

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

www.pinnacle-engr.com

ONSITE CIVIL ENGINEERING INFRASTRUCTURE PLANS
FOR

ALDI WHITEWATER

WHITEWATER, WI

PLANS PREPARED
FOR

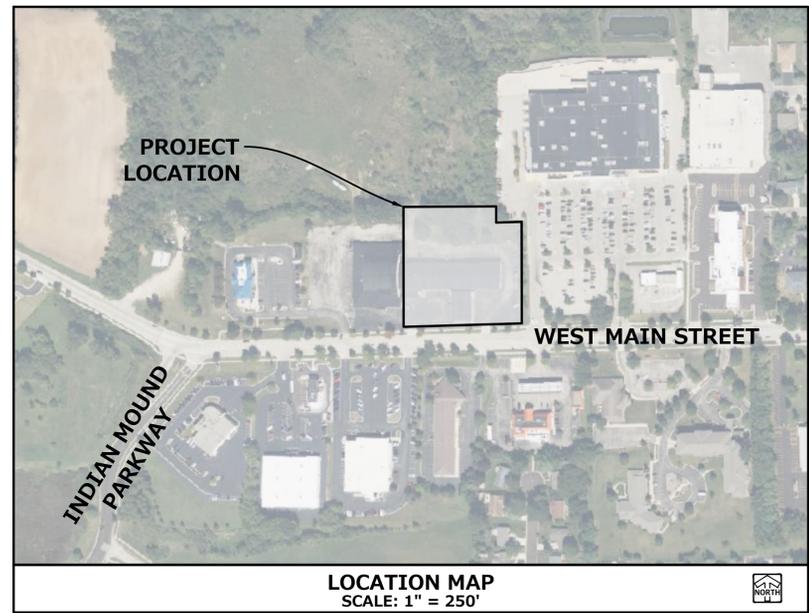
ALDI INC.

9342 SOUTH 13th STREET
OAK CREEK, WI 53154



INDEX OF SHEETS	
C-1	COVER SHEET
C-2	GENERAL NOTES
C-3	EXISTING CONDITIONS & DEMOLITION PLAN
C-4	SITE DIMENSIONAL & PAVING PLAN
C-5	GRADING PLAN
C-6	STORM SEWER PLAN
C-7	SANITARY & WATERMAIN PLAN
C-8	PUBLIC SANITARY PLAN & PROFILE
C-9	PUBLIC WATERMAIN PLAN & PROFILE
C-10	EROSION CONTROL PLAN
C-11	SIGNAGE PLAN
C-12	CONSTRUCTION DETAILS
C-13	CONSTRUCTION DETAILS

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	—	—
UTILITY CROSSING	—	—
GRANULAR TRENCH BACKFILL	▨	▨
LIGHTING	⊙	⊙
ELECTRICAL CABLE	—	—
OVERHEAD WIRES	—	—
GAS MAIN	—	—
TELEPHONE LINE	—	—
CAUTION EXISTING UTILITIES NEARBY	⊙	⊙
ELECTRICAL TRANSFORMER OR PEDESTAL	⊙	⊙
POWER POLE	⊙	⊙
POWER POLE WITH LIGHT	⊙	⊙
GUY WIRE	—	—
STREET SIGN	—	—
CONTOUR	749	749
SPOT ELEVATION	x(750.00)	+750.00
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	SF	SF
FENCE LINE, WIRE	SF	SF
FENCE LINE, CHAIN LINK OR IRON	—	—
FENCE LINE, WOOD OR PLASTIC	—	—
CONCRETE SIDEWALK	—	—
CURB AND GUTTER	—	—
MOUNTABLE CURB	—	—
REVERSE PITCH CURB & GUTTER	—	—
EASEMENT LINE	—	—
RETAINING WALL	—	—



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/RULES/ETC., AND THE OWNER'S DIRECTION.
- A GEOTECHNICAL REPORT PREPARED BY GESTRA DATED APRIL 20TH, 2023 HAS BEEN PREPARED 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 THERE FROM BY THE CONTRACTOR. DATA IS MADE AVAILABLE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY ADDITIONAL SOILS 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 INSTANCE 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 EXTRAS.
- 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 UNFORSEEN 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 DISTRIBUTED. 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 DIGGER'S HOTLINE IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT 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 THIS PROJECT.

PROJECT TEAM CONTACTS	
CIVIL ENGINEER: MARK T. SEIDT PINNACLE ENGINEERING GROUP 20725 WATERTOWN ROAD, SUITE 100 BROOKFIELD, WI 53186 MAIN: (262) 754-8888 E-MAIL: MSEIDL@PINNACLE-ENGR.COM	SURVEYOR: JOHN KONOPACKI, P.L.S. PINNACLE ENGINEERING GROUP 20725 WATERTOWN ROAD, SUITE 100 BROOKFIELD, WI 53186 MAIN: (262) 754-8888 E-MAIL: john.konopacki@pinnacle-engr.com
APPLICANT: TOM HOWALD ALDI INC. 9342 SOUTH 13TH STREET OAK CREEK, WI 53154 E-MAIL: Tom.Howald@aldi.us	CONSTRUCTION MANAGER: ROB MERKEL ALDI INC. OAK CREEK DIVISION 9342 S 13TH STREET OAK CREEK, WI 53154 MAIN: (414) 216-7078 E-MAIL: Rob.Merkel@aldi.us

DIGGERS HOTLINE

Toll Free (800) 242-8511
Milwaukee Area (414) 258-1181
Hearing Impaired TDD (800) 545-2289
www.DiggersHotline.com

EXPIRATION DATE: JULY 21, 2024

PINNACLE ENGINEERING GROUP, LLC
ENGINEER'S LIMITATION

PINNACLE ENGINEERING GROUP, LLC AND THEIR CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE DELIVERABLES HEREIN BEYOND A REASONABLE DILIGENCE. IF ANY MISTAKES, OMISSIONS, OR DISCREPANCIES ARE FOUND TO EXIST WITHIN THE DELIVERABLES, THE ENGINEER SHALL BE PROMPTLY NOTIFIED PRIOR TO BID SO THAT HE MAY HAVE THE OPPORTUNITY TO TAKE WHATEVER STEPS NECESSARY TO RESOLVE THEM. FAILURE TO PROMPTLY NOTIFY THE ENGINEER OF SUCH CONDITIONS SHALL ABSOLVE THE ENGINEER FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH FAILURE. ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT OF THE ENGINEER, OR IN CONTRADICTION TO THE ENGINEER'S DELIVERABLES OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE ENGINEER BUT OF THE PARTIES RESPONSIBLE FOR TAKING SUCH ACTION.

FURTHERMORE, PINNACLE ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR CONSTRUCTION SAFETY OR THE MEANS AND METHODS OF CONSTRUCTION.

ABBREVIATIONS			
BL	BASE LINE	NWL	NORMAL WATER LEVEL
C & G	LONG CHORD OF CURVE	PC	POINT OF CURVATURE
CB	CURB AND GUTTER	PT	POINT OF TANGENCY
CL	CATCH BASIN	PVI	POINT OF VERTICAL INTERSECTION
CL	CENTERLINE	R	RADIUS
EP	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	TB	TOP OF BANK
FP	FLOODPLAIN	TC	TOP OF CURB
FR	FRAME	TF	TOP OF FOUNDATION
FW	FLOODWAY	TP	TOP OF PIPE
HWL	HIGH WATER LEVEL	TS	TOP OF SIDEWALK
INV	INVERT	TW	TOP OF WALK
INV	LENGTH OF CURVE	WM	WATER MAIN
MH	MANHOLE	∆	INTERSECTION ANGLE
NTS	NOT TO SCALE		

BENCHMARKS & DATUM

CONCRETE MONUMENT WITH BRASS CAP
AT THE SOUTHEAST CORNER OF THE
NORTHEAST ¼ SECTION 6, TOWN 4 NORTH,
RANGE 15 EAST,
ELEVATION = 863.07 (NAVD88)

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

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE | NATIONWIDE

ALDI WHITEWATER
1380 W MAIN STREET
WHITEWATER, WI

COVER SHEET

REVISIONS		SHEET C-1 C-13

REG JOB No. 3000.00
REG PM MTS
START DATE 04-29-22
SCALE N.T.S.

GENERAL SPECIFICATIONS FOR CONSTRUCTION ACTIVITIES

- THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR SEWER & WATER IN WISCONSIN, AND WISCONSIN ADMINISTRATIVE CODE, SPS 380, 382-383, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR EXECUTION OF THE WORK. THE CONTRACTOR SHALL CONDUCT HIS WORK ACCORDING TO THE REQUIREMENTS OF THE PERMITS.
- THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE MUNICIPALITY FORTY- EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.
- THE MUNICIPALITY SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF ALL PRIVATE PORTIONS OF THE WORK. THE OWNER SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF ALL PRIVATE PORTIONS OF THE WORK.
- THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, AND THE MUNICIPALITY, THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.
- SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL UTILITY INFORMATION SHOWN ON THE PLANS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL CALL DIGGERS HOTLINE AT 1-800-242-8511 TO NOTIFY THE UTILITIES OF HIS INTENTIONS, AND TO REQUEST FIELD STAKING OF EXISTING UTILITIES.
- SILT FENCE AND OTHER EROSION CONTROL FACILITIES MUST BE INSTALLED PRIOR TO CONSTRUCTION OR ANY OTHER LAND DISTURBING ACTIVITY. FOLLOW THE SEQUENCE OF CONSTRUCTION ON THE GRADING & EROSION CONTROL PLAN FOR MORE DETAILS. INSPECTIONS SHALL BE MADE WEEKLY OR AFTER EVERY RAINFALL OF 0.5" OR MORE. REPAIRS SHALL BE MADE IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL FACILITIES ONCE THE THREAT OF EROSION HAS PASSED WITH THE APPROVAL OF THE GOVERNING AGENCY.
- ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR.
- TRASH AND DEBRIS SHALL BE NOT BE ALLOWED TO ACCUMULATE ON THIS SITE AND THE SITE SHALL BE CLEAN UPON COMPLETION OF WORK.
- THE OWNER SHALL HAVE THE RIGHT TO HAVE ALL MATERIALS USED IN CONSTRUCTION TESTED FOR COMPLIANCE WITH THESE SPECIFICATIONS.
- ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB OR FACE OF BUILDING 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, MANUEVERING LANES AND FIRE ACCESS LANES, WHERE THE SETBACK IS MEASURED FROM THE BACK OF CURB TO THE PROPERTY LINE.
- SPOT ELEVATIONS REPRESENT THE GRADE ON PAVEMENT SURFACE OR FLOW LINE UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER/OWNER IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION.
- 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 CITY OF WHITEWATER CONSTRUCTION STANDARDS/ORDINANCES.
- LANDSCAPE AND TURF AREAS SHALL HAVE A MINIMUM OF 4-INCH TOPSOIL REPLACEMENT.

SPECIFICATIONS FOR GRADING & EROSION CONTROL

- THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING AND FOR ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT. CONTRACTOR SHALL NOTIFY OWNER OF THE NEED TO IMPORT OR HAUL OFF SOIL. ON-SITE LOCATIONS SUITABLE FOR BORROW OR FILL MAY BE PRESENT. COORDINATE WITH OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT MAY BE AVAILABLE FROM THE OWNER.
- SITE SHALL BE CLEARED TO THE LIMITS SHOWN ON THE PLANS. REMOVE VEGETATION FROM THE SITE. BURNING IS NOT PERMITTED. PROTECT TREES AND OTHER FEATURES FROM DAMAGE WITH FENCING. STOCKPILES SHALL NOT BE LOCATED CLOSER THAN 25' TO A DRAINAGE STRUCTURE OR FEATURE AND SHALL BE SURROUNDED WITH SILT FENCE.
- THE GEOTECHNICAL ENGINEER IS RESPONSIBLE FOR VERIFYING COMPACTION AND FILL PLACEMENT IN THE FIELD. THE GEOTECHNICAL ENGINEER MAY SUPERCEDE THESE SPECIFICATIONS IF THERE IS GOOD CAUSE TO DO SO. AN EXPLANATION MUST BE SUBMITTED TO THE ENGINEER IN WRITING BEFORE ANY DEVIATIONS ARE MADE.
- IF NO GEOTECHNICAL RECOMMENDATION IS AVAILABLE, THEN THE FOLLOWING SPECIFICATIONS SHALL APPLY. ALL FILL SHALL BE CONSIDERED STRUCTURAL FILL AND SHALL BE PLACED IN ACCORDANCE WITH THE FOLLOWING: THE COMPACTED FILL SUBGRADE SHALL CONSIST OF AND SHALL BE UNDERLAIN BY SUITABLE BEARING MATERIALS, FREE OF ALL ORGANIC, FROZEN OR OTHER DELETERIOUS MATERIAL AND INSPECTED AND APPROVED BY THE RESIDENT GEOTECHNICAL ENGINEER. PREPARATION OF THE SUBGRADE, AFTER STRIPPING, SHALL CONSIST OF PROOF-ROLLING TO DETECT UNSTABLE AREAS THAT MIGHT BE UNDER THE SCARIFIED SURFACE TO THE SAME MINIMUM DENSITY INDICATED BELOW. THE COMPACTED FILL MATERIALS SHALL BE FREE OF ANY DELETERIOUS, ORGANIC OR FROZEN MATTER AND SHALL HAVE A MAXIMUM LIQUID LIMIT (ASTM D-423) AND PLASTICITY INDEX (ASTM D-424) IF 30 AND 10 RESPECTIVELY, UNLESS SPECIFICALLY TESTED AND APPROVED BY AN EXPERIENCED SOILS ENGINEER. THE TOP TWELVE (12) INCHES OF COMPACTED FILL SHOULD HAVE A MAXIMUM THREE (3) INCH PARTICLE DIAMETER AND ALL UNDERLYING COMPACTED FILL A MAXIMUM SIX (6) INCH PARTICLE DIAMETER UNLESS SPECIFICALLY APPROVED BY AN ENGINEER. ALL FILL MUST BE TESTED AND APPROVED UNDER THE DIRECTION AND SUPERVISION OF AN EXPERIENCED SOILS ENGINEER PRIOR TO PLACEMENT. IF THE FILL IS TO PROVIDE NON-FROST SUSCEPTIBLE CHARACTERISTICS, IT MUST BE CLASSIFIED AS A CLEAN GW, GP, SW, OR SP PER UNITED SOIL CLASSIFICATION SYSTEM (ASTM D-2487) FOR STRUCTURAL FILL. THE DENSITY OF THE STRUCTURAL COMPACTED FILL AND SCARIFIED SUBGRADE AND GRADES SHALL NOT BE LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D-998) WITH THE EXCEPTION TO THE TOP 12 INCHES OF PAVEMENT SUBGRADE WHICH SHALL A MINIMUM IN-SITU DENSITY OF 100 PERCENT OF THE MAXIMUM DRY DENSITY, OR 5 PERCENT HIGHER THAN UNDERLYING FILL MATERIALS. THE MOISTURE CONTENT OF COHESIVE SOIL SHALL NOT VARY BY MORE THAN -1 TO +3 PERCENT AND GRANULAR SOIL +3 PERCENT OF OPTIMUM WHEN PLACED AND COMPACTED OR RECOMPACTED, UNLESS SPECIFICALLY APPROVED BY THE SOILS ENGINEER TAKING INTO CONSIDERATION THE TYPE OF MATERIALS AND COMPACTION EQUIPMENT BEING USED. THE COMPACTION EQUIPMENT SHOULD CONSIST OF SUITABLE MECHANICAL EQUIPMENT SPECIFICALLY DESIGNED FOR SOIL COMPACTION. BULLDOZERS OR SIMILAR TRACKED VEHICLES ARE TYPICALLY NOT SUITABLE FOR COMPACTION MATERIAL THAT IS TOO WET TO PERMIT PROPER COMPACTION MAY BE SPREAD ON THE FILL AND PERMITTED TO DRY, DISCING, HARROWING OR PULVERIZING MAY BE NECESSARY TO REDUCE THE MOISTURE CONTENT TO A SATISFACTORY VALUE. AFTER WHICH IT SHALL BE COMPACTED. THE FINISHED SUBGRADE AREAS OF THE SITE SHALL BE COMPACTED TO 100 PERCENT OF THE STANDARD PROCTOR (ASTM D-398) MAXIMUM DENSITY.
- NO FILL SHALL BE PLACED ON A WET OR SOFT SUBGRADE. THE SUBGRADE SHALL BE PROOF-ROLLED AND INSPECTED BY THE GEOTECHNICAL ENGINEER BEFORE ANY MATERIAL IS PLACED.
- SUBGRADE TOLERANCES ARE +/- 1" FOR LANDSCAPE AREAS AND +/- 1/2" FOR ALL PAVEMENT AND BUILDING AREAS.
- TOPSOIL SHALL BE FREE OF DELETERIOUS MATERIALS, ROOTS, OLD VEGETATION, ROCKS OVER 2" DIAMETER AND SHALL NOT BE EXCESSIVELY CLAYEY IN NATURE. NO CLUMPS LARGER THAN 4" ARE ACCEPTABLE. TOPSOIL MAY BE AMENDED AS NEEDED WITH SAND OR COMPOST TO BE LOOSE WHEN SPREAD.
- THE CONTRACTOR SHALL MAINTAIN SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE THE EXCAVATION OF TEMPORARY DITCHES OR PUMPING TO ALLEVIATE WATER PONDING. ANY DEWATERING SYSTEMS TO STREAMS, CREEKS, WETLANDS OR OTHER ENVIRONMENTALLY SENSITIVE AREAS WITHOUT BEING TREATED FIRST. A DIRT BAG OR OTHER DEWATERING TREATMENT DEVICE MAY BE USED TO CAPTURE SEDIMENT FROM THE PUMPED WATER.
- CONTRACTOR IS ADVISED THAT ALL MUD AND DEBRIS MUST NOT BE DEPOSITED ONTO THE ADJACENT ROADWAYS PER THE REQUIREMENT OF THE MUNICIPALITY OR OTHER APPROPRIATE GOVERNMENT AGENCIES. IN THE EVENT THIS OCCURS, THE ROADWAYS SHALL BE POWER SWEEP IMMEDIATELY AND ALL SEDIMENT REMOVED FROM DOWNSTREAM FACILITIES.

