

EXISTING	PROPOSED

SITE NOTES

- ALL PAVING, CONCRETE CURB, GUTTER AND SIDEWALK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN PER THE DETAIL SHEET(S) AND STATE/LOCAL JURISDICTION REQUIREMENTS.
- ACCESSIBLE PARKING AND ACCESSIBLE ROUTES SHALL BE PROVIDED PER CURRENT ADA STANDARDS AND LOCAL/STATE REQUIREMENTS.
- ALL CURB DIMENSIONS SHOWN ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF WALL UNLESS OTHERWISE NOTED.
- BITUMINOUS IMPREGNATED FIBER BOARD TO BE PLACED AT FULL DEPTH OF CONCRETE ADJACENT TO EXISTING STRUCTURES AND BEHIND CURB ADJACENT TO DRIVEWAYS AND SIDEWALKS.
- BITUMINOUS PARKING STALLS AND DRIVE ISLES TO BE HEAVY DUTY BITUMINOUS
- SEE ELECTRICAL PLAN FOR SITE LIGHTING
- SEE ARCHITECTURE FOR SITE USE TABULATION.

SITE DATA

AREAS:	SQUARE FEET	ACRES
LOT 1, BLOCK 1	= 5,144 +/-	0.12 +/-
LOT 2, BLOCK 1	= 40,920 +/-	0.94 +/-
LOT 3, BLOCK 1	= 111,532 +/-	2.56 +/-
LOT 4, BLOCK 1	= 150,397 +/-	3.45 +/-
LOT 1, BLOCK 2	= 63,359 +/-	1.45 +/-
LOT 2, BLOCK 2	= 58,306 +/-	1.34 +/-
OUTLOT A	= 112,896 +/-	2.59 +/-
OUTLOT B	= 66,695 +/-	1.53 +/-
OUTLOT C	= 69,070 +/-	1.59 +/-
RIGHT OF WAY DEDICATION AREA	= 56,736 +/-	1.30 +/-
CREEK AREA	= 23,305 +/-	0.53 +/-
NET PROPERTY AREA	= 655,014 +/-	15.04 +/-
TOTAL PROPERTY AREA	= 735,055 +/-	16.87 +/-

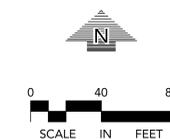
NOTE:

- SEE ARCHITECTURAL SITE PLANS FOR ZONING AND PARKING INFORMATION.

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



CALL BEFORE YOU DIG
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

CADD QUALIFICATION

CADD files generated by the Consultant for this project are the property of the Consultant and shall not be used for any other project without the written approval of the Consultant. The Consultant's approval, either oral or written, shall not constitute a warranty or representation of any kind, and the Consultant shall not be held responsible for any errors or omissions in the CADD files.

SUBMITTALS/REVISIONS

12/21/2023 PUD AMENDMENT

THIS DRAWING SET IS PRELIMINARY AND NOT TO BE USED FOR CONSTRUCTION PURPOSES

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Michael J. St. Martin PE 24440
Date 12-21-23

QUALITY CONTROL

Projects Project No. 20503A
Project Lead MUS
Drawn By NWC
Checked By MUS
Review Date 12-21-23

SHEET INDEX

C1-1A-D EX. CONDITIONS PLAN
C1-2A-D DEMOLITION PLAN
C2-1A-D SITE PLAN
C3-1A-D GRADING PLAN
C3-2A-D SWPPP PLAN
C-3 SWPPP NOTES
C4-1A-D SANI. AND WATERMAIN
C4-2A-D STORM SEWER
C8-1-C8-3 DETAIL SHEET

EXISTING	PROPOSED

GRADING, DRAINAGE & EROSION CONTROL NOTES

- SPOT ELEVATIONS REPRESENT FINISHED SURFACE GRADES, GUTTER/FLOW LINE, FACE OF BUILDING, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE SUMPED 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL BE SUMPED 0.16 FEET. RIM ELEVATIONS SHOWN ON PLANS DO NOT REFLECT SUMPED ELEVATIONS.
- ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE MINIMUM OF 4 INCHES OF TOP SOIL AND SEED/MULCH OR SOD. THESE AREAS SHALL BE WATERED/MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION IS ESTABLISHED.
- FOR SITE RETAINING WALLS "TW" EQUALS SURFACE GRADE AT TOP FACE OF WALL (NOT TOP OF WALL), "GW" EQUALS SURFACE GRADE AT WALL GRADE TRANSITION, AND "BW" EQUALS SURFACE GRADE AT BOTTOM FACE OF WALL (NOT BOTTOM OF BURIED WALL COURSES).
- STREETS MUST BE CLEANED AND SWEEP WHENEVER TRACKING OF SEDIMENTS OCCURS AND BEFORE SITES ARE LEFT IDLE FOR WEEKENDS AND HOLIDAYS. A REGULAR SWEEPING SCHEDULE MUST BE ESTABLISHED.
- DUST MUST BE ADEQUATELY CONTROLLED.
- SEE SWPPP FOR ADDITIONAL EROSION CONTROL NOTES AND REQUIREMENTS.
- SEE UTILITY PLANS FOR WATER, STORM AND SANITARY SEWER INFORMATION.
- SEE SITE PLAN FOR CURB AND BITUMINOUS TAPER LOCATIONS.
- SEE LANDSCAPE PLAN FOR FINAL SITE STABILIZATION.
- PLANS ARE SHOWN PRIOR TO CONSTRUCTION AND COMPLETION OF BUILDING A - CHORUS APARTMENTS

CADD QUALIFICATION

CADD files generated by the Consultant for this project are prepared by the Consultant professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for reproduction, for distribution, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD files for information and reference only. All intellectual or proprietary matters, additions, or deletions to these CADD files shall be made at the risk of the party making such requests, additions or deletions and the user shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTALS/REVISIONS

12/21/2023 PUD AMENDMENT

THIS DRAWING SET IS PRELIMINARY AND NOT TO BE USED FOR CONSTRUCTION PURPOSES

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Michael J. St. Martin PE
License No. 24440
Date 12-21-23

QUALITY CONTROL

Loucks Project No. 20503A
Project Lead MJS
Drawn By NWC
Checked By MJS
Review Date 12-21-23

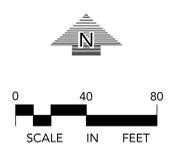
SHEET INDEX

C1-1A-D	EX. CONDITIONS PLAN
C1-2A-D	DEMOLITION PLAN
C2-1A-D	SITE PLAN
C3-1A-D	GRADING PLAN
C3-2A-D	SWPPP PLAN
C3-3	SWPPP NOTES
C4-1A-D	SANIT. AND WATERMAIN
C4-2A-D	STORM SEWER
C8-1-C8-3	DETAIL SHEET

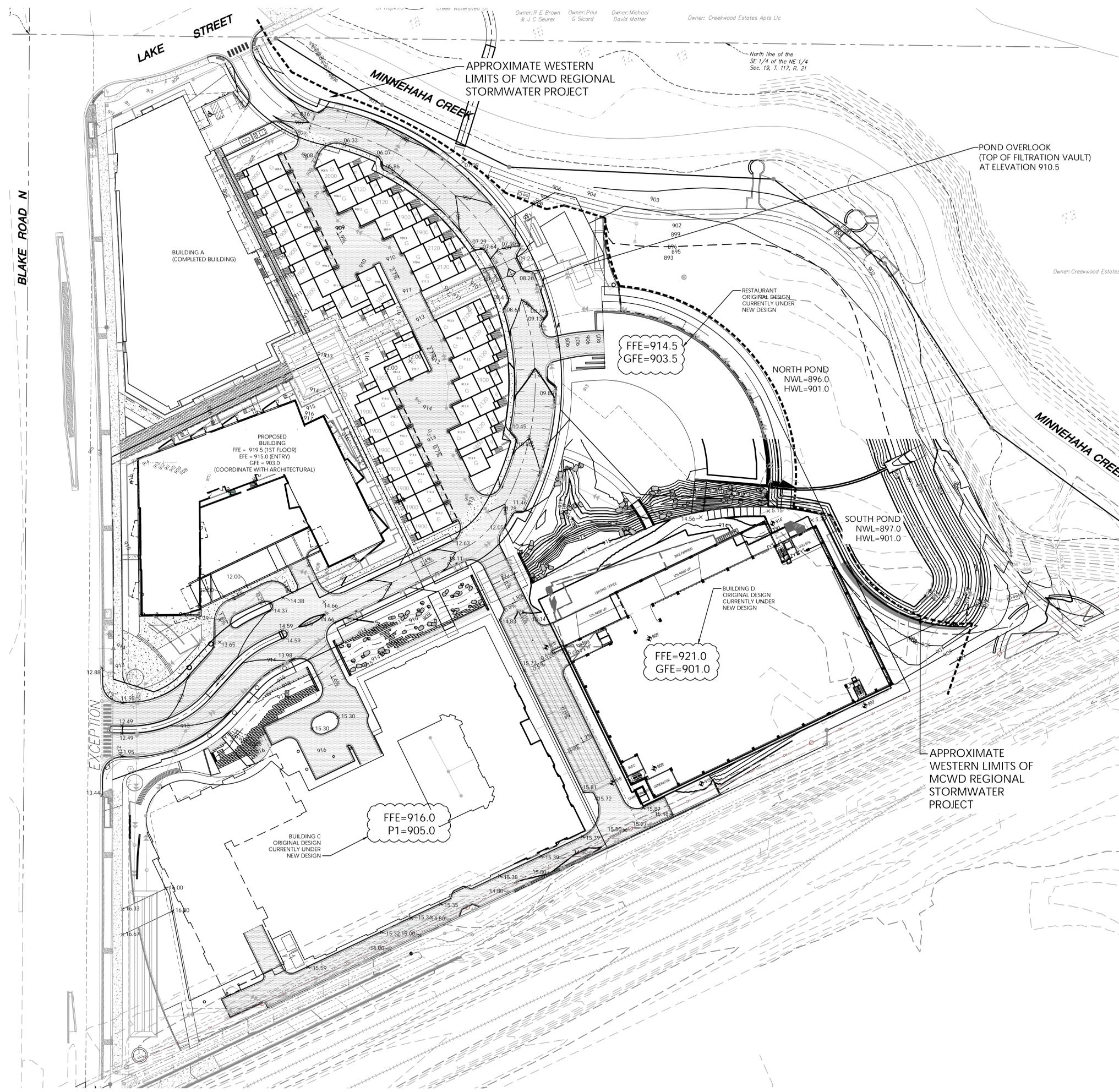
WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



