

Call 48 Hours before digging: 811 or call811.com Common Ground Alliance

—— RIGHT-OF-WAY LINE — — — — — EASEMENT LINE ----- SECTION LINE TREE LINE GAS LINE POH POWER OVERHEAD SANITARY SEWER ----- STORM SEWER ----- WATERMAIN FENCE LINE —— △ — CONTROLLED ACCESS CURB & GUTTER CONCRETE SURFACE BITUMINOUS SURFACE

<u>EXISTING</u>	PROPOSED	
<del></del>		PROPERTY LINE
		SAW CUT PAVEMENT
<u>EXISTING</u>	<u>REMOVALS</u>	
		CURB & GUTTER
sto	<del></del>	STORM SEWER
		CONCRETE
		BITUMINOUS
		TREE

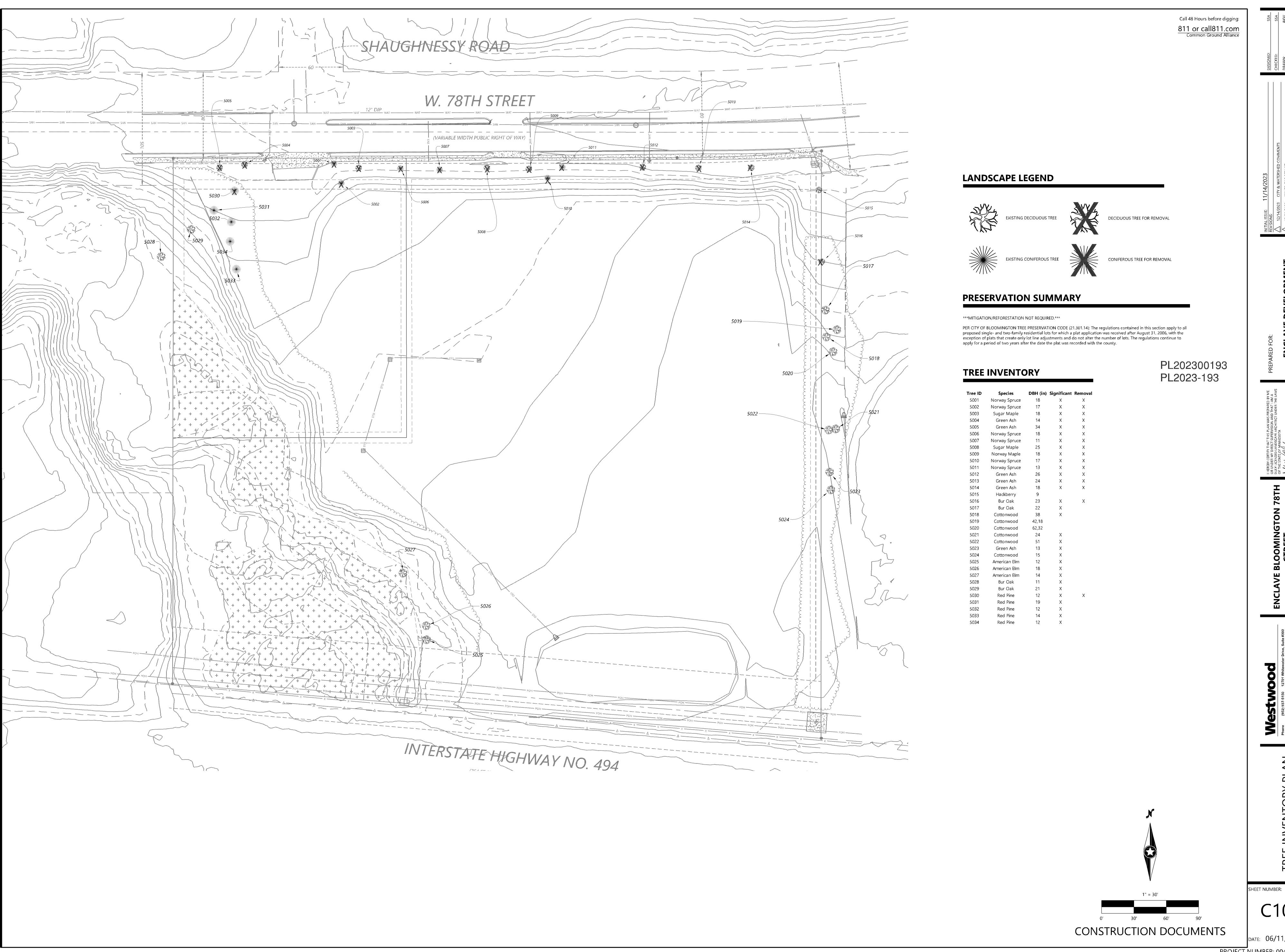
- 1. 1.BACKGROUND INFORMATION FOR THIS PROJECT PROVIDED BY WESTWOOD PROFESSIONAL SERVICES, MINNETONKA, MN, 5/11/2023.
- 2. LOCATIONS AND ELEVATIONS OF EXISTING TOPOGRAPHY AND UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO EXCAVATION/CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
- 3. CONTRACTOR SHALL COORDINATE LIMITS OF REMOVALS WITH PROPOSED IMPROVEMENTS AND FIELD VERIFY CONDITION OF EXISTING APPURTENANCES TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING OR REPLACING MISCELLANEOUS ITEMS (SUCH AS FENCES, SIGNS, IRRIGATION HEADS, ETC.) THAT MAY BE DAMAGED BY CONSTRUCTION.
- 4. CONTRACTOR SHALL PLACE ALL NECESSARY EROSION CONTROL MEASURES REQUIRED TO
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH UTILITY PROVIDERS FOR REMOVAL AND/OR RELOCATION OF EXISTING UTILITIES AFFECTED BY SITE DEVELOPMENT. ALL PERMITS, APPLICATIONS AND FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 6. SEE ALTA SURVEY PROVIDED BY WESTWOOD PROFESSIONAL SERVICES, DATED 6/1/2023, FOR
- 7. ALL CONSTRUCTION AND POST-CONSTRUCTION PARKING AND STORAGE OF EQUIPMENT AND MATERIALS MUST BE ON-SITE. USE OF PUBLIC STREETS FOR PRIVATE CONSTRUCTION PARKING, LOADING/UNLOADING, AND STORAGE WILL NOT BE ALLOWED. ADD NOTE TO SITE PLAN AND

CONSTRUCTION DOCUMENTS

Phone Fax Toll Free

SHEET NUMBER: C100

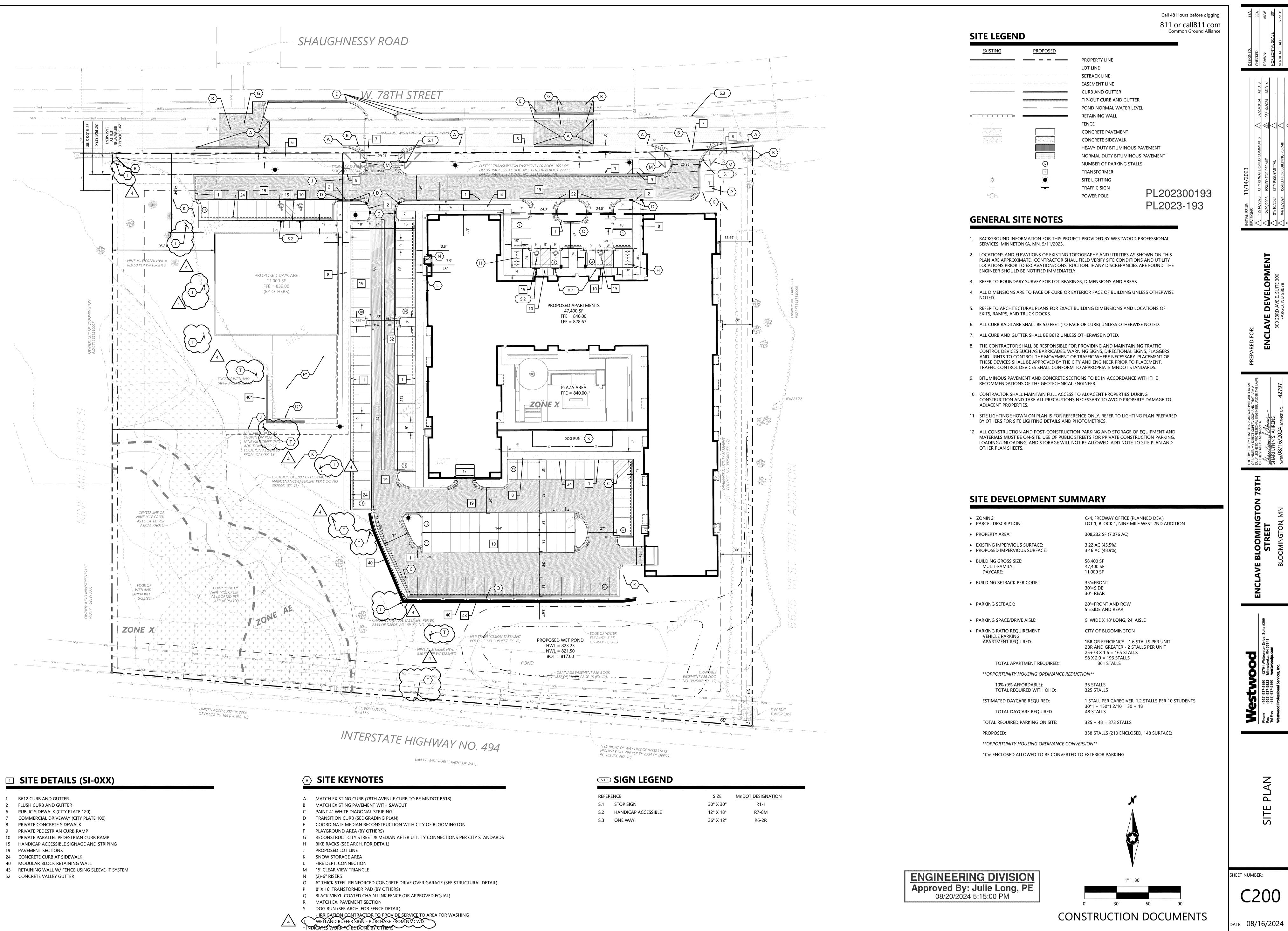
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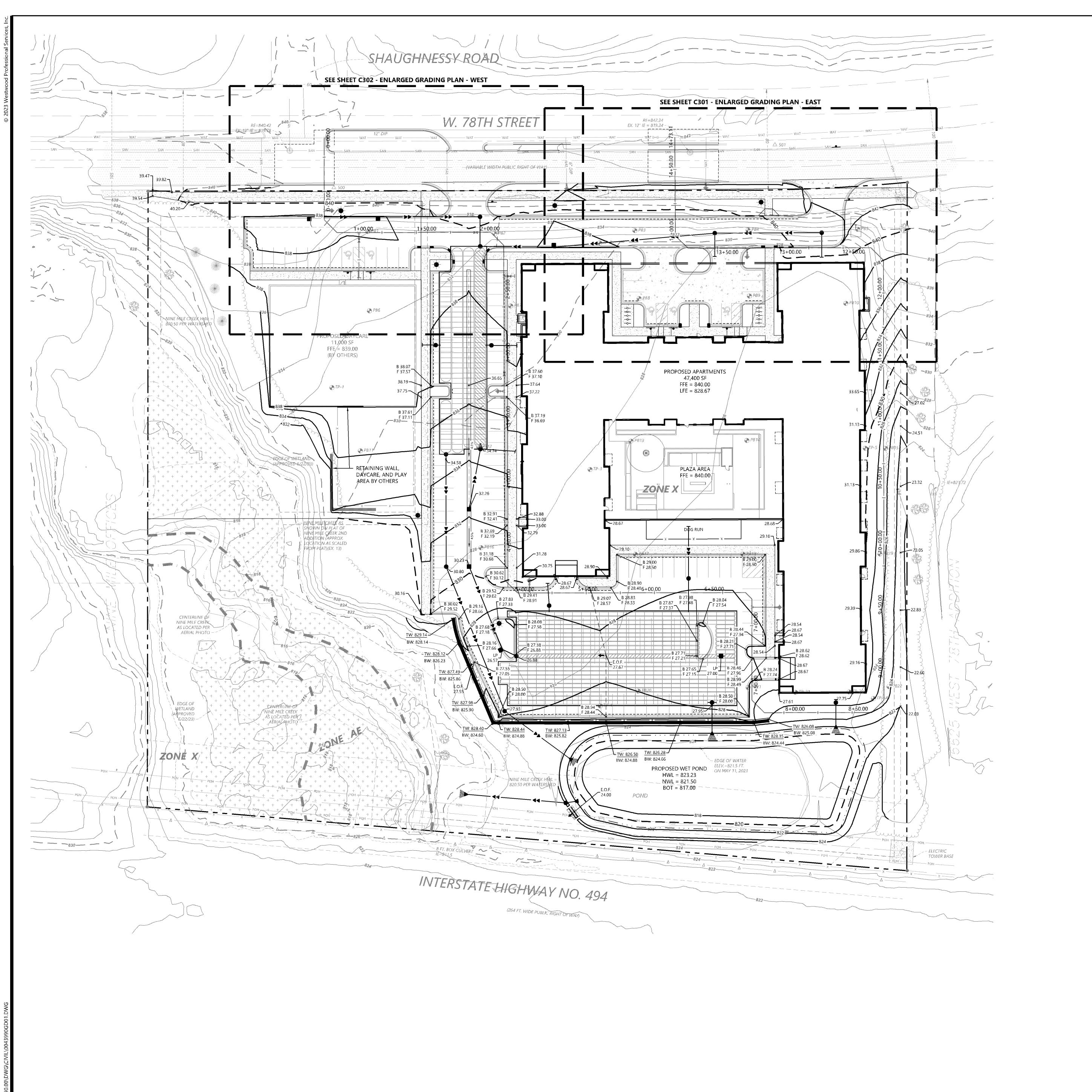


Phone Fax Toll Free

C101

date: 06/11/2024





PL202300193 PL2023-193

# **GRADING LEGEND**

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Common Ground Alliance

EXISTING	PROPOSED	
		PROPERTY LINE
workstandstands minimum 988 minimum minimum.		INDEX CONTOUR
	982	INTERVAL CONTOUR
=		CURB AND GUTTER
-	· · ·	POND NORMAL WATER LEVEL
		STORM SEWER
lacksquare		FLARED END SECTION (WITH RIPRAP)
		WATER MAIN
-		RETAINING WALL
-		RIDGE LINE
× 900.00	× 900.00	SPOT ELEVATION
	0.00%	FLOW DIRECTION
	TW=XXX.XX BW=XXX.XX	TOP AND BOTTOM OF RETAINING WALL
	E.O.F.— <b>→</b>	EMERGENCY OVERFLOW
<b>₽</b> 58-79		SOIL BORING LOCATION