SPECIFICATIONS FOR PRIVATE UTILITIES

- BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.
- ALL CONNECTIONS TO EXISTING PIPES AND MANHOLES SHALL BE CORED CONNECTIONS. CONNECTIONS TO WATERMAIN SHALL BE WET TAPPED WITH A STAINLESS STEEL TAPPING SLEEVE.
- PROPOSED SANITARY SEWER AND INTERNALLY CONNECTED STORM SEWER SHOWN ON THIS PLAN SHALL TERMINATE AT A POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL. THE EXACT LOCATION OF ALL DOWN SPOUTS CONNECTIONS SHALL BE PER THE ARCHITECTURAL PLANS.
- CONTRACTOR SHALL NOT SHUT OFF WATER OR PLUG SANITARY SEWER IN MUNICIPAL LINES WITHOUT PRIOR APPROVAL.
- MATERIALS FOR STORM SEWER SHALL BE AS FOLLOWS: STORM SEWER PIPE SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) CORRUGATED PIPE WITH AN INTEGRALLY FORMED SMOOTH WATERWAY SUCH AS ADS N-12, WHERE SPECIFICALLY REQUIRED, REINFORCED CONCRETE PIPE (RCP), ASTM C-76, CLASS III OR HIGHER, MAY BE USED. TRENCH SECTION SHALL BE CLASS "B" FOR HOPE AND CLASS "C" FOR CONNECTIONS. MANHOLES, INLETS AND CATCH BASINS SHALL BE PRECAST REINFORCED CONCRETE, ASTM C-476. CASTINGS SHALL BE HEAVY DUTY CAST IRON. AREA DRAINS SHALL BE ADS NYLOPLAST OR EQUIVALENT AND SHALL BE A MINIMUM OF 24" IN DIAMETER. CONNECTIONS TO EXISTING PIPES SHALL BE MADE WITH INSERTA WYE OR EQUIVALENT.
- CLEANOUTS FOR SANITARY SEWER LATERALS SHALL BE PLACED AT MAXIMUM SEPARATION OF EVERY 90'.
- 45° BENDS SHALL BE USED IN PLACE OF 90° BENDS WHEREVER POSSIBLE.
- MATERIALS FOR SANITARY SEWER SHALL BE AS FOLLOWS: SANITARY SEWER SHALL BE PVC, ASTM D-3034, SDR-35 WITH RUBBER GASKETED JOINTS, CONFORMING TO ASTM D-3212. TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. CONNECTIONS SHALL BE MADE WITH AN INSERTA WYE OR EQUIVALENT. A MINIMUM OF 6" OF COVER IS REQUIRED FOR ALL SANITARY SEWER.
- MATERIALS FOR WATER SERVICES AND PRIVATE HYDRANTS SHALL BE AS FOLLOWS: WATER SERVICES SHALL BE PVC, HDPE, OR DI AS ALLOWED BY MUNICIPAL CODE. PVC SHALL BE AWWA C-900, DI SHALL BE AWWA C151, CLASS 52 (OR AS REQUIRED BY LOCAL CODE). TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. CONNECTION SHALL BE MADE WITH A WET TAP. CORPORATE STOP AND VALVE BOX PER MUNICIPAL STANDARDS. A MINIMUM OF 6" COVER IS REQUIRED FOR ALL WATERMAIN. VALVES SHALL BE NON-RISING STEM, RESILIENT SEATED GATE VALVES COMPLYING WITH AWWA C509 WITH A THREE PIECE CAST IRON VALVE BOX. INSTALL THURST BLOCKS AT ALL BENDS AND TEES. DISINFECT ALL NEW LINES AND OBTAIN SAFE WATER SAMPLE PRIOR TO USE.
- EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED FOR ALL UTILITIES. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED.
- MANDREL TESTING ON SANITARY LINES AND PRESSURE TESTING ON WATERMAIN MAY BE REQUIRED BY THE OWNER OR MUNICIPALITY.
- UPON COMPLETION OF FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.
- TRACER WIRE (NO. 12 SINGLE STRAND COPPER) AND WARNING TAPE SHALL BE INSTALLED IN ORDER TO LOCATE NON-METALLIC UNDERGROUND UTILITIES IN ACCORDANCE WITH THE WISCONSIN ADMINISTRATIVE CODE, CHAPTER SPS 382. TRACER WIRE SHALL TERMINATE IN A VALVECO TERMINAL BOX AT EACH END.

SPECIFICATIONS FOR PAVING

- ALL DIMENSIONS ARE TO FACE OF CURB OR FACE OF BUILDING 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, MANUEVERING LANES AND FIRE ACCESS LANES, WHERE THE SETBACK IS MEASURED FROM THE BACK OF CURB TO THE PROPERTY LINE.
- AGGREGATES USED IN THE CRUSHED STONE BASE SHALL CONFORM TO THE GRADATION REQUIREMENTS SECTIONS 301.2 AND 305.2.2 OF THE STANDARD SPECIFICATIONS. THICKNESS SHALL BE PER THE DETAIL ON THE PLANS. BASE SHALL BE 1 1/2 INCH DIAMETER LIMESTONE UNLESS NOTED OTHERWISE. RECYCLED MATERIALS MAY BE ALLOWED WITH APPROVAL FROM THE OWNER.
- SUBGRADE SHALL BE PROOFROLLED AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF STONE BASE. EXCAVATE UNSUITABLE AREAS AND REPLACE WITH BREAKER RUN STONE AND RECOMPACT. REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL SPECIFICATIONS.
- EXISTING PAVEMENT SHALL BE SAWCUT IN NEAT STRAIGHT LINES TO FULL DEPTH AT ANY POINT WHERE EXISTING PAVEMENT IS REMOVED. CURB AND WALK SHALL BE REMOVED TO THE NEAREST JOINT. REMOVED PAVEMENT SHALL BE REPLACED WITH THE SAME SECTION AS EXISTING. MUNICIPAL STANDARDS MAY REQUIRE ADDITIONAL WORK.
- ASPHALT FOR PARKING AREAS SHALL BE PER THE SECTION IDENTIFIED IN THE SITE DIMENSIONAL AND PAVING PLAN. MATERIALS AND PLACEMENT SHALL CONFORM TO THE DOT STANDARD SPECIFICATIONS, SECTION 450 AND 460. TYPE LT IS REQUIRED UNLESS NOTED OTHERWISE. A COMMERCIAL GRADE MIX MAY BE SUBSTITUTED ONLY WITH APPROVAL FROM THE OWNER.
- CONCRETE FOR CURB, DRIVEWAY, WALKS AND NON-FLOOR SLABS SHALL CONFORM TO SECTION 415 OF THE STANDARD SPECIFICATIONS. GRADE A, ASTM C-94, 8 BAG MIX, WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI. JOINTING SHALL BE PER SECTION 415.3.8 OF THE STANDARD SPECIFICATIONS WITH CONSTRUCTION JOINTS HAVING A MAXIMUM SPACING OF 10'. EXPANSION JOINTS SHALL BE PROVIDED EVERY 50'. CONCRETE SHALL BE FINISHED PER SECTION 415.3.8 WITH A MEDIUM BROOM TEXTURE. A CURING MEMBRANE IN CONFORMANCE WITH SECTION 415.3.12 IS REQUIRED.
- 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.
- 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 PREPARATORY WORK AS SPECIFIED.

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 (WPDES) PERMIT NO. WI-5067831-124 FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH LOCAL, 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 (BMP'S). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF, AND UNDERSTAND, THE BMP'S 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 UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMP'S. ALL MODIFICATIONS MUST BE APPROVED BY OWNER/ENGINEER/GOVERNING AGENCY PRIOR TO DEVIATION OF THE APPROVED PLAN.
- INSTALL PERIMETER 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 PROPERTIES/STORM SEWER SYSTEMS FROM SEDIMENT TRANSPORT.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL LOCATIONS OF VEHICLE INGRESS/EGRESS POINTS. CONTRACTOR IS RESPONSIBLE TO COORDINATE LOCATION(S) 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 AGENCIES PRIOR TO INSTALLATION.
- PAVED SURFACES ADJACENT TO CONSTRUCTION ENTRANCES SHALL BE SWEEP AND/OR SCRAPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR 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 DEPOSITION WITHIN STORM SEWER SYSTEMS. INLET 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 SWALES SHALL BE KEPT CLEAN AND FREE OF SEDIMENTATION AND DEBRIS.
- EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, WATER MAIN, ETC.) OUTSIDE OF THE PERIMETER 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 INTO STORM SEWER OR DITCHES.

- 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 UNTREATED RUNOFF.
- IF APPLICABLE, 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 PERIMETER 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 EROSION CONTROL DEVICES THROUGH 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 BAG 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 NON CHANNELIZED AREAS SHALL BE STABILIZED WITH CURLEX I EROSION MATTING AND ALL CHANNELS SHALL BE STABILIZED WITH CURLEX II EROSION MATTING OR APPLICATION OF AN APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. EROSION MATTING AND/OR NETTING USED ONSITE 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 0.5-INCH, 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 OF THE GENERAL PERMIT. CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
- SEE ADDITIONAL DETAILS AND NOTES ON SITE STABILIZATION AND CONSTRUCTION DETAILS.

DEMOLITION NOTES

- PERIMETER SILT FENCING AND CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO ANY DEMOLITION. PLEASE REFER TO GRADING AND EROSION AND SEDIMENT CONTROL PLAN SHEETS FOR FURTHER DETAILS.
- EXISTING FEATURES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY TO AVOID DAMAGE THEREO. CONTRACTOR/OWNER SHALL CALL "DIGGERS HOTLINE" PRIOR TO ANY DEMOLITION.
- CONTRACTOR SHALL PERFORM ALL DEMOLITION WORK IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- COORDINATE WITH ALL APPLICABLE UTILITY COMPANIES AND THE MUNICIPALITY TO PROTECT EXISTING FUNCTIONING UTILITIES. BULKHEAD/REMOVE CONNECTIONS AS NECESSARY, AND TO ENSURE ALL UTILITIES ARE INACTIVE PRIOR TO ANY DEMOLITION ACTIVITIES. CONTRACTOR SHALL TAKE ADEQUATE PRECAUTIONS TO ENSURE PROTECTION OF EXISTING UTILITIES THAT ARE NOT TO BE IMPACTED. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR OF ANY EXISTING UTILITIES DAMAGED AS A RESULT OF THE DEMOLITION.
- VOIDS LEFT BY REMOVAL OF FEATURES SHALL BE MODIFIED/FILLED TO PREVENT PONDING OF WATER.
- DEMOLISH AND DISPOSE EXISTING PIPING, CABLE/WIRES, STRUCTURES, OR OTHER SURFACE FEATURES INDICATED ON THE PLANS TO BE REMOVED.
- CLEARING AND GRUBBING DESIGNATIONS SHALL INCLUDE CLEARING, GRUBBING, REMOVING, AND DISPOSING OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS OF CONSTRUCTION, AS DESIGNATED ON THE PLANS. CONTRACTOR SHALL REMOVE ONLY THOSE TREES ABSOLUTELY NECESSARY TO ALLOW FOR CONSTRUCTION.
- CONTRACTOR SHALL REMOVE EXISTING FENCING IN A MANNER TO ALLOW REUSE. ANY FENCING MATERIAL TO BE REUSED IN THE CONSTRUCTION OF RELOCATED FENCE LINES SHALL BE PRESENTED TO ENGINEER FOR INSPECTION AND PROPOSED CONTRACT DETAILS ASSIGNED TO THE SAME ASSIGNED TO THE SAME MATERIAL. ENGINEER OR OWNER WILL PROVIDE WRITTEN ACCEPTANCE OF THE PROPOSED SALVAGED MATERIAL.
- CONTRACTOR SHALL COORDINATE WITH THE MUNICIPALITY FOR TERMINATION OF PUBLIC UTILITY CONNECTIONS TO SITE.
- CONTRACTOR SHALL COORDINATE STOCKPILE LIMITS AND LOCATIONS WITH ENGINEER/OWNER PRIOR TO DEMOLITION.