CALL BEFORE YOU DIG
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166



Owner: R. E. Brown & J. C. Seurer
Owner: Paul G. Sicard
Owner: Michael David Matter
Owner: Creekwood Estates Apts Llc

North line of the SE 1/4 of the NE 1/4 Sec. 19, T. 117, R. 21

APPROXIMATE WESTERN LIMITS OF MCWD REGIONAL STORMWATER PROJECT

POND OVERLOOK (TOP OF FILTRATION VAULT) AT ELEVATION 910.5

FFE=914.5
GFE=903.5

NORTH POND
NWL=896.0
HWL=901.0

SOUTH POND
NWL=897.0
HWL=901.0

FFE=921.0
GFE=901.0

APPROXIMATE WESTERN LIMITS OF MCWD REGIONAL STORMWATER PROJECT

FFE=916.0
P1=905.0

BUILDING A (COMPLETED BUILDING)

PROPOSED BUILDING
FFE = 919.5 (1ST FLOOR)
EFE = 915.0 (ENTRY)
GFE = 903.0
(COORDINATE WITH ARCHITECTURAL)

RESTAURANT ORIGINAL DESIGN CURRENTLY UNDER NEW DESIGN

BUILDING D ORIGINAL DESIGN CURRENTLY UNDER NEW DESIGN

BUILDING C ORIGINAL DESIGN CURRENTLY UNDER NEW DESIGN

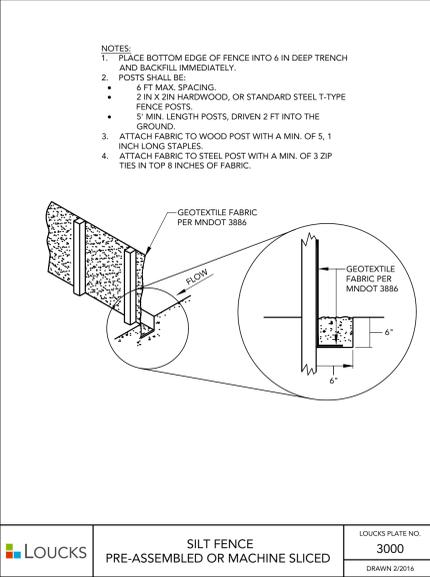
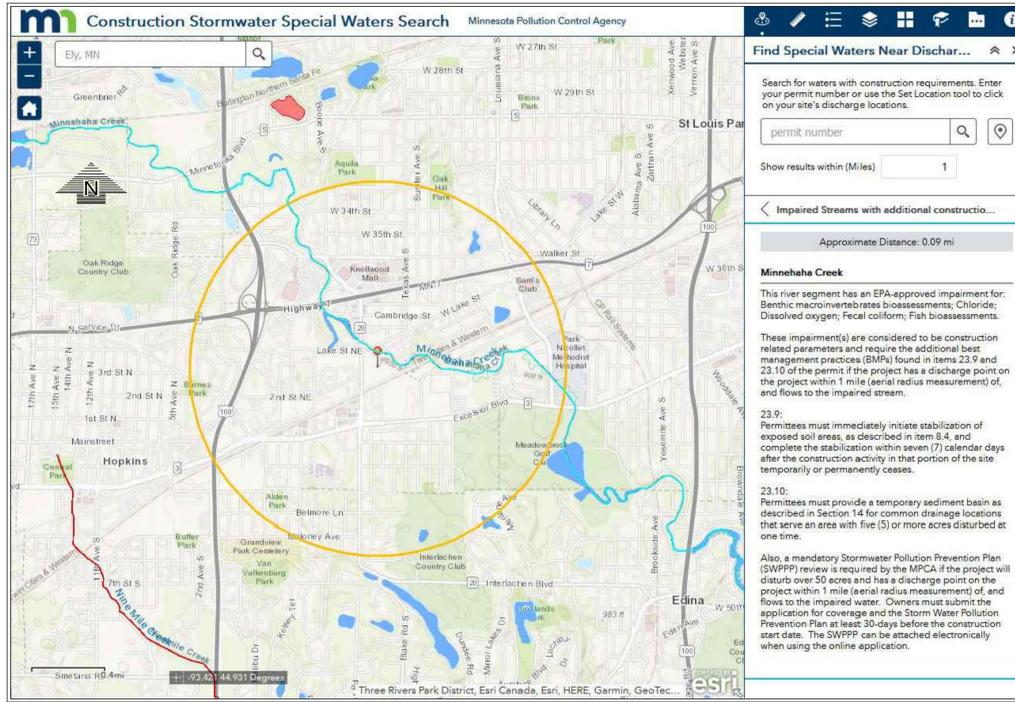
Owner: Creekwood Estates

