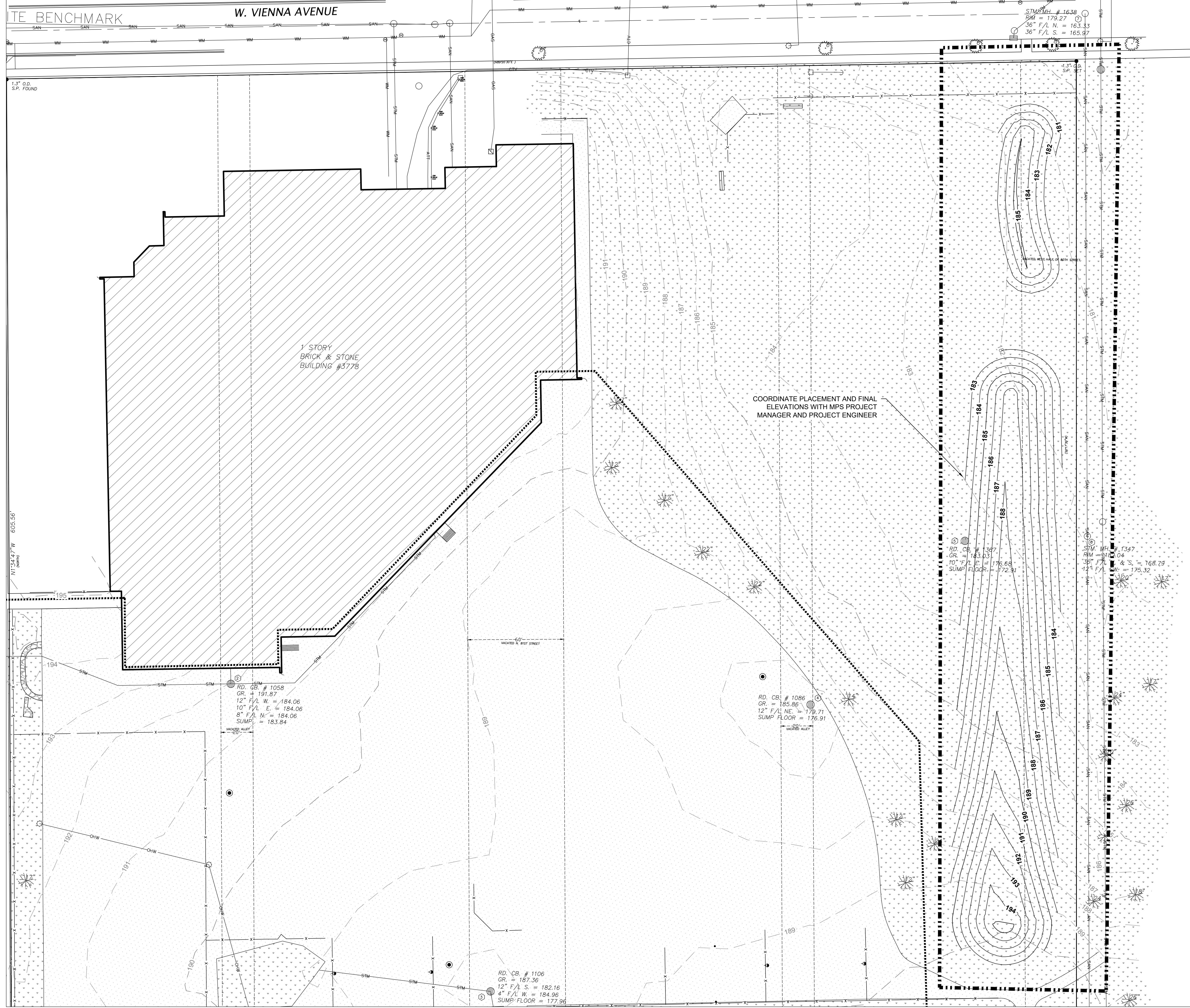
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 1124 NORTH 11TH STREET
 MILWAUKEE, WI 53205-0259
 PHONE: 414-283-4600
 FAX: 414-283-4682

LEGEND:

- PROPERTY BOUNDARY
- - - EXISTING MAJOR CONTOUR (5' INTERVAL)
- - - EXISTING MINOR CONTOUR (1' INTERVAL)
- PROPOSED MAJOR CONTOUR (5' INTERVAL)
- PROPOSED MINOR CONTOUR (1' INTERVAL)
- LIMIT OF WORK
- SCOPE OF WORK BY OTHERS

GENERAL NOTES:

1. CUT MATERIALS WHICH CANNOT BE PLACED WITHIN SITE TO BE RELOCATED TO MILWAUKEE GERMAN IMMERSION SCHOOL. SEE MGIS SITE MAP ON TITLE PAGE.
2. ALL CUT MATERIALS TRANSFERRED TO MGIS, ARE TO MEET STANDARDS OF "SUBSOIL FILL" AS INDICATED IN SPECIFICATIONS.
3. SITE FENCING NOT REQUIRED AT MGIS, UNLESS THE WORK AREA CANNOT BE MAINTAINED IN A SAFE WAY THROUGHOUT THE COURSE OF WORK.
4. SEE CUTFILL CALCULATIONS FOR ESTIMATED QUANTITIES OF MATERIAL TO BE MOVED.
5. FINAL LIMITS OF BERM HEIGHT AND SIDE SLOPES TO BE COORDINATED WITH MPS PROJECT MANAGER AND DESIGN ENGINEER. ONLY FILL BERM AS NECESSARY FROM THE MATERIALS FROM GAENSLER SITE.
6. FINISH BERM WITH GRASS SEED. INSTALL AND ESTABLISH GRASS AS SPECIFIED.



1 STORY BRICK & STONE BUILDING #3778

COORDINATE PLACEMENT AND FINAL ELEVATIONS WITH MPS PROJECT MANAGER AND PROJECT ENGINEER

RD. CB. # 1058
 CR. = 191.87
 12" F/L W. = 184.06
 10" F/L E. = 184.06
 8" F/L N. = 184.06
 SUMP FLOOR = 183.84

RD. CB. # 1086
 CR. = 185.86
 12" F/L NE = 179.71
 SUMP FLOOR = 176.91

RD. CB. # 1387
 CR. = 183.03
 10" F/L E. = 176.68
 SUMP FLOOR = 172.81

STM. MH. # 1347
 RIM = 172.04
 36" F/L N. & S. = 168.79
 42" F/L E. = 175.32

RD. CB. # 1106
 CR. = 187.36
 12" F/L S. = 182.16
 4" F/L W. = 184.96
 SUMP FLOOR = 177.96

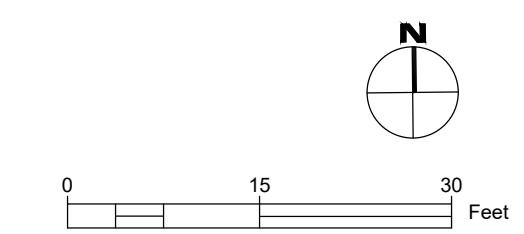
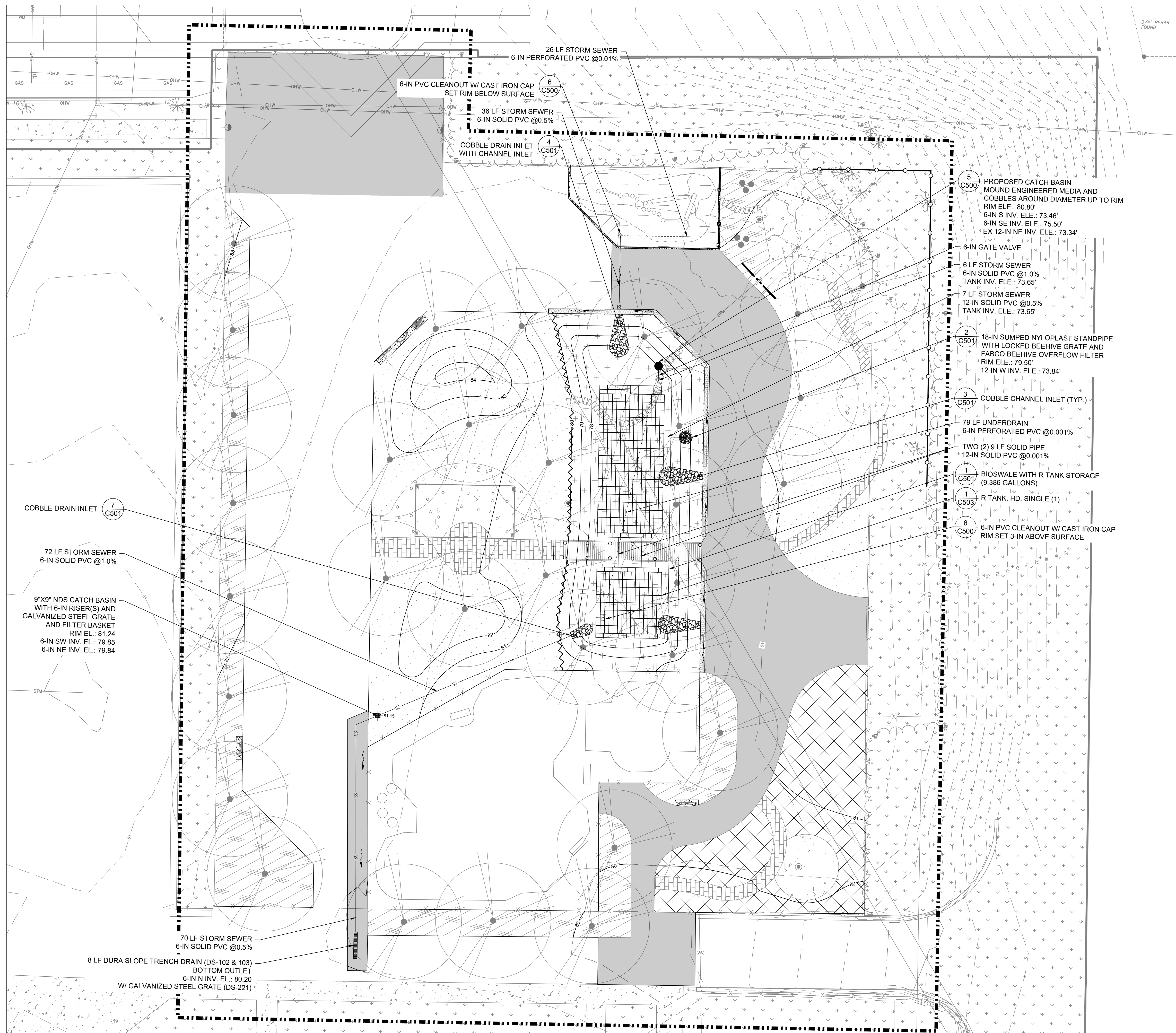
SHEET NAME: **MGIS SITE PREPARATION AND EROSION CONTROL PLAN**
 PROJECT NAME: **2023 GREEN INFRASTRUCTURE UPGRADES**
 PROJECT ADDRESS: **MILWAUKEE GERMAN IMMERSION ELEMENTARY SCHOOL
 3778 N. 82ND STREET, MILWAUKEE, WI 53222**

ISSUED FOR:	REV:	DATE:
50% CD		11/14/2022
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DRAWN BY:	KLK
REVIEWED BY:	CNH
APPROVED BY:	CBG
DATE:	January 2023

SEAL AND SIGNATURE	
PROJECT NUMBER:	
SITE NUMBER:	
SHEET:	C201





LEGEND:

- PROPERTY BOUNDARY
- - - EXISTING MAJOR CONTOUR (5' INTERVAL)
- - - EXISTING MINOR CONTOUR (1' INTERVAL)
- PROPOSED MAJOR CONTOUR (5' INTERVAL)
- PROPOSED MINOR CONTOUR (1' INTERVAL)
- ▨ ASPHALT CURB
- ▨ CONCRETE CURB
- BEEHIVE GRATE
- CLEANOUT
- STORM INLET
- PROPOSED STORM MANHOLE
- ▨ TRENCH DRAIN
- ⋯ PERFORATED UNDERDRAIN
- STORM SEWER PIPE
- ▨▨▨▨▨▨ ALTERNATE/FUTURE WORK
- ▨▨▨▨▨▨ CONCRETE PAVING
- ▨▨▨▨▨▨ NEW ASPHALT SURFACE
- ▨▨▨▨▨▨ PLANTING AREA 1
- ▨▨▨▨▨▨ PLANTING AREA 2
- ▨▨▨▨▨▨ SOD
- ▨▨▨▨▨▨ BIOSWALE PLANTING
- ▨▨▨▨▨▨ 12" ENGINEERED WOOD FIBER
- ▨▨▨▨▨▨ PERMEABLE PAVERS
- ▨▨▨▨▨▨ LIMIT OF WORK

GENERAL NOTES:

1. CONTRACTOR TO VERIFY IN FIELD AND VERIFY DESIGN WITH ENGINEERS: EXISTING PIPE QUALITY, EXISTING INLET STRUCTURAL INTEGRITY, AND PROPOSED GRATE AND FRAME.
2. SUPPLY MATERIALS AS SPECIFIED, OR APPROVED EQUAL.
3. EXISTING CATCH BASINS WITHIN PROJECT AREA TO BE CLEANED AFTER CONSTRUCTION.
4. REFER TO C501, DETAIL 5 FOR UNDERDRAIN ELEVATIONS AND INVERTS.

STORMWATER SOLUTIONS ENGINEERING, LLC
 247 W. FRESHWATER WAY, SUITE 410
 MILWAUKEE, WI 53204
 PHONE: (414) 810-1245
 WWW.STORMWATER-SOLUTIONS-ENGINEERING.COM

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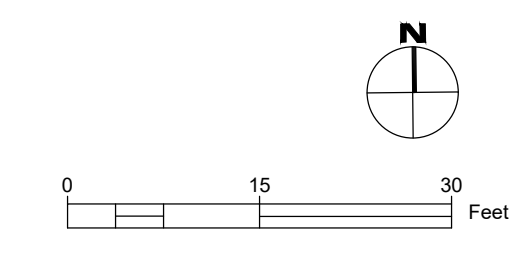
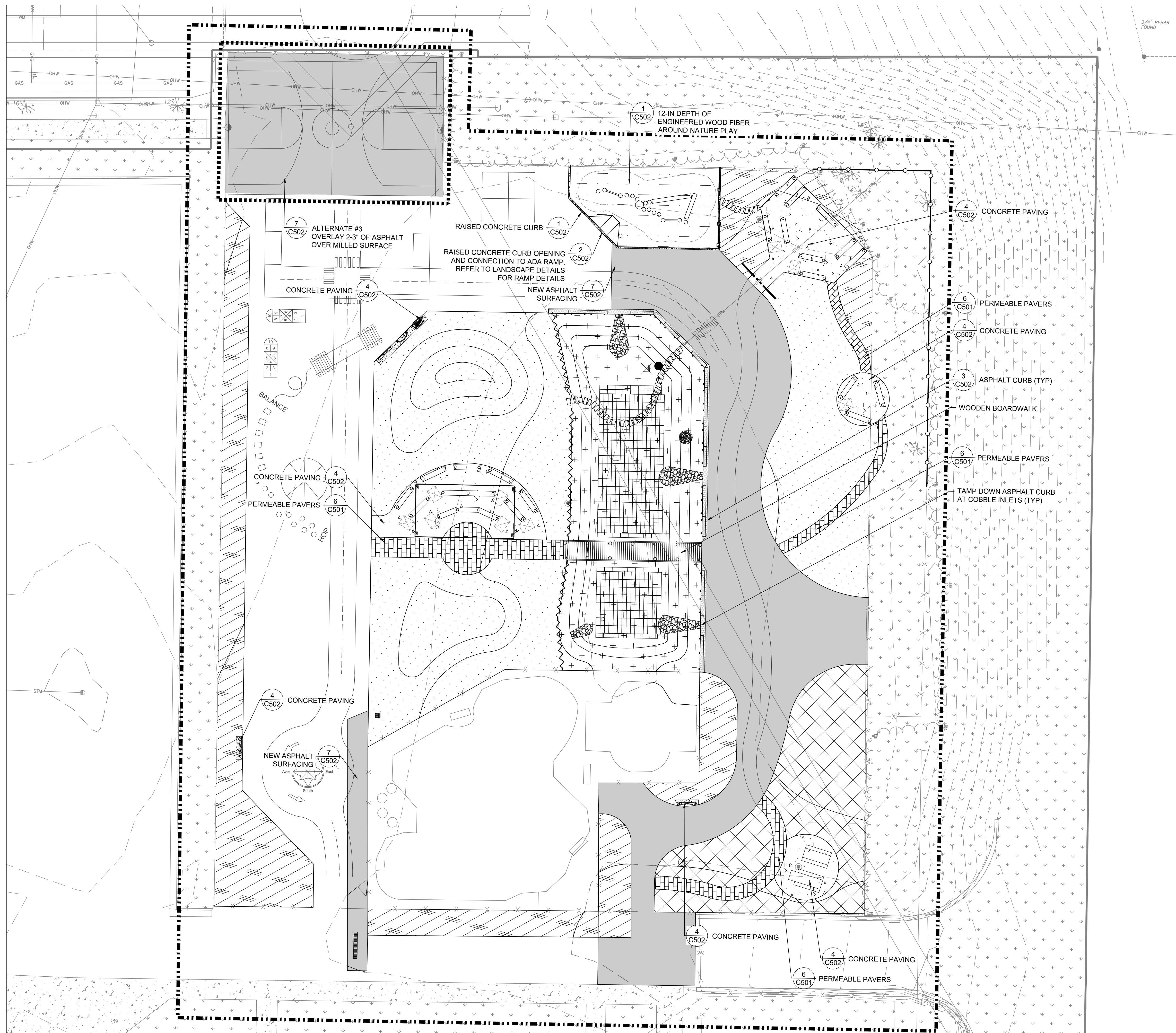
SHEET NAME: **STORM SEWER PLAN**
 PROJECT NAME: **2023 GREEN INFRASTRUCTURE UPGRADES**
 PROJECT ADDRESS: **FREDERICK J GAENSLER K-8 SCHOOL, 1250 E. BURLINGHAM STREET, MILWAUKEE, WI 53212**

ISSUED FOR:	REV:	DATE:
50% CD		11/14/2022
90% CD		12/22/2022
100% CD		1/23/2023

DRAWN BY: **EMP**
 REVIEWED BY: **KLK**
 APPROVED BY: **CBG**
 DATE: **January 2023**
 SEAL AND SIGNATURE

PROJECT NUMBER: 8176 (DIVISION 2)
 SITE NUMBER: 185
 SHEET: **C300**





LEGEND:

- PROPERTY BOUNDARY
- - - EXISTING MAJOR CONTOUR (5' INTERVAL)
- - - EXISTING MINOR CONTOUR (1' INTERVAL)
- PROPOSED MAJOR CONTOUR (5' INTERVAL)
- PROPOSED MINOR CONTOUR (1' INTERVAL)
- ▨ ASPHALT CURB
- ▩ CONCRETE CURB
- ⊙ BEEHIVE GRATE
- CLEANOUT
- STORM INLET
- PROPOSED STORM MANHOLE
- ▬ TRENCH DRAIN
- ▬▬▬ ALTERNATE/FUTURE WORK
- ▨ CONCRETE PAVING
- ▩ NEW ASPHALT SURFACE
- ▨ PLANTING AREA 1
- ▨ PLANTING AREA 2
- ▨ SOD
- ▨ BIOSWALE PLANTING
- ▨ 12" ENGINEERED WOOD FIBER
- ▨ PERMEABLE PAVERS
- ▬▬▬ LIMIT OF WORK

- GENERAL NOTES:**
1. CONTRACTOR IS TO REFER TO SHEET L300 FOR THE PLANTING PLAN.
 2. INSTALL TEMPORARY PROTECTIVE FENCING AROUND GREEN INFRASTRUCTURE (BIOSWALES AND NATIVE PLANTINGS) AS DIRECTED BY MPS OR ON-SITE ENGINEER FOR ESTABLISHMENT. TEMPORARY FENCING SHALL BE INSTALLED TO WITHSTAND A YEAR. WOODEN SNOW FENCE WITH HEAVY DUTY POSTS.
 3. REFER TO SHEET L200 FOR PAVEMENT MARKING DETAILS. PREPARE ASPHALT SURFACE PRIOR TO PAVEMENT MARKINGS. PRESSURE WASH, SWEEP, AND CRACKFILL.

STORMWATER SOLUTIONS ENGINEERING, LLC
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 MILWAUKEE, WI 53204
 PHONE: (414) 810-1245
 WWW.STORMWATER-SOLUTIONS-ENGINEERING.COM

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 1124 NORTH 11TH STREET
 MILWAUKEE, WI 53205-0259
 PHONE: 414-283-4600
 FAX: 414-283-4682

SHEET NAME: **PAVEMENT PLAN**
 PROJECT NAME: **2023 GREEN INFRASTRUCTURE UPGRADES**
 PROJECT ADDRESS: **FREDERICK J GAENSLER K-8 SCHOOL, 1250 E. BURLINGHAM STREET, MILWAUKEE, WI 53212**

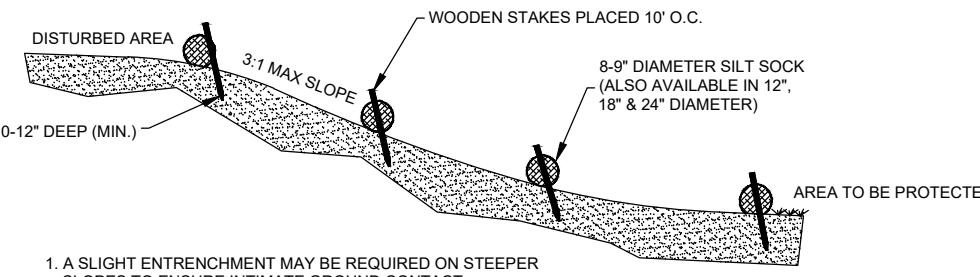
ISSUED FOR:	REV:	DATE:
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100% CD		1/23/2023

DRAWN BY: **EMP**
 REVIEWED BY: **KLK**
 APPROVED BY: **CBG**
 DATE: **January 2023**
 SEAL AND SIGNATURE

PROJECT NUMBER: 8176 (DIVISION 2)
 SITE NUMBER: 185
 SHEET: **C400**

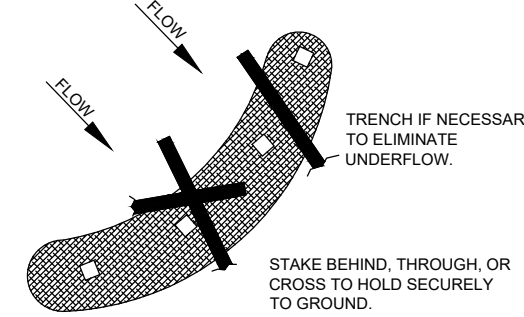


SLOPE INTERRUPTION



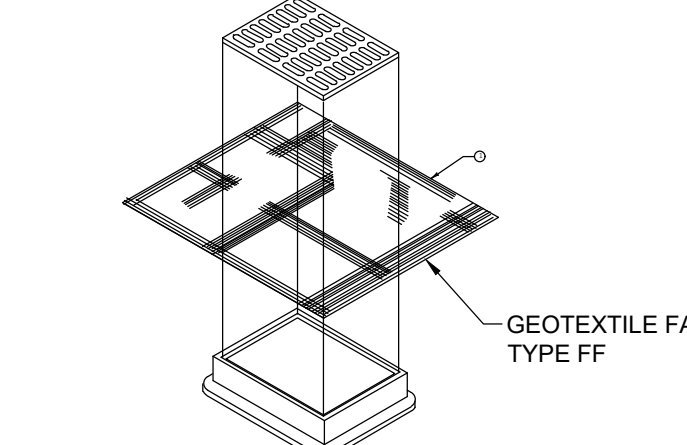
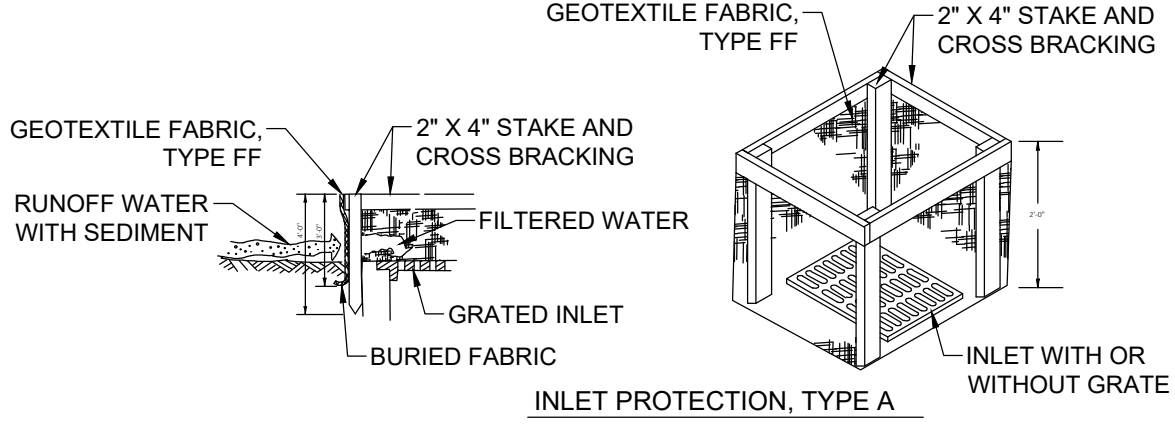
1. A SLIGHT ENTRENCHMENT MAY BE REQUIRED ON STEEPER SLOPES TO ENSURE INTIMATE GROUND CONTACT!
2. REMOVE SEDIMENT FROM THE UPSLOPE SIDE OF THE SILT SOCK WHEN ACCUMULATION HAS REACHED 1/2 OF EFFECTIVE HEIGHT OF SOCK.
3. LOOSE FILTER MEDIA MAY BE BACKFILLED ON THE UPSLOPE SIDE OF SOCK TO ENHANCE PERFORMANCE.
4. HARDWOOD STAKES 2"x2" (NOMINAL) ARE SUGGESTED.

DITCH CHECK



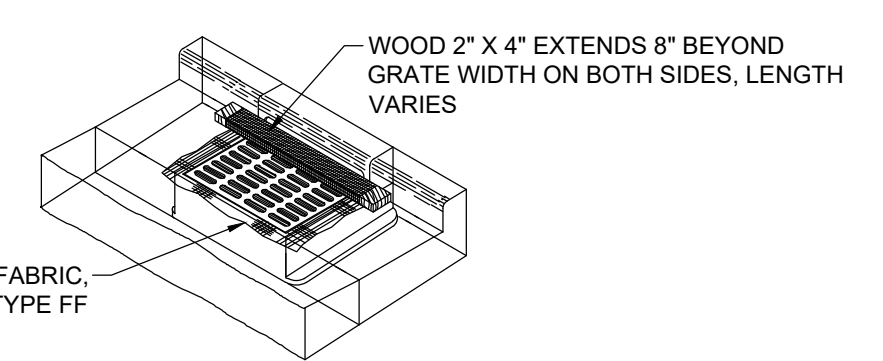
INSTALL SILT SOCK PERPENDICULAR TO FLOW WITH ENDS CURLED SLIGHTLY UPSTREAM TO PREVENT HIGH WATER FROM GOING AROUND THE ENDS. SLOW AND SPREAD WATER TO REDUCE CHANNELING AND EROSION.

NOTE: ATTACH GEOTEXTILE FABRIC, TYPE FF TO THE TOP OF STAKES AND CROSS BRACINGS.

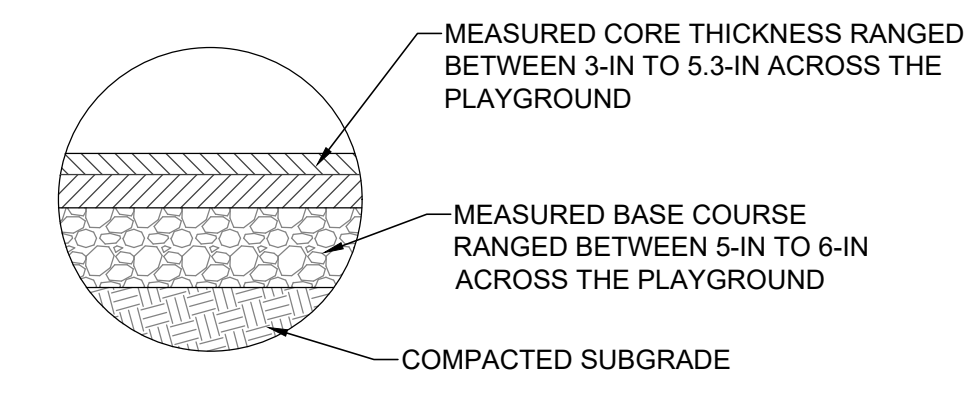


INLET PROTECTION, TYPE B (WITHOUT CURB BOX)
(CAN BE INSTALLED ON ANY INLET TYPE)

- INLET PROTECTION GENERAL NOTES:**
1. FABRIC SHALL BE REPLACED AT THE ENGINEERS DISCRETION.
 2. MANUFACTURED ALTERNATIVE APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED FOR THE INLET PROTECTION TYPE SPECIFIED.
 3. WHEN REMOVING OR MAINTAINING INLET PROTECT, CARE SHALL BE TAKEN SO THAT THE SEDIMENT RAPPED ON THE GEOTEXTILE FABRIC DOES FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.
 4. FABRIC SIZE SHALL BE 8" (MIN) OR GREATER ON ALL SIDE OF THE INLET COVER TO PROVIDE A HAND HOLD WHEN MAINTENANCE OR REMOVAL IS REQUIRED.
 5. FOR INLET PROTECTION, TYPE C, WITH A CURB BOX, AN ADDITIONAL 18" OF BARRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX.