### **GRADING NOTES**

- 1. LOCATIONS AND ELEVATIONS OF EXISTING TOPOGRAPHY AND UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO EXCAVATION/CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
- 2. CONTRACTORS SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULE, SLOPED PAVEMENT, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY ENTRANCE LOCATIONS, AND EXACT LOCATIONS AND NUMBER OF DOWNSPOUTS.
- ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR TRENCH EXCAVATION AND BACKFILL/SURFACE RESTORATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA.
- 4. ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE SIX INCHES OF TOPSOIL AND SOD OR SEED. THESE AREAS SHALL BE WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. SEE LANDSCAPE PLAN FOR PLANTING AND TURF ESTABLISHMENT.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO APPROPRIATE MNDOT STANDARDS.
- 6. ALL SLOPES SHALL BE GRADED TO 3:1 OR FLATTER, UNLESS OTHERWISE INDICATED ON THIS
- 7. CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AND PROVIDE A SMOOTH FINISHED SURFACE WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN OR BETWEEN SUCH POINTS AND EXISTING GRADES.
- 8. SPOT ELEVATIONS SHOWN INDICATE FINISHED PAVEMENT ELEVATIONS & GUTTER FLOW LINE UNLESS OTHERWISE NOTED. PROPOSED CONTOURS ARE TO FINISHED SURFACE
- 9. SEE SOILS REPORT FOR PAVEMENT THICKNESSES AND HOLD DOWNS.
- 10. CONTRACTOR SHALL DISPOSE OF ANY EXCESS SOIL MATERIAL THAT EXISTS AFTER THE SITE GRADING AND UTILITY CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS SOIL MATERIAL IN A MANNER ACCEPTABLE TO THE OWNER AND THE REGULATING AGENCIES.
- 11. CONTRACTOR SHALL PROVIDE A STRUCTURAL RETAINING WALL DESIGN CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER.
- 12. ALL CONSTRUCTION SHALL CONFORM TO LOCAL, STATE AND FEDERAL RULES INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS.
- 13. PRIOR TO PLACEMENT OF ANY STRUCTURE OR PAVEMENT, A PROOF ROLL, AT MINIMUM, WILL BE REQUIRED ON THE SUBGRADE. PROOF ROLLING SHALL BE ACCOMPLISHED BY MAKING MINIMUM OF 2 COMPLETE PASSES WITH FULLY-LOADED TANDEM-AXLE DUMP TRUCK, OR APPROVED EQUAL, IN EACH OF 2 PERPENDICULAR DIRECTIONS WHILE UNDER SUPERVISION AND DIRECTION OF THE INDEPENDENT TESTING LABORATORY. AREAS OF FAILURE SHALL BE EXCAVATED AND RE-COMPACTED AS SPECIFIED HEREIN.
- 14. EMBANKMENT MATERIAL PLACED BENEATH BUILDINGS AND STREET OR PARKING AREAS SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFIED DENSITY METHOD AS OUTLINED IN MNDOT 2105.3F1 AND THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER.
- 15. EMBANKMENT MATERIAL NOT PLACED IN THE BUILDING PAD, STREETS OR PARKING AREA, SHALL BE COMPACTED IN ACCORDANCE WITH REQUIREMENTS OF THE ORDINARY COMPACTION METHOD AS OUTLINED IN MNDOT 2105.3F2.
- 16. ALL SOILS AND MATERIALS TESTING SHALL BE COMPLETED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. EXCAVATION FOR THE PURPOSE OF REMOVING UNSTABLE OR UNSUITABLE SOILS SHALL BE COMPLETED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOILS TESTS AND INSPECTIONS WITH THE GEOTECHNICAL ENGINEER.

**ENGINEERING DIVISION** 

Approved By: Julie Long, PE 08/20/2024 5:15:10 PM

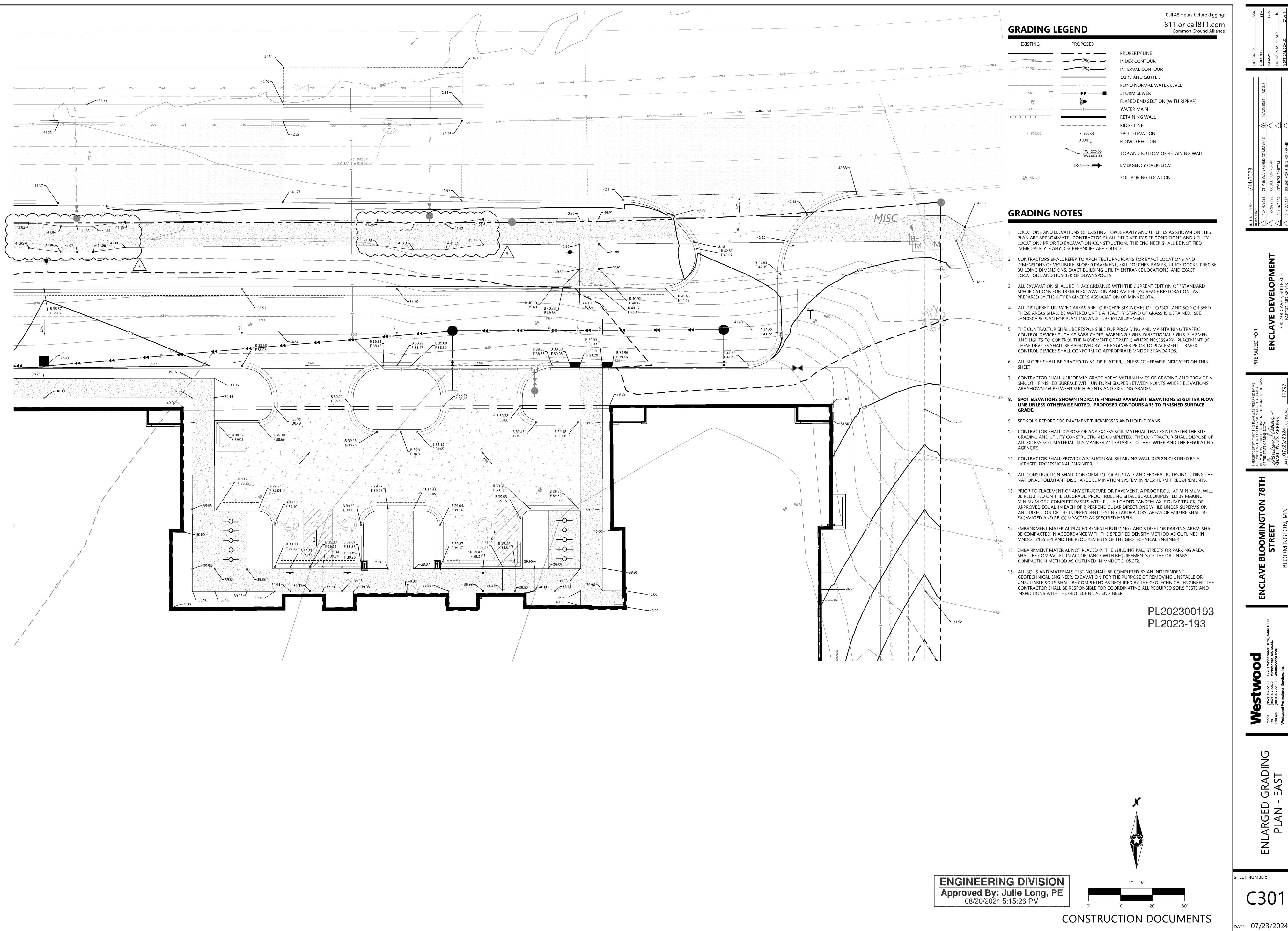
CONSTRUCTION DOCUMENTS

PROJECT NUMBER: 0043990.00

Phone Fax Toll Free

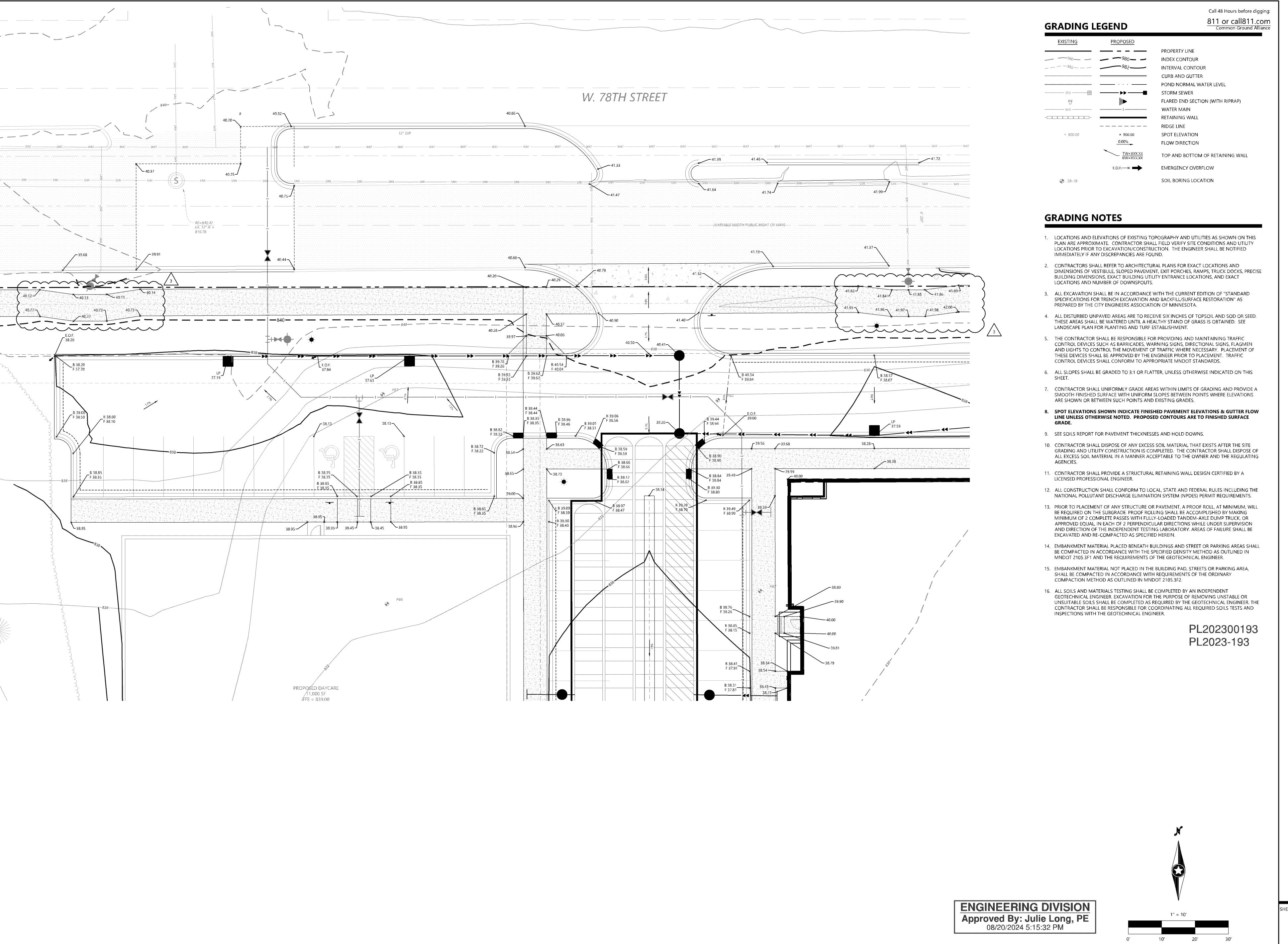
HEET NUMBER: C300

date: **06/11/2024** 



ENLARGED GRADING PLAN - EAST

date: 07/23/2024



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AWN: AKW
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DESIGNED:

CHECKED:

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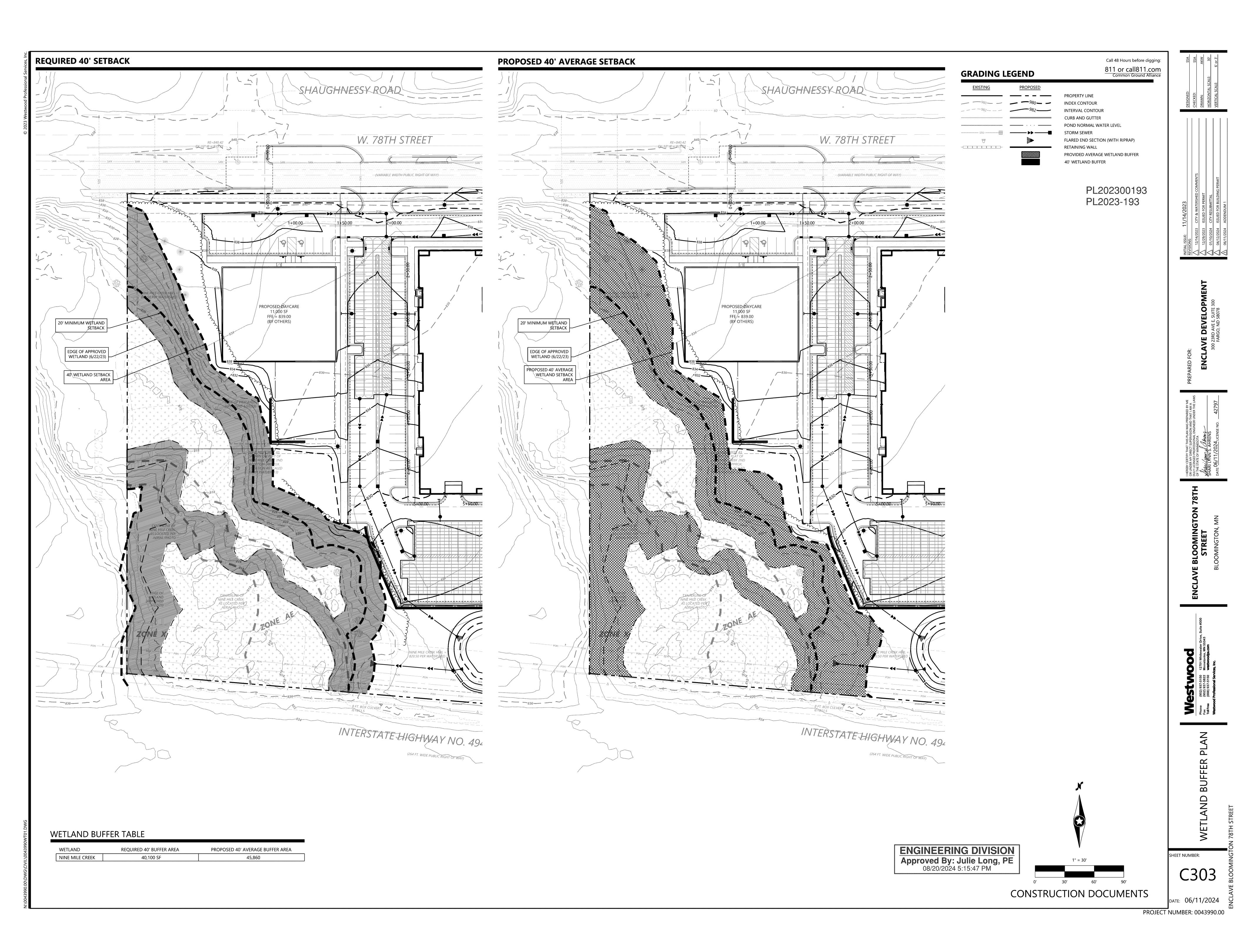
STREET
BLOOMINGTON, MN