SWPPP NOTES

- THE NATURE OF THIS PROJECT WILL CONSIST OF CONSTRUCTING ONE RESIDENTIAL BUILDING, ASSOCIATED SURFACE PAVEMENTS, STORMWATER MANAGEMENT SYSTEMS AND UTILITIES.
- THE PROJECT INCLUDES A PART OF PRIVATE DEVELOPMENT FOR THE ALATUS 325 BLAKE ROAD MIXED USE DEVELOPMENT. CONCURRENT WORK ON THE PUBLIC REALM IMPROVEMENTS FOR THE MCWD 325 BLAKE REGIONAL STORMWATER WITH ADDITIONAL SWPPP. INTENDED SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES ARE AS FOLLOWS:
 FALL 2022
 a. INSTALL VEHICLE TRACKING BMP
 b. INSTALL SILT FENCE AROUND SITE
 c. INSPECT AND CLEAN EXISTING TEMPORARY SEDIMENTATION OUTLET
 d. CLEAR AND GRUB SITE
 e. STRIP AND STOCKPILE TOPSOIL
 f. REMOVE PAVEMENTS AND UTILITIES
 g. RELOCATE OR EXPORT EXISTING STOCKPILES OF CRUSHED CONCRETE AND BITUMINOUS
 h. REMOVE SEDIMENT FROM TEMPORARY BASIN, ENSURE INFILTRATION VOLUME OF 3,793 CF
 i. INSTALL SECONDARY SILT FENCE AND BIOWALLS AROUND PILES AND STORMWATER
 j. ROUGH GRADE SITE
 k. IMPORT CLEAN FILL AS NEEDED FOR REPLACEMENT AND BALANCE
 l. INSTALL TEMPORARY STORM PIPE TO TEMPORARY SEDIMENTATION BASIN
 m. INSTALL UTILITIES
 n. INSTALL BUILDING FOUNDATIONS
 SPRING 2023
 o. INSTALL UNDERGROUND STORMWATER SYSTEMS (KEEP OFF LINE UNTIL SITE ESTABLISHED)
 p. INSTALL TEMPORARY OVERFLOW SWALE FROM UNDERGROUND SYSTEM. CONNECT TO TRUNK SEWER THAT IS ROUTED TO REGIONAL POND WHEN COMPLETE
 q. ROOF GOES ON BUILDING
 r. INSTALL CURB & GUTTER
 s. FINAL GRADE SITE
 t. INSTALL PAVEMENTS AND SIDEWALKS
 u. INSTALL LANDSCAPING
 v. REMOVE ACCUMULATED SEDIMENT FROM STORMWATER SYSTEMS WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE SILT FENCE AND RESTORE ANY AREAS DISTURBED BY THE REMOVAL
- SITE DATA:
 AREA OF DISTURBANCE: 1.5 AC
 PRE-CONSTRUCTION IMPERVIOUS AREA: 0.80 AC
 POST-CONSTRUCTION IMPERVIOUS AREA: 1.045 AC
- GENERAL SOIL TYPE: SEE GEOTECHNICAL EVALUATION REPORT
- THE LOCATION OF AREAS NOT TO BE DISTURBED MUST BE IDENTIFIED WITH FLAGS, STAKES, SIGNS, SILT FENCE, ETC. BEFORE CONSTRUCTION BEGINS.
- ALL EXPOSED SOILS MUST HAVE EROSION PROTECTION/COVER INITIATED IMMEDIATELY AND COMPLETED WITHIN SEVEN DAYS. ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN (7) OR MORE DAYS SHALL BE STABILIZED BY SEEDING OR SOILING (ONLY AVAILABLE PRIOR TO SEPTEMBER 15) OR BY MULCHING OR COVERING OR OTHER EQUIVALENT CONTROL MEASURE.
- ON SLOPES 3:1 OR GREATER MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES. SLOPE LENGTHS CAN NOT BE GREATER THAN 75 FEET.
- ALL STORM DRAINS AND INLETS MUST BE PROTECTED UNTIL ALL SOURCES OF POTENTIAL DISCHARGE ARE STABILIZED.
- TEMPORARY SOIL STOCKPILES MUST HAVE EFFECTIVE SEDIMENT CONTROL AND CAN NOT BE PLACED IN SURFACE WATERS OR STORM WATER CONVEYANCE SYSTEMS. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT AMOUNT OF SILT, CLAY, OR ORGANIC COMPOUNDS ARE EXEMPT EX. CLEAN AGGREGATE STOCK PILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES. STOCKPILES MUST HAVE EROSION PROTECTION/COVER INITIATED IMMEDIATELY AND COMPLETED WITHIN SEVEN (7) DAY.
- TOPSOIL MUST BE STOCKPILED PER TEMPORARY STOCKPILE REQUIREMENTS AND SEDIMENT CONTROL MEASURES INSTALLED IMMEDIATELY. SEE PLAN FOR LOCATION.
- A WETTED PERIMETER OF THE LAST 200 LINEAR FEET OF DITCHES MUST BE STABILIZED WITHIN 24 HOURS OF CONNECTING TO A SURFACE WATER OR PROPERTY LINE.
- TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM DURING CONSTRUCTION MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM.
- SEDIMENT LADEN WATER MUST BE DISCHARGED TO A SEDIMENTATION BASIN WHENEVER POSSIBLE. IF NOT POSSIBLE, IT MUST BE TREATED WITH THE APPROPRIATE BMP'S.
- DIRECT DISCHARGE FROM BMP'S TO VEGETATED AREAS, UNLESS INFESIBLE.
- INFILTRATION/FILTRATION: FILTER MEDIA MUST NOT BE INSTALLED UNTIL THE CONTRIBUTING DRAINAGE AREA IS CONSTRUCTED AND FULLY STABILIZED. UNLESS RIGOROUS EROSION PREVENTION AND SEDIMENTATION CONTROLS (E.G., DIVERSION BERMS) ARE PROVIDED TO KEEP SEDIMENT AND RUNOFF COMPLETELY AWAY FROM THE FILTRATION AREA.
- INFILTRATION/FILTRATION AREAS TO HAVE SILT FENCE INSTALLED EARLY TO PREVENT VEHICLE TRACKING AND COMPACTION. UNDERGROUND INFILTRATION WILL NOT BE EXCAVATED UNTIL NECESSARY AND LARGE EQUIPMENT MUST BE KEPT OUT OF ANY INFILTRATION AREA. IN THE EVENT OF COMPACTION IN THESE AREAS, OVER EXCAVATION OF THREE (3) FEET MINIMUM IS REQUIRED.
- SOLID WASTE MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.
- EXTERNAL WASHING OF CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE PROPERLY CONTAINED.
- NO ENGINE DEGREASING IS ALLOWED ON SITE.
- THE OWNER WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITEE AND IS RESPONSIBLE FOR COMPLIANCE WITH ALL TERMS AND CONDITIONS OF THE PERMIT. THE OPERATOR (CONTRACTOR) WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITEE FOR SECTION 3, 4, 6-22.24 AND THE APPLICABLE REQUIREMENTS FOR CONSTRUCTION ACTIVITY IN SECTION 21 OF THE NPDES PERMIT AND IS JOINTLY RESPONSIBLE WITH THE OWNER FOR COMPLIANCE WITH THOSE PORTIONS OF THE PERMIT.
- TERMINATION OF COVERAGE-PERMITEE(S) WISHING TO TERMINATE COVERAGE MUST SUBMIT A NOTICE OF TERMINATION (NOT) TO THE MPCA. ALL PERMITEE(S) MUST SUBMIT A NOT WITHIN 30 DAYS AFTER ONE OR

- MORE OF THE FOLLOWING CONDITIONS HAVE BEEN MET:
- ALL CONDITIONS LISTED IN SECTION 13 ARE COMPLETE.
 - TRANSFER OF OWNERSHIP AS DESCRIBED IN THE PERMIT.
- INSPECTIONS
 - INITIAL INSPECTION FOLLOWING SILT FENCE INSTALLATION BY CITY REPRESENTATIVE IS REQUIRED.
 - EXPOSED SOIL AREAS: ONCE EVERY 7 DAYS AND WITHIN 24 HOURS FOLLOWING A 0.5" OVER 24 HOUR RAIN EVENT.
 - STABILIZED AREAS: ONCE EVERY 30 DAYS
 - FROZEN GROUND: AS SOON AS RUNOFF OCCURS OR PRIOR TO RESUMING CONSTRUCTION.
 - CONSTRUCTION AND MAINTENANCE RECORDS MUST BE RETAINED FOR 3 YEARS AFTER FILING OF THE NOTICE OF TERMINATION AND MUST INCLUDE: DATE AND TIME OF ACTION, NAME OF PERSON(S) CONDUCTING WORK, FINDING OF INSPECTIONS AND RECOMMENDATIONS FOR CORRECTIVE ACTION, DATE AND AMOUNT OF RAINFALL EVENTS GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD.
 - POLLUTION PREVENTION
 - BUILDING PRODUCTS THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS MUST BE UNDER COVER TO PREVENT DISCHARGE OR PROTECTED BY AN EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.
 - PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPE MATERIALS MUST BE UNDER COVER.
 - HAZARDOUS MATERIALS AND TOXIC WASTE CONTAINMENT MUST BE PROVIDED TO PREVENT VANDALISM. SOLID WASTE MUST BE STORED, COLLECTED AND DISPOSED OF IN COMPLIANCE WITH MINN. R. CH 7035.
 - PORTABLE TOILETS MUST BE POSITIONED SO THAT THEY ARE SECURE AND WILL NOT BE TIPPED OR KNOCKED OVER. SANITARY WASTE MUST BE DISPOSED OF PROPERLY IN ACCORDANCE WITH MINN. R. CH 7041.
 - DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED SHALL BE PREVENTED USING DRIP PANS OR ABSORBENTS. SUPPLIES SHALL BE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS AND THAT AN APPROPRIATE DISPOSAL METHOD MUST BE AVAILABLE FOR RECOVERED SPILLED MATERIALS.
 - MINIMUM MAINTENANCE
 - SILT FENCE TO BE REPAIRED, REPLACED, SUPPLEMENTED WHEN NONFUNCTIONAL, OR 1/3 FULL: WITHIN 24 HOURS
 - SEDIMENT BASINS DRAINED AND SEDIMENT REMOVED WHEN REACHES 1/2 STORAGE VOLUME. REMOVAL MUST BE COMPLETE WITHIN 72 HOURS OF DISCOVERY.
 - SEDIMENT REMOVED FROM SURFACE WATERS WITHIN (7)SEVEN DAYS
 - CONSTRUCTION SITE EMTS INSPECTED, TRACKED SEDIMENT REMOVED WITH 24 HOURS.
 - PROVIDE COPIES OF EROSION INSPECTION RESULTS TO CITY ENGINEER FOR ALL EVENTS GREATER THAN 1/2" IN 24 HOURS
 - THE SWPPP, INCLUDING ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION ACTIVITY BY THE PERMITEE(S) WHO HAVE OPERATIONAL CONTROL OF THE SITE.
 - OWNER MUST KEEP RECORDS OF ALL PERMITS REQUIRED FOR THE PROJECT, THE SWPPP, ALL INSPECTIONS AND MAINTENANCE, PERMANENT OPERATION AND MAINTENANCE AGREEMENTS, AND REQUIRED CALCULATIONS FOR TEMPORARY AND PERMANENT STORM WATER MANAGEMENT SYSTEMS. THESE RECORDS MUST BE RETAINED FOR THREE YEARS AFTER FILING NPDES NOTICE OF TERMINATION.
 - SWPPP MUST BE AMENDED WHEN:
 - THERE IS A CHANGE IN DESIGN, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS THAT HAS A SIGNIFICANT EFFECT ON DISCHARGE
 - INSPECTIONS INDICATE THAT THE SWPPP IS NOT EFFECTIVE AND DISCHARGE IS EXCEEDING WATER QUALITY STANDARDS.
 - THE BMP'S IN THE SWPPP ARE NOT CONTROLLING POLLUTANTS IN DISCHARGES OR IS NOT CONSISTENT WITH THE TERMS AND CONDITIONS OF THE PERMIT.
 - CONCRETE WASHOUT AREA
 - CONTRACTOR TO PROVIDE PREFABRICATED CONCRETE WASH-OUT CONTAINER WITH RAIN PROTECTION PER PLAN.
 - CONCRETE WASH-OUT TO BE IDENTIFIED WITH SIGNAGE STATING "CONCRETE WASHOUT AREA DO NOT OVERFILL"
 - CONCRETE WASHOUT WATER NEEDS TO BE PUMPED WITHIN 24 HOURS OF STANDING WATER IN WASHOUT AREA.
 - IN THE EVENT OF ENCOUNTERING A WELL OR SPRING DURING CONSTRUCTION CONTRACTOR TO CEASE CONSTRUCTION ACTIVITY AND NOTIFY ENGINEER.
 - PIPE OULETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER.
 - PERMANENT STORMWATER TREATMENT BMP'S MUST BE INSPECTED AND MAINTAINED ONCE INSTALLED.
 - FINAL STABILIZATION
 FINAL STABILIZATION REQUIRES THAT ALL SOIL DISTURBING ACTIVITIES HAVE BEEN COMPLETED AND THAT DISTURBED AREAS ARE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH 70% OF THE EXPECTED FINAL DENSITY, AND THAT ALL PERMANENT PAVEMENTS HAVE BEEN INSTALLED. ALL TEMPORARY BMP'S SHALL BE REMOVED, DITCHES STABILIZED, AND SEDIMENT SHALL BE REMOVED FROM PERMANENT CONVEYANCES AND SEDIMENTATION BASINS IN ORDER TO RETURN THE POND TO DESIGN CAPACITY. SEE LANDSCAPE PLANS FOR FINAL GROUND COVER.
 - RESPONSIBILITIES
 - THE OWNER MUST IDENTIFY A PERSON WHO WILL OVERSEE THE SWPPP IMPLEMENTATION AND THE PERSON RESPONSIBLE FOR INSPECTION AND MAINTENANCE:
 CONTACT:
 COMPANY: _____
 PHONE: _____
 - THE OWNER MUST IDENTIFY THE A PERSON WHO WILL BE RESPONSIBLE FOR LONG TERM OPERATIONS AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM:
 CONTACT:
 COMPANY: _____
 PHONE: _____
 - THE WATERSHED DISTRICT OR THE CITY MAY HAVE REQUIREMENTS FOR INSPECTIONS OR AS-BUILT DRAWINGS VERIFYING PROPER CONSTRUCTION OF THE BMP'S.