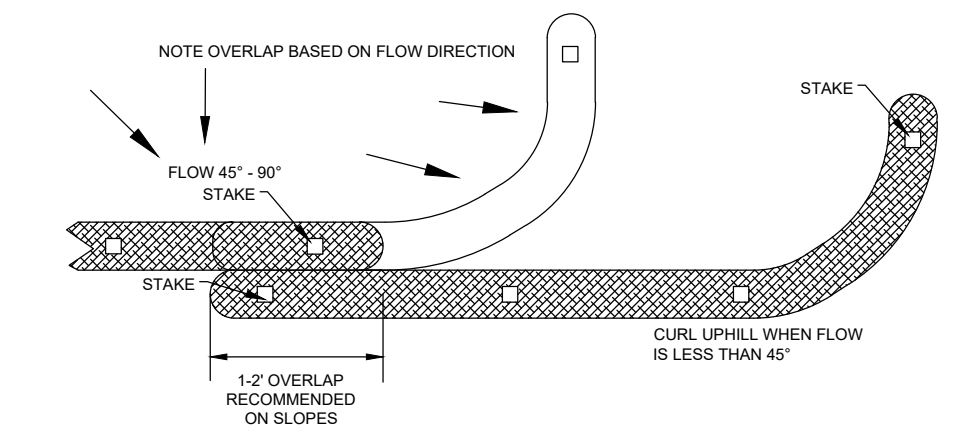


INLET PROTECTION, TYPE C (WITH CURB BOX)

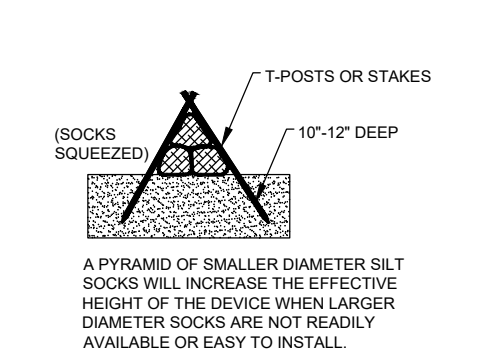


3 ASSUMED EXISTING ASPHALT AND BASE DEPTH
NTS

PERIMETER CONTROL & OVERLAPPING

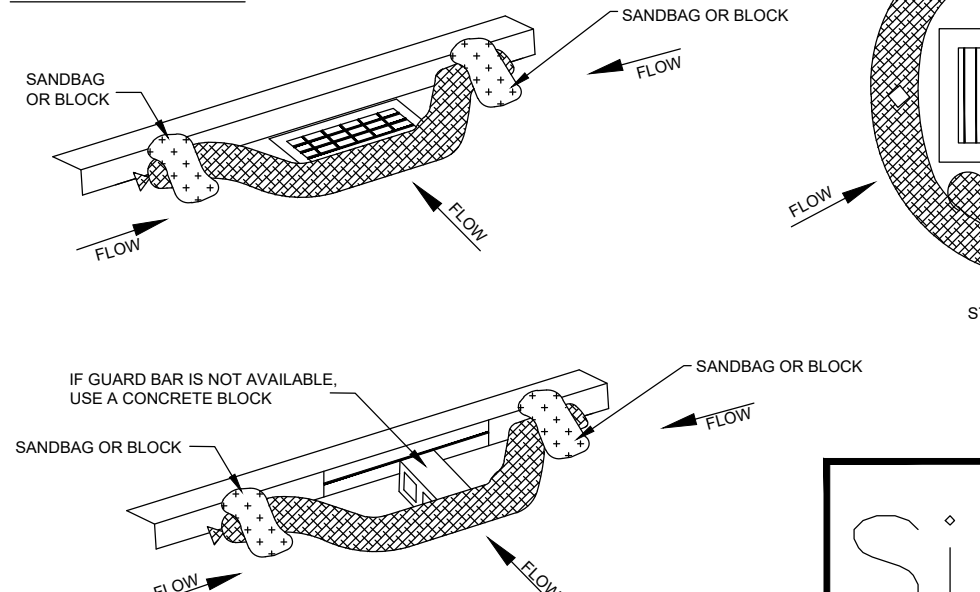


PYRAMID INSTALLATION STAKING



A PYRAMID OF SMALLER DIAMETER SILT SOCKS WILL INCREASE THE EFFECTIVE HEIGHT OF THE DEVICE WHEN LARGER DIAMETER SOCKS ARE NOT READILY AVAILABLE OR EASY TO INSTALL.

INLET PROTECTION



1. THESE GUIDELINES ARE BASED UPON MANUFACTURERS RECOMMENDATIONS. PROJECT SPECIFICATIONS MAY SUPERSEDE THESE GUIDELINES.
2. REFER TO REGULATORY AUTHORITY OR PROJECT ENGINEER FOR DETAILED INSTALLATION PROCEDURES.
3. WOOD FILLER MATERIAL IS PROPERLY SIZED, BIODEGRADABLE, WEED, SEED & DISEASE FREE AND ENVIRONMENTALLY SOUND.

Silt Sock

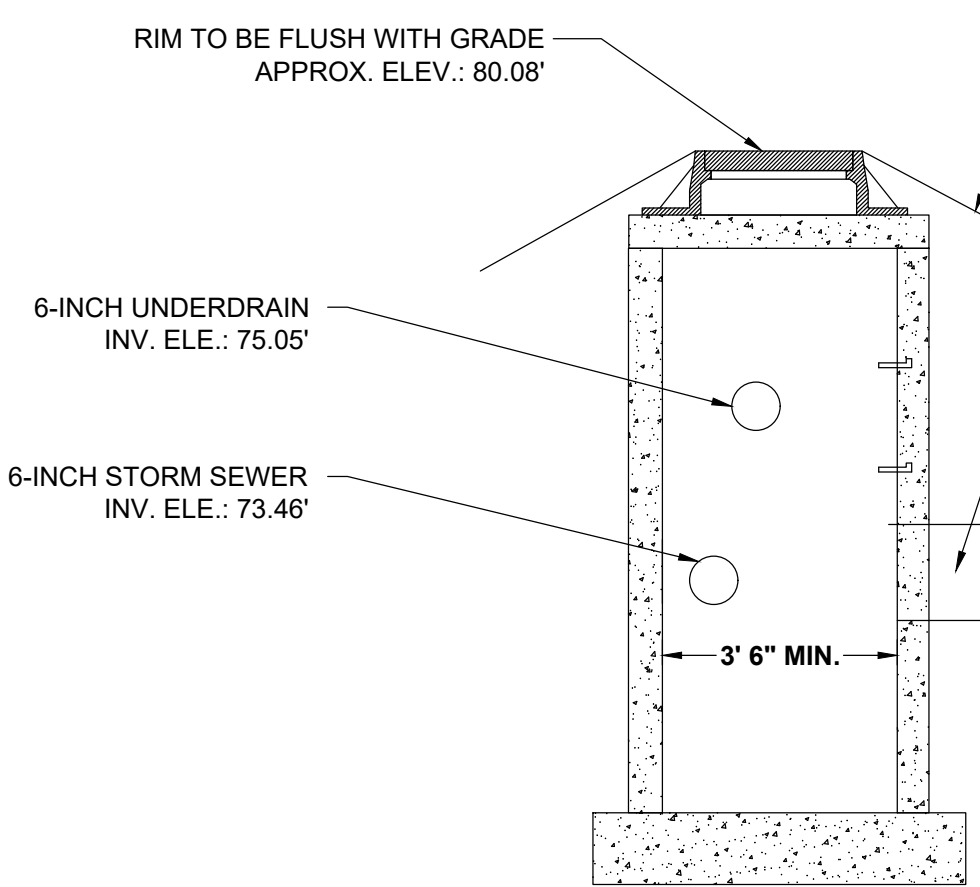
EROSION CONTROL PRODUCTS

(608) 438-7625
WWW.SILT SOCK.NET

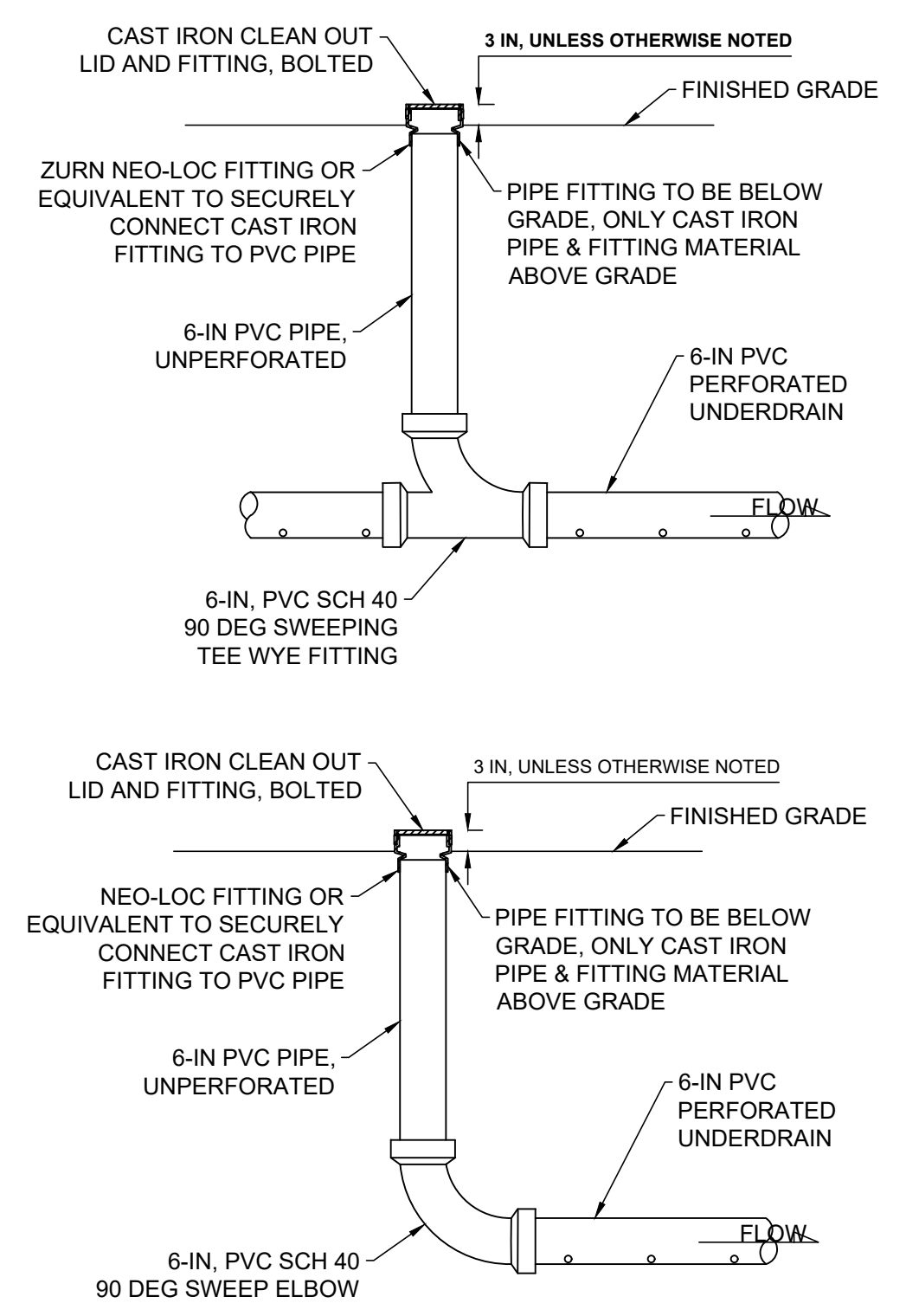
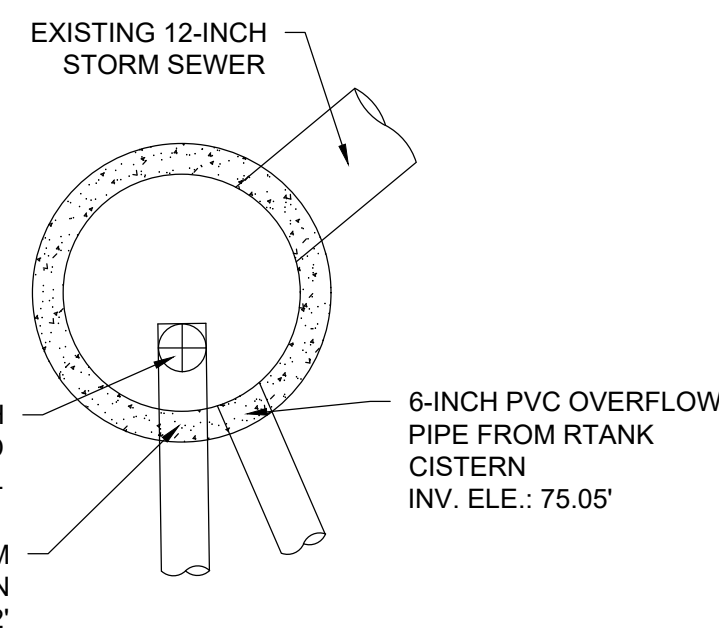
1 SILT SOCK
NTS

2 INLET PROTECTION DETAIL
NTS

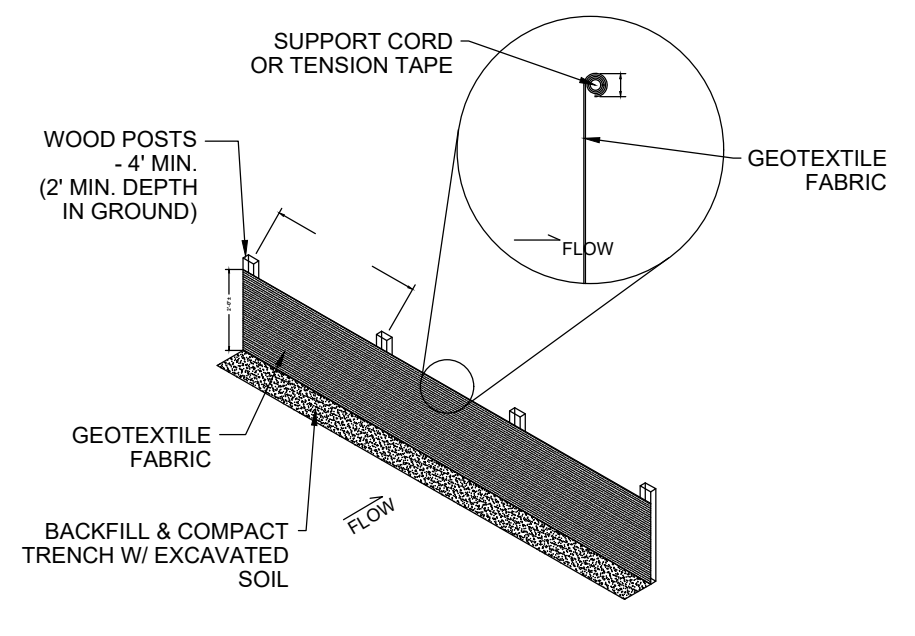
4 BIOSWALE EROSION CONTROL MATTING INSTALLATION DETAIL
NTS



5 PROPOSED CATCH BASIN
NTS

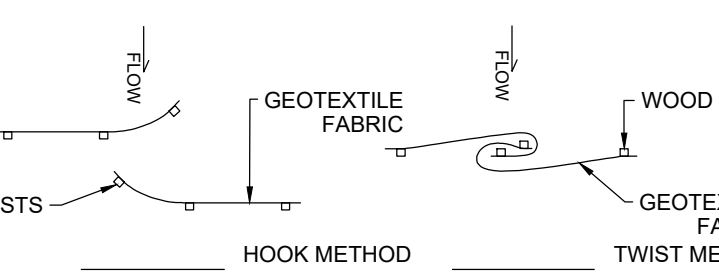
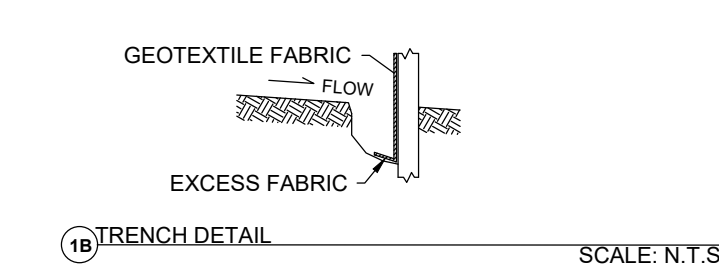
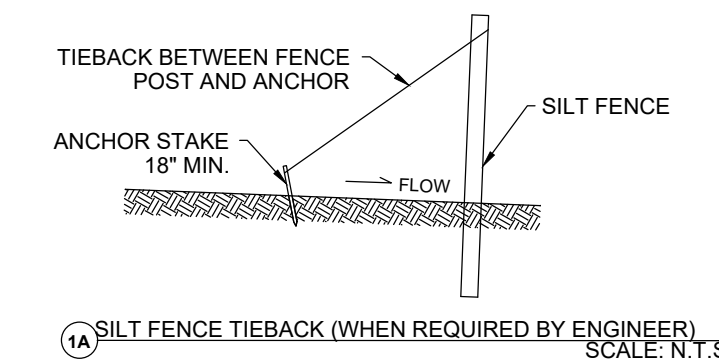


6 CLEANOUT (TYPICAL)
NTS



- SILT FENCE NOTES:**
1. ADDITIONAL POST DEPTH OR TIEBACKS MAY BE REQUIRED IN UNSTABLE SOILS.
 2. 8' POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.
 3. HORIZONTAL BRACE REQUIRED WITH 2"x4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
 4. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
 5. WOOD POSTS SHALL BE A MINIMUM OF 1 1/2" x 1 1/2" OF OAK OR HICKORY.
 6. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
 7. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS: A.) OVERLAP THE END POSTS AND TWIST OR ROTATE AT LEAST 180 DEGREES. B.) HOOK THE END OF EACH SILT FENCE LENGTH.

7 SILT FENCE
NTS



1C JOINING OF TWO LENGTHS OF SILT FENCE SCALE: N.T.S.

SHEET NAME:	DETAILS
PROJECT NAME:	2023 GREEN INFRASTRUCTURE UPGRADES
PROJECT ADDRESS:	FREDERICK J GAENSLER K-8 SCHOOL 1250 E. BURLINGHAM STREET, MILWAUKEE, WI 53212

ISSUED FOR:	REV:	DATE:
50% CD		11/14/2022
90% CD		12/22/2022
100% CD		1/23/2023

DRAWN BY:	EMP
REVIEWED BY:	KLK
APPROVED BY:	CBG
DATE:	January 2023

SEAL AND SIGNATURE	

PROJECT NUMBER:	8176 (DIVISION 2)
SITE NUMBER:	185

SHEET:	C500
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ISSUED FOR:	REV:	DATE:
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90% CD		12/22/2022
100% CD		1/23/2023

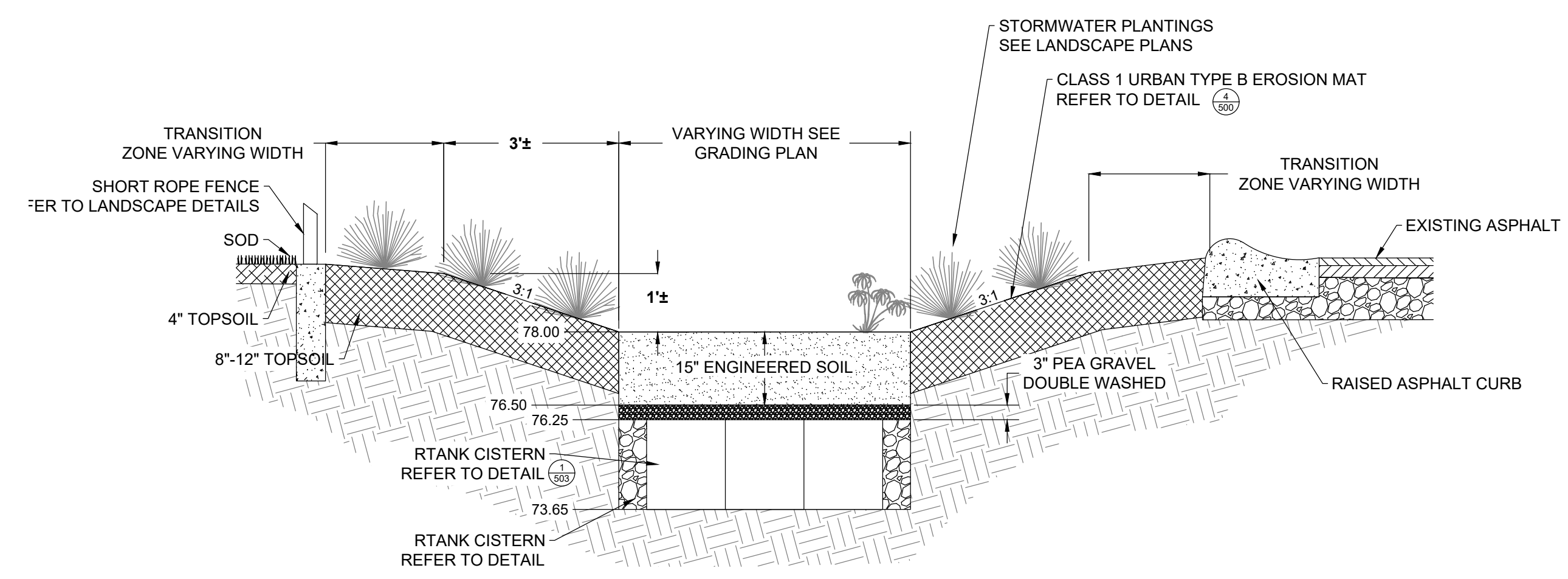
DRAWN BY:	EMP
REVIEWED BY:	KLK
APPROVED BY:	CBG
DATE:	January 2023

SEAL AND SIGNATURE

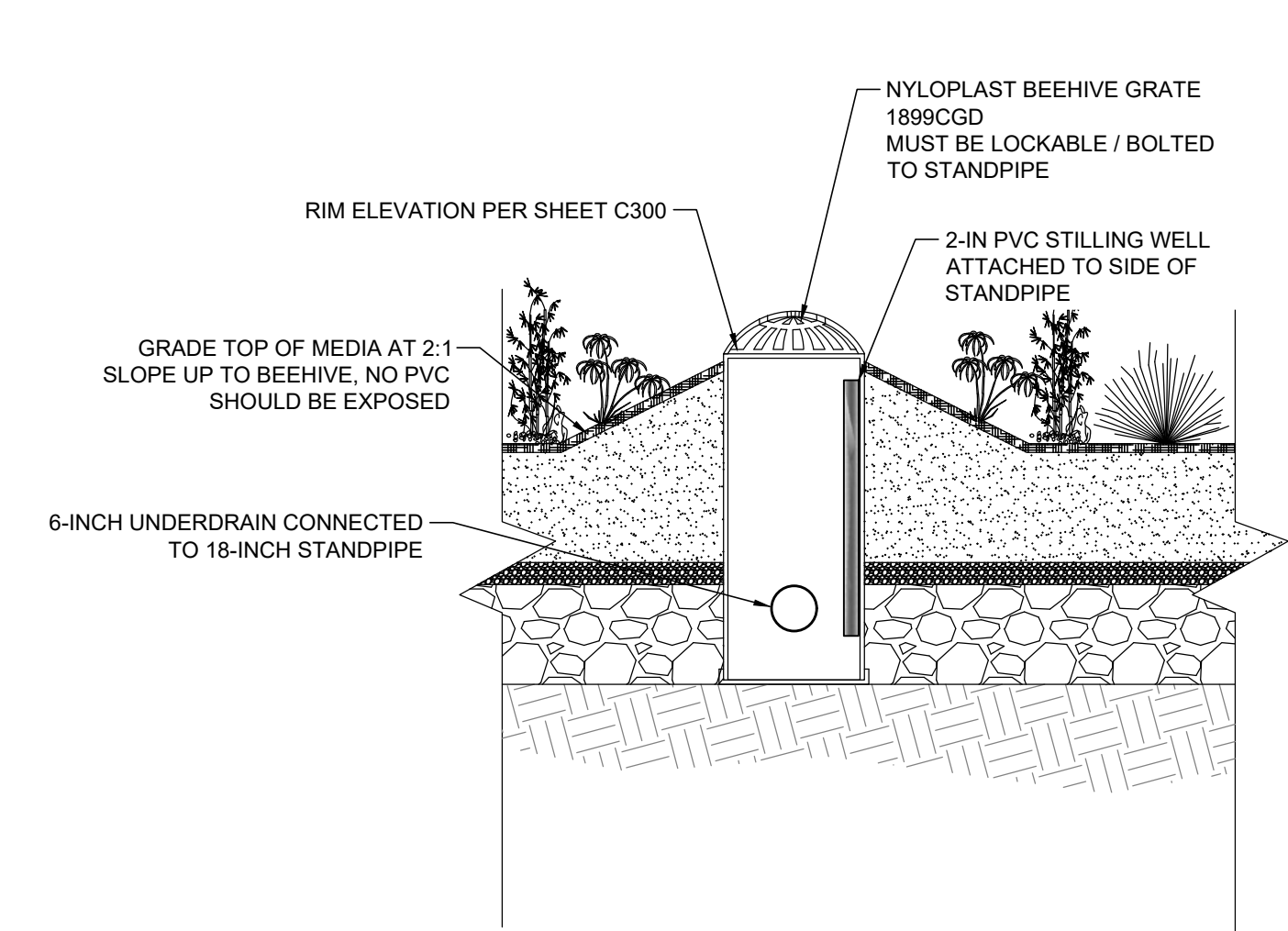
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SITE NUMBER: 185