NLARGED GRADING PLAN - WEST

EET NUMBER:

DATE: 07/23/2024

CONSTRUCTION DOCUMENTS



THE OWNER/CONTRACTOR IS RESPONSIBLE FOR THE OPERATION, MAINTENANCE OF TEMPORARY AND PERMANENT WATER QUALITY MANAGEMENT BMPS AS WELL AS ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS FOR THE DURATION OF THE CONSTRUCTION WORK AT THE SITE. THE CONTRACTOR MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS AND POLLUTION PREVENTION MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS DURING ALL ROUTINE AND POST RAINFALL EVENTS. ALL NONFUNCTIONAL BMPS MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS

ALL NON-FUNCTIONAL BMPS - OBSERVED CONDITION; SEDIMENT OVERTOPPING, UNDER WATER, SCOURED ENDS, UNDERMINED, DESTROYED, NON-FUNCTION AS DESIGNED, ETC. - SHALL BE MAINTAINED OR REPLACED BY

PERIMETER SEDIMENT CONTROL (SILT FENCE, FIBER LOGS, BERMS, ETC.) - OBSERVED CONDITION TO BE 1/2 FULL OF SEDIMENT, FLATTENED TO 1/2 HEIGHT, DRIVEN OVER, UNDERMINED, SCOURED, MOVED FOR ACCESS, ETC. -

INLET PROTECTION BMPS, CONVEYANCES, SURFACE WATERS - OBSERVED CONDITION; SEDIMENT DEPOSITION, SEDIMENT DELTAS AN ACCUMULATION OF SEDIMENT MATERIAL, DEVICES APPEAR PLUGGED WITH SEDIMENT -

TEMPORARY SEDIMENT BASINS AND TRAPS/PERMANENT SEDIMENT BASINS - OBSERVED TO HAVE SEDIMENT DEPOSITION AND ACCUMULATION TO 1/2 OF THE STORAGE VOLUME - CLEAN OUT, REMOVE ACCUMULATED

5. SITE EXIT LOCATIONS, ROCK EXIT PADS, OTHER ANTI-TRACKING PRACTICES - OBSERVED TO HAVE ACCUMULATED SEDIMENT IN ROCK OR OTHER ANTI-TRACKING BMP, TRACKING OF SEDIMENT FROM THE SITE ONTO PAVED

PAVED SURFACES AND ADJACENT STREETS - OBSERVED TO BE TRACKED WITH SEDIMENT AND SOIL MATERIAL FRO THE SITE HAULING OR ACCESS - SWEEP WITHIN 1 CALENDAR DAY OF DISCOVERY, ADDITIONAL AND/OR MORE

DAY AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS UNLESS ANOTHER TIME FRAME IS SPECIFIED BELOW.

THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY OR NOTIFICATION, OR AS SOON AS FIELD CONDITIONS ALLOW.

FREQUENT SWEEPING MAY BE NEEDED TO MAINTAIN PUBLIC SAFETY OR PREVENT WASHING FROM FORECASTED RAINS.

SEDIMENT MATERIAL WITHIN 7 DAYS OF OBSERVATION, OR AS FIELD CONDITIONS ALLOW ACCESS.

THE FOLLOWING GUIDELINES WILL BE USED TO DETERMINE IF THE EROSION AND SEDIMENT CONTROL DEVICES REQUIRE MAINTENANCE, REPAIR, OR REPLACEMENT:

SHALL BE MAINTAINED, REPAIRED OR SUPPLEMENTATION OF PERIMETER SEDIMENT CONTROL SHOULD BE DONE BY THE END OF NEXT BUSINESS DAY OR AD FIELD CONDITIONS ALLOW.

SURFACES - TOP DRESS ROCK, MAINTAIN ROCK EXIT OR OTHER ANTI-TRACKING CONTROLS, SCRAP PAVED SURFACES, SWEEP PAVED SURFACES WITHIN 1 CALENDAR DAY OF DISCOVERY.

REMOVAL/CLEAN OUT OF ACCUMULATED SEDIMENT AND DELTAS TO BE REMOVED WITHIN 7 DAYS, STABILIZE AS NEEDED IF SOILS ARE EXPOSED DURING REMOVAL/CLEAN OUT.

# **EROSION CONTROL LEGEND**

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<u>EXISTING</u>	<u>PROPOSED</u>	
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PROPERTY LINE **INDEX CONTOUR** INTERVAL CONTOUR CURB AND GUTTER POND NORMAL WATER LEVEL SILT FENCE REDUNDANT SILT CONTROL STORM SEWER

FLARED END SECTION (WITH RIPRAP) **W**ATER MAIN **RETAINING WALL ROCK CONSTRUCTION ENTRANCE EROSION CONTROL BLANKET** SOIL BORING LOCATION

NLET PROTECTION

# PL202300193 PL2023-193

### **GENERAL EROSION CONTROL NOTES**

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF SHALL NOT BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY DISCREPANCIES.
- ALL SILT FENCE AND OTHER EROSION CONTROL FEATURES SHALL BE IN-PLACE PRIOR TO ANY EXTREME IMPORTANCE TO BE AWARE OF CURRENT FIELD CONDITIONS WITH RESPECT TO EROSION CONTROL. TEMPORARY PONDING, DIKES, HAYBALES, ETC., REQUIRED BY THE CITY SHALL BE INCIDENTAL TO THE GRADING CONTRACT.
- 3. EROSION AND SILTATION CONTROL (ESC): THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO CONTROL THE EROSION AND SILTATION INCLUDING BUT NOT LIMITED TO: CATCH BASIN INSERTS, CONSTRUCTION ENTRANCES, EROSION CONTROL BLANKET, AND SILT FENCE. ESC SHALL COMMENCE WITH GRADING AND CONTINUE THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER. THE CONTRACTOR'S RESPONSIBILITY INCLUDES ALL IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE OWNER MAY DIRECT THE CONTRACTOR'S METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS, ANY DEPOSITION OF SILT OR MUD ON NEW OR EXISTING PAVEMENT OR IN EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN EVENT. AFFECTED AREAS SHALL BE CLEANED TO THE SATISFACTION OF THE OWNER, ALL AT THE EXPENSE OF THE CONTRACTOR. ALL TEMPORARY EROSION CONTROL SHALL BE REMOVED BY THE CONTRACTOR AFTER THE TURF IS ESTABLISHED.
- 4. ALL STREETS DISTURBED DURING WORKING HOURS MUST BE CLEANED AT THE END OF EACH WORKING DAY. A CONSTRUCTION ENTRANCE TO THE SITE MUST BE PROVIDED ACCORDING TO DETAILS TO REDUCE TRACKING OF DIRT ONTO PUBLIC STREETS.
- 5. PROPOSED PONDS SHALL BE EXCAVATED FIRST AND USED AS TEMPORARY PONDING DURING CONSTRUCTION.
- 6. WHEN INSTALLING END-OF-LINE FLARED END SECTIONS, BRING THE SILT FENCE UP & OVER THE FLARED END SECTIONS & COVER DISTURBED AREAS WITH RIP RAP. THE UPSTREAM FLARED END
- SECTIONS SHALL HAVE WOOD FIBER BLANKET INSTALLED ON THE DISTURBED SOILS. 7. ALL UNPAVED AREAS ALTERED DUE TO CONSTRUCTION ACTIVITIES MUST BE RESTORED WITH SEED AND MULCH, SOD, EROSION CONTROL BLANKET OR BE HARD SURFACE WITHIN 2 WEEKS

OF COMPLETION OF CONSTRUCTION.

- 8. THE SITE MUST BE STABILIZED PER THE REQUIREMENTS OF THE MPCA, NPDES, MNDOT, AND
- A. TEMPORARY (GREATER THAN 1-YEAR) SEED SHALL BE MNDOT SEED MIX 22-111 AT 30.5-POUNDS PER ACRE.
- TEMPORARY (LESS THAN 1-YEAR) SEED SHALL BE MNDOT SEED MIX 21-112 (FALL) OR 21-111 (SPRING/SUMMER) AT 100-POUNDS PER ACRE
- C. INFILTRATION/FILTRATION BASIN SHALL BE MNDOT SEED MIX 34-262 AT 14.5-POUNDS PER
- D. POND SLOPES SHALL BE MNDOT SEED MIX 33-261 AT 35-POUNDS PER ACRE.
- E. GENERAL SEEDING SHALL BE MNDOT SEED MIX 25-151 AT 70-POUNDS PER ACRE.
- F. MULCH SHALL BE MNDOT TYPE 1 APPLIED AT 2-TONS PER ACRE. 9. FOR AREAS WITH SLOPE OF 3:1 OR GREATER, RESTORATION WITH SOD OR EROSION CONTROL
- BLANKET IS REQUIRED. 10. ALL TEMPORARY STOCKPILES MUST HAVE SILT FENCE INSTALLED AROUND THEM TO TRAP
- SEDIMENT. 11. ALL PERMANENT PONDS USED AS TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION
- SHALL BE DREDGED AFTER THE SITE HAS BEEN STABILIZED TO RESTORE THE POND TO THE PROPOSED BOTTOM ELEVATION.
- 12. ALL CONSTRUCTION SHALL CONFORM TO LOCAL AND STATE RULES INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS.
- 13. THE SITE MUST BE KEPT IN A WELL-DRAINED CONDITION AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES. PIPING OR OTHER MEANS REQUIRED TO INSURE PROPER DRAINAGE DURING CONSTRUCTION. LOW POINTS IN ROADWAYS OR BUILDING PADS MUST BE PROVIDED WITH A POSITIVE OUTFLOW.

**ENGINEERING DIVISION** Approved By: Julie Long, PE 08/20/2024 5:15:55 PM

CONSTRUCTION DOCUMENTS

PROJECT NUMBER: 0043990.00

HEET NUMBER:

DATE: 06/11/2024

THE SWPPP IS FOR IMPLEMENTATION BY THE OWNER AND OPERATOR, AS LISTED BELOW, AT ENCLAVE 78TH STREET. THIS REPORT SHALL BE ON THE SITE AT ALL TIMES DURING CONSTRUCTION. THE OWNER MUST ALSO KEEP THIS SWPPP ON FILE FOR THREE YEARS AFTER SUBMITTAL OF THE NOTICE OF TERMINATION. THE FOLLOWING ARE OUTLINED IN THIS SWPPP:

- CONTROL MEASURES FOR STORM WATER POLLUTION PREVENTION PRIOR TO AND DURING CONSTRUCTION - CONTROL MEASURES FOR STORM WATER POLLUTION PREVENTION AFTER CONSTRUCTION

- SOURCES OF STORMWATER AND NON-STORMWATER POLLUTION - INSPECTION AND MAINTENANCE PROCEDURES

THE GRADING AND EROSION CONTROL PLAN PREPARED FOR ENCLAVE 78TH STREET SHALL BE CONSIDERED PART OF THE SWPPP.

THIS DOCUMENT PRESENTS A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR ENCLAVE 78TH STREET IN BLOOMINGTON, MN. THE SITE IS LOCATED IN THE SOUTHEAST QUADRANT OF 78TH STREET & SHAUGHNESSY ROAD.

PROJECT CONTACT INFORMATION

OWNER/DEVELOPER: CONTRACTOR: BRIAN BOCHMAN JORDAN BOWAR ENCLAVE DEVELOPMENT **ENCLAVE COMPANIES** 300 23RD AVE E. SUITE 300 1660 S HWY 100, SUITE 530 FARGO, ND 58078 ST. LOUIS PARK, MN 55416 701-212-8110 612-360-3431 BRIAN@ENCLAVECOMPANIES.COM JORDAN@ENCLAVECOMPANIES.COM

IDENTIFY PERSONNEL INVOLVED WITH THE PROJECT AND THEIR RELATED NECESSARY TRAINING COMMENSURATE WITH THEIR TASK PRIOR TO

BMP INSTALLER:

COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

SWPPP DESIGNER: SWPPP INSPECTION: SHARI AHRENS WESTWOOD PROFESSIONAL SERVICES 12701 WHITEWATER DR, SUITE 300 MINNETONKA, MN 55343 952-697-5760 SHARI.AHRENS@WESTWOODPS.COM UNIV. OF MINN. DESIGN OF SWPPP

OWNER/OPERATOR RESPONSIBILITIES

05/31/2026

-DEVELOPMENT OF SWPPP PRIOR TO APPLICATION/NOI SUBMITTAL.

-SUBMIT A COMPLETE AND ACCURATE APPLICATION FORM (NOI)

-COMPLIANCE WITH ALL TERMS AND CONDITIONS OF CONSTRUCTION GENERAL STORMWATER PERMIT -SWPPP SUBMITTAL FOR 30 DAY REVIEW FOR PROTECT GREATER THAN 50 ACRES & DISCHARGING TO SPECIAL/IMPAIRED WATERS WITHIN 1 MILE OF

SITE DISCHARGE. -KEEPING PERMIT COVERAGE UP-TO-DATE (TRANSFER/SUBDIVISION) -SUBMIT NOTICE OF TERMINATION (NOT) WITHIN 30 DAYS AFTER ALL PERMIT TERMINATION CONDITIONS AS LISTED IN SECTION 13 ARE COMPETE

-SUBMIT NOTICE OF TERMINATION (NOT) WITHIN 30 DAYS OF MEETING REQUIREMENTS OF FINAL STABILIZATION

-IDENTIFY WHO HAS LONG TERM OPERATION AND MAINTENANCE RESPONSIBILITY OF THE PERMANENT STORMWATER SYSTEM -DEVELOP CHAIN OF RESPONSIBILITY WITH ALL OPERATORS TO ENSURE NPDES COMPLIANCE.

-IDENTIFY TRAINED PERSONNEL TO DEVELOP THE SWPPP, INSTALL AND MAINTAIN BEST MANAGEMENT PRACTICES, AND OVERSEE THE SWPPP AND CONDUCT INSPECTIONS

-COMPLETION OF AN ACCURATE NOI WITH THE OWNER -COMPLIANCE WITH CSGP SECTIONS 3, 4, 6-22, 24 AND ANY APPLICABLE REQUIREMENTS FOR CONSTRUCTION ACTIVITY IN SECTION 23 (MINN. R. 7090)

-KEEPING THE PERMIT UP-TO-DATE WITH THE OWNER (PARTIAL, WHOLE, CONTRACTOR, BUILDER, ETC) -COMPLETE AND SIGN APPLICATIONS FOR PERMIT TRANSFER AND MODIFICATION AND NOTICE OF TERMINATION WITH OWNER AS NEEDED.

