
EATON CORPORATION BADGER DRIVE FACILITY

2300 BADGER DR
WAUKESHA, WI



FINAL SITE PLAN & ARCHITECTURE REVIEW

10/05/2020

PROJECT NUMBER: 220395

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ONSITE CIVIL ENGINEERING INFRASTRUCTURE PLANS FOR SOUTH BUILDING ADDITION

WAUKESHA, WI
PLANS PREPARED FOR



LEGEND		
	EXISTING	PROPOSED
SANITARY SEWER MANHOLE	⊙	⊙
STORM SEWER MANHOLE	⊙	⊙
STORM SEWER CATCH BASIN (ROUND CASTING)	⊙	⊙
STORM SEWER CATCH BASIN (RECTANGULAR CASTING)	⊙	⊙
PRECAST FLARED END SECTION	⊙	⊙
CONCRETE HEADWALL	⊙	⊙
VALVE BOX	⊙	⊙
FIRE HYDRANT	⊙	⊙
CLEANOUT	⊙	⊙
SANITARY SEWER	—	—
FORCE MAIN	—	—
STORM SEWER	—	—
DRAIN TILE	—	—
WATER MAIN	—	—
FIRE PROTECTION	—	—
ELECTRICAL CABLE	—	—
OVERHEAD WIRES	—	—
GAS MAIN	—	—
TELEPHONE LINE	—	—
UTILITY CROSSING	—	—
CAUTION EXISTING UTILITIES NEARBY	—	—
GRANULAR TRENCH BACKFILL	—	—
LIGHTING	—	—
ELECTRICAL TRANSFORMER OR PEDESTAL	—	—
POWER POLE	—	—
POWER POLE WITH LIGHT	—	—
GUY WIRE	—	—
STREET SIGN	—	—
CONTOUR	—	—
SPOT ELEVATION	—	—
WETLANDS	—	—
PRIMARY ENVIRONMENTAL CORRIDOR	—	—
FLOODWAY	—	—
FLOODPLAIN	—	—
HIGH WATER LEVEL (HWL)	—	—
NORMAL WATER LEVEL (NWL)	—	—
DIRECTION OF SURFACE FLOW	—	—
DITCH OR SWALE	—	—
DIVERSION SWALE	—	—
OVERFLOW RELIEF ROUTING	—	—
TREE WITH TRUNK SIZE	—	—
SOIL BORING	—	—
TOPSOIL PROBE	—	—
FENCE LINE, TEMPORARY SILT	—	—
FENCE LINE, WIRE	—	—
FENCE LINE, CHAIN LINK OR IRON	—	—
FENCE LINE, WOOD OR PLASTIC	—	—
CONCRETE SIDEWALK	—	—
CURB AND GUTTER	—	—
DEPRESSED CURB	—	—
REVERSE PITCH CURB & GUTTER	—	—
EASEMENT LINE	—	—

ABBREVIATIONS			
BL	BASE LINE	NWL	NORMAL WATER LEVEL
C & G	LONG CHORD OF CURVE	PC	POINT OF CURVATURE
CL	CURB AND GUTTER	PT	POINT OF TANGENCY
CB	CATCH BASIN	PVI	POINT OF VERTICAL INTERSECTION
CL	CENTERLINE	R	RADIUS
DE	DEGREE OF CURVE	ROW	RIGHT-OF-WAY
EP	EDGE OF PAVEMENT	SAN	SANITARY SEWER
FF	FINISHED FLOOR	ST	STORM SEWER
FG	FINISHED GRADE	T	TANGENCY OF CURVE
FL	FLOW LINE	TOB	TOP OF BANK
FP	FLOODPLAIN	TC	TOP OF CURB
FR	FRAME	TF	TOP OF FINISH
FW	FLOODWAY	TP	TOP OF PIPE
HWL	HIGH WATER LEVEL	TS	TOP OF SIDEWALK
INV	INVERT	TW	TOP OF WALK
LEN	LENGTH OF CURVE	WM	WATER MAIN
MH	MANHOLE	WA	WATER MAIN INTERSECTION ANGLE

PLAN I DESIGN I DELIVER
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 BUTLER, WI 53007
 (414) 866-7565
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BENCHMARKS
 REFERENCE BENCHMARK
 BENCHMARK 1: HYDRANT ON NORTH SIDE OF BADGER DRIVE
 BLOCK WEST PROPERTY LINE PER TOPOGRAPHY
 EXHIBIT BY CHAPMAN LAND SURVEYS LLC PROJECT
 NO. 1607-SUE, DATED JANUARY 22, 2014.
 ELEVATION = 26.48
 VERTICAL DATUM: NATIONAL GEODETIC DATUM
 OF 1929 (NGVD)
 BEARINGS REFERENCED TO THE WISCONSIN STATE PLANE
 COORDINATE SYSTEM SOUTH ZONE (N.A.D. 1927)
 SITE BENCHMARK:
 4" E FLANGE BOLT
 HYDRANT EL. = 26.48
 SCALE: 1" = 400'

GENERAL NOTES

- THE INTENTION OF THE PLANS AND SPECIFICATIONS IS TO SET FORTH PERFORMANCE AND CONSTRUCTION MATERIAL STANDARDS FOR THE PROPER EXECUTION OF WORK. ALL WORKS CONTAINED WITHIN THE PLANS AND SPECIFICATIONS SHALL BE COMPLETED IN ACCORDANCE WITH ALL REQUIREMENTS FROM LOCAL, STATE, FEDERAL, OR OTHER GOVERNING AGENCY'S LAWS, REGULATIONS, JURISDICTIONAL ORDINANCES, CODES, ETC., AND THE OWNER'S DIRECTION.
- A GEOTECHNICAL REPORT HAS BEEN PREPARED BY GILES ENGINEERING ASSOCIATES, INC., DATED AUGUST 2020, FOR THE PROJECT SITE. THE DATA ON SUB-SURFACE SOIL CONDITIONS IS NOT INTENDED AS A REPRESENTATION OR WARRANTY OF THE CONTINUITY OF SUCH CONDITIONS BETWEEN BORINGS OR INDICATED SAMPLING LOCATIONS. IT SHALL BE EXPRESSLY UNDERSTOOD THAT OWNER WILL NOT BE RESPONSIBLE FOR ANY INTERPRETATIONS OR CONCLUSIONS DRAWN THEREFROM BY THE CONTRACTOR. DATA IS MADE AVAILABLE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY ADDITIONAL SOIL INVESTIGATIONS THEY FEEL IS NECESSARY FOR THE PROPER EVALUATION OF THE SITE FOR PURPOSES OF PLANNING, BIDDING, OR CONSTRUCTING THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND UNDERSTAND ALL COMPONENTS OF THE PLANS AND SPECIFICATIONS, INCLUDING FIELD VERIFYING SOIL CONDITIONS PRIOR TO SUBMISSION OF A BID PROPOSAL.
- THE CONTRACTOR SHALL PROMPTLY REPORT ANY ERRORS OR AMBIGUITIES LEARNED AS PART OF THEIR REVIEW OF PLANS, SPECIFICATIONS, REPORTS AND FIELD INVESTIGATIONS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COMPUTATION OF QUANTITIES AND WORK REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR'S BID SHALL BE BASED ON ITS OWN COMPUTATIONS AND IN NO SUCH MANNER RELY ON THE ENGINEER'S ESTIMATE.
- QUESTIONS/CLARIFICATIONS WILL BE INTERPRETED BY ENGINEER/OWNER PRIOR TO THE AWARD OF CONTRACT. ENGINEER/OWNER WILL SUBMIT OFFICIAL RESPONSES IN WRITING. INTERPRETATIONS PRESENTED IN OFFICIAL RESPONSES SHALL BE BINDING ON ALL PARTIES ASSOCIATED WITH THE CONTRACT. IN NO WAY SHALL WORD-OF-MOUTH DIALOG CONSTITUTE AN OFFICIAL RESPONSE.
- PRIOR TO START OF WORK CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL CONDITIONS OF THE SITE AND SHALL ACCOUNT FOR CONDITIONS THAT AFFECT, OR MAY AFFECT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, LIMITATIONS OF WORK ACCESS, SPACE LIMITATIONS, OVERHEAD OBSTRUCTIONS, TRAFFIC PATTERNS, LOCAL REQUIREMENTS, ADJACENT ACTIVITIES, ETC. FAILURE TO CONSIDER SITE CONDITIONS SHALL NOT BE CAUSE FOR CLAIM OF JOB EXTRA.
- COMMENCEMENT OF CONSTRUCTION SHALL EXPLICITLY CONFIRM THAT THE CONTRACTOR HAS REVIEWED THE PLANS AND SPECIFICATIONS IN ENTIRETY AND CERTIFIES THAT THEIR SUBMITTED BID PROPOSAL CONTAINS PROVISIONS TO COMPLETE THE PROJECT WITH THE EXCEPTION OF UNRESERVED FIELD CONDITIONS. ALL APPLICABLE PERMITS HAVE BEEN OBTAINED AND CONTRACTOR UNDERSTANDS ALL OF THE REQUIREMENTS OF THE PROJECT.
- SHOULD ANY DISCREPANCIES OR CONFLICTS IN THE PLANS OR SPECIFICATIONS BE DISCOVERED AFTER THE AWARD OF CONTRACT, ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY AND CONSTRUCTION OF ITEMS AFFECTED BY THE DISCREPANCIES/CONFLICTS SHALL NOT COMMENCE, OR CONTINUE UNTIL A WRITTEN RESPONSE FROM ENGINEER/OWNER IS RECEIVED. IN THE EVENT OF A CONFLICT BETWEEN REFERENCED CODES, STANDARDS, SPECIFICATIONS AND PLANS, THE ONE ESTABLISHING THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.
- THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS AND LICENSES TO COMPLETE THE PROJECT, OBTAINING PERMITS, OR DELAYS, IS NOT CAUSE FOR DELAY OF THE CONTRACT OR SCHEDULE. CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS.
- THE CONTRACTOR SHALL NOTIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND DIGGERS HOTLINE IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL JURISDICTIONAL, ORDINANCES/CODES/ELECTRIC, FERTIL, STIPULATIONS, AND OTHER APPLICABLE STANDARDS.
- SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO INITIATE, INSTITUTE, ENFORCE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND JOB SITE SAFETY PROGRAMS IN CONNECTION WITH THE WORK.
- CONTRACTOR SHALL KEEP THE JOBSITE CLEAN AND ORDERLY AT ALL TIMES. ALL LOCATIONS OF THE SITE SHALL BE KEPT IN A WORKING MANNER SUCH THAT DEBRIS IS REMOVED CONTINUOUSLY AND ALL RESPECTIVE CONTRACTORS OPERATE UNDER GENERAL "GOOD HOUSEKEEPING".
- THE CONTRACTOR SHALL INDEMNIFY THE OWNER, ENGINEER, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THE PROJECT.

DIAGNOSIS & TREATMENT
 Toll Free (800) 242-8511
 Milwaukee Area (414) 258-1181
 Hearing Impaired TDD (800) 542-2339
 www.DiggerHotline.com

SOUTH BUILDING ADDITION WAUKESHA, WI

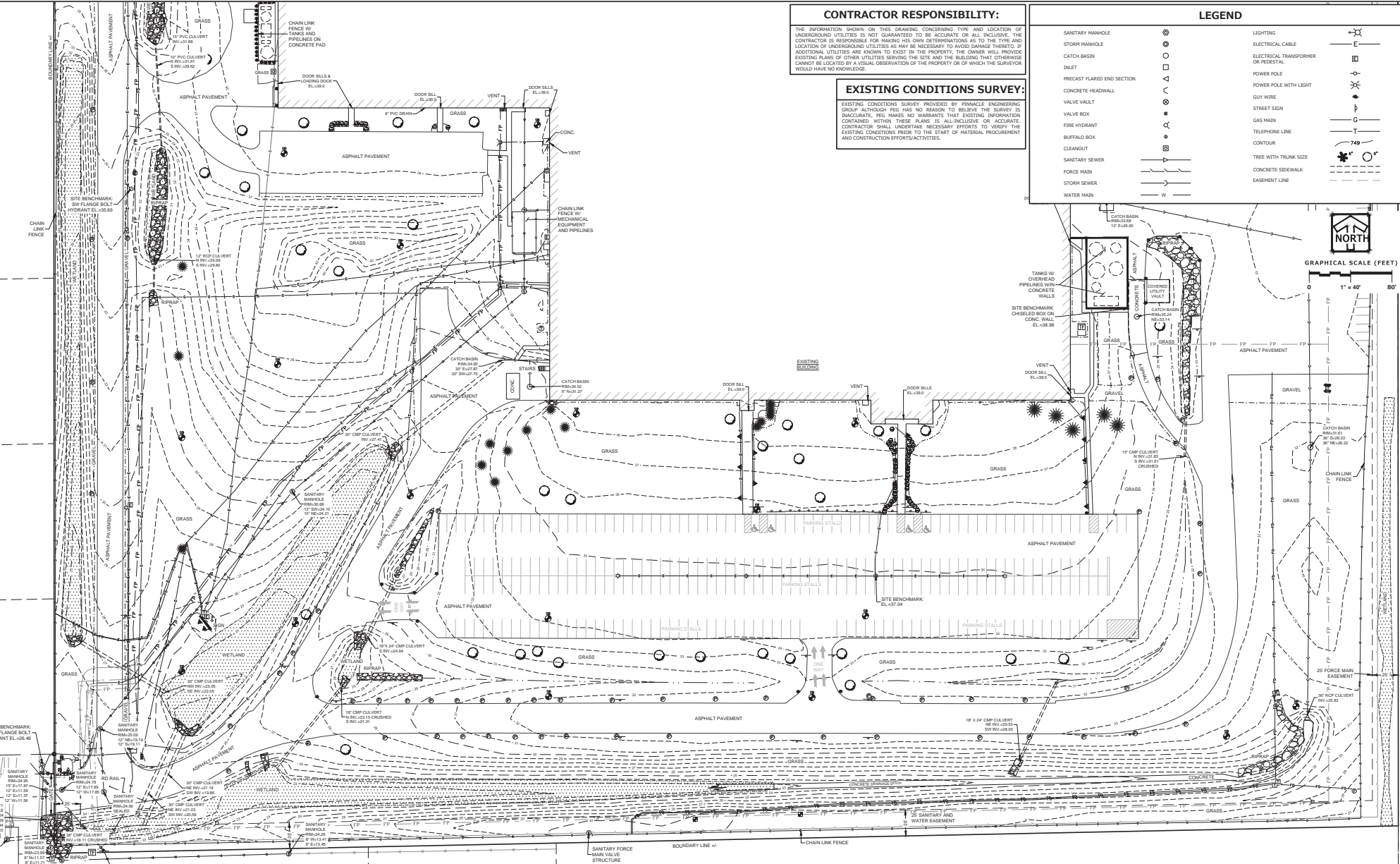
COVER SHEET
 1. BID SET: 09/04/20
 2. SECURITY GATE UPDATES: 09/25/20
 3. ADDRESS CITY COMMENTS: 10/05/20

REVISIONS
 NO. DATE BY
 1. 09/04/20
 2. 09/25/20
 3. 10/05/20

SHEET
C-1
 C-13

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CONTRACTOR RESPONSIBILITY:

THE INFORMATION SHOWN ON THIS DRAWING CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS FAR AS NECESSARY TO AVOID DAMAGE THEREOF. IF ADDITIONAL UTILITIES ARE KNOWN TO EXIST IN THE PROPERTY, THE OWNER WILL PROVIDE EXISTING PLANS OF OTHER UTILITIES SERVING THE SITE AND THE BUILDING THAT OTHERWISE CANNOT BE LOCATED BY A VISUAL OBSERVATION OF THE PROPERTY OR OF WHICH THE SURVEYOR WOULD HAVE NO KNOWLEDGE.

EXISTING CONDITIONS SURVEY:

EXISTING CONDITIONS SURVEY PROVIDED BY PINNACLE ENGINEERING GROUP ALTHOUGH PREG HAS NO REASON TO BELIEVE THE SURVEY IS INACCURATE. PREG MAKES NO WARRANTIES THAT EXISTING INFORMATION CONTAINED WITHIN THESE PLANS IS ALL-INCLUSIVE OR ACCURATE. CONTRACTOR SHALL UNDERTAKE NECESSARY EFFORTS TO VERIFY THE EXISTING CONDITIONS PRIOR TO THE START OF MATERIAL PROCUREMENT AND CONSTRUCTION EFFORTS/ACTIVITIES.

LEGEND			
SANITARY MANHOLE	⊗	LIGHTING	⊗
STORM MANHOLE	⊙	ELECTRICAL CABLE	—E—
CATCH BASIN	⊠	ELECTRICAL TRANSFORMER OR PRECAST	⊠
INLET	⊡	POWER POLE	⊡
PRECAST FLARED END SECTION	⊢	POWER POLE WITH LIGHT	⊡*
CONCRETE HEADWALL	⊣	GUY WIRE	⊡*
VALVE VAULT	⊤	STREET SIGN	⊡*
VALVE BOX	⊥	GAS MAIN	—G—
FIRE HYDRANT	⊦	TELEPHONE LINE	—T—
BUFFALO BOX	⊧	CONTOUR	740
CLEANOUT	⊨	TREE WITH TRUNK SIZE	⊗
SANITARY SEWER	—S—	CONCRETE SIDEWALK	—C—
FORCE MAIN	—F—	EASEMENT LINE	—E—
STORM SEWER	—W—		
WATER MAIN	—W—		

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 EXISTING CONDITIONS

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 CHICAGO OFFICE: 100 N. LAKE ST., SUITE 1000, CHICAGO, IL 60602

SOUTH BUILDING ADDITION
EXISTING CONDITIONS
 WAUKESHA, WI

REVISIONS	
1. BID SET	09/04/20
2. SECURITY GATE UPDATES	09/25/20
3. ADDRESS CITY COMMENTS	10/05/20

PROJ. NO.	2300.00A	SHEET	C-2
DATE	09/03/20	SCALE	C-13

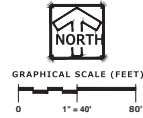
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 REVISIONS: 004, 003, 002, 001, 000
 DRAWN BY: JMB
 CHECKED BY: JMB
 APPROVED BY: JMB

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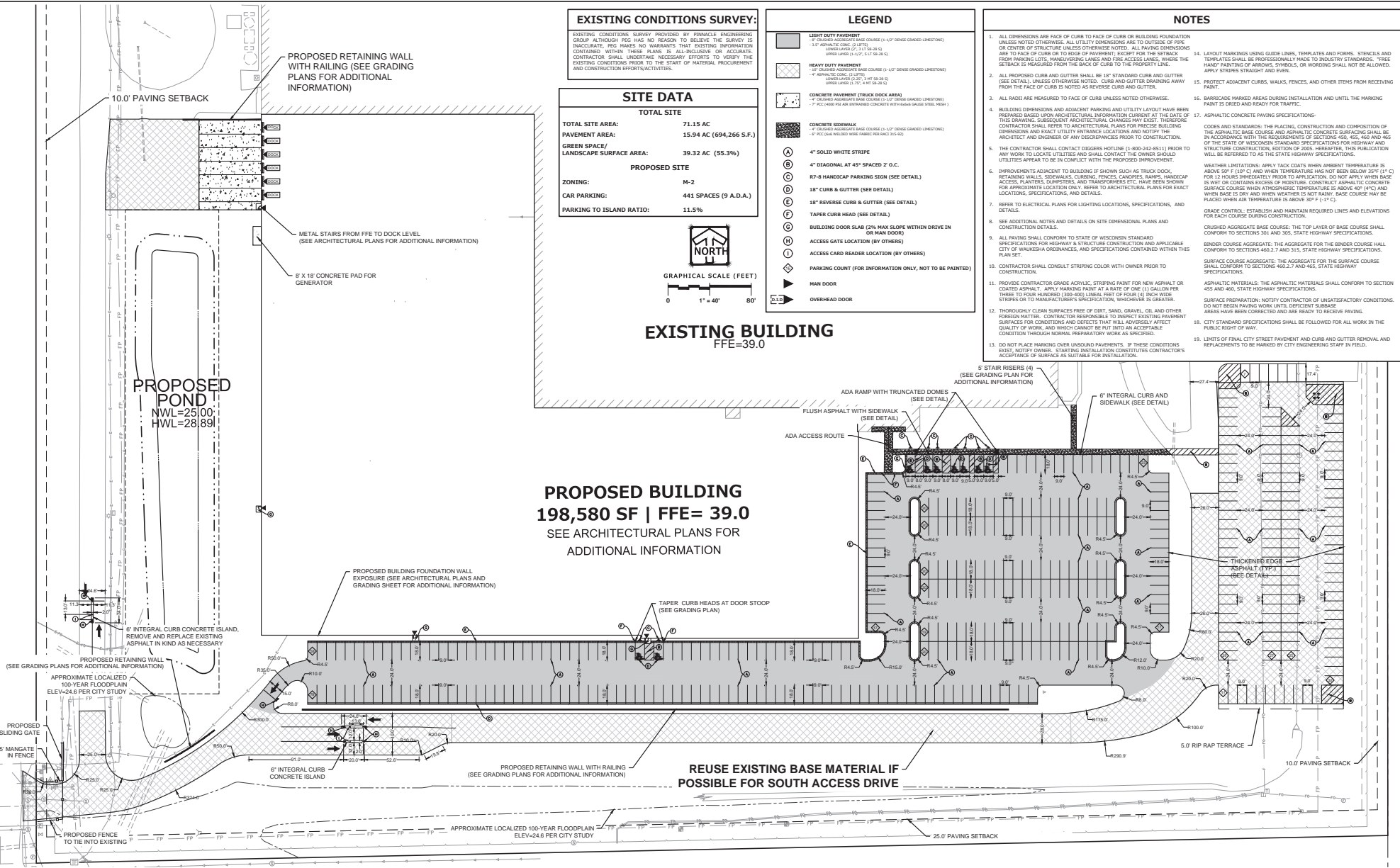
SITE DATA