SPECIFICATIONS FOR PUBLIC UTILITIES

- BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.
- ALL CONNECTIONS TO EXISTING PIPES AND MANHOLES SHALL BE CORED CONNECTIONS. CONNECTIONS TO WATERMAIN SHALL BE TWO-PIECE BOLTED STAINLESS STEEL TYPE WITH MECHANICAL JOINTS. SLEEVE MODEL/MANUFACTURER SHALL BE CASCADE CST EXTRA HEAVY DUTY AND VALVE MODEL/MANUFACTURER TO BE CLOW F-5093 OR KENNEDY C950.
- CONTRACTOR SHALL NOT SHUT OFF WATER OR PLUG SANITARY SEWER IN MUNICIPAL LINES WITHOUT PRIOR APPROVAL. WATER UTILITY REQUIRES A 48-HOUR NOTICE PRIOR TO WATER SHUT OFF.
- MATERIALS FOR DRIVEWAY CULVERTS SHALL BE MINIMUM 15-INCH DIAMETER RCP OR CMP WITH CONCRETE FLARED END SECTIONS.
- TRENCH SECTIONS FOR STORM SEWER SHALL BE CLASS "C" BEDDING FOR CONCRETE (PER STANDARD SPECIFICATIONS); 3/4" CRUSHED LIMESTONE CHIPS SHALL BE USED FOR BEDDING MATERIAL.
- MATERIALS FOR SANITARY SEWER SHALL BE AS FOLLOWS: SANITARY SEWER SHALL BE MINIMUM 8" PVC, ASTM D-3034, SDR-26 WITH RUBBER GASKETED JOINTS. ADDITIONAL MANHOLE SPECIFICATIONS ON SHEET C-12.
- CONNECTIONS SHALL BE MADE WITH AN INSERTA WYE OR EQUIVALENT. PROVIDE DUCTILE IRON RISER TEE ON DEEPER INSTALLATIONS. A MINIMUM OF 6" OF COVER IS REQUIRED FOR ALL SANITARY SEWER.
- MATERIALS FOR WATER SERVICES AND HYDRANTS SHALL BE AS FOLLOWS: WATER SERVICES SHALL BE CONFORMING TO AWWA C-900, CLASS 150, SDR 18. CONNECTION SHALL BE MADE WITH A WET TAP WITH STAINLESS STEEL SADDLE WITH O-RING AND GRADE 30 RUBBER GRID MAP. CASCADE STYLE CSC1, CSC2, OR EQUAL. VALVES 4-INCH TO 12-INCH SHALL BE RESILIENT WEDGE GATE VALVE, NON-RISING STEM MEETING AWWA C-509, CLOW MODEL 2639/2640. ADDITIONAL HYDRANT SPECIFICATIONS ARE ON SHEET C-12.
- ALL FITTINGS SHALL BE FULL-BODIED STYLES. PROVIDE 8 MIL POLYETHYLENE WRAP ON VALVES, VALVE BOXES, FITTINGS AND FIRE HYDRANT BARREL SECTIONS. USE RESTRAINED JOINTS ON ALL FITTINGS. BOLTS AND NUTS SHALL BE COR-BLUE OR 1-304 STAINLESS STEEL. THRUST BLOCKING (IN ADDITION TO RESTRAINED MECHANICAL JOINTS) SHALL BE SOLID CONCRETE MASONRY UNITS OR CLASS F POURED CONCRETE PER SECTION 4.3.13 OF THE STANDARD SPECIFICATIONS.
- TRENCH SECTIONS FOR SANITARY & WATERMAIN SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS); 3/4" CRUSHED LIMESTONE CHIPS SHALL BE USED FOR BEDDING MATERIAL.
- EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL PUBLIC UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL, TOPPED WITH 10 TO 14-INCHES OF 1-1/4" DENSE GRADED BASE COURSE IS REQUIRED UNDER & WITHIN 4 FEET OF ALL PAVEMENT INCLUDING SIDEWALKS AND ASPHALT PATHS.
- USE ONLY CLEAN GRADED SAND, CLEAN GRANULAR BANK RUN, AGGREGATE SLURRY, OR EXCAVATED GRANULAR MATERIAL, WITH VILLAGE ENGINEER'S APPROVAL. CONSOLIDATION OF BACKFILL IS TO BE 95% STANDARD PROCTOR DENSITY FOR IMPORTED GRANULAR MATERIAL AND 100% FOR EXCAVATED MATERIAL OF EXISTING AGGREGATE MATERIAL IN THE ADJACENT TRENCH WALL. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED.
- MANDREL TESTING ON SANITARY LINES AFTER 30-DAYS. INTERNAL SEWER INSPECTION SHALL BE CLOSED CIRCUIT COLOR TELEVISION. LOW-PRESSURE AIR TEST AND MANHOLE VACUUM TEST ARE TO BE DONE PER STANDARD SPECIFICATIONS.
- WATER MAIN TESTING IS TO BE A ONE-HOUR PRESSURE TEST AT 150 PSI WITH NO LOSS. IF PRESSURE TEST FAILS, A LEAKAGE TEST WILL BE DONE FOR TWO HOURS AT SYSTEM PRESSURE PER STANDARD SPECIFICATIONS.
- UPON COMPLETION OF FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.
- SANITARY TRACER WIRE AND TERMINAL POST: NO. 10 AWG SINGLE STRAND INSULATED COPPER WIRE AND 2-1/2 INCH BY 18-INCH C.P. TEST SERVICES - VALVCO TERMINAL BOX.
- WATERMAIN TRACER WIRE SHALL BE NO. 10 AWG SINGLE STRAND BLUE INSULATED COPPER WIRE INSTALLED ON TOP OF PVC PIPE AND FITTINGS, SECURED AT MIN. 10-FOOT INTERVALS. TERMINAL BOX SHALL BE 2-1/2 INCH BY 18-INCH C.P. TEST SERVICES - VALVCO. EXTEND LOCATOR WIRE TO TOP OF TERMINAL BOXES LEAVING 12 INCHES OF SLACK FOR FUTURE CONNECTION AND CONNECT TO TERMINAL BOX.
- SECURE TERMINAL BOX TO BACK SIDE OF FIRE HYDRANT BARREL AND SET TOP OF BOX FLUSH WITH FINISHED GRADE. CONNECT SERVICE LOCATOR WIRE TO WATER MAIN LOCATOR WIRE.

REVISIONS

NO.	DATE	DESCRIPTION

REG. JOB No. 2000.00
REG. PM MTS
START DATE 04-29-22
SCALE N.T.S.

SHEET
C-2
OF
C-13
© COPYRIGHT 2022

DESIGNED: DMS
DRAWN: MTS
CHECKED: MTS
REVIEWED:
THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

www.pinnacle-engr.com
GENERAL NOTES

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

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE | NATIONWIDE

ALDI WHITEWATER
1380 W MAIN STREET
WHITEWATER, WI

GENERAL NOTES

REVIEWED: DRAFTED: DMS

www.pinnacle-engr.com

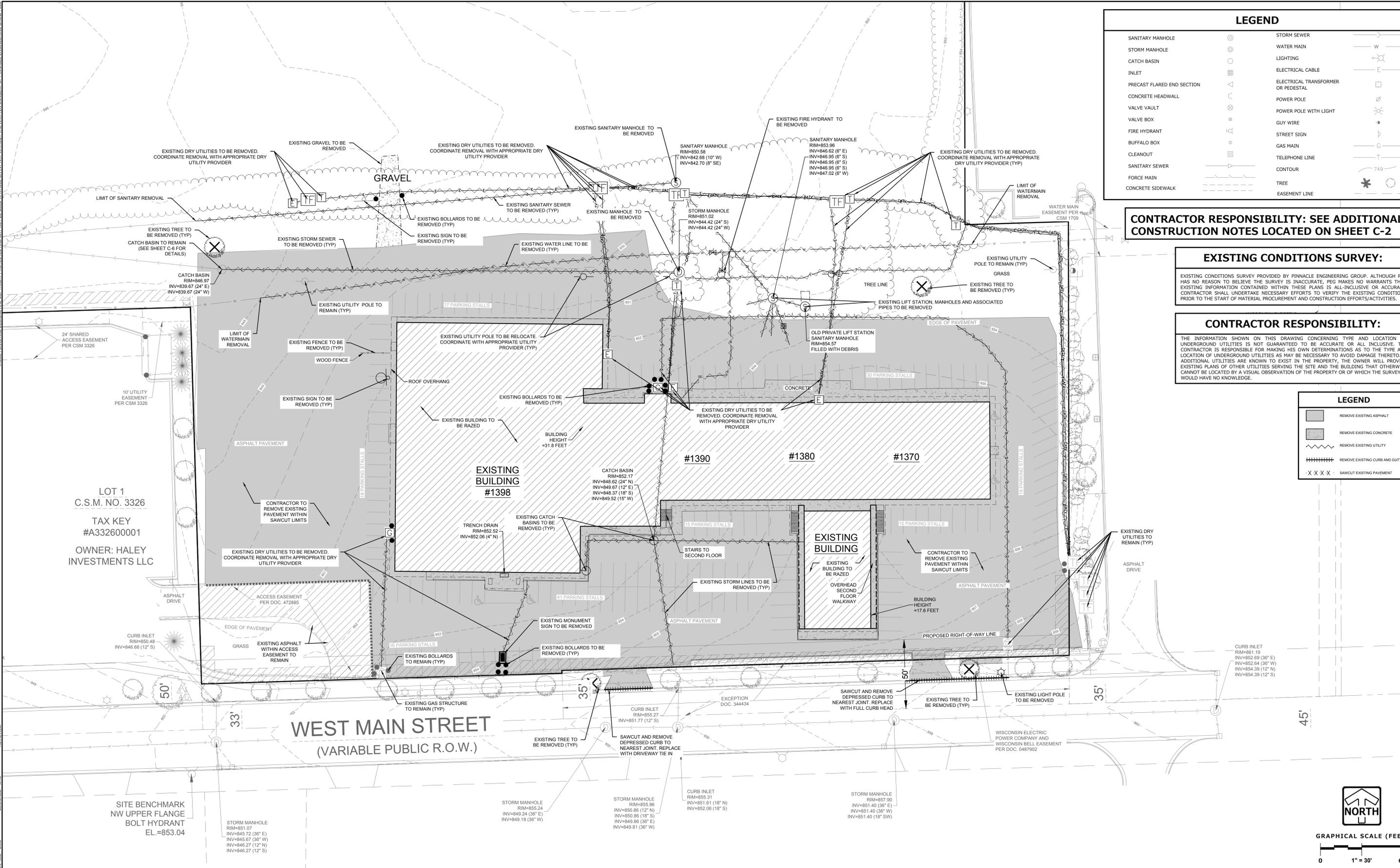
LEGEND	
SANITARY MANHOLE	STORM SEWER
STORM MANHOLE	WATER MAIN
CATCH BASIN	LIGHTING
INLET	ELECTRICAL CABLE
PRECAST FLARED END SECTION	ELECTRICAL TRANSFORMER OR PEDESTAL
CONCRETE HEADWALL	POWER POLE
VALVE VAULT	POWER POLE WITH LIGHT
VALVE BOX	GUY WIRE
FIRE HYDRANT	STREET SIGN
BUFFALO BOX	GAS MAIN
CLEANOUT	TELEPHONE LINE
SANITARY SEWER	CONTOUR
FORCE MAIN	TREE
CONCRETE SIDEWALK	EASEMENT LINE

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

EXISTING CONDITIONS SURVEY:
 EXISTING CONDITIONS SURVEY PROVIDED BY PINNACLE ENGINEERING GROUP, ALTHOUGH PEG HAS NO REASON TO BELIEVE THE SURVEY IS INACCURATE, PEG 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.

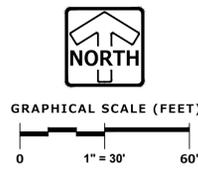
CONTRACTOR RESPONSIBILITY:
 THE INFORMATION SHOWN ON THIS DRAWING CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. 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.

LEGEND	
[Hatched Box]	REMOVE EXISTING ASPHALT
[Dotted Box]	REMOVE EXISTING CONCRETE
[Wavy Line]	REMOVE EXISTING UTILITY
[Dashed Line]	REMOVE EXISTING CURB AND GUTTER
[X X X X]	SAWCUT EXISTING PAVEMENT



LOT 1
 C.S.M. NO. 3326
 TAX KEY
 #A332600001
 OWNER: HALEY INVESTMENTS LLC

WEST MAIN STREET
 (VARIABLE PUBLIC R.O.W.)



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

PINNACLE ENGINEERING GROUP
 ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
 20725 WATERTOWN ROAD, SUITE 100
 BROOKFIELD, WI 53186
 (262) 754-8888
 CHICAGO | MILWAUKEE | NATIONWIDE

