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GRAPHICAL SCALE (FEET)
0 1" = 60' 120'

FIRE PROTECTION NOTES

- ALL NEW FIRE HYDRANTS SHALL HAVE A 5/8" STORZ CONNECTION.
- CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PROPOSED UTILITIES.

LOOP AND FIRE DEPARTMENT CONNECTION SHOWN FOR CONCEPTUAL HYDRANT SPACING ONLY. THIS PLAN SHALL NOT BE USED FOR FIRE PROTECTION SYSTEM AND SYSTEM CONSTRUCTION. FINAL DESIGN AND SIZING SHALL BE BY FIRE PROTECTION ENGINEER.

ALL WORK WITHIN PUBLIC R.O.W. SHALL CONFORM TO VILLAGE OF CALEDONIA STANDARDS.

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
	STORM SEWER
	WATER MAIN
	FIRE PROTECTION
	ELECTRICAL CABLE
	LIGHTING
	ELECTRICAL TRANSFORMER OR PEDESTAL
	LIGHT POLE BASE
	STREET SIGN

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 TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY FOR PROPOSED UTILITY CONNECTIONS AND/OR TO AVOID DAMAGE THERETO. CONTRACTOR SHALL CALL "DIGGER'S 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 CONTRACTOR'S 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 VILLAGE OF CALEDONIA SPECIAL PROVISIONS AND WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES SPS 382.
- 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 FINISHED 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 VILLAGE OF CALEDONIA PUBLIC WORKS DEPARTMENT 48 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 LOCATIONS FOR ALL UTILITY SERVICES PRIOR TO START OF CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROPER AUTHORITIES FOR ANY REQUIRED PERMITS, AUTHORIZATIONS, TRAFFIC CONTROL AND ANY PERMIT FEES 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 IS RESPONSIBLE FOR THE SIZE, TYPE AND NUMBER OF WATER MAIN BENDS, HORIZONTAL AND VERTICAL, REQUIRED TO COMPLETE CONSTRUCTION. COST FOR BENDS, 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 GASKET JOINTS CONFORMING TO ASTM C-443. STRENGTH CLASSIFICATIONS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
HEIGHT OF COVER (FEET): 0-2 2-3 3-6 6-15 15-25 25+
MINIMUM CONCRETE PIPE CLASSIFICATION: IV III II III IV ENGINEER TO SPECIFY
HIGH DENSITY DUAL-WALL POLYETHYLENE N-12 CORRUGATED PIPE (HDPE) SHALL BE AS MANUFACTURED BY ADS OR EQUAL WITH WATER TIGHT JOINTS, AND SHALL MEET THE REQUIREMENTS OF AASHTO DESIGNATION M-294 TYPE "S", OR POLYVINYL CHLORIDE (PVC) - CLASS 6546 MEETING AASHTO M278, 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. 25 OF THE "STANDARD SPECIFICATIONS" WITH A 1'-8" X 2'-6" MAXIMUM OPENING. FRAME & GRATE SHALL BE NEENAH R-2502 WITH TYPE D GRATE, OR EQUAL. CURB FRAME & GRATE SHALL BE NEENAH R-3067, OR EQUAL. THE SUMP DEPTH (VERTICAL DISTANCE FROM THE BASE OF THE STRUCTURE TO OUTFALL INVERT OF THE PIPE) 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. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. SLURRY BACK FILL UNDER PUBLIC ROAD PAVEMENT. SLURRY LIMITS: FROM TOP OF COVER TO PAVEMENT. STONE TO PAVEMENT. SLURRY TO BE 1-BAG PORTLAND MIX. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS".
MANHOLE FRAMES AND COVERS - MANHOLE FRAMES AND COVERS SHALL BE NEENAH R-1661 W/ NEENAH R-1660-0003 ROCKING COVER W/ 2 PICK HOLES AND 8 VENT HOLES
- WATER MAIN SPECIFICATIONS -
PIPE - WATER MAIN SHALL BE POLYVINYL CHLORIDE (PVC) PIPE MEETING THE REQUIREMENTS OF AWWA STANDARD C-900, CLASS 235, DR-18, WITH CAST IRON O.D. AND INTEGRAL ELASTOMERIC BELL AND SPIGOT JOINTS. VALVES AND VALVE BOXES - GATE VALVES SHALL BE AWWA GATE VALVES MEETING THE REQUIREMENTS OF AWWA C-500 AND CHAPTER 8.2.7.0 OF THE "STANDARD SPECIFICATIONS". GATE VALVES AND VALVE BOXES SHALL CONFORM TO LOCAL PLUMBING ORDINANCES.
HYDRANTS - HYDRANTS SHALL CONFORM TO THE SPECIFICATIONS OF THE "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 24-INCHES. HYDRANT MANUFACTURE: AMERICAN FLOW CONTROL - MODEL: 5-1/4" WATERLOUS PACER, HYDRANT AND TAP VALVES: TRAFFIC MODEL W/ BREAKAWAY FLANGES, TWO 2-1/2" HOSE NOZZLES (7-12" NST) AND ONE 5-1/4" PUMPER OR STEAMER NOZZLE (4 NST), A 1-1/2" PENTAGON OPERATING NUT AND CCW OPENING, 6" MECHANICAL JOINT INLET CONNECTION.
BEDDING AND COVER MATERIAL - PIPE BEDDING AND COVER MATERIAL SHALL BE SAND, CRUSHED STONE CHIPS OR CRUSHED STONE SCREENINGS CONFORMING TO CHAPTER 8.43.2 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. SLURRY BACK FILL UNDER PUBLIC ROAD PAVEMENT. SLURRY LIMITS: FROM TOP OF COVER STONE TO PAVEMENT. SLURRY TO BE 1-BAG PORTLAND MIX. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS".
- SANITARY SEWER SPECIFICATIONS -
PIPE - SANITARY SEWER PIPE MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) MEETING REQUIREMENTS OF ASTM D 3034, SDR-35, WITH INTEGRAL BELL TYPE FLEXIBLE ELASTOMERIC JOINTS, MEETING THE REQUIREMENTS OF ASTM D-3212.
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 8.43.2 (A). 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 WITH CHAPTER 2.6.0 OF THE "STANDARD SPECIFICATIONS". SLURRY BACK FILL UNDER PUBLIC ROAD PAVEMENT. SLURRY LIMITS: FROM TOP OF COVER STONE TO PAVEMENT. SLURRY TO BE 1-BAG PORTLAND MIX. 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 8.43.5 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 VILLAGE OF CALEDONIA. STRUCTURE SHOP DRAWINGS SHALL BE SUBMITTED TO PINNACLE ENGINEERING GROUP FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURING AND INSTALLATION.
MANHOLE FRAMES AND COVERS - NEENAH R-1661 FRAME W/ SOLID GASKETED LID AND 2 CONCEALED PICK HOLES. CONFORM TO STANDARD SPECIFICATIONS CH. 3.5.0
- WATER MAIN AND SANITARY SEWER SHALL BE INSULATED WHEREVER THE DEPTH OF COVER IS LESS THAN 6 FEET. INSULATION AND PLACING OF INSULATION SHALL CONFORM TO CHAPTER 4.17.0 "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 182.0715(2R) OF THE STATUTES. TRACER WIRE: COPPERHEAD TRACER WIRE #10 SOLID CCS SUPERFLEX (BLUE). WIRE CONNECTORS SHALL BE SNAKEBITE (BLUE) MADE BY COPPERHEAD INDUSTRIES, LLC. 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.