CONSTRUCTION STORMWATER SPECIAL WATERS SEARCH MAP

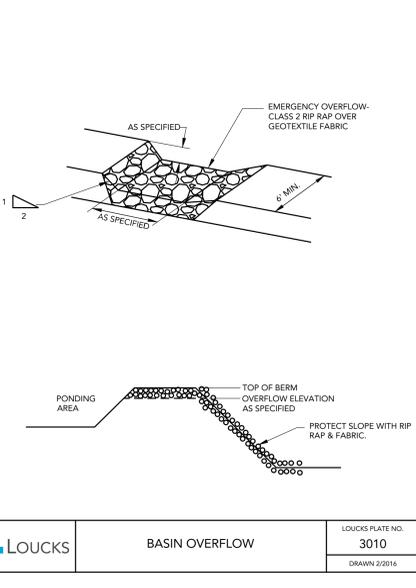
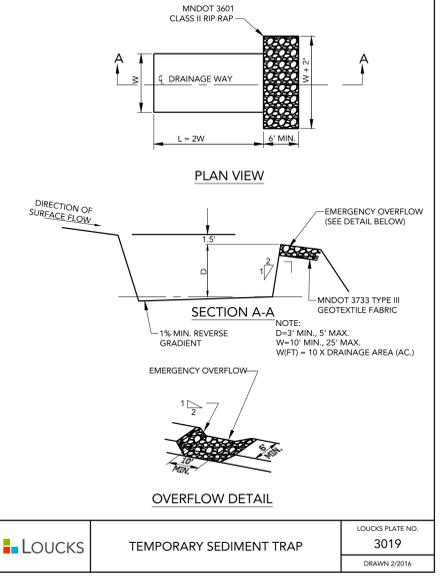
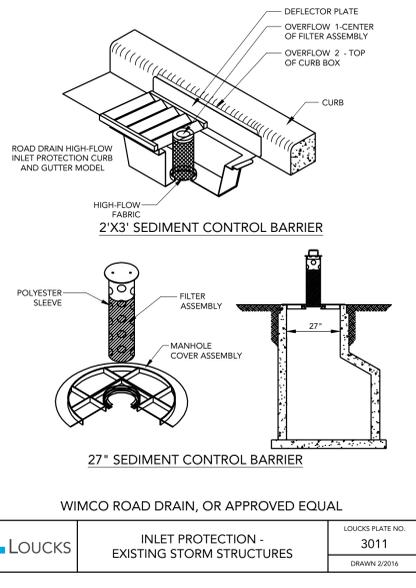
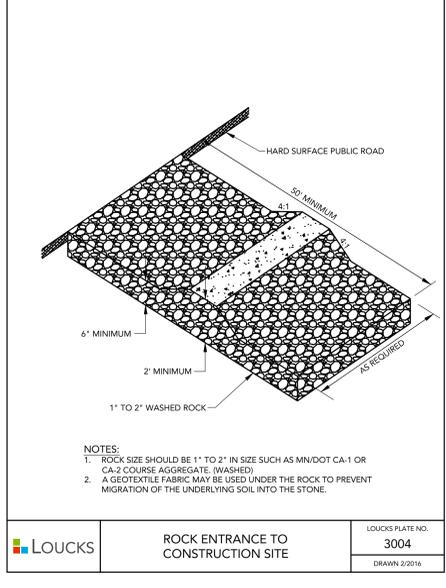
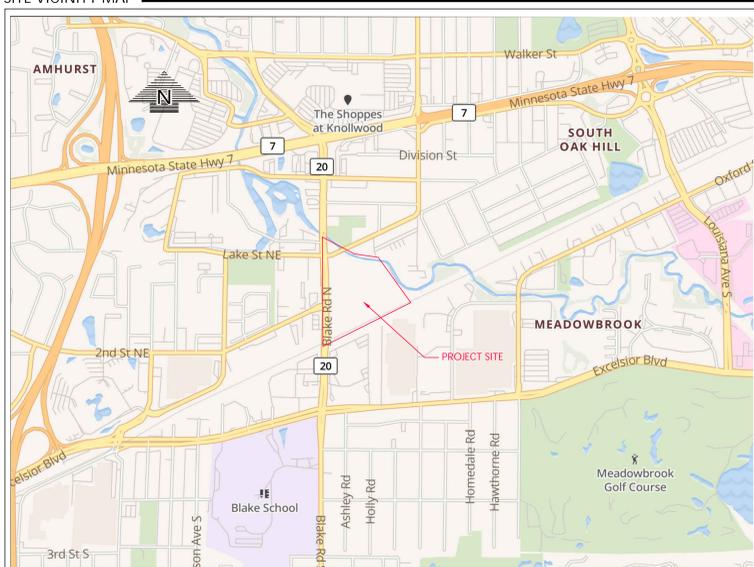


ESTIMATED QUANTITIES

DESCRIPTION	UNIT	QUANTITY
TEMPORARY ROCK CONSTRUCTION ENTRANCE	EA	2
SILT FENCE (STANDARD)	LF	6,600
INLET PROTECTION	EA	38

UNIVERSITY OF MINNESOTA
Samuel R. Trebesch
 Design of Construction SWPPP (May 31 2024)

SITE VICINITY MAP



325 BLAKE ROAD N
 HOPKINS, MN

ALATUS LLC
 80 S 8th St STE. 4155
 MINNEAPOLIS, MN 55402

LOUCKS
 PLANNING
 CIVIL ENGINEERING
 LAND SURVEYING
 LANDSCAPE ARCHITECTURE
 ENVIRONMENTAL
 7200 Hemlock Lane, Suite 300
 Maple Grove, MN 55569
 763.424.5505
 www.loucksinc.com

DF/ DAMON FABER LANDSCAPE ARCHITECTS
 310 South 4th Avenue Suite 700
 Minneapolis, MN 55415 p. 612.332.7522

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are prepared by the Consultant professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project, for other projects without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intellectual or proprietary rights, additions, or deletions to these CADD files shall be made at the risk of the party using such materials, additions, deletions and the user shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