TOTAL SITE	
TOTAL SITE AREA:	71.15 AC
PAVEMENT AREA:	15.94 AC (694,266 S.F.)
GREEN SPACE/ LANDSCAPE SURFACE AREA:	39.32 AC (55.3%)
PROPOSED SITE	
ZONING:	M-2
CAR PARKING:	441 SPACES (9 A.D.A.)
PARKING TO ISLAND RATIO:	11.5%



EXISTING BUILDING
FFE=39.0

PROPOSED BUILDING
198,580 SF | FFE= 39.0
SEE ARCHITECTURAL PLANS FOR
ADDITIONAL INFORMATION



LEGEND

- LIGHT DUTY PAVEMENT**
 - 1" (25.4) GRANULAR BASE COURSE (1'-0" DENED GRADED LINESHOTS)
 - 1.5" ASPHALTIC CONC. (1.5" LFTS)
 - UNLESS LAYER IS: 1.5" (38.1)
- HEAVY DUTY PAVEMENT**
 - 4" ASPHALTIC CONC. (1.5" LFTS)
 - UNLESS LAYER IS: 2.25" (57.15) OR 2.0" (50.8)
- CONCRETE PAVEMENT (TRUCK DOCK AREA)**
 - 4" (101.6) GRANULAR BASE COURSE (1'-0" DENED GRADED LINESHOTS)
 - 4" (101.6) ASPHALTIC CONC. (1.5" LFTS)
 - 4" (101.6) ASPHALTIC CONC. (1.5" LFTS)
 - 4" (101.6) ASPHALTIC CONC. (1.5" LFTS)
- CONCRETE SIDEWALK**
 - 4" (101.6) GRANULAR BASE COURSE (1'-0" DENED GRADED LINESHOTS)
 - 4" (101.6) ASPHALTIC CONC. (1.5" LFTS)
 - 4" (101.6) ASPHALTIC CONC. (1.5" LFTS)
 - 4" (101.6) ASPHALTIC CONC. (1.5" LFTS)
- 4" SOLID WHITE STRIPE**
- 4" DIAGONAL AT 45° SPACED 2" O.C.**
- R7-B HANDICAP PARKING SIGN (SEE DETAIL)**
- 18" CURB & GUTTER (SEE DETAIL)**
- 18" REVERSE CURB & GUTTER (SEE DETAIL)**
- TAPER CURB HEAD (SEE DETAIL)**
- BUILDING DOOR SLAB (2% MAX SLOPE WITH DRIVE IN OR MAN DOOR)**
- ACCESS GATE LOCATION (BY OTHERS)**
- ACCESS CARD READER LOCATION (BY OTHERS)**
- PARKING COUNT (FOR INFORMATION ONLY, NOT TO BE PAINTED)**
- MAN DOOR**
- OVERHEAD DOOR**

NOTES

1. ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB OR BUILDING FOUNDATION UNLESS NOTED OTHERWISE. ALL UTILITY DIMENSIONS ARE TO OUTSIDE OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED. ALL PAVING DIMENSIONS ARE TO FACE OF CURB OR TO EDGE OF PAVEMENT, EXCEPT FOR THE SETBACK FROM PARKING LOTS, HANDICAP LANES AND FIRE ACCESS LANES, WHERE THE SETBACK IS MEASURED FROM THE BACK OF CURB TO THE PROPERTY LINE.
2. ALL PROPOSED CURB AND GUTTER SHALL BE 18" STANDARD CURB AND GUTTER (SEE DETAIL), UNLESS OTHERWISE NOTED. CURB AND GUTTER DRAINING AWAY FROM THE FACE OF CURB IS NOTED AS REVERSE CURB AND GUTTER.
3. ALL RACE ARE DIMENSIONS TO FACE OF CURB UNLESS NOTED OTHERWISE.
4. BUILDING DIMENSIONS AND ADJACENT PARKING AND UTILITY LAYOUT HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL CONTACT DIGGERS HOTLINE (1-800-242-8511) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
6. IMPROVEMENTS ADJACENT TO BUILDING IF SHOWN AS TRUCK DOCK, RETAINING WALLS, SIDEWALKS, CURBING, FENCES, CANOPIES, RAMPS, HANDICAP ACCESS, PLANTERS, CHIMNEYS, AND TRANSFORMERS ETC. HAVE BEEN SHOWN FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS, SPECIFICATIONS, AND DETAILS.
7. REFER TO ELECTRICAL PLANS FOR LIGHTING LOCATIONS, SPECIFICATIONS, AND DETAILS.
8. SEE ADDITIONAL NOTES AND DETAILS ON SITE DIMENSIONAL PLANS AND CONSTRUCTION DETAILS.
9. ALL PAVING SHALL CONFORM TO STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION AND APPLICABLE CITY OF WAUKESHA ORDINANCES, AND SPECIFICATIONS CONTAINED WITHIN THIS PLAN SET.
10. CONTRACTOR SHALL CONSULT STRIPING COLOR WITH OWNER PRIOR TO CONSTRUCTION.
11. PROVIDE CONTRACTOR GRADE ACRYLIC STRIPING PAINT FOR NEW ASPHALT OR COATED ASPHALT. APPLY MARKING PAINT AT A RATE OF ONE (1) GALLON PER THREE TO FOUR HUNDRED (300-400) LINEAL FEET OF FOUR (4) INCH WIDE STRIPES OR TO MANUFACTURER'S SPECIFICATION, WHICHEVER IS GREATER.
12. THOROUGHLY CLEAN SURFACES FREE OF DIRT, SAND, GRAVEL, OIL AND OTHER FOREIGN MATTER. CONTRACTOR RESPONSIBLE TO INSPECT EXISTING PAVEMENT SURFACES FOR CONDITIONS AND DEFECTS THAT WILL ADVERSELY AFFECT QUALITY OF WORK, AND WHICH CANNOT BE PUT INTO AN ACCEPTABLE CONDITION THROUGH NORMAL REPAIRATORY WORK AS SPECIFIED.
13. DO NOT PLACE MARKING OVER UNPAID FORMENTS. IF THESE CONDITIONS EXIST, NOTIFY OWNER. STARTING INSTALLATION CONSTITUTES CONTRACTOR'S ACCEPTANCE OF SURFACE AS SUITABLE FOR INSTALLATION.
14. LAYOUT MARKINGS USING GUIDE LINES, TEMPLATES AND FORMS. STENCILS AND TEMPLATES SHALL BE PROFESSIONALLY MADE TO INDUSTRY STANDARDS. "FREE HAND" PAINTING OF ARROWS, SYMBOLS, OR WORDING SHALL NOT BE ALLOWED. APPLY STRIPS STRAIGHT AND EVEN.
15. PROTECT ADJACENT CURBS, WALLS, FENCES, AND OTHER ITEMS FROM RECEIVING PAINT.
16. BARRICADE MARKED AREAS DURING INSTALLATION AND UNTIL THE MARKING PAINT IS DRIED AND READY FOR TRAFFIC.
17. ASPHALTIC CONCRETE PAVING SPECIFICATIONS:
 - CODES AND STANDARDS: THE PLACING, CONSTRUCTION AND COMPOSITION OF THE ASPHALTIC BASE COURSE AND ASPHALTIC CONCRETE SURFACE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 405, 405.405 AND 405.405 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, EDITION OF 2005. HEREINAFTER, THIS PUBLICATION WILL BE REFERRED TO AS THE STATE HIGHWAY SPECIFICATIONS.
 - WEATHER LIMITATIONS: APPLY TACK COATS WHEN AMBIENT TEMPERATURE IS ABOVE 50°F (10°C) AND WHEN TEMPERATURE HAS NOT BEEN BELOW 39°F (1°C) FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION. DO NOT APPLY WHEN BASE IS WET OR CONTAINS EXCESS OF MOISTURE. CONTRACTOR SHALL APPLY ASPHALTIC CONCRETE SURFACE COURSE WHEN ATMOSPHERIC TEMPERATURE IS ABOVE 40°F (4°C) AND WHEN BASE IS DRY AND WHEN WEATHER IS NOT RAINY. BASE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30°F (1°C).
 - GRADE CONTROL: ESTABLISH AND MAINTAIN REQUIRED LINES AND ELEVATIONS FOR EACH COURSE DURING CONSTRUCTION.
 - CRUSHED AGGREGATE BASE COURSE: THE TOP LAYER OF BASE COURSE SHALL CONFORM TO SECTIONS 301 AND 305, STATE HIGHWAY SPECIFICATIONS.
 - BINDER COURSE AGGREGATE: THE AGGREGATE FOR THE BINDER COURSE SHALL CONFORM TO SECTIONS 460.2.1 AND 315, STATE HIGHWAY SPECIFICATIONS.
 - SURFACE COURSE AGGREGATE: THE AGGREGATE FOR THE SURFACE COURSE SHALL CONFORM TO SECTIONS 460.2.1 AND 461, STATE HIGHWAY SPECIFICATIONS.
 - ASPHALTIC MATERIALS: THE ASPHALTIC MATERIALS SHALL CONFORM TO SECTION 455 AND 460, STATE HIGHWAY SPECIFICATIONS.
18. SURFACE PREPARATION: NOTIFY CONTRACTOR OF UNSATISFACTORY CONDITIONS. DO NOT BEGIN PAVING WORK UNTIL DEFICIENT SUBBASE AREAS HAVE BEEN CORRECTED AND ARE READY TO RECEIVE PAVING.
19. CITY STANDARD SPECIFICATIONS SHALL BE FOLLOWED FOR ALL WORK IN THE PUBLIC RIGHT OF WAY.
20. LIMITS OF FINAL CITY STREET PAVEMENT AND CURB AND GUTTER REMOVAL AND REPLACEMENTS TO BE MARKED BY CITY ENGINEERING STAFF IN FIELD.

SOUTH BUILDING ADDITION

WAUKESHA, WI

SITE DIMENSION & PAVING PLAN

REVISIONS	
1. BID SET	09/04/20
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PINNACLE ENGINEERING GROUP
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 SITE DIMENSION & PAVING PLAN
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 REVISION: 03-20
 REVISION: 02-20
 REVISION: 01-20

SPECIFICATIONS

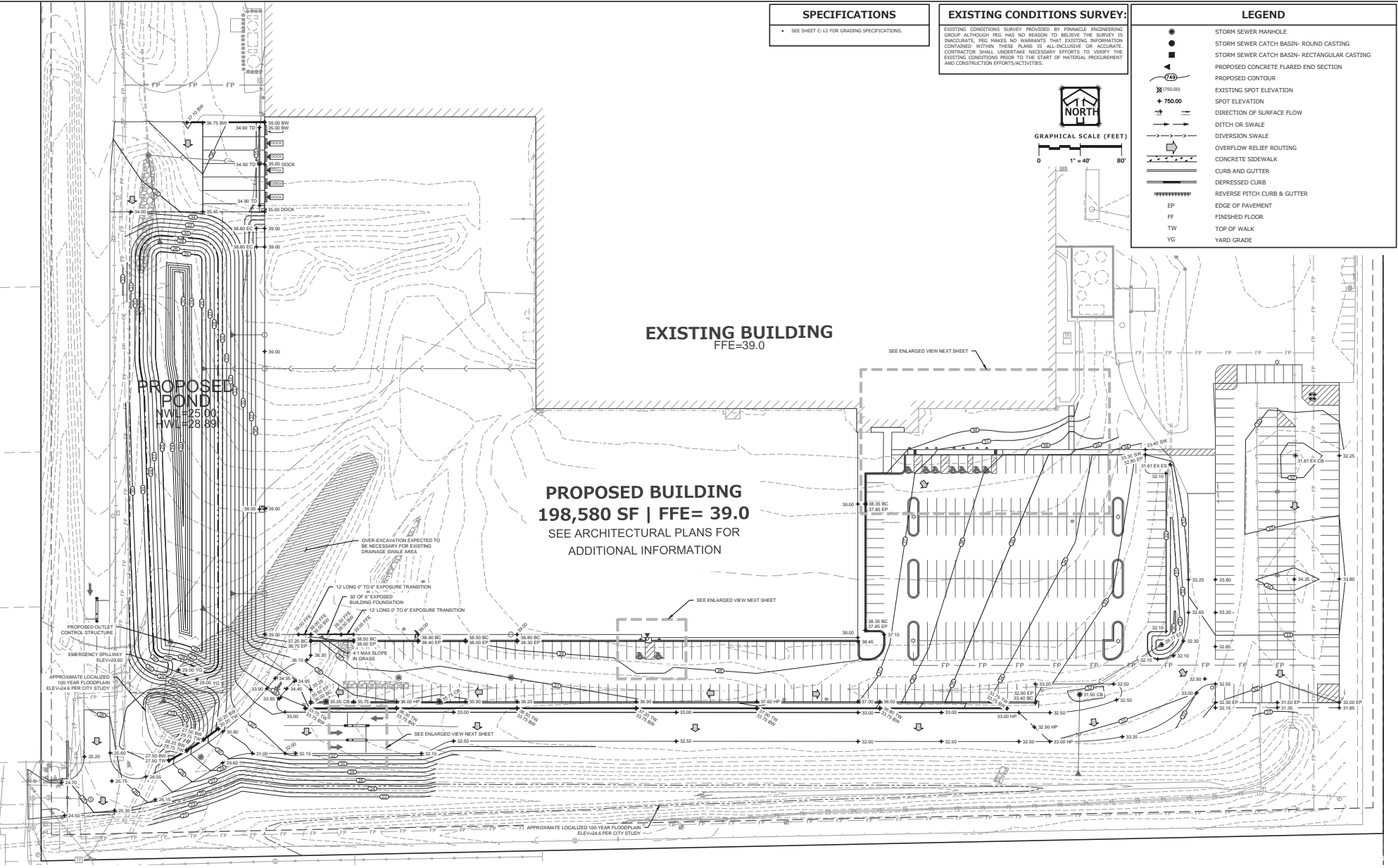
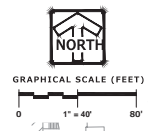
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LEGEND

- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN- ROUND CASTING
- ▣ STORM SEWER CATCH BASIN- RECTANGULAR CASTING
- ▭ PROPOSED CONCRETE FLARED END SECTION
- PROPOSED CONTOUR
- ⊗ (750.00) EXISTING SPOT ELEVATION
- + 750.00 SPOT ELEVATION
- DIRECTION OF SURFACE FLOW
- DITCH OR SWALE
- DIVERSION SWALE
- OVERFLOW RELIEF ROUTING
- ▬ CONCRETE SIDEWALK
- ▬ CURB AND GUTTER
- ▬ DEPRESSED CURB
- ▬ REVERSE PITCH CURB & GUTTER
- ▬ EDGE OF PAVEMENT
- EP FINISHED FLOOR
- FF FINISHED FLOOR
- TW TOP OF WALK
- YG YARD GRADE



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SOUTH BUILDING ADDITION
GRADING PLAN
 WAUKESHA, WI

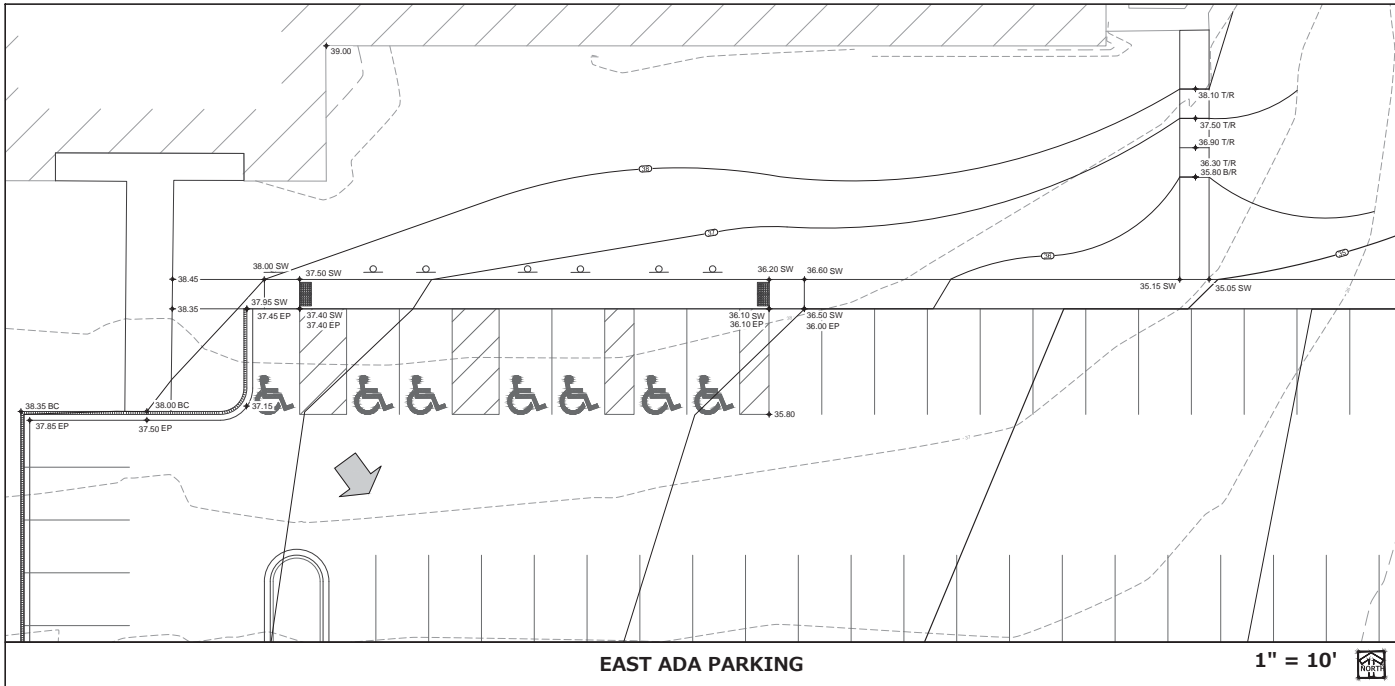
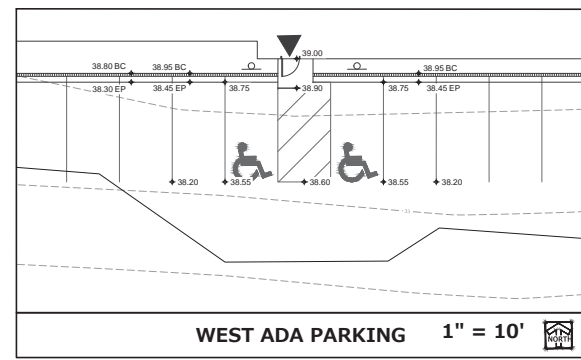
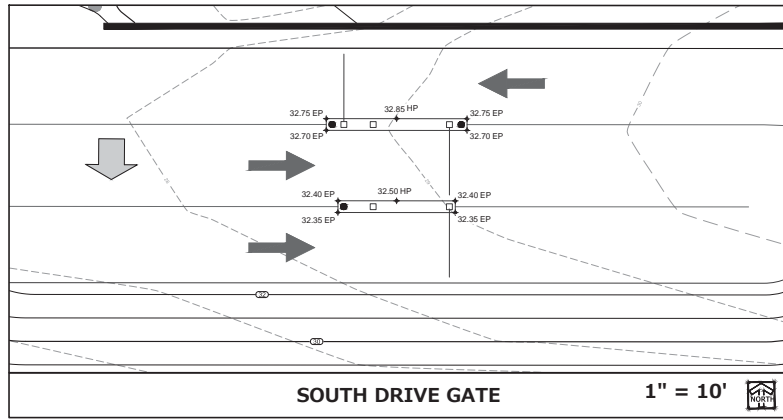
REVISIONS

NO.	DESCRIPTION	DATE
1.	BID SET	09/04/20
2.	SECURITY GATE UPDATES	09/25/20
3.	ADDRESS CITY COMMENTS	10/05/20

SHEET **C-5**
 C-13
 PROJECT NO.: 230100A
 PEG PIN: MMS
 START DATE: 09/01/20
 SCALE: 1"=40'
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 DRAFTER: JAB



SPECIFICATIONS

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LEGEND

	STORM SEWER MANHOLE
	STORM SEWER CATCH BASIN- ROUND CASTING
	STORM SEWER CATCH BASIN- RECTANGULAR CASTING
	PROPOSED CONCRETE FLARED END SECTION
	PROPOSED CONTOUR
	EXISTING SPOT ELEVATION
	SPOT ELEVATION
	DIRECTION OF SURFACE FLOW
	DITCH OR SWALE
	DIVERSION SWALE
	OVERFLOW RELIEF ROUTING
	CONCRETE SIDEWALK
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	DEPRESSED CURB
	REVERSE PITCH CURB & GUTTER
	EDGE OF PAVEMENT
	FINISHED FLOOR
	TOP OF WALK
	YARD GRADE

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SOUTH BUILDING ADDITION
 WAUKESHA, WI

GRADING PLAN

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2. SECURITY GATE UPDATES	09/25/20
3. ADDRESS CITY COMMENTS	10/05/20

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 PEG. PR.: MAM
 START DATE: 09/04/20
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 DRAWING: 04/20

NOTES

- THE STORM WATER FACILITY SHALL BE INSPECTED BY A CITY OF WAUKESHA INSPECTOR AT LEAST ONCE DURING CONSTRUCTION AND ONCE AFTER FINAL SITE STABILIZATION OF THE SITE.