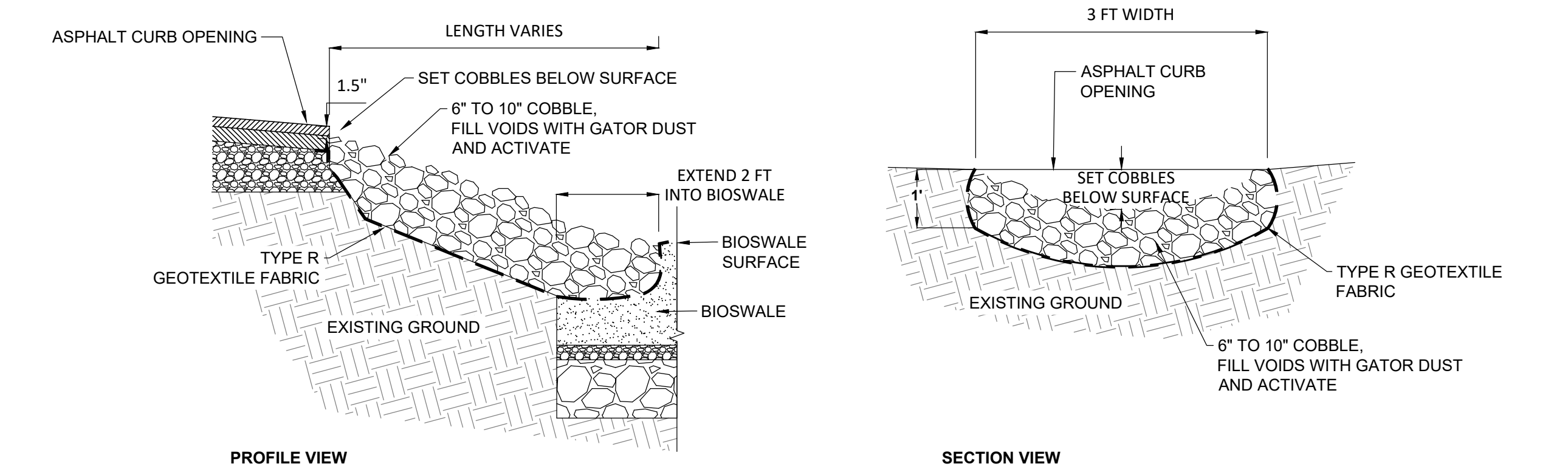
SHEET:
C501



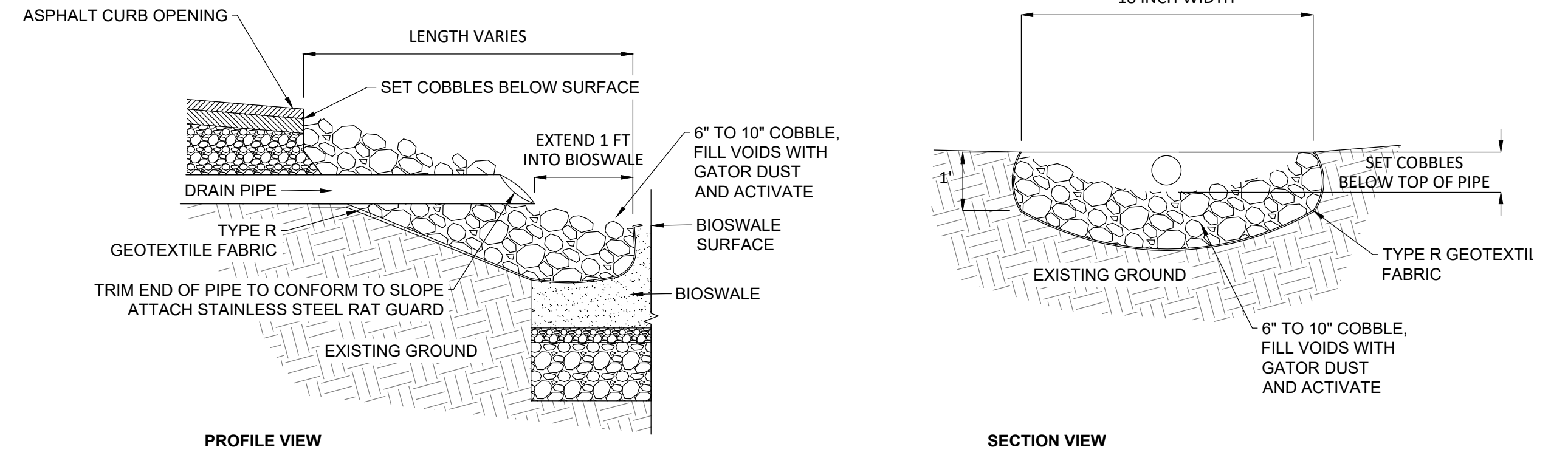
1 BIOSWALE
NTS



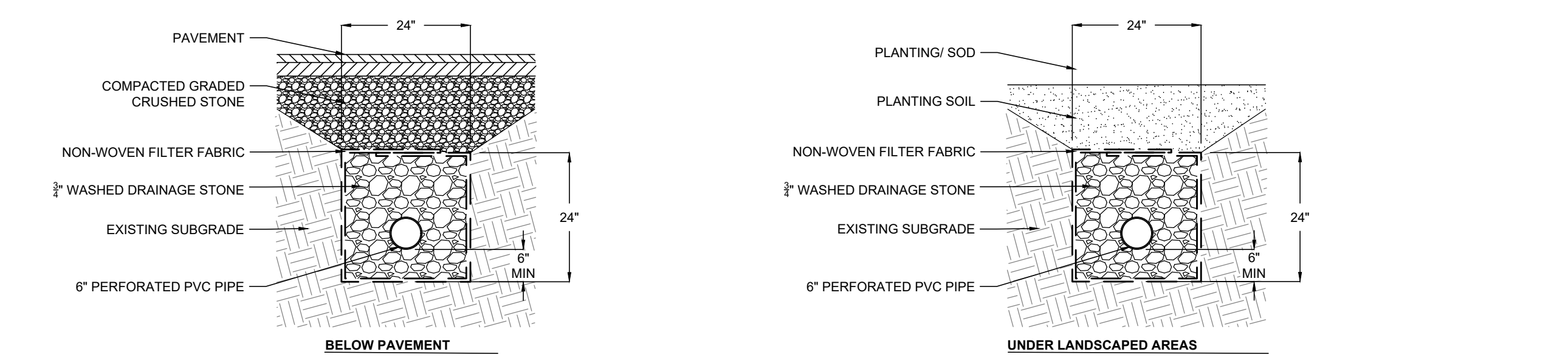
2 18-IN BIOSWALE STANDPIPE OVERFLOW
NTS



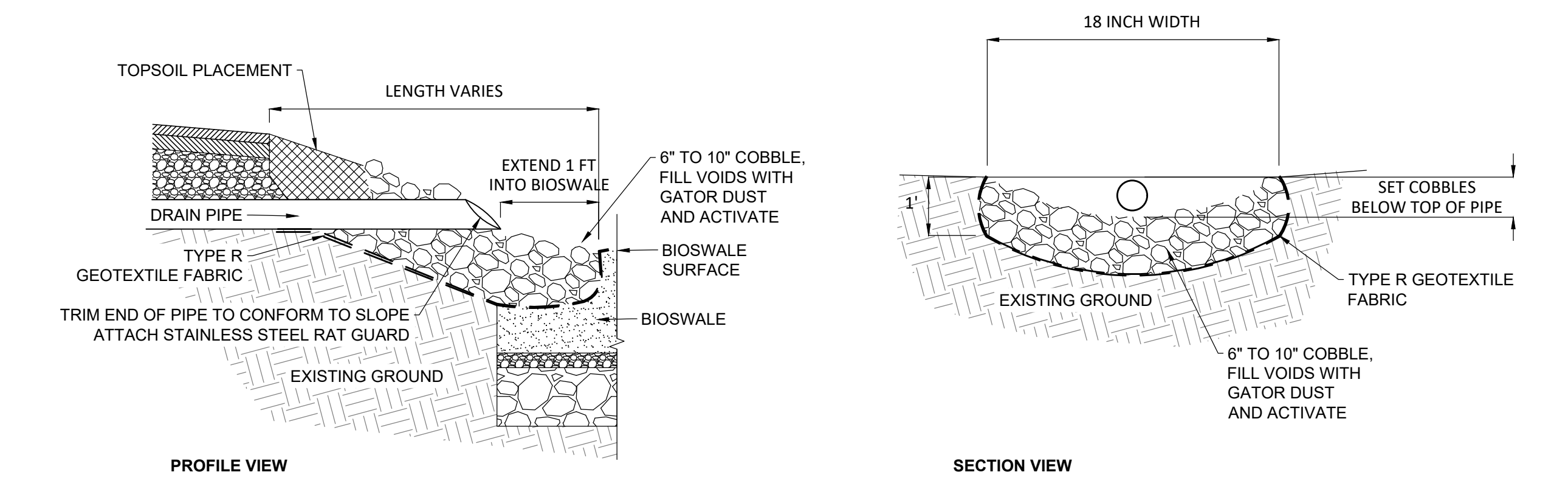
3 COBBLE CHANNEL INLET
NTS



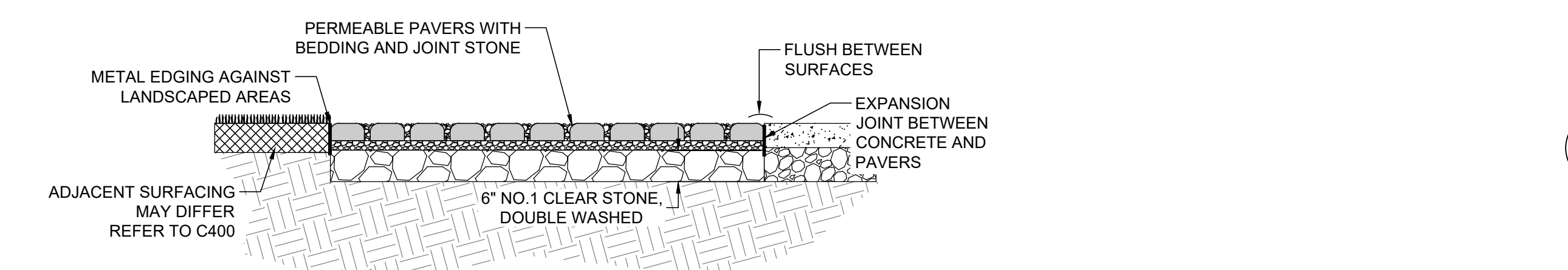
4 COBBLE DRAIN INLET WITH CHANNEL INLET
NTS



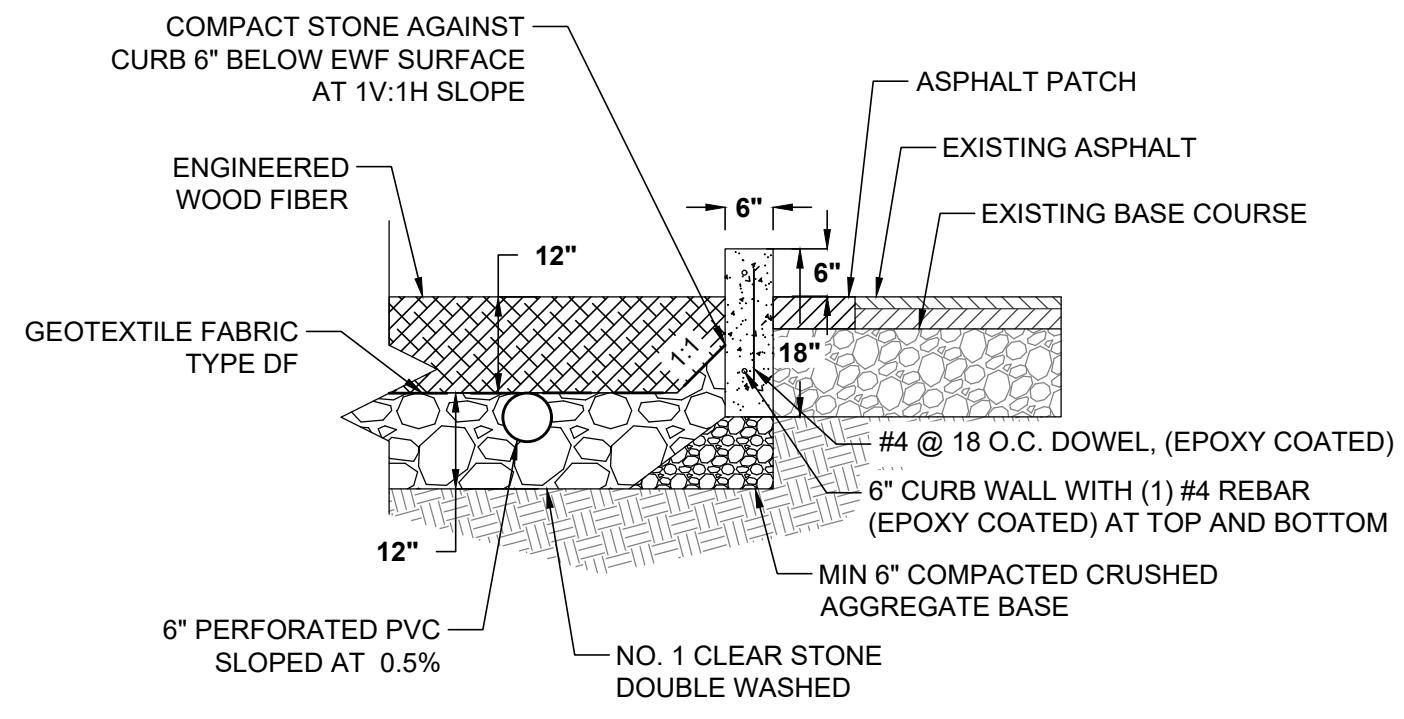
5 UNDERDRAIN AND STORM SEWER TRENCH
NTS



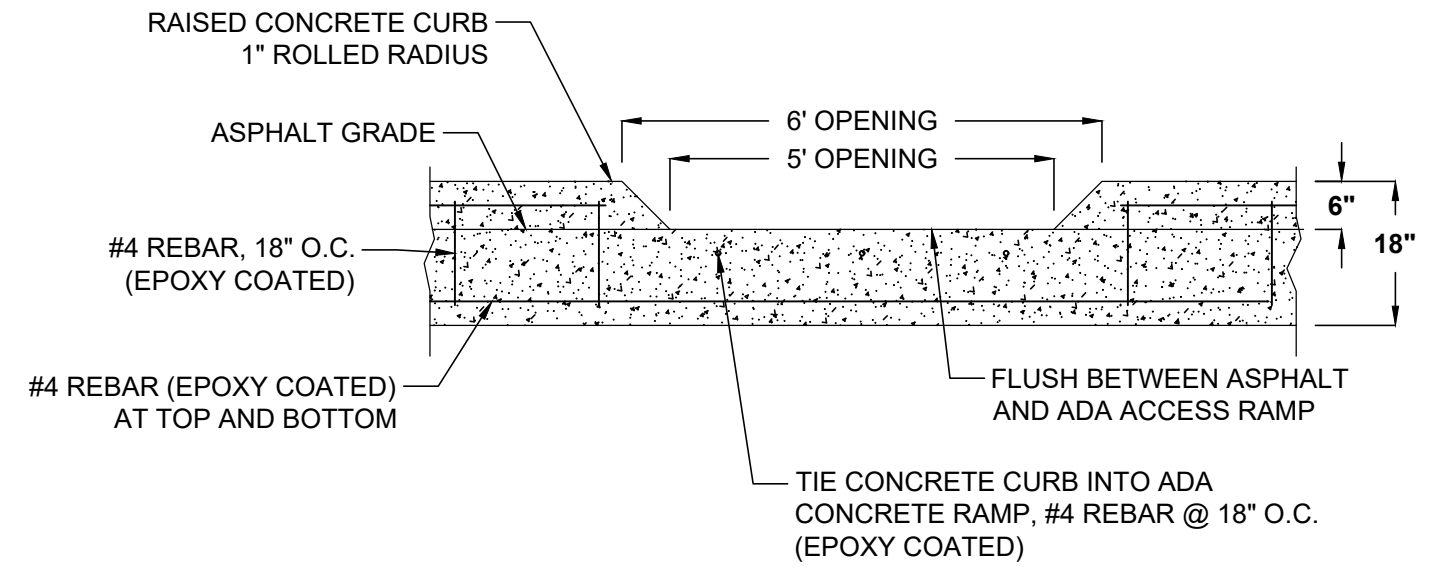
7 COBBLE DRAIN INLET
NTS



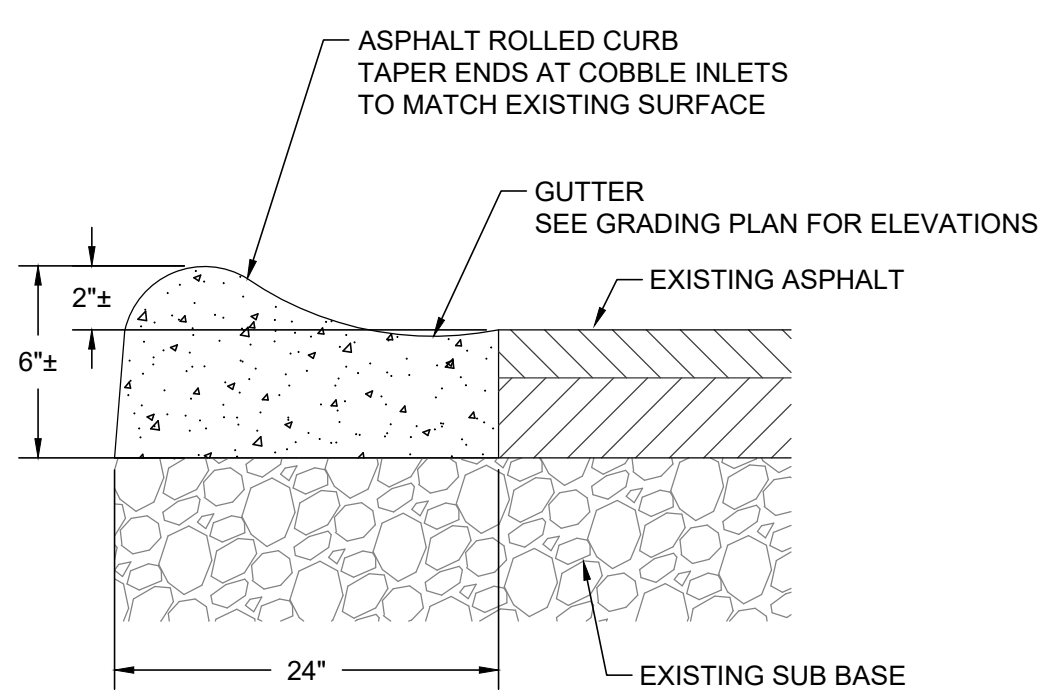
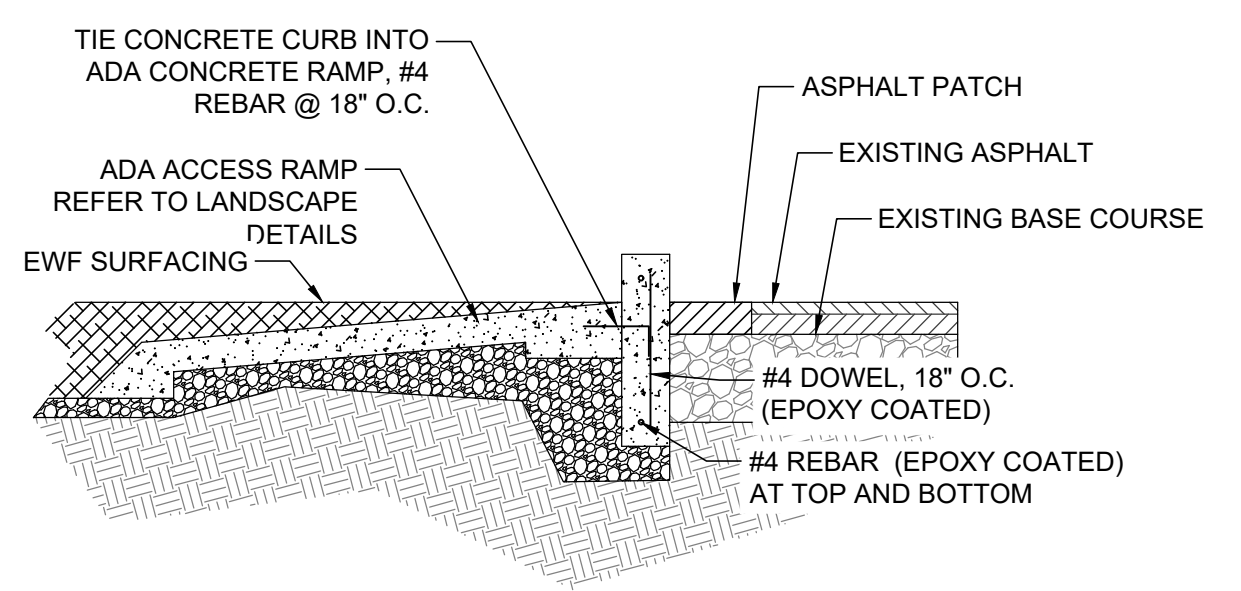
6 PERMEABLE PAVER SURFACE WITH NO STORAGE
NTS



1 RAISED CONCRETE CURB AND ENGINEERED WOOD FIBER
 NTS

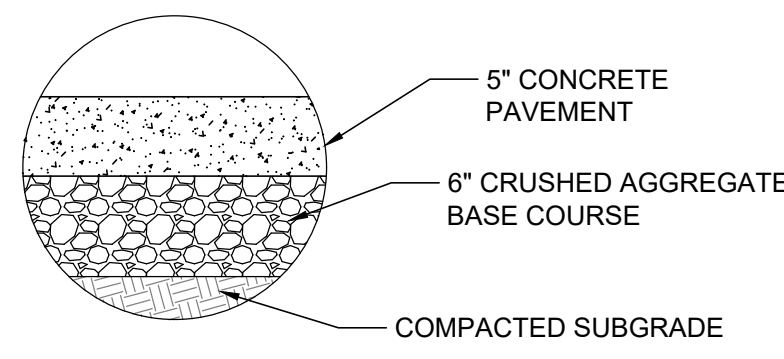


2 RAISED CONCRETE CURB OPENING AND CONNECTION TO ADA ACCESS RAMP
 NTS

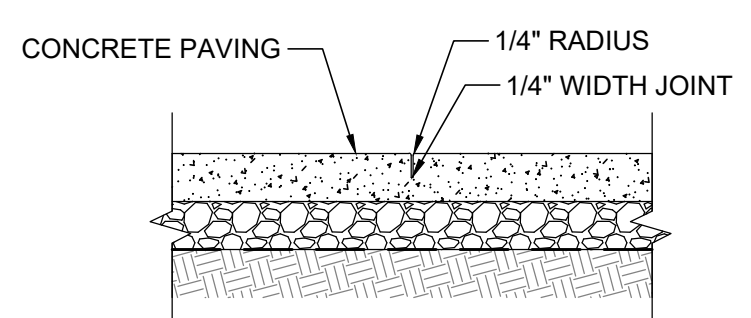


- NOTES:**
1. THE FUNCTION OF THE ASPHALT CURB IS TO CONVEY WATER TO COBBLE INLETS.
 2. ASPHALT CURBS CAN BE FULL DEPTH NEW PATCHES OF ASPHALT, OR CONSTRUCTED BY MILLING AND OVERLAYING A NEW TOP SURFACE. CONSULT WITH ENGINEER PRIOR TO CONSTRUCTION.
 3. WHEN INSTALLING A FULL DEPTH NEW PATCH, COMPACT SUBBASE MATERIAL PRIOR TO PLACEMENT OF ASPHALT PATCH.
 4. GUTTER SLOPE TO COBBLE INLETS SHALL BE UNIFORM.
 5. WHEN CONSTRUCTING THE ASPHALT CURB WITH A LOG BORDER, COORDINATE THE ASPHALT PATCH WORK WITH THE INSTALLATION OF THE HORIZONTAL LOGS TO ENSURE 50% LOG TO ASPHALT CONTACT.
 6. REFER TO LANDSCAPE DETAILS FOR THE INSTALLATION OF THE HORIZONTAL LOG BORDER.

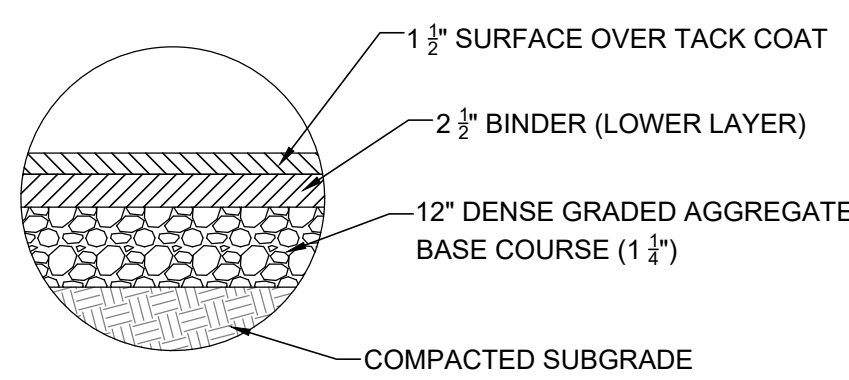
3 ASPHALT CURB WITH LOG BORDER
 NTS



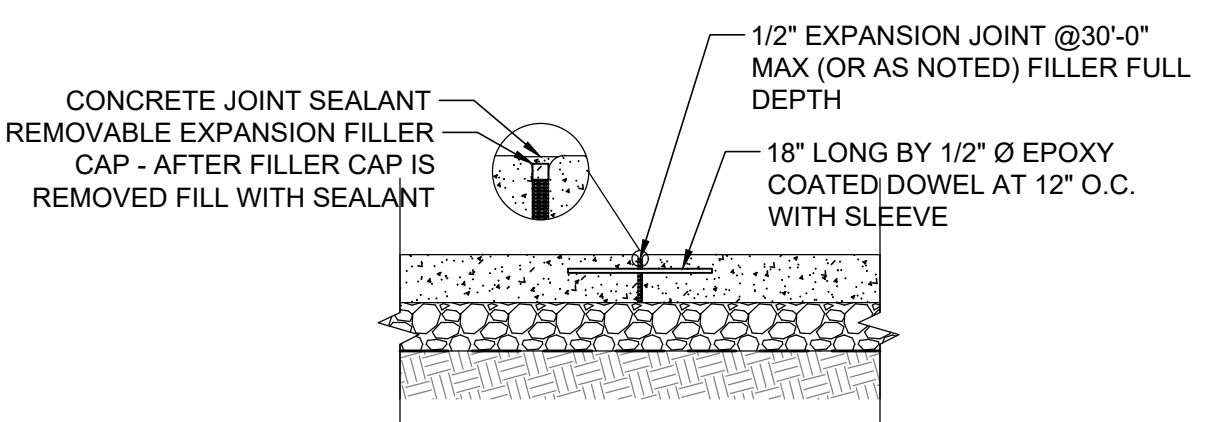
4 CONCRETE PAVING
 NTS



6 CONCRETE TOOLED CONTROL JOINT
 NTS



7 ASPHALT PAVING
 NTS



8 CONCRETE EXPANSION JOINT
 NTS

SHEET NAME: DETAILS	PROJECT NAME: 2023 GREEN INFRASTRUCTURE UPGRADES	PROJECT ADDRESS: FREDERICK J GAENSLER K-8 SCHOOL 1250 E. BURLLEIGH STREET, MILWAUKEE, WI 53212
	ISSUED FOR: 50% CD 90% CD 100% CD	REV: _____ _____ _____
DRAWN BY: EMP		REVIEWED BY: KLK
APPROVED BY: CBG		DATE: January 2023
SEAL AND SIGNATURE		
PROJECT NUMBER: 8176 (DIVISION 2)		
SITE NUMBER: 185		
SHEET: C502		

SHEET NAME: DETAILS		
PROJECT NAME: 2023 GREEN INFRASTRUCTURE UPGRADES		
ISSUED FOR:	REV:	DATE:
50% CD		11/14/2022
90% CD		12/22/2022
100% CD		1/23/2023
DRAWN BY: EMP		
REVIEWED BY: KLK		
APPROVED BY: CBG		
DATE: January 2023		
SEAL AND SIGNATURE		

NOTES:

- FOR COMPLETE MODULE DATA, SEE APPROPRIATE R-TANK^{HD} SHEET.
- PRE-TREATMENT STRUCTURES NOT SHOWN.
- FOR INFILTRATION APPLICATIONS, GEOTEXTILE ENVELOPING R-TANK SHALL BE ACF M200 (PER SPEC SECTION 2.02A) AND BASE SHALL BE 4" MIN. UNCOMPACTED FREE DRAINING BACKFILL (SPEC SECTION 2.03A) TO PROVIDE A LEVEL BASE. SURFACE MUST BE SMOOTH, FREE OF LUMPS OR DEBRIS, AND EXTEND 2' BEYOND R-TANK^{HD} FOOTPRINT.

MODULE DATA

GEOMETRY:
 LENGTH = 28.15 IN. (715 MM)
 WIDTH = 15.75 IN. (400 MM)
 HEIGHT = 17.32 IN. (440 MM)
 TANK VOLUME = 4.44 CF
 STORAGE VOLUME = 4.22 CF
 VOID INTERNAL VOLUME: 95%
 VOID SURFACE AREA: 90%

LOAD RATING:
 33.4 PSI (MODULE ONLY)
 HS20H25-2 SEE SPEC FOR COVER REQUIREMENTS
MATERIAL:
 100% RECYCLED POLYPROPYLENE
 SMALL PLATES REQUIRED: 5/MODULE

R-TANK^{HD} TYPICAL TANK INLET/OUTLET W/ GEOTEXTILE PIPE BOOT DETAIL

NOTES:

- FOLLOWING PLACEMENT OF SIDE BACKFILL, A UNIFORM 12" LIFT OF THE FREELY DRAINING MATERIAL (SPEC SECTION 2.03 B2) SHALL BE PLACED OVER THE R-TANK AND LIGHTLY COMPACTED USING A WALK-BEHIND TRENCH ROLLER. ALTERNATELY, A ROLLER (MAXIMUM GROSS VEHICLE WEIGHT OF 6 TONS) MAY BE USED. ROLLER MUST REMAIN IN STATIC MODE UNTIL A MINIMUM OF 24" OF COVER HAS BEEN PLACED OVER THE MODULES. SHEEP FOOT ROLLERS SHOULD NOT BE USED. SPEC SECTION 3.05 A5
- ONLY LOW PRESSURE TIRE OR TRACK VEHICLES (LESS THAN 7 PSI AND OPERATING WEIGHT OF LESS THAN 20,000 LBS) SHALL BE OPERATED OVER THE R-TANK SYSTEM DURING CONSTRUCTION. SPEC SECTION 3.05 A5
- DUMP TRUCKS AND PANS SHALL NOT BE OPERATED WITHIN THE R-TANK SYSTEM AT ANY TIME. WHEN NECESSARY, THE HEAVY EQUIPMENT SHOULD UNLOAD IN AN AREA ADJACENT TO THE R-TANK SYSTEM AND THE MATERIAL SHOULD BE MOVED OVER THE SYSTEM WITH TRACKED EQUIPMENT. SPEC SECTION 3.05 A5
- ENSURE THAT ALL UNRELATED CONSTRUCTION TRAFFIC IS KEPT AWAY FROM THE LIMITS OF EXCAVATION UNTIL THE PROJECT IS COMPLETE AND FINAL SURFACE MATERIALS ARE IN PLACE. NO NON-INSTALLATION RELATED LOADING SHOULD BE ALLOWED OVER THE R-TANK SYSTEM UNTIL THE FINAL DESIGN SECTION HAS BEEN CONSTRUCTED (INCLUDING PAVEMENT). SPEC SECTION 3.05 B
- SEE R-TANK INSTALLATION GUIDE OR CONTACT YOUR LOCAL FERGUSON REPRESENTATIVE FOR ADDITIONAL INFORMATION.

NOTES:

- FOR COMPLETE MODULE DATA, SEE APPROPRIATE R-TANK^{HD} SHEET.
- PRE-TREATMENT STRUCTURES NOT SHOWN.
- FOR INFILTRATION APPLICATIONS, GEOTEXTILE ENVELOPING R-TANK SHALL BE ACF M200 (PER SPEC SECTION 2.02A) AND BASE SHALL BE 4" MIN. UNCOMPACTED FREE DRAINING BACKFILL (SPEC SECTION 2.03A) TO PROVIDE A LEVEL BASE. SURFACE MUST BE SMOOTH, FREE OF LUMPS OR DEBRIS, AND EXTEND 2' BEYOND R-TANK^{HD} FOOTPRINT.

MODULE DATA

GEOMETRY:
 LENGTH = 28.15 IN. (715 MM)
 WIDTH = 15.75 IN. (400 MM)
 HEIGHT = 17.32 IN. (440 MM)
 TANK VOLUME = 4.44 CF
 STORAGE VOLUME = 4.22 CF
 VOID INTERNAL VOLUME: 95%
 VOID SURFACE AREA: 90%

LOAD RATING:
 33.4 PSI (MODULE ONLY)
 HS20H25-2 SEE SPEC FOR COVER REQUIREMENTS
MATERIAL:
 100% RECYCLED POLYPROPYLENE
 SMALL PLATES REQUIRED: 5/MODULE

R-TANK^{HD} TYPICAL TANK INLET/OUTLET W/ GEOTEXTILE PIPE BOOT DETAIL

NOTES:

- FOR COMPLETE MODULE DATA, SEE APPROPRIATE R-TANK^{HD} SHEET.
- PRE-TREATMENT STRUCTURES NOT SHOWN.
- FOR INFILTRATION APPLICATIONS, GEOTEXTILE ENVELOPING R-TANK SHALL BE ACF M200 (PER SPEC SECTION 2.02A) AND BASE SHALL BE 4" MIN. UNCOMPACTED FREE DRAINING BACKFILL (SPEC SECTION 2.03A) TO PROVIDE A LEVEL BASE. SURFACE MUST BE SMOOTH, FREE OF LUMPS OR DEBRIS, AND EXTEND 2' BEYOND R-TANK^{HD} FOOTPRINT.