ALDI WHITEWATER
 1380 W MAIN ST
 WHITEWATER, WI

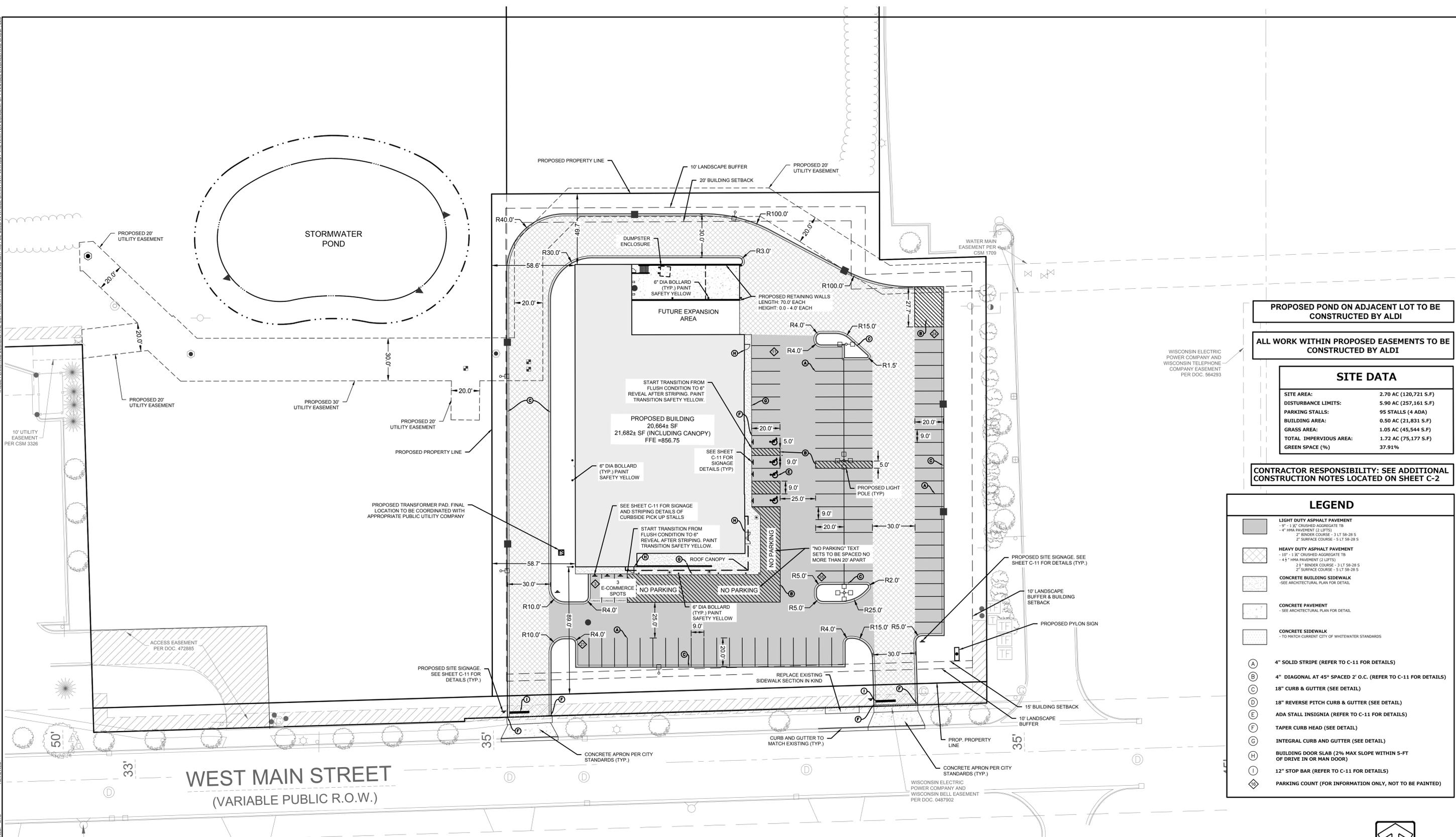
EXISTING CONDITIONS & DEMOLITION PLAN

REVISIONS	

REG JOB No. 3000.00	MTS	SHEET C-3
REG PM	START DATE 04-29-22	OF C-13
SCALE 1" = 30'	DATE	

DESIGNED: MTS
DRAFTED: DMS
REVIEWED:
THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

www.pinnacle-engr.com



PROPOSED POND ON ADJACENT LOT TO BE CONSTRUCTED BY ALDI

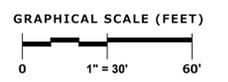
ALL WORK WITHIN PROPOSED EASEMENTS TO BE CONSTRUCTED BY ALDI

SITE DATA	
SITE AREA:	2.70 AC (120,721 S.F)
DISTURBANCE LIMITS:	5.90 AC (257,161 S.F)
PARKING STALLS:	95 STALLS (4 ADA)
BUILDING AREA:	0.50 AC (21,831 S.F)
GRASS AREA:	1.05 AC (45,544 S.F)
TOTAL IMPERVIOUS AREA:	1.72 AC (75,177 S.F)
GREEN SPACE (%):	37.91%

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

LEGEND	
	LIGHT DUTY ASPHALT PAVEMENT - 5" - 1 1/2" CRUSHED AGGREGATE TB - 4" HMA PAVEMENT (2 LIFTS) 2" BINDER COURSE - 3 LT 58-28 S 2" SURFACE COURSE - 5 LT 58-28 S
	HEAVY DUTY ASPHALT PAVEMENT - 10" - 1 1/2" CRUSHED AGGREGATE TB - 4 1/2" HMA PAVEMENT (2 LIFTS) 2 1/2" BINDER COURSE - 3 LT 58-28 S 2" SURFACE COURSE - 5 LT 58-28 S
	CONCRETE BUILDING SIDEWALK - SEE ARCHITECTURAL PLAN FOR DETAIL
	CONCRETE PAVEMENT - SEE ARCHITECTURAL PLAN FOR DETAIL
	CONCRETE SIDEWALK - TO MATCH CURRENT CITY OF WHITEWATER STANDARDS
	4" SOLID STRIPE (REFER TO C-11 FOR DETAILS)
	4" DIAGONAL AT 45° SPACED 2" O.C. (REFER TO C-11 FOR DETAILS)
	18" CURB & GUTTER (SEE DETAIL)
	18" REVERSE PITCH CURB & GUTTER (SEE DETAIL)
	ADA STALL INSIGNIA (REFER TO C-11 FOR DETAILS)
	TAPER CURB HEAD (SEE DETAIL)
	INTEGRAL CURB AND GUTTER (SEE DETAIL)
	BUILDING DOOR SLAB (2% MAX SLOPE WITHIN 5-FT OF DRIVE IN OR MAN DOOR)
	12" STOP BAR (REFER TO C-11 FOR DETAILS)
	PARKING COUNT (FOR INFORMATION ONLY, NOT TO BE PAINTED)

WEST MAIN STREET
(VARIABLE PUBLIC R.O.W.)



SITE BENCHMARK
W UPPER FLANGE
BOLT HYDRANT
EL. = 853.04

PINNACLE ENGINEERING GROUP
 ENGINEERING | NATURAL RESOURCES | SURVEYING
 PLAN | DESIGN | DELIVER
 www.pinnacle-engr.com
 WISCONSIN OFFICE:
 20725 WATERTOWN ROAD, SUITE 100
 BROOKFIELD, WI 53186
 (262) 754-8888
 CHICAGO | MILWAUKEE | NATIONWIDE

ALDI WHITEWATER
1380 W MAIN STREET
WHITEWATER, WI

SITE DIMENSIONAL & PAVING PLAN

REVISIONS	

REG. JOB No.	3000.00	 NORTH	SHEET C-4 OF C-13
REG. PM	MTS		
START DATE	04-29-22		
SCALE	1" = 30'		

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC.
 DESIGNED: MTS
 DRAFTED: DMS
 REVIEWED:

www.pinnacle-engr.com
 GRADING PLAN

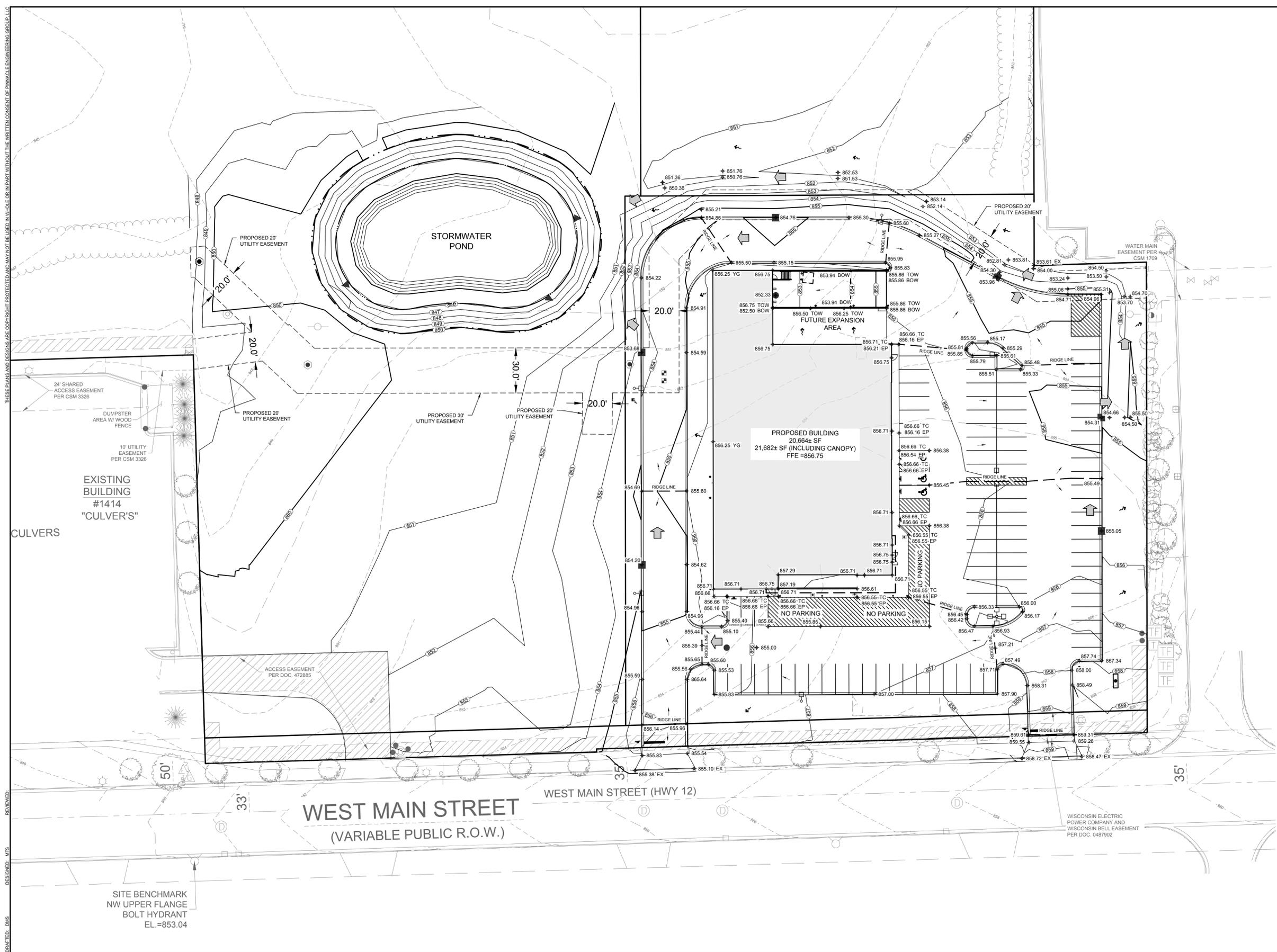
LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM STORM CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST FLARED END SECTION
- CLEANOUT
- VALVE BOX
- FIRE HYDRANT
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- WETLANDS
- FLOODPLAIN
- HIGH WATER LEVEL (HWL)
- DIRECTION OF SURFACE FLOW
- NORMAL WATER LEVEL (NWL)
- DITCH OR SWALE
- DIVERSION SWALE

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

PROPOSED POND ON ADJACENT LOT TO BE CONSTRUCTED BY ALDI

ALL WORK WITHIN PROPOSED EASEMENTS TO BE CONSTRUCTED BY ALDI



WEST MAIN STREET
 (VARIABLE PUBLIC R.O.W.)

SITE BENCHMARK
 NW UPPER FLANGE
 BOLT HYDRANT
 EL. = 853.04

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 30' 60'

PINNACLE ENGINEERING GROUP

ENGINEERING | NATURAL RESOURCES | SURVEYING

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

WISCONSIN OFFICE:
 20725 WATERTOWN ROAD, SUITE 100
 BROOKFIELD, WI 53186
 (262) 754-8888
 CHICAGO | MILWAUKEE | NATIONWIDE

ALDI WHITEWATER

1380 W MAIN ST
 WHITEWATER, WI

GRADING PLAN

REVISIONS	

REG JOB No. 3000.00	MTS	SHEET
REG PM	START DATE 04-29-22	C-5
SCALE 1" = 30'		OF
		C-13

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

www.pinnacle-engr.com

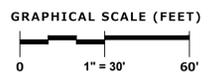
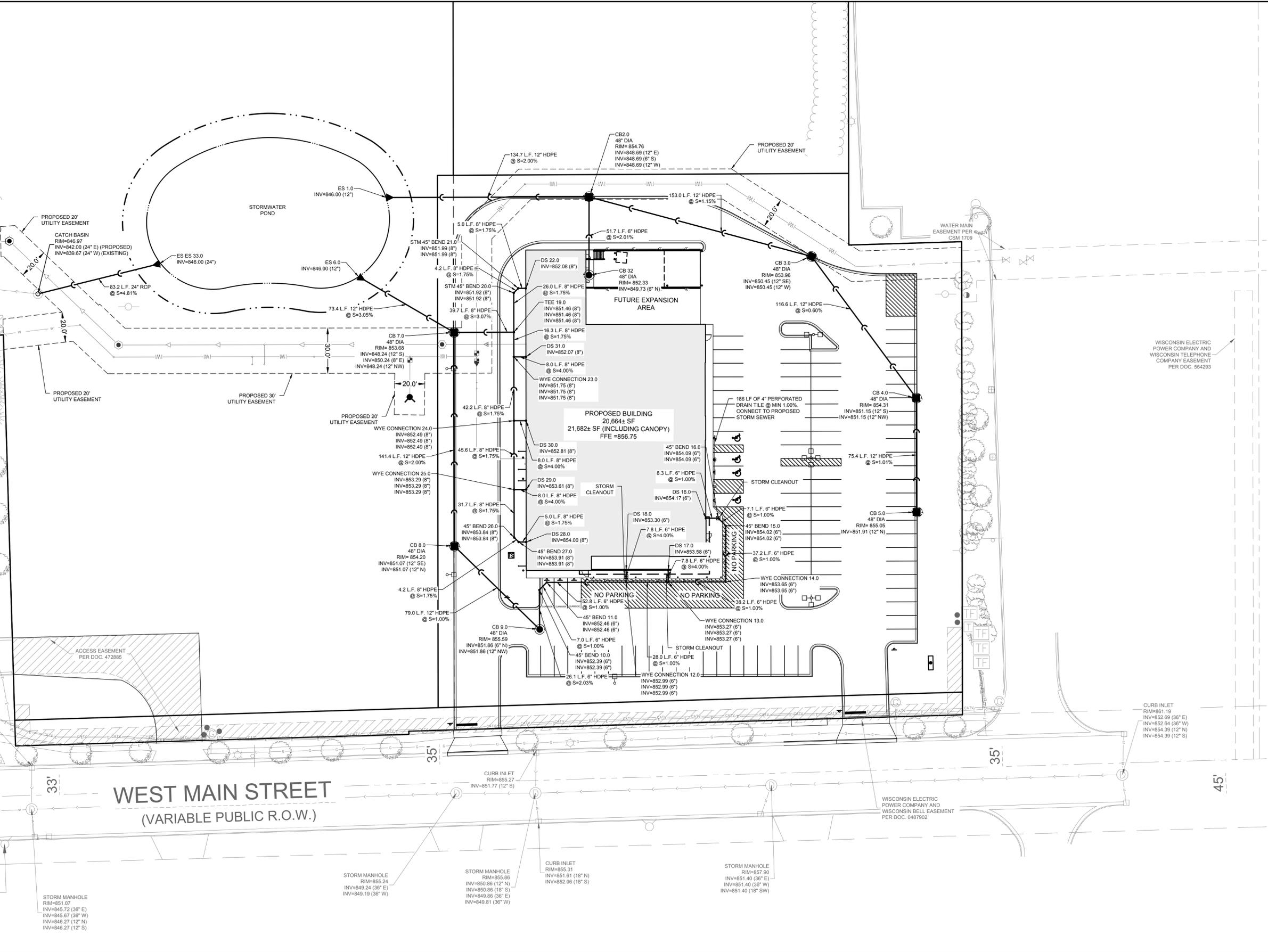
LEGEND	
	SANITARY SEWER MANHOLE
	STORM SEWER MANHOLE
	STORM SEWER CATCH BASIN (ROUND CASTING)
	STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
	PRECAST CONCRETE FLARED END SECTION
	CLEANOUT
	VALVE BOX
	FIRE HYDRANT
	SANITARY SEWER
	SANITARY SEWER (PUBLIC)
	FORCE MAIN
	STORM SEWER
	DRAIN TILE
	WATER MAIN
	WATER MAIN (PUBLIC)
	FIRE PROTECTION
	UTILITY CROSSING
	ELECTRICAL CABLE
	GAS MAIN
	TELEPHONE LINE
	OVERHEAD WIRES
	LIGHTING
	ELECTRICAL TRANSFORMER OR PEDESTAL
	POWER POLE
	POWER POLE WITH LIGHTS
	STREET SIGN