THE SITE IS APPROXIMATELY 7.07 ACRES. CONSTRUCTION WILL CONSIST OF, BUT IS NOT LIMITED TO, A MULTI-FAMILY APARTMENT BUILDING, COMMERCIAL BUILDING, PARKING LOTS, ENTRANCE DRIVES, RETAINING WALLS, AND SIDEWALKS.

PROJECT AREA = 7.07 AC

DISTURBED AREA = 5.18 AC EXISTING IMPERVIOUS AREA = 3.22 AC PROPOSED IMPERVIOUS AREA = 3.46 AC

PRE-DEVELOPMENT SITE CONDITIONS

POST-DEVELOPMENT SITE CONDITIONS

THE SITE PREVIOUSLY INCLUDED AN 85,000 SQUARE FOOT BUILDING, SURFACE PARKING, A PARKING RAMP, AND A WET POND ON THE SOUTH SIDE OF THE SITE. NINE MILE CREEK IS LOCATED IN THE WEST/SOUTHWEST PORTION OF THE PROPERTY.

A MAJORITY OF THE SITE DRAINED TO THE SOUTHERN POND, VIA PRIVATE STORM SEWER OR OVERLAND FLOW. THIS POND OVERFLOWS WEST INTO NINE MILE CREEK. THERE IS CURRENTLY NO OUTLET STRUCTURE FROM THIS POND, AND IT APPEARS THE POND OVERFLOWS VIA A BROAD CRESTED WEIR AT ELEVATION 823.50. AREAS WEST OF THE SURFACE PARKING DRAINED DIRECTLY OVERLAND TO NINE MILE CREEK, WHICH FLOWS SOUTH UNDER INTERSTATE HIGHWAY NO. 494.

MUCH OF THE SITE FEATURES HAVE BEEN DEMOLISHED AND THE SITE IS CURRENTLY VEGETATED WITH LOW NATIVE SHRUBS, GRASSES, AND TREES.

THE SITE CONTAINS

PER THE GEOTECHNICAL REPORT PREPARED BY WSB, FILLS ON SITE ARE A MIXTURE OF LEAN CLAY, SILTY SAND, AND SANDS, WITH BURIED TOPSOIL BELOW FILL PRESENT AT ONE BORING. BELOW THE FILLS AND BURIED TOPSOIL, WSB "ENCOUNTERED DEPOSITS CONSISTING OF SANDS AND SILTY SANDS, LEAN CLAYS AND TO A LESSER EXTENT FAT CLAYS. THESE SOILS WERE GENERALLY BROWN TO GRAY IN COLOR AND RANGED FROM MOIST TO SATURATED OR WATERBEARING." THE SITE SLOPES FROM NORTH TO SOUTH TO AN EXISTING STORMWATER POND. THE SOILS IN THE SOUTHERLY PORTION OF THE SITE ARE LEAN CLAY WITH UNDERLYING FAT CLAYS. REFER TO GEOTECHNICAL REPORT DATED 12/19/2016 COMPLETED BY WSB.

THE PROPOSED DEVELOPMENT PLAN INCLUDES CONSTRUCTION OF A MULTI-FAMILY APARTMENT BUILDING, COMMERCIAL BUILDING, PARKING LOTS, ENTRANCE DRIVES, RETAINING WALLS, AND SIDEWALKS. STORMWATER MANAGEMENT WILL INCLUDE CONSTRUCTION OF TWO UNDERGROUND STORMWATER CHAMBER SYSTEMS (STORMTECH SYSTEM OR APPROVED EQUAL) AND EXPANSION OF THE EXISTING DETENTION POND TO PROVIDE THE REQUIRED VOLUME ABSTRACTION AND WATER QUALITY TREATMENT.

THE TEMPORARY STORMWATER MANAGEMENT PLAN WILL CONSIST OF UTILIZING THE EXISTING DETENTION BASIN ON THE SOUTHER END OF THE SITE AS A TEMPORARY SEDIMENTATION BASIN.

THE PERMANENT STORM WATER MANAGEMENT PLAN WILL CONSIST OF

STORMWATER RUNOFF FROM THE PROPOSED COMMERCIAL BUILDING, NORTH PARKING AND DRIVEWAYS, AND WESTERLY AND CENTRAL PORTION OF THE MULTI-FAMILY BUILDING WILL BE ROUTED TO AN UNDERGROUND STORM CHAMBER SYSTEM TO PROVIDE RATE CONTROL, VOLUME CONTROL AND WATER QUALITY. STORMWATER RUNOFF FROM THE SOUTH-CENTRAL PARKING LOT AND DRIVEWAYS WILL BE ROUTED TO AN UNDERGROUND STORM CHAMBER SYSTEM

TO PROVIDE RATE CONTROL, VOLUME CONTROL AND WATER QUALITY. SUMP MANHOLE STRUCTURES WILL PROVIDE INITIAL PRETREATMENT OF DISCHARGE TO THE UNDERGROUND STORM CHAMBERS, WITH ADDITIONAL SEDIMENT REMOVAL VIA THE STORM CHAMBER ISOLATOR ROW SYSTEM. THE STORM CHAMBER SYSTEMS ARE DESIGNED TO CONTAIN SEDIMENT AND

FLOATABLE DEBRIS WITHING THE ISOLATOR ROW, WHICH CAN THEN BE REMOVED AS NEEDED. STORMWATER RUNOFF FROM THE WESTERLY PORTION OF THE DEVELOPMENT AREA WILL CONSIST OF GRASS SLOPES (100% PERVIOUS) AND WILL FLOW WEST TO NINE MILE CREEK, SIMILAR TO THE EXISTING CONDITION.

STORMWATER RUNOFF FROM THE SOUTHEASTERLY PORTION OF THE MULTI-FAMILY BUILDING (4S) WILL DISCHARGE SOUTH TO THE EXISTING/EXPANDED POND. THE EXISTING POND WILL BE DREDGED TO REMOVE ACCUMULATED SEDIMENT AND WILL BE EXPANDED TO PROVIDE FOR ADDITIONAL WATER QUALITY TREATMENT.

THE STORM CHAMBER SYSTEMS WILL DISCHARGE TO THE EXPANDED POND FOR ADDITIONAL WATER QUALITY TREATMENT.

REFER TO THE ENCLAVE 78TH STREET STORMWATER MANAGEMENT REPORT FOR MORE INFORMATION REGARDING THE PRE-DEVELOPMENT SITE CONDITIONS, POST-DEVELOPMENT SITE CONDITIONS, STORM WATER MANAGEMENT CALCULATIONS, AND DRAINAGE AREA MAPS.

THE SITE STORM WATER DETENTION FACILITY WILL BE CONSTRUCTED TO MEET OR EXCEED LOCAL, STATE AND FEDERAL REQUIREMENTS.

RECEIVING WATERS WITHIN 1 MILE OF THE PROJECT SITE

IMPAIRED (Y/N) SPECIAL (Y/N) DISTANCE/ DIRECTION FROM SITE NINE MILE NINE MILE, SOUTH FORK 0.63 MI SE

\*NINE MILE CREEK IS IMPAIRED FOR BENTHIC MACROINVERTEBRATES BIOASSESSMENTS; FISH BIOASSESSMENTS, WHICH ARE CONSIDERED CONSTRUCTION-RELATED PARAMETERS

TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL BMP'S ALONG WITH THE PROCEDURES TO BE USED TO ESTABLISHED ADDITIONAL TEMPORARY BMP'S AS NECESSARY FOR SITE CONDITIONS DURING CONSTRUCTION ARE IDENTIFIED ON THE SITE GRADING AND EROSION CONTROL PLAN PREPARED FOR THE DEVELOPMENT OF THIS PROJECT, AND WITHIN THE PROJECT STORM WATER POLLUTION PREVENTION PLAN.

POTENTIAL POLLUTANT SOURCES, INCLUDING CONSTRUCTION AND WASTE MATERIALS THAT ARE USED OR STORED AT THE SITE, ARE DESCRIBED IN THE SECTION. BY IMPLEMENTATION OF THESE BMPS, THE POTENTIAL POLLUTANT SOURCES ARE NOT REASONABLY EXPECTED TO AFFECT THE STORM WATER

CONSTRUCTION MATERIALS, CHEMICALS AND WASTE MATERIALS THAT WILL BE USED OR STORED AT THE SITE:

POTENTIAL POLLUTANT	LOCATION	CONTROL MEASURE
ANTIFREEZE	VARIOUS	SECONDARY CONTAINMENT / DRIP PAN
DIESEL FUEL	VARIOUS	SECONDARY CONTAINMENT / DRIP PAN
FERTILIZER	LANDSCAPE CONTRACTOR	SECONDARY CONTAINMENT
GASOLINE	IN EQUIPMENT/FUELING AREA	SECONDARY CONTAINMENT / DRIP PAN
GLUE/ADHESIVES	CONTRACTOR	SECONDARY CONTAINMENT
HYDRAULIC OILS/FLUIDS	CONTRACTOR	SECONDARY CONTAINMENT
PAINTS	CONTRACTOR	SECONDARY CONTAINMENT
GREASE	CONTRACTOR	SECONDARY CONTAINMENT / DRIP PAN
SANITARY WASTE	PORTABLE BATHROOMS	SERVICE PROVIDER TO SECURE UNITS FROM
		TIPPING OVER AND MAINTAINED
SOIL AMENDMENTS	VARIOUS	SECONDARY CONTAINMENT
LANDSCAPING MATERIALS	LANDSCAPE CONTRACTOR	CONTRACTOR RESPONSIBLE
CONCRETE	TRUCK WASHOUT	WASHOUT AREA
CONCRETE / MORTAR	MOBILE MIXER	S.C. / WASHOUT AREA

CONSTRUCTION SEQUENCE

THE INTENDED SEQUENCING OF MAJOR SITE CONSTRUCTION ACTIVITIES IS AS FOLLOWS: 1. INSTALL PERIMETER CONTROL DEVICES (SILT FENCE, BIO-LOGS, ETC.) AND INLET PROTECTION TO EXISTING STRUCTURES AS SHOWN ON PLAN.

INSTALL TREE PROTECTION FENCE AS SHOWN ON PLAN. 2. INSTALL STABILIZED ROCK CONSTRUCTION ENTRANCE.

3. CLEAR AND GRUB SITE. STRIP AND STOCKPILE TOPSOIL.

ROUGH GRADE OF SITE.

STABILIZE DENUDED AREAS AND STOCKPILES. INSTALL SANITARY SEWER, WATERMAIN, STORM SEWER AND SERVICES.

8. INSTALL INLET PROTECTION AROUND CATCH BASINS. 9. INSTALL STREET SECTION. 10. INSTALL CURB AND GUTTER.

11. INSTALL PAVEMENT. 12. INSTALL SMALL UTILITIES (GAS, ELECTRIC, PHONE, CABLE, ETC.)

AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.

13. FINE GRADE BOULEVARD, LANDSCAPE AREAS, SEED AND MULCH. 14. REMOVE ACCUMULATED SEDIMENT.

15. FINAL GRADE. 16. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED BY EITHER SEED OR SOD AND LANDSCAPING, REMOVE SILT FENCE

IT IS HIGHLY RECOMMENDED THAT THE CONTRACTOR MAINTAIN A STOCKPILE OF EROSION CONTROL DEVICES AND SEDIMENT CONTROL BMP'S ON SITE AT ALL TIMES FOR IMMEDIATE USAGE. IN THE EVENT OF AN ACCIDENTAL SEDIMENT DISCHARGE TO WATERS OF THE STATE, OR ANY DISCHARGE OF HAZARDOUS MATERIAL OF REPORTABLE QUANTITY, CONTACT THE MPCA STATE DUTY OFFICER AT 1-800-422-0798.

THE EROSION PREVENTION AND SEDIMENT CONTROL BMP'S SHALL BE INSTALLED TO MINIMIZE EROSION FROM DISTURBED SURFACES AND CAPTURE SEDIMENT ON SITE. THE FOLLOWING LIST DEFINES THE TIMING OF EROSION PREVENTION AND SEDIMENT CONTROL MEASURES IN SPECIFIC AREAS.

 PRIOR TO START OF CONSTRUCTION THE FOLLOWING EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE SHOWN IN THE PLANS AND SHALL BE IMPLEMENTED PRIOR TO

1. INSTALL SILT FENCE OR OTHER SEDIMENT CONTROL AROUND THE PERIMETER OF AREAS TO BE GRADED AND ALL AREAS WHICH ARE NOT TO BE DISTURBED AS SHOWN ON THE GRADING AND EROSION CONTROL PLAN.

CONSTRUCT GRAVEL CONSTRUCTION ENTRANCES AT FIELD ENTRANCES TO THE SITE AS SHOWN ON THE CONSTRUCTION PLANS. 3. INLET PROTECTION IS TO BE INSTALLED AT ALL STORM WATER INLETS WHICH HAVE THE POTENTIAL TO RECEIVE STORM WATER RUNOFF FROM THE

CONSTRUCTION SITE WITHIN 200 FEET OF LIMITS OF CONSTRUCTION. 4. INSTALL SILT FENCE OR OTHER SEDIMENT CONTROL AROUND ALL TEMPORARY INACTIVE STOCKPILES. ALL SILT FENCES FOR STOCKPILES SHALL BE INCIDENTAL TO GRADING CONTRACT IF STOCKPILES ARE PLACED OUTSIDE OF SILT FENCES SHOWN ON THE PLAN.

 DURING CONSTRUCTION THE FOLLOWING EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE SHOWN IN THE PLANS AND SHALL BE IMPLEMENTED DURING

PHASE GRADING WORK TO MINIMIZE THE DURATION THAT ANY DISTURBED SOIL IS EXPOSED.

ALL DISTURBED AREAS SHALL HAVE TEMPORARY PROTECTION OR PERMANENT COVER OVER EXPOSED SOIL AREAS IF NOT BEING ACTIVELY GRADED AND/OR IF NOT AT FINAL GRADE WITHIN **7 DAYS** OF DISTURBANCE ACTIVITY TEMPORARILY OR PERMANENTLY CEASING. TEMPORARY SEED MIX 22-111, APPLIED AT A RATE OF 30.5 LBS/ACRE, SHALL BE USED PRIOR TO WINTER, IF SITE NOT SODDED. 3. STRIP AND STOCKPILE TOPSOIL FOR REPLACEMENT OF 6 INCHES OF TOPSOIL OVER TURF AREAS WHEN GRADING IS COMPLETE.