DATE	DESCRIPTION
12/21/2023	PUD AMENDMENT

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Michael J. St. Martin - PE
 License No. 24440
 Date 12-21-23

QUALITY CONTROL

Loucks Project No. 20503A
 Project Lead: MUS
 Drawn By: MUS
 Checked By: MUS
 Review Date: 12-21-23

SHEET INDEX

NO.	DESCRIPTION
C1-1A-D	EX. CONDITIONS PLAN
C1-2A-D	DEMOLITION PLAN
C2-1A-D	SITE PLAN
C3-1A-D	GRADING PLAN
C3-2A-D	SWPPP PLAN
C3-3	SWPPP NOTES
C4-1A-D	SANIT. AND WATERMAIN
C4-2A-D	STORM SEWER
C8-1-C8-3	DETAIL SHEET

SWPPP NOTES C3-3

EXISTING	PROPOSED

UTILITY NOTES

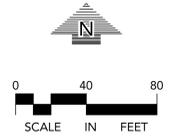
- ALL SANITARY SEWER, STORM SEWER AND WATERMAIN UTILITIES SHALL BE FURNISHED AND INSTALLED PER THE REQUIREMENTS OF THE SPECIFICATIONS, THE MINNESOTA PLUMBING CODE, THE LOCAL GOVERNING UNIT, AND THE STANDARD UTILITIES SPECIFICATION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM), 2013 EDITION.
- ALL UTILITY PIPE BEDDING SHALL BE COMPACTED SAND OR FINE GRANULAR MATERIAL. ALL COMPACTION SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CEAM SPECIFICATION AND THE GEOTECHNICAL REPORT.
- ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE PERFORMED PER THE REQUIREMENTS OF THE STATE AND LOCAL JURISDICTIONS. THE CITY DEPARTMENT OF ENGINEERING AND BUILDING INSPECTIONS DEPARTMENT AND THE CONSTRUCTION ENGINEER MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY WORK WITHIN THE PUBLIC RIGHT OF WAY, OR WORK IMPACTING PUBLIC UTILITIES.
- ALL STORM SEWER, SANITARY SEWER AND WATER SERVICES SHALL TERMINATE 5' FROM THE BUILDING FACE UNLESS OTHERWISE NOTED.
- A MINIMUM OF 18 INCHES OF VERTICAL SEPARATION AND 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FOR ALL UTILITIES UNLESS OTHERWISE NOTED.
- ALL NEW WATERMAIN AND SERVICES MUST HAVE A MINIMUM OF 7.5 FEET OF COVER. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN A MINIMUM 18" VERTICAL SEPARATION TO SANITARY OR STORM SEWER LINES. THE CONTRACTOR SHALL FIELD ADJUST WATERMAIN TO AVOID CONFLICTS WITH SANITARY SEWER, STORM SEWER, AND SERVICES AS REQUIRED. INSULATION OF WATER AND SANITARY SEWER LINES SHALL BE PROVIDED WHERE 7.5 FEET MINIMUM DEPTH CAN NOT BE ATTAINED.
- ALL FIRE HYDRANTS SHALL BE LOCATED 5 FEET BEHIND BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- PROPOSED PIPE MATERIALS:

CL 52 DIP	6" TO 8" DIAMETER
PVC SDR 35 & SCH 40	6" TO 8" DIAMETER
DUAL WALL HDPE	12" TO 15" DIAMETER
PVC SDR 35	8" TO 15" DIAMETER
- ALL PORTIONS OF THE STORM SEWER SYSTEM, INCLUDING CATCH BASINS, LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED ACCORDANCE WITH MINNESOTA RULES, PART 4715.2820
- ALL JOINTS AND CONNECTIONS IN THE STORM SEWER SYSTEM SHALL BE GASTIGHT OR WATERTIGHT (SEE MINNESOTA RULES, PART 4715.0700). APPROVED RESILIENT RUBBER JOINTS MUST BE USED TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES, CATCHBASINS, AND OTHER STRUCTURES.
- HIGH-DENSITY POLYETHYLENE (HDPE) STORM DRAINS MUST COMPLY WITH MINNESOTA RULES, PART 4715.0540.
 - PIPES 4-INCH TO 10-INCH IN SIZE MUST COMPLY WITH AASHTO M252.
 - PIPES 12-INCH TO 60-INCH IN SIZE MUST COMPLY WITH ASTM F2306.
 - ALL FITTINGS MUST COMPLY WITH ASTM D3212.
 - WATER-TIGHT JOINTS MUST BE USED AT ALL CONNECTIONS INCLUDING STRUCTURES.
- CONTRACTOR AND MANHOLE FABRICATOR SHALL SUMP (LOWER) ALL STORM SEWER CATCH BASIN CASTINGS WITHIN PAVED AREAS 0.16 FEET OR 2-INCHES BELOW THE RIM ELEVATION DEPICTED ON THE UTILITY PLAN.
- ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE ALL SIGNAGE, BARRICADES, FLASHERS AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT THE EXPRESSED AUTHORITY OF THE CITY.
- THE CITY SHALL OPERATE ALL GATE VALVES.
- CONNECTIONS TO EXISTING MANHOLES SHALL BE MADE BY CORE DRILLING THE MANHOLE AT THE PROPOSED INVERT ELEVATIONS AND INSTALLING A RUBBER BOOT. GROUT IN THE BOOT AND AN INVERT FOR THE NEW SEWER LINE.
- PIPE LENGTHS SHOWN ON THE PLAN INCLUDE THE APRON SECTION.
- WATERMAIN PIPE SHALL BE DIP CLASS 52, INSTALLED WITH 7.5 FEET OF COVER TO TOP PIPE. FITTINGS SHALL BE COMPACT TYPE. PIPE AND FITTINGS SHALL HAVE A CEMENT MORTAR LINING. CONDUCTIVITY SHALL BE PROVIDED BY WELDED STRAPS ACROSS EACH JOINT.
- TRENCH COMPACTION SHALL BE 95% STANDARD PROCTOR DENSITY IN THE AREA FROM THE PIPE ZONE TO WITHIN 3 FEET OF FINISHED GRADE AND 100% IN FINAL 3 FEET OF THE BACKFILL TO FINISH GRADE.

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



CALL BEFORE YOU DIG!
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-232-1166

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are the property of the Consultant and shall remain confidential. No part of this project shall be used for any other project without the written approval of the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intellectual or proprietary rights, additions, or deletions to these CADD files shall be made the full and sole responsibility of the Consultant. The Consultant shall not be held responsible for any errors or omissions in the CADD files or any liability resulting therefrom.

SUBMITTAL/REVISIONS

12/21/2023 PUD AMENDMENT

THIS DRAWING IS PRELIMINARY AND NOT TO BE USED FOR CONSTRUCTION PURPOSES

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Michael J. St. Martin PE 24440
License No. 12-21-23
Date

QUALITY CONTROL

Locks Project No. 20503A
Project Lead MUS
Drawn By NWC
Checked By MUS
Review Date 12-21-23

SHEET INDEX

C1-1A-D	EX. CONDITIONS PLAN
C1-2A-D	DEMOLITION PLAN
C2-1A-D	SITE PLAN
C3-1A-D	GRADING PLAN
C3-2A-D	SWPPP PLAN
C3-3	SWPPP NOTES
C4-1A-D	SANL. AND WATERMAIN
C4-2A-D	STORM SEWER
C8-1-C8-3	DETAIL SHEET



Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

325 BLAKE ROAD N
HOPKINS, MN

ALATUS LLC
80 S 8th ST, STE. 4155
MINNEAPOLIS, MN 55402

LOUCKS
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

7200 Homlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksinc.com

DF/DAMON FARMER
LANDSCAPE ARCHITECTS
310 South 4th Avenue Suite 7000
Minneapolis, MN 55415 p. 612.332.7822

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are prepared by the Consultant professional services for use only with respect to this project. These CADD files shall not be used for any other project. The Consultant's approval or disapproval of the project for others without written approval by the Consultant, with the Consultant's approval, others may be permitted to obtain copies of the CADD drawings files for information and reference only. All drawings and information contained herein are the property of the Consultant and shall remain the property of the Consultant. The Consultant shall not be held responsible for any errors, omissions, additions, or deletions to these CADD files that may be made after the date of the project closing and/or thereafter. The Consultant shall not be held responsible for any errors, omissions, additions, or deletions to these CADD files that may be made after the date of the project closing and/or thereafter.