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

ALL STORM SEWER STRUCTURES SHALL HAVE DONUT DRAINTILE IN ACCORDANCE WITH DETAIL ON SHEET C-12

PROPOSED POND ON ADJACENT LOT TO BE CONSTRUCTED BY ALDI

ALL WORK WITHIN PROPOSED EASEMENTS TO BE CONSTRUCTED BY ALDI



DESIGNED: MTS
DRAFTED: DMS
REVIEWED:

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

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE | NATIONWIDE

ALDI WHITEWATER
1380 W MAIN ST
WHITEWATER, WI

STORM SEWER PLAN

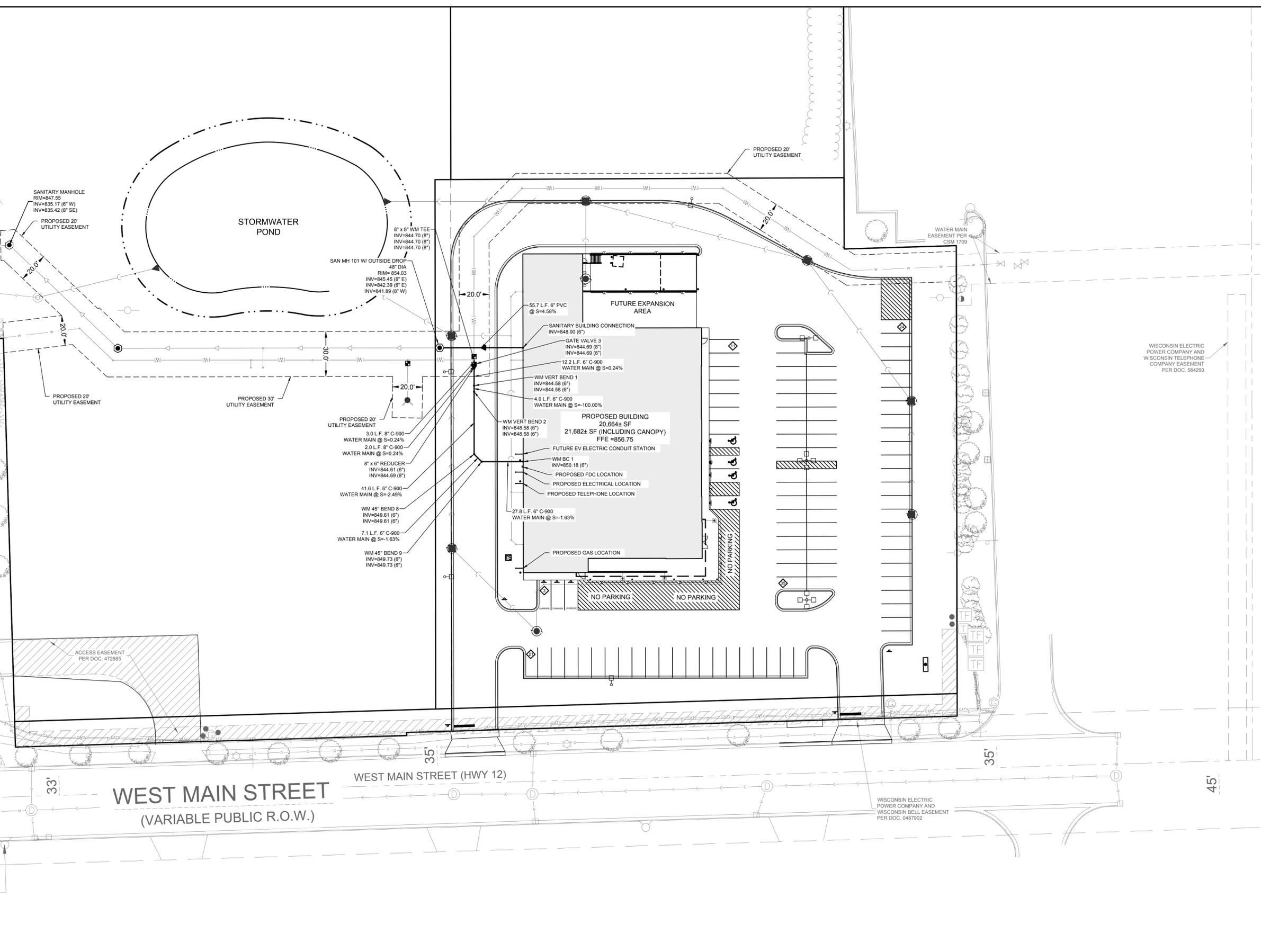
REVISIONS	

REG JOB NO. 3000.00
REG PM MTS
START DATE 04-29-22
SCALE 1" = 30'

SHEET
C-6
OF
C-13

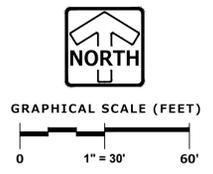
© COPYRIGHT 2022

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC.
 DESIGNED: MTS
 DRAFTED: DMS
 REVIEWED:



LEGEND	
	SANITARY SEWER MANHOLE
	STORM SEWER MANHOLE
	STORM SEWER CATCH BASIN (ROUND CASTING)
	STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
	PRECAST CONCRETE FLARED END SECTION
	CLEANOUT
	VALVE BOX
	FIRE HYDRANT
	SANITARY SEWER
	SANITARY SEWER (PUBLIC)
	FORCE MAIN
	STORM SEWER
	DRAIN TILE
	WATER MAIN
	WATER MAIN (PUBLIC)
	FIRE PROTECTION
	UTILITY CROSSING
	ELECTRICAL CABLE
	GAS MAIN
	TELEPHONE LINE
	OVERHEAD WIRES
	LIGHTING
	ELECTRICAL TRANSFORMER OR PEDESTAL
	POWER POLE
	POWER POLE WITH LIGHTS
	STREET SIGN

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2
CONTRACTOR TO FIELD VERIFY UTILITY CONNECTION LOCATION AND ELEVATION PRIOR TO CONSTRUCTION



PINNACLE ENGINEERING GROUP
 ENGINEERING | NATURAL RESOURCES | SURVEYING
 PLAN | DESIGN | DELIVER
 www.pinnacle-engr.com
 WISCONSIN OFFICE:
 20725 WATERTOWN ROAD, SUITE 100
 BROOKFIELD, WI 53186
 (262) 754-8888
 CHICAGO | MILWAUKEE | NATIONWIDE

ALDI WHITEWATER
 1380 W MAIN ST
 WHITEWATER, WI

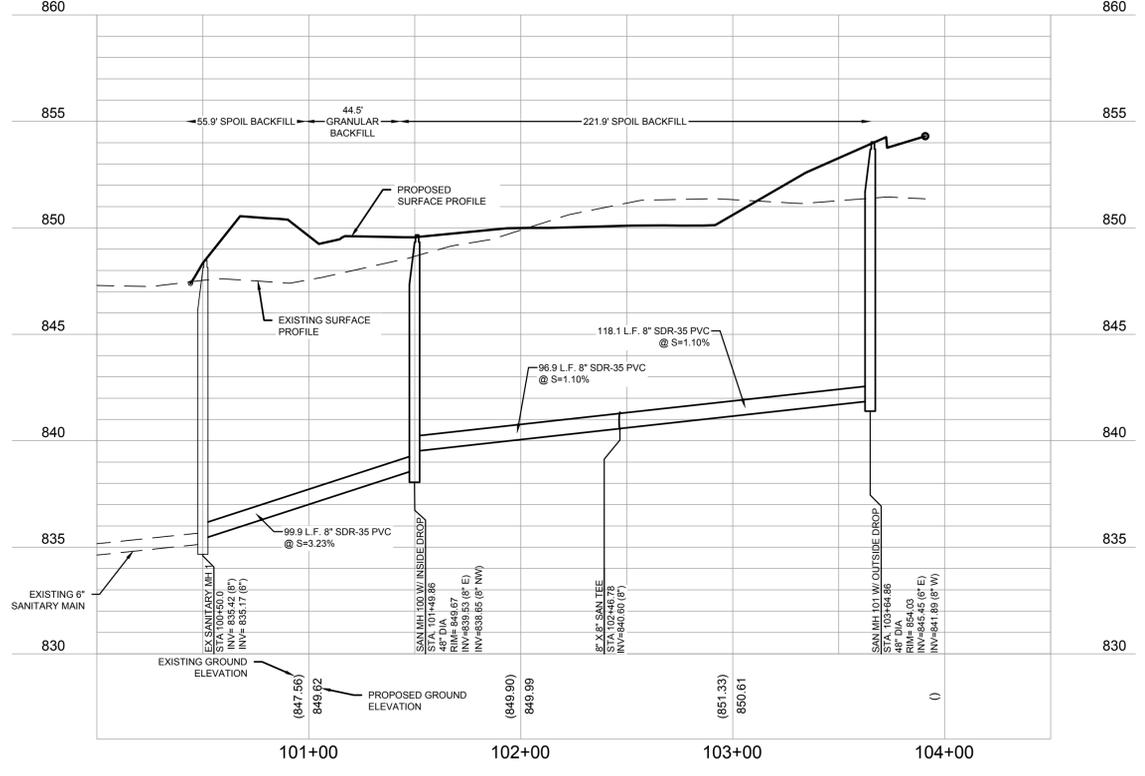
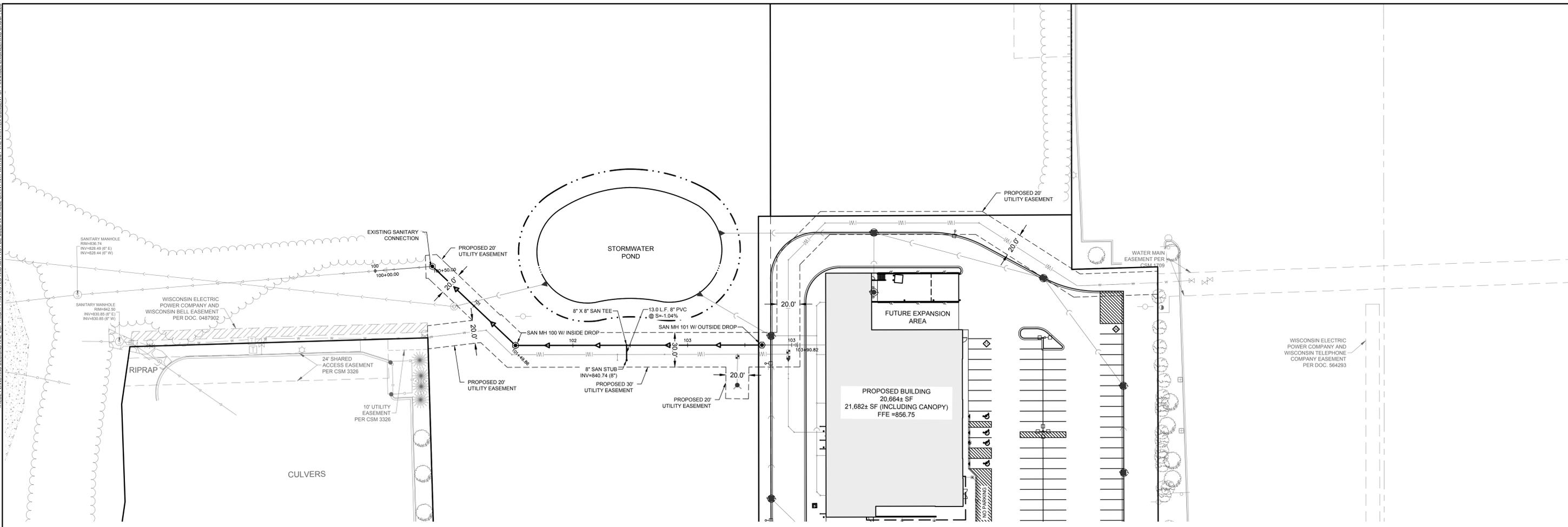
SANITARY & WATERMAIN PLAN

REVISIONS	

SHEET
C-7
 OF
C-13

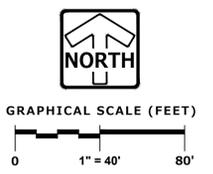
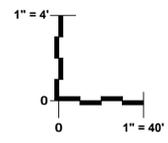
www.pinnacle-engr.com
 SANITARY & WATERMAIN PLAN

DESIGNED: MTS
 DRAFTED: DMS
 REVIEWED:



CONTRACTOR TO FIELD VERIFY UTILITY CONNECTION LOCATION AND ELEVATION PRIOR TO CONSTRUCTION

ALL WORK WITHIN PROPOSED EASEMENTS TO BE CONSTRUCTED BY ALDI



PINNACLE ENGINEERING GROUP
 ENGINEERING | NATURAL RESOURCES | SURVEYING
 PLAN | DESIGN | DELIVER
 www.pinnacle-engr.com
 WISCONSIN OFFICE:
 20725 WATERTOWN ROAD, SUITE 100
 BROOKFIELD, WI 53186
 (262) 754-8888
 CHICAGO | MILWAUKEE | NATIONWIDE