SPECIFICATIONS

- SEE SHEET C-12 FOR SITE STABILIZATION SPECIFICATIONS.

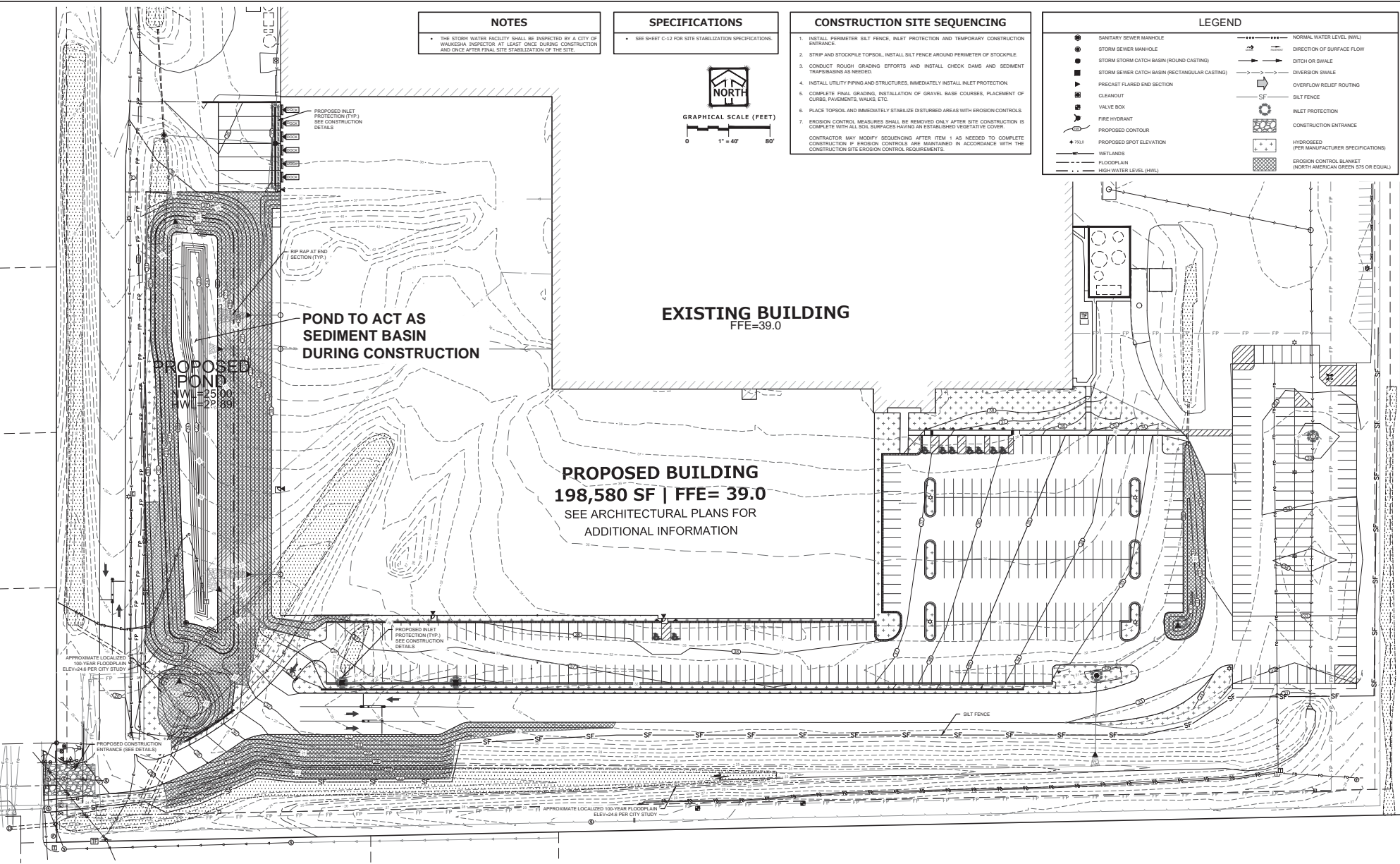
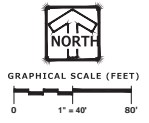
CONSTRUCTION SITE SEQUENCING

- INSTALL PERIMETER SILT FENCE, INLET PROTECTION AND TEMPORARY CONSTRUCTION ENTRANCE.
- STRIP AND STOCKPILE TOPSOIL, INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE.
- CONDUCT ROUGH GRADING EFFORTS AND INSTALL CHECK DAMS AND SEDIMENT TRAPS/BAIRS AS NEEDED.
- INSTALL UTILITY PIPING AND STRUCTURES, IMMEDIATELY INSTALL INLET PROTECTION.
- COMPLETE FINAL GRADING, INSTALLATION OF GRAVEL, BASE COURSES, PLACEMENT OF CURBS, PAVEMENTS, WALKS, ETC.
- PLACE TOPSOIL AND IMMEDIATELY STABILIZE DISTURBED AREAS WITH EROSION CONTROLS.
- EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.

CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM 1 AS NEEDED TO COMPLETE CONSTRUCTION IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS.

LEGEND

●	SEWAGE MANHOLE	---	NORMAL WATER LEVEL (NWL)
○	STORM SEWER MANHOLE	→	DIRECTION OF SURFACE FLOW
○	STORM STORM CATCH BASIN (ROUND CASTING)	↘	DITCH OR SWALE
○	STORM SEWER CATCH BASIN (RECTANGULAR CASTING)	↗	DIVERSION SWALE
○	PRECAST FLARED END SECTION	↖	OVERFLOW RELIEF ROUTING
○	CLEANOUT	—	SILT FENCE
○	VALVE BOX	○	INLET PROTECTION
○	FIRE HYDRANT	○	CONSTRUCTION ENTRANCE
○	PROPOSED CONTOUR	○	HYDROSEED (PER MANUFACTURER SPECIFICATIONS)
+	PROPOSED SPOT ELEVATION	○	EROSION CONTROL BLANKET (NORTH AMERICAN GREEN SFS OR EQUAL)
---	WETLANDS		
---	FLOODPLAIN		
---	HIGH WATER LEVEL (HWL)		



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SOUTH BUILDING ADDITION
WAUKESHA, WI

SITE STABILIZATION PLAN

REVISIONS

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3.	ADDRESS CITY COMMENTS	10/05/20

PROJ. NO.: 230100A
 DATE: 09/04/20
 SCALE: 1" = 40'
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C-8
C-13

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 SITE STABILIZATION PLAN

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 CONSTRUCTION DETAILS

1.0 POTENTIAL POLLUTANT SOURCES

GIVEN THE PROPOSED ACTIVITY ON THE PROJECT SITE, THE PRIMARY POTENTIAL POLLUTANT SOURCE ASSOCIATED WITH THIS CONSTRUCTION PROJECT IS SOIL EROSION AND TRANSPORTATION. REFER TO SECTION 2 OF THIS PLAN. ADDITIONAL POTENTIAL SOURCES OF POLLUTION MAY INCLUDE FUEL TANKS, WASTE CONTAINERS, OIL OR OTHER PETROLEUM PRODUCTS, DETERGENTS, PAINTS, CONSTRUCTION OILS, SANITARY STATIONS, FERTILIZERS, AND DUST. REFER TO SECTION 5 OF THIS PLAN.

2.0 EROSION AND SEDIMENT CONTROL IMPLEMENTATION

THE FOLLOWING ARE DESCRIPTIONS OF THE EROSION AND SEDIMENT CONTROL PRACTICES THAT SHALL BE IMPLEMENTED DURING CONSTRUCTION OF THIS PROJECT. IN ADDITION TO THESE MEASURES, CONTRACTOR SHALL DISTURB ONLY AREAS NECESSARY TO COMPLETE THE CONSTRUCTION PROJECT. ALL PRACTICES SHALL BE CONDUCTED IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES (BMP).

2.1 CONSTRUCTION AND EROSION CONTROL SEQUENCING

CONSTRUCTION SEQUENCING WILL BE UTILIZED AS A MEANS OF CONTROLLING EROSION AND LIMITING SEDIMENT TRANSPORT. SEQUENCING AS LISTED BELOW IS GENERAL IN NATURE AND MAY VARY DEPENDING ON WEATHER CONDITIONS AND/OR PHASING OF CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A DETAILED SITE SEQUENCING PLAN TO OWNER FOR APPROVAL. AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES, CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM 8 AS NEEDED TO COMPLETE CONSTRUCTION ONLY IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL REQUIREMENTS.

- INSTALL TEMPORARY CONSTRUCTION ENTRANCES, INLET PROTECTION ON EXISTING STORM SEWER AND CURB INLET LOCATIONS, AND PERMETER SILT FENCING.
- INSTALL SILT FENCING ALONG THE PERIMETER OF PROPOSED TOPSOIL STOCKPILE LOCATIONS. THE FIRST TOPSOIL DEPOSITED WITHIN THE STOCKPILE LIMITS SHALL BE PLACED TO CREATE TEMPORARY BERMING ALONG THE SILT FENCE TO PREVENT DIRECT STORMWATER RUNOFF AGAINST SILT FENCING. CONTRACTOR SHALL LIMIT LAND DISTURBING ACTIVITIES ASSOCIATED WITH TEMPORARY BERMING TO A MINIMUM.
- STRIP TOPSOIL WITHIN THE LIMITS OF THE SEDIMENT TRAPS THAT WILL BE USED FOR TEMPORARY SEDIMENT CONTROL. STRIPPED TOPSOIL SHALL BE PLACED TO CONSTRUCT DIVERSION BERMING OR PLACED WITHIN THE STOCKPILE LIMITS.
- STRIP TOPSOIL ALONG THE REMAINDER OF DIVERSION BERMING AND IMMEDIATELY PLACE TOPSOIL TO CREATE THE BERMING. MASS TOPSOIL STRIPPING SHALL NOT OCCUR UNTIL ALL DOWNSTREAM SEDIMENT CONTROLS ARE IN PLACE.
- CONDUCT ROUGH GRADING OPERATIONS AND UTILITY PIPING INSTALLATION. DRAIN TILE SHALL NOT BE INSTALLED UNTIL UPLAND AREAS CONTRIBUTING STORMWATER RUNOFF ARE ESTABLISHED. DITCH CHECKS SHALL BE INSTALLED WITH DRAINAGE DITCHES IMMEDIATELY FOLLOWING CREATION OF DITCHES AND INLET PROTECTION SHALL BE INSTALLED TO PROTECT ANY STORM SEWER OR COLLECTORS THAT WILL FUNCTION DURING CONSTRUCTION.
- FINE GRADE SUB-GRADE SOILS WITHIN PAVEMENT AND BUILDING LIMITS. PLACE STONE BASE MATERIAL AS SOON AS POSSIBLE FOLLOWING COMPLETION OF FINE GRADING EFFORTS.
- FINE GRADE REMAINING DISTURBED AREAS. PLACE SALVAGED TOPSOIL, EROSION BANKS/MATINGS, AND SEED/MULCH AS SOON AS POSSIBLE FOLLOWING COMPLETION OF FINE GRADING EFFORTS.
- EROSION CONTROLS SHALL NOT BE REMOVED UNTIL SITE IS FULLY STABILIZED OR 70% VEGETATIVE COVER IS ESTABLISHED. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF SILT FENCE, TEMPORARY FENCING/PREFECTION, DITCH CHECKS, AND OTHER TEMPORARY CONTROLS, AND RESTORATION PRACTICES AS NECESSARY, TO THE SATISFACTION OF THE OWNER.

2.2 STABILIZATION PRACTICES

THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR, WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, AND WHEN STABILIZATION MEASURES ARE INITIATED, SHALL BE RECORDED ON THE STABILIZATION SCHEDULE FOR MAJOR GRADING ACTIVITIES.

STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. NO MORE THAN SEVEN (7) DAYS SHALL PASS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS PERMANENTLY CEASED UNLESS:

- THE INITIATION OF STABILIZATION MEASURES BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER. IN THAT EVENT, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
- CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN FOURTEEN (14) DAYS FROM WHEN ACTIVITIES CEASED. (I.E. THE TOTAL TIME PERIOD THAT THE CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN FOURTEEN (14) DAYS). IN THAT EVENT, STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED. SEE THE SOIL PROTECTION CHART PRESENTED IN THE CONSTRUCTION DOCUMENTS FOR RATES OF PERMANENT AND TEMPORARY VEGETATION.

STABILIZATION MEASURES SHALL BE DETERMINED BASED ON SITE CONDITIONS AT THE TIME CONSTRUCTION ACTIVITY HAS CEASED, INCLUDING BUT NOT LIMITED TO WEATHER CONDITIONS AND LENGTH OF TIME MEASURE MUST BE EFFECTIVE. THE FOLLOWING ARE ACCEPTABLE STABILIZATION MEASURES.

- PERMANENT SEEDING, IN ACCORDANCE WITH APPROVED LANDSCAPING PLAN
- TEMPORARY SEEDING MAY CONSIST OF SPRING OATS (100LB/ACRE) AND/OR WHEAT OR CEREAL RYE (150LB/ACRE)
- HYDRO-MULCHING WITH A TACKIFIER
- GEOTEXTILE EROSION MATTING
- SOODING

2.3 STRUCTURAL PRACTICES

THE FOLLOWING ARE DESCRIPTIONS OF STRUCTURAL PRACTICES TO BE IMPLEMENTED TO DIVERT FLOWS FROM EXPOSED SOILS, STORE FLOWS, OR OTHERWISE LIMIT THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE INCLUDING THE PROPOSED AND EXISTING WETLAND AREAS. SUCH PRACTICES COULD INCLUDE SILT FENCE, PROTECTION FENCE, CONSTRUCTION ENTRANCE, DITCH CHECK, EROSION CONTROL MATTING, DIVERSION BERM/SWALE, SEDIMENT TRAP, LEVEL SPREADER, INLET PROTECTION, OUTLET PROTECTION, AND TEMPORARY OR PERMANENT SEDIMENT BASK. THE FOLLOWING STRUCTURAL PRACTICES ARE TO BE UTILIZED DURING THIS PROJECT.

SILT FENCE SHALL BE PLACED DOWN SLOPE OF DISTURBED AREAS OF THE CONSTRUCTION SITE AND AROUND THE PERIMETER OF THE TOPSOIL STOCKPILE. THIS INCLUDES PROTECTION OF EXISTING WETLAND AREAS TO BE MAINTAINED. SILT FENCE MAY ALSO BE USED AS A TEMPORARY CONTROL DEVICE WHERE SEDIMENTATION RUNOFF IS DISCOVERED.

CONSTRUCTION ENTRANCE SHALL BE INSTALLED TO REDUCE SOIL EROSION POLLUTANTS FROM LEAVING THE SITE DURING CONSTRUCTION ACTIVITIES. IF THE CRUSHED STONE DOES NOT ADEQUATELY REMOVE MUD FROM VEHICLE TIRES, SILT SHALL BE SHOVED OFF BEFORE ENTERING A PAVED ROADWAY. ANY CONSTRUCTION DEPOSITED ON THE PAVED ROADWAY SHALL BE REMOVED IMMEDIATELY.

DITCH CHECK (STRAW BALES) SHALL BE INSTALLED IN DRAINAGE CHANNELS AS NEEDED.

EROSION CONTROL MATTING SHALL BE PLACED ON GRASSES OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 1:1V, BEFORE VEGETATION IS ESTABLISHED.

DIVERSION BERM/SWALE SHALL BE CONSTRUCTED TO DIVERT RUNOFF AROUND THE SITE AND TO DIVERT RUNOFF FROM THE DISTURBED AREA TO A SEDIMENT TRAP OR OTHER CONTROL. BERM/SWALES SHALL BE STABILIZED WITH EQUIPMENT TRACKING AND TEMPORARY SEEDING.

SEDIMENT TRAP/BASK SHALL BE CONSTRUCTED TO COLLECT RUNOFF AND RUNOFF FROM SITE DIVERSION BERM/SWALES.

INLET PROTECTION SHALL BE INSTALLED AT STORMWATER DRAINAGE INLETS TO REDUCE SEDIMENT WITH STORM SEWER CONVICANCE FEATURES.

OUTLET SOILS PROTECTION SHALL BE INSTALLED AT STORMWATER DRAINAGE OUTLETS TO DIFFUSE FLOWS.

3.0 ADDITIONAL PRACTICES

ADDITIONAL POLLUTION CONTROL MEASURES TO BE IMPLEMENTED DURING CONSTRUCTION ACTIVITIES SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

CONSTRUCTION WASTE SHALL BE PROPERLY DISPOSED OF. THIS INCLUDES ALL CONSTRUCTION SITE WASTE MATERIAL, SANITARY WASTE, AND WASTE FROM VEHICLE TRACKING OR SEEDMENTS. THE CONTRACTOR SHALL ENSURE THAT NO MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, BURNED, OR DISCHARGED TO THE WATERS OF THE STATE, VEHICLES HAULING MATERIAL AWAY FROM THE SITE SHALL BE COVERED WITH A TARP/PAUL TO PREVENT BLOWING DEBRIS.

DUST CONTROL SHALL BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING METHODS:

- COVERING 30% OR MORE OF THE SOIL SURFACE WITH A NON-ERODIBLE MATERIAL.
- ROUNDERING EQUIPMENT TRACKING; THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND. RIDGES SHALL BE AT LEAST SIX (6) INCHES IN HEIGHT.
- FREQUENT WATERING OF EXCAVATION AND FILL AREAS.
- PROVIDING GRAVEL OR PAVING AT ENTRANCE/EXIT DRIVES, PARKING AREAS AND TRANSIT PATHS.

SILT FENCE - REPAIR OR REPLACE ANY DAMAGED FILTER FABRIC AND/OR STAKES. REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

CONSTRUCTION ENTRANCE - AS NEEDED, ADD STONE TO MAINTAIN CONSTRUCTION ENTRANCE DIMENSIONS AND EFFECTIVENESS.

DITCH CHECK (STRAW BALES) - RE-SECURE STAKES, ADJUST OR REPOSITION BALES TO ACHIEVE PROPER FLOW OF STORMWATER, AND REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE HEIGHT OF THE BALE.

EROSION CONTROL MATTING - REPAIR MATTING IMMEDIATELY IF INSPECTION REVEALS BLEMISHES OR FAILED CONDITIONS. REPAIR AND RE-GRADE SOIL WHERE CHANNELIZATION HAS OCCURRED.

DIVERSION BERM/SWALE - REPLACE OR RE-COMPACT THE CONSTRUCTION MATERIALS AS NECESSARY.

SEDIMENT TRAP - REMOVE AND DISPOSE OF THE ACCUMULATED SEDIMENT WHEN IT HAS REACHED THE SEDIMENT STORAGE ELEVATION.

INLET PROTECTION - CLEAN, REPAIR OR REPLACE FILTER FABRIC, TURF REINFORCEMENT MATTING AND/OR STONE WHEN CONTROL MEASURE IS CLOGGED. INLET FILTER BAGS SHALL BE REPLACED ONCE ONE-HALF FULL OF SEDIMENT.

OUTLET PROTECTION - CLEAN, REPAIR OR REPLACE FILTER FABRIC, TURF REINFORCEMENT MATTING AND/OR STONE WHEN CONTROL MEASURE IS ONE-HALF FULL OF SEDIMENT.

SEDIMENT BASIN - AT THE END OF CONSTRUCTION, CONTRACTOR SHALL REMOVE AND DISPOSE OF THE ACCUMULATED SEDIMENT AND RESTORE BASIN AREA TO INTENDED POST-CONSTRUCTION DESIGN GRADES.

5.0 INSPECTION

INSPECTIONS SHALL BE COMPLETED WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A RAINFALL EVENT THAT IS ONE-HALF INCH OR GREATER OR EQUIVALENT SNOWFALL OR AT A MINIMUM ONCE EVERY SEVEN (7) DAYS. INSPECTIONS SHALL BE CONDUCTED BY PERSONNEL PROVIDED BY THE CONTRACTOR AND SHALL INCLUDE DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. A STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT SHALL BE COMPLETED AND ADDED TO THE SWPPP. RAINFALL SHALL BE RECORDED ON THE SWPPP RAINFALL LOG. CONTRACTOR SHALL IMMEDIATELY ARRANGE FOR REPAIR OR REPLACEMENT OF ANY DAMAGED OR DEFICIENT CONTROL MEASURES OBSERVED DURING THE INSPECTION.