SUBMITTALS/REVISIONS

12/21/2023 PUD AMENDMENT

THIS DRAWING SET IS PRELIMINARY AND NOT TO BE USED FOR CONSTRUCTION PURPOSES

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Michael J. St. Martin PE 24440
Date 12-21-23

QUALITY CONTROL

Loucks Project No. 20503A
Project Lead MUS
Drawn By NWC
Checked By MUS
Review Date 12-21-23

SHEET INDEX

C1-1A-D	EX. CONDITIONS PLAN
C1-2A-D	DEMOLITION PLAN
C2-1A-D	SITE PLAN
C3-1A-D	GRADING PLAN
C3-2A-D	SWPPP PLAN
C3-3	SWPPP NOTES
C4-1A-D	SANIT. AND WATERMAIN
C4-2A-D	STORM SEWER
C8-1-C8-3	DETAIL SHEET

LEGEND

EXISTING	PROPOSED

UTILITY NOTES

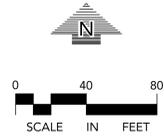
- ALL SANITARY SEWER, STORM SEWER AND WATERMAIN UTILITIES SHALL BE FURNISHED AND INSTALLED PER THE REQUIREMENTS OF THE SPECIFICATIONS, THE MINNESOTA PLUMBING CODE, THE LOCAL GOVERNING UNIT, AND THE STANDARD UTILITIES SPECIFICATION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM), 2013 EDITION.
- ALL UTILITY PIPE BEDDING SHALL BE COMPACTED SAND OR FINE GRANULAR MATERIAL. ALL COMPACTION SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CEAM SPECIFICATION AND THE GEOTECHNICAL REPORT.
- ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE PERFORMED PER THE REQUIREMENTS OF THE STATE AND LOCAL JURISDICTIONS. THE CITY DEPARTMENT OF ENGINEERING AND BUILDING INSPECTIONS DEPARTMENT AND THE CONSTRUCTION ENGINEER MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY WORK WITHIN THE PUBLIC RIGHT OF WAY, OR WORK IMPACTING PUBLIC UTILITIES.
- ALL STORM SEWER, SANITARY SEWER AND WATER SERVICES SHALL TERMINATE 5' FROM THE BUILDING FACE UNLESS OTHERWISE NOTED.
- A MINIMUM OF 18 INCHES OF VERTICAL SEPARATION AND 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FOR ALL UTILITIES UNLESS OTHERWISE NOTED.
- ALL NEW WATERMAIN AND SERVICES MUST HAVE A MINIMUM OF 7.5 FEET OF COVER. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN A MINIMUM 18" VERTICAL SEPARATION TO SANITARY OR STORM SEWER LINES. THE CONTRACTOR SHALL FIELD ADJUST WATERMAIN TO AVOID CONFLICTS WITH SANITARY SEWER, STORM SEWER, AND SERVICES AS REQUIRED. INSULATION OF WATER AND SANITARY SEWER LINES SHALL BE PROVIDED WHERE 7.5 FEET MINIMUM DEPTH CAN NOT BE ATTAINED.
- ALL FIRE HYDRANTS SHALL BE LOCATED 5 FEET BEHIND BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- PROPOSED PIPE MATERIALS:

SANITARY SEWER	CL 52 DIP	6" TO 8" DIAMETER
SANITARY SEWER	PVC SDR 35 & SCH 40	6" TO 8" DIAMETER
STORM SEWER	DUAL WALL HDPE	12" TO 15" DIAMETER
STORM SEWER	PVC SDR 35	8" TO 15" DIAMETER
- ALL PORTIONS OF THE STORM SEWER SYSTEM, INCLUDING CATCH BASINS, LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED ACCORDANCE WITH MINNESOTA RULES, PART 4715.2820
- ALL JOINTS AND CONNECTIONS IN THE STORM SEWER SYSTEM SHALL BE GASTIGHT OR WATERTIGHT (SEE MINNESOTA RULES, PART 4715.0700). APPROVED RESILIENT RUBBER JOINTS MUST BE USED TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES, CATCHBASINS, AND OTHER STRUCTURES.
- HIGH-DENSITY POLYETHYLENE (HDPE) STORM DRAINS MUST COMPLY WITH MINNESOTA RULES, PART 4715.0540.
 - PIPES 4-INCH TO 10-INCH IN SIZE MUST COMPLY WITH AASHTO M252.
 - PIPES 12-INCH TO 60-INCH IN SIZE MUST COMPLY WITH ASTM F2306.
 - ALL FITTINGS MUST COMPLY WITH ASTM D3212.
 - WATER-TIGHT JOINTS MUST BE USED AT ALL CONNECTIONS INCLUDING STRUCTURES.
- CONTRACTOR AND MANHOLE FABRICATOR SHALL SUMP (LOWER) ALL STORM SEWER CATCH BASIN CASTINGS WITHIN PAVED AREAS 0.16 FEET OR 2-INCHES BELOW THE RIM ELEVATION DEPICTED ON THE UTILITY PLAN.
- ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE ALL SIGNAGE, BARRICADES, FLASHERS AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT THE EXPRESSED AUTHORITY OF THE CITY.
- THE CITY SHALL OPERATE ALL GATE VALVES.
- CONNECTIONS TO EXISTING MANHOLES SHALL BE MADE BY CORE DRILLING THE MANHOLE AT THE PROPOSED INVERT ELEVATIONS AND INSTALLING A RUBBER BOOT. GROUT IN THE BOOT AND AN INVERT FOR THE NEW SEWER LINE.
- PIPE LENGTHS SHOWN ON THE PLAN INCLUDE THE APRON SECTION.
- WATERMAIN PIPE SHALL BE DIP CLASS 52, INSTALLED WITH 7.5 FEET OF COVER TO TOP PIPE. FITTINGS SHALL BE COMPACT TYPE. PIPE AND FITTINGS SHALL HAVE A CEMENT MORTAR LINING. CONDUCTIVITY SHALL BE PROVIDED BY WELDED STRAPS ACROSS EACH JOINT.
- TRENCH COMPACTION SHALL BE 95% STANDARD PROCTOR DENSITY IN THE AREA FROM THE PIPE ZONE TO WITHIN 3 FEET OF FINISHED GRADE AND 100% IN FINAL 3 FEET OF THE BACKFILL TO FINISH GRADE.

WARNING:

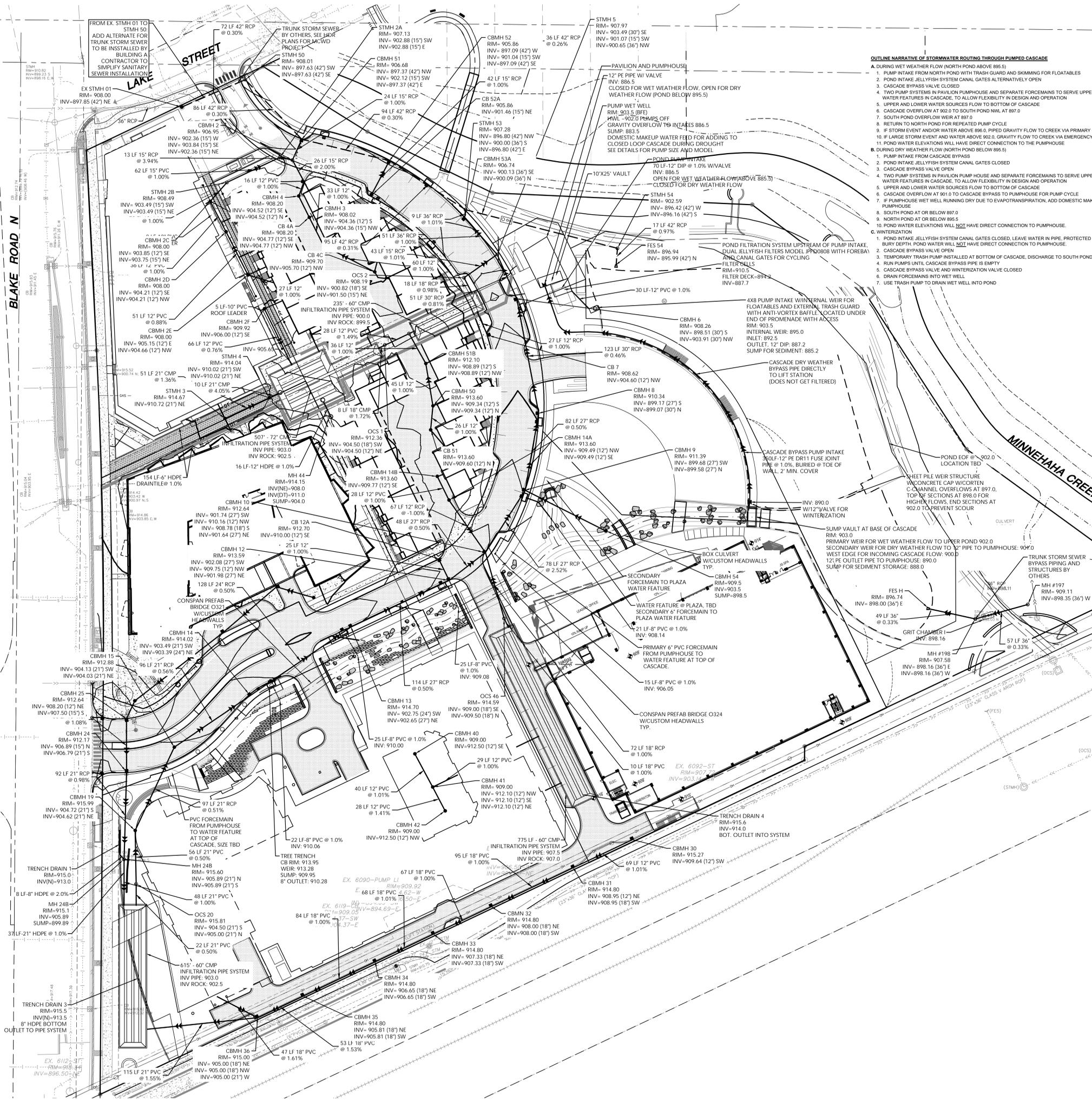
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITIES COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