ALDI WHITEWATER
 1380 W MAIN ST
 WHITEWATER, WI

PUBLIC SANITARY PLAN & PROFILE

REVISIONS	

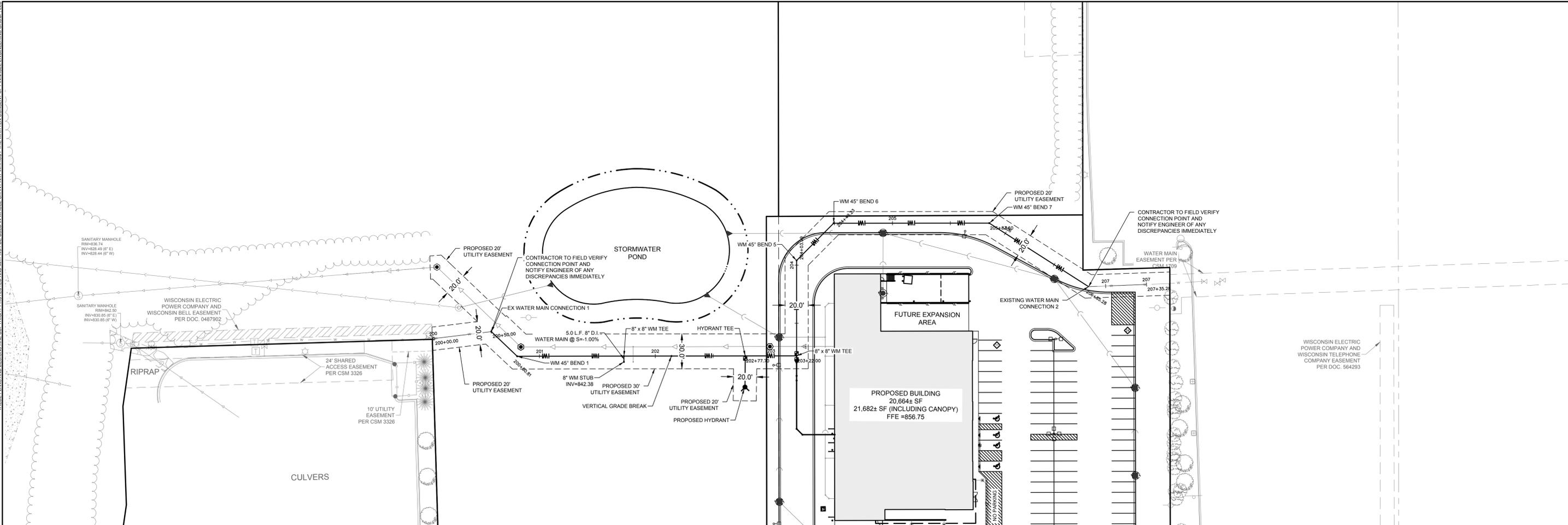
REG. JOB NO. 3000.00
 REG. PM. MTS
 START DATE 04-29-22
 SCALE 1" = 40'
 SHEET C-8 OF C-13
 © COPYRIGHT 2022

www.pinnacle-engr.com PUBLIC SANITARY PLAN & PROFILE

Z:\PROJECTS\2022\3000.00-W\CAD\SHEETS\3000.00 PUBLIC SANITARY PROFILE.DWG

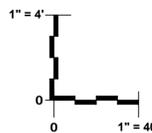
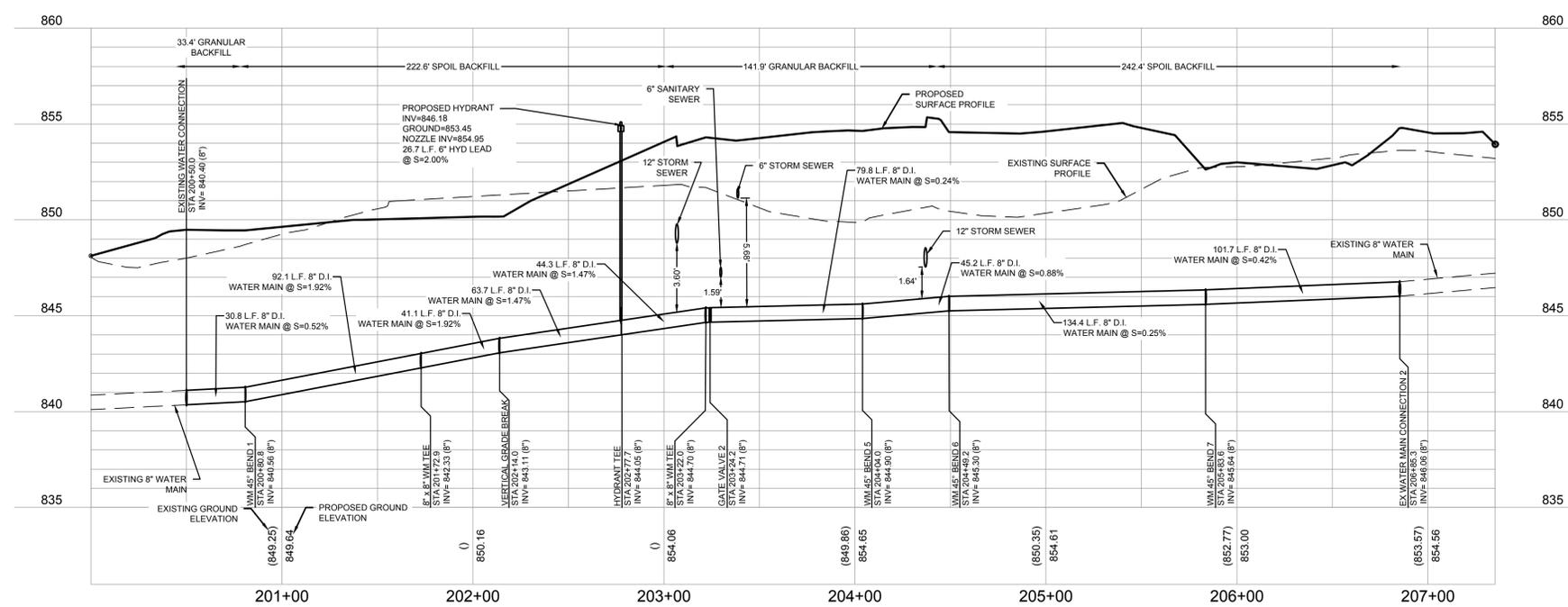
THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

www.pinnacle-engr.com



CONTRACTOR TO FIELD VERIFY UTILITY CONNECTION LOCATION AND ELEVATION PRIOR TO CONSTRUCTION

ALL WORK WITHIN PROPOSED EASEMENTS TO BE CONSTRUCTED BY ALDI



GRAPHICAL SCALE (FEET)

DESIGNED: DMS
REVIEWED: MTS

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

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

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE | NATIONWIDE

ALDI WHITEWATER
1380 W MAIN ST
WHITEWATER, WI

PUBLIC WATERMAIN PLAN & PROFILE

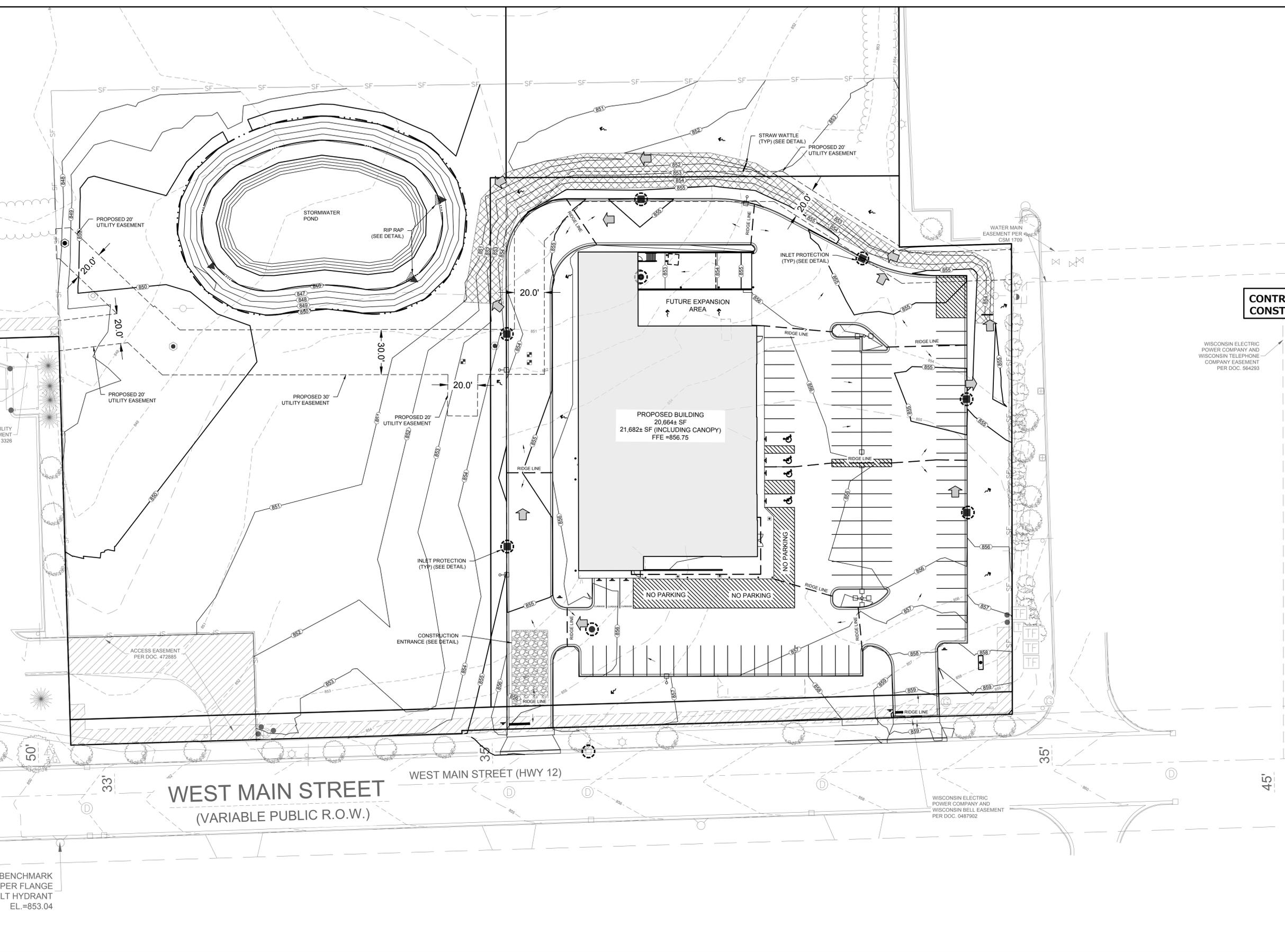
REVISIONS	

REG JOB No. 3000.00
REG PM MTS
START DATE 04-29-22
SCALE 1" = 40'

SHEET
C-9
OF
C-13

© COPYRIGHT 2022

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC
 DESIGNED: MTS
 DRAFTED: DMS
 REVIEWED:



LEGEND	
	SANITARY SEWER MANHOLE
	STORM SEWER MANHOLE
	STORM CATCH BASIN (ROUND CASTING)
	STORM CATCH BASIN (RECTANGULAR CASTING)
	PRECAST FLARED END SECTION
	CLEANOUT
	VALVE BOX
	FIRE HYDRANT
	PROPOSED CONTOUR
	WETLANDS
	FLOODPLAIN
	HIGH WATER LEVEL (HWL)
	NORMAL WATER LEVEL (NWL)
	DIRECTION OF SURFACE FLOW
	DITCH OR SWALE
	DIVERSION SWALE
	SILT FENCE
	TYPE D INLET PROTECTION
	CONSTRUCTION ENTRANCE
	EROSION CONTROL BLANKET

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

CONSTRUCTION SITE SEQCING

1. INSTALL PERIMETER SILT FENCE, INLET PROTECTION, TEMPORARY CONSTRUCTION ENTRANCE AND ANY OTHER EROSION CONTROL MEASURES.
 2. DEMOLITION AND REMOVALS OF BUILDINGS, PAVEMENTS & LANDSCAPING.
 3. CONDUCT ROUGH GRADING EFFORTS.
 4. CONSTRUCTION OF FOUNDATIONS AND BUILDING.
 5. INSTALL UTILITY PIPING & STRUCTURES.
 6. COMPLETE FINAL GRADING, INSTALLATION OF GRAVEL BASE COURSES, PLACEMENT OF CURBS, PAVEMENTS, WALKS, ETC.
 7. INSTALL TOPSOIL AND LANDSCAPING. IMMEDIATELY STABILIZE DISTURBED AREAS WITH EROSION CONTROLS.
 8. EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.
- CONTRACTOR MAY MODIFY SEQCING AFTER ITEM 1 AS NEEDED TO COMPLETE CONSTRUCTION IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS.

NOTE :
 ALL DISTURBED GRASS AREAS SHALL BE STABILIZED WITH CURLEX BLANKET. EROSION MAT CLASS 1 TYPE A

PROPOSED POND ON ADJACENT LOT TO BE CONSTRUCTED BY ALDI

ALL WORK WITHIN PROPOSED EASEMENTS TO BE CONSTRUCTED BY ALDI

WISCONSIN ELECTRIC POWER COMPANY AND WISCONSIN TELEPHONE COMPANY EASEMENT PER DOC. 564293

WISCONSIN ELECTRIC POWER COMPANY AND WISCONSIN BELL EASEMENT PER DOC. 0487902

BENCHMARK UPPER FLANGE OF HYDRANT EL.=853.04

WEST MAIN STREET
 (VARIABLE PUBLIC R.O.W.)

WEST MAIN STREET (HWY 12)

PROPOSED BUILDING
 20,654± SF
 21,682± SF (INCLUDING CANOPY)
 FFE=856.75

NO PARKING

NO PARKING

NO PARKING

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

PINNACLE ENGINEERING GROUP
 ENGINEERING | NATURAL RESOURCES | SURVEYING

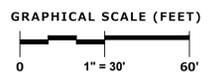
WISCONSIN OFFICE:
 20725 WATERTOWN ROAD, SUITE 100
 BROOKFIELD, WI 53186
 (262) 754-8888
 CHICAGO | MILWAUKEE | NATIONWIDE

ALDI WHITEWATER
 1380 W MAIN ST
 WHITEWATER, WI

EROSION CONTROL PLAN

REVISIONS

NO.	DATE	DESCRIPTION

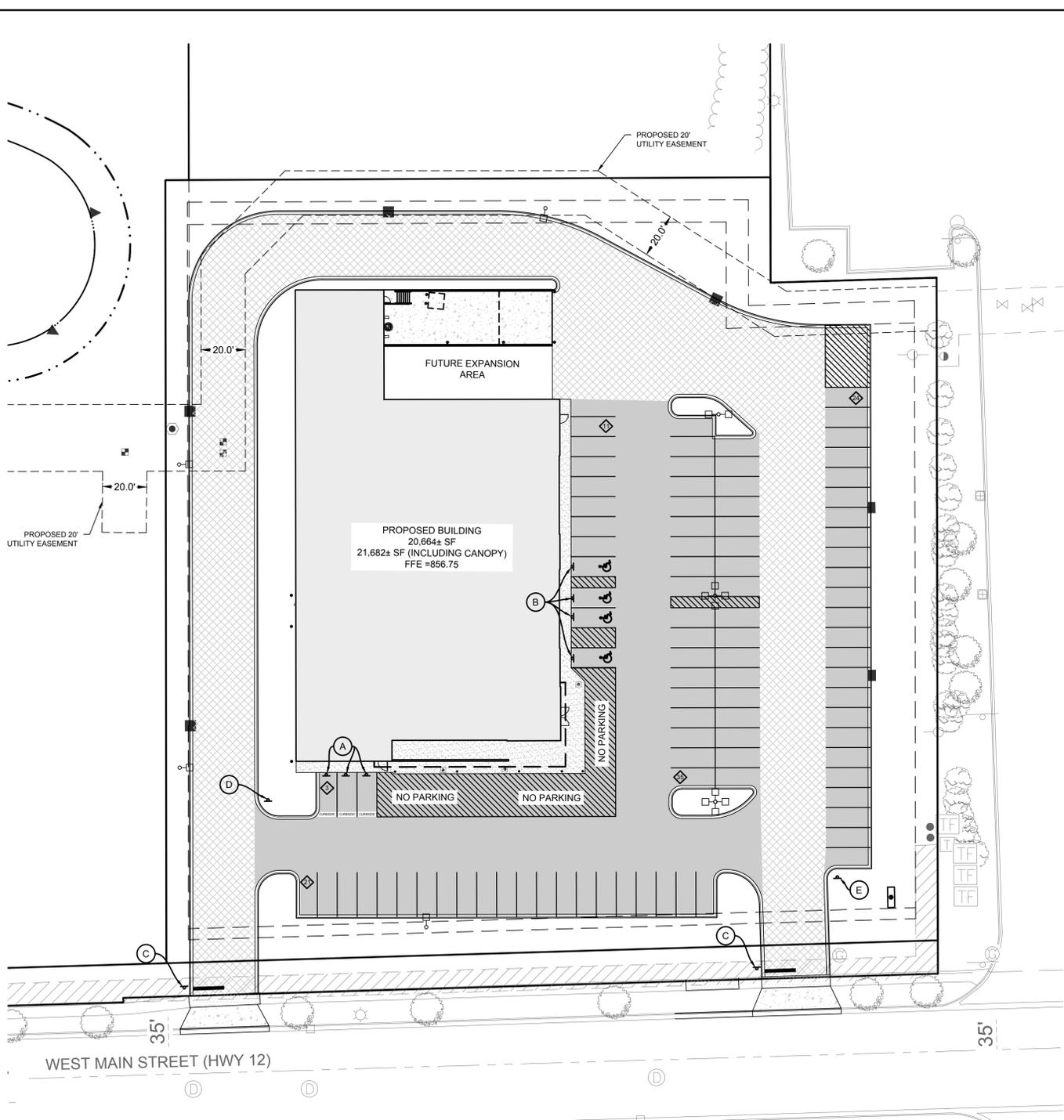


REG JOB No. 3000.00
 REG PM MTS
 START DATE 04-29-22
 SCALE 1" = 30'