4. PLACE A MINIMUM OF 2 TONS/ACRE OF STRAW ON ALL AREAS AFTER REACHING FINAL GRADE WITH TOPSOIL AND ANCHOR STRAW WITH EITHER A STRAIGHT DISK, HYDROMULCH OR POLYMER. STABILIZATION OF TEMPORARY OR PERMANENT DRAINAGE DITCHES THAT DRAIN WATER FROM THE CONSTRUCTION SITE MUST BE INITIATED

WITHIN 24 HOURS OF CONNECTING THE DRAINAGE DITCH TO ANY CONVEYANCE SYSTEM THAT DISCHARGES TO SURFACE WATERS. THE FIRST 200 LINEAR FEET MUST BE STABILIZED WITHIN 24 HOURS. THE REMAINING DITCH SHALL BE STABILIZED WITHIN **7 DAYS**. 6. INSTALL SILT FENCE AROUND ALL TEMPORARY INACTIVE STOCKPILES WHICH ARE NOT PLACED WITHIN EXISTING SILT FENCES OR OTHER

APRON IS INSTALLED. RIPRAP SHALL BE INSTALLED UNDER APRON LIP ACCORDING TO THE STANDARD DETAIL. 8. SUFFICIENT PERSONNEL, EQUIPMENT, AND MATERIALS SHALL BE MOBILIZED WITHIN 24 HOURS OF A WRITTEN ORDER BY THE OWNER OR OWNER'S REPRESENTATIVE TO CONDUCT CORRECTIVE WORK AND INSTALL TEMPORARY EROSION CONTROL WORK IN THE CASE OF AN

7. TEMPORARY OR PERMANENT ENERGY DISSIPATION AT PIPE APRON OUTLETS WILL BE PLACED PRIOR TO BUT NO SOONER THAN 7 DAYS BEFORE

9. REMOVE ANY SEDIMENT THAT HAS BEEN TRACKED ONTO PUBLIC STREETS AT THE END OF THE DAY OR WITHIN 24 HOURS OF DETECTION, OR

MORE FREQUENT AT DIRECTION OF SITE INSPECTOR. 10. COLLECT ALL CONSTRUCTION DEBRIS IN DUMPSTERS AND ROLL-OFF BOXES, EMPTY WHEN DEBRIS REACHES TOP OF DUMPSTER

 INSPECT POLLUTION CONTROL MEASURES AS SPECIFIED WITHIN SECTION 11 OF THE GENERAL PERMIT. INLET SEDIMENT CONTROL BMP REMOVAL

IF INLET SEDIMENT CONTROLS (WIMCO TYPE OR EQUAL) BMP'S ARE REMOVED FOR FLOODING / FREEZING CONCERNS UPON REQUEST OF THE MUNICIPALITY, WATERSHED DISTRICT OR OTHER AGENCY, DOCUMENTATION SHALL BE ATTACHED TO THE INSPECTION REPORTS AND THIS SWPPP OR BE AVAILABLE WITHIN 72 HOURS OF REQUEST. DOCUMENTATION SHALL BE A WRITTEN FORM OF CORRESPONDENCE VERIFYING THE NEED FOR REMOVAL.

UPON COMPLETION OF CONSTRUCTION ACTIVITIES

PERMIT TERMINATION CONDITIONS ARE ACHIEVED FOR THE PROJECT WHEN PERMANENT EROSION CONTROL BMP'S ARE APPLIED TO THE SITE. THE PERMANENT EROSION CONTROL BMP'S MAY BE A COMBINED OF VEGETATIVE AND NON-VEGETATIVE COVER TYPES. ADDITIONAL REQUIREMENTS TO ACHIEVING FINAL STABILIZATION PERMIT TERMINATION CONDITIONS INCLUDE:

1. ALL SOIL DISTURBING ACTIVITY IS COMPLETED. ALL DISTURBED AREA WITHOUT PERMANENT IMPERMEABLE SURFACES ARE VEGETATED FOR FINAL STABILIZATION. PERMANENT STORMWATER TREATMENT SYSTEM (IF REQUIRED) IS CONSTRUCTED AND ACCUMULATED SEDIMENT HAS BEEN REMOVED FROM CONSTRUCTION ACTIVITY. CLEAN OUT ALL SEDIMENT FROM CONVEYANCES AND FROM TEMPORARY SEDIMENT BASINS THAT ARE TO BE USED AS PERMANENT WATER QUALITY MANAGEMENT BASINS. THE CLEAN OUT OF PERMANENT BASINS MUST BE SUFFICIENT TO RETURN THE BASIN TO

B. THE VEGETATIVE COVER FOR THE SITE IS AT A DENSITY, WITH UNIFORM PERENNIAL COVER OF 70% OF THE EXPECTED FINAL GROWTH DENSITY. 4. ALL TEMPORARY, SYNTHETIC BMP'S HAVE BEEN REMOVED.

PERMANENT VEGETATION ESTABLISHMENT

PERMANENT TURF SHALL FOLLOW THE RECOMMENDATIONS PER NOTES AND SPECIFICATIONS IN THE GRADING AND/OR LANDSCAPE PLAN. SEED THAT IS TO OCCUR AFTER OCTOBER 20TH SHALL CONFORM TO THE MNDOT SPECIFICATIONS FOR DORMANT SEEDING.

SWPPP INSPECTIONS AND MAINTENANCI

EROSION AND SEDIMENT CONTROL INSPECTIONS

CONSTRUCTION ACTIVITY AND ALL SUPPORT ACTIVITIES MUST BE INSPECTED (USING MPCA CONSTRUCTION STORMWATER INSPECTION CHECKLIST OR AN ALTERNATIVE FORM) WITHIN THE PARAMETERS OF THE SCHEDULE BELOW. THE INSPECTOR SHALL BE A PERSON TRAINED AND FAMILIAR WITH THE REQUIREMENTS OF THIS SWPPPP AND THE MPCA MN R100001 PERMIT. ALTERNATES WILL INCLUDE INDIVIDUALS TO BE DESIGNATED BY THE OWNER AND MAY INCLUDE CONTRACTOR PERSONNEL OR OTHER QUALIFIED INDIVIDUALS AND SHALL BE LISTED IN THE PROJECT CONTACT INFORMATION SECTION OF THIS PLAN

INSPECTION SCHEDULE

IF THE SITE IS ACTIVE: INSPECTION NEEDED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL GREATER THAT 0.5 INCHES.

INACTIVE AND STABILIZED AREAS: INSPECTION NEEDED ONCE EVERY 30 CALENDAR DAYS.

INACTIVE AREAS WITH FINAL STABILIZATION: INSPECTION NEEDED ONCE EVERY MONTH FOR 12 MONTHS (NOT INCLUDING FROZEN CONDITIONS). SUBJECT TO WINTER/FROZEN CONDITIONS: NOT APPLICABLE/NOT NEEDED IF NO CONSTRUCTION ACTIVITY IS OCCURRING.

SCOPE OF INSPECTION SHALL INCLUDE:

 RECORD DATE AND TIME OF INSPECTION 2. NAME OF PERSON(S) CONDUCTING INSPECTION

3. FINDINGS OF THE INSPECTION 4. LOCATION AND CORRECTIVE ACTIONS NEEDED

5. CORRECTIVE ACTIONS TAKEN (DATE.TIME/BY WHOM) 6. DATE AND AMOUNT OF RAINFALL (RAINFALL AMOUNTS TO BE TAKEN FROM AN ONSITE RAIN GAUGE)

7. OBSERVED DISCHARGES LOCATIONS

8. DESCRIBE DISCHARGE (COLOR, ODOR, FLOATING. SETTLED, SOLIDS, FOAM, OIL SHEEN)

9. THE SITE INSPECTOR WILL VISUALLY CHECK A DISCHARGE FROM A TEMPORARY OR PERMANENT SEDIMENTATION BASIN TO ENSURE ADEQUATE TREATMENT IS OBTAINED AND DISCHARGE WATER WILL NOT CONTRIBUTE EXCESSIVE SEDIMENT OR OTHER NUISANCE CONDITIONS.

10. RECORD CHANGES MADE TO THE SWPPP. AMENDMENTS FROM INSPECTIONS NEED TO BE COMPLETED WITHIN 7 DAYS. 11. ALL INSPECTIONS SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER COMPLETING THE FIELD INSPECTION AND AVAILABLE IN PAPER OR ELECTRONIC FORM ON SITE.

MAINTENANCE OF EROSION AND SEDIMENT CONTROL DEVICES

THE OWNER/CONTRACTOR IS RESPONSIBLE FOR THE OPERATION, MAINTENANCE OF TEMPORARY AND PERMANENT WATER QUALITY MANAGEMENT BMPS AS WELL AS ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS, FOR THE DURATION OF THE CONSTRUCTION WORK AT THE SITE. THE CONTRACTOR MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS AND POLLUTION PREVENTION MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS DURING ALL ROUTINE AND POST RAINFALL EVENTS. ALL NONFUNCTIONAL BMPS MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS UNLESS ANOTHER TIME FRAME IS SPECIFIED BELOW.

THE FOLLOWING GUIDELINES WILL BE USED TO DETERMINE IF THE EROSION AND SEDIMENT CONTROL DEVICES REQUIRE MAINTENANCE, REPAIR, OR REPLACEMENT:

1. ALL NON-FUNCTIONAL BMPS - OBSERVED CONDITION; SEDIMENT OVERTOPPING, UNDER WATER, SCOURED ENDS, UNDERMINED, DESTROYED, NON-FUNCTION AS DESIGNED, ETC. - SHALL BE MAINTAINED OR REPLACED BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY OR NOTIFICATION, OR AS SOON AS FIELD CONDITIONS ALLOW.

PERIMETER SEDIMENT CONTROL (SILT FENCE, FIBER LOGS, BERMS, ETC.) - OBSERVED CONDITION TO BE 1/2 FULL OF SEDIMENT, FLATTENED TO 1/2 HEIGHT, DRIVEN OVER, UNDERMINED, SCOURED, MOVED FOR ACCESS, ETC. - SHALL BE MAINTAINED, REPAIRED OR SUPPLEMENTATION OF PERIMETER SEDIMENT CONTROL SHOULD BE DONE BY THE END OF NEXT BUSINESS DAY OR AD FIELD CONDITIONS ALLOW.

3. INLET PROTECTION BMPS, CONVEYANCES, SURFACE WATERS - OBSERVED CONDITION; SEDIMENT DEPOSITION, SEDIMENT DELTAS AN ACCUMULATION OF SEDIMENT MATERIAL, DEVICES APPEAR PLUGGED WITH SEDIMENT - REMOVAL/CLEAN OUT OF ACCUMULATED SEDIMENT AND DELTAS TO BE REMOVED WITHIN 7 DAYS, STABILIZE AS NEEDED IF SOILS ARE EXPOSED DURING REMOVAL/CLEAN OUT.

4. TEMPORARY SEDIMENT BASINS AND TRAPS/PERMANENT SEDIMENT BASINS - OBSERVED TO HAVE SEDIMENT DEPOSITION AND ACCUMULATION TO  $\frac{1}{2}$  OF THE STORAGE VOLUME - CLEAN OUT, REMOVE ACCUMULATED SEDIMENT MATERIAL WITHIN 7 DAYS OF OBSERVATION. OR AS FIELD CONDITIONS ALLOW ACCESS.

5. SITE EXIT LOCATIONS, ROCK EXIT PADS, OTHER ANTI-TRACKING PRACTICES - OBSERVED TO HAVE ACCUMULATED SEDIMENT IN ROCK OR OTHER ANTI-TRACKING BMP, TRACKING OF SEDIMENT FROM THE SITE ONTO PAVED SURFACES - TOP DRESS ROCK, MAINTAIN ROCK EXIT OR OTHER ANTI-TRACKING CONTROLS, SCRAP PAVED SURFACES, SWEEP PAVED SURFACES WITHIN 1 CALENDAR DAY OF DISCOVERY

6. PAVED SURFACES AND ADJACENT STREETS - OBSERVED TO BE TRACKED WITH SEDIMENT AND SOIL MATERIAL FRO THE SITE HAULING OR ACCESS -SWEEP WITHIN 1 CALENDAR DAY OF DISCOVERY, ADDITIONAL AND/OR MORE FREQUENT SWEEPING MAY BE NEEDED TO MAINTAIN PUBLIC SAFETY OR PREVENT WASHING FROM FORECASTED RAINS.

TERMINATION OF COVERAGE

THE PROJECT PERMIT MAY BE TERMINATED IN ONE OF THE FOLLOWING SCENARIOS:

1. ALL CONSTRUCTION ACTIVITY IS COMPLETE, TEMPORARY SYNTHETIC BMP'S ARE REMOVED, ACCUMULATED SEDIMENT FROM CONSTRUCTION IS REMOVED, AND PERMANENT COVER HAS BEEN ACHIEVED WITH VEGETATIVE AND/OR NON-VEGETATIVE COVER. THE NOTICE OF TERMINATION FORM FROM THE PCA SHOULD BE COMPLETED WITHIN 30 DAYS OF MEETING THE CONDITIONS ABOVE. UPON MIDNIGHT OF THE POST MARKED DATE, THE PERMIT COVERAGE IS TERMINATED UNLESS OTHERWISE NOTIFIED BY THE MPCA. OR:

WITHIN 30 DAYS OF SELLING OR OTHERWISE LEGALLY TRANSFERRING OWNERSHIP OF THE SITE IN IT'S ENTIRETY (INCLUDING STREET SWEEPING AND STORMWATER INFRASTRUCTURE) FROM THE ORIGINAL OWNER TO ANOTHER PARTY TAKING RESPONSIBILITY OF OWNERSHIP. THE TERMINATION IS EFFECTIVE UPON MIDNIGHT OF THE SUBMISSION DATE OF THE NOT. IF A PORTION OF THE SITE IS TRANSFERRED (I.E. OUTLOTS, LOTS/BLOCKS) THAT PORTION OF THE SITE IS TERMINATED FROM THE ORIGINAL PERMIT COVERAGE AT MIDNIGHT OF THE SUBMISSION DATE. OR:

PERMIT COVERAGE CAN BE TERMINATED IF ALL OF THE FOLLOWING ARE MET: 3.a. CONSTRUCTION ACTIVITY HAS CEASED FOR 90 DAYS; AND

3.b. AT LEAST 90% OF THE AREA OF THE ORIGINALLY PROPOSED ACTIVITY HAS BEEN COMPLETED AND PERMANENTLY ESTABLISHED WITH VEGETATION OR NON-VEGETATIVE COVER; AND

3.c. Where construction activity is not complete, permanent cover has been established; and

3.d. THE SITE IS COMPLIANT WITH PERMIT SECTIONS 13.3 THROUGH 13.7. 4. WHERE THE PROJECT OBTAINED PERMIT COVERAGE BUT NEVER STARTED CONSTRUCTION ACTIVITY DUE TO CANCELLATION OR OTHER REASONS,

DOCUMENTATION SHOULD BE SENT TO THE PCA WITH THE NOT FORM AND IS SUBJECT TO PCA APPROVAL.