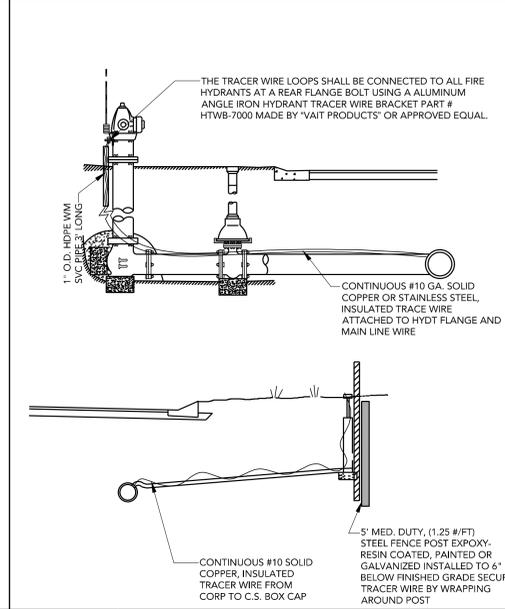
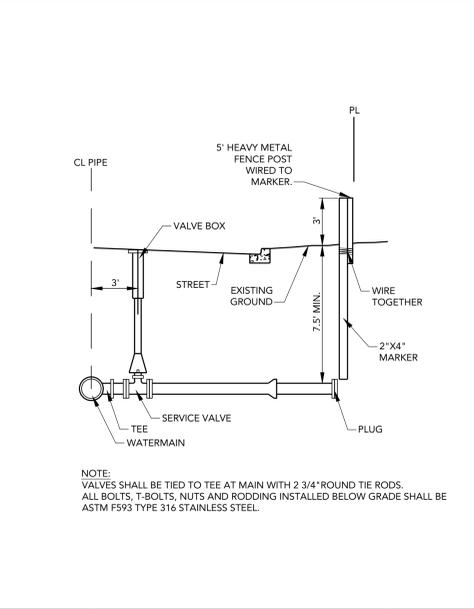
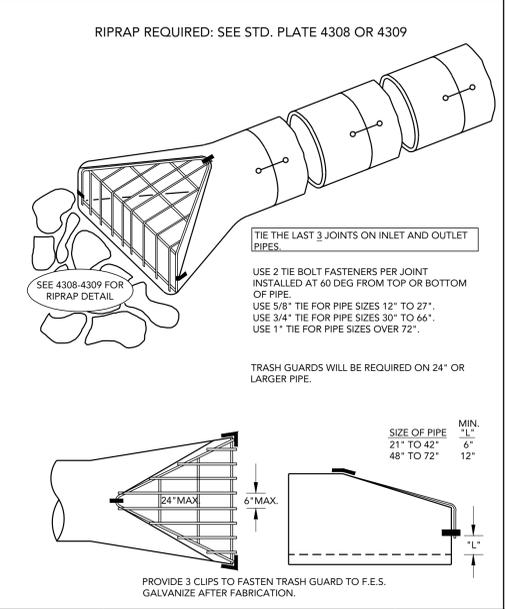
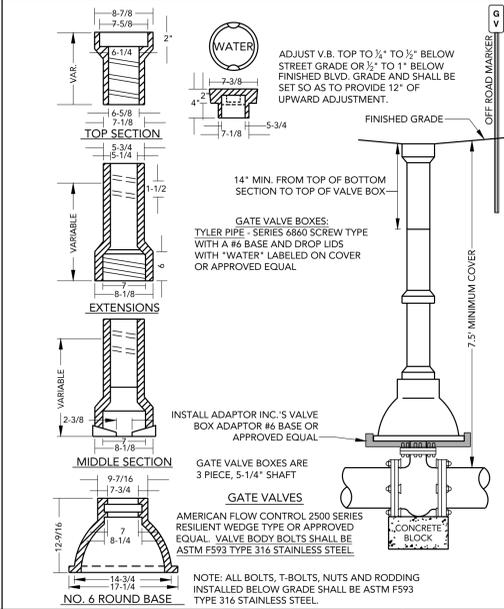
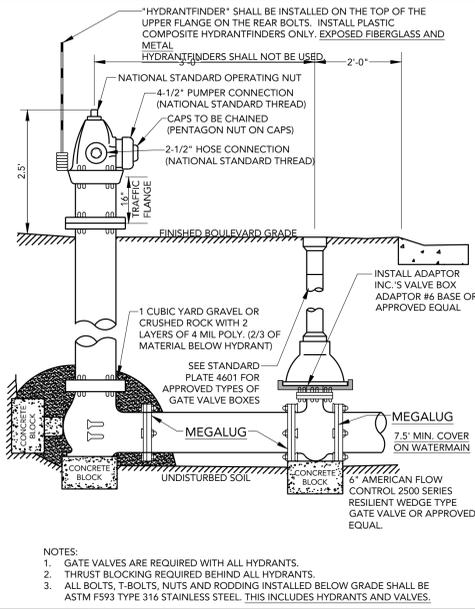


OUTLINE NARRATIVE OF STORMWATER ROUTING THROUGH PUMPED CASCADE

- DURING WET WEATHER FLOW (NORTH POND ABOVE 895.5)
 - PUMP INTAKE FROM NORTH POND WITH TRASH GUARD AND SKIMMING FOR FLOATABLES
 - POND INTAKE JELLYFISH SYSTEM CANAL GATES ALTERNATIVELY OPEN
 - CASCADE BYPASS VALVE CLOSED
 - TWO PUMP SYSTEMS IN PAVILION PUMPHOUSE AND SEPARATE FORCEMAINS TO SERVE UPPER AND LOWER WATER FEATURES IN CASCADE, TO ALLOW FLEXIBILITY IN DESIGN AND OPERATION
 - UPPER AND LOWER WATER SOURCES FLOW TO BOTTOM OF CASCADE
 - CASCADE OVERFLOW AT 902.0 TO SOUTH POND NWL AT 897.0
 - SOUTH POND OVERFLOW WEIR AT 897.0
 - RETURN TO NORTH POND FOR REPEATED PUMP CYCLE
 - IF STORM EVENT AND/OR WATER ABOVE 896.0, PIPED GRAVITY FLOW TO CREEK VIA PRIMARY OUTLET
 - IF LARGE STORM EVENT AND WATER ABOVE 902.0, CASCADE FLOW TO CREEK VIA EMERGENCY OVERFLOW PIPE
 - POND WATER ELEVATIONS WILL HAVE DIRECT CONNECTION TO THE PUMPHOUSE
- DURING DRY WEATHER FLOW (NORTH POND BELOW 895.5)
 - PUMP INTAKE FROM CASCADE BYPASS
 - POND INTAKE JELLYFISH SYSTEM CANAL GATES CLOSED
 - CASCADE BYPASS VALVE OPEN
 - TWO PUMP SYSTEMS IN PAVILION PUMPHOUSE AND SEPARATE FORCEMAINS TO SERVE UPPER AND LOWER WATER FEATURES IN CASCADE, TO ALLOW FLEXIBILITY IN DESIGN AND OPERATION
 - UPPER AND LOWER WATER SOURCES FLOW TO BOTTOM OF CASCADE
 - CASCADE OVERFLOW AT 901.0 TO CASCADE BYPASS TO PUMPHOUSE FOR PUMP CYCLE
 - IF PUMPHOUSE WELL RUNNING DRY DUE TO EVAPOTRANSPIRATION, ADD DOMESTIC MAKEUP WATER IN PUMPHOUSE
 - SOUTH POND AT OR BELOW 897.0
 - NORTH POND AT OR BELOW 895.5
 - POND WATER ELEVATIONS WILL NOT HAVE DIRECT CONNECTION TO PUMPHOUSE.
- WINTERIZATION
 - POND INTAKE JELLYFISH SYSTEM CANAL GATES CLOSED. LEAVE WATER IN PIPE, PROTECTED FROM FROST BY BURY DEPTH. POND WATER WILL NOT HAVE DIRECT CONNECTION TO PUMPHOUSE.
 - UPPER AND LOWER WATER SOURCES FLOW TO BOTTOM OF CASCADE
 - TEMPORARY TRASH PUMP INSTALLED AT BOTTOM OF CASCADE. DISCHARGE TO SOUTH POND
 - RUN PUMPS UNTIL CASCADE BYPASS PIPE IS EMPTY
 - CASCADE BYPASS VALVE AND WINTERIZATION VALVE CLOSED
 - DRAIN FORCEMAINS INTO WET WELL
 - USE TRASH PUMP TO DRAIN WET WELL INTO POND