SHEET C-10

SHEET C-11

SHEET C-11

ZILBER C251
251,872 SF
FFE = 764.00

ZILBER INDUSTRIAL 2
#4321 CAROL ROAD
233,249 SF
FFE = 764.00

OUTLOT 3
NWL = 756.00

OUTLOT 1
NWL = 750.00

OUTLOT 4
NWL = 745.00

CLAY

CLAY

BAXTER COURT (FUTURE)

BAXTER COURT (EXISTING)

CAROL ROAD

C.T.H. 101
NORTHWESTERN AVE

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

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CHICAGO | MILWAUKEE | NATIONWIDE

PINNACLE ENGINEERING GROUP

ZILBER C251
CALEDONIA, WI

UTILITY PLAN (OVERVIEW)

REVISIONS		DATE	BY
1	VILLAGE BSO SUBMITTAL	02/09/26	JL
2	VILLAGE BSO RESUBMITTAL	03/27/26	JL
3	ISSUED FOR BID	03/30/26	JL
4	VILLAGE COMMENTS / BID SET	04/22/26	JL
5	ISSUED FOR CONSTRUCTION	05/19/26	JL

REG. JOB NO. 1912-40-WT
JOB NO. 1912-40-WT
PLAN DATE: 02/09/26
SCALE: 1" = 60'

SHEET C-9

UTILITY PLAN (OVERVIEW)