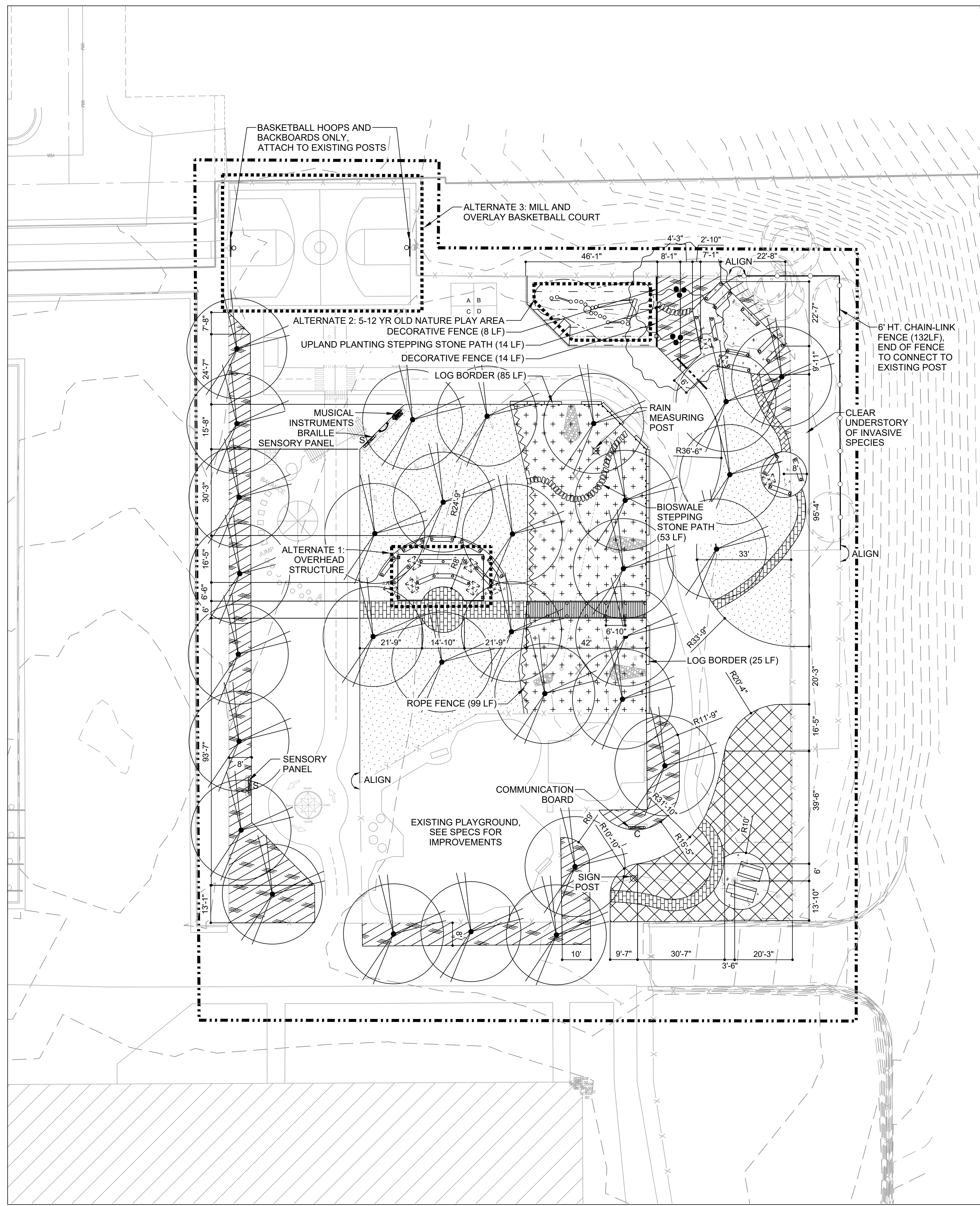
NOTES:

- THIS PORT IS USED TO PUMP WATER INTO THE SYSTEM AND RE-SUSPENDS ACCUMULATED SEDIMENT SO THAT IT MAY BE PUMPED OUT.
- MINIMUM REQUIRED MAINTENANCE INCLUDES A QUARTERLY INSPECTION DURING THE FIRST YEAR OF OPERATION AND A YEARLY INSPECTION THEREAFTER. FLUSH AS NEEDED.
- R-TANK^{HD}, R-TANK^{HD}, R-TANK^{HD} AND R-TANK^{HD} MAY BE USED IN TRAFFIC APPLICATIONS.
- SEE TRAFFIC LOADING DETAIL FOR MINIMUM & MAXIMUM COVER REQUIREMENTS.
- IF MAINTENANCE PORT IS LOCATED IN A NON-TRAFFIC AREA, A PLASTIC CAP CAN BE USED IN LIEU OF A FRAME AND COVER WITH CONCRETE COLLAR.

R-TANK^{HD} TYPICAL MAINTENANCE PORT

NOTES:

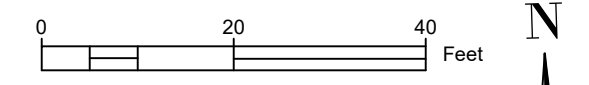
- COVER BACKFILL MATERIAL MAY BE EITHER STONE OR SAND (SPEC SECTION 2.03 B1) OR A BLEND OF AASHTO #57 STONE WITH 30-40% (BY VOLUME) TOPSOIL TO AID IN ESTABLISHING VEGETATION (SPEC SECTION 2.03 B2).



MATERIALS LEGEND

- EQUIPMENT USE ZONE - EXTEND A MIN. 6' OF IMPACT SURFACING BEYOND EDGE OF PLAY EQUIPMENT. SEE SPECS
- DECORATIVE FENCE (3 L401)
- CHAIN-LINK FENCE AS SPECIFIED (2 L401)
- ROPE FENCE (4 L401)
- ENTRY ARCH (4 L401)
- PROPOSED TREE SEE PLANTING PLAN
- PROPOSED MULTI-STEMMED TREE SEE PLANTING PLAN
- EXISTING TREE
- ▨ PLANTING AREA 1 - LAWN / MICROCOVER SEE PLANTING PLAN
- ▩ PLANTING AREA 2 - URBAN UPLANDS SEE PLANTING PLAN
- 12" ENGINEERED WOOD FIBER SURFACE SEE CIVIL PLANS
- LAWN SEE PLANTING PLAN
- + BIOSWALE PLANTING SEE PLANTING PLAN
- ▨ PERMEABLE PAVERS SURFACE SEE CIVIL PLANS
- ▩ CONCRETE PAVING SEE CIVIL PLANS
- ⊗ RAIN MEASURING POST (4 L400)
- ⊗ SIGN POST (5 L401)
- C COMMUNICATION BOARD SEE SPECS
- ♫ MUSICAL INSTRUMENTS (TYP OF 2) SEE SPECS
- S SENSORY PANEL (TYP OF 2) SEE SPECS
- ♯ ADA COMPANION SEATING 36"x48" CLEAR SPACE
- ▨ PICNIC TABLE & ADA PICNIC TABLE (TYP OF 2) AS SPECIFIED
- ▨ LOG BORDER (5 L400)
- STEPPING STONE PATH AT BIOSWALE AND UPLAND PLANTING AREAS (8 L400, 2 L501)
- WOOD BENCHES (1-3 L400)
- ▨ CONCRETE ADA RAMP (1 L401)
- ▨ BOARDWALK (1-2 L405)
- ▨ NATURE PLAYGROUND - LOG CLIMBERS ARE COMPOSED OF BLACK LOCUST (ROBINIA) LOGS AND STRUCTURAL SUPPORTS AS NEEDED. LOGS MUST BE INSTALLED IN A STABLE POSITION FULLY SUPPORTING IT'S OWN WEIGHT. CONTRACTOR HAS FLEXIBILITY IN INSTALLATION METHODS AS LONG AS IT MEETS SAFETY REGULATIONS AND PROJECT SPECIFICATIONS. PLAY COMPONENTS MUST MEET ASTM AND CSPC SAFETY GUIDELINES. ALL SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- ▨ OVERHEAD STRUCTURE (L403, L404)
- BASKETBALL HOOP (TYP OF 2) SEE SPECS

NOTES:
 FOR ADDITIONAL LAYOUT INFORMATION A CAD BASE (.DWG FILE) CAN BE PROVIDED TO THE CONTRACTOR UPON REQUEST



STORMWATER SOLUTIONS ENGINEERING, LLC
 247 W. FRESHWATER WAY, SUITE 410
 MILWAUKEE, WI 53204
 PHONE: (414) 810-1245
 WWW.STORMWATER-SOLUTIONS-ENGINEERING.COM

Learning Landscapes
 LEARNING LANDSCAPES DESIGN, LLC

MPS MILWAUKEE PUBLIC SCHOOLS

DIVISION OF FACILITIES AND MAINTENANCE SERVICES
 1124 NORTH 11TH STREET
 MILWAUKEE, WI 53205-0259
 PHONE: 414-283-4600
 FAX: 414-283-4682

SHEET NAME: MATERIALS & LAYOUT PLAN
PROJECT NAME: 2023 GREEN INFRASTRUCTURE UPGRADES
PROJECT ADDRESS: FREDERICK J GAENSLER K-8 SCHOOL, 1250 E. BURLEIGH STREET, MILWAUKEE, WI 53212

ISSUED FOR:	REV:	DATE:
50% CD		11/14/2022
95% CD		12/22/2022
100% CD		1/23/2023

DRAWN BY: ZWA
REVIEWED BY: KW
APPROVED BY: MM
DATE: January 2023

SEAL AND SIGNATURE

 KERRY WHITE
 LA-822-14
 WAUWATOSA, WI

PROJECT NUMBER: 8176 (DIVISION 2)

SITE NUMBER: 185

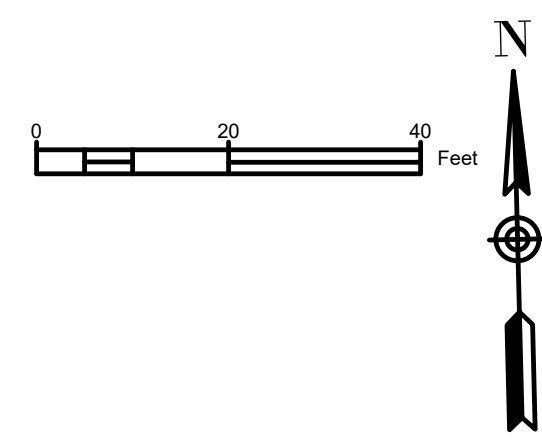
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L100



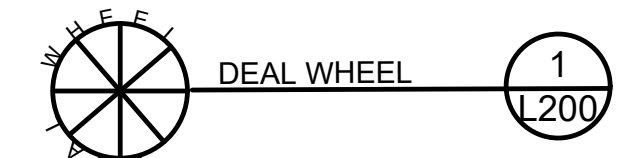


****SHEET MUST BE PRINTED IN COLOR****



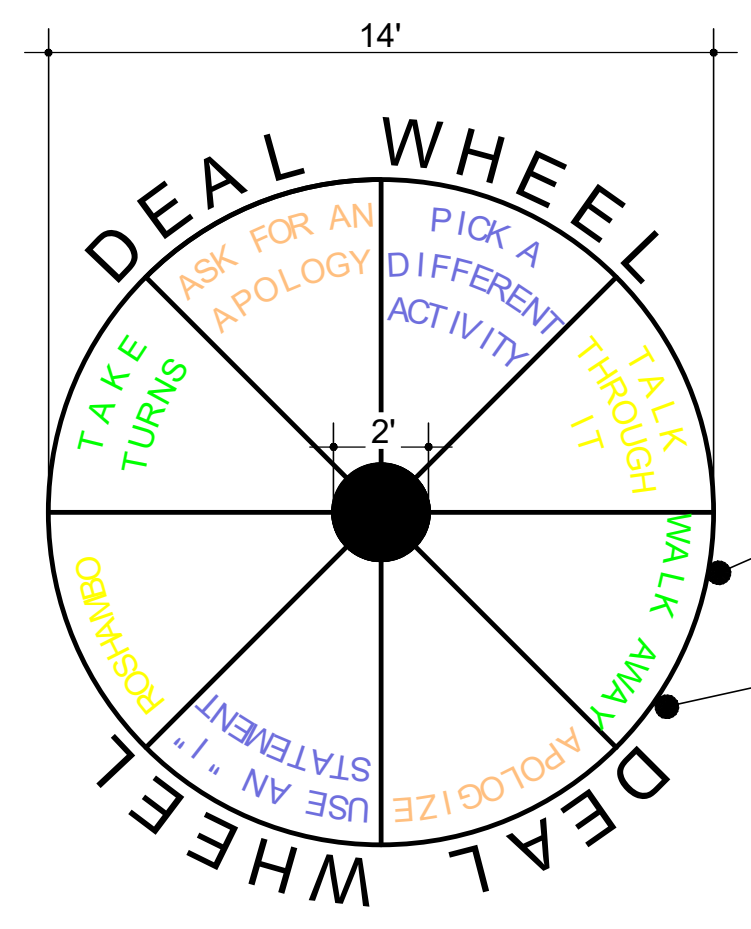
PAINT LEGEND

- PANTONE 7683
- PANTONE 291 C
- PANTONE 802 C
- PANTONE 102 C
- PANTONE 804 C
- WHITE



PAINT NOTES

1. REFERENCE SPECIFICATIONS FOR COLOR AND APPLICATION INFORMATION
2. ALL PAVEMENT MARKINGS ARE PER MPS STANDARD TEMPLATES UNLESS OTHERWISE STATED
3. REFERENCE DETAIL 1/L200 FOR DEAL WHEEL LAYOUT
4. PREP SURFACE AS SPECIFIED, SEE CIVIL PLANS
5. A COPY OF MPS' STANDARD LINE AND GAME STRIPING DETAILS IS AVAILABLE UPON REQUEST FROM THE DIVISION OF FACILITIES AND MAINTENANCE SERVICES, (414) 283-4600



- PANTONE 7683
- PANTONE 291 C
- PANTONE 802 C
- PANTONE 102 C
- PANTONE 804 C
- WHITE

8 SECTIONS TO BE OF EQUAL SIZE AND DIMENSIONS

CIRCLE IS TO BE PAINTED AS ONE CONTINUOUS LINE

NOTES:
1. REFERENCE SPECIFICATIONS FOR ADDITIONAL PAINTING INFORMATION

1 PAVEMENT MARKINGS - DEAL WHEEL

PLAN 0" 12" 24" 48"

STORMWATER SOLUTIONS ENGINEERING
247 W. FRESHWATER WAY, SUITE 410
MILWAUKEE, WI 53204
PHONE: (414) 810-1245
WWW.STORMWATER-SOLUTIONS-ENGINEERING.COM

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MPS MILWAUKEE PUBLIC SCHOOLS

DIVISION OF FACILITIES AND MAINTENANCE SERVICES
1124 NORTH 11TH STREET
MILWAUKEE, WI 53205-0259
PHONE: 414-283-4600
FAX: 414-283-4682

SHEET NAME: PAVEMENT MARKINGS PLAN	PROJECT NAME: 2023 GREEN INFRASTRUCTURE UPGRADES	PROJECT ADDRESS: FREDERICK J GAENSLER K-8 SCHOOL 1250 E. BURLINGHAM STREET, MILWAUKEE, WI 53212
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ISSUED FOR:	REV:	DATE:
50% CD		11/14/2022
95% CD		12/22/2022
100% CD		1/23/2023

DRAWN BY:	ZWA
REVIEWED BY:	KW
APPROVED BY:	MM
DATE:	January 2023

SEAL AND SIGNATURE

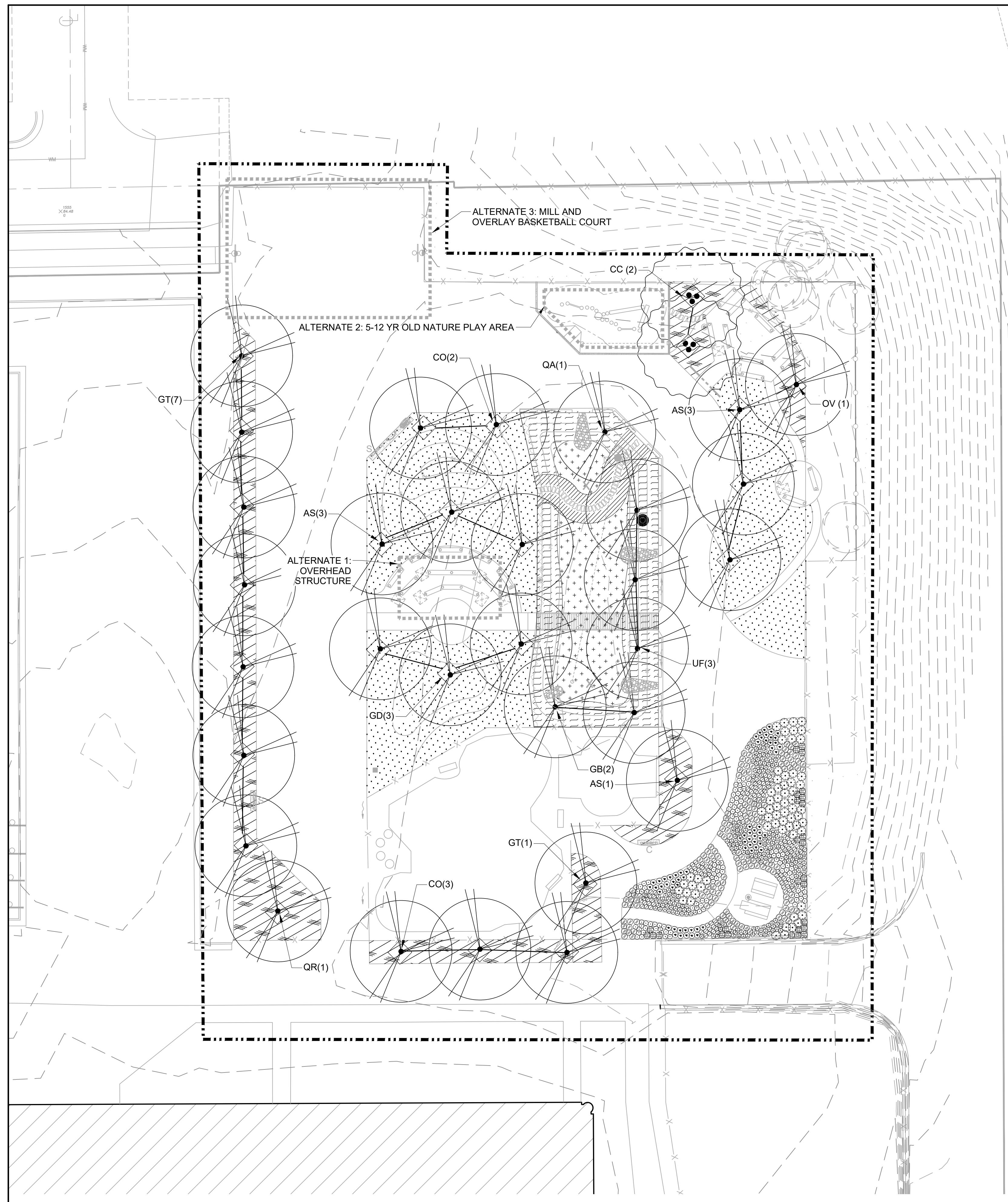
 KERRY WHITE
 LA-822-14
 WAUWATOSA
 WIS.

PROJECT NUMBER: 8176 (DIVISION 2)

SITE NUMBER: 185

SHEET:
L200

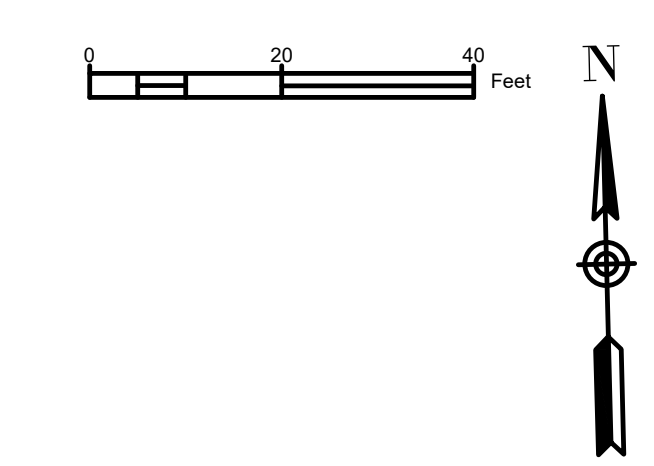




PLANTING LEGEND

		QUANTITIES
		BASE BID
EXISTING TREE		
PROPOSED TREES		
Diamond symbol indicates tree installation and protection staking per detail 3/L501. Trees without protection staking shall be staked per detail 3/L500.		
AS	<i>Acer saccharum</i> 'Green Mountain' - Green Mountain Sugar Maple 3" Cal. B&B, Mature Size: 60' ht. x 45' spread	7
CO	<i>Celtis occidentalis</i> - Common Hackberry 3" Cal. B&B, Mature Size: 50' ht. x 50' spread	5
GB	<i>Ginkgo biloba</i> 'Autumn Gold' - Autumn Gold Ginkgo 3" Cal. B&B, Mature Size: 45' ht. x 35' spread	2
GD	<i>Gymnocladus dioica</i> - Kentucky Coffeetree 3" Cal. B&B, Mature Size: 55' ht. x 55' spread	3
GT	<i>Gleditsia triacanthos</i> 'Skycole' - Skyline Honeylocust 3" Cal. B&B, Mature Size: 55' ht. x 35' spread, Thornless variety	8
OV	<i>Ostrya virginiana</i> - Ironwood 3" Cal. B&B, Mature Size: 50' ht. x 30' spread,	1
QA	<i>Quercus macrocarpa</i> - Bur Oak 3" Cal. B&B, Mature Size: 80' ht. x 80' spread	1
QR	<i>Quercus rubra</i> - Red Oak 3" Cal. B&B, Mature Size: 60' ht. x 60' spread	1
UF	<i>Ulmus</i> 'Frontier' - Frontier Elm 3" Cal. B&B, Mature Size: 50' ht. x 30' spread	3
PROPOSED MULTI-STEMMED TREE		
CC	<i>Carpinus caroliniana</i> - Muscledwood Multi-stem B&B, Mature Size: 30' ht. x 30' spread	2
	Lawn See Specs	7452 SF
	Planting Area 1 - Lawn/Microclover See Specs	4370 SF
	<i>Geum triflorum</i> - Prairie Smoke Plant plugs 12" o.c. with triangular spacing	453 PLUGS
ZONE B		
	Bio-swale Bottom Seed Mix	1520 SF
ZONE C		
	Bioswale Side Slope Mix Plant plugs 12"-18" O.C. with triangular spacing, group plugs by species in groups of 40-50.	1730 PLUGS
	<i>Allium cernuum</i> - Nodding Onion Plug, Mature Size: 1.5' ht x 1' spread	
	<i>Dodecatheon meadia</i> - Shooting Star Plug, Mature Size: 1.5' ht x 1' spread	
	<i>Eragrostis Spectabilis</i> - Purple Love Grass Plug, Mature Size: 1' ht x 1.5' spread	
	<i>Rudbeckia hirta</i> - Black Eyed Susan Plug, Mature Size: 1-3' ht x 1.5' spread	
	<i>Zizia aurea</i> - Golden Alexander Plug, Mature Size: 1-2' ht x 1.5' spread	
URBAN SCHOOLYARD PLANTING AREA		
	<i>Actinidia kolomikta</i> - Arctic Kiwi, MALE VARIETY ONLY Plug, Mature Size: climbing x 1-3' spread	27
	<i>Aquilegia canadensis</i> - Wild Columbine Plug, Mature Size: 2.5' ht x 1.5' spread	211
	<i>Coreopsis lanceolata</i> - Lance Leaf Coreopsis Plug, Mature Size: 1.5' ht x 1.5' spread	116
	<i>Lavandula spp.</i> - Lavender Plug, Mature Size: 2' ht x 2' spread	281
	<i>Liatis aspera</i> - Rough Blazing Star Plug, Mature Size: 2.5' ht x 1.5' spread	65
	<i>Schizachyrium Scoparium</i> - Little Bluestem Plug, Mature Size: 2' ht x 1.5' spread	194
	<i>Sporobolus heterolepis</i> - Prairie Dropseed Plug, Mature Size: 3' ht x 3' spread	64

- NOTES
- SEE SHEET L500 AND L501 FOR PLANTING DETAILS AND NOTES
 - SEE SPECS FOR SEED MIX SPECIES PERCENT COVERAGE



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 PHONE: 414-283-4600
 FAX: 414-283-4682

SHEET NAME: **PLANTING PLAN**
 PROJECT NAME: **2023 GREEN INFRASTRUCTURE UPGRADES**
 PROJECT ADDRESS: **FREDERICK J GAENSLER K-8 SCHOOL, 1250 E. BURLING STREET, MILWAUKEE, WI 53212**

ISSUED FOR:	REV:	DATE:
50% CD		11/14/2022
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DRAWN BY: ZWA
 REVIEWED BY: KW
 APPROVED BY: MM

DATE: January 2023

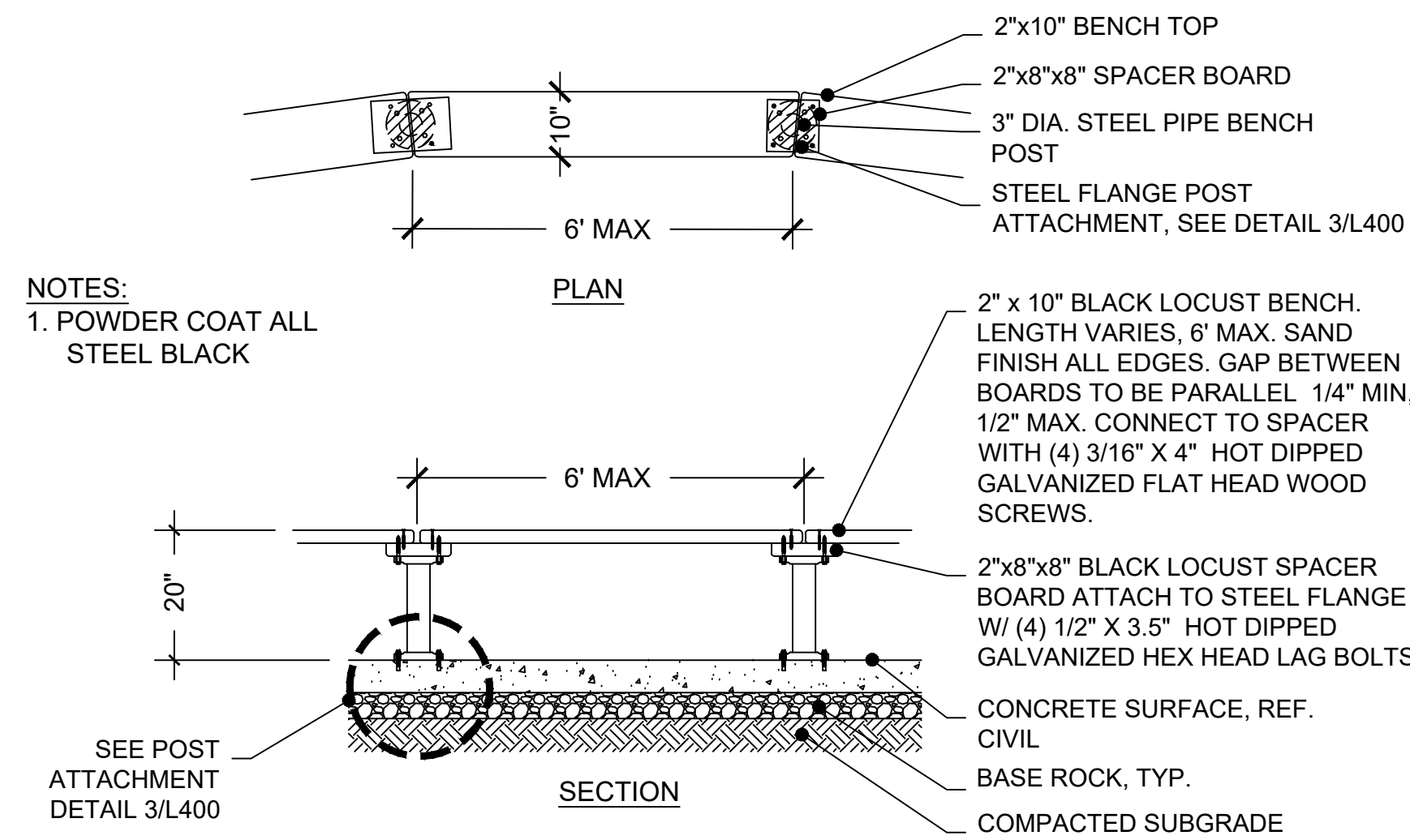
SEAL AND SIGNATURE


PROJECT NUMBER: 8176 (DIVISION 2)