SHEET
C-10
 OF
C-13

www.pinnacle-engr.com
 EROSION CONTROL PLAN

DESIGNED: MTS
 DRAFTED: DMS
 REVIEWED:
 THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC
 Z:\PROJECTS\2022\3000.00-WI\CAD\SHEETS\3000.00 SIGNAGE PLAN.DWG



SITE LEGEND:

- ① PAINT CURBSIDE PARKING STALL (REFER TO DETAIL)
- ② EMPLOYEE INGRESS/EGRESS

SIGN SCHEDULE/LEGEND:

LEGEND	SIGN	DESCRIPTION	TYPE OF MOUNT	MOUNTING HEIGHT (BOTTOM OF SIGN)	QUANTITY
(A)		12" x 18" CURBSIDE PICK-UP PARKING SIGN	POST MOUNTED ON BOLLARD	5'	3
(B)		12" x 18" ADA PARKING SIGN	POST MOUNTED ON BOLLARD	5'	4
(C)		30" x 30" STOP SIGN	POST MOUNTED IN GRASS	7'	2
(D)		12" x 18" DIRECTIONAL SIGNAGE, RIGHT ARROW	POST MOUNTED IN GRASS	5'	1
(E)		12" x 18" DIRECTIONAL SIGNAGE, LEFT ARROW	POST MOUNTED IN GRASS	5'	1

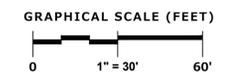
SIGNS A, B, D & E TO BE PROVIDED BY ALDI. CONTRACTOR TO PROVIDE BOLLARD, POST, ETC. FOR ALL SIGNS

LEGEND OF IMPROVEMENTS

- BACK OF CURB
- FACE OF CURB
- SUBJECT PARCEL PROPERTY LINE
- ALDI BUILDING
- SITE SIGN

TRAFFIC SIGNAGE AND PAVEMENT MARKINGS:

1. FONT STYLE FOR CURBSIDE SIGNAGE, PARKING SPACE LETTERING AND PARKING SPACE NUMBERING SHALL BE ARIAL BOLD.
2. PAVEMENT MARKINGS SHALL BE THE TYPE, COLOR, SIZE, AND LOCATIONS SHOWN ON THE PLANS. CONTRACTOR SHALL PROVIDE TWO (2) COATS OF PAINT FOR ALL PAVEMENT MARKINGS. IF THE INFORMATION ON THE PLANS AND DETAILS IS NOT COMPLETE AND THE AUTHORITY HAVING JURISDICTION DOES NOT HAVE REQUIREMENTS REGARDING THIS, USE THE FOLLOWING:
 - 2.1. PAINT SHALL BE SUPPLIED IN ACCORDANCE WITH AASHTO: M 248 LATEST ADDITION.
 - 2.2. COLORS SHALL BE AS FOLLOWS:
 - 2.2.1. YELLOW - PARKING STALLS, PARKING ISLANDS, AND FIRE LANES
 - 2.2.2. WHITE - STOP BARS AND LETTERING, PEDESTRIAN CROSSINGS, HANDICAP PARKING SYMBOL AND CHARACTERS, TRAFFIC CONTROL LETTERING AND CHARACTERS
 - 2.2.3. BLUE - BACKGROUND OF HANDICAP PARKING SYMBOL
 - 2.3. REFER TO CURBSIDE PARKING DETAIL FOR PAINT TYPE, COLOR AND FONT
3. THE PAVEMENT SHALL BE CLEAN AND FREE OF DIRT, DUST, MOISTURE, OILS, AND OTHER FOREIGN MATERIALS. ANY OLD PAVEMENT MARKINGS SHALL BE REMOVED UNLESS PAINTS ARE COMPATIBLE AND OVERLAY IDENTICAL. THE SURFACE OF THE PAVEMENT PRIOR TO APPLICATION SHALL BE 45 DEGREES F AND RISING UNLESS MANUFACTURER'S RECOMMENDATIONS ARE GREATER. ALL PAINTING SHALL BE APPLIED IN APPROPRIATE WEATHER CONDITIONS (E.G. TEMPERATURE, WIND, PRECIPITATION), AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
4. THE SIGNAGE AND PAVEMENT MARKINGS SHALL BE THE TYPE AND AT THE GENERAL LOCATION SHOWN ON THE DRAWINGS.
5. POSTS, BRACKETS, AND FRAMES SHALL BE STEEL PER ASTM A-36, A-242, A-441, A-572, A588, GRADE 50, AND HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123. ALL CUTTING, DRILLING, OR OTHER POLE MODIFICATIONS SHALL BE PAINTED WITH GALVANIZING PAINT. ALL BOLTS, NUTS, AND WASHERS SHALL BE STAINLESS STEEL.
6. POST HOLES IN PAVEMENT SHALL BE IN ACCORDANCE WITH THE DETAIL UNLESS POOR SOILS OR FROST CONDITIONS REQUIRE GREATER DEPTH. SIGN POSTS SHALL BE KEPT PLUMB, 6 INCHES OFF BOTTOM AND CENTERED AS 4,000 PSI CONCRETE IS PLACED AROUND THE POST. THE OVERALL SIGN AND POST SYSTEM SHOULD BE ABLE TO WITHSTAND 33 POUNDS PER SQUARE FOOT.
7. CONTRACTOR CAN PLACE SIGNS ON POSTS AFTER CONCRETE HAS CURED FOR SEVEN DAYS OR 3/4 STRENGTH IS ACHIEVED.
8. ALL HANDICAP STRIPING AND SIGNAGE, INCLUDING SPACES, CROSSWALK, ACCESSIBLE PATH, AND CURB RAMPS, SHALL MEET AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. FIRE LANE STRIPING AND SIGNAGE SHALL MEET THE REQUIREMENTS OF THE LOCAL BUILDING INSPECTOR AND FIRE DEPARTMENT.



PINNACLE ENGINEERING GROUP
 ENGINEERING | NATURAL RESOURCES | SURVEYING
 20725 WATERTOWN ROAD, SUITE 100
 BROOKFIELD, WI 53186
 (262) 754-8888
 CHICAGO | MILWAUKEE | NATIONWIDE

ALDI WHITEWATER
 1380 W MAIN ST
 WHITEWATER, WI

SIGNAGE PLAN

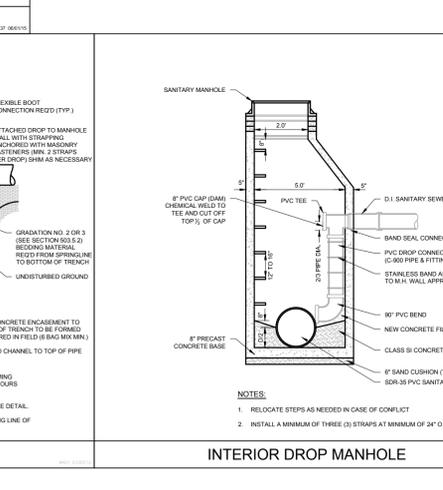
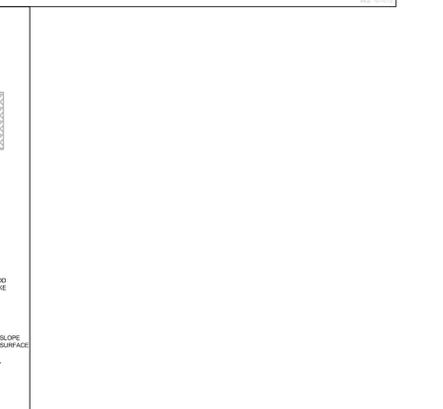
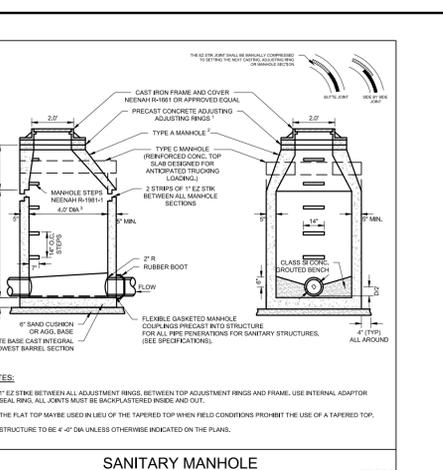
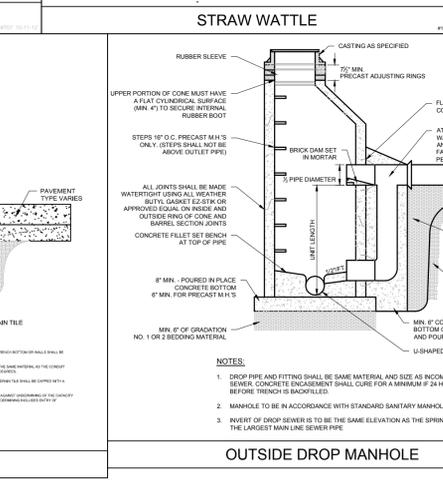
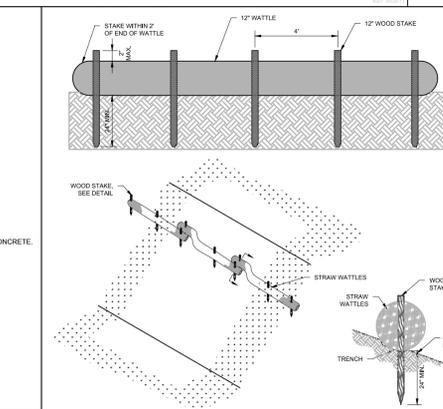
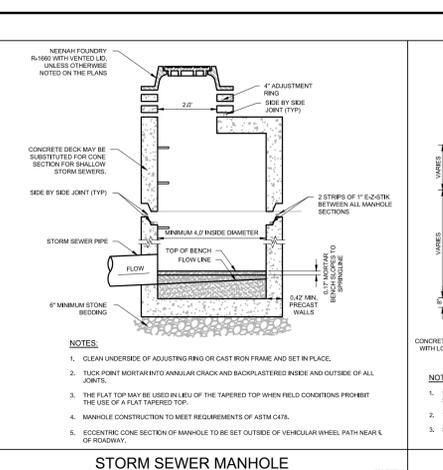
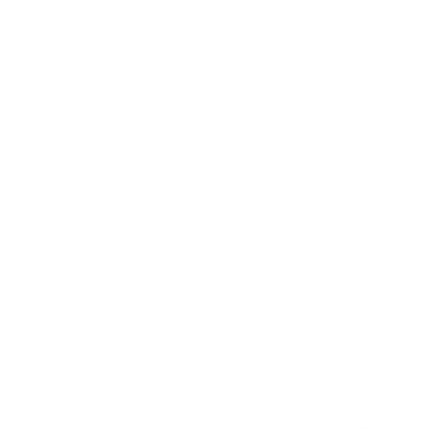
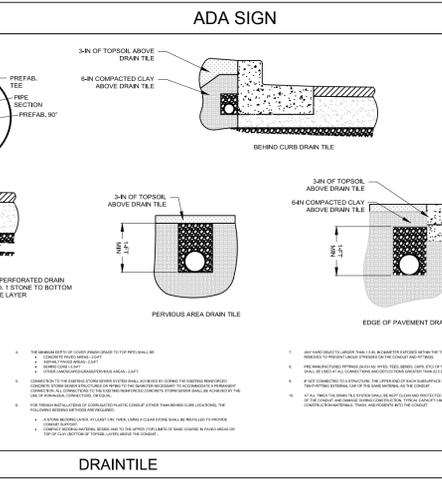
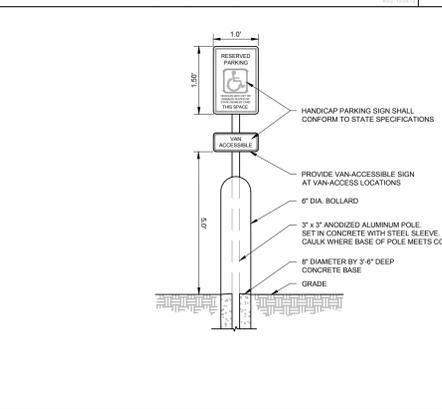
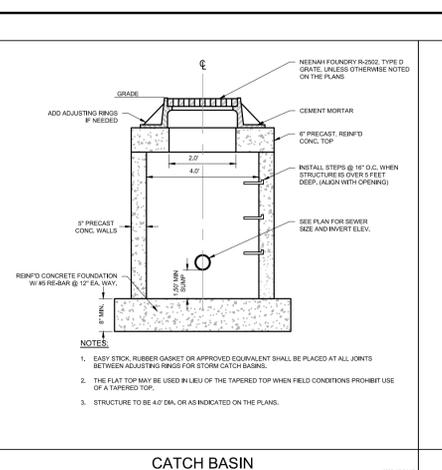
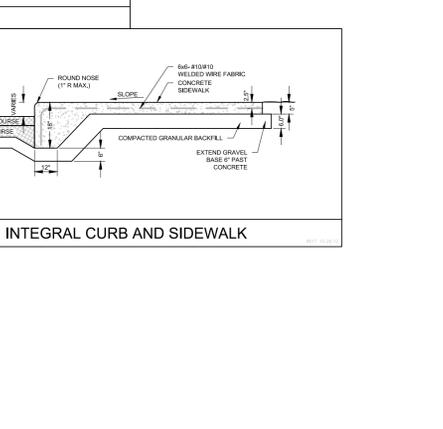
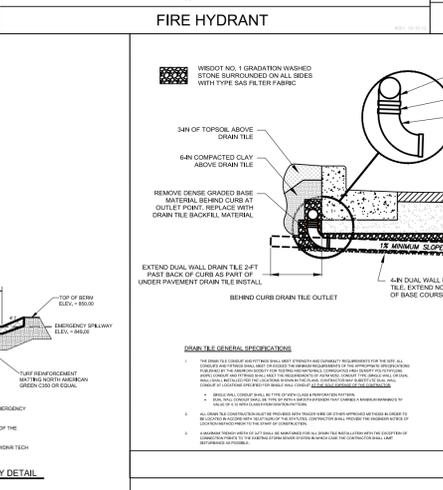
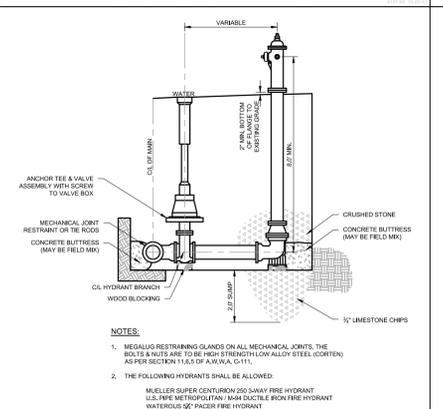
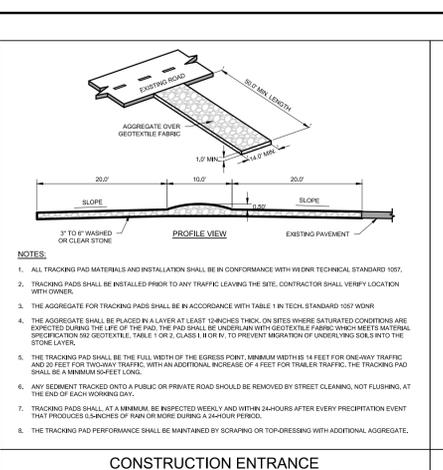
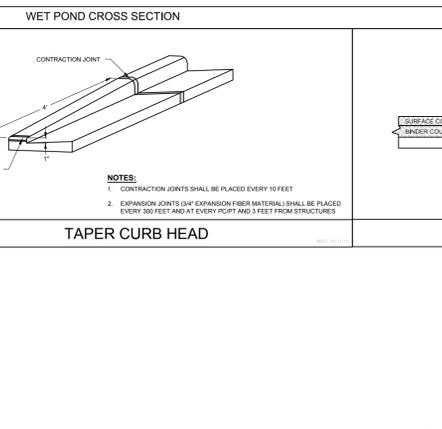
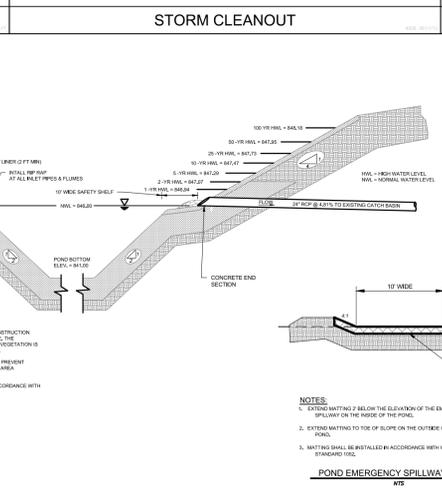
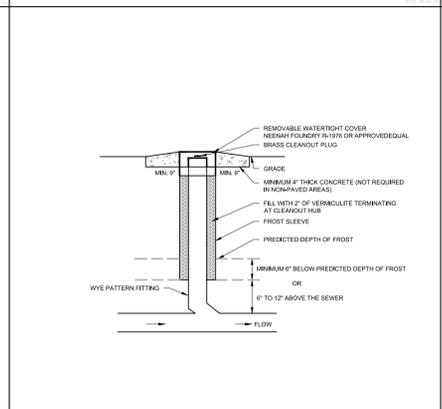
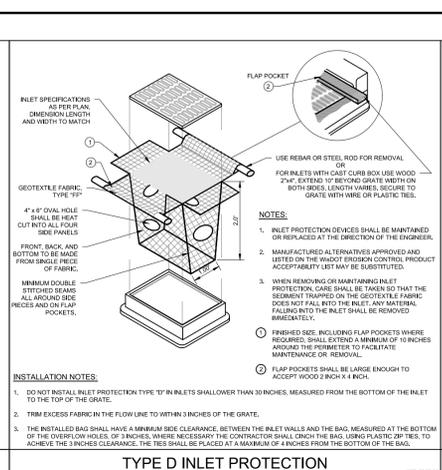
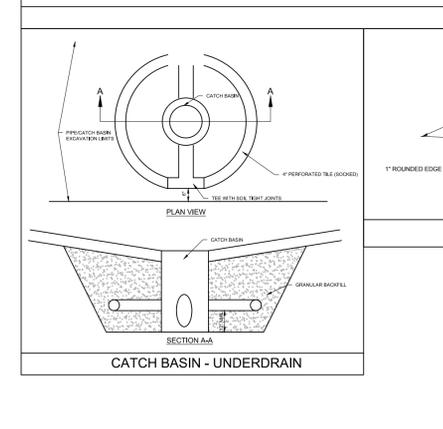
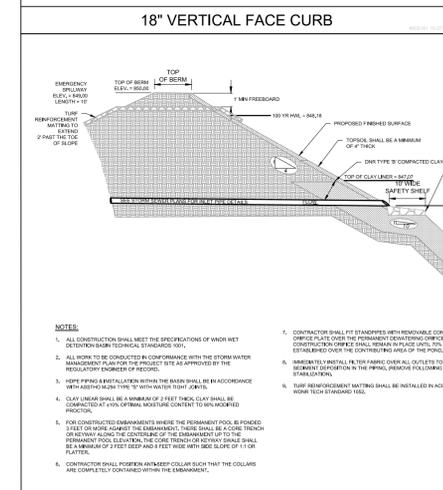
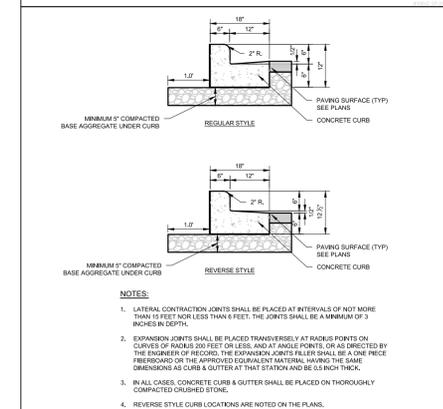
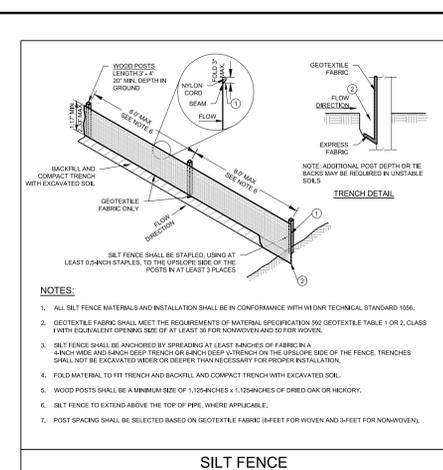
REVISIONS