QUALIFIED PERSONNEL MEANS A PERSON KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICES OF EROSION AND SEDIMENT CONTROL MEASURES, SUCH AS A LICENSED PROFESSIONAL ENGINEER, A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL, A CERTIFIED EROSION SEDIMENT OR STORMWATER INSPECTOR, OR OTHER TRAINED INDIVIDUAL.

6.0 SPILL PREVENTION

6.1 GENERAL MATERIAL MANAGEMENT PRACTICES

THE GOOD HOUSEKEEPING PRACTICES LISTED BELOW SHALL BE FOLLOWED THROUGHOUT THE CONSTRUCTION PROJECT.

- CONTRACTOR SHALL STORE ONLY ENOUGH PRODUCTS REQUIRED TO COMPLETE THIS PROJECT.
- ALL MATERIAL SHALL BE STORED IN A neat, orderly MANNER IN THEIR ORIGINAL CONTAINERS CONTAINING MANUFACTURER'S LABEL.
- MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
- MATERIALS REQUIRED TO HAVE A MATERIAL SAFETY DATA SHEET (MSDS) SHALL HAVE A COPY STORED IN THE PROJECT'S MSDS DATABASE.

6.2 SPILL CONTROL PRACTICES

THE PRACTICES LISTED BELOW SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP.

- MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE MAINTAINED ON-SITE.
- IMMEDIATELY UPON DISCOVERY, ALL SPILLS SHALL BE CLEANED UP ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS.
- PERSONNEL CLEANING UP A SPILL SHALL USE PERSONAL PROTECTIVE EQUIPMENT.
- IMMEDIATELY UPON DISCOVERY, SPILLS OF TOXIC OR HAZARDOUS MATERIALS SHALL BE REPORTED TO THE OWNER AND GENERAL CONTRACTOR.
- NOTIFICATION AND REPORTING TO THE APPROPRIATE FEDERAL, STATE, AND LOCAL GOVERNMENT AGENCIES SHALL BE MADE AS REQUIRED.

GENERAL INFORMATION:

THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN DEVELOPED TO FULFILL ONE OF THE REQUIREMENTS OF THE GENERAL ENVIRONMENTAL PROTECTION AGENCY (EPA) NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT NO. W15000141 FOR THE DISCHARGE OF STORMWATER ASSOCIATED WITH CONSTRUCTION PROJECTS DISTURBING ONE ACRE OR MORE. THE OWNER AND CONTRACTORS SHALL COMPLY WITH ALL REQUIREMENTS OF THE NPDES FOR ALL SUCH CONSTRUCTION PROJECTS. THE STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY FROM THIS SITE ARE SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF THE PERMITS.

THE EXECUTED OWNER CERTIFICATION AND THE CONTRACTOR CERTIFICATIONS SHALL BE KEPT ON-SITE WITH THE APPROVED PLANS.

SWPPP AVAILABILITY:

THE OWNER SHALL RETAIN A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF THE PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

KEEPING PLANS CURRENT:

THE CONTRACTOR SHALL AMEND THE PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE PLAN OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SITE ACTIVITY. IN ADDITION, THE PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR THAT WILL IMPLEMENT A MEASURE OF THE PLAN. AMENDMENTS TO THE PLAN MAY BE REQUIRED BY THE MUNICIPALITY, OWNER, OR OTHER REVIEWING AGENCY. COPIES OF THE AMENDMENTS SHALL BE KEPT ON-SITE AS PART OF THE SWPPP.

RETENTION OF RECORDS:

THE OWNER SHALL RETAIN COPIES OF THIS AND ALL REPORTS AND NOTICES REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT, FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT COVERAGE EXPIRES OR IS TERMINATED. THIS PERIOD MAY BE EXTENDED BY THE REQUEST OF THE AGENCY AT ANY TIME. IN ADDITION, THE OWNER SHALL RETAIN A COPY OF THE PLAN REQUIRED BY THIS PERMIT TO CONSTRUCT THE SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

A NOTICE OF INTENT (NOI) APPLICATION MUST BE COMPLETED AND INCORPORATED INTO THE SWPPP.

WPDES NOTICE OF TERMINATION GUIDANCE:

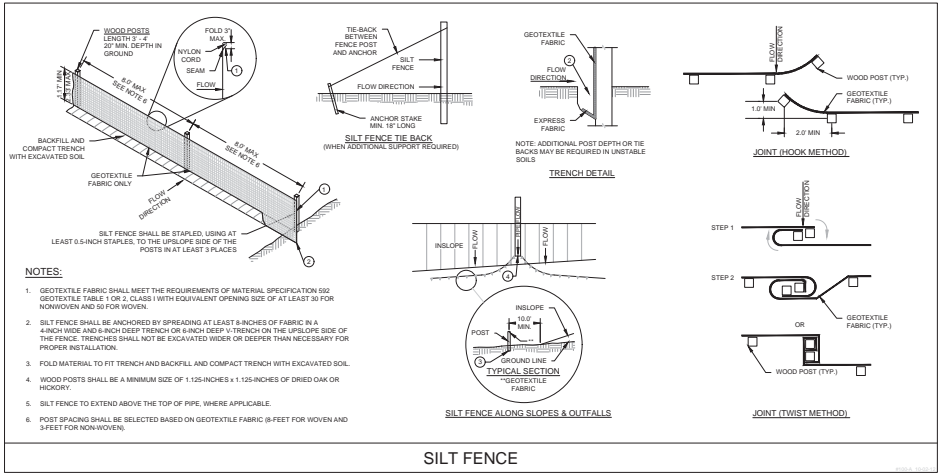
WHEN A SITE HAS BEEN FINALLY STABILIZED AND ALL STORMWATER DISCHARGES FROM CONSTRUCTION SITES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED, THE OWNER OF THE FACILITY MUST SUBMIT A COMPLETED NOTICE OF TERMINATION THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT. CONTRACTOR SHALL SUBMIT A COMPLETED NOTICE OF TERMINATION TO OWNER FOR EXECUTION PRIOR TO THEIR FINAL PAY APPLICATION REQUEST.

CONTROL MEASURE TYPE	CONTROL MEASURE	CONTROL MEASURE CHARACTERISTICS
VEGETATIVE SOIL COVER	TEMPORARY SEEDING	PROVIDES QUICK TEMPORARY COVER TO CONTROL EROSION WHEN PERMANENT SEEDING IS NOT DESIRED OR TIME OF YEAR IS UNSUITABLE.
NON-VEGETATIVE SOIL COVER	PERMANENT SEEDING	PROVIDES PERMANENT VEGETATIVE COVER TO CONTROL EROSION. PLANT TYPES DIFFERENT FROM WATERSHED MAY BE PART OF TRAIL-LANDSCAPE PLANS.
NON-VEGETATIVE SOIL COVER	AGGREGATE COVER	PROVIDES TEMPORARY COVER ON ROADS AND PARKING LOTS AND AREAS WHERE VEGETATION CANNOT BE ESTABLISHED. PREVENTS MUD FROM BEING PICKED UP AND TRANSPORTED OFF-SITE.
NON-VEGETATIVE SOIL COVER	PAVING	PROVIDES PERMANENT COVER ON PARKING LOTS AND ROADS OR OTHER AREAS WHERE VEGETATION CANNOT BE ESTABLISHED.
DIVERSIONS	DIVERSION BERM / SWALE	DIVERTS RUNOFF TO A SEDIMENT TRAP OR OTHER CONTROL.
ENCLOSED DRAINAGE	STORM SEWER	CONVEYS SEDIMENT LAIDEN WATER TO A SEDIMENT BASIN.
OUTLETS	APRON ENDWALL OR REPAIR	PROTECTS DOWNSTREAM CHANNEL FROM HIGH VELOCITY OF FLOW DISCHARGING FROM STRUCTURE.
SEDIMENT BASINS	TEMPORARY SEDIMENT TRAP	CONSTRUCTED TO SHOW UP 18" FROM FINISH FROM 18" DEPTH DIVERSION BERM/SWALES AND/OR OVERLAND FLOOD ROUTE. CAN BE CONVERTED TO PERMANENT SEDIMENT BASK.
SEDIMENT FILTERS	SILT FENCE	SILT FENCE: DOWN SLOPE OF DISTURBED AREA TO KEEP RUNOFF CONTAINED ON-SITE.
	INLET PROTECTION	INSTALLATION OF INLET STRUCTURES TO COLLECT SEDIMENT.
	DITCH CHECK	PLACED IN DRAINAGE CHANNELS TO FILTER SEDIMENT FROM RUNOFF.
MUD AND DUST CONTROL	CONSTRUCTION ENTRANCE	REDUCES SOIL EROSION POLLUTANTS BEING TRANSPORTED OFF-SITE.
	STREET SWEEPING	REDUCES POLLUTANTS TRACING FROM CONSTRUCTION SITE.
	DUST CONTROL	PREVENTS DUST FROM LEAVING CONSTRUCTION SITE.

STABILIZATION EFFECTIVENESS (TIME OF YEAR)

STABILIZATION TYPE	PERIOD OF UTILIZATION											
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
PERMANENT SEEDING			▲	*	*	*	*	*	*	*	*	*
DORMANT SEEDING	■	▶										◀
TEMPORARY SEEDING		*	*	*	*	*	*	*	*	*	*	*
SOODING	■	*	*	*	*	*	*	*	*	*	*	*

- A. KENTUCKY BLUEGRASS 90 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 30 LBS/ACRE.
- B. KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 45 LBS/ACRE + 2 TONS STRAW MULCH/ACRE.
- C. SPRING OATS 100 LBS/ACRE.
- D. WHEAT OR CEREAL RYE 150 LBS/ACRE.
- E. SOIL.
- F. STRAW MULCH 2 TONS/ACRE.
- * IRRIGATION/WATERING REQUIRED TO SUPPORT ESTABLISHMENT AS NEEDED.



SILT FENCE

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SOUTH BUILDING ADDITION

WAUKESHA, WI

CONSTRUCTION DETAILS

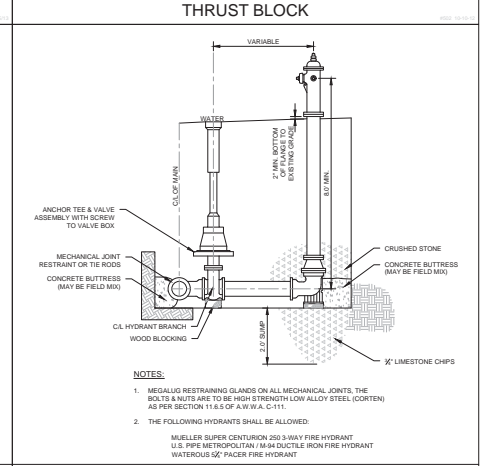
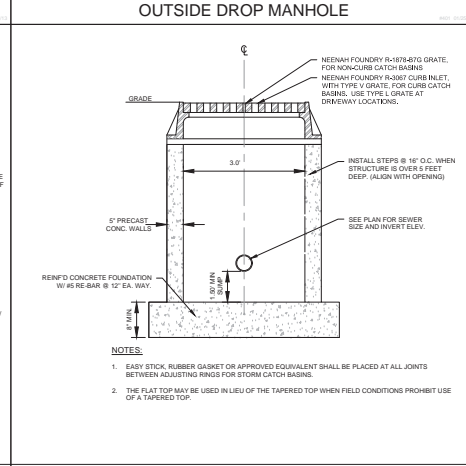
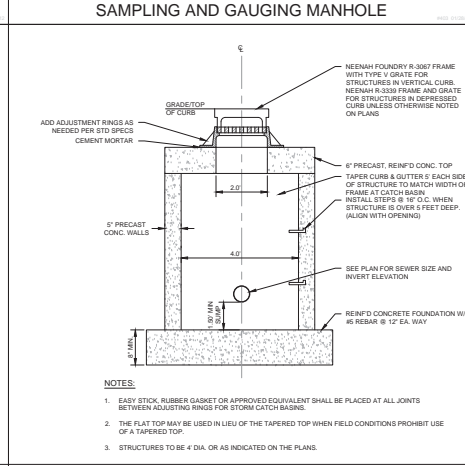
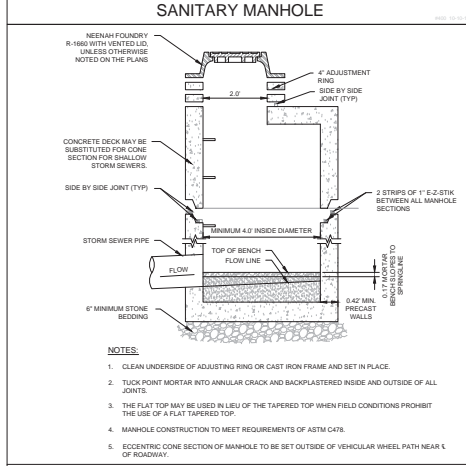
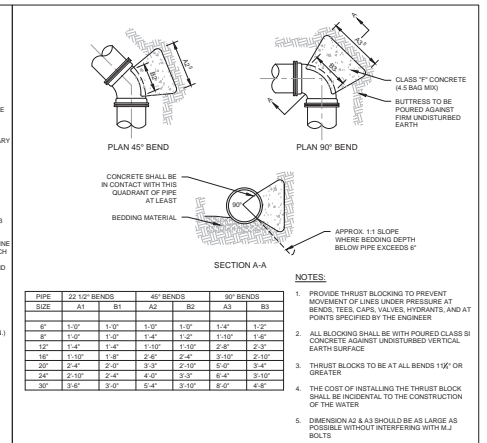
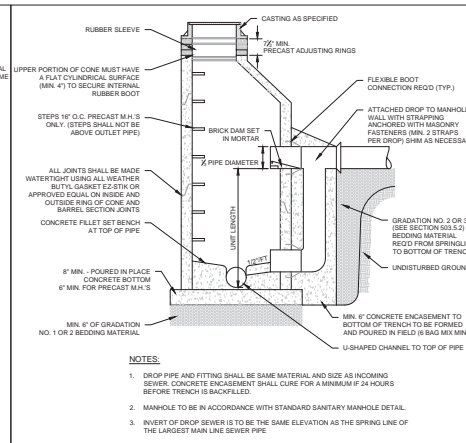
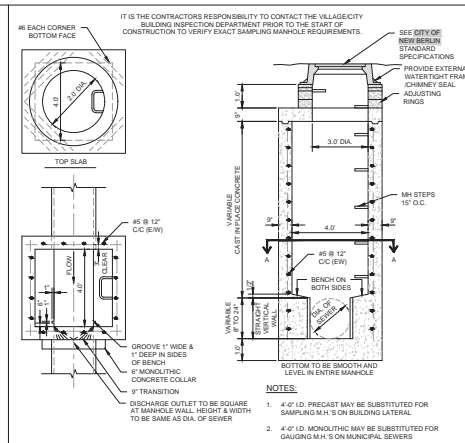
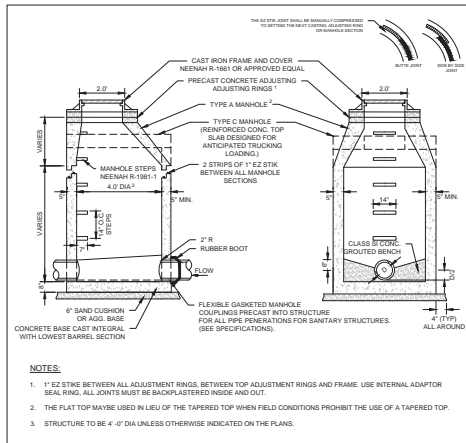
WISCONSIN OFFICE: 20725 WILSON DRIVE SUITE 100 BROOKFIELD, WI 53116 (262) 781-8400 CHICAGO | MILWAUKEE | NATIONWIDE

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

REVISIONS	
1. BID SET	09/04/20
2. SECURITY GATE UPDATES	09/25/20
3. ADDRESS CITY COMMENTS	10/05/20

PROJ. NO.: 230.000
 SHEET: C-9
 OF: C-13
 DATE: 09/04/20
 SCALE: 1" = 1'-0"

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SANITARY MANHOLE

STORM SEWER MANHOLE

CATCH BASIN - CURB

2' x 3' CATCH BASIN

FIRE HYDRANT

THRUST BLOCK

OUTSIDE DROP MANHOLE

SAMPLING AND GAUGING MANHOLE

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BROOKFIELD, WI 53150
DND 734-8888

CHICAGO OFFICE:
1411 W. WASHINGTON
CHICAGO, IL 60607

SOUTH BUILDING ADDITION

WAUKESHA, WI

CONSTRUCTION DETAILS

REVISIONS

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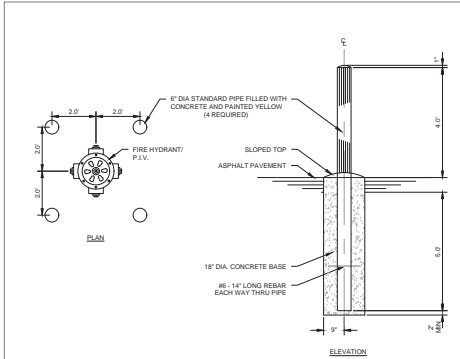
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SHEET NO.: 11 OF 11
SCALE: 1" = 1'-0"

SHEET C-11

C-13

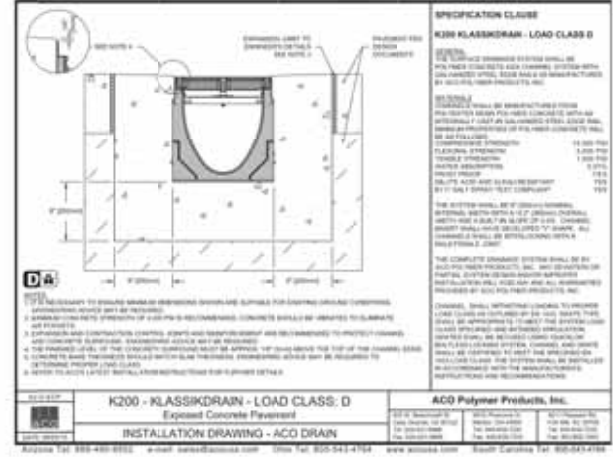
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 REVISION: 04
 DESIGNED: DGC
 DRAWN: JAC



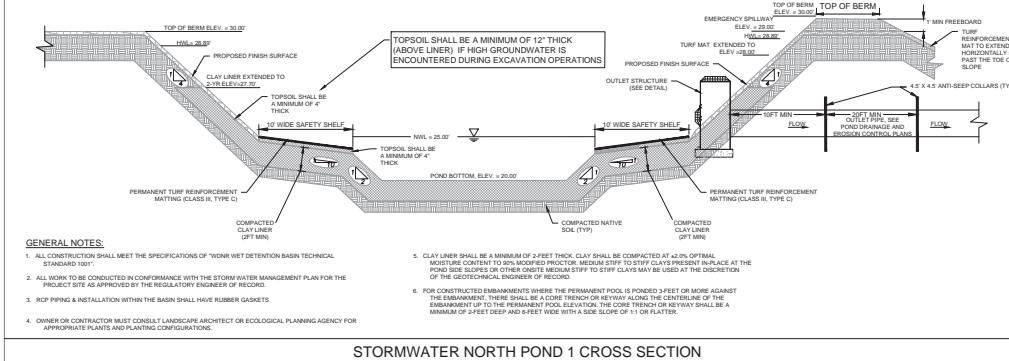
NOTES:
 1. USE WHERE HYDRANT IS LOCATED WITHIN PAVED AREAS. COST INCIDENTAL.

HYDRANT/POST INDICATOR VALVE BOLLARD



K200 - KLASIKDRAIN - LOAD CLASS: D
 Exposed Concrete Pavement
 INSTALLATION DRAWING - ACC DRAIN

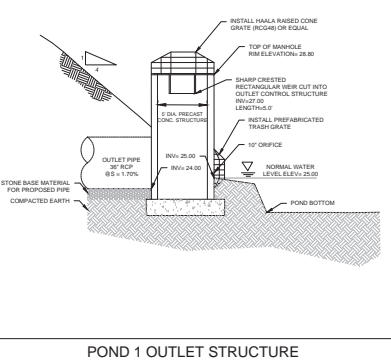
ACD Polymer Products, Inc.