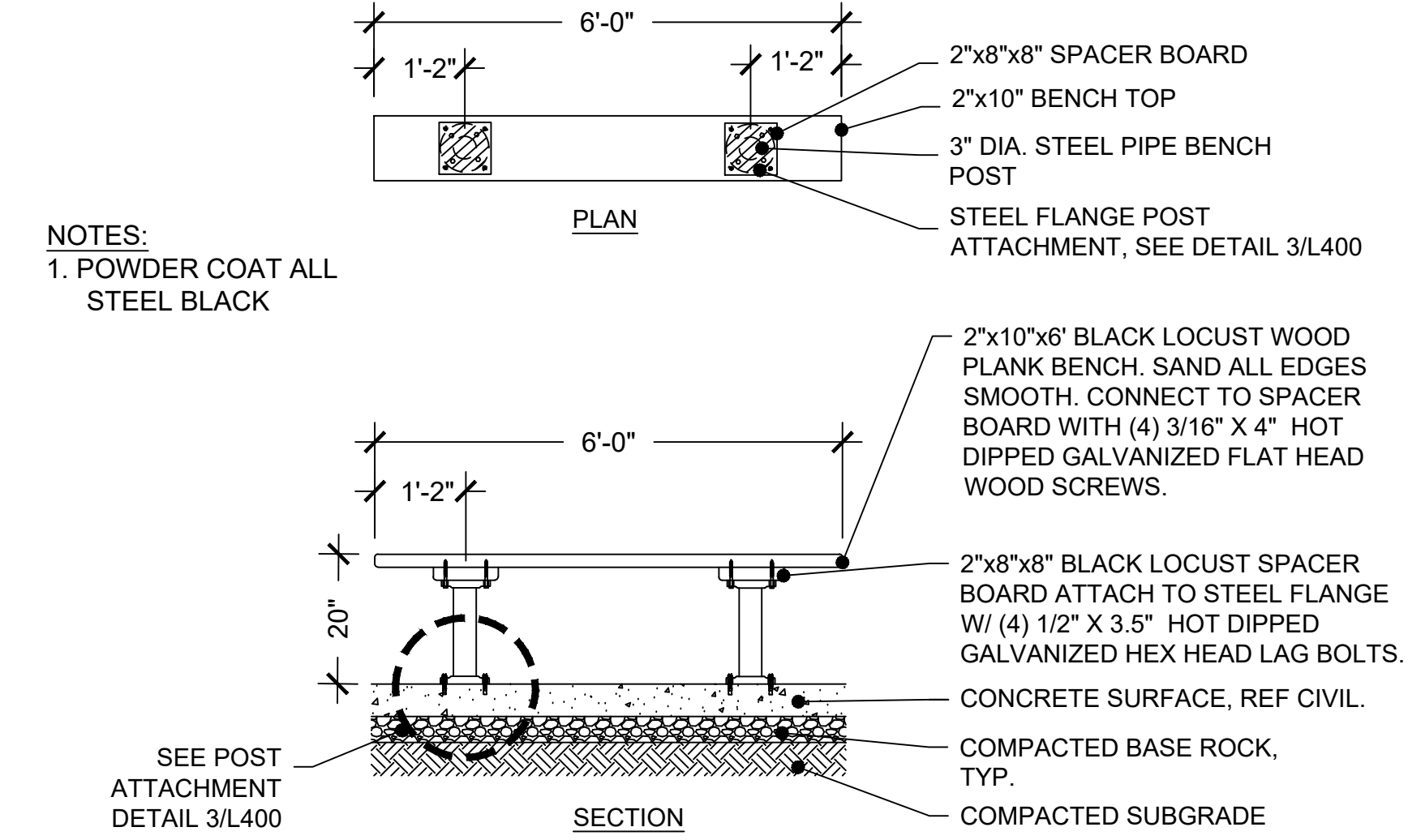
SITE NUMBER: 185

SHEET: **L300**

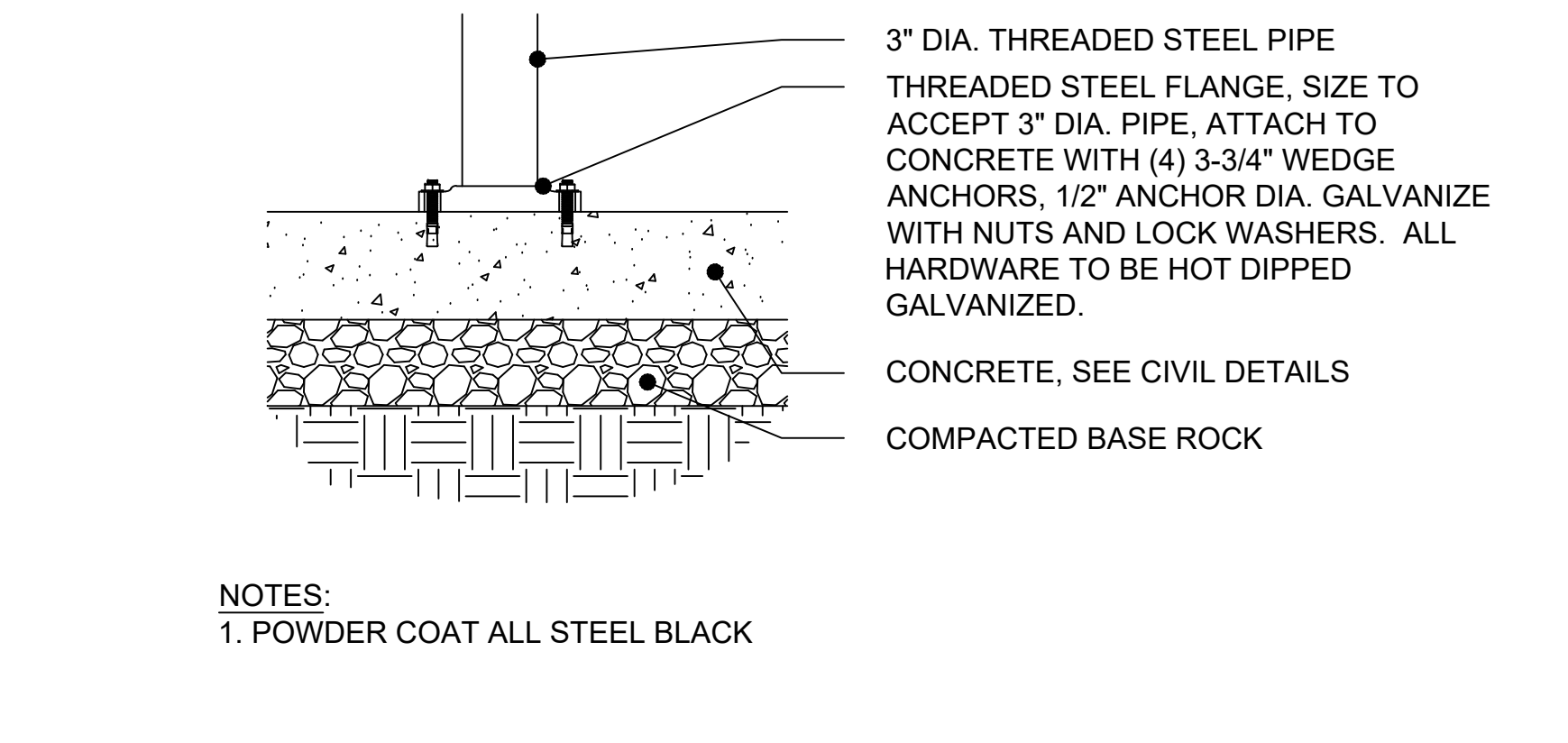




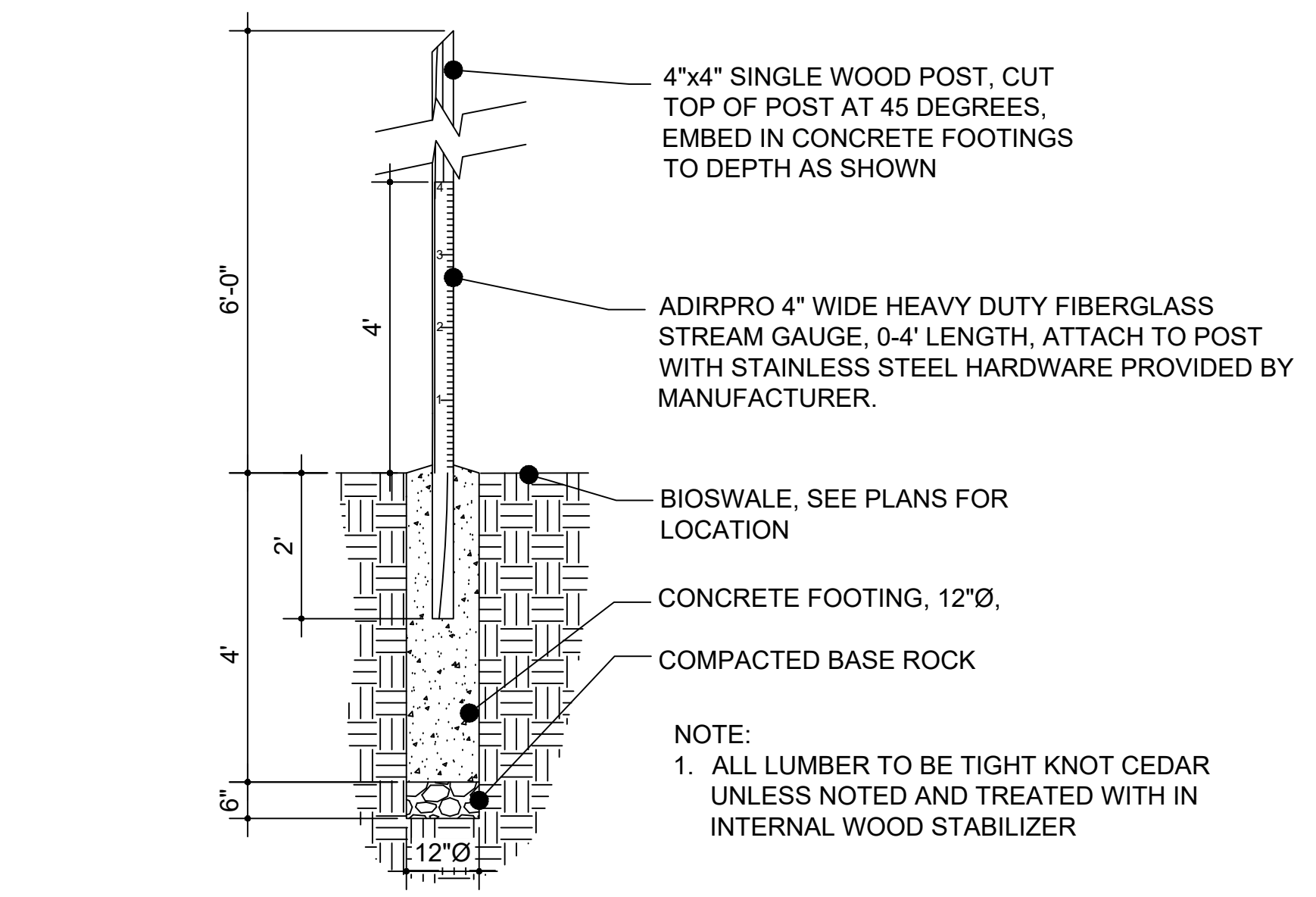
1 WOOD BENCH - CONTINUOUS
PLAN & SECTION
0" 6" 12" 24"



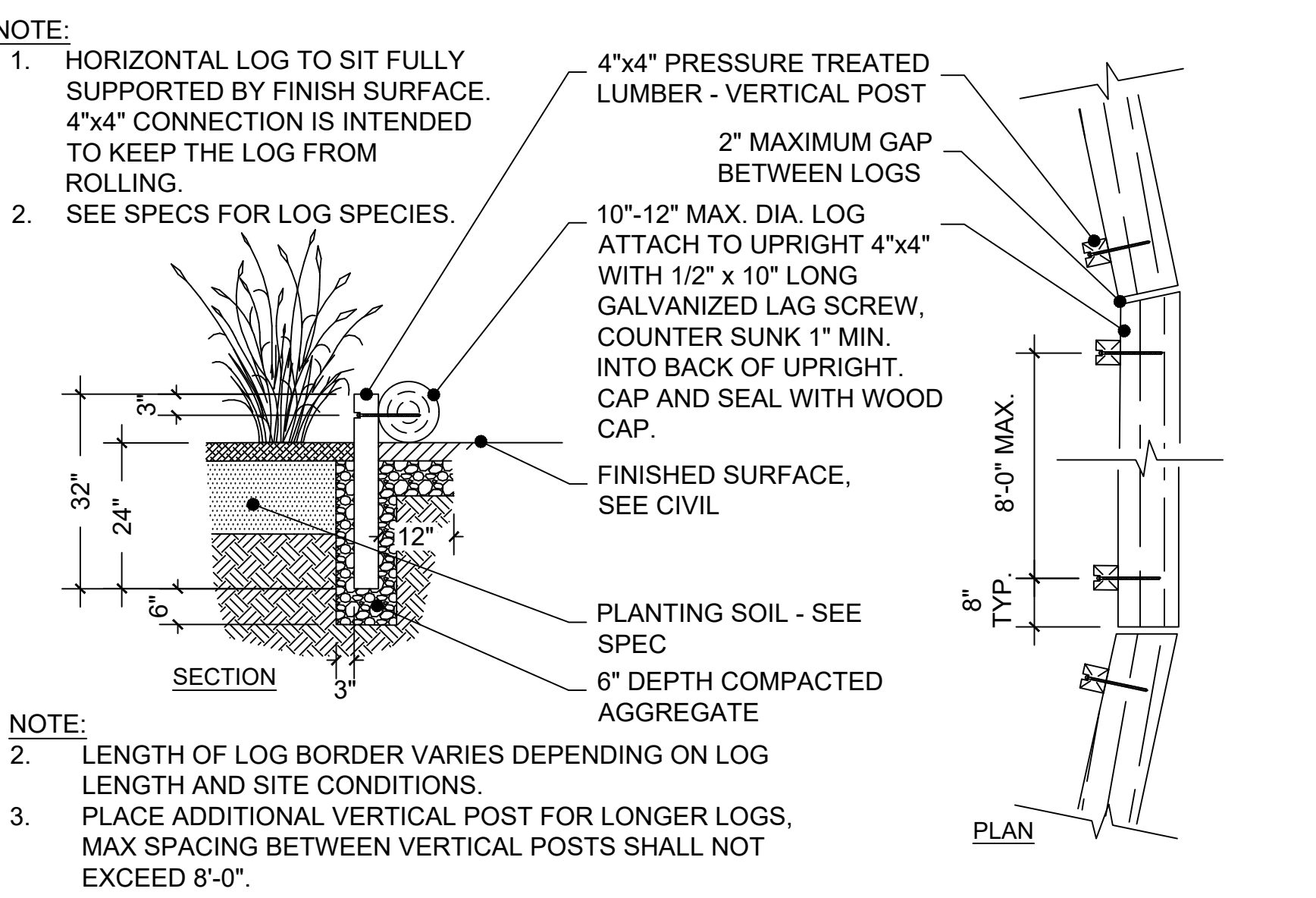
2 WOOD BENCH - FREESTANDING
PLAN & SECTION
0" 6" 12" 24"



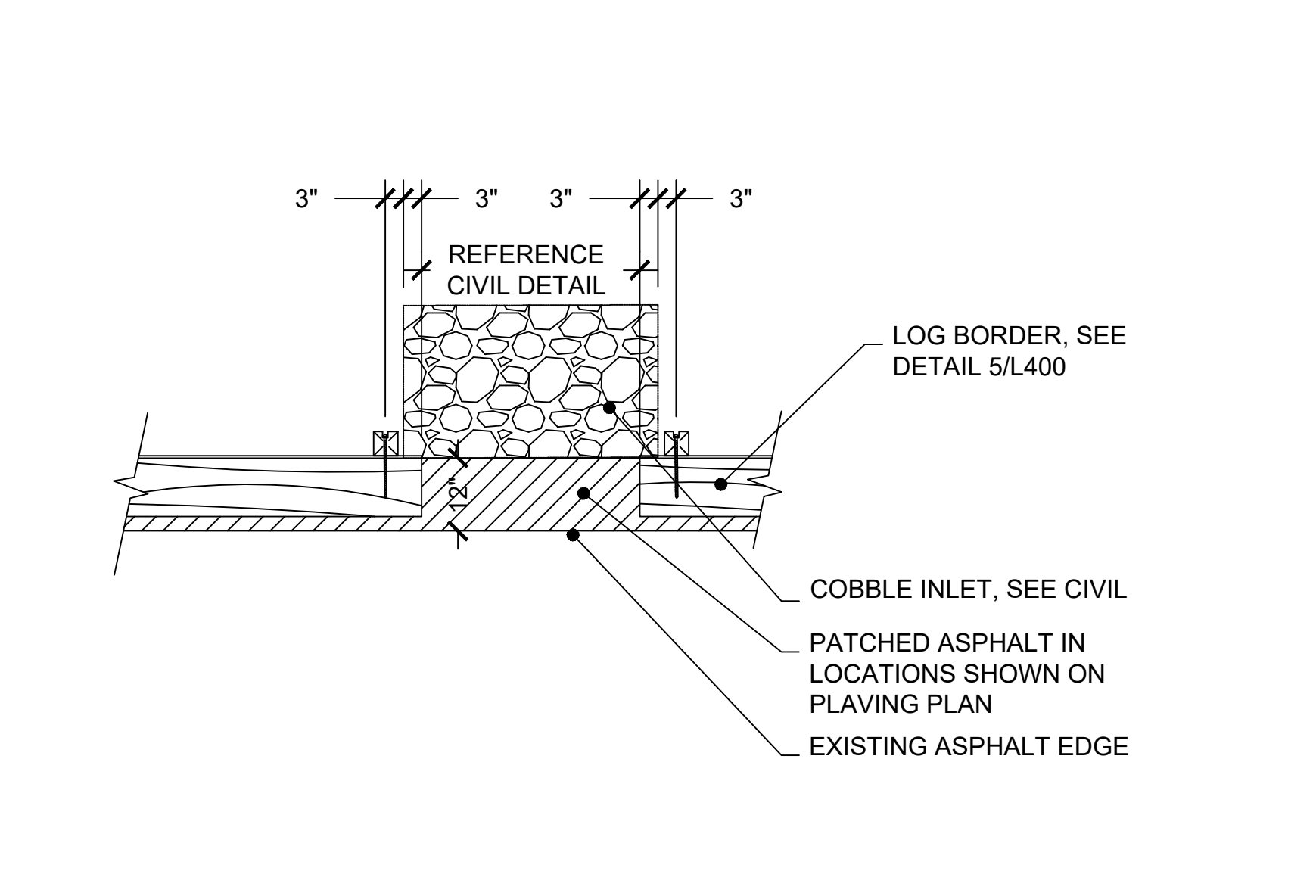
3 WOOD BENCH - POST ATTACHMENT
SECTION
0" 2" 4" 8"



4 RAIN MEASURING POST - IN BIOSWALE
SECTION
0" 6" 12" 24"

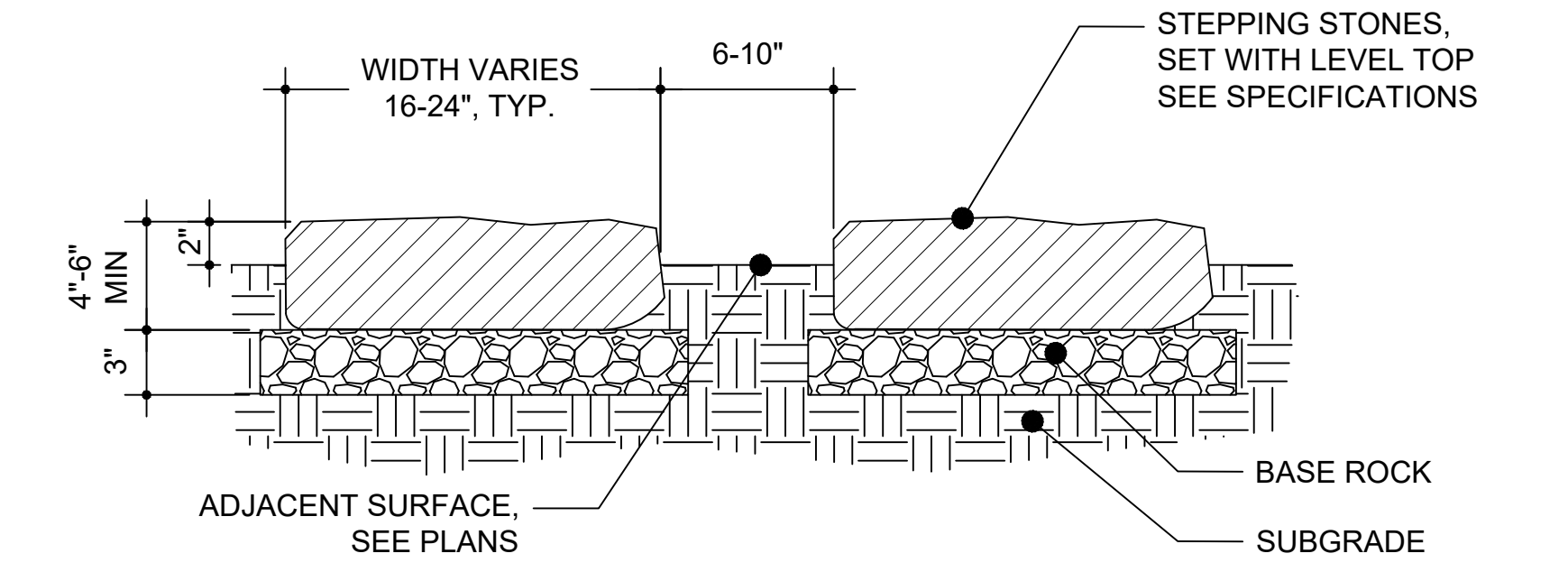


5 LOG BORDER
PLAN & SECTION
0" 6" 12" 24"



6 LOG BORDER @ COBBLE INLET CHANNEL
PLAN
0" 6" 12" 24"

- NOTES:**
- THIS DETAIL IS FOR STEPPING STONES IN NON-BIOSWALE AREAS.
 - SEE MATERIAL PLANS FOR STEPPING STONE PLACEMENT.
 - FINAL PLACEMENT OF ALL STONES MUST BE APPROVED IN THE FIELD BY THE OWNER'S REP.
 - BOULDERS MUST REST IN A STABLE POSITION FULLY SUPPORTING ITS OWN WEIGHT. SUBGRADE AND SURROUNDING SOIL MUST BE STABLE AND CAPABLE OF SUPPORTING BOULDERS WITHOUT SETTLING.
 - BOULDER EDGES SHALL BE SMOOTH AND ROUNDED. ALL SHARP POINTS AND EDGES SHALL BE REMOVED.
 - SPACE BETWEEN STONES TO BE 6"-10".
 - HEIGHT DIFFERENCE TO BE 4" MAX.



8 UPLAND PLANTING STEPPING STONE PATH
SECTION
0" 2" 4" 8"

7 NOT USED

SHEET NAME: SITE DETAILS	PROJECT NAME: 2023 GREEN INFRASTRUCTURE UPGRADES	PROJECT ADDRESS: FREDERICK J GAENSLER K-8 SCHOOL 1250 E. BURLEIGH STREET, MILWAUKEE, WI 53212
	ISSUED FOR: REV: DATE:	

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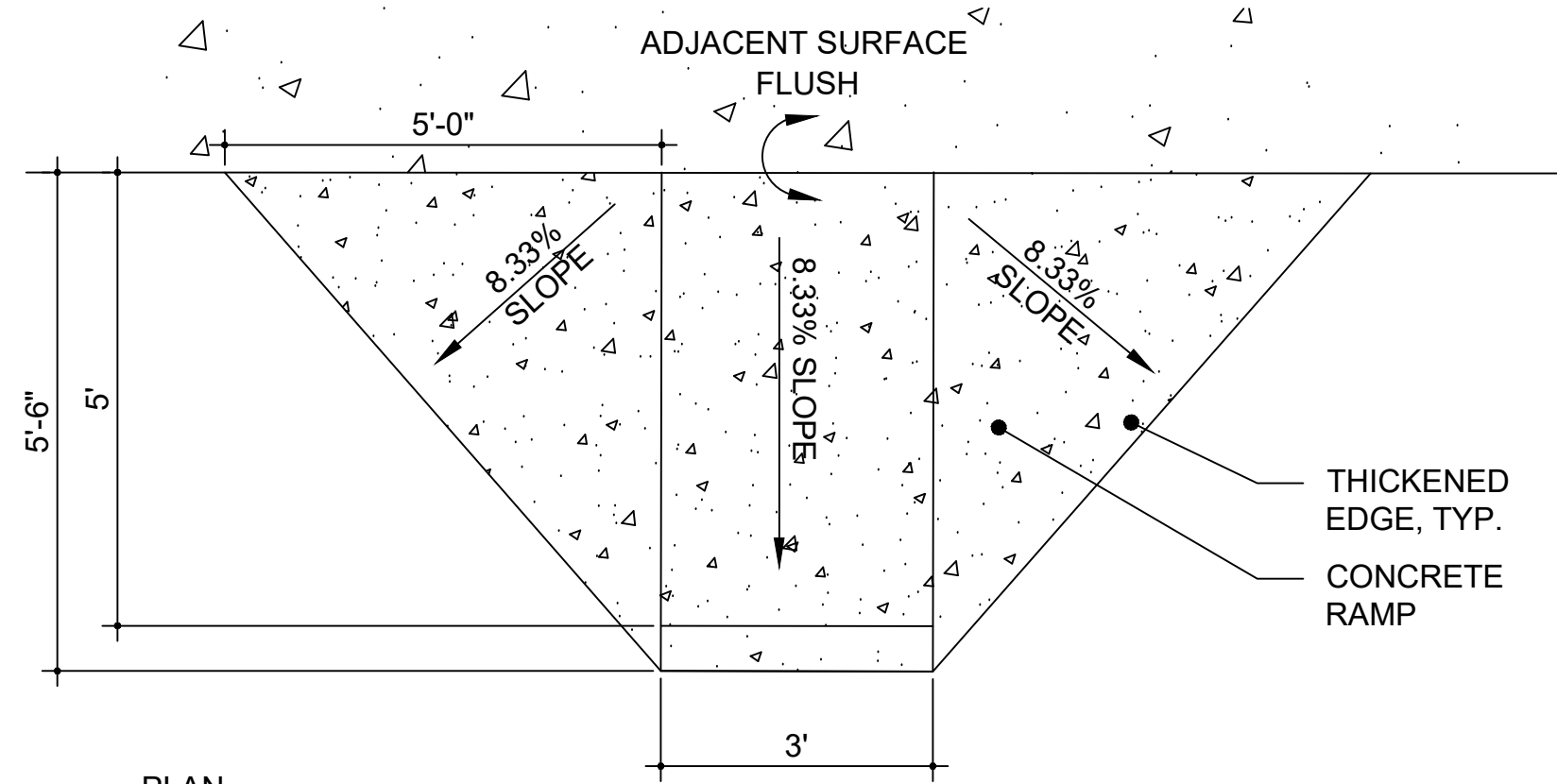
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REVIEWED BY:	KW
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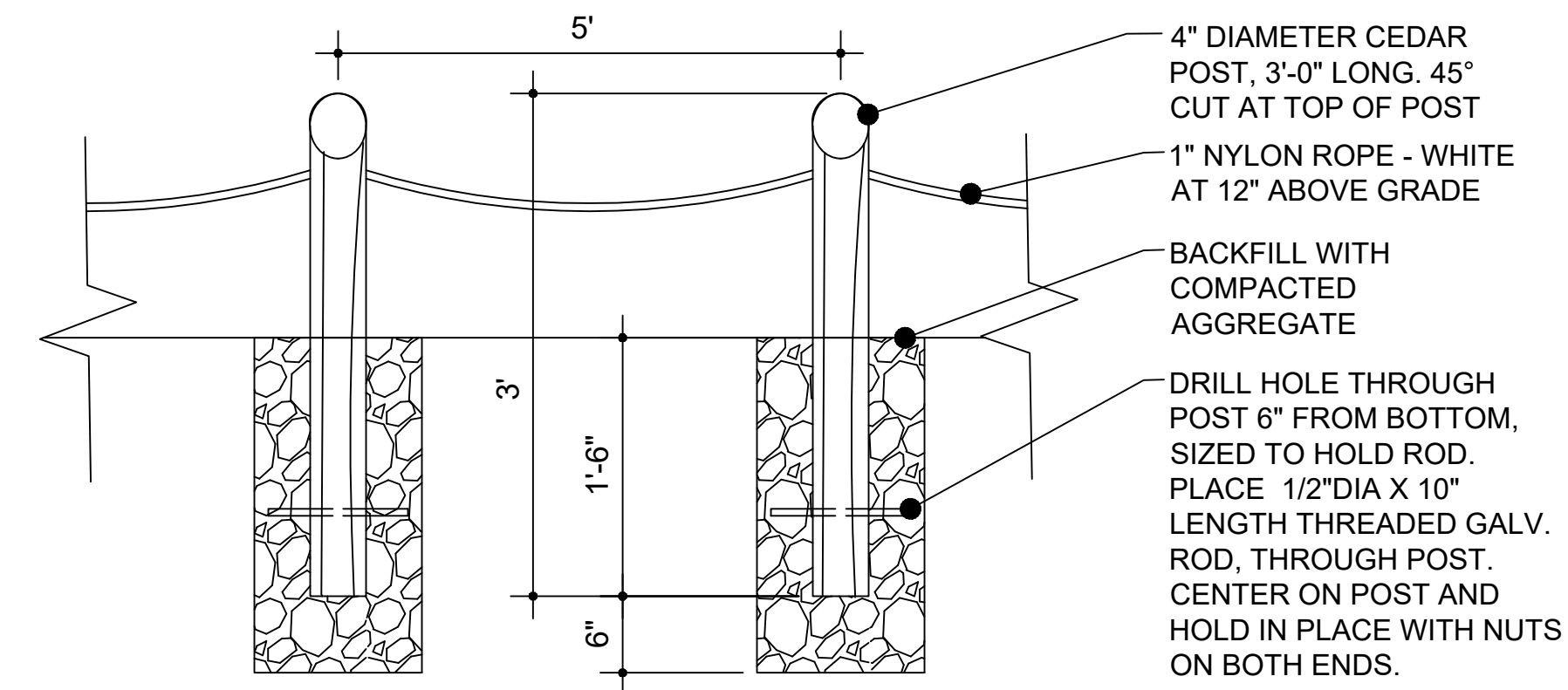
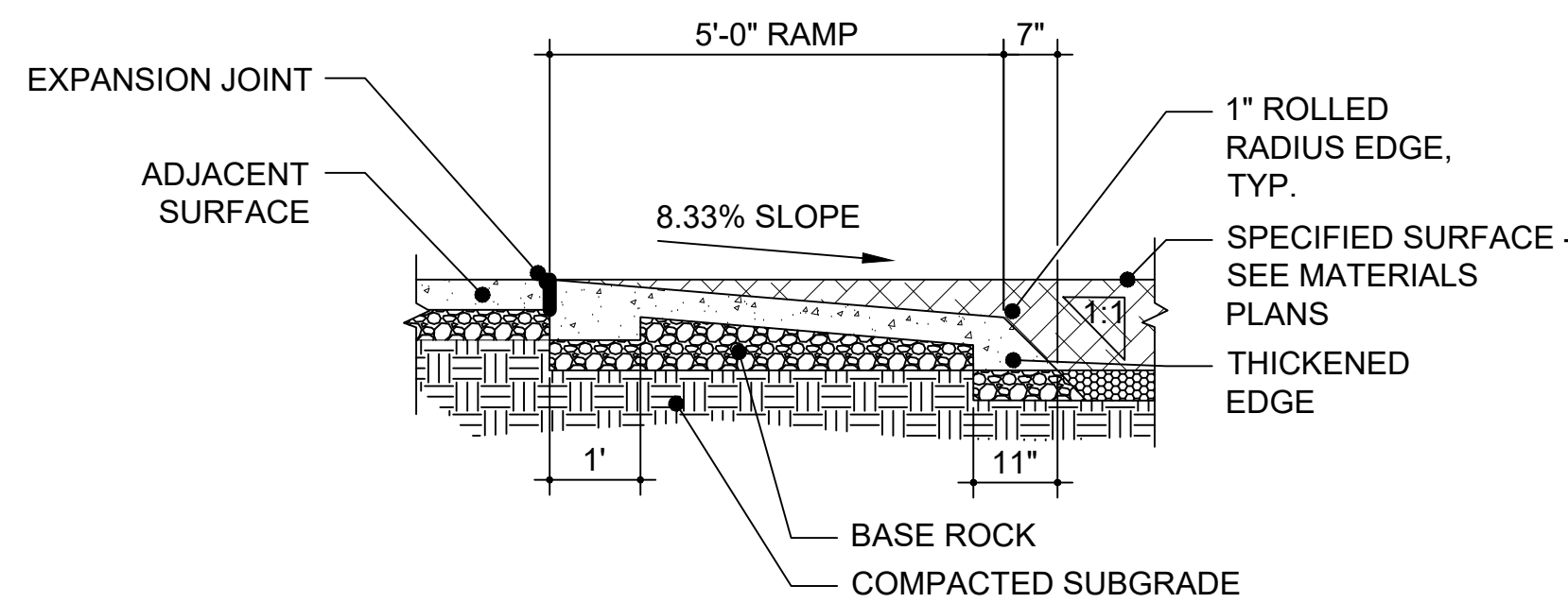
 KERRY WHITE
 LA-822-14
 WAUWATOSA
 WIS.