Revised: 12/21/2023 2:41 PM W:\2020\20503A\Cadd\Drawings\Full_Site\Stormwater\Full_Site



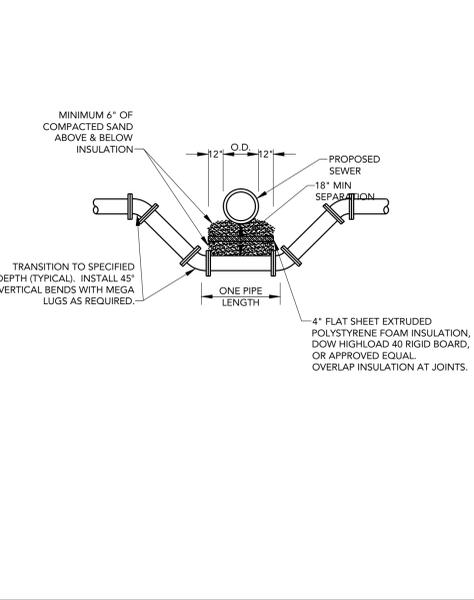
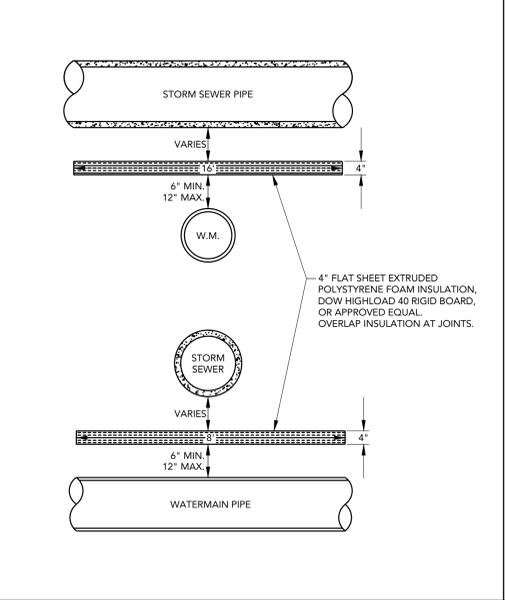
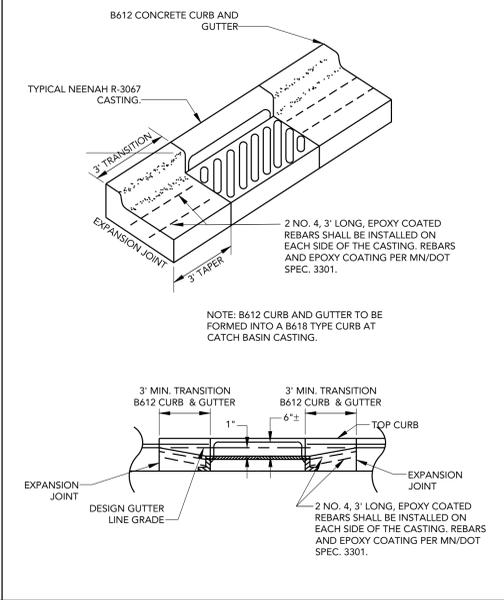
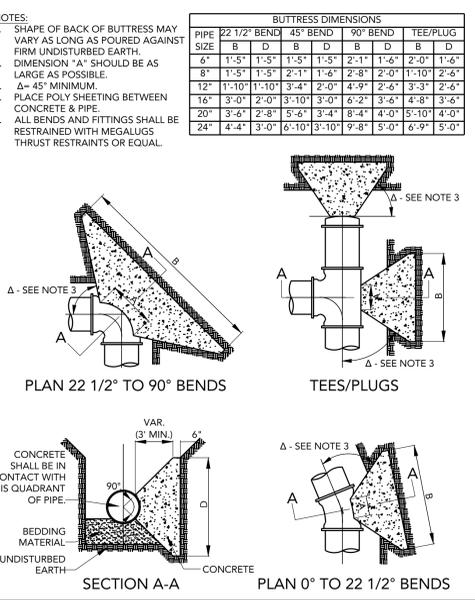
LOUCKS PLATE NO. 4600
DRAWN 12/2016

LOUCKS PLATE NO. 4601
DRAWN 2/2016

LOUCKS PLATE NO. 4306
DRAWN 2/2016

LOUCKS PLATE NO. 4604
DRAWN 2/2016

LOUCKS PLATE NO. 4605
DRAWN 2/2016



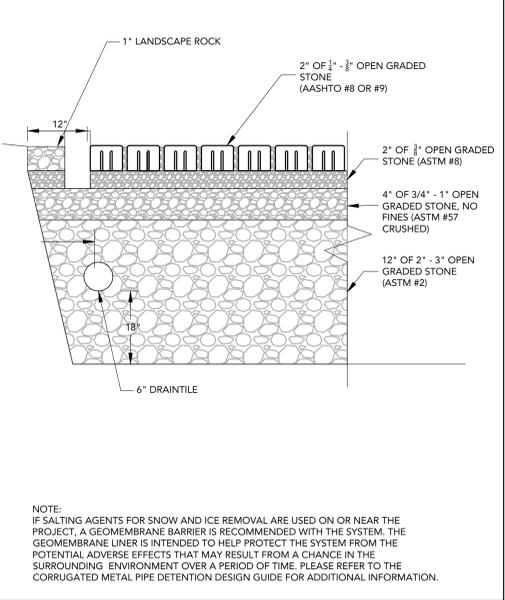
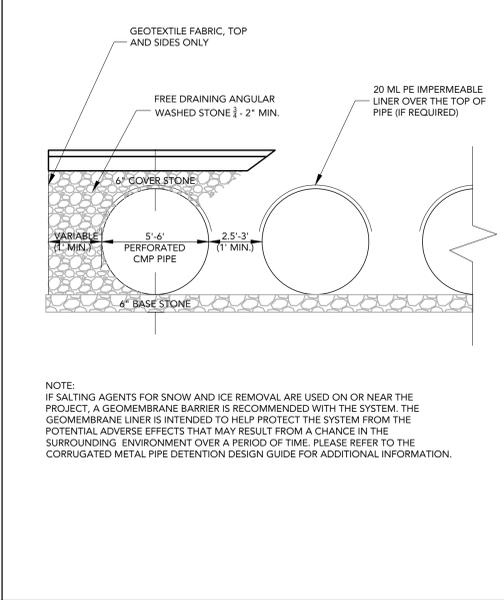
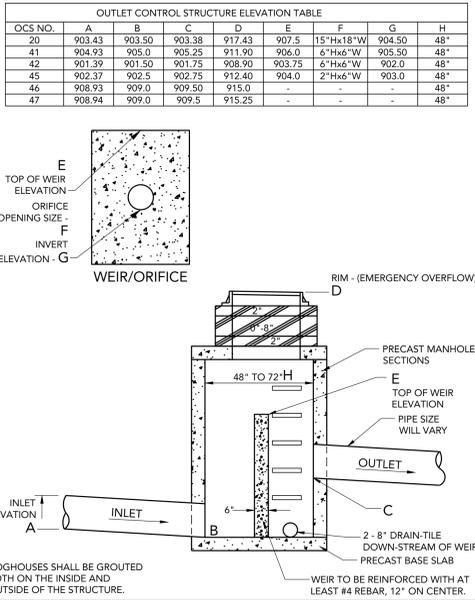
LOUCKS PLATE NO. 4606
DRAWN 2/2016

LOUCKS PLATE NO. 4312
DRAWN 12/2016

LOUCKS PLATE NO. 4608
DRAWN 2/2016

LOUCKS PLATE NO. 4611
DRAWN 2/2016

LOUCKS PLATE NO. 4615
DRAWN 2/2016



LOUCKS PLATE NO. 4316
DRAWN 2/2016

LOUCKS PLATE NO. 2002
DRAWN 12/2016

LOUCKS PLATE NO. 2002
DRAWN 12/2016

CADD QUALIFICATION
CADD files prepared by the Consultant for this project are prepared by the Consultant professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project for others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All information or information revisions, additions, or deletions to these CADD files shall be made in the field of the project and such revisions, additions or deletions shall be clearly noted, dated, and identified by the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS
12/21/2023 PUD AMENDMENT

PROFESSIONAL SIGNATURE
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Michael J. St. Martin PE
License No. 24440
Date 12-21-23

QUALITY CONTROL
Locks Project No. 20503A
Project Lead MJ5
Drawn By NWC
Checked By MJ5
Review Date 12-21-23

SHEET INDEX
C1-1A-D EX. CONDITIONS PLAN
C1-2A-D DEMOLITION PLAN
C2-1A-D SITE PLAN
C3-1A-D GRADING PLAN
C3-2A-D SWPPP PLAN
C3-3 SWPPP NOTES
C4-1A-D SANI. AND WATERMAIN
C4-2A-D STORM SEWER
C8-1-C8-3 DETAIL SHEET