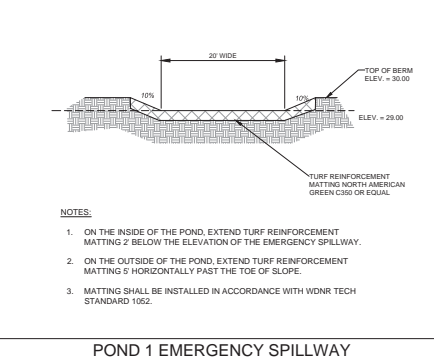
GENERAL NOTES:

1. ALL CONSTRUCTION SHALL MEET THE SPECIFICATIONS OF "WDRN WET DETENTION BASIN TECHNICAL STANDARD 105".
2. ALL WORK TO BE CONDUCTED IN CONFORMANCE WITH THE STORM WATER MANAGEMENT PLAN FOR THE PROJECT SITE AS APPROVED BY THE REGULATORY ENGINEER OF RECORD.
3. HCP PIPING & INSTALLATION WITHIN THE BASIN SHALL HAVE RUBBER GASKETS.
4. OWNER OR CONTRACTOR MUST CONSULT LANDSCAPE ARCHITECT OR ECOLOGICAL PLANNING AGENCY FOR APPROPRIATE PLANTS AND PLANTING CONFIGURATIONS.
5. CLAY LINER SHALL BE A MINIMUM OF 2 FEET THICK. CLAY SHALL BE COMPACTED AT 42% OPTIMAL MOISTURE CONTENT TO 90% MOISTURE PROCTOR. REINFORCING STRIP TO STIFF CLAYS PRESENT IN PLACE AT THE POND SIDE SLOPES OR OTHER ODDLY BEHAVIOR STRIPS TO STIFF CLAYS MAY BE USED AT THE DISCRETION OF THE GEOTECHNICAL ENGINEER OF RECORD.
6. FOR CONSTRUCTED EMBANKMENTS WHERE THE PERMANENT POOL IS POND 2 FEET OR MORE AGAINST THE EMBANKMENT, THERE SHALL BE A CORE TRENCH OR KEYWAY ALONG THE CENTRELINE OF THE EMBANKMENT UP TO THE PERMANENT POOL ELEVATION. THE CORE TRENCH OR KEYWAY SHALL BE A MINIMUM OF 2 FEET DEEP AND 8 FEET WIDE WITH A SIDE SLOPE OF 1:1 OR FLATTER.

STORMWATER NORTH POND 1 CROSS SECTION



POND 1 OUTLET STRUCTURE



NOTES:

1. ON THE INSIDE OF THE POND, EXTEND TURF REINFORCEMENT MATTING 2' BELOW THE ELEVATION OF THE EMERGENCY SPILLWAY.
2. ON THE OUTSIDE OF THE POND, EXTEND TURF REINFORCEMENT MATTING 5' HORIZONTALLY PAST THE TOE OF SLOPE.
3. MATTING SHALL BE INSTALLED IN ACCORDANCE WITH WDRN TECH STANDARD 105Z.

POND 1 EMERGENCY SPILLWAY

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SOUTH BUILDING ADDITION
WAUKESHA, WI

CONSTRUCTION DETAILS

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PROJ. NO.: 230-00A
 MISC. SHEET NO.: 09/04/20
 SCALE: Custom
SHEET C-12
 OF 19
C-13

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GENERAL EROSION AND SEDIMENT CONTROL NOTES

- ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN EPA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT (TPDES) PERMIT NO. WISCONSIN-001. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH STATE AND FEDERAL TECHNICAL STANDARDS AND PROVISIONS IN EFFECT AT THE TIME OF CONSTRUCTION. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMPs). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF AND UNDERSTAND THE BMPs PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
- THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL CONTROL MEASURES AS DIRECTED BY OWNER/ENGINEER OR GOVERNING AGENCIES SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
- MODIFICATIONS TO THE APPROVED SWPPP IN ORDER TO MEET UNPREDSEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMPs. ALL MODIFICATIONS MUST BE APPROVED BY OWNER/ENGINEER/GOVERNING AGENCY PRIOR TO DEVIATION OF THE APPROVED PLAN.
- INSTALL PERMETER EROSION CONTROL MEASURES (SUCH AS CONSTRUCTION ENTRANCES, SILT FENCE AND EXISTING INLET PROTECTION) PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE COVER, AS SHOWN ON PLAN IN ORDER TO PROTECT ADJACENT PERMITS/STORM SEWER SYSTEMS FROM SEQUENTIAL TRANSPORT.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL LOCATIONS OF VEHICLE INGRESS/EGRESS POINTS. CONSTRUCTION IS RESPONSIBLE TO COORDINATE LOCATIONS WITH THE PROPER AUTHORITIES, PROVIDE NECESSARY FEES AND OBTAIN ALL REQUIRED APPROVALS OR PERMITS. ADDITIONAL CONSTRUCTION ENTRANCES OTHER THAN AS SHOWN ON THE PLANS MUST BE APPROVED BY THE APPLICABLE GOVERNING AGENCY PRIOR TO INSTALLATION.
- PAVED SURFACES ADJACENT TO CONSTRUCTION ENTRANCES SHALL BE SWEEP AND/OR SCARED TO REMOVE ACCUMULATED SOIL AND ANKOR DUST IMMEDIATELY AND AS REQUESTED BY THE GOVERNING AGENCIES.
- ALL EXISTING STORM SEWER FACILITIES THAT WILL COLLECT RUNOFF FROM DISTURBED AREAS SHALL BE PROTECTED TO PREVENT SEDIMENT OBSTRUCTION WITHIN STORM SEWER SYSTEMS. SILT PROTECTION SHALL BE IMMEDIATELY FITTED AT THE INLET OF ALL INSTALLED STORM SEWER AND SILT FENCE SHALL BE IMMEDIATELY FITTED AT ALL INSTALLED CULVERT INLETS. ALL INLETS, STRUCTURES, PIPES, AND SHAFTS SHALL BE KEPT CLEAN AND FREE OF SEDIMENTATION AND DEBRIS.
- EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, WATER MAIN, ETC.) OUTSIDE OF THE PERMETER CONTROLS SHALL INCORPORATE THE FOLLOWING:
 - PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
 - BACKFILL, COMPACT AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
 - DISCHARGE TRENCH WATER INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH BMP'S PRIOR TO RELEASE TO STORM SEWER OR OTHER.
- AT A MINIMUM, SEDIMENT BASINS AND NECESSARY TEMPORARY DRAINAGE PROVISIONS SHALL BE CONSTRUCTED AND OPERATIONAL BEFORE BEGINNING OF SIGNIFICANT MASS GRADING OPERATIONS TO PREVENT OFFSITE DISCHARGE OF UNFILTERED RUNOFF.
- ALL WATERCOURSES AND WETLANDS SHALL BE PROTECTED WITH SILT FENCE TO PREVENT ANY DIRECT DISCHARGE FROM DISTURBED SOILS.
- ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR INSPECTION AND REPAIR DURING CONSTRUCTION. THE OWNER WILL BE RESPONSIBLE IF EROSION CONTROL IS REQUIRED AFTER THE CONTRACTOR HAS COMPLETED THE PROJECT.
- TOPSOIL STOCKPILES SHALL HAVE A BERM OR TRENCH AROUND THE CIRCUMFERENCE AND PERMETER SILT FENCE TO CONTROL SILT. IF TOPSOIL STOCKPILE REMAINS UNDISTURBED FOR MORE THAN SEVEN (7) DAYS, TEMPORARY SEEDING AND STABILIZATION IS REQUIRED.
- EROSION CONTROL MEASURES TEMPORARILY REMOVED FOR UNAVOIDABLE CONSTRUCTION ACTIVITIES SHALL BE IN WORKING ORDER IMMEDIATELY FOLLOWING COMPLETION OF SUCH ACTIVITIES OR PRIOR TO THE COMPLETION OF EACH WORK DAY, WHICH EVER OCCURS FIRST.
- MAINTAIN SOIL PROTECTION DEVICES THROUGHOUT THE DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCES ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.
- PUMPS MAY BE USED AS BYPASS DEVICES. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS. PUMP DISCHARGE SHALL BE DIRECTED INTO AN APPROVED FILTER BASIN OR APPROVED SETTLING DEVICE.
- GRADING EFFORTS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. EROSION AND SEDIMENT CONTROL MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES. ALL DISTURBED AREAS THAT WILL NOT BE WORKED FOR A PERIOD OF FOURTEEN (14) DAYS REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH TECHNICAL STANDARDS.
- ALL DISTURBED SLOPES EXCEEDING 4:1 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN TISON EROSION MATTING (OR APPROVED EQUIV) AND ALL CHANNELS SHALL BE STABILIZED WITH NORTH AMERICAN GREEN TISON (OR APPROVED EQUIV) OR APPLICATION OF AN APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. EROSION MATTING AND/OR NETTING USED ONCE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
- DURING PERIODS OF EXTENDED DRY WEATHER, THE CONTRACTOR SHALL KEEP A WATER TRUCK ON SITE FOR THE PURPOSE OF WATERING DOWN SOILS WHICH MAY OTHERWISE BECOME AIRBORNE. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING WIND EROSION (DUST) DURING CONSTRUCTION AT HIS/HER EXPENSE.
- DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE VISUALLY INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM ON A DAILY BASIS.
- QUALIFIED PERSONNEL (PROVIDED BY THE GENERAL/PRIME CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL OFF-TRACK OR MORE, PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERVAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT. REPORTING SHALL BE IN ACCORDANCE WITH THE GENERAL PERMIT. CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REPAIRED/REINTEGRATED.
- SEE ADDITIONAL DETAILS AND NOTES ON SITE STABILIZATION AND CONSTRUCTION DETAILS.
- THE STORM WATER FACILITY SHALL BE INSPECTED BY A CITY OF WAUKESHA INSPECTOR AT LEAST ONCE DURING CONSTRUCTION AND ONCE AFTER FINAL SITE STABILIZATION OF THE SITE.

GRADING NOTES

- CONTRACTOR SHALL VERIFY ALL GRADES, ENSURE ALL AREAS DRAIN PROPERLY AND REPORT ANY DISCREPANCIES TO PINNACLE ENGINEERING GROUP PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.
- ALL EXISTING CONDITIONS REPRESENT EXISTING SURFACE GRADES UNLESS OTHERWISE NOTED. ALL PROPOSED GRADES ARE FINISH SURFACE GRADES UNLESS OTHERWISE NOTED.
- SPOT ELEVATIONS REPRESENT THE GRADE ALONG THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. THESE GRADES SHALL BE MAINTAINED THROUGHOUT THE PROJECT.
- ALL EXCAVATIONS AND MATERIAL PLACEMENT SHALL BE COMPLETED TO DESIGN ELEVATIONS AS DEPICTED IN THE PLANS.
 - CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING QUANTITIES. VERIFY PEG ATTEMPTS TO PROVIDE A COST EFFECTIVE APPROACH TO BALANCE EARTHWORK. GRADING DESIGN IS BASED ON MANY FACTORS, INCLUDING SAFETY, AESTHETICS, AND COMMON ENGINEERING STANDARDS OF CARE. THEREFORE NO GUARANTEE CAN BE MADE FOR A BALANCED SITE.
 - THE CONTRACTOR MAY SOLICIT APPROVAL FROM ENGINEER/OWNER TO ADJUST FINAL GRADES FROM DESIGN GRADES TO PROVIDE AN OPTIMAL SET OF SPACES AS A RESULT OF FIELD CONDITIONS.
- GRADING ACTIVITIES SHALL BE IN A MANNER TO ALLOW POSITIVE DRAINAGE ACROSS DISTURBED SOILS, WHICH MAY INCLUDE EXCAVATION OF TEMPORARY DITCHES TO PREVENT PONDING, AND IF NECESSARY PUMPING TO ALLEVIATE PONDING. CONTRACTOR SHALL PREVENT SURFACE WATER FROM ENTERING INTO EXCAVATIONS. IN NO WAY SHALL OWNER BE RESPONSIBLE FOR REMEDIATION OF UNSATURABLE SOILS CREATED/OBTAINED AS A RESULT OF IMPROPER SITE GRADING OR SEQUENCING. CONTRACTOR SHALL SEQUENCE GRADING ACTIVITIES TO LIMIT EXPOSURE OF DISTURBED SOILS DUE TO WEATHER.
- THE CONTRACTOR IS RESPONSIBLE FOR MEETING MINIMUM COMPACTION STANDARDS. THE CONTRACTOR SHALL NOTIFY ENGINEER/OWNER IF PROPER COMPACTION CANNOT BE OBTAINED. THE PROJECT'S GEOTECHNICAL CONSULTANT SHALL DETERMINE WHICH IN-SITU SOILS ARE TO BE CONSIDERED UNSATURABLE SOILS. THE ENGINEER/OWNER AND GEOTECHNICAL TESTING CONSULTANT WILL DETERMINE IF REMEDIAL MEASURES WILL BE NECESSARY.
- IN THE EVENT THAT ANY MOISTURE-DENSITY TEST(S) FAIL TO MEET SPECIFICATION REQUIREMENTS, THE CONTRACTOR SHALL PERFORM CORRECTIVE WORK AS NECESSARY TO BRING THE MATERIAL INTO COMPLIANCE AND RETEST THE FAILED AREA AT NO COST TO THE OWNER.
- WITH THE AUTHORIZATION OF THE ENGINEER/OWNER, MATERIAL THAT IS TOO WET TO PERMIT PROPER COMPACTION MAY BE SPREAD ON FILL AREAS. IN AN EFFORT TO DRY, CONTRACTOR SHALL CLEARLY FIELD MARK THE AREAS OF SPREAD MATERIAL WITH PAINTED LATH AND SUBMIT A PLAN TO THE ENGINEER/OWNER THAT IDENTIFIES THE LIMITS. UNDER NO CIRCUMSTANCES SHALL THE SPREAD MATERIAL DEPTH EXCEED THE SHORTEST RESTRICTIVE OF THE EFFECTIVE TREATMENT DEPTH OF MACHINERY THAT WILL BE USED TO TURNOVER THE SPREAD MATERIAL, OR THE MAXIMUM COMPACTION LIFT DEPTH.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER/OWNER IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ADEQUATE AND SAFE TEMPORARY SHORING, BRACING, RETENTION STRUCTURES, AND EXCAVATIONS.
- THE SITE SHALL BE COMPLETED TO WITHIN 0.10 (+/-) FT. OF THE PROPOSED GRADES AS INDICATED WITHIN THE PLANS PRIOR TO PLACEMENT OF TOPSOIL OR STONE. CONTRACTOR IS ENCOURAGED TO SEQUENCE CONSTRUCTION SUCH THAT THE SITE IS COVERED INTO SMALLER AREAS TO ALLOW STABILIZATION OF DISTURBED SOILS IMMEDIATELY UPON COMPLETION OF INDIVIDUAL SMALLER AREAS.
- CONTRACTOR SHALL PROTECT "DIGGERS HOTLINE" FOR LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES AND SHALL BE RESPONSIBLE FOR PROTECTING SAID UTILITIES FROM ANY DAMAGE DURING CONSTRUCTION.
- CONTRACTOR SHALL PROTECT INLETS AND ADJACENT PROPERTIES WITH SILT FENCING OR APPROVED EROSION CONTROL METHODS. UTILS CONSTRUCTION IS COMPLETED, CONTRACTOR SHALL PLACE SILT FENCING AT DOWN SLOPE SIDE OF GRADING LIMITS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING FACILITIES OR UTILITIES. ANY DAMAGE SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE EXPENSE OF THE CONTRACTOR.
- WORK WITHIN ANY ROADWAY RIGHT-OF-WAY SHALL BE COORDINATED WITH THE APPROPRIATE MUNICIPAL OFFICIAL PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FEES. GRADING WITHIN RIGHT-OF-WAY IS SUBJECT TO APPROVAL BY SAID OFFICIALS. RESTORATION OF RIGHT-OF-WAY IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF GRADING. RESTORATION SHALL INCLUDE ALL ITEMS NECESSARY TO RESTORE RIGHT-OF-WAY IN KIND INCLUDING LANDSCAPING.
- CONTRACTOR SHALL COMPLY WITH ALL WAUKESHA COUNTY CONSTRUCTION STANDARDS/ORDINANCES.
- LANDSCAPE AND TURF AREAS SHALL HAVE A MINIMUM OF A 1-INCH TOPSOIL REPLACEMENT.
- TOPSOIL BERMING SHALL ACHIEVE 90% STANDARD PROCTOR DENSITY AT 3% (+/-) OPTIMUM MOISTURE CONTENT.
- SURVEY BENCHMARKS AND MAPPING HAS BEEN PROVIDED BY PEG IN NO WAY DOES PEG WARRANT THE BASEMAP IS ALL INCLUSIVE OR REPRESENTATIVE OF ACTUAL CONDITIONS. CONTRACTOR SHALL PROVIDE CHECKS AS NECESSARY TO VERIFY THE BASEMAP CONTENT AND ACCURACY.

UTILITY NOTES

- EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY WERE NECESSARY TO DETERMINE THE LOCATION AND DEPTH OF ANY CHANGE THERETO. CONTRACTOR SHALL CALL "DIGGERS HOTLINE" PRIOR TO ANY CONSTRUCTION.
- ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (LATEST EDITION AND ADDENDUM) AND ALL STATE AND LOCAL CODES AND SPECIFICATIONS. IT IS THE CONTRACTORS' RESPONSIBILITY TO DETERMINE WHICH SPECIFICATIONS AND CODES APPLY, AND TO COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE LOCAL AND STATE AUTHORITIES.
- UTILITY CONSTRUCTION AND SPECIFICATIONS SHALL COMPLY WITH THE CITY OF WAUKESHA SPECIAL PROVISIONS AND WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES COM-46.
- LENGTHS OF PROPOSED UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLAN LENGTHS ARE SHOWN FOR CONTRACTOR CONVENIENCE ONLY. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPUTATIONS OF MATERIALS REQUIRED TO COMPLETE WORK. LENGTHS SHALL BE FIELD VERIFIED DURING CONSTRUCTION.
- CONTRACTOR SHALL ADJUST AND/OR RECONSTRUCT EXISTING UTILITY COVERS (SUCH AS MANHOLE COVERS, VALVE BOX COVERS, ETC.) TO MATCH EXISTING GRADES OF THE AREAS DISTURBED DURING CONSTRUCTION.
- CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS, AND SIZES OF PROPOSED UTILITIES AND CHECK ALL UTILITY CROSSINGS FOR CONFLICTS PRIOR TO ATTEMPTING CONNECTIONS AND BEGINNING UTILITY CONSTRUCTION AND NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS.
- ALL NEW ON-SITE SANITARY, STORM AND WATER UTILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE PROPERTY OWNER.
- THE CONTRACTOR SHALL CONTACT THE CITY OF WAUKESHA PUBLIC WORKS DEPARTMENT 24 HOURS IN ADVANCE OF SANITARY, WATER AND STORM CONNECTIONS TO THE CITY OWNED SYSTEM TO SCHEDULE INSPECTIONS.
- ROUTING OF GAS, ELECTRIC AND TELEPHONE SERVICES ARE SHOWN ON THE ARCHITECTURAL PLANS AND SUBJECT TO CHANGE BASED UPON FINAL REVIEW AND APPROVAL BY RESPECTIVE UTILITY COMPANIES AND OWNER. CONTRACTOR SHALL CONTACT EACH UTILITY COMPANY AND COORDINATE FINAL CONNECTIONS FOR UTILITY SERVICES PRIOR TO START OF CONSTRUCTION.
- IF IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROPER AUTHORITIES FOR REQUIRED PERMITS, AUTHORIZATIONS, TRAFFIC CONTROL AND ANY FEE'S REQUIRED.
- FIELD TILE CONNECTION - ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE INCLUDED IN THE UNIT PRICE(S) FOR STORM SEWER. TILE LINES CROSSED BY THE TRENCH SHALL BE REPLACED WITH THE SAME MATERIAL AS THE STORM SEWER.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER/OWNER IF WATER MAIN BENCH, HORIZONTAL AND VERTICAL, REQUIRED TO COMPLETE CONSTRUCTION. COST FOR BENCH, HORIZONTAL AND VERTICAL SHALL BE INCIDENTAL AND INCLUDED IN THE OVERALL COST OF THE CONTRACT.
- STORM SEWER SPECIFICATIONS -
 - PIPE - REINFORCED CONCRETE PIPE (RCP) SHALL MEET THE REQUIREMENTS OF ASTM CLASS C-76 WITH RUBBER GASKETS MEETING REQUIREMENTS OF ASTM C-441. STRENGTH HEIGHT OF COVER (FEET):

0	2	3	4	5	15	25
MINIMUM CONCRETE PIPE CLASSIFICATION:	I	II	III	IV	ENGINEER	SPECIFY
 - HIGH DENSITY DUAL-WALL POLYETHYLENE HD-12 CORRUGATED PIPE (HDPE) SHALL BE AS MANUFACTURED BY ADS OR EQUAL WITH WATER TIGHT JOINTS, AND SHALL MEET THE REQUIREMENTS OF ASTM D 2240 TYPE "SD", OR POLYVINYL CHLORIDE (PVC) - CLASS 156 MEETING ASTM 1075, AS NOTED. IF HDPE PIPE IS USED FOR POND OUTFALLS, A MINIMUM OF THREE (3) SECTIONS (2 STRAPS) SHALL BE STRAPPED TOGETHER.
- INLETS/CATCH BASINS - INLETS/CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FILE NO. 15 OF THE "STANDARD SPECIFICATIONS" WITH A 1'-6" X 2'-6" MAXIMUM OPENING. FRAME & GRATE SHALL BE NEEHAN R-3607, OR EQUAL. THE SUMP DEPTH (VERTICAL DISTANCE FROM THE BASE OF THE STRUCTURE TO OUTFALL INVERT) OF THE PIPES SHALL BE 18" MIN. STRUCTURE SHOP DRAWINGS SHALL BE SUBMITTED TO PINNACLE ENGINEERING GROUP FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURING AND INSTALLATION.
- BACKFILL AND BEDDING - STORM SEWER SHALL BE CONSTRUCTED WITH GRAVEL BACKFILL AND CLASS "B" BEDDING IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH DECAHENT MATERIAL IN CONFORMANCE WITH SECTION 4.4.3 OF THE "STANDARD SPECIFICATIONS".
 - MANHOLE FRAMES AND COVERS - MANHOLE FRAMES AND COVERS SHALL BE NEEHAN R-1642 WITH TYPE "B" SELF SEALING LIDS, NON-ROOFING OR EQUAL.
- WATER MAIN AND SANITARY SEWER SHALL BE INSULATED WHENEVER THE DEPTH OF COVER IS LESS THAN 6 FEET. INSULATION AND PLACING OF INSULATION SHALL CONFORM TO CHAPTER 11.7.1 "INSULATION" OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN 6TH EDITION UPDATED WITH ITS LATEST ADDENDUM (TYP.).
- TRACER WIRE SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THESE CODE SECTIONS AS PER 183.01(3)(5) OF THE STATUTES. THE TRACER WIRE FOR THE SANITARY SEWER LATERAL SHALL BE CONTINUOUS AND SHALL BE EXTENDED ABOVE GRADE VIA A 4-INCH PVC PIPE WITH SCREW ON CAP ADJACENT TO THE PROPOSED TERMINATION POINT OF THE LATERAL FOR THE PROPOSED BUILDING.
- SEE UTILITY PLANS AND CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

WITH TYPE "B" SELF SEALING LIDS, NON-ROOFING OR EQUAL. IF HDPE PIPE IS USED FOR POND OUTFALLS, A MINIMUM OF THREE (3) SECTIONS (2 STRAPS) SHALL BE STRAPPED TOGETHER PRIOR TO ANY CONSTRUCTION.