PROJECT NUMBER: 8176 (DIVISION 2)
 SITE NUMBER: 185
 SHEET:
L400





NOTE: PLAY SURFACING SHOULD COMPLETELY COVER RAMP



- NOTES:**
1. DRILL HOLE THROUGH POST TO ACCEPT ROPE, SAND ALL ROUGH EDGES SMOOTH.
 2. ROPE INSTALLATION: AT EACH POST TIE KNOT IN ROPE, INSERT ROPE IN POST, LOOP THE ROPE AROUND ONE SIDE OF THE POST, INSERT THE ROPE THROUGH THE POST AGAIN, TIE ANOTHER KNOT, REPEAT AT EACH POST.
 3. ROPE BETWEEN POSTS SHALL BE LOOSE ENOUGH THAT IF STEPPED ON IT NEARLY TOUCHES THE GROUND.
 4. POST TO BE SET 5' O.C. AND CLOSER AS NEEDED AT TIGHT TURNS.

1 ADA ACCESS RAMP

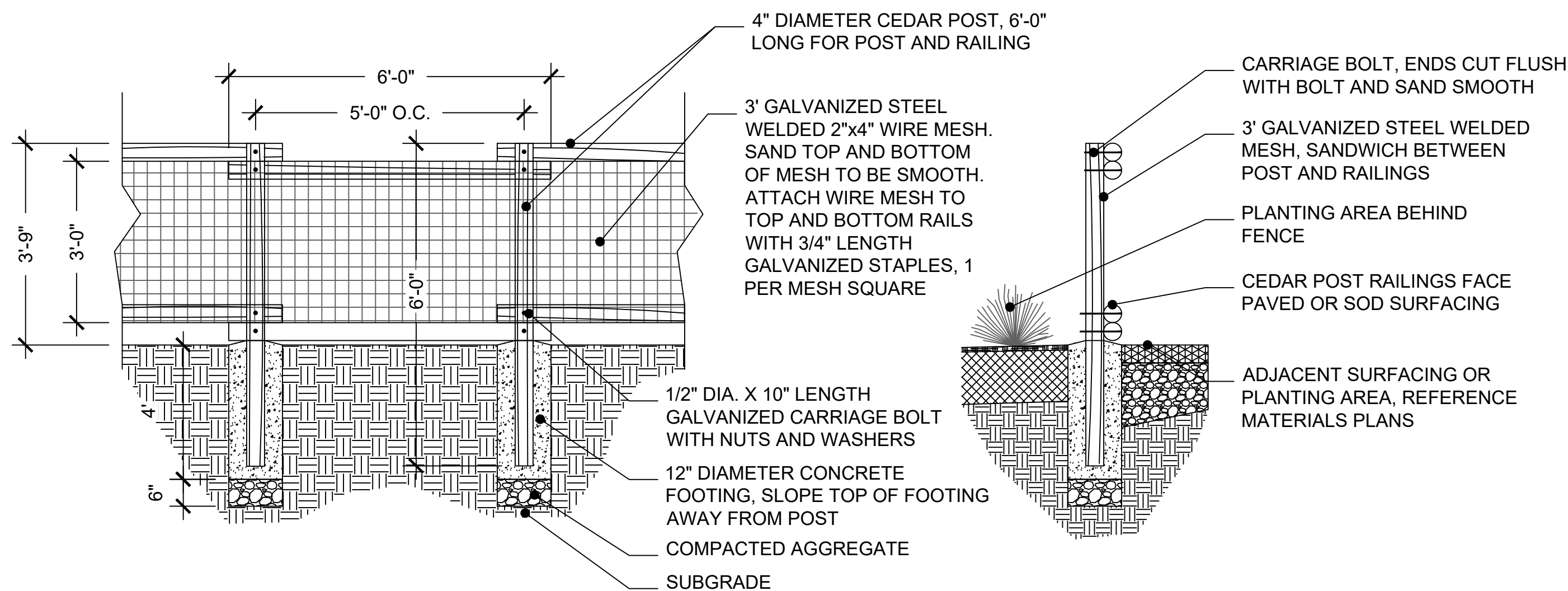
PLAN AND SECTION

0" 6" 12" 24"

2 ROPE FENCE

SECTION

0" 3" 6" 12"



- NOTE:**
1. ALL LUMBER TO BE TIGHT KNOT CEDAR UNLESS NOTED AND TREATED W/ INTERNAL WOOD STABILIZER
 2. CIRCULAR PIER FOOTINGS CAN BE PLACED USING SONOTUBE CONCRETE FORMS

3 DECORATIVE FENCE

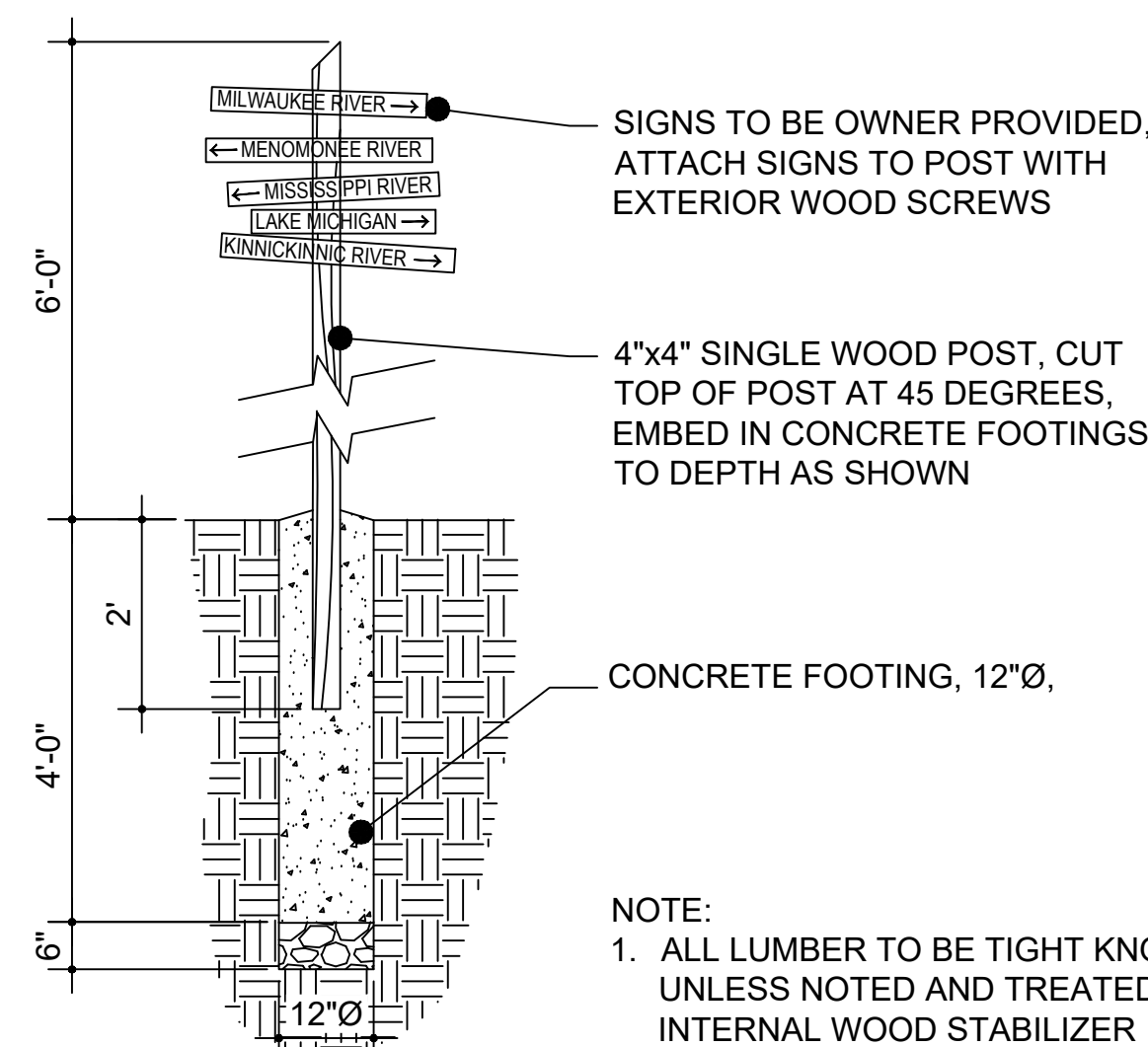
SECTION

0" 6" 12" 24"

4 ENTRY ARCH

SECTION

0" 6" 12" 24"



- NOTE:**
1. ALL LUMBER TO BE TIGHT KNOT CEDAR UNLESS NOTED AND TREATED WITH INTERNAL WOOD STABILIZER

5 SIGN POST

SECTION

0" 6" 12" 24"

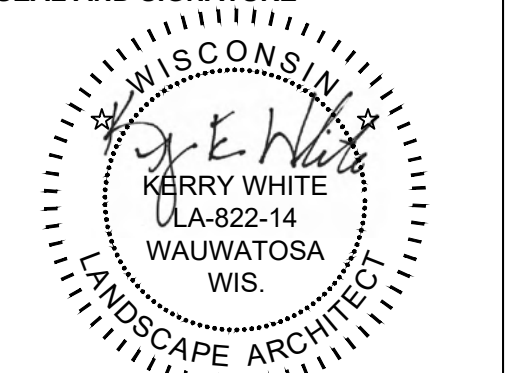
6 NOT USED

SHEET NAME: SITE DETAILS	PROJECT NAME: 2023 GREEN INFRASTRUCTURE UPGRADES	PROJECT ADDRESS: FREDERICK J GAENSLER K-8 SCHOOL 1250 E. BURLINGHAM STREET, MILWAUKEE, WI 53212
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PROJECT NUMBER: 8176 (DIVISION 2)

SITE NUMBER: 185

SHEET:

L401



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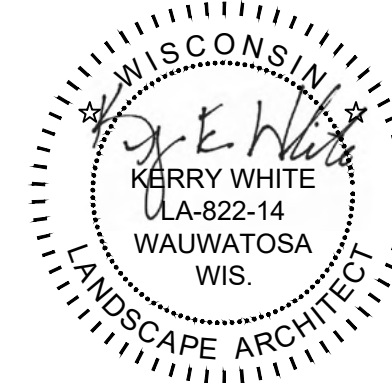
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PROJECT NUMBER: 8176 (DIVISION 2)

SITE NUMBER: 185

SHEET:
L402

1 NOT USED

2 NOT USED

3 NOT USED

4 NOT USED





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 Copyright laws protect the style and visual appearance of the structure while patents may protect other parts of the design.

PROJECT NAME: OUTDOOR CLASSROOM MPS

PROJECT LOCATION: MILWAUKEE, WI

BUILDING TYPE: MSE 16X30

ROOF TYPE: MULTI-RIB

BUILDING NUMBER: P14115

ORDER NUMBER: 72044

DRAWING LIST:

SHEET NUMBER	DRAWING DESCRIPTION
CS	COVER SHEET
1	ARCHITECTURAL ELEVATIONS
2-2.1	ANCHOR AND FOOTING LAYOUT / DETAILS
3	STRUCTURAL FRAMING PLAN / DETAILS
4-4.1	FRAME CONNECTION DETAILS
5	ELECTRICAL DETAILS
6-6.1	ROOF LAYOUT
7-7.1	ROOF CONNECTION DETAILS

MANUFACTURER NOTES:

MATERIALS:

DESCRIPTION	ASTM DESIGNATION
TUBE STEEL	A360 (GRADE B)
SCHEDULE PIPE	A51 (GRADE B)
RMT PIPE	A519
LIGHT GAUGE COLD FORMED	A1003 (GRADE 50)
STRUCTURAL STEEL PLATE	A36
ROOF PANELS (STEEL)	A653
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.

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 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.

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.

CERTIFICATES:

MIAMI-DADE COUNTY CERTIFICATE OF COMPETENCY NO. 21-0819.13
 PCI (POWDER COATING INSTITUTE) 4000 CERTIFIED

FABRICATOR APPROVALS:

- CITY OF PHOENIX, AZ APPROVED FABRICATOR #C08-2010
- CITY OF LOS ANGELES, CA APPROVED FABRICATOR #F801598
- CITY OF RIVERSIDE, CA APPROVED FABRICATOR #F1_000042
- CITY OF HOUSTON, TX APPROVED FABRICATOR #470
- CLARK COUNTY, NV APPROVED FABRICATOR #264
- STATE OF UTAH APPROVED FABRICATOR 02008-14
- ASIS APPROVED FABRICATOR C-00018751



DESIGN CRITERIA:

GENERAL:
 2015 INTERNATIONAL BUILDING CODE
 RISK CATEGORY: II

DEAD LOAD:
 ROOF DEAD LOAD: 2 PSF
 FRAME DEAD LOAD: SELF WEIGHT

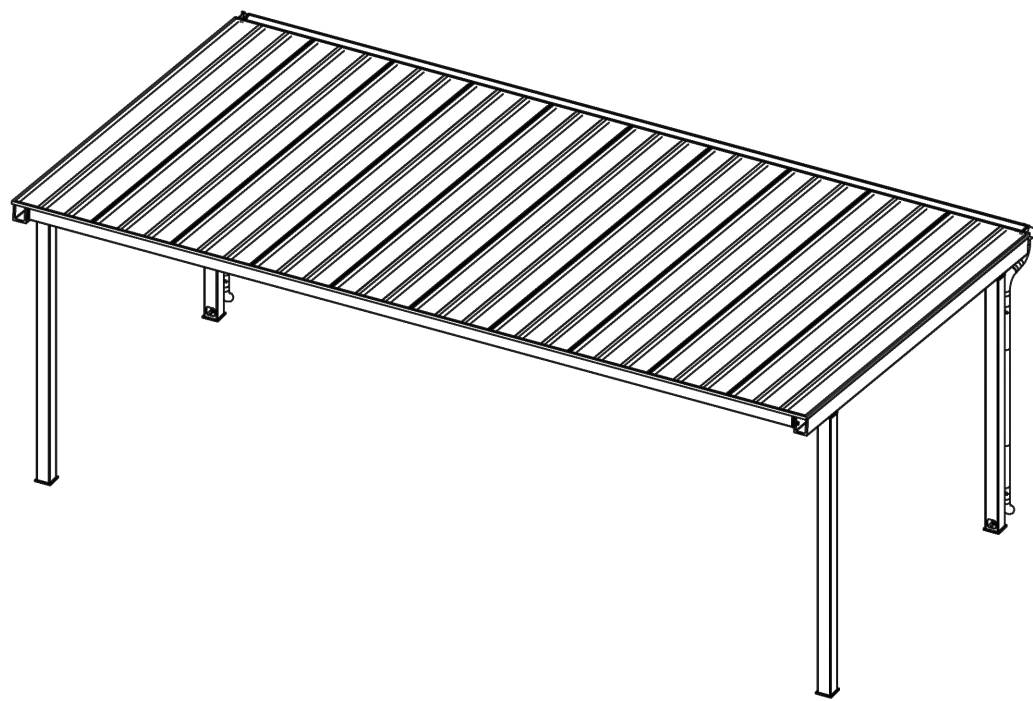
LIVE LOAD:
 ROOF LIVE LOAD: 20 PSF

SNOW DESIGN DATA:
 GROUND SNOW LOAD (Ps): 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

WIND DESIGN DATA:
 BASIC WIND SPEED (V): 115 MPH
 GUST EFFECT FACTOR (G): 0.85
 INTERNAL PRESSURE COEFFICIENT (GCp): 0
 WIND EXPOSURE: C

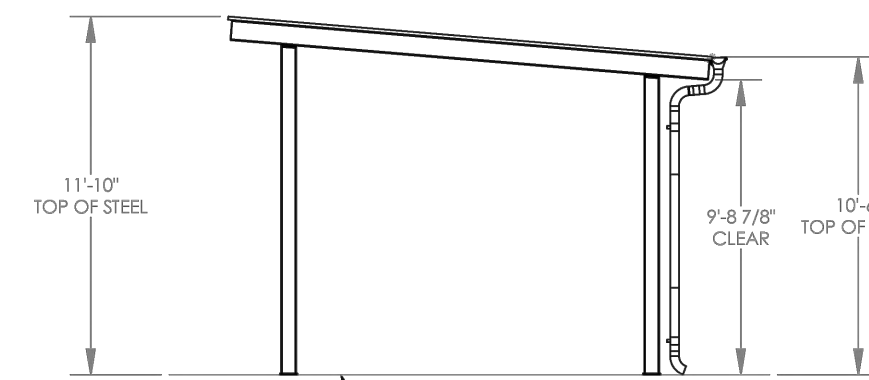
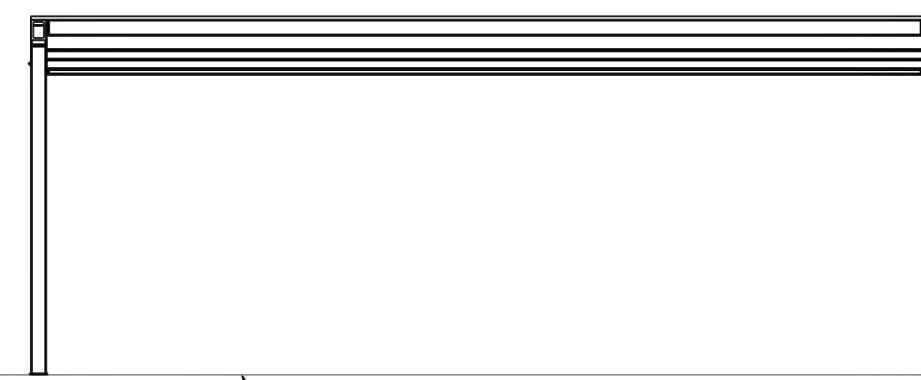
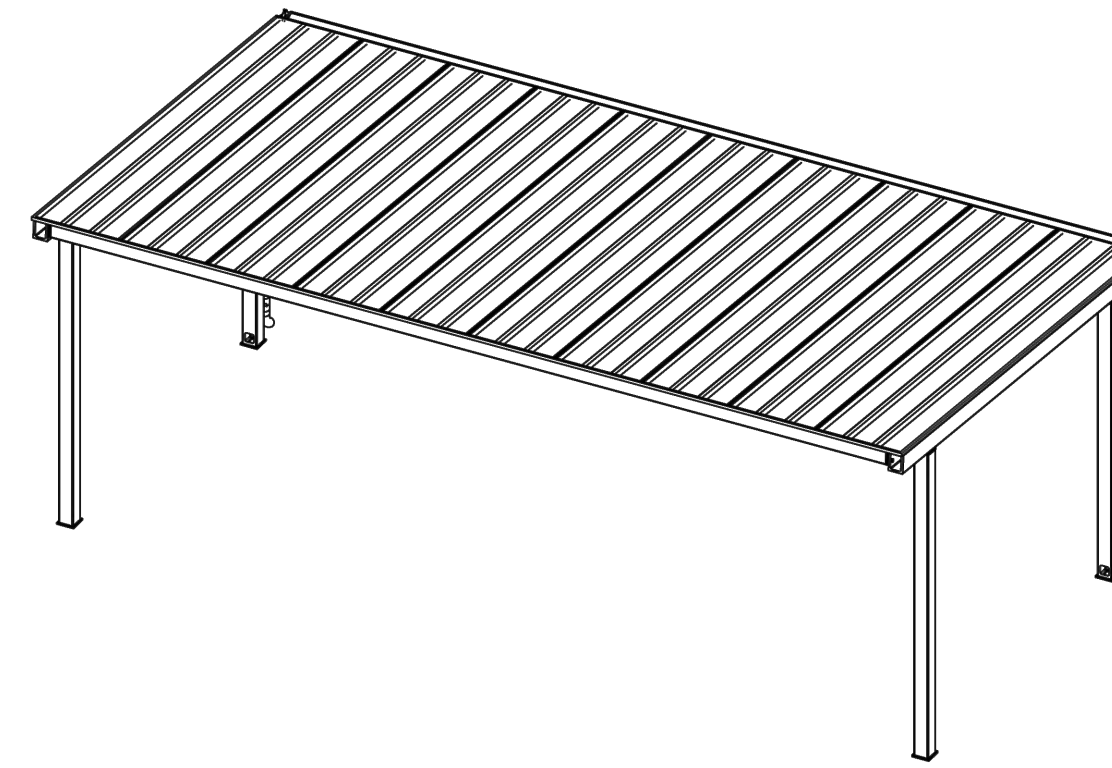
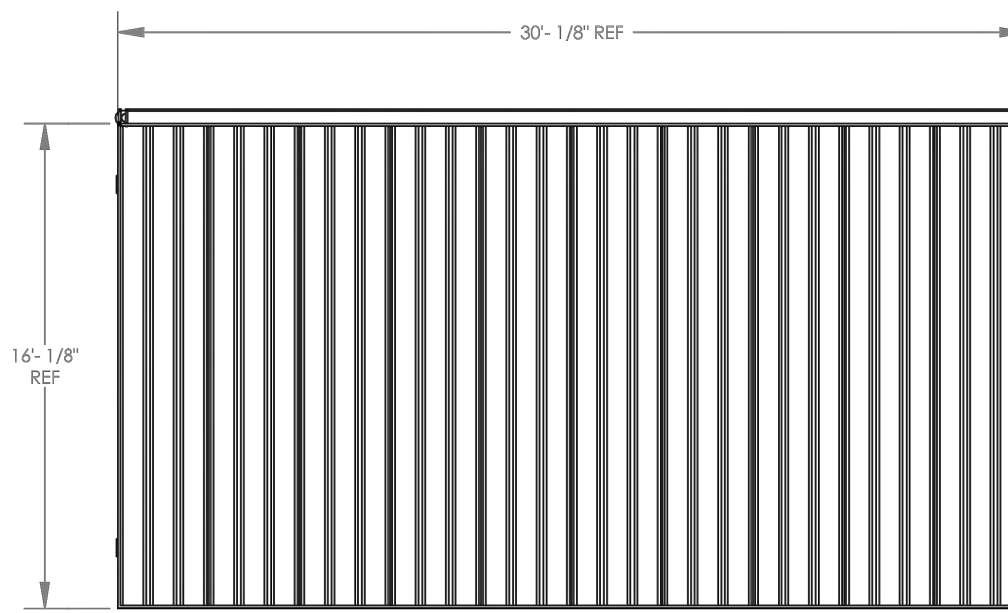
SEISMIC DESIGN DATA:
 STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
 SEISMIC IMPORTANCE FACTOR (Ie): 1.0
 SEISMIC DESIGN CATEGORY: C
 SEISMIC SITE CLASS: D
 SEE CALCULATIONS FOR ADDITIONAL DATA

ADDITIONAL CRITERIA:
 NONE



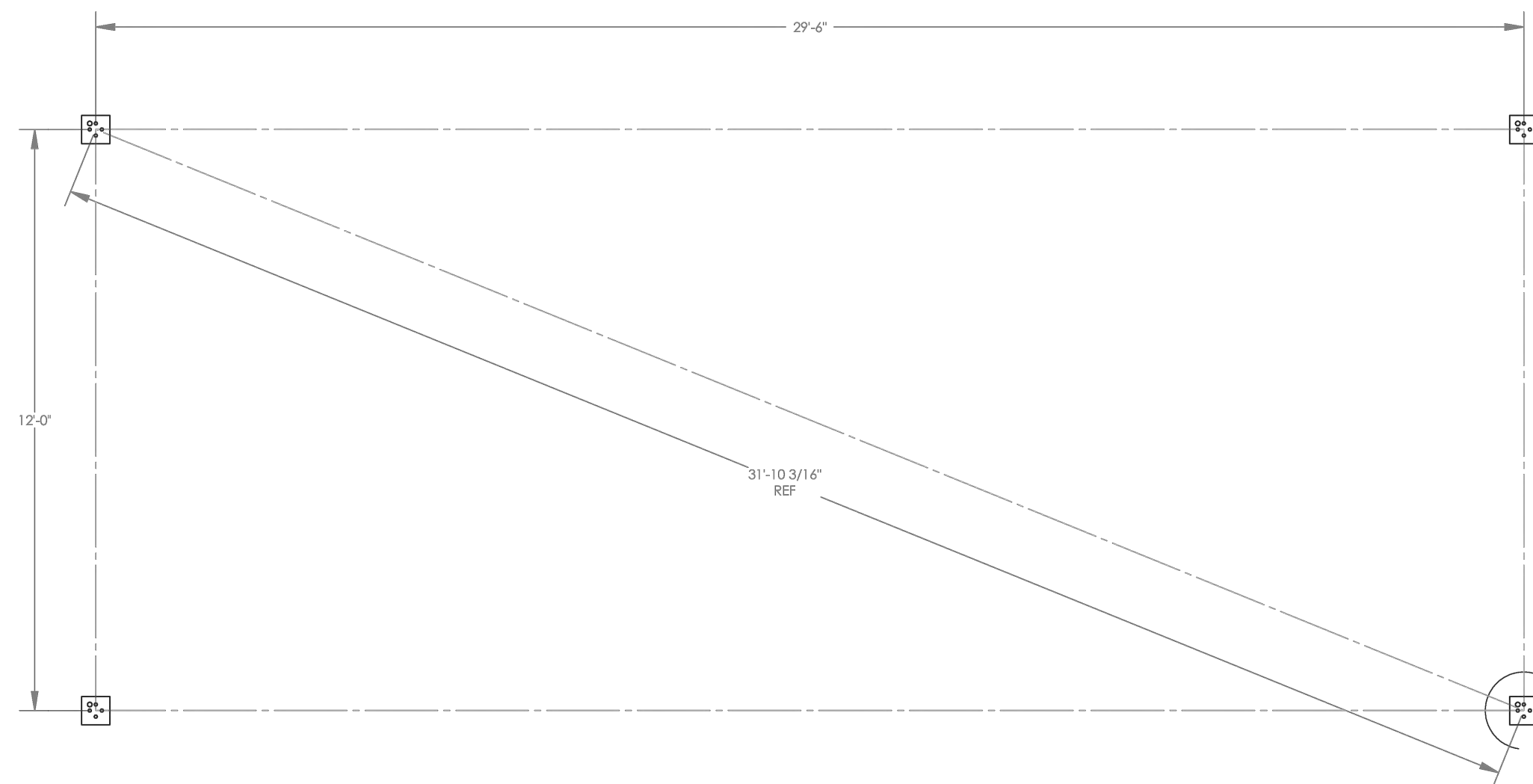
1 SHADE SHELTER - COVER SHEET

NOT TO SCALE



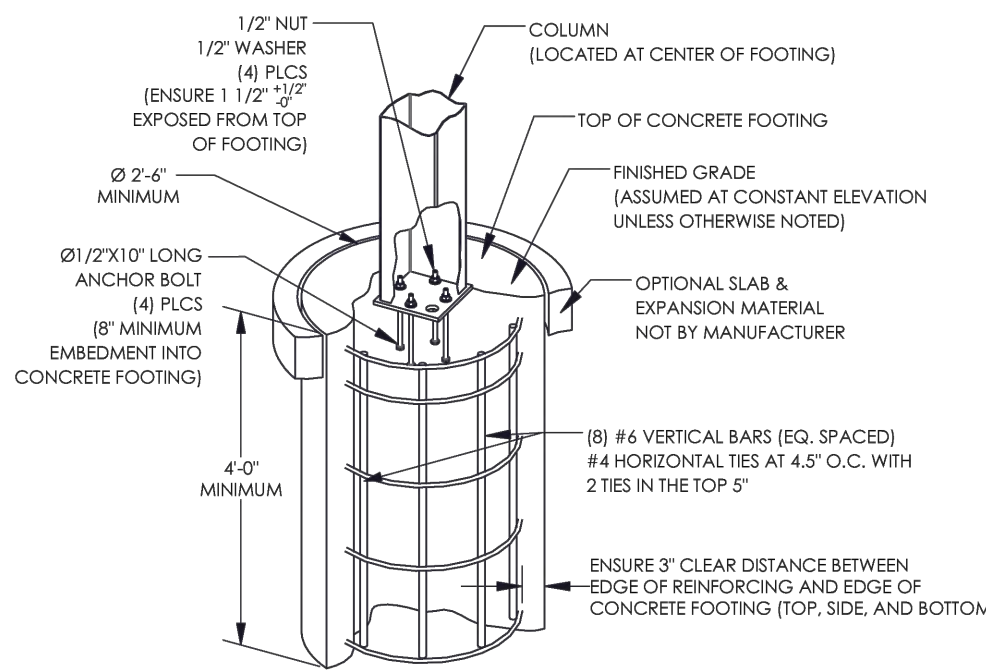
2 SHADE SHELTER - ARCHITECTURAL ELEVATIONS

NOT TO SCALE



ANCHOR AND FOOTING LAYOUT NOTES:

- ANCHORS MUST BE CENTERED IN FOOTINGS
- FOOTINGS MUST BE TURNED TO ALIGN WITH COLUMN AND TRUSS CENTERLINE

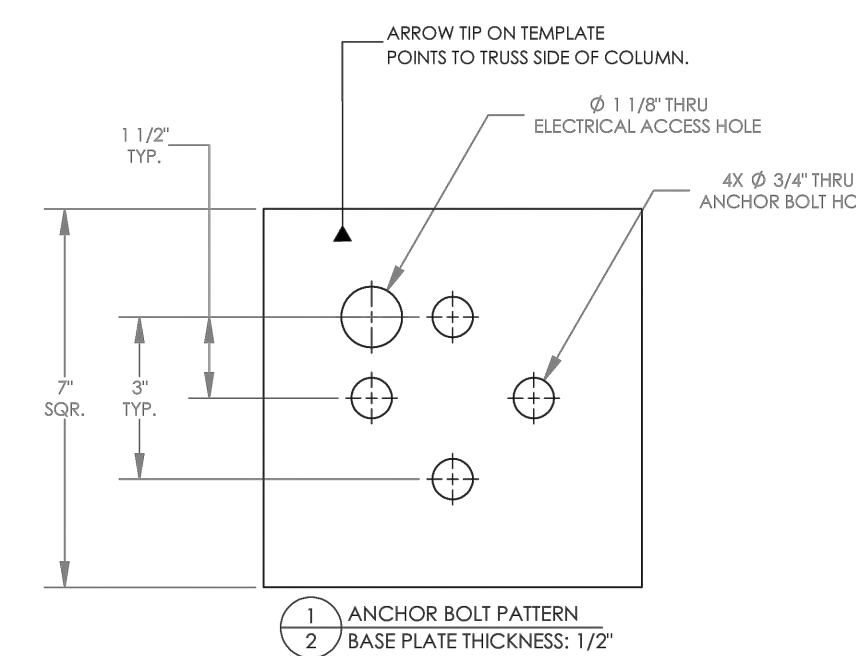


PIER FOOTING OPTION (INTERNAL ANCHOR BOLTS)

FOOTING DESIGN BY MANUFACTURER. FOOTING MATERIALS BY OTHERS.
 (TYPICAL WITH EACH COLUMN, QTY OF REINFORCING AND ANCHOR BOLTS SHOWN IN DRAWINGS MAY NOT REFLECT REQUIREMENTS)

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

- ANCHOR BOLTS SHALL BE ASTM A307 (GRADE A) MATERIAL UNLESS OTHERWISE NOTED.
- ANCHOR BOLTS SHALL BE EITHER "READY" OR "THREADED WITH NUT" AS DEFINED IN THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL.
- HOOKED ANCHOR BOLTS ARE NOT ACCEPTABLE.
- 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.
- 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.
- 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.
- THE CALCULATIONS FOR THIS STRUCTURE ASSUME A PINNED COLUMN BASE.
- THE FOLLOWING ADHESIVE ANCHORS MAY BE SUBSTITUTED FOR THE CAST-IN-PLACE ANCHOR BOLTS:
 HILTI HIT-200 (A OR R) 1/2" ADHESIVE WITH Ø 1/2" HASTE ROD WITH MINIMUM 4" EMBEDMENT.
 CONTRACTOR SHALL FOLLOW ALL INSTALLATION SPECIFICATIONS AND REQUIREMENTS OF ANCHOR MANUFACTURER.