WHEN SUBMITTING FOR NOT, GROUND OR AERIAL PHOTOGRAPHS MUST BE SUBMITTED SHOWING PERMANENT/VEGETATIVE COVER REQUIREMENTS

1.500 LF INLET PROTECTION 7 EACH CULVERT PROTECTION 1 EACH 3.5 LBS WETLAND SEED MIX (33-261) PERMANENT SEED MIX (25-131) 160 LBS 38,000 SF 20,000 SF EROSION CONTROL BLANKET ROCK CONSTRUCTION ENTRANCE 1 EACH STREET SWEEPING 1 EACH

Call 48 Hours before digging 811 or call811.com Common Ground Alliance

PL202300193 PL2023-193

EET NUMBER:

CONSTRUCTION DOCUMENTS

### 1. IMPORTANT VEGETATION

FROM AN OWNER HAS BEEN GIVEN.

- SAFETY FENCE OR A SIMILAR METHOD OF PROTECTION SHALL BE INSTALLED TO PROTECT IMPORTANT VEGETATION AND PROHIBIT VEHICULAR TRAFFIC. • A SECONDARY SILT FENCE SHALL BE INSTALLED AT FIELD OFFICES, STORED EQUIPMENT (INCLUDING VEHICLE PARKING), CONSTRUCTION MATERIAL LOCATIONS, AND TOPSOIL OR FILL STOCKPILES INSTALLED WITHIN A 25-FOOT MINIMUM BUFFER OUTSIDE THE DRIP LINE OF TREES.
- BLUFF PROTECTION TREES SHALL BE SELECTIVELY TRIMMED ALONG BLUFFS OR CLEARED TO ALLOW EQUIPMENT TO OPERATE ONLY WITHIN CONSTRUCTION LIMITS SHOWN ON THE PLAN.
- GRUBBING OF ROOTS SHALL BE AVOIDED EXCEPT WHERE NECESSARY TO COMPLETE WORK. MACHINE SLICED SILT FENCE OR BIO-ROLLS SHALL BE PLACED AROUND STOCKPILES ON SLOPES NOT ALREADY CONTAINED BY SILT FENCES, AND NO STOCKPILES SHALL BE PLACED WITHIN 30 FEET OF BLUFF EDGE. TEMPORARY EROSION CONTROL DEVICES REQUIRED DUE TO CONTRACTORS METHOD OF SEQUENCING THEIR
- RUNOFF FROM THE TOP OF BLUFFS MAY BE DIRECTED DOWN LONG OR STEEP SLOPES THROUGH SLOPE DRAINS. PLASTIC SHEETING MAY BE USED TO PROTECT SMALL, STEEP AREAS OF EXPOSED SOIL.

CONSTRUCTION WORK SHALL BE INCIDENTAL TO THE GRADING CONTRACT.

 FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 7 DAYS OF COMPLETION OF WORK. INSTALL EROSION CONTROL BLANKET ACCORDING TO AND AS INDICATED ON THE PLAN.

- NO DISTURBANCE SHALL OCCUR IN IMPAIRED STREAMS OR PROTECTED WATERS. THIS WILL BE ACCOMPLISHED USING TEMPORARY BRIDGING TO SPAN STREAMS FOR ACCESS DURING BRIDGE OR ROADWAY CONSTRUCTION.
- ALSO, PIERS AND PILING WILL NOT BE PLACED IN THE STREAM. • CONSTRUCTION ACTIVITIES NEXT TO STREAMS WILL BE SCHEDULED FOR PERIODS WHEN FLOWS AREA
- ANTICIPATED TO BE LOW.
- GRUBBING OF ROOTS SHALL BE KEPT TO A MINIMUM.
- A 4-FOOT WIDE BUFFER OF VEGETATION SHALL BE LEFT ON STREAM BANKS. • THE PRIMARY BMP SHALL BE MACHINE SLICED SILT FENCE AND HAY BALES PLACED ALONG THE BUFFER. AS A REDUNDANT BMP, A FLOATING SILT CURTAIN MAY LINE THE CHANNEL BANKS DURING PERIODS OF FLOWING
- WATER. THE FLOATING SILT CURTAIN SHALL NOT BE PLACED ACROSS A STREAM. SHOULD THE PREVIOUS BMPS PROVE UNSUCCESSFUL, THE SILT FENCE/HAY BALES WILL BE REPLACED BY SANDBAGS, PLYWOOD BARRIERS OR SHEETPILE CUTOFFS AS DIRECTED BY THE OWNER AND TO THE SATISFACTION OF THE ENGINEER.

- THERE WILL BE NO UNBROKEN SURFACE SLOPE LENGTHS OF GREATER THAN 75 FEET FOR SLOPES WITH A GRADE OF 3:1 OR STEEPER WITHIN 200 FEET OF SURFACE WATERS. ALL EXPOSED AREAS WITH A CONTINUOUS POSITIVE SLOPE WITHIN 200 FEET OF A SURFACE WATER WILL HAVE A TEMPORARY OR PERMANENT COVER YEAR ROUND. THE EXPOSED SOILS SHALL BE STABILIZED WITHIN 14 DAYS
- PLANNED SLOPES OF 3:1 (H:V) OR STEEPER AND GREATER THAN 75 FT IN LENGTH WILL BE TEMPORARILY OR PERMANENTLY STABILIZED IN INCREMENTS NOT TO EXCEED 75 FT, PRIOR TO CONSTRUCTION OR DISTURBING A
- LONG SLOPES SHOULD BE BROKEN INTO SHORTER LENGTHS BY INSTALLING STRAW BIOROLLS IN INTERLOCKING
   21. HAZARDOUS MATERIALS HERRINGBONES AS SHOWN ON THE GRADING PLAN. IF TEMPORARY SEEDING AND MULCH CAN NOT BE USED ON SLOPES STEEPER THAN 3:1, THEN THE SLOPE MAY BE COVERED WITH TARPS OR PLASTIC SHEETING. TEMPORARY EROSION CONTROL DEVICES REQUIRED DUE TO CONTRACTORS METHOD OF SEQUENCING THEIR
- CONSTRUCTION WORK SHALL BE INCIDENTAL TO THE GRADING CONTRACT. • THE SOIL SURFACE ON RE-VEGETATED SLOPES WILL BE ROUGHENED USING ANY APPROPRIATE IMPLEMENT THAT CAN BE SAFELY OPERATED ON THE SLOPE, SUCH AS BULLDOZERS OR DISKS. THE GROOVES SHALL BE CREATED PERPENDICULAR TO THE SLOPE TO HELP ESTABLISH VEGETATIVE COVER, REDUCE RUNOFF VELOCITY, INCREASE INFILTRATION, AND PROVIDE FOR SEDIMENT TRAPPING.

### 10. CULVERT INLET/OUTLET PROTECTION

- SOD MAY BE PLACED AND ANCHORED AT CULVERT INLETS AS SHOWN ON THE GRADING PLAN, UNLESS VELOCITIES REQUIRE RIPRAP.
- AT LEAST ONE 2-FOOT WIDE STRIP OF SOD OR FIBER BLANKET SHALL BE PLACED ALONG THE EDGES OF CULVERT HEADWALLS AND WINGWALLS AS SHOWN ON THE GRADING AND/OR UTILITY PLANS.
- RIPRAP AT PIPE APRON OUTLETS WILL BE PLACED PRIOR TO BUT NO SOONER THAN 7 DAYS BEFORE APRON IS INSTALLED. RIPRAP SHALL BE INSTALLED UNDER APRON LIP ACCORDING TO THE STANDARD DETAIL.

### 11. STORM SEWER INLET PROTECTION

- STORM DRAIN INLETS SHALL BE PROTECTED UNTIL THE DISTURBED AREAS THAT COULD DISCHARGE TO AN INLET HAVE BEEN STABILIZED. INFRASAFE SEDIMENT CONTROL BARRIERS OR APPROVED EQUAL SHALL BE USED WHEN CASTINGS ARE NOT IN
- PLACE. AS INDICATED ON THE UTILITY PLAN AND AS APPROVED BY THE OWNER. • INFRASAFE DEBRIS COLLECTION DEVICE OR APPROVED EQUIVALENT SHALL BE USED WHEN CASTINGS ARE IN
- PLACE AS INDICATED ON THE UTILITY PLAN AND AS APPROVED BY THE OWNER. DOCUMENTATION IS NEEDED WITHIN 72 HOURS IF REMOVAL OF PROTECTION BMPS IS NEEDED DUE TO WINTER CONDITIONS OR FLOODING CONCERNS.
- 12. STORM WATER POND OUTLETS

INDICATED ON GRADING AND/OR UTILITY PLANS.

- TEMPORARY OR PERMANENT ENERGY DISSIPATION MEASURES SHALL BE IN PLACE AT THE STORM WATER POND OUTLETS WITHIN 24 HOURS OF DIRECT CONNECTION TO A SURFACE WATER.
- RIPRAP AT PIPE APRON OUTLETS WILL BE PLACED PRIOR TO APRON INSTALLATION AND SHALL BE INSTALLED UNDER THE APRON LIP. POND EMERGENCY SPILLWAYS SHALL BE LINED BASED ON THE DESIGN DISCHARGE FLOW VELOCITY AND AS

# 13. TEMPORARY SEDIMENT BASINS

- TEMPORARY SEDIMENT BASINS WILL BE PROVIDED WHERE 5 OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION. THE BASIN SIZE IS BASED ON RUNOFF FROM A 2-YEAR, 24 HOUR STORM, FOR EACH ACRE DRAINED TO THE BASIN. AT A MINIMUM, THE BASIN WILL PROVIDE 1800 CUBIC FEET OF STORAGE FOR EACH ACRE DRAINED TO THE BASIN.
- SEDIMENT BASINS WILL DETAIN WATER LONG ENOUGH TO SETTLE OUT AT LEAST 75 PERCENT OF THE SEDIMENT. THE USE OF FLOCS MAY BE NECESSARY. THE DISCHARGE QUALITY SHALL BE EQUAL TO OR BETTER THAN THE RECEIVING WATER. THE TEMPORARY BASIN MAY BE DRAWN DOWN WITH A PUMP TO INCREASE CAPACITY FOR THE NEXT RAIN EVENT. TEMPORARY EROSION CONTROL DEVICES REQUIRED DUE TO CONTRACTORS METHOD OF SEQUENCING THEIR CONSTRUCTION WORK SHALL BE INCIDENTAL TO THE GRADING CONTRACT.
- THE SEDIMENT PONDS WILL BE EXCAVATED TO MAINTAIN THE NECESSARY SEDIMENT CAPACITY AND CONTAINMENT.
- TEMPORARY SEDIMENT FOREBAYS WILL BE CONSTRUCTED TO CAPTURE SEDIMENT BEFORE IT ENTERS THE POND,
- THE SEDIMENT PONDS WILL BE MONITORED BY THE CONTRACTOR TO DETERMINE THE SEDIMENT LEVEL IN THE
- WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE TEMPORARY BASIN REACHES ½ FULL (50% OF THE STORAGE VOLUME) THE BASIN SHALL BE DRAINED USING PUMPS AND ENERGY DISSIPATION AND SEDIMENT REMOVAL SHALL BE COMPLETED WITHIN 72 HOURS OF DISCOVERY OF THE BASIN BEING 1/2 FULL OF SEDIMENT, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS. TEMPORARY EROSION CONTROL DEVICES REQUIRED DUE TO CONTRACTORS METHOD OF SEQUENCING THEIR CONSTRUCTION WORK SHALL BE INCIDENTAL TO THE
- TEMPORARY SEDIMENT BASINS WILL HAVE A STABILIZED EMERGENCY OVERFLOW AND CONTAIN ENERGY DISSIPATION AT BASIN OUTLET.

# 14. DEEP UTILITIES: WATER AND SANITARY/GAS LINE

- SILT FENCE OR A SIMILAR TYPE OF PERIMETER CONTROL SHALL BE PLACED DOWN GRADIENT OF THE EXCAVATED SOIL IF WORK IS DONE WITHIN 200 FEET OF WETLANDS OR STREAMS. • DISTURBANCE OF CHANNEL BANKS, WETLANDS, AND IMPORTANT VEGETATION AREAS SHALL BE MINIMIZED TO THE EXTENT POSSIBLE. THE UTILITY CONSTRUCTION SITE SHALL BE SEEDED WITH A TEMPORARY
- SEED MIX AND MULCH AFTER INSTALLATION IF THE SITE WILL BE IDLE FOR 7, 14, OR 21 DAYS DEPENDING UPON
   26. NON-STORMWATER DEWATERING SLOPES OF STEEPER THAN 3:1, 3:1 TO 10:1 AND FLATTER THAN 10:1 RESPECTIVELY.