16. WATER MAIN SPECIFICATIONS -

PIPE - WATER MAIN SHALL BE POLYVINYL CHLORIDE (PVC) PIPE MEETING THE REQUIREMENTS OF AWWA STANDARD C-900, CLASS 150, DR 18, WITH CAST IRON D.O. AND FITTINGS SHALL BE POLYETHYLENE BELL AND RING VALVE AND VALVE BOXES - GATE VALVES SHALL BE AWWA GATE VALVES MEETING THE REQUIREMENTS OF AWWA C-500 AND CHAPTER 2.7.2 OF THE "STANDARD SPECIFICATIONS". GATE VALVES AND VALVE BOXES SHALL CONFORM TO LOCAL LUMBER ORDINANCES.

HYDRANTS - HYDRANTS SHALL CONFORM TO THE SPECIFICATIONS OF THE CITY OF PORT WASHINGTON AND IN ACCORDANCE WITH FILE NO. 38 OF THE "STANDARD SPECIFICATIONS". THE DISTANCE FROM THE GROUND LINE TO THE CENTERLINE OF THE LOWEST NOZZLE AND THE LOWEST CONNECTION OF THE FIRE DEPARTMENT SHALL BE NO LESS THAN 18-INCHES AND NO GREATER THAN 23-INCHES.

BEDDING AND COVER MATERIAL - PIPE BEDDING AND COVER MATERIAL SHALL BE SAND, CRUSHED STONE CHIPS OR CRUSHED STONE SCREENINGS CONFORMING TO CHAPTER 8.4.3.2 OF THE "STANDARD SPECIFICATIONS".

BACKFILL - BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE WITH CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS". GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 4.4.3.1 OF THE "STANDARD SPECIFICATIONS".

17. SANITARY SEWER SPECIFICATIONS -

PIPE - SANITARY SEWER PIPE MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) MEETING REQUIREMENTS OF ASTM D 3034, SDR-35, WITH INTEGRAL BILL TYPE FLEXIBLE ELASTOMERIC JOINTS, MEETING THE REQUIREMENTS OF ASTM D-3122.

BEDDING AND COVER MATERIAL - BEDDING AND COVER MATERIAL SHALL CONFORM TO THE APPROPRIATE SECTIONS OF THE "STANDARD SPECIFICATION" WITH THE FOLLOWING MODIFICATION: COVER MATERIAL SHALL BE THE SAME AS USED FOR BEDDING AND SHALL CONFORM TO SECTION 8.4.3.2 (4). BEDDING AND COVER MATERIAL SHALL BE PLACED IN A MINIMUM OF THREE SEPARATE LIFTS, OR AS REQUIRED TO INSURE ADEQUATE COMPACTING OF THESE MATERIALS, WITH ONE LIFT OF BEDDING MATERIAL ENDING AT OR NEAR THE SPRINGLINE OF THE PIPE. THE CONTRACTOR SHALL TAKE CARE TO COMPLETELY WORK BEDDING MATERIAL UNDER THE HAUNCH OF THE PIPE TO PROVIDE ADEQUATE SIDE SUPPORT.

BACKFILL - BACKFILL MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS". GRAVEL BACKFILL IS REQUIRED IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 4.4.3.1 OF THE "STANDARD SPECIFICATIONS".

MANHOLES - MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH FILE NOS. 12, 13, AND 15 OF THE "STANDARD SPECIFICATIONS" AND ALL SPECIAL PROVISIONS OF THE CITY OF WAUKESHA. STRUCTURE SHOP DRAWINGS SHALL BE SUBMITTED TO PINNACLE ENGINEERING GROUP FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURING AND INSTALLATION.

MANHOLE FRAMES AND COVERS - MANHOLE FRAMES AND COVERS SHALL BE NEEHAN R-1642 WITH TYPE "B" SELF SEALING LIDS, NON-ROOFING OR EQUAL.

18. WATER MAIN AND SANITARY SEWER SHALL BE INSULATED WHENEVER THE DEPTH OF COVER IS LESS THAN 6 FEET. INSULATION AND PLACING OF INSULATION SHALL CONFORM TO CHAPTER 11.7.1 "INSULATION" OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN 6TH EDITION UPDATED WITH ITS LATEST ADDENDUM (TYP.).

19. TRACER WIRE SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THESE CODE SECTIONS AS PER 183.01(3)(5) OF THE STATUTES. THE TRACER WIRE FOR THE SANITARY SEWER LATERAL SHALL BE CONTINUOUS AND SHALL BE EXTENDED ABOVE GRADE VIA A 4-INCH PVC PIPE WITH SCREW ON CAP ADJACENT TO THE PROPOSED TERMINATION POINT OF THE LATERAL FOR THE PROPOSED BUILDING.

20. SEE UTILITY PLANS AND CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

DRAWN BY: JAH

DESIGNED BY: JAC

REVIEWED BY: JAC

PROJECT NO.: 230103

SHEET NO.: 000000

DATE: 08/20/24

SCALE: 1"=1'-0"

PROJECT: 230103-000-WI-CAD-SHEETS-230103-000-WI-CONSTRUCTION DETAILS DWG

PROJECT: 230103-000-WI-CAD-SHEETS-230103-000-WI-CONSTRUCTION DETAILS DWG

PROJECT: 230103-000-WI-CAD-SHEETS-230103-000-WI-CONSTRUCTION DETAILS DWG

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PROJECT: 230103-000-WI-CAD-SHEETS-230103-000-WI-CONSTRUCTION DETAILS DWG

SOUTH BUILDING ADDITION

CONSTRUCTION DETAILS

WAUKESHA, WI



 PINNACLE ENGINEERING GROUP

 ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:

 20725 WATERLOO DRIVE SUITE 100

 BROOKFIELD, WI 53119

 (262) 781-8888

 CHICAGO | MILWAUKEE | MADISON

	REVISONS				
1	BID SET	09/04/20	_____	_____	_____
2	SECURITY GATE UPDATES	09/25/20	_____	_____	_____
3	ADDRESS CITY COMMENTS	10/05/20	_____	_____	_____

PEG JOB NO.: 230103
 PEG PR: _____
 STATE DATE: 08/20/24
 SCALE: 1"=1'-0"

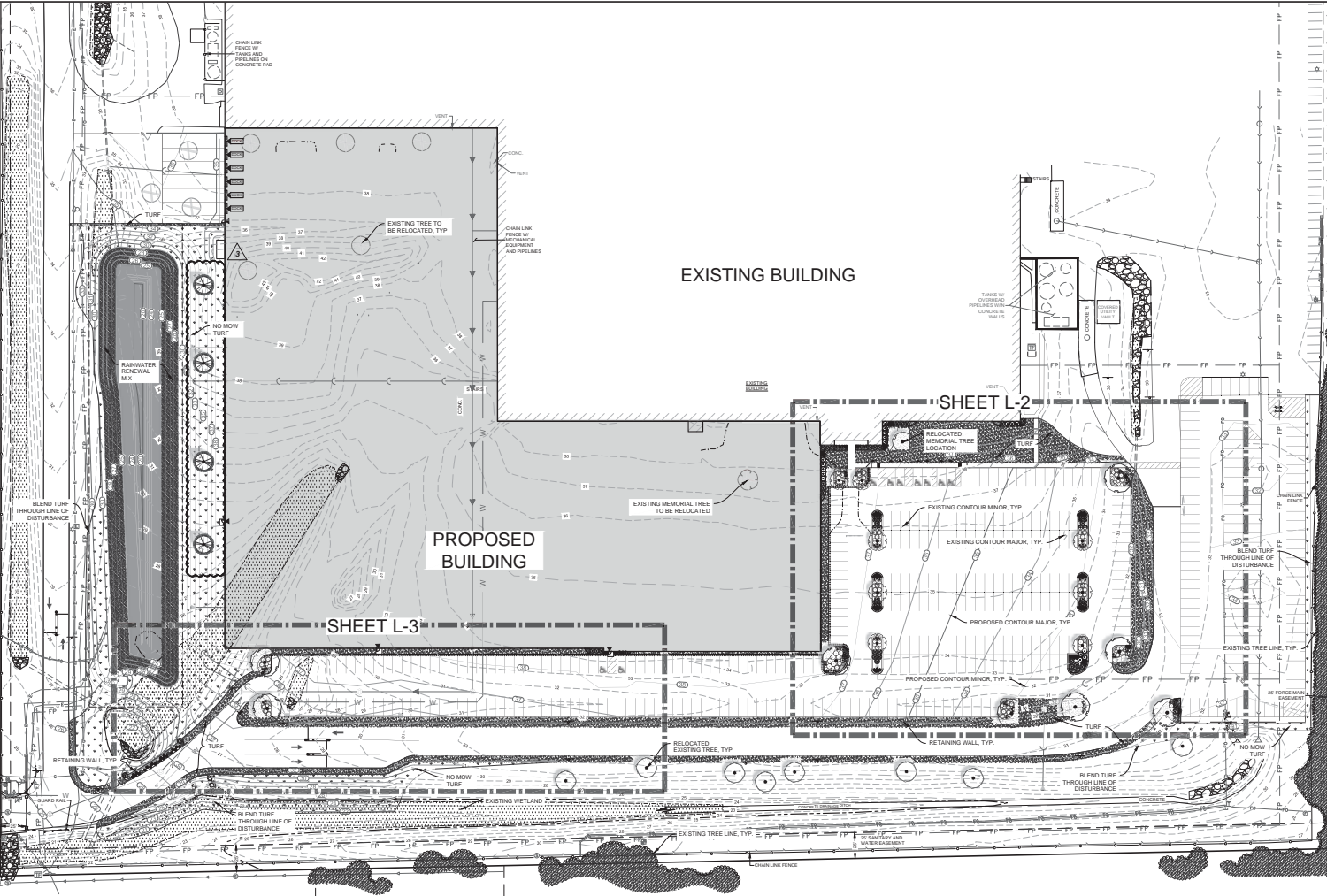
SHEET	C-13
OF	13
SHEET	C-13

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CONSTRUCTION DETAILS

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 REVISIONS: 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.



CONCEPT PLANT SCHEDULE

Plant Type	Quantity	Plant Name	Height	Notes
DECIDUOUS TREE	8	Acer Freemont / Autumn Fantasy / Autumn Fantasy Maple	25' Cal.	
		Gymnocladus dioica / Kentucky Coffee Tree	25' Cal.	
		Quercus x schubertii / Swamp Bur Oak	25' Cal.	
		Tilia tomentosa / Sterling / Sterling Silver Linden	25' Cal.	
ORNAMENTAL TREE	8	Aristolochia x grandiflora / Autumn Brilliance / Autumn Brilliance Serviceberry	8' HL	
		Malus x Prairie Maid / Prairie Maid Crabapple	1.5' Cal.	
		Malus x Sugar Tyme / Sugar Tyme Crabapple	1.5' Cal.	
		Syringa reticulata / Ivory Silk / Ivory Silk Japanese Tree Lilac	1.5' Cal.	
EVERGREEN TREE	4	Picea glauca / White Spruce	6' HL	
TRANSPLANTED TREES	9			
MEDIUM EVERGREEN SHRUB	85	Juniperus chinensis / Pfitzeriana Kallitys / Kallit Compact Juniper	18' W	
		Juniperus chinensis / Sea Green / Sea Green Juniper	18' W	
		Juniperus chinensis / Sea of Gold / Sea of Gold Juniper	18' W	
		Juniperus horizontalis / Youngstown / Andorra Juniper	18' W	
		Juniperus sabina / Buffalo / Buffalo Juniper	18' W	
		Juniperus virginiana / Grey Owl / Eastern Redcedar Juniper	18' W	
		Taxus x media / Demiformis / Dense Yew	18' W	
MEDIUM DECIDUOUS SHRUB	27	Aronia melanocarpa / Elata / Glossy Black Chokeberry	18' HL	
SMALL DECIDUOUS SHRUB	104	Cornus stolonifera / Arctic Fire / Arctic Fire Dogwood	18' HL	
TALL ORNAMENTAL GRASS	153	Calamagrostis x a / Karl Foerster / Karl Foerster Reed Grass	1 gal.	
SHORT ORNAMENTAL GRASS	31	Eragrostis spectabilis / Purple Love Grass	1 gal.	
PERENNIALS	454 sf	Aster x chinensis / Vision in Red / Vision in Red Astilbe	17 ft. 4.5' cont.	
RAINWATER RENEWAL MIX	13,824 sf	AGRECOL RAINWATER RENEWAL / AGRECOL RAINWATER RENEWAL MIX	seed	
SOD	28,787 sf	Sod / Sod	seed	
NO MOW TURF	53,531 sf	Turf Hydroseed Low Grow / Low Grow Mix	seed	

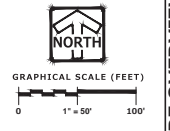
PINNACLE ENGINEERING GROUP
 20725 WATERFORD ROAD, SUITE 100
 BROOKFIELD, WI 53116
 (262) 534-8888
 CHICAGO | MILWAUKEE | NATIONWIDE

SOUTH BUILDING ADDITION

WAUKESHA, WI

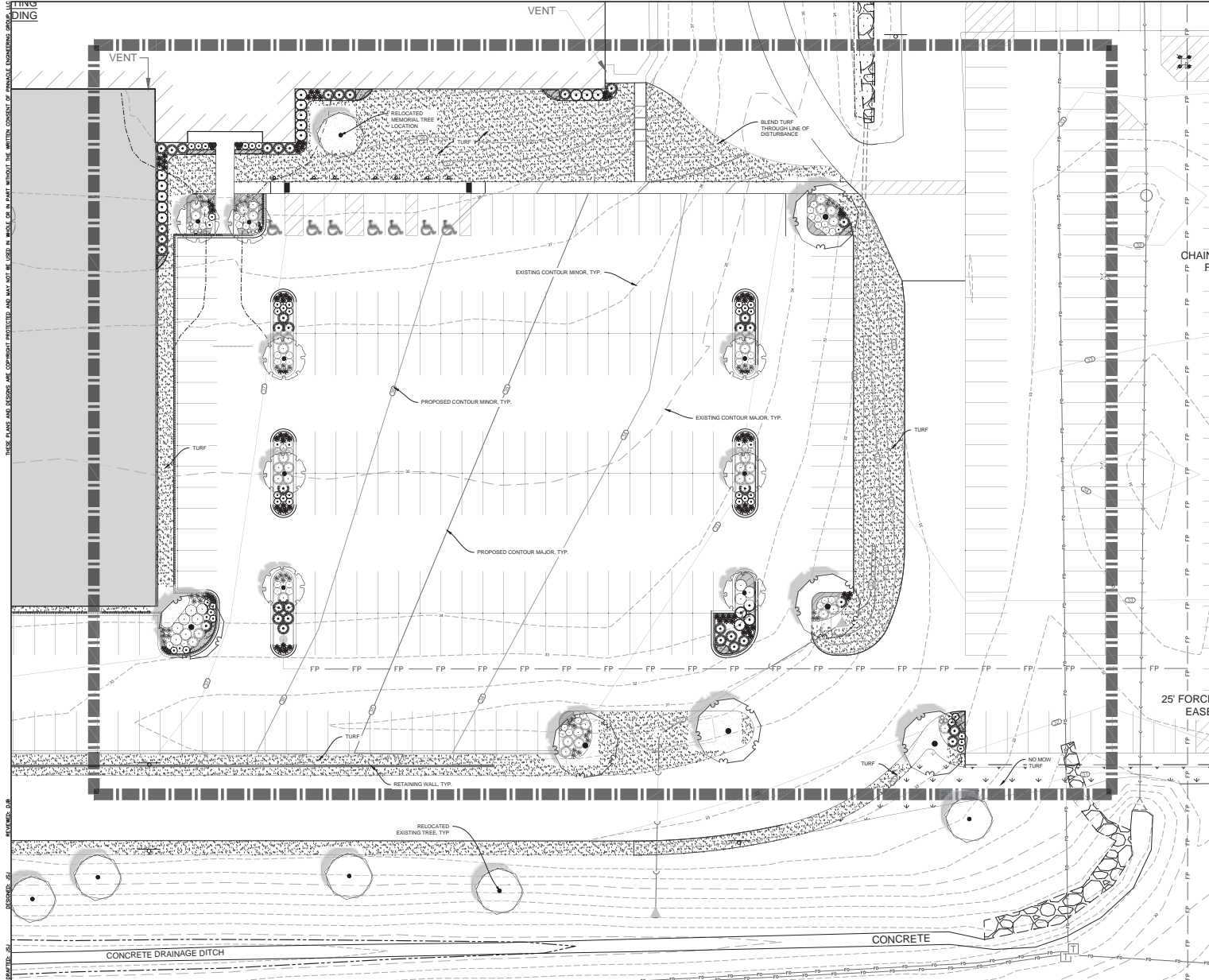
LANDSCAPE OVERVIEW

REVISIONS	DATE	DESCRIPTION
1.	09/04/20	BID SET
2.	09/25/20	SECURITY GATE UPDATES
3.	10/05/20	ADDRESS CITY COMMENTS



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 LANDSCAPE OVERVIEW

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- ### CONCEPT PLANT KEY
- DECIDUOUS TREE**
 - Acer Freemanii / Autumn Fantasy / Autumn Fantasy Maple
 - Cornus alba / Kentucky Coffee Tree
 - Quercus x schuetti / Swamp Bur Oak
 - Tilia tomentosa / Sterling / Sterling Silver Linden
 - ORNAMENTAL TREE**
 - Ameiarcher x grandiflora / Autumn Brilliance / Autumn Brilliance Serviceberry
 - Malus x Prairie Maid / Prairie Maid Crabapple
 - Malus x Sugar Tyme / Sugar Tyme Crabapple
 - Syringa reticulata / Ivory Silk / Ivory Silk Japanese Tree Lilac
 - MEDIUM EVERGREEN SHRUB**
 - Juniperus chinensis / Pilizeriana Kallays / Kallay Compact Juniper
 - Juniperus chinensis / Sea Green / Sea Green Juniper
 - Juniperus chinensis / Sea of Gold / Sea of Gold Juniper
 - Juniperus horizontalis / Youngstown / Andorra Juniper
 - Juniperus saxatilis / Buffalo / Buffalo Juniper
 - Juniperus virginiana / Grey Owl / Eastern Redcedar Juniper
 - Taxus x media / Densata / Densata Yew
 - Taxus x media / Everlow / Everlow Yew
 - MEDIUM DECIDUOUS SHRUB**
 - Aronia melanocarpa / Elata / Glossy Black Chokeberry
 - Hydrangea p. Vanilla Strawberry / Vanilla Strawberry Hydrangea
 - Rosa rugosa / Purple Pavement / Purple Pavement Rugosa Rose
 - Sambucus nigra / Black Lace / Black Lace Elderberry
 - Spiraea japonica / Anthony Waterer / Anthony Waterer Spiraea
 - Syringa meyeri / Palibin / Dwarf Korean Lilac
 - SMALL DECIDUOUS SHRUB**
 - Cornus sibirica / Arctic Fire / Arctic Fire Dogwood
 - Diervilla lonicera / Dwarf Bush Honeysuckle
 - Hydrangea paniculata / Bobo / Bobo Hydrangea
 - Rhus aromatica / Gro-Low / Gro-Low Fragrant Sumac
 - Spiraea japonica / Magic Carpet / Magic Carpet Spiraea
 - TALL ORNAMENTAL GRASS**
 - Calamagrostis x a. Karl Foerster / Karl Foerster Reed Grass
 - Miscanthus sinensis / Oktoberfest / Oktoberfest Miscanthus
 - Panicum virgatum / Northwind / Northwind Switch Grass
 - Schizachyrium scoparium / Blue Heaven / Blue Heaven Little Bluestem Grass
 - SHORT ORNAMENTAL GRASS**
 - Eriogonum speciosum / Purple Love Grass
 - Hystrix patula / Bottlebrush Grass
 - Sporobolus heterolepis / Tara / Prairie Dropseed
 - PERENNIALS**
 - Aster chinensis / Vision in Red / Vision in Red Astilbe
 - Calamintha nepeta / Calamint
 - Coneopsis verticillata / Zagreb / Zagreb Coneopsis
 - Echinacea purpurea / Magnus Superior / Magnus Superior Coneflower
 - Hemerocallis / Siletta De Oro / Siletta De Oro Daylily
 - Hemerocallis / Summer Wine / Summer Wine Daylily
 - Heuchera m. Palace Purple / Palace Purple Coral Bell
 - Hosta x Frances Williams / Frances Williams Hosta
 - Loxandanthemum x Bechy / Bechy Shasta Daisy
 - Nepeta x Walker x Low / Walker x Low Calaminth
 - Rudbeckia l. Witte x Little Suzy / Witte x Little Suzy Showy Coneflower
 - Salvia nemorosa / May Night / May Night Sage
 - Sedum / Autumn Joy / Autumn Joy Sedum
 - RAINWATER RENEWAL MIX**
 - AGRECOL RAINWATER RENEWAL / AGRECOL RAINWATER RENEWAL MIX
 - SOD**
 - Sod / Sod
 - NO MOW TURF**
 - Turf Hydroseeded Low Grow / Low Grow Mix