NO.	DATE	DESCRIPTION

REG JOB No. 3000.00
 REG PM MTS
 START DATE 04-29-22
 SCALE 1" = 30'
 SHEET C-11 OF C-13

www.pinnacle-engr.com

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC. REVIEWED: MTS DESIGNED: DMS DRAFTED: DMS



PINNACLE ENGINEERING GROUP logo and contact information including address, phone, and website.

ALDI WHITEWATER 1380 W MAIN ST WHITEWATER, WI logo and project title.

Table with 2 columns: REVISIONS, SCALE. Includes fields for job number, date, and scale.

Table with 2 columns: SHEET, CONSTRUCTION DETAILS. Includes fields for sheet number and project name.

DESIGNED: DMS CHECKED: MTS REVIEWED: THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

1.0 POTENTIAL POLLUTANT SOURCES

OTHER THAN 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 4 OF THIS PLAN. ADDITIONAL POTENTIAL SOURCES OF POLLUTION MAY INCLUDE FUEL TANKS, WASTE CONTAINERS, OIL OR OTHER PETROLEUM PRODUCTS, DETERGENTS, PAINTS, CONSTRUCTION DEBRIS, 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 # AS NEEDED TO COMPLETE CONSTRUCTION ONLY IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL REQUIREMENTS.

1. INSTALL TEMPORARY CONSTRUCTION ENTRANCES, INLET PROTECTION ON EXISTING STORM SEWER AND CULVERT INLET LOCATIONS, AND PERIMETER SILT FENCING.
2. 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.
3. 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.
4. 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.
5. CONDUCT ROUGH GRADING OPERATIONS AND UTILITY PIPING INSTALLATION. DRAIN TILE SHALL NOT BE INSTALLED UNTIL UPLAND AREAS CONTRIBUTING STORMWATER RUNOFF ARE STABILIZED. DITCH CHECKS SHALL BE INSTALLED WITHIN DRAINAGE DITCHES IMMEDIATELY FOLLOWING CREATION OF DITCHES AND INLET PROTECTION SHALL BE INSTALLED TO PROTECT ANY STORM SEWER OR CULVERTS THAT WILL FUNCTION DURING CONSTRUCTION.
6. FINE GRADE SUB-GRADE SOLS WITHIN PAVEMENT AND BUILDING LIMITS. PLACE STONE BASE MATERIAL AS SOON AS POSSIBLE FOLLOWING COMPLETION OF FINE GRADING EFFORTS.
7. FINE GRADE REMAINING DISTURBED AREAS. PLACE SALVAGED TOPSOIL, EROSION BLANKETS/MATTING, AND SEED/MULCH AS SOON AS POSSIBLE FOLLOWING COMPLETION OF FINE GRADING EFFORTS.
8. 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/PRETECTION, 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 CEASE IS PRECLUDED BY SNOW COVER. IN THAT EVENT, STABILIZATION MEASURE 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 (100LBS/ACRE) AND/OR WHEAT OR CEREAL RYE (150LBS/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 BASIN. 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, THEY SHALL BE HOSED OFF BEFORE ENTERING A PAVED ROADWAY. ANY SOIL DEPOSITED ON THE PUBLIC PAVED ROAD WAY SHALL BE REMOVED IMMEDIATELY.

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

EROSION CONTROL MATTING SHALL BE PLACED ON AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 3H: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. BERMS/SWALES SHALL BE STABILIZED WITH EQUIPMENT TRACKING AND TEMPORARY SEEDING.

SEDIMENT TRAP/BASIN SHALL BE CONSTRUCTED TO COLLECT RUNOFF AND RUNOFF FROM SITE DIVERSION BERMS/SWALES.

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

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

3.0 ADDITIONAL PRACTICES

ADDITIONAL POLLUTANT 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 OF SEDIMENTS. 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/AULIN 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.
- ROUGHENING (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.
- STREET SWEEPING** SHALL BE PERFORMED TO IMMEDIATELY REMOVE ANY SEDIMENT TRACKED ON PAVEMENTS.

4.0 EROSION AND SEDIMENT STRUCTURAL PRACTICE MAINTENANCE

THE FOLLOWING MAINTENANCE PRACTICES SHALL BE USED TO MAINTAIN IN GOOD AND EFFECTIVE OPERATING CONDITIONS, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES, AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN, UPON IDENTIFICATION, DEFICIENCIES IN STORMWATER CONTROLS SHALL BE ADDRESSED IMMEDIATELY. THE MAINTENANCE PROCEDURES FOR THIS DEVELOPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO THE BELOW.

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 ADDRESS 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 BREACHED 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 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 GRACES.

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) CALENDAR DAYS. INSPECTIONS SHALL BE UNDERTAKEN BY QUALIFIED 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.

1. CONTRACTOR SHALL STORE ONLY ENOUGH PRODUCTS REQUIRED TO COMPLETE THIS PROJECT.
2. ALL MATERIAL SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR ORIGINAL CONTAINERS CONTAINING MANUFACTURER'S LABEL.
3. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
4. 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.

1. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE MAINTAINED ON-SITE.
2. IMMEDIATELY UPON DISCOVERY, ALL SPILLS SHALL BE CLEANED UP ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS.
3. PERSONNEL CLEANING UP A SPILL SHALL USE PERSONAL PROTECTIVE EQUIPMENT.
4. IMMEDIATELY UPON DISCOVERY, SPILLS OF TOXIC OR HAZARDOUS MATERIALS SHALL BE REPORTED TO THE OWNER AND GENERAL CONTRACTOR.
5. 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 (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM "NPDES" PERMIT NO. WI-5078731-1) 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 PERMIT 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 AT THE CONSTRUCTION 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 GROUP	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 APPROPRIATE.
	PERMANENT SEEDING	PROVIDES PERMANENT VEGETATIVE COVER TO CONTROL EROSION. FILTERS SEDIMENT FROM WATER. MAY BE PART OF FINAL LANDSCAPE PLAN.
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.
	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 LADEN WATER TO A SEDIMENT BASIN.
OUTLETS	APRON ENDWALL OR RIPRAP	PROTECTS DOWNSTREAM CHANNEL FROM HIGH VELOCITY OF FLOW DISCHARGING FROM STRUCTURE.
SEDIMENT BASINS	TEMPORARY SEDIMENT TRAP	CONSTRUCTED TO REMOVE SALINATION FROM RUNOFF FROM SITE DIVERSION BERMS/SWALES AND IN OVERLAND FLOOD ROUTE. CAN BE CONVERTED TO PERMANENT SEDIMENT BASIN.
	SILT FENCE	PLACED DOWN SLOPE OF DISTURBED AREA TO KEEP RUNOFF CONTAINED ON-SITE.
SEDIMENT FILTERS	INLET PROTECTION	INSTALLED IN OPEN GRATE 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 TRACKED FROM CONSTRUCTION SITE.
	DUST CONTROL	PREVENTS DUST FROM LEAVING CONSTRUCTION SITE.

STABILIZATION EFFECTIVENESS (TIME OF YEAR)

STABILIZATION TYPE	S T A B I L I Z A T I O N U T I L I Z A T I O N P E R I O D S											
	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. SOD.
- F. STRAW MULCH 2 TONS/ACRE.

* IRRIGATION/WATERING REQUIRED TO SUPPORT ESTABLISHMENT AS NEEDED.


PINNACLE ENGINEERING GROUP
 ENGINEERING | NATURAL RESOURCES | SURVEYING
 20725 WATERTOWN ROAD, SUITE 100
 BROOKFIELD, WI 53186
 (262) 754-8888
 CHICAGO | MILWAUKEE | NATIONWIDE
 PLAN | DESIGN | DELIVER
 www.pinnacle-engr.com

ALDI WHITEWATER
 1380 W MAIN ST
 WHITEWATER, WI

CONSTRUCTION DETAILS

REVISIONS	

REG JOB No. 3000.00
 REG PM MTS
 START DATE 04-29-22
 SCALE N.T.S.
SHEET C-13 OF C-13
 © COPYRIGHT 2022