# 15. STOCKPILES (TEMPORARY AND PERMANENT)

- LOCATE STOCKPILES A MINIMUM OF 100 FEET FROM CATCH BASIN INLETS, PONDS, AND SITE DRAINAGE ROUTES PERIMETER CONTROLS SUCH AS SILT FENCE SHALL BE INSTALLED AROUND ALL STOCKPILES PRIOR TO INITIATION OF STOCKPILING IF NOT PLACED WITHIN EXISTING SILT FENCES OR OTHER SEDIMENT CONTROL TEMPORARY SEED AND MULCH SHALL BE USED TO STABILIZE THE STOCKPILES AND THE STOCKPILES SHALL BE
- SHAPED TO FACILITATE SEEDING AND MINIMIZE EROSION AND SHALL BE SEEDED WITHIN 7 DAYS. TEMPORARY EROSION CONTROL DEVICES REQUIRED DUE TO CONTRACTORS METHOD OF SEQUENCING THEIR
- CONSTRUCTION WORK SHALL BE INCIDENTAL TO THE GRADING CONTRACT. IF TEMPORARY SEED AND MULCH CANNOT BE USED, THEN THE STOCKPILES SHALL BE COVERED WITH HYDROMULCH, TARPS OR PLASTIC SHEETING AS APPROVED BY THE OWNER.
- IF STOCKPILES MUST BE PLACED WITHIN A CONVEYANCE A TEMPORARY BYPASS SHALL BE INSTALLED (I.E. PVC PIPE) TO ADEQUATELY CONVEY RUNOFF. TEMPORARY BYPASS BMPS SHALL BE INCIDENTAL TO THE CONTRACT UNLESS PREVIOUSLY APPROVED BY THE OWNER / ENGINEER

#### CONSTRUCTION DEWATERING DURING DEWATERING ACTIVITIES, THE SEDIMENT LADEN WATER CANNOT CAUSE NUISANCE CONDITIONS AND

- MUST DISCHARGE TO A SEDIMENT CONTROL DESIGNED TO PREVENT DISCHARGE WITH VISUAL TURBIDITY.
- OPTIONS FOR REDUCING THE TURBIDITY OF THE WATER INCLUDE: CONSTRUCT A TEMPORARY SEDIMENT TRAP FOR TURBID WATER DISCHARGE.
- USE A PORTABLE SEDIMENT TRAP SYSTEM. APPLY NATURAL BASED FLOCCULENT TECHNOLOGY SUCH AS CHITOSAN IN SEDIMENT TRAPS OR A SERIES OF DITCH CHECKS TO CONTAIN SEDIMENT.
- USE A FILTER BAG SYSTEM PUMP TO A TEMPORARY SEDIMENT BASIN. TO THE EXTENT FEASIBLE, USE WELL-VEGETATED UPLAND AREAS OF THE SITE TO INFILTRATE DEWATERING
- WATER BEFORE DISCHARGE.
- ENERGY DISSIPATION WILL BE PROVIDED AT ALL DISCHARGE POINTS.
- DEWATERING OR BASIN DRAINING ACTIVITIES WILL NOT CAUSE EROSION IN RECEIVING CHANNELS OR ADVERSELY IMPACT WETLANDS.
- DEWATERING DISCHARGE MUST BE VISUALLY CHECKED. PHOTOGRAPH DISCHARGE AT THE BEGINNING AND AT LEAST EVERY 24 HOURS OF OPERATION. DEWATERING THAT ONLY LASTS FOR A FEW MINUTES, AS OPPOSED TO HOURS, AND DO NOT REACH SURFACE WATERS, DO NOT REQUIRE PHOTOGRAPHS OR DOCUMENTATION.
- IF NUISANCE CONDITIONS RESULT (SEDIMENT PLUME IN THE DISCHARGE, DISCHARGE APPEARS CLOUDY OR OPAQUE, HAS A VISIBLE CONTRAST, HAS A VISIBLE OIL FILM, HAS AQUATIC HABITAT DEGRADATION),
- DEWATERING MUST BE CEASED IMMEDIATELY AND CORRECTIVE ACTIONS MUST OCCUR BEFORE DEWATERING IS
- ALL EROSION CONTROL OR SEDIMENT TRAPS REQUIRED FOR CONSTRUCTION DEWATERING SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION ACTIVITY REQUIRING DEWATERING.

### 17. CONSTRUCTION ENTRANCES

- A TEMPORARY CRUSHED ROCK OR WOOD CHIP PAD SHALL BE LOCATED WHERE VEHICLES LEAVE THE
- CONSTRUCTION SITE. THE CONSTRUCTION ENTRANCE PAD SHALL BE AT LEAST 50 FEET IN LENGTH.
- GEOTEXTILE FABRIC MAY BE PLACED UNDER THE CRUSHED ROCK OR WOOD CHIPS TO PREVENT MIGRATION OF MUD FROM UNDERLYING SOIL INTO THE CONSTRUCTION ENTRANCE MATERIAL.
- ROCK PADS SHALL BE CONSTRUCTED OF ROCK 1 TO 3 INCHES IN SIZE AND PLACED IN 6 INCH LAYERS. CONSTRUCTION ENTRANCES SHALL BE INSPECTED AT LEAST EVERY 7 DAYS AND MAINTAINED AS NEEDED. TRACKED SEDIMENTS SHALL BE REMOVED FROM PAVED SURFACES AT THE END OF EACH DAY USING PICK-UP TYPE STREET SWEEPER.

IF TRACKING INTO ROADWAY BECOMES PROBLEMATIC THE ENTRANCE PADS SHALL BE LENGTHENED OR

ANOTHER TECHNIQUE APPLIED. TEMPORARY EROSION CONTROL DEVICES REQUIRED DUE TO CONTRACTORS METHOD OF SEQUENCING THEIR CONSTRUCTION WORK SHALL BE INCIDENTAL TO THE GRADING CONTRACT. THE CONSTRUCTION ENTRANCE SHALL BE MONITORED CLOSELY DURING WET CONDITIONS. IF TRACKING INTO ADJACENT ROADWAYS OCCURS, THE FREQUENCY OF STREET SWEEPING SHALL BE INCREASED.

#### 18. CONCRETE TRUCK WASHOUT CONCRETE TRUCKS SHALL UTILIZE THE CONCRETE WASHOUT AREA SHOWN ON THE PLANS TO WASH AND

- RINSE THEIR EQUIPMENT PRIOR TO LEAVING THE SITE. WASHOUT OF CONCRETE MIXER TRUCKS WILL BE PERFORMED IN THE DESIGNATED AREAS ONLY.
- WASHOUTS WILL BE CONSTRUCTED AND MAINTAINED TO PROVIDE SUFFICIENT CONTAINMENT FOR ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS. WASHOUTS SHALL BE CLEARLY MARKED ON SITE WITH SIGNAGE BY THE UTILITY CONTRACTOR WITH APPROVAL
- WASHOUTS SHALL BE LOCATED A MINIMUM OF 50 FEET FROM DRAINAGE FACILITIES AND WATERCOURSES.
- CONCRETE WASHOUT AREAS WILL HAVE AN IMPERMEABLE LINER TO PREVENT CONCRETE WASHOUT WATER FROM INFILTRATING/CONTACTING WITH SOIL. IMPERMEABLE LINER SHALL CONSIST OF 10 MIL POLYLINER.

## WASHOUT SYSTEMS CAN BE USED AS ALTERNATE WASHOUT AREAS.

PROPERLY DISPOSED OF.

19. VEHICLE MAINTENANCE ROUTINE MAINTENANCE OF VEHICLES AND EQUIPMENT SHALL OCCUR IN STAGING AREAS ONLY. VEHICLE WASHING SHOULD BE AVOIDED. IF WASHING IS NECESSARY, RUNOFF FROM THE WASHING WILL BE CONTAINED AND LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE CONTAINED AND WASTE

WATER/DEGREASING AT A TREATMENT FACILITY SHALL BE INCIDENTAL TO THE CONSTRUCTION CONTRACT.

- ENGINE DEGREASING SHALL BE AVOIDED. IF DEGREASING IS NECESSARY, RUNOFF FROM THE OPERATION WILL BE CONTAINED IN A LINED SEDIMENT TRAP AND PROPERLY DISPOSED OF AT A TREATMENT FACILITY. ALL REQUIRED SEDIMENT TRAPS AND CONTAINMENT FACILITIES AND PROPER DISPOSAL OF WASH
- ANY FUEL TANK OR TRUCK STORED ON THE PROJECT SITE SHALL BE PROTECTED BY A SECONDARY
- CONTAINMENT SYSTEM. FUELING AREAS SHALL NOT BE WASHED OR RINSED WITH WATER SINCE THIS COULD CAUSE FUEL SPILLS TO BE DISCHARGED INTO STORM WATER SYSTEMS.
- ABSORBENT MATERIALS SHALL BE AVAILABLE ON SITE FOR USE IN CLEANING UP SMALL SPILLS. ALL REQUIRED FUEL CONTAINMENT AND CLEAN-UP MATERIALS AND THE PROPER DISPOSAL OF THE MATERIALS

# SHALL BE INCIDENTAL TO THE CONSTRUCTION CONTRACT.

- HAZARDOUS MATERIALS SHALL BE PROPERLY STORED TO PREVENT VANDALISM OR UNAUTHORIZED ACCESS. CONTAINMENT UNITS SHALL BE INSTALLED IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. MPCA STORING AND DISPOSAL REQUIREMENTS SHALL BE FOLLOWED FOR ALL HAZARDOUS WASTE.
- NO HAZARDOUS MATERIAL SHOULD BE STORED WITHIN 200 FEET OF AN IDENTIFIED CRITICAL AREA. ABSORBENT MATERIALS SHALL BE AVAILABLE FROM THE CONTRACTOR ON SITE FOR USE IN CLEANING UP
- IF BUILDING MATERIALS, CHEMICALS, OR GENERAL REFUSE IS BEING USED, STORED, DISPOSED OF, OR OTHERWISE MANAGED INAPPROPRIATELY, THE CONTRACTOR SHALL CORRECT SUCH DEFECTS WITHIN 24
- HOURS OF DETECTION OR NOTIFICATION. ALL REQUIRED CONTAINMENT / STORAGE UNITS / ABSORBENT MATERIAL AND REQUIRED DISPOSAL SHALL BE

### 22. CHEMICAL CONTAINMENT

INCIDENTAL TO THE CONSTRUCTION CONTRACT.

- GASOLINE, OIL, PAINT, SOLVENTS, AND OTHER CHEMICALS NECESSARY FOR CONSTRUCTION ARE NOT ALLOWED TO CONTACT THE GROUND SURFACE, BE EXPOSED TO GROUNDWATER OR BE RELEASED TO A SURFACE OR GROUNDWATER EXCEPT IN DE MINIMIS QUANTITIES.
- ALL PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINER, WITH ORIGINAL LABELS STILL ATTACHED, UNLESS THE CONTAINER IS NOT RESEALABLE. HAZARDOUS MATERIALS SHALL BE RETURNED TO THE HAZARDOUS MATERIAL STORAGE AREA AT THE END OF
- EACH DAY. AN EFFORT SHOULD BE MADE TO STORE ONLY ENOUGH PRODUCTS TO DO THE REQUIRED JOB.
- THE CONTRACTOR SHALL PROVIDE TANKS OR BARRELS TO COLLECT LIQUID BYPRODUCTS THAT POSE A POLLUTION HAZARD.
- THE POLLUTANTS SHALL BE REMOVED FROM THE SITE ON A WEEKLY BASIS AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.
- ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY, IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDED METHODS.
- ALL REQUIRED CONTAINMENT / STORAGE UNITS / ABSORBENT MATERIAL AND REQUIRED DISPOSAL SHALL BE INCIDENTAL TO THE CONSTRUCTION CONTRACT

ALL STORAGE AREAS SHALL BE SECURED TO PREVENT UNAUTHORIZED ACCESS.

### 23. SOLID WASTE

- SOLID WASTE SHALL BE STORED IN APPROPRIATE CONTAINERS AND PROPERLY DISPOSED OF ON A REGULAR
- CONTAINERS SHALL BE COVERED TO PREVENT WIND BLOWING THE WASTE AROUND THE SITE. MPCA DISPOSAL REQUIREMENTS WILL BE FOLLOWED FOR ALL SOLID WASTE.
- SOLID WASTE STORAGE CONTAINERS AND PROPER DISPOSAL SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION CONTRACT.

#### 24. DUST CONTROL THE CONTRACTOR SHALL USE A VARIETY OF DUST CONTROL INCLUDING BUT NOT LIMITED TO THE FOLLOWING: A. RAPID STABILIZATION METHODS ON SLOPES

- B. WATER ON ROADWAYS AND GRADED AREAS C. ALTERNATIVES: IN THE FORM OF VEGETABLE POLYMERS, WATER AND CALCIUM CHLORIDE PETROLEUM EMULSION RESINS, OR ACRYLIC COPOLYMERS MAY ALSO BE USED.
- ALL REQUIRED DUST CONTROL SHALL BE INCIDENTAL TO THE CONSTRUCTION CONTRACT AS PER SPECIFICATIONS.

# 25. WINTER STABILIZATION

- COVER EXPOSED SOILS ON OR AROUND NOV. 15TH AND/OR PRIOR TO TERMINATION OF CONSTRUCTION ACTIVITIES FOR WINTER
- ALL EXPOSED SOILS TO BE COVERED WITH 2 TONS TYPE 1 MULCH ALL EXPOSED SOILS TO BE SEEDED WITH MNDOT SEED MIX 21-112ALL LOW POINTS IN ROADS TO BE ADEQUATELY DRAINED IN ACCORDANCE WITH NPDES DEWATERING REQUIREMENTS PART IV. CONSTRUCTION
- ACTIVITY REQUIREMENTS. SECTION D. DEWATERING AND BASIN DRAINING. PERIMETER SILT FENCE OR OTHER CONTROLS TO BE INSTALLED 3-5 FEET FROM THE BACK OF THE CURB AND
- OUT OF THE PLOWED SNOW AREA. PERIMETER CONTROLS AROUND PERMANENT STORMWATER BASINS TO BE INSTALLED AND MAINTAINED • INLET CONTROLS TO BE REMOVED ACCORDING TO LEGAL REQUIREMENTS WITH DOCUMENTATION WITHIN 72
- HOURS FROM LEGAL AUTHORITY. IF WORK HAS OCCURRED NEAR OR IN STREAMS OR OTHER SURFACE WATERS, THE EXPOSED SOILS SHALL BE STABILIZED TO PROTECT AGAINST FLOODING AND SPRING RUNOFF TO THE 100-YR FLOOD ELEVATION.
- ALL TEMPORARY AND PERMANENT STORMWATER BASINS AND SEDIMENT BASINS SHOULD HAVE OUTLETS AND STABILIZED EMERGENCY OVERFLOWS INSTALLED AS PER THE GRADING AND/OR UTILITY PLAN AND AT THE

# HYDRANT FLUSHING: FLUSHING OF HYDRANTS WILL BE DISCHARGED

APPROVAL OF THE OWNER.

WATER BASINS AND STORM SEWER SYSTEM. POTABLE WATER DISCHARGE: ALL WATER LINES WILL BE FLUSHED USING HOSES AND DISCHARGED ONTO AN IMPERVIOUS SURFACE AND DIRECTED TO THE STORM SEWER INFRASTRUCTURE BY NON-EROSIVE MEANS.

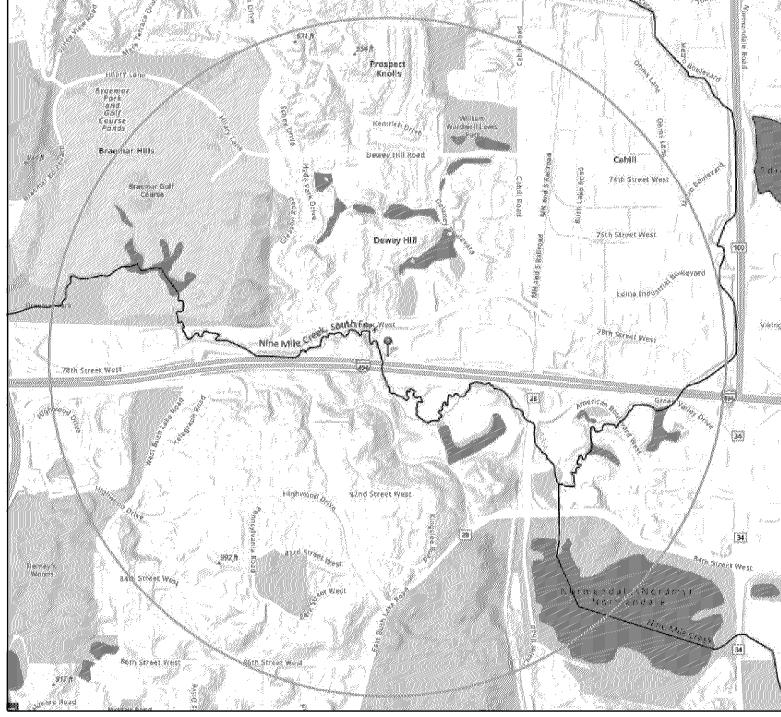
THROUGH TEMPORARY PIPES AS NECESSARY, ONTO IMPERVIOUS SURFACES OR TO STABILIZED ARES WITH

ENERGY DISSIPATION AT THE DISCHARGE POINT. THE DISCHARGE SHOULD BE COLLECTED BY THE STORM

- 28. WORK NEAR OR IN IMPAIRED WATERS EXPOSED SOILS MUST BE STABILIZED WITHIN 7 DAYS OF ACTIVITY TEMPORARILY OR PERMANENTLY CEASED.
- TEMPORARY SEDIMENT BASIN NEEDED WITHIN AREAS 5 ACRE DISTURBANCE WITH COMMON POINT OF
- DISCHARGE. • IF WORK IS NEAR SPECIAL WATERS REFER TO APPENDIX A OF THE NPDES PERMIT FOR ADDITIONAL NOTES AND REQUIREMENTS.
- NO UNTREATED DEWATERING WILL TAKE PLACE AND DISCHARGE TO "IMPAIRED WATERS" SEE PERMIT FOR ADDITIONAL NOTES AND REQUIREMENTS

#### 30. INFILTRATION/FILTRATION AREAS FENCE OFF AREA PRIOR TO BEGINNING CONSTRUCTION.

- EXCAVATION AREA SHALL TAKE PLACE AFTER CONTRIBUTING AREAS ARE AT FINAL GRADE AND STABILIZED. DO NOT USE HEAVY/WHEELED EQUIPMENT IN FILTRATION AREA.
- DIVERSIONS, REDUNDANT SEDIMENT AND EROSION CONTROLS MUST BE USED TO PROTECT AREA. • ENSURE 8 FT MAINTENANCE ACCESS IS ADEQUATE FOR AREA.
- IF GRADING MUST OCCUR IN FILTRATION AREA, LEAVE GRADE 3 FT HIGH TEMPORARILY UNTIL AREA CAN BE FINAL GRADED AND STABILIZED



VICINITY MAP/IMPAIRED WATERS MAP



Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
L2E	Malardi-Hawick complex, 18 to 35 percent slopes	0.0	0.2%
L50A	Muskego and Houghton soils, 0 to 1 percent slopes	0.0	0.0%
L56A Muskego and Klossner soils, 0 to 1 percent slopes, frequently flooded		0.0	
L62C2 Koronis-Kingsley-Malardi complex, 6 to 12 percent slopes, eroded		0.8	
L62E	Koronis-Kingsley-Malardi complex, 18 to 35 percent slopes	0.6	10.8%
U1A	Urban land-Udorthents, wet substratum, complex, 0 to 2 percent slopes	1.0	17.8%
Ufban land-Udorthents, wet substratum, complex, 0 to 2 percent slopes, rarely flooded		2.2	39.7%
U6B	Urban land-Udorthents (cut and fill land) complex, 0 to 6 percent slopes	0.9	16.5%
Totals for Area of Interest		5.5	100.0%

SOIL MAP UNIT SYMBOL LEGEND

SUMMARIZED BELOW

THIS PLAN AND THE ATTACHMENTS MUST BE AMENDED WITHIN 7 DAYS TO INCLUDE ADDITIONAL REQUIREMENTS OR MODIFIED REQUIREMENTS WHICH TAKE PLACE DURING CONSTRUCTION IF ONE OR MORE OF THE FOLLOWING OCCUR:

- 1. THERE IS A CHANGE IS DESIGN CONSTRUCTION, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS THAT SIGNIFICANTLY IMPACTS THE DISCHARGE OF
- POLLUTANTS FROM THE SITE TO SURFACE OR GROUNDWATER. 2. INSPECTIONS OR INVESTIGATIONS BY THE SITE OWNER, OPERATOR, ENVIRONMENTAL PROTECTION AGENCY, MINNESOTA POLLUTION CONTROL AGENCY OFFICIALS
- INDICATE THIS PLAN IS NOT EFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING THE DISCHARGE OF POLLUTANTS. 3. THIS SWPPP IN NOT ACHIEVING THE GENERAL OBJECTIVES OF MINIMIZING POLLUTANTS IN STORMWATER DISCHARGES OR IF THIS PLAN IS NOT CONSISTENT WITH THE MN R1000011 CONSTRUCTION GENERAL PERMIT.
- 4. IF THE MPCA NOTIFIES THE OWNER AND/OR OPERATOR (i.e. PERMITTEES) THAT ADDITIONAL REQUIREMENTS ARE NEEDED, REQUIREMENTS ARE NOT BEING NET FOR TMDL OR OTHER WATER QUALITY STANDARDS, OR THAT THE SWPPP DID NOT INCORPORATE THE NECESSARY REQUIREMENTS. 5. CHANGES INVOLVING THE USE OF A LESS STRINGENT BMP MUST INCLUDE A JUSTIFICATION DESCRIBING HOW THE REPLACEMENT BMP IS EFFECTIVE FOR THE SITE

CHARACTERISTICS. THE FOLLOWING TABLE SHOULD BE COMPLETED AS NECESSARY DURING CONSTRUCTION TO DOCUMENT CHANGES AND AMENDMENTS TO THIS DOCUMENT.

AMENDMENTS MUST BE MADE BY ONE OF THE FOLLOWING INDIVIDUALS:THOSE PREPARING THIS DOCUMENT; THOSE OVERSEEING THE IMPLEMENTATION OF THE SWPPP: THOSE REVISING THE SWPPP; THOSE PERFORMING INSPECTIONS FOR THE PROJECT; AND/OR OTHER QUALIFIED INDIVIDUAL.

PLACE THE AMENDMENT NUMBER NEXT TO ALL APPLICABLE CHANGES, REDLINES, AND INFORMATION IN THE DOCUMENT TO REFERENCE BACK TO THE CHANGES

AMENDMENT NO.	DATE	REASON, LOCATION, AND BRIEF DESCRIPTION OF CHANGE OR AMENDMENT	REQUESTED BY	PREPARED BY

Call 48 Hours before digging 811 or call811.com Common Ground Alliance

PL202300193 PL2023-193

HEET NUMBER:

CONSTRUCTION DOCUMENTS

DATE: 06/11/2024

PL202300193 PL2023-193

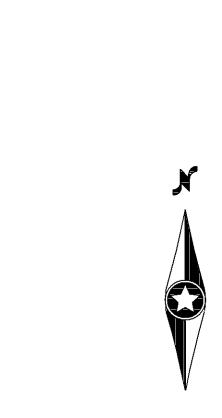
Call 48 Hours before digging: 811 or call811.com Common Ground Alliance

## SANITARY SEWER AND WATERMAIN LEGEND

<u>EXISTING</u>	PROPOSED	
		PROPERTY LINE
		EASEMENT LINE
		CURB AND GUTTER
——————————————————————————————————————	<b></b>	SANITARY SEWER
STO —		STORM SEWER
	I	WATER MAIN
	<del></del> -	HYDRANT
<u>GAS</u>	———— GAS ————	GAS
PU5		UNDERGROUND ELECTRIC
POH	——— РОН ———	OVERHEAD ELECTRIC
	——— ТОН ————	UNDERGROUND TELEPHONE
TOH	——— ТОН ————	OVERHEAD TELEPHONE
FO	FO	TELEPHONE FIBER OPTIC
CTV	сту	CABLE TELEVISION
	M	GATE VALVE
lacksquare		FLARED END SECTION (WITH RIPRAP)
<b>\</b>	w	LIGHT POLE

# **GENERAL WATERMAIN & SANITARY SEWER NOTES**

- 1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND LIMITED MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION SHALL NOT BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE OWNER OR ENGINEER OF DISCREPANCIES.
- ALL SANITARY SEWER AND WATER MAIN MATERIAL AND INSTALLATIONS SHALL BE PER CITY REQUIREMENTS, MINNESOTA PLUMBING CODE, AND IN ACCORDANCE WITH THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR WATER MAIN AND SERVICE LINE INSTALLATION AND SANITARY SEWER AND STORM SEWER INSTALLATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN THE NECESSARY FEDERAL, STATE AND LOCAL PERMITS FOR THE PROPOSED WORK OR VERIFY WITH THE OWNER OR ENGINEER THAT PERMITS HAVE BEEN OBTAINED. PERMIT FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS OTHERWISE ARRANGED WITH THE OWNER.
- 4. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND DIMENSIONS OF DOORWAYS, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY CONNECTION LOCATIONS.
- 5. ALL PRIVATE UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE THE SERVICE LINE CONSTRUCTION WITH THE UTILITY COMPANIES.
- 6. CONTRACTOR SHALL OBTAIN ALL NECESSARY CITY PERMITS FOR UTILITY CONNECTIONS, AND UTILITIES SHALL BE INSPECTED AND APPROVED BY THE CITY. THE CITY SHALL BE NOTIFIED 48-HOURS PRIOR TO COMMENCING WITH THE UTILITY CONSTRUCTION OR ANY REQUIRED TESTING. CONTRACTOR SHALL NOT OPERATE, INTERFERE WITH, CONNECT ANY PIPE OR HOSE TO, OR TAP ANY WATER MAIN BELONGING TO THE CITY UNLESS DULY AUTHORIZED TO DO SO BY THE CITY. ANY ADVERSE CONSEQUENCES OF SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 7. WATER MAIN LENGTHS AS SHOWN ARE APPROXIMATE HORIZONTAL LENGTHS. ALLOW FOR ADDITIONAL PIPE WHEN INSTALLING ON SLOPES OR WHEN DEFLECTIONS ARE REQUIRED. THE JOINT DEFLECTIONS SHALL NOT EXCEED THE MAXIMUM RECOMMENDED BY THE PIPE MANUFACTURER OR BY LOCAL GOVERNING SPECIFICATIONS. FITTINGS REQUIRED TO CONSTRUCT WATER MAIN SHALL BE INCLUDED IN WATER MAIN CONSTRUCTION.
- 8. PROVIDE WATER MAIN THRUST RESTRAINTS PER CITY STANDARD REQUIREMENTS.
- 9. A MINIMUM VERTICAL SEPARATION OF 18 INCHES IS REQUIRED AT ALL WATER LINE CROSSINGS WITH SANITARY SEWER OR STORM SEWER. THE WATER LINE SHALL NOT HAVE JOINTS OR CONNECTION WITHIN 10-FEET OF THE CROSSING. INSULATE CROSSINGS WITH STORM SEWER.
- 10. UTILITY SERVICES TYPICALLY TERMINATE 5' OUTSIDE BUILDING WALL UNLESS OTHERWISE SHOWN OR NOTED.
- 11. DUCTILE IRON WATER LINES SHALL BE CLASS 52 FOR LINES 12 INCH Ø OR SMALLER, PER AWWA C115 OR C151. A MINIMUM 8 MIL POLYWRAP IS REQUIRED ON ALL DIP PIPE.
- 12. ALL WATER LINES SHALL HAVE 8' MINIMUM COVER. INSULATE WATER MAIN IF LESS THAN 8' OF COVER. INSULATION SHALL BE DOW STYROFOAM HI BRAND 35 OR EQUIVALENT, WITH 4 INCHES OF THICKNESS.
- 13. SANITARY SEWER PIPE OUTSIDE THE BUILDING ENVELOPE SHALL BE POLYVINYL CHLORIDE (PVC) SDR 26. SANITARY SEWER PIPE WITHIN 5 FEET OF THE BUILDING AND UNDER FOOTINGS SHALL BE SCHEDULE 40 PER ASTM D2665. ALL PLASTIC SANITARY SEWER SHALL BE INSTALLED PER D2321. SOLVENT WELD JOINTS MUST INCLUDE USE OF A PRIMER WHICH IS OF A CONTRASTING COLOR TO THE PIPE AND CEMENT. ALL SANITARY SEWER SHALL BE TESTED ACCORDING TO MINNESOTA PLUMBING CODE, PART 712.0.
- 14. ALL NONCONDUCTIVE PIPE SHALL BE INSTALLED WITH A LOCATE (TRACER) WIRE PER MINNESOTA PLUMBING CODE, PART 604.9.
- 15. AFTER CONSTRUCTION IS COMPLETED, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH AN AS-BUILT RECORD OF UTILITY CONSTRUCTION. THE AS-BUILT SHALL INCLUDE LOCATION AND LENGTH DEVIATIONS OR CHANGES TO THE PLAN. CONTRACTOR TO VERIFY WITH OWNER OR ENGINEER WHETHER A PLAN WITH POST-CONSTRUCTION ELEVATIONS IS REQUIRED.
- 16. ALL MANHOLE CASTINGS IN PAVED AREAS SHALL BE SUMPED 0.05 FEET. RIM ELEVATIONS ON PLAN REFLECT THE SUMPED ELEVATIONS.
- 17. COMBINATION FIRE AND DOMESTIC SERVICES MUST TERMINATE WITH A THREAD ON FLANGE OR A MECHANICAL JOINT TO FLANGE ADAPTER.
- 18. ALL COMPONENTS OF THE WATER SYSTEM, UP TO THE WATER METER OR FIRE SERVICE EQUIPMENT MUST UTILIZE PROTECTIVE INTERNAL COATINGS MEETING CURRENT ANSI/AWWA STANDARDS FOR CEMENT MORTAR LINING OR SPECIAL COATINGS. THE USE OF UNLINED OR UNCOATED PIPE IS NOT ALLOWED.



\* DENOTES WATER MAIN LOWERING

BOTTOM OF PIPE

ELEV = 829.5

ELEV = 831.1\*

WATER MAIN

ELEV = 830.9

WATER MAIN

WATER MAIN ELEV = 820.5

ELEV = 833.9

ELEV = 832.6

ELEV = 833.1

STORM ELEV = 824.9

ELEV = 823.6

STORM ELEV = 835.8

ELEV = 832.3

ELEV = 835.5

ELEV = 835.0NOT USED

WATER MAIN ELEV = 830.7

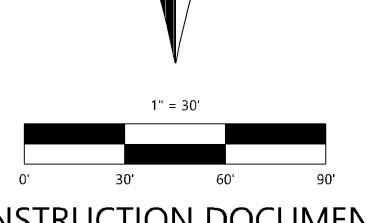
STORM ELEV = 833.5

STORM ELEV = 834.2

STORM WATER MAIN ELEV = 832.1 ELEV = 829.7

STORM

**ENGINEERING DIVISION** Approved By: Julie Long, PE 08/20/2024 5:16:11 PM



CONSTRUCTION DOCUMENTS

PROJECT NUMBER: 0043990.00

date: 08/20/2024