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SOUTH BUILDING ADDITION

LANDSCAPE ENLARGEMENT

WAUKESHA, WI

REVISIONS	
1. BID SET	09/04/20
2. SECURITY GATE UPDATES	09/25/20
3. ADDRESS CITY COMMENTS	10/05/20

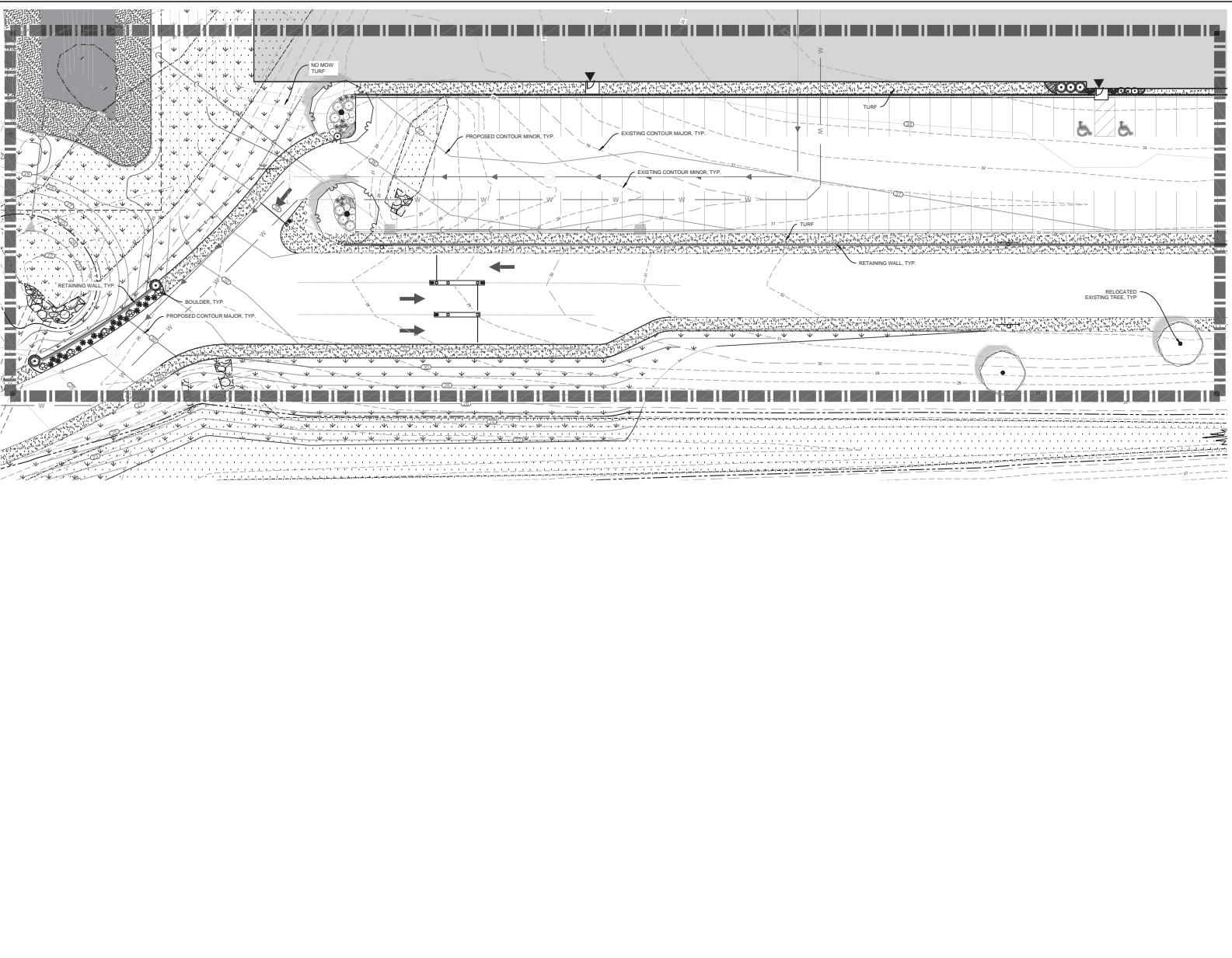
GRAPHICAL SCALE (FEET)
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NORTH

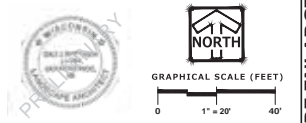
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 REVISION: 04
 REVISION: 05
 REVISION: 06
 REVISION: 07



- ### CONCEPT PLANT KEY
- DECIDUOUS TREE**
 - Acer freemanii* 'Autumn Fantasy' / Autumn Fantasy Maple
 - Gymnocladus dioica* / Kentucky Coffee Tree
 - Quercus x schubertii* / Swamp Bar Oak
 - Tilia tomentosa* 'Stiefeling' / Sterling Silver Linden
 - ORNAMENTAL TREE**
 - Amelanchier x grandiflora* 'Autumn Brilliance' / Autumn Brilliance Serviceberry
 - Malus x Prairie Maid* / Prairie Maid Crabapple
 - Malus x Sugar Tyme* / Sugar Tyme Crabapple
 - Syringa reticulata* 'Ivory Silk' / Ivory Silk Japanese Tree Lilac
 - MEDIUM EVERGREEN SHRUB**
 - Juniperus chinensis* 'Pizzardiana Kallaya' / Kallaya Compact Juniper
 - Juniperus chinensis* 'Sea Green' / Sea Green Juniper
 - Juniperus chinensis* 'Sea of Gold' / Sea of Gold Juniper
 - Juniperus horizontalis* 'Youngblow' / Anders Juniper
 - Juniperus sabinna* 'Buffalo' / Buffalo Juniper
 - Juniperus virginiana* 'Grey Owl' / Eastern Redcedar Juniper
 - Taxus x media* 'Densiformis' / Dense Yew
 - Taxus x media* 'Everlow' / Everlow Yew
 - MEDIUM DECIDUOUS SHRUB**
 - Aronia melanocarpa* 'Elatea' / Glossy Black Chokeberry
 - Hydrangea p.* 'Vanilla Strawberry' / Vanilla Strawberry Hydrangea
 - Rosa rugosa* 'Purple Pavement' / Purple Pavement Rugosa Rose
 - Sambucus nigra* 'Black Lace' / Black Lace Elderberry
 - Spiraea japonica* 'Anthony Waterer' / Anthony Waterer Spiraea
 - Syringa meyeri* 'Palibin' / Dwarf Korean Lilac
 - SMALL DECIDUOUS SHRUB**
 - Cornus stolonifera* 'Arctic Fire' / Arctic Fire Dogwood
 - Desmodium illinoense* 'Dwarf Bush Homespuckler'
 - Hydrangea paniculata* 'Bobo' / Bobo Hydrangea
 - Rhus aromatica* 'Glo-Low' / Glo-Low Fragrant Sumac
 - Spiraea japonica* 'Magic Carpet' / Magic Carpet Spiraea
 - TALL ORNAMENTAL GRASS**
 - Calamagrostis x a.* 'Karl Foerster' / Karl Foerster Reed Grass
 - Miscanthus sinensis* 'Oktoberfest' / Oktoberfest Miscanthus
 - Panicum virgatum* 'Northwind' / Northwind Switch Grass
 - Schizachyrium scoparium* 'Blue Heaven' / Blue Heaven Little Bluestem Grass
 - SHORT ORNAMENTAL GRASS**
 - Eragrostis spectabilis* / Purple Love Grass
 - Hypoxis patula* / Bottlebrush Grass
 - Sporobolus heterolepis* 'Tara' / Prairie Dropseed
 - PERENNIALS**
 - Astilbe chinensis* 'Vision in Red' / Vision in Red Astilbe
 - Calamintha nepeta* / Calamint
 - Coreopsis verticillata* 'Zagreb' / Zagreb Coreopsis
 - Echinacea purpurea* 'Magnus Superior' / Magnus Superior Coneflower
 - Hemerocallis* 'Stella De Oro' / Stella De Oro Daylily
 - Hemerocallis* 'Summer Wine' / Summer Wine Daylily
 - Heuchera m.* 'Palace Purple' / Palace Purple Coral Bells
 - Hosta x* 'Frances Williams' / Frances Williams Hosta
 - Leucanthemum x* 'Becky' / Becky Shasta Daisy
 - Nepeta x* 'Walker's Low' / Walker's Low Catmint
 - Rudbeckia l.* 'Vielte's Little Suzy' / Vielte's Little Suzy Showy Coneflower
 - Sakila nemorosa* 'May Night' / May Night Sage
 - Sedum* 'Autumn Joy' / Autumn Joy Sedum
 - RAINWATER RENEWAL MIX**
 - AGRECOL RAINWATER RENEWAL / AGRECOL RAINWATER RENEWAL MIX
 - SOD**
 - Sod / Sod
 - NO MOW TURF**
 - Turf Hydroseeded Low Grow / Low Grow Mix



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SOUTH BUILDING ADDITION

LANDSCAPE ENLARGEMENT

WAUKESHA, WI

REVISIONS	
1. BID SET	09/04/20
2. SECURITY GATE UPDATES	09/25/20
3. ADDRESS CITY COMMENTS	10/05/20

PROJ. NO.	230100A	SHEET	L-3
DATE	09/04/20		
SCALE	1"=20'	OF	L-4

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GENERAL PLANTING NOTES

- THE LAYOUT OF ALL PLANTING BEDS AND INDIVIDUAL TREES AND SHRUBS SHALL BE STAKED BY THE CONTRACTOR IN ADVANCE OF INSTALLATION. FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE LOCATIONS AS CALLED FOR THE PLANS. AN APPROVED REPRESENTATIVE WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR AND MAKE MINOR ADJUSTMENTS AS NECESSARY. BED LAYOUT SHALL ALSO INCLUDE PERENNIAL GROUPINGS BY SPECIES.
- THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY DETERMINING THE PLANT MATERIAL QUANTITIES REQUIRED BY THE LANDSCAPE PLANS. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.
- ALL STOCK SHALL BE FREE OF DISEASES AND HARMFUL INSECTS, DAMAGE, DISORDERS AND DEFORMITIES.
- TREES SHALL HAVE SINGLE, STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. HEIGHT-TO-CALIPER RATIOS SHALL BE CONSISTENT WITH THE LATEST EDITION OF ANSI Z60.1.
- ROOT SYSTEMS SHALL BE LARGE ENOUGH TO ALLOW FOR FULL RECOVERY OF THE TREE, AND SHALL CONFORM TO STANDARDS AS THEY APPEAR IN THE MOST CURRENT REVISION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD OF NURSERY STOCK ANSI Z60.1.
- 8 IN. TREES SHALL BE DUG WITH A BALL OF SOIL, NOT SOFT BALLED OR POTTED AND SHALL BE FIRM IN THEIR ROOTBALL. ROOT BALL SHALL BE WRAPPED (WITH BIODEGRADABLE MATERIAL). THE TREE ROOT FLARE, OR COLLAR, SHALL BE AT OR WITHIN THE TOP THREE INCHES OF GRADE.
- ALL SPRING TREES MUST BE FREELY DUG IN THE MOST RECENT SPRING SEASON.
- ALL AUTUMN TREES MUST BE FREELY DUG IN THE MOST RECENT AUTUMN SEASON.
- TREES SHALL BE ALIVE, HEALTHY AND APPROPRIATELY MOIST, AT TIME OF DELIVERY.
- TREES SHALL BE SUBJECT TO INSPECTION FOR CONFORMITY TO SPECIFICATION REQUIREMENTS AND APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE. THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY TREES THAT DO NOT MEET THE SPECIFICATIONS OR THAT HAVE BEEN DAMAGED DURING SHIPMENT. THE LANDSCAPE INSTALLER MUST RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT FOR ANY SUBSTITUTIONS OR ALTERATIONS.
- ALL PLANT MATERIAL AND SEED SHALL BE PROVIDED FROM A NURSERY (WITHIN 200 MILES) WITH A SIMILAR PLANT HARDINESS ZONE AS PROJECT LOCATION. EXISTING SOIL SHALL BE AMENDED PER SOIL ANALYSIS REPORT TO ENSURE A PROPER GROWING MEDIUM IS ACHIEVED.
- ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH PLANTING DETAILS.
- ALL PLANTING BEDS SHALL HAVE A MINIMUM 10" DEPTH OF PREPARED SOIL, WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 10" OF SOIL. REFER TO SOIL PLACEMENT NOTES.
- WHILE PLANTING TREES AND SHRUBS, BACKFILL OF PLANTING HOLE AND WATER TUBE THOROUGHLY BEFORE INSTALLING THE REMAINDER OF SOIL MIXTURE. AFTER ALL SOIL HAS BEEN PLACED INTO THE PLANTING HOLE WATER THOROUGHLY AGAIN.
- THE CONTRACTOR MUST LABEL ALL TREES WITH THE COMMON AND BOTANICAL NAMES PRIOR TO FINAL INSPECTION.
- AREAS THAT CALL FOR BARK MULCH SHALL RECEIVE LANDSCAPE FABRIC, CONTRACTOR TO PROVIDE LANDSCAPE FABRIC SPECIFICATIONS TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. LANDSCAPE FABRIC SHALL BE INSTALLED TO COVER THE ENTIRE AREA TO RECEIVE BARK MULCH WITH EACH SEAM OVERLAPPING A MINIMUM OF 6". SEAMS SHALL BE STAPLED AT 12" INTERVALS.
- ALL PLANTING BEDS SHALL BE MULCHED WITH 3" DEEP SHREDDED HARDWOOD MULCH, AND ALL TREES PLANTED IN TURF AREAS SHALL RECEIVE A 3" DEEP SHREDDED HARDWOOD MULCHED RING AS SHOWN IN PLANTING DETAILS.
- ALL PLANTING BEDS AND TREE RINGS SHALL HAVE A COMMERCIAL GRADE POLYETHYLENE EDGE INSTALLED. BED EDGES ARE TO BE CUT CLEAN AND SMOOTH AS SHOWN ON LANDSCAPE PLANS WITH A CLEAN DEFINITION BETWEEN TURF AND PLANTING AREAS.
- ALL SODDED AREAS SHALL RECEIVE A MINIMUM OF 2" DEPTH OF TOPSOIL, WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 6" OF SOIL AS INDICATED IN THE SOIL PLACEMENT NOTES. APPLY A 10-10-10 STARTER FERTILIZER UNIFORMLY AT RECOMMENDED RATES PRIOR TO INSTALLATION OF SOIL. INSTALL SOD UNIFORMLY WITH STAGGERED JOINTS, LAID TIGHTLY END TO END AND SIDE TO SIDE. ROLL SOIL WITH A WALK BEHIND ROLLER AND WATER IMMEDIATELY TO A DEPTH OF 3". SOD INSTALLED IN SWALES AND ON SLOPES EXCEEDING 1:3 SHALL BE STAKED. CONTRACTOR IS RESPONSIBLE TO PROVIDE A SMOOTH, UNIFORM, HEALTHY LAWN. CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIRST 2 MOWINGS AND WATERING DURING THIS ESTABLISHMENT PERIOD.
- ALL TURF SEED AREAS SHALL HAVE A MINIMUM DEPTH OF 6" OF TOPSOIL, WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 6" OF SOIL AS INDICATED IN THE SOIL PLACEMENT NOTES. REQUIRED AMENDMENTS SHALL BE DETERMINED BASED ON A SOIL ANALYSIS TO BE PERFORMED. ALL TOPSOIL AMENDMENT SHALL BE GED WEED FREE MANURE OR CLASS 1 ORGANIC MATTER.
- FOR LAWN SEEDING, APPLY A STARTER FERTILIZER AND SEED UNIFORMLY AT THE RATE RECOMMENDED BY MANUFACTURER, AND PROVIDE A MULCH COVERING THAT IS SUITABLE TO PROMOTE SEED GERMINATION AND TURF ESTABLISHMENT. CONTRACTOR TO PROVIDE FERTILIZER, SEED, AND MULCH SPECIFICATIONS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. EROSION CONTROL MEASURES ARE TO BE INSTALLED IN THOSE AREAS REQUIRING STABILIZATION (SWALES, SLOPES EXCEEDING 1:3, AND THOSE LOCATIONS INDICATED IN CIVIL DRAWINGS).
- THE CONTRACTOR TO ENSURE A SMOOTH, UNIFORM QUALITY TURF IS ACHIEVED WITH NO BARE SPOTS LARGER THAN 6" X 6". ANY BARE SPOTS LARGER THAN 6" X 6" AT THE END OF ESTABLISHMENT PERIOD SHALL BE RESEED AT THE CONTRACTOR'S EXPENSE TO OBTAIN A DENSE, UNIFORM LAWN.
- ALL FINISH GRADING AND LAWN AREAS TO BE INSTALLED BY LANDSCAPE CONTRACTOR.
- ALL DISTURBED AREAS WITHIN THE PROJECT SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
- ALL DISTURBED AREAS OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL ENSURE THAT SOIL CONDITIONS AND COMPACTION ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AROUND THE CONSTRUCTION SITE. UNDESIRABLE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK. IF SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER SURFACE AND SUBSURFACE DRAINAGE IN ALL AREAS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, INCLUDING ANY IRRIGATION LINES, PRIOR TO DIGGING. CONSULT DIGGERS HOTLINE.
- TREES SHALL BE INSTALLED NO CLOSER THAN:
 - 10 FEET FROM ANY FIRE HYDRANT
 - 7 FEET FROM DRIVEWAYS, STORM SEWER, SANITARY SEWER LATERALS, AND WATER SERVICE
- THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, AND LICENSES NECESSARY FOR THE INSTALLATION OF THIS PLAN.
- THE CONTRACTOR IS TO REVIEW ALL SITE ENGINEERING DOCUMENTS PRIOR TO INSTALLATION. ANY CONFLICTS MUST BE REPORTED TO THE LANDSCAPE ARCHITECT. THESE LANDSCAPE DRAWINGS ARE FOR THE INSTALLATION OF PLANT MATERIALS ONLY UNLESS OTHERWISE STATED.
- THE CONTRACTOR SHALL PROVIDE WATERING AND MAINTENANCE SERVICES FOR A PERIOD OF 60 DAYS TO ENSURE VEGETATIVE ESTABLISHMENT. UPON COMPLETION OF THE PROJECT, CONTRACTOR SHALL SUPPLY THE OWNER IN WRITING WITH ONGOING WATERING AND MAINTENANCE INSTRUCTIONS.
- PLANT MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM TIME OF OWNER ACCEPTANCE. ONLY ONE REPLACEMENT PER PLANT WILL BE REQUIRED DURING THE WARRANTY PERIOD EXCEPT IN THE EVENT OF FAILURE TO COMPLY WITH THE SPECIFIED REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE TO CONDUCT A FINAL WALK THROUGH WITH THE LANDSCAPE ARCHITECT AND OR OWNERS REPRESENTATIVE TO ANSWER QUESTIONS, PROVIDE WRITTEN INSTRUCTIONS, AND ENSURE THAT PROJECT REQUIREMENTS HAVE BEEN MET.

