

# L&B LAND COMPANY, LLC

## WOODHAVEN

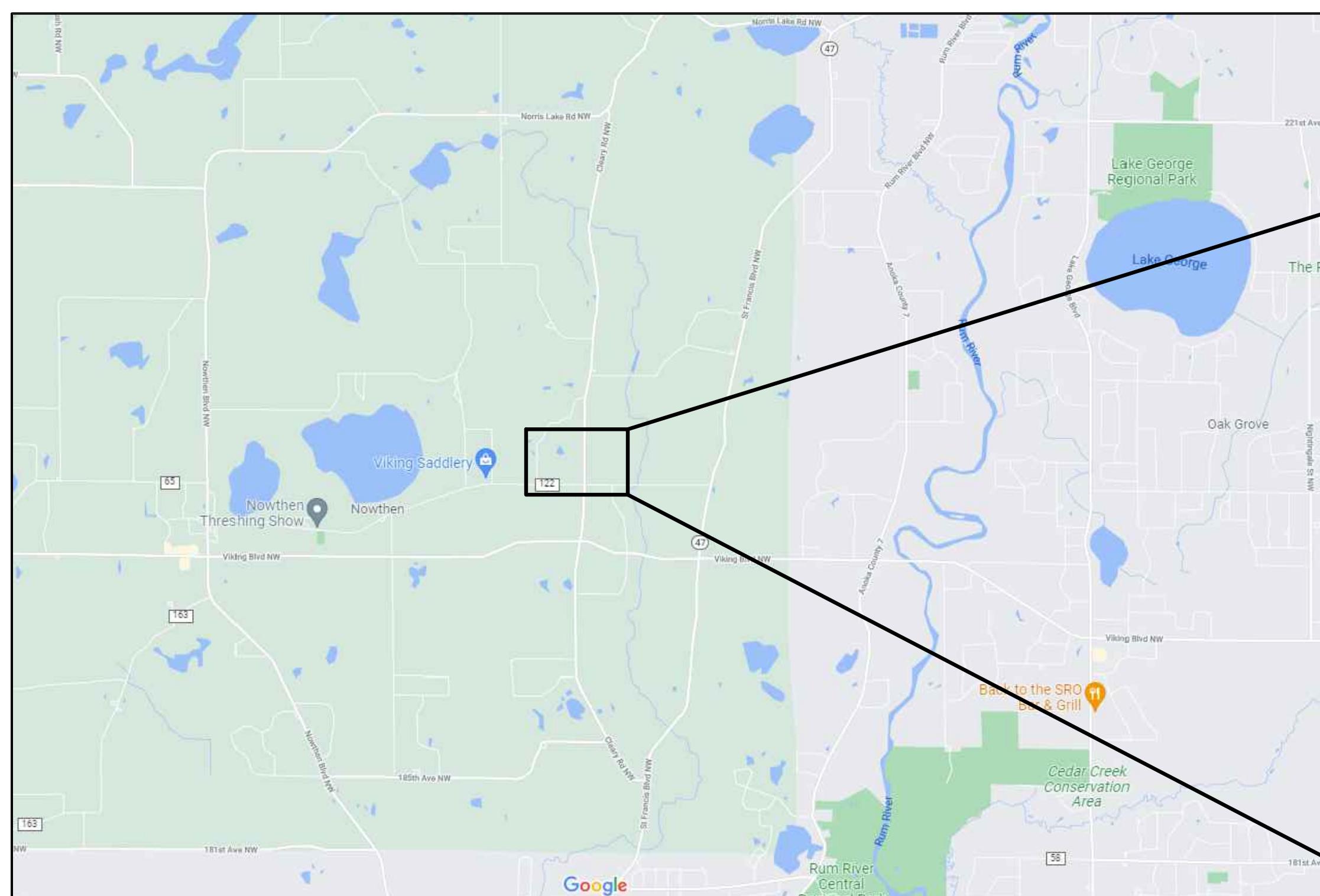
### OLD VIKING BLVD.

### CITY OF NOWTHEN, ANOKA COUNTY, MN