FOUNDATION NOTES:

- 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.
- THE CONCRETE DESIGN IS BASED ON THE FOLLOWING PROPERTIES:
 • 28 DAY STRENGTH OF 4500 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.
- THE REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615, 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 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 SHOWN ON THESE DRAWINGS IS NOT SITE SPECIFIC, BUT BASED ON THE PRESUMPTIVE ALLOWABLE FOUNDATION PRESSURES IN CHAPTER 18 OF THE BUILDING CODE (CLASS 5 SOIL). THE BUILDING OFFICIAL IN THE JURISDICTION IN WHICH THIS STRUCTURE IS LOCATED MAY REQUIRE A SITE SPECIFIC GEOTECHNICAL REPORT OR LETTER FROM A QUALIFIED LOCAL PROFESSIONAL ENGINEER ATTESTING TO WHETHER THE ACTUAL SITE CONDITIONS MEET THE ASSUMPTIONS IDENTIFIED ABOVE.

3 SHADE SHELTER - ANCHOR AND FOOTING LAYOUT

NOT TO SCALE

4 SHADE SHELTER - ANCHOR AND FOOTING DETAILS

NOT TO SCALE



247 W. FRESHWATER WAY, SUITE 410
 MILWAUKEE, WI 53204
 PHONE: (414) 810-1245
 WWW.STORMWATER-SOLUTIONS-ENGINEERING.COM



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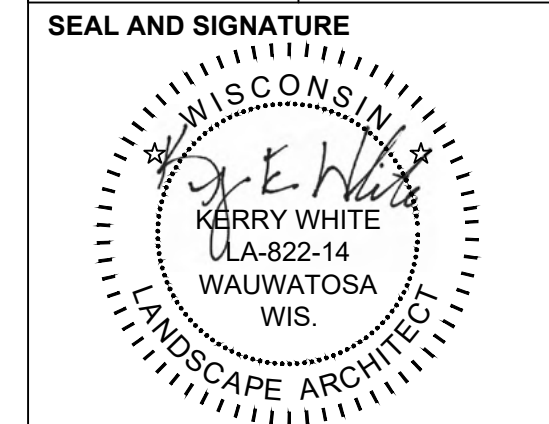


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 MILWAUKEE, WI 53205-0259
 PHONE: 414-283-4600
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SHEET NAME: SITE DETAILS	PROJECT NAME: 2023 GREEN INFRASTRUCTURE UPGRADES	PROJECT ADDRESS: FREDERICK J GAENSLER K-8 SCHOOL 1250 E. BURLINGHAM STREET, MILWAUKEE, WI 53212
	ISSUED FOR:	REV:
50% CD		11/14/2022
95% CD		12/22/2022
100% CD		1/23/2023

DRAWN BY:	ZWA
REVIEWED BY:	KW
APPROVED BY:	MM
DATE:	January 2023

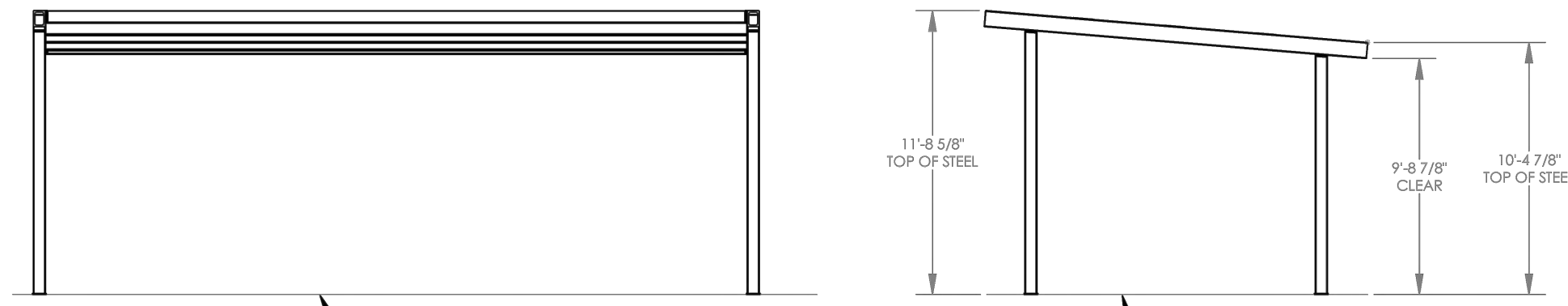
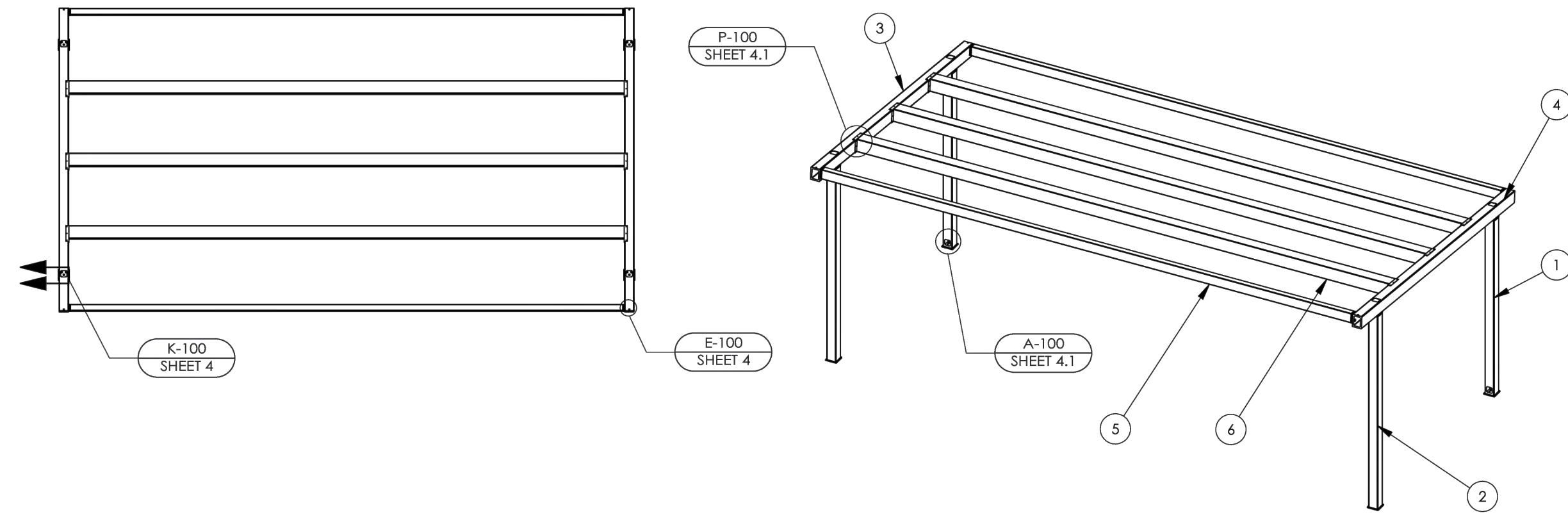


PROJECT NUMBER: 8176 (DIVISION 2)

SITE NUMBER: 185

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ITEM	QTY	PART NO.	DESCRIPTION	MATERIAL	WEIGHT
6	3	-	PURLIN ASM	HSS8X8X3/16	389.17
5	2	-	EAVE ASM	HSS6X4X3/16	241.49
4	1	-	TRUSS 2 ASM	HSS8X6X3/16	283.74
3	1	-	TRUSS 1 ASM	HSS8X6X3/16	283.74
2	2	-	COLUMN 2 ASM	HSS6X6X3/16	167.62
1	2	-	COLUMN 1 ASM	HSS6X6X3/16	153.19

5 SHADE SHELTER - STRUCTURAL FRAMING PLAN

NOT TO SCALE

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 MILWAUKEE, WI 53205-0259
 PHONE: 414-283-4600
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SHEET NAME: **SITE DETAILS**
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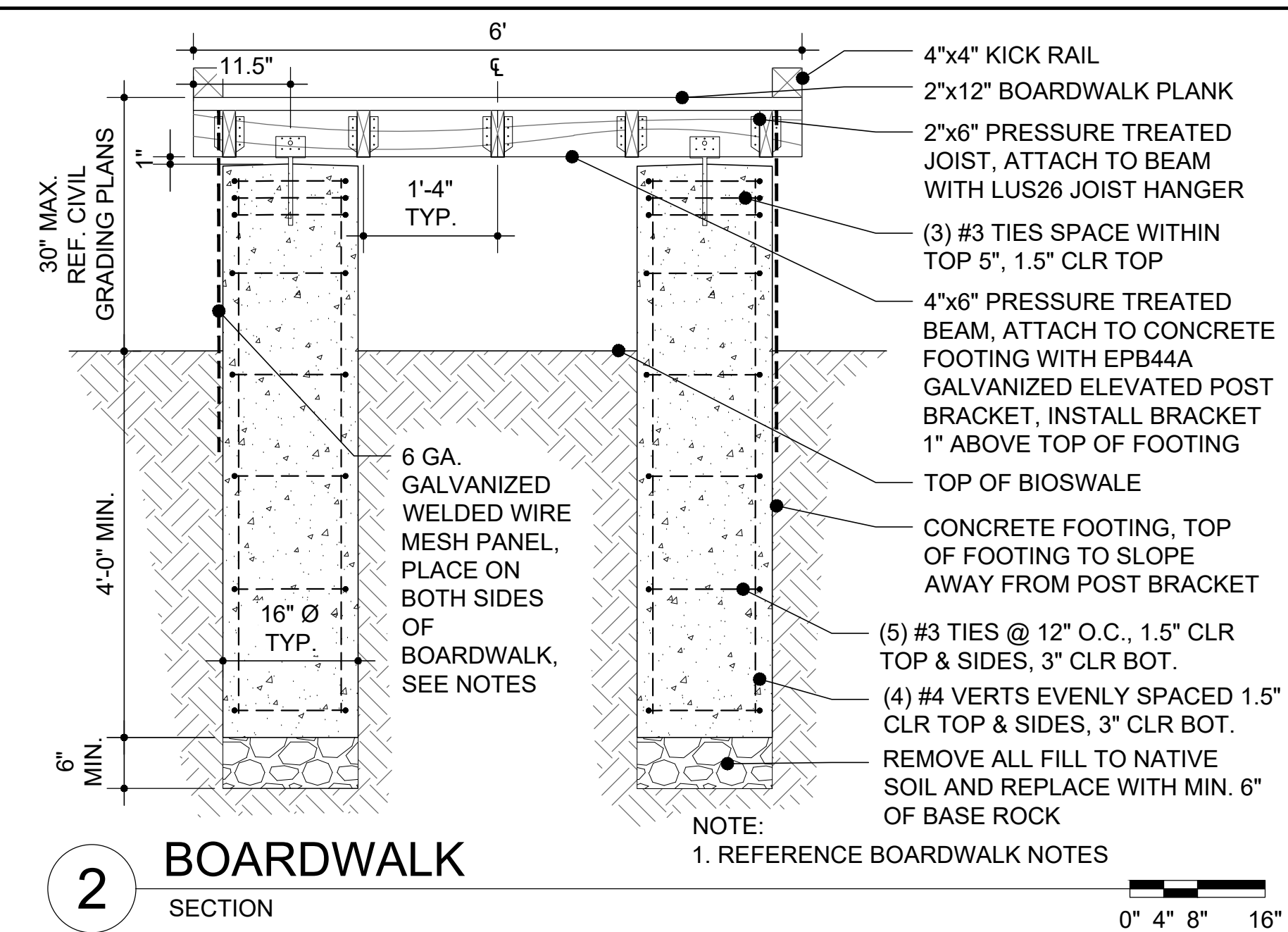
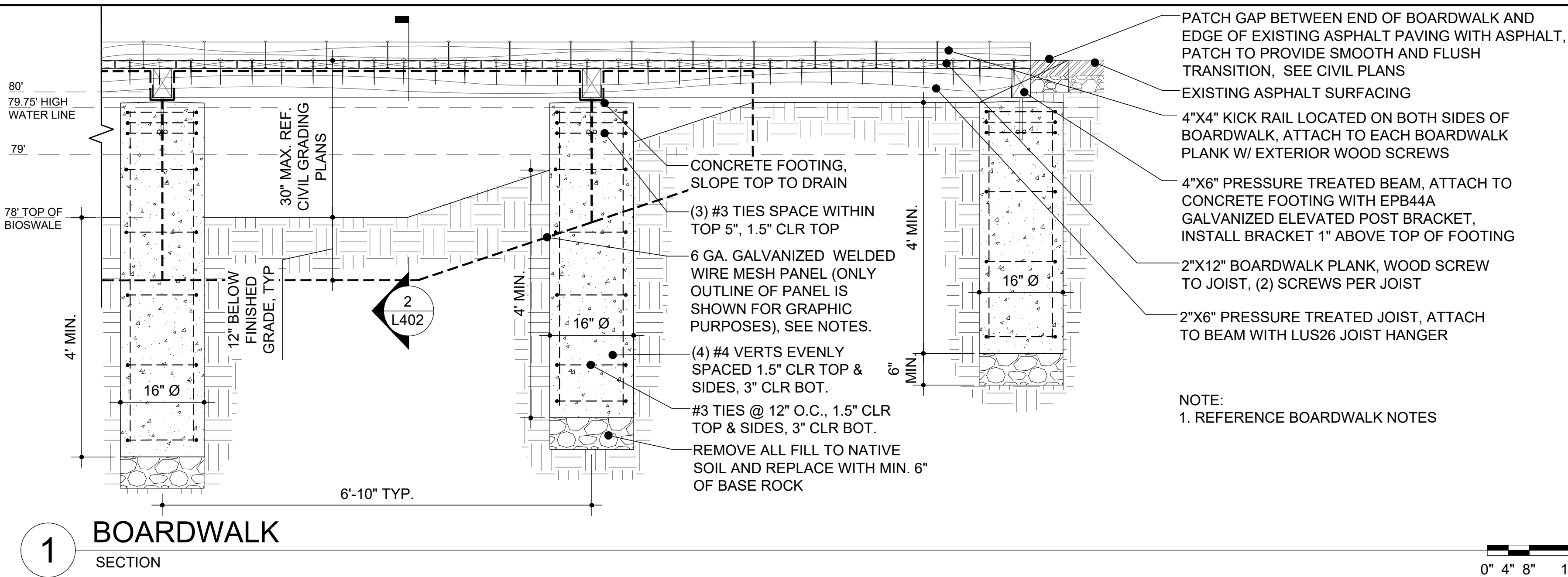
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1 BOARDWALK SECTION

2 BOARDWALK SECTION

BOARDWALK NOTES:

1. ALL WOOD TO BE TREATED W/ INTERNAL WOOD STABILIZER IF AN ALTERNATIVE IS NOT NOTED.
2. ALL WOOD TO BE FREE FROM SPLINTERS, WARPING AND CHECKING OVER 1/2".
3. PLACE PAVERS DIRECTLY UP TO EDGE OF BOARDWALK ON OTHER END. TOP OF PAVERS TO BE FLUSH WITH TOP OF BOARDWALK PLANKS.
4. NON-STRUCTURAL 6 GA. GALVANIZED WELDED WIRE MESH PANEL - NO OPENINGS GREATER THAN 3.5" ALLOWED. ATTACH PANEL TO OUTSIDE FACE OF CONCRETE FOOTING WITH 3/16" x 1-3/4" TAPCON WHITE STAR FLAT HEAD CONCRETE ANCHORS AND GALVANIZED 3/16" HALF CLIP CABLE CLAMP (GRAINGER ITEM: 6RNA8 OR APPROVED EQUAL). ATTACH TO BOARDWALK JOIST WITH GALVANIZED EXTERIOR SCREWS AND SAME CABLE CLAMP. 8" MAX SPACING ON CLAMPS. BOTTOM OF PANEL TO BE BURIED 12" BELOW FINISHED GRADE. PANEL TO BE CONTINUOUS BETWEEN CONCRETE FOOTINGS.
5. DESIGN LIVE LOAD = 100 PSF
6. WOOD SPECIES AND GRADE = TREATED SOUTHERN PINE #1
7. ALL CONNECTORS AND FASTENERS TO BE CORROSION RESISTANCE FOR EXPOSURE
8. CONCRETE COMPRESSIVE STRENGTH = 3,500 PSI
9. REINFORCED STEEL = GRADE 60
10. ASSUMED ALLOWABLE SOIL BEARING CAPACITY = 2,000PSF

PATCH GAP BETWEEN END OF BOARDWALK AND EDGE OF EXISTING ASPHALT PAVING WITH ASPHALT, PATCH TO PROVIDE SMOOTH AND FLUSH TRANSITION, SEE CIVIL PLANS
 EXISTING ASPHALT SURFACING
 4"x4" KICK RAIL LOCATED ON BOTH SIDES OF BOARDWALK, ATTACH TO EACH BOARDWALK PLANK W/ EXTERIOR WOOD SCREWS
 4"x6" PRESSURE TREATED BEAM, ATTACH TO CONCRETE FOOTING WITH EPB44A GALVANIZED ELEVATED POST BRACKET, INSTALL BRACKET 1" ABOVE TOP OF FOOTING
 2"x12" BOARDWALK PLANK, WOOD SCREW TO JOIST, (2) SCREWS PER JOIST
 2"x6" PRESSURE TREATED JOIST, ATTACH TO BEAM WITH LUS26 JOIST HANGER

NOTE:
 1. REFERENCE BOARDWALK NOTES

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 1. REFERENCE BOARDWALK NOTES

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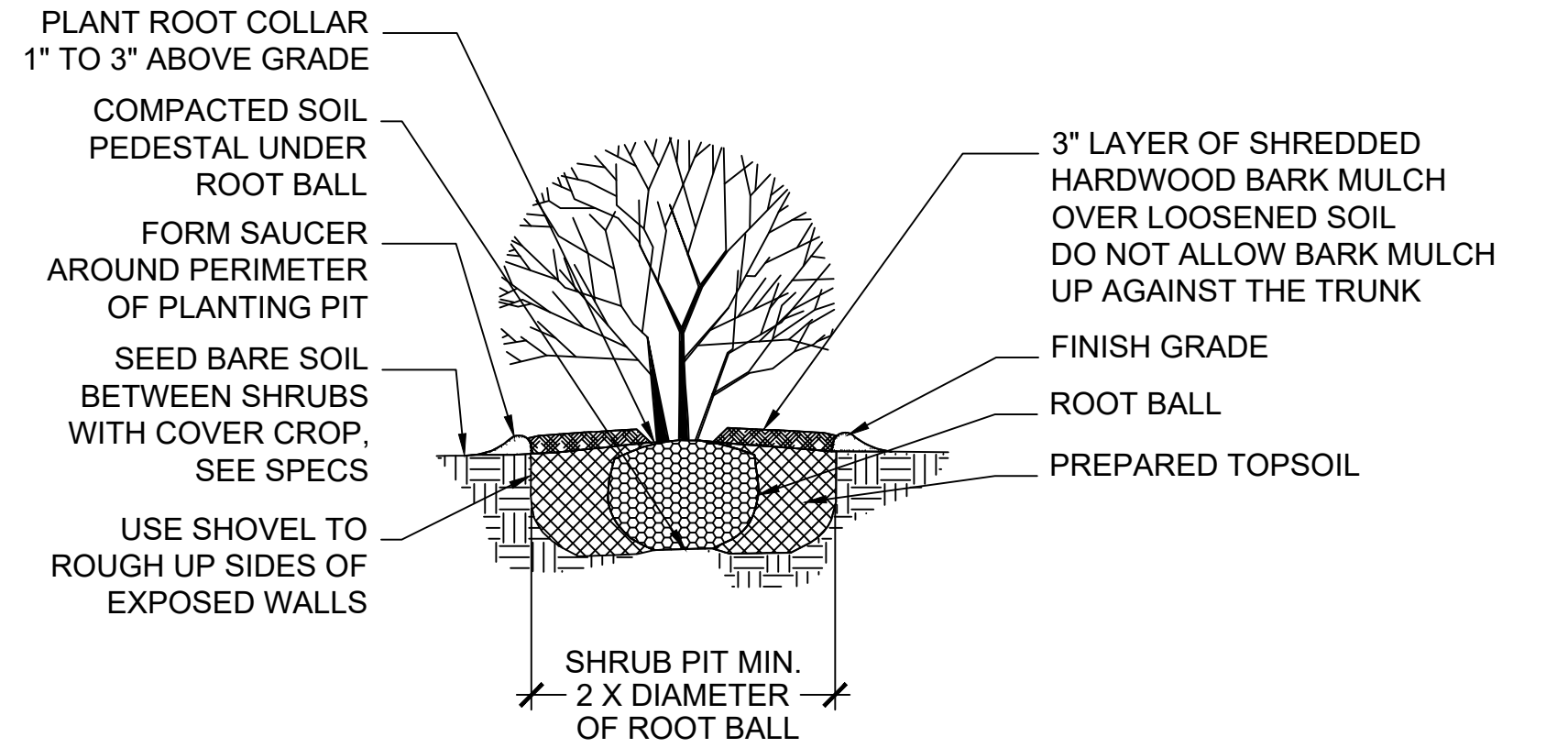
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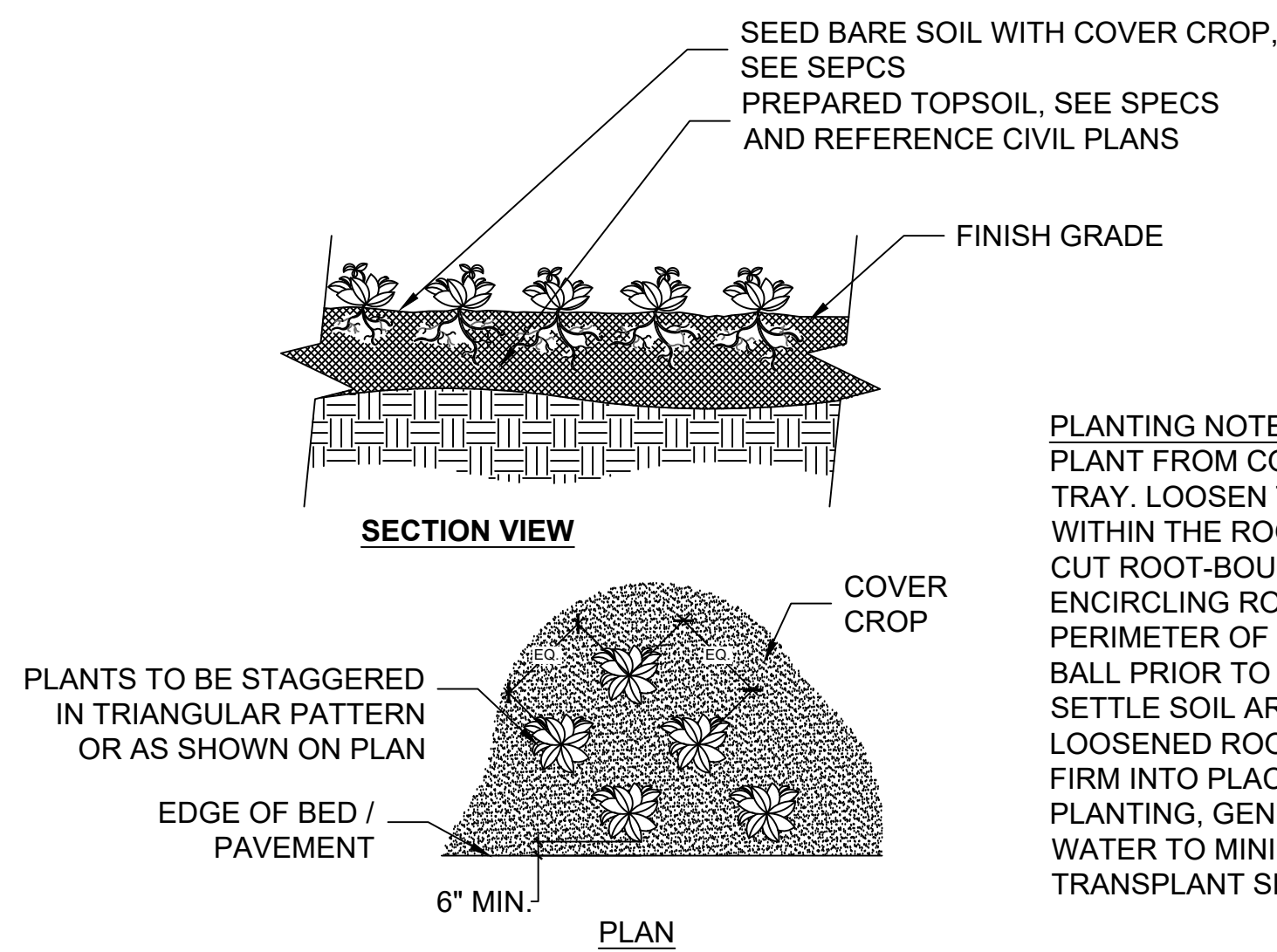
B & B NOTES: REMOVE THE ROPE AROUND TRUNK, PEEL THE TOP OF BURLAP BACK AND SCRAPE EXCESS SOIL TO EXPOSE THE ROOT COLLAR. REMOVE THE WIRE BASKET AND PEEL THE BURLAP OFF

CONTAINER NOTES: REMOVE PLANT FROM POT. LOOSEN ROOTS / CUT WITH KNIFE TO REDUCE POT-BOUND ROOTS



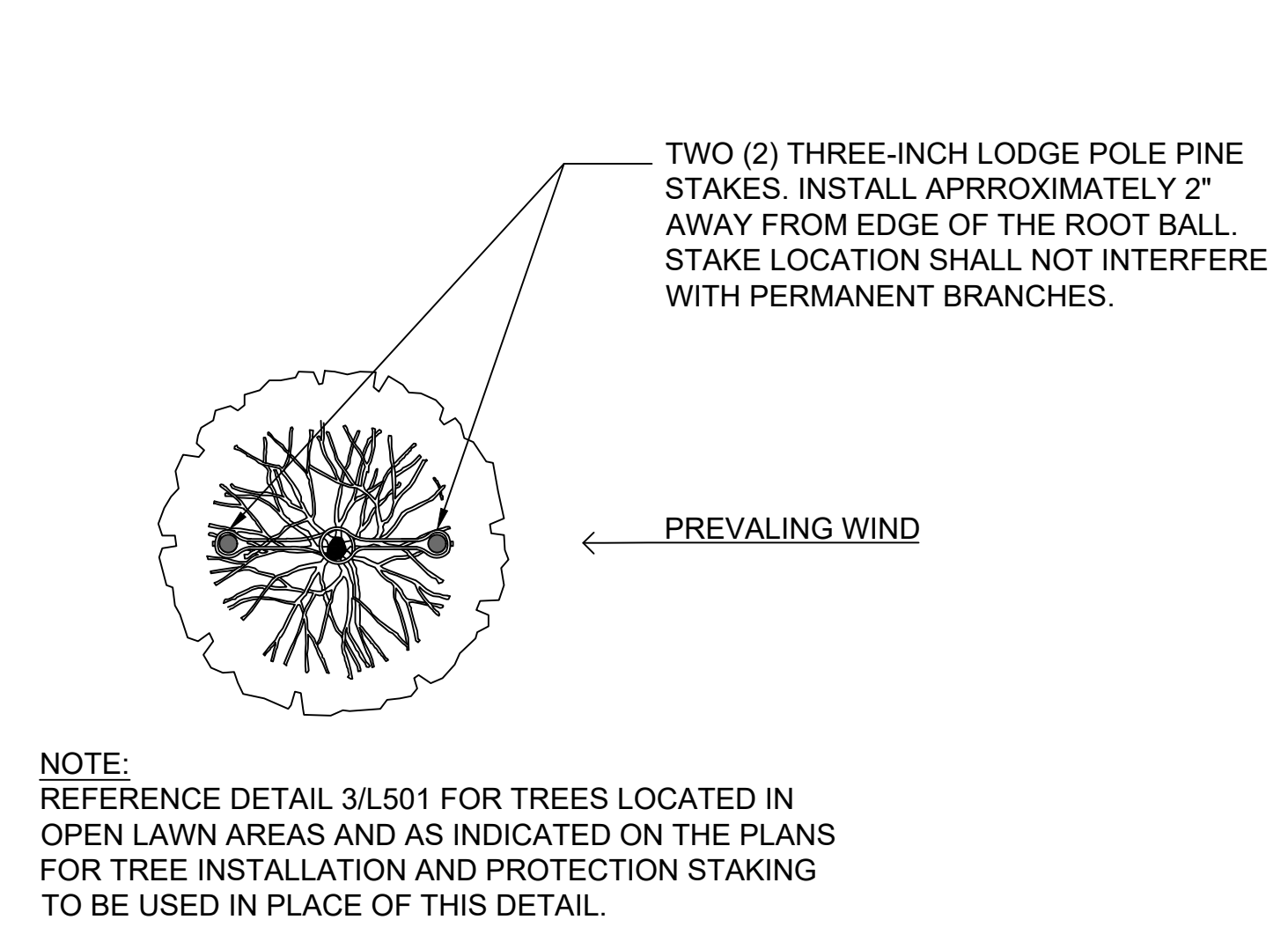
1 SHRUB PLANTING

SECTION 0" 6" 12" 24"



2 PLUG PLANTING

SECTION 0" 6" 12" 24"