NATIVE PLANTINGS AND PRAIRIE

- Specifications for Hand Broadcasting:**
- Seeding shall be conducted in late fall (September 1 - Soil Freezes) so that seeds may lie dormant during the winter, allowing for stratification, or spring (March 1-June 1) to allow a complete growing season to become established.
- A. Preparation of Soil Prior to Seeding**
- Incorporate soil additives consisting of two inches of compost mixed into two inches of topsoil. The soil mix should be incorporated into the soil using a rotary device with capability of reaching to 12" below the surface. Compost shall meet WDNR specification 5100 - Compost.
 - All foreign materials larger than 1-inch shall be removed from the soil prior to seeding or planting.
 - Area should be free from unwanted vegetation, edges, and depressions.
 - Avoid dividing over the specified area with machinery.
- B. Cover Crop**
- Annual rye shall be spread at a density of 20 pounds per acre during the planting or seeding of the native plant species to stabilize the soil and reduce the growth of unwanted vegetation. This annual grass grows rapidly without competing with the wildflowers and grasses that are planted in the target areas.
 - Winter wheat or perennial rye shall not be used as a cover crop. These grasses may out compete prairie seedlings, leading to a reduction in the success of the plantings.
- C. Seed Mix**
- Mix all prairie seed with vermiculite according to Agracore recommendations and installation guidelines.
- Broadcast half the seed over the entire site or target area.
 - Broadcast the other half of seed perpendicular to the direction that the first half of the seed was broadcast.
 - Cover seed with 1/4 inch to 3/8-inch of soil (use any excess soil from the site) with rake or drag.
 - Roll site to ensure firm seed-to-ground contact.
 - Keep seed consistently wet through germination period. Generally 3 weeks.

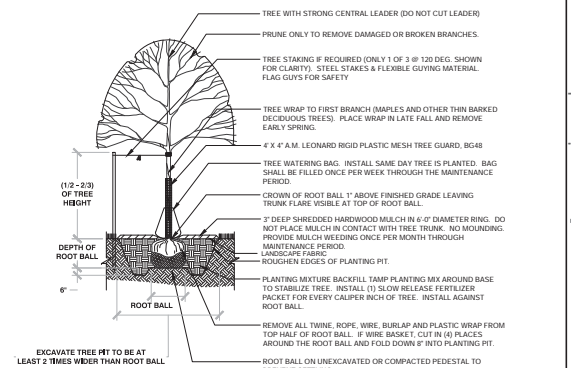
All seeding shall be covered with 1-inch of clean, non-invasive straw (no marsh hay, or reed canary grass) without seeds, within seven days. Wheat, rye, oats, or barley are acceptable forms of straw. Those areas of slopes steeper than 8:1 (eight feet horizontal to one foot vertical) shall be planted no later than October 1 and staked with an erosion control blanket to prevent erosion.

Weed Suppression Measures/ Maintenance:

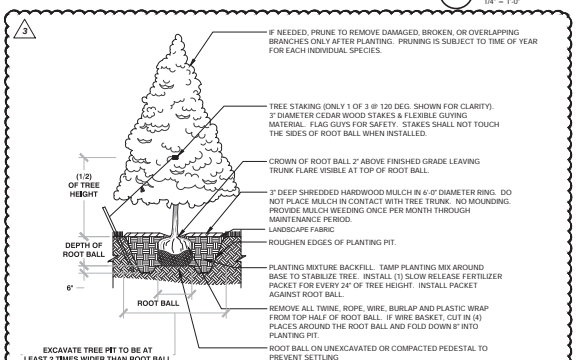
- First Year -** Perform spot spray with herbicide to suppress weeds. This should occur approximately every month of the growing season after infiltration basins have been rough graded.
- Second Year -** In May/June mow basins at 6-inch height to suppress weeds. Perform spot spray with herbicide to suppress weeds. Have qualified professional assess plantings. Repeat mowing basins and spot-spray in early July.
- Third Year -** In May/June mow basins at 8-inch height to suppress weeds. Perform spot spray with herbicide to suppress weeds. Have qualified professional assess plantings.
- Fourth Year -** In May perform a prescribed burn. In June have qualified professional assess plantings.

SOIL PLACEMENT NOTES

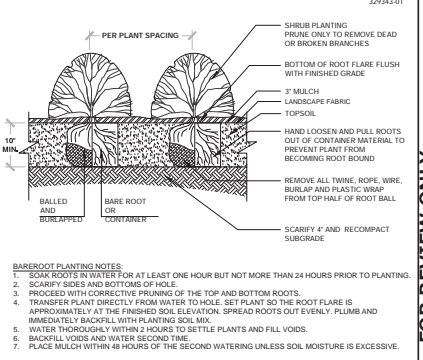
- LOOSEN SUBGRADE TO A MINIMUM DEPTH INDICATED IN PLANTING NOTES USING A CULT/MULCHER OR SIMILAR EQUIPMENT, AND REMOVE STONES MEASURING OVER 1-1/2 INCHES IN ANY DIMENSION, STICKS, RUBBISH AND OTHER EXTRANEOUS MATTER. AREAS ADJACENT TO WALKS AND PAVEMENT SHALL BE FREE OF EXCESS STONE AND PAVING MATERIALS SO AS TO PROVIDE AN UNINTERRUPTED CROSS SECTION OF SOIL. INTERVAL PARKING ISLANDS SHALL BE LOOSENED TO A DEPTH OF 30".
- THOROUGHLY BLEND PLANTING SOIL MIX FOR PLANTING BED AREAS. (1 PART EXISTING SOIL, 1 PART TOPSOIL, 1 PART ORGANIC SOIL AMENDMENT, 2.9 POUNDS PER CUBIC YARD OF 4-4-4 ANALYSIS SLOW-RELEASE FERTILIZER)
- TREE AND SHRUB HOLES SHALL BE FILLED WITH A PREPARED PLANTING MIXTURE OF 1 PART TOPSOIL, 2 PARTS PLANTING SOIL MIX.
- SPREAD SOIL AND SOIL AMENDMENTS TO DEPTH INDICATED ON DRAWINGS, BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. FINISH GRADE OF PLANTING BEDS SHALL BE 3" BELOW ALL ADJACENT SURFACES. FINISH GRADE OF TURF SEEDING AREAS SHALL BE 1" BELOW ALL ADJACENT HARD SURFACES, WALKS, AND CURBS.)
- PLACE APPROXIMATELY 1/2 OF TOTAL AMOUNT OF SOIL REQUIRED. WORK INTO TOP OF LOOSENED SUBGRADE TO CREATE A TRANSITION LAYER, THEN PLACE REMAINDER OF THE SOIL. SOIL TRANSITION LAYER SHALL BE TILLED TO A MINIMUM DEPTH OF 6" BELOW THE DEPTH OF NEWLY PLACED SOIL. PARKING LOT ISLANDS SHALL BE CROWNED TO A HEIGHT OF 6" TO PROVIDE PROPER DRAINAGE UNLESS OTHERWISE NOTED.
- DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
- FINISH GRADING: GRADE SOIL TO A SMOOTH, UNIFORM SURFACE PLANT WITH A LOOSE, UNIFORMLY FINE TEXTURE.
- ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES.
- RESTORE PLANTING BEDS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.



1 TREE PLANTING
10" - 11"



2 EVERGREEN TREE PLANTING
10" - 11"

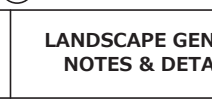


3 SHRUB PLANTING
10" - 11"

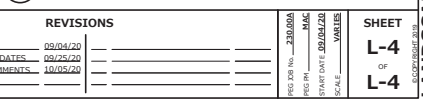
4 PERENNIAL PLANTING
1" - 1 1/2"



5 PLANT SPACING
3/4\" - 1 1/2"



6 POLYETHYLENE BED EDGE
3/4\" - 1 1/2"



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LANDSCAPE GENERAL NOTES & DETAILS

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PROJ. NO.	230100A
PROJ. NAME	WISCONSIN STATE ROAD 100
DATE	09/04/20
SCALE	AS SHOWN

SHEET
L-4
OF
L-4

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CHECKED: JLS
DESIGNED: JLS

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- CONCEPT PLANT KEY**
- DECIDUOUS TREE**
 - Acelebransis Autumn Fantasy / Autumn Fantasy Maple
 - Opuntia discolor / Kentucky Coffee Tree
 - Quercus x schuetti / Swamp Bur Oak
 - Tilia amantosa / Starling / Starling Silver Linden
 - ORNAMENTAL TREE**
 - Amelanchier x grandiflora Autumn Brilliance / Autumn Brilliance Serviceberry
 - Malus x Prairie Maid / Prairie Maid Crabapple
 - Malus x Sugar Tyme / Sugar Tyme Crabapple
 - Burgundy redbud / Ivory Silk / Ivory Silk Japanese Tree Lilac
 - EVERGREEN TREE**
 - Prunella laevis / White Spruce
 - TRANSPLANTED TREES**
 - MINIUM EVERGREEN SHRUB**
 - Juniperus chinensis Pizzonia Kalkys / Kalkys Compact Juniper
 - Juniperus chinensis Sea Green / Sea Green Juniper
 - Juniperus chinensis Sea of Gold / Sea of Gold Juniper
 - Juniperus horizontalis Youngtown / Anderson Juniper
 - Juniperus sabina Buffalo / Buffalo Juniper
 - Juniperus virginiana Grey Owl / Eastern Redcedar Juniper
 - Taxus media Densiformis / Dense Yew
 - Taxus media Everlow / Everlow Yew
 - MINIUM DECIDUOUS SHRUB**
 - Amelanchier canadensis / Glossy Black Chokeberry
 - Hydrangea o. Vanilla Strawberry / Vanilla Strawberry Hydrangea
 - Nyssa sylvatica Purple Pavement / Purple Pavement Rugosa Rose
 - Wibauxia nigra Black Lace / Black Lace Elderberry
 - Spiraea japonica Anthony Weaver / Anthony Weaver Spiraea
 - Spiraea meyeri Pablin / Dwarf Korean Lilac
 - MINIUM DECIDUOUS SHRUB**
 - Cornus alternifolia Arctis Fire / Arctis Fire Dogwood
 - Shrubus tortuosa Dwarf Bush Honeyuckle
 - Hydrangea paniculata Bobo / Bobo Hydrangea
 - Nyssa sylvatica Qns Low / Qns Low Fragrant Burnac
 - Spiraea japonica Magic Carpet / Magic Carpet Spiraea
 - TALL ORNAMENTAL GRASS**
 - Calamagrostis x Karl Foerster / Karl Foerster Reed Grass
 - Miscanthus sinensis Oktoberfest / Oktoberfest Miscanthus
 - Panicum virgatum Northwind / Northwind Switch Grass
 - Brachypodium pinnatum Blue Heaven / Blue Heaven Little Bluestem Grass
 - SHORT ORNAMENTAL GRASS**
 - Flugetria spectabilis Purple Love Grass
 - Hypochaeris glabra / Broomrape Grass
 - Spiraeola heterolepis Tara / Prairie Dropseed
 - PERENNIALS**
 - Asclepias tuberosa Vision in Red / Vision in Red Asclepias
 - Callirhoe coccinea / Callirhoe
 - Coreopsis verticillata Zagreb / Zagreb Coreopsis
 - Echinacea purpurea Magnus Superior / Magnus Superior Coneflower
 - Hemerocallis Stella De Oro / Stella De Oro Daylily
 - Hemerocallis Summer Wine / Summer Wine Daylily
 - Heuchera m. Palace Purple / Palace Purple Coral Bells
 - Hebe x Frances Williams / Frances Williams Hosts
 - Lewishamum x Becky / Becky Shasta Daisy
 - Hebe x Walker's Low / Walker's Low Camellia
 - Rudbeckia l. Valtia's Little Sisy / Valtia's Little Sisy Showy Coneflower
 - Salix nemoralis May Night / May Night Sage
 - Salix Autumn Joy / Autumn Joy Sedum
 - RAINWATER RENEWAL MIX**
 - BIOPRECIPITATION RENEWAL / BIOPRECIPITATION RENEWAL MIX**
 - SOIL**
 - NO MOW TURF**
 - Turf Hydroseed Low Grow / Low Grow Mix**

www.pinnacle-engr.com

FOR REVIEW ONLY

LANDSCAPE COLOR EXHIBIT

PINNACLE ENGINEERING GROUP
 ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE
 2025 WATERLOO ROAD, SUITE 100
 BROOKFIELD, WI 53005
 (262) 754-8888
 (262) 754-8888

PLAN | DESIGN | DELIVER
 www.pinnacle-engr.com

SOUTH BUILDING ADDITION
 WAUKESHA, WI

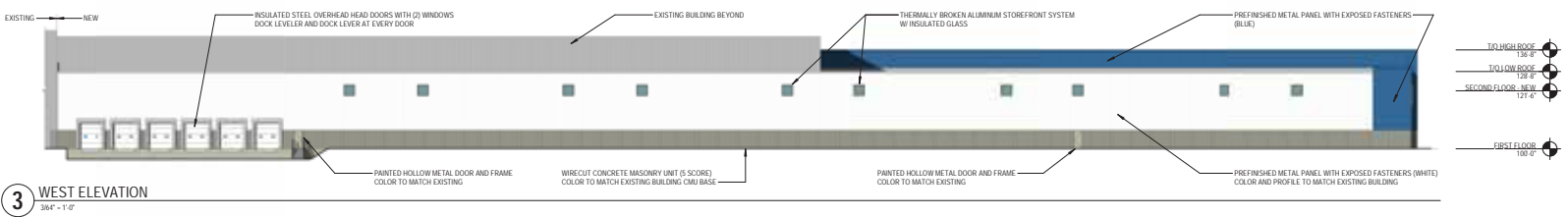
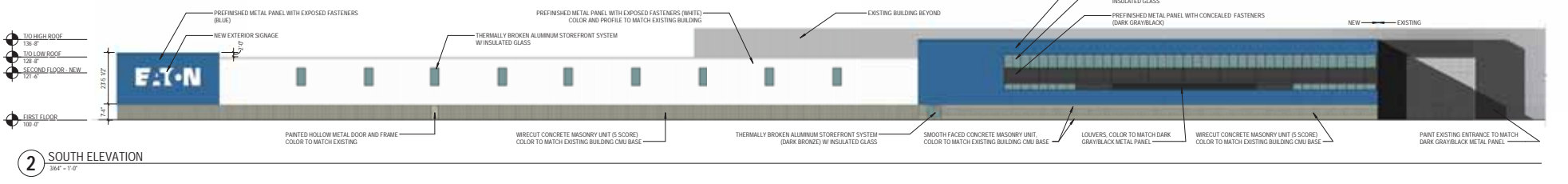
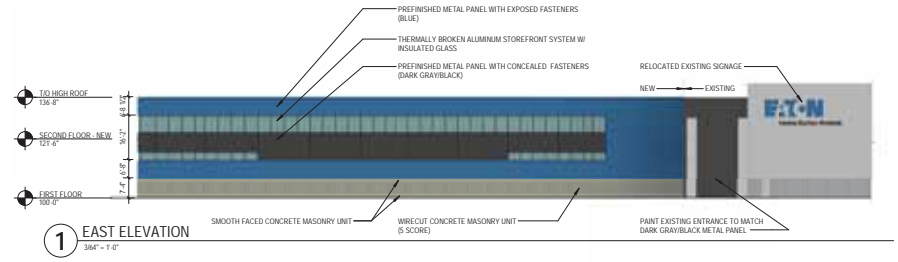
LANDSCAPE COLOR EXHIBIT

NO.	DATE	DESCRIPTION

PROJ. NO. 230.00A
 DATE 08/04/20
 SCALE 1" = 50'

SHEET 1 OF 1

2:\PROJECTS\2023\230.00A-WYAD\SHEETS\230.00A-WI LANDSCAPE PLAN SET.DWG





1 RENDERING - BIRDS EYE VIEW FROM SOUTHEAST
RTS

EXTERIOR RENDERING



1 RENDERING - VIEW OF BUILDING ENTRY FROM SOUTHEAST
NTS

EXTERIOR RENDERING



1 RENDERING - VIEW OF SITE ENTRY FROM SOUTHWEST
NIS

EXTERIOR RENDERING



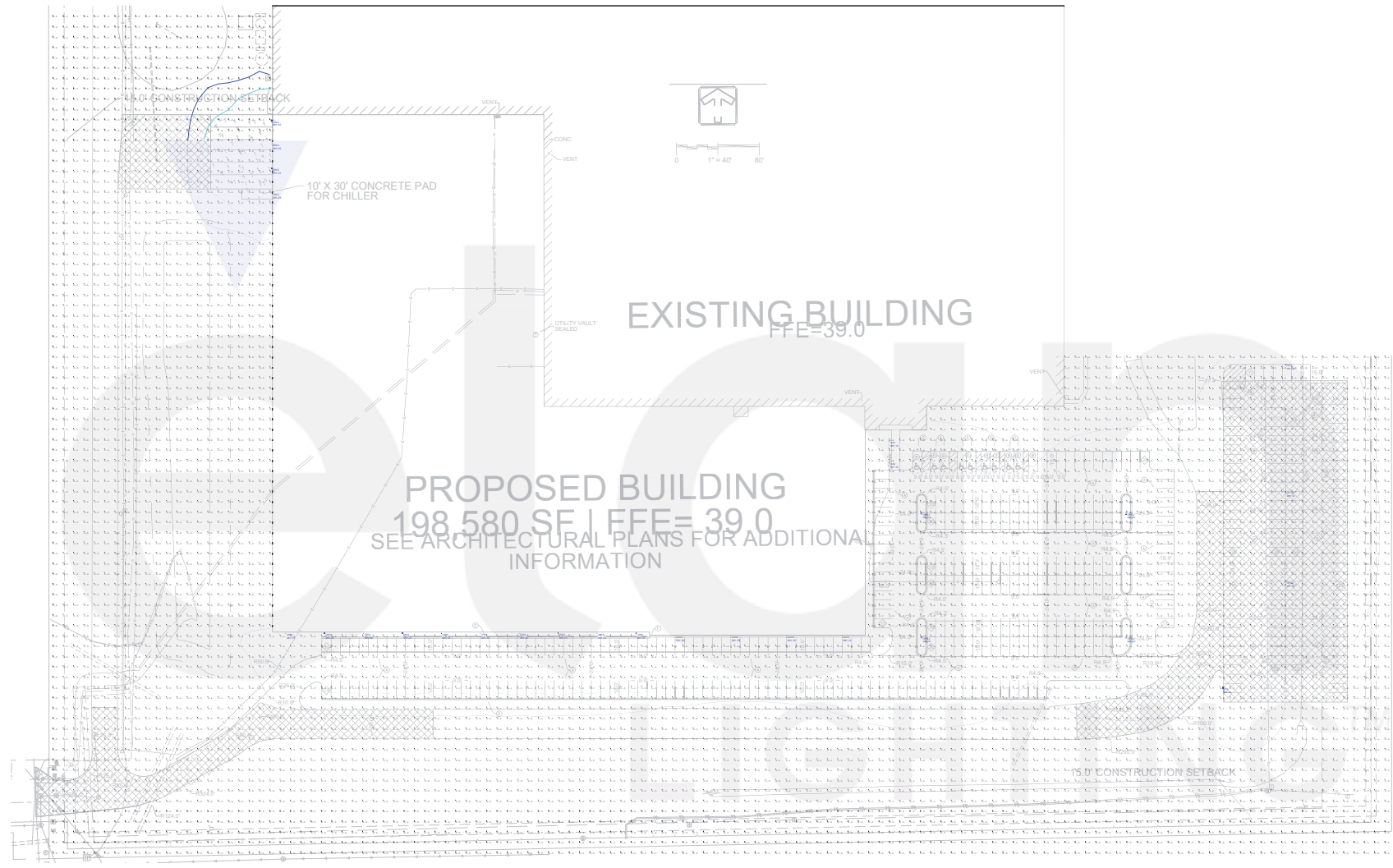
1 RENDERING - VIEW FROM EAST
RIS

EXTERIOR RENDERING



EATON CORPORATION BADGER DRIVE FACILITY

Z20395
10/5/2020



Scale: 1 inch= 40 Ft.

Luminaire Schedule						
Symbol	Label	Quantity	Manufacturer	Catalog Number	Lumens	LLF Watts
○	OA2	2	COOPER LIGHTING SOLUTIONS - INVUE (FORMERLY EATON)	ARB-61-LED-D1-T2	2045	0.900 24
□	OP4	2	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-C40-D-UNV-T4-BZ	17087	0.900 131
□	OP5-2	4	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-C40-D-UNV-T5-BZ	18264	0.900 131
□	OP5-3	2	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-C40-D-UNV-T5-BZ	18264	0.900 131
□	OW4	18	COOPER LIGHTING SOLUTIONS - MCGRAW-EDISON (FORMERLY EATON)	GWC-AF-01-LED-E1-T4FT	6542	0.900 59

THESE CALCULATIONS ARE ESTIMATES
 BASED ON INFORMATION AVAILABLE
 AT TIME OF LAYOUT REQUEST AND
 CONDITIONS WITH 100% ACCURACY.

Date: 9/9/2020

Paper Size: ARCH E1 - 30x42

EATON ADDITION WAUKESHA SITE

Terminal Andrae Inc.