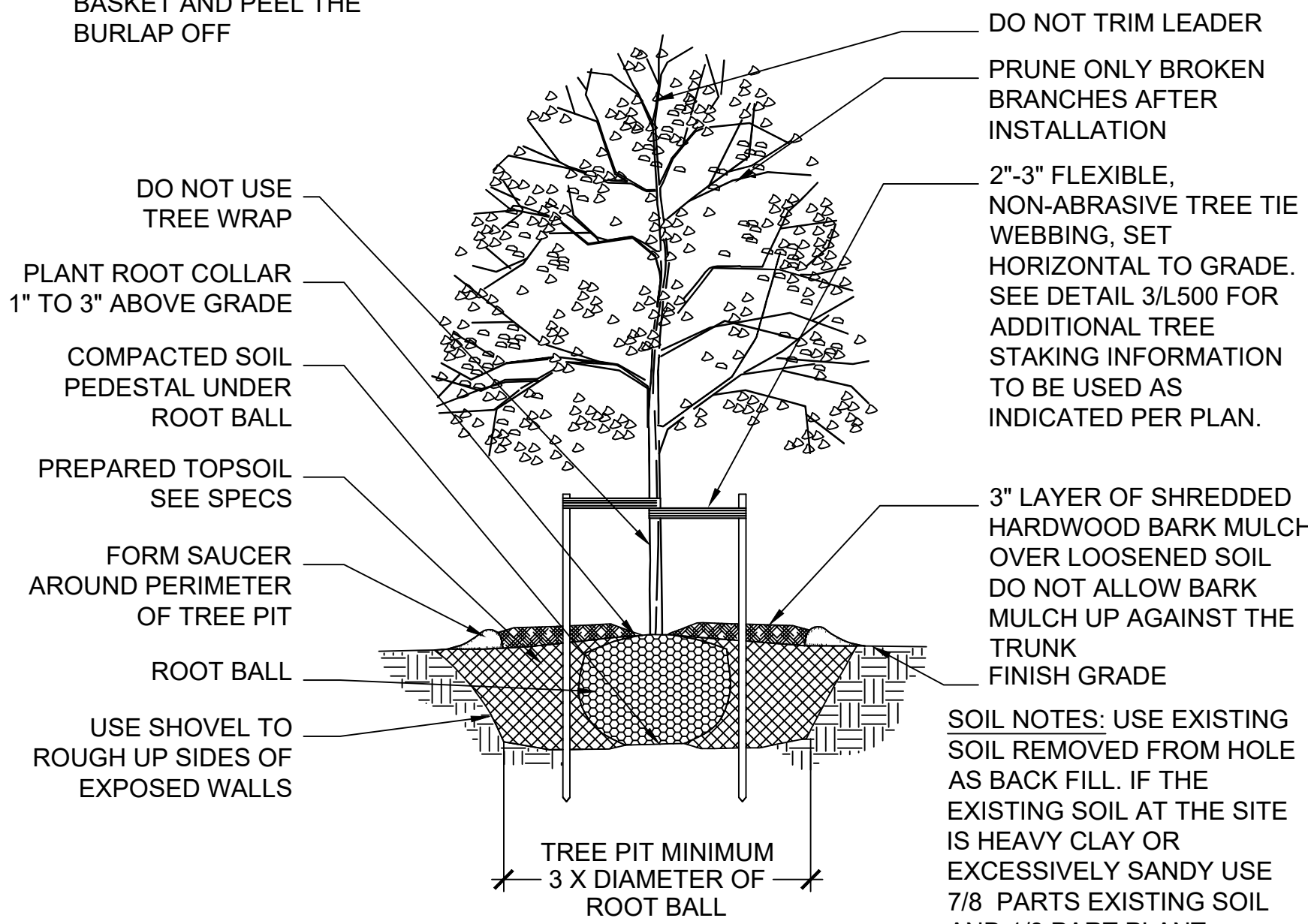


3 TREE STAKING

PLAN 0" 6" 12" 24"

B & B NOTES: REMOVE THE ROPE AROUND TRUNK, PEEL THE TOP OF BURLAP BACK AND SCRAPE EXCESS SOIL TO EXPOSE THE ROOT COLLAR. REMOVE THE WIRE BASKET AND PEEL THE BURLAP OFF

DNR NOTES: THIS PLANTING DETAIL CONFORMS TO TREE PLANTING GUIDELINES AS SPECIFIED IN DNR DOCUMENT, 'DEVELOPING PLANTING SPECIFICATIONS' REVISED 10/25

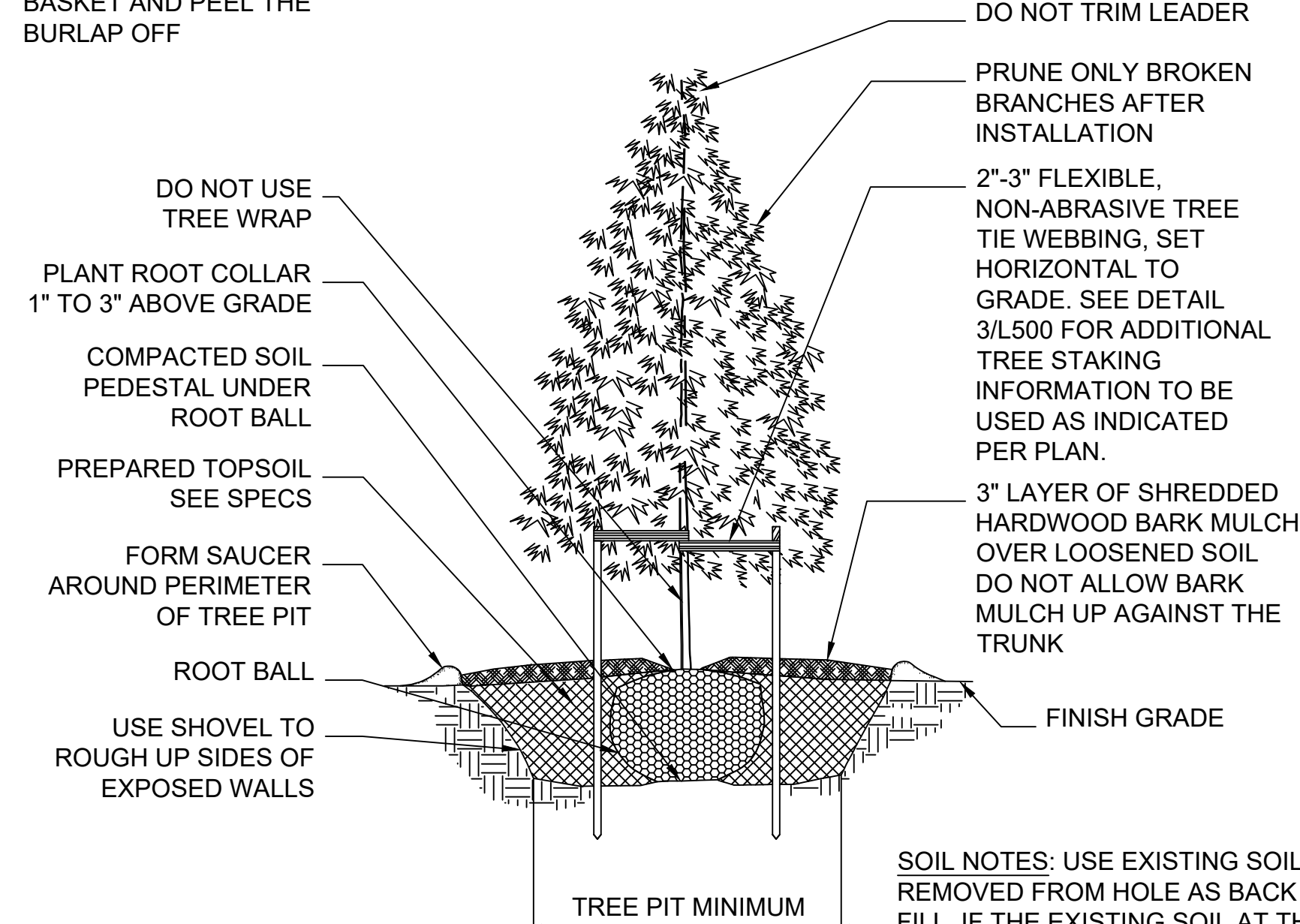


4 DECIDUOUS TREE PLANTING

SECTION NTS

B & B NOTES: REMOVE THE ROPE AROUND TRUNK, PEEL THE TOP OF BURLAP BACK AND SCRAPE EXCESS SOIL TO EXPOSE THE ROOT COLLAR. REMOVE THE WIRE BASKET AND PEEL THE BURLAP OFF

DNR NOTES: THIS PLANTING DETAIL CONFORMS TO TREE PLANTING GUIDELINES AS SPECIFIED IN DNR DOCUMENT, 'DEVELOPING PLANTING SPECIFICATIONS' REVISED 10/25



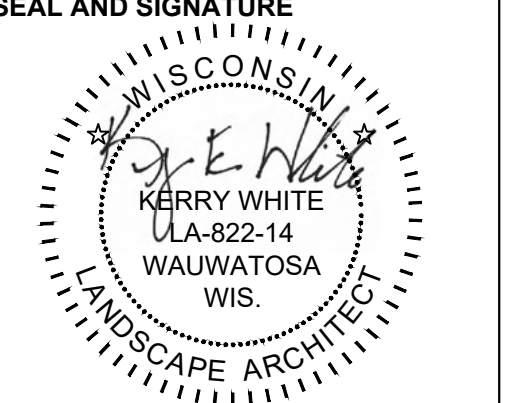
5 EVERGREEN TREE PLANTING

SECTION NTS

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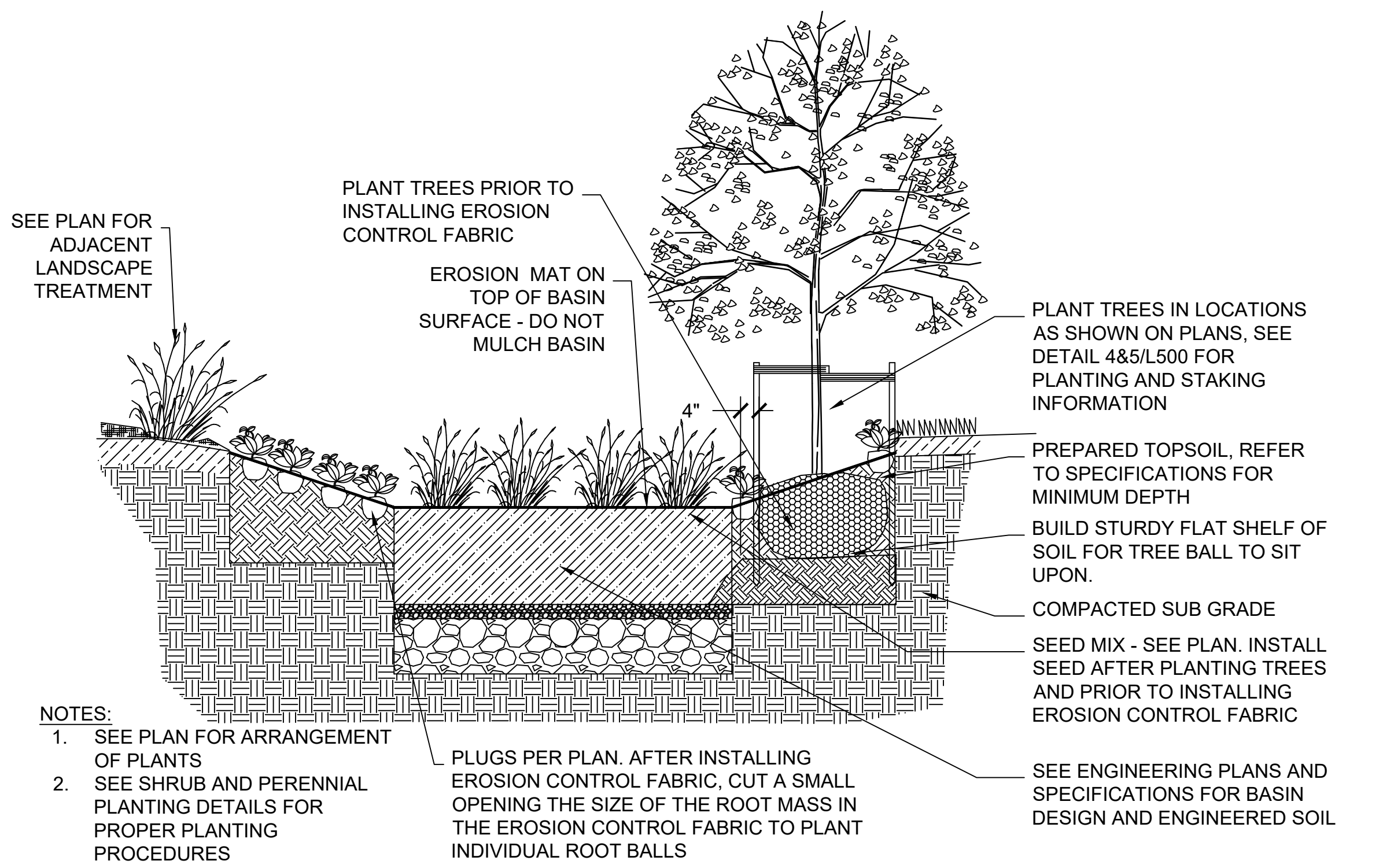
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PROJECT NUMBER: 8176 (DIVISION 2)
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SHEET:
L500

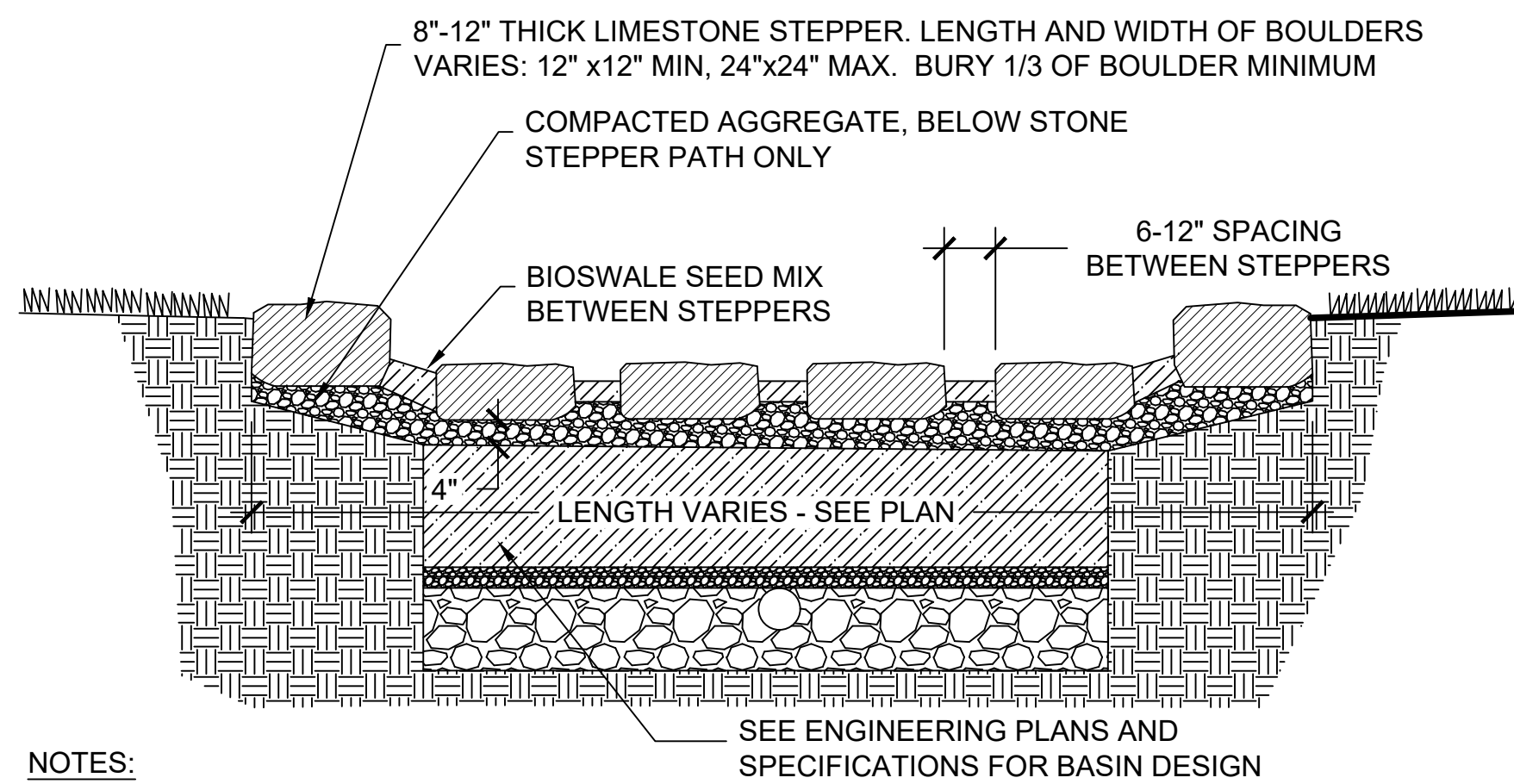




1 BIOFILTRATION BASIN WITH MIXED PLANT TYPES

SECTION

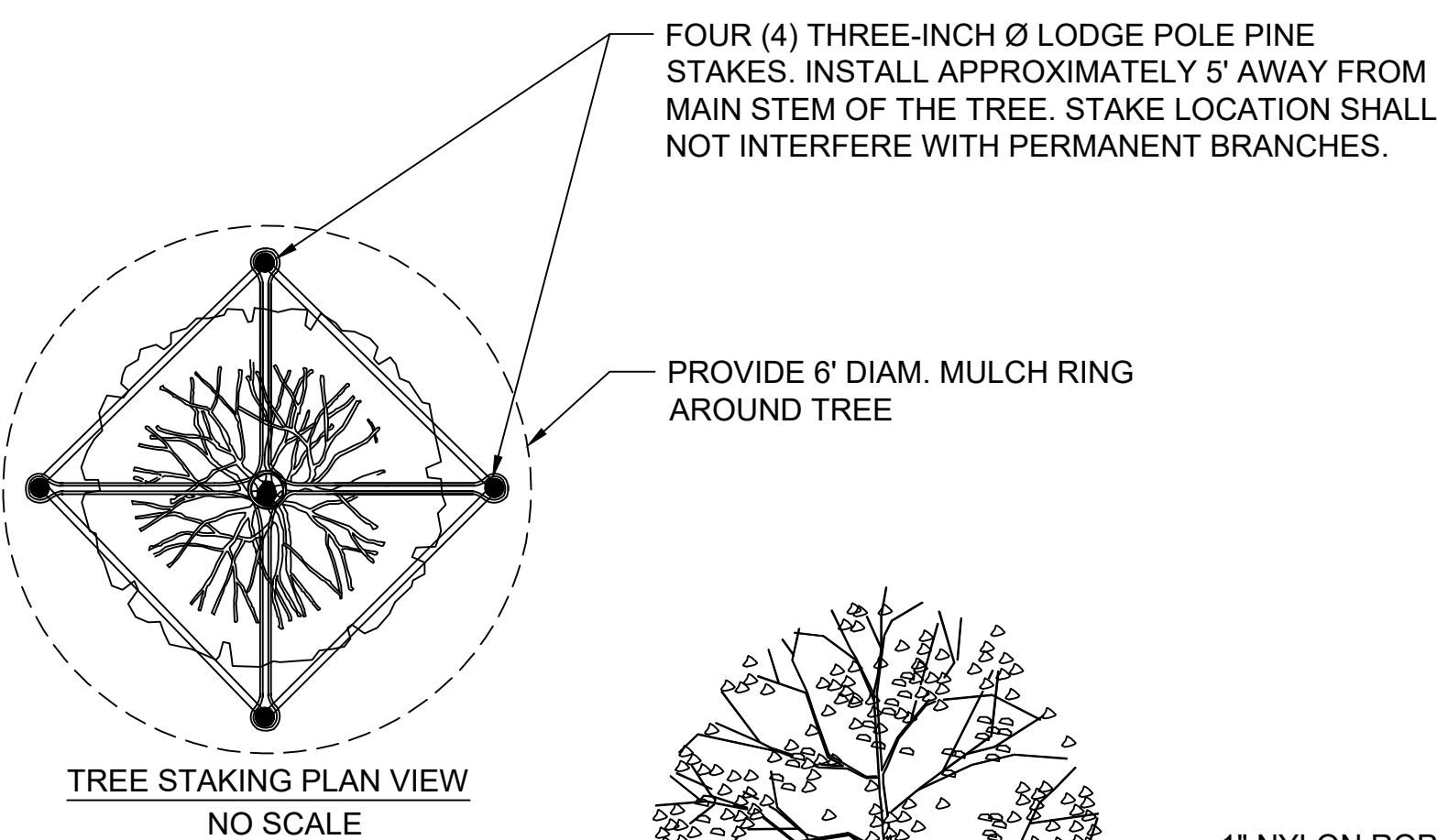
0" 6" 12" 24"



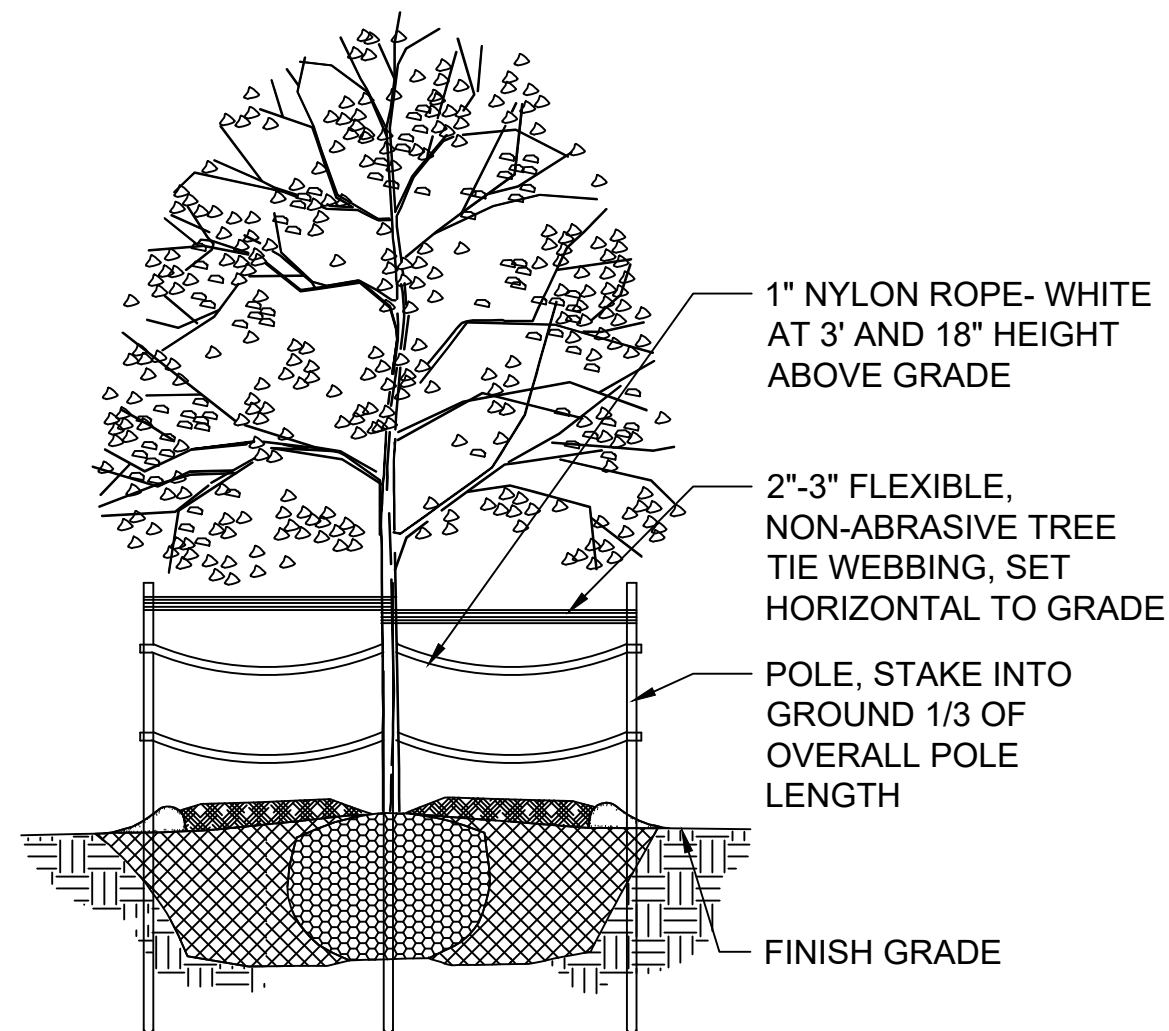
2 BIOSWALE STEPPING STONE PATH

SECTION

0" 6" 12" 24"



TREE STAKING PLAN VIEW
NO SCALE



NOTE:
THIS DETAIL IS TO BE USED IN AREAS WHERE TREES ARE IN OPEN AREAS ONLY. SEE L300 FOR LOCATIONS.

REFER TO DETAIL 3/L500 FOR STAKING OF TREES WITHOUT ADDITIONAL INSTALLATION AND PROTECTION.

3 TREE INSTALLATION AND PROTECTION STAKING

SECTION

NTS

PLANTING NOTES

- CONTRACTOR SHALL INSPECT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS RELATED TO THE NATURE AND SCOPE OF WORK.
- CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND AND ABOVE GROUND UTILITIES AND PROVIDE THE NECESSARY PROTECTION BEFORE CONSTRUCTION BEGINS.
- CONTRACTOR SHALL VERIFY PLAN LAYOUT AND DIMENSIONS SHOWN AND BRING TO THE ATTENTION OF THE PRIME CONSULTANT DISCREPANCIES WHICH MAY COMPROMISE THE DESIGN AND/OR INTENT OF THE PROJECT'S LAYOUT.
- CONTRACTOR SHALL ASSURE COMPLIANCE WITH APPLICABLE CODES AND REGULATIONS GOVERNING THE WORK AND/OR MATERIALS SUPPLIED.
- CONTRACTOR SHALL PROTECT EXISTING ROADS, CURBS/GUTTERS, TRAILS, SIDEWALKS, TREES, LAWNS AND OTHER SITE ELEMENTS DURING CONSTRUCTION OPERATIONS. DAMAGE TO SAME SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR TO MAINTAIN EXISTING GRADE WITHIN THE TREE CANOPY LINE (MINIMUM) OF TREES TO BE PRESERVED AND PROTECTED UNLESS OTHERWISE INDICATED ON THE PLANS. REFERENCE SPECIFICATIONS FOR ADDITIONAL TREE PROTECTION INFORMATION.
- NO PRUNING SHALL BE PERFORMED ON TREES TO BE PRESERVED EXCEPT BY APPROVED ARBORIST.
- NO EQUIPMENT SHALL OPERATE INSIDE THE DRIP LINE (AT MINIMUM) OF TREES TO BE PRESERVED.
- HAND WORK ONLY AND NO MACHINERY OR MATERIAL STORAGE WITHIN DRIP LINE OF TREES TO BE PRESERVED.
- EXISTING TREES TO REMAIN SHALL BE FERTILIZED AND PRUNED TO REMOVE DEAD WOOD, DAMAGED, AND/OR RUBBING BRANCHES.
- CONTRACTOR SHALL COORDINATE THE PHASES OF CONSTRUCTION AND PLANTING INSTALLATION WITH OTHER CONTRACTORS WORKING ON THE SITE.
- CONTRACTOR TO COMPLETE SOIL PREPARATION PER SPECIFICATIONS.
- CONTRACTOR TO SUPPLY AND INSTALL SOD, TREES, SHRUBS, PERENNIALS, GRASSES, PLUGS, AND GROUNDCOVERS.
- PROPOSED PLANT MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1 UNLESS NOTED OTHERWISE. DECIDUOUS SHRUBS SHALL HAVE AT LEAST 5 CANES AT THE SPECIFIED HEIGHT. ORNAMENTAL TREES SHALL HAVE NO "V" CROTCHES AND SHALL BEGIN BRANCHING NO LOWER THAN 3 FEET ABOVE ROOT BALL. SHADE TREES SHALL BEGIN BRANCHING NO LOWER THAN 6' ABOVE FINISHED GRADE.
- ALL PLANTS AND TREES SHALL BE PLANTED PER DETAILS AND SPECS.
- ALL TREES, AS IDENTIFIED ON THE PLANS, SHALL BE STAKED AS SHOWN ON THE PLANTING DETAILS UNLESS NOTED OTHERWISE ON THE PLANS.
- NO PLANTS SHALL BE INSTALLED UNTIL FINAL GRADES AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- WHEN QUANTITIES ARE LISTED THEY ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. ALL COUNTS MUST BE VERIFIED BY THE CONTRACTOR. IN THE CASE OF A DISCREPANCY BETWEEN THE LEGEND AND THE PLAN, PLANTS INDICATED ON THE PLAN SHALL SUPERCEDE QUANTITIES LISTED IN THE LEGEND. SPECIFICATIONS AND DETAILS TAKE PRECEDENCE OVER NOTES.
- NO PLANT MATERIAL SUBSTITUTIONS WILL BE ACCEPTED UNLESS APPROVAL IS REQUESTED OF THE LANDSCAPE ARCHITECT BY THE LANDSCAPE CONTRACTOR PRIOR TO THE SUBMISSION OF BID AND/OR QUOTATION.
- ADJUSTMENTS IN LOCATION OF PROPOSED PLANT MATERIAL MAY BE NEEDED IN FIELD. PRIME CONSULTANT MUST BE NOTIFIED PRIOR TO THE ADJUSTMENT OF PLANTS.
- CONTRACTOR SHALL VERIFY PLANT QUANTITIES SHOWN ON THE PLAN AND PROVIDE A LIST TO THE CLIENT IDENTIFYING THE SPECIES AND SIZES TO BE USED THROUGHOUT THE PROJECT. THE LANDSCAPE ARCHITECT AND THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY SUBSTANDARD PLANT MATERIAL. REJECTED MATERIAL SHALL BE REMOVED FROM THE PROJECT SITE IMMEDIATELY.

STORMWATER SOLUTIONS ENGINEERING, LLC
247 W. FRESHWATER WAY, SUITE 410
MILWAUKEE, WI 53204
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SEAL AND SIGNATURE

KERRY WHITE
LA-822-14
WAUWATOSA
WIS.

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SITE NUMBER: 185

SHEET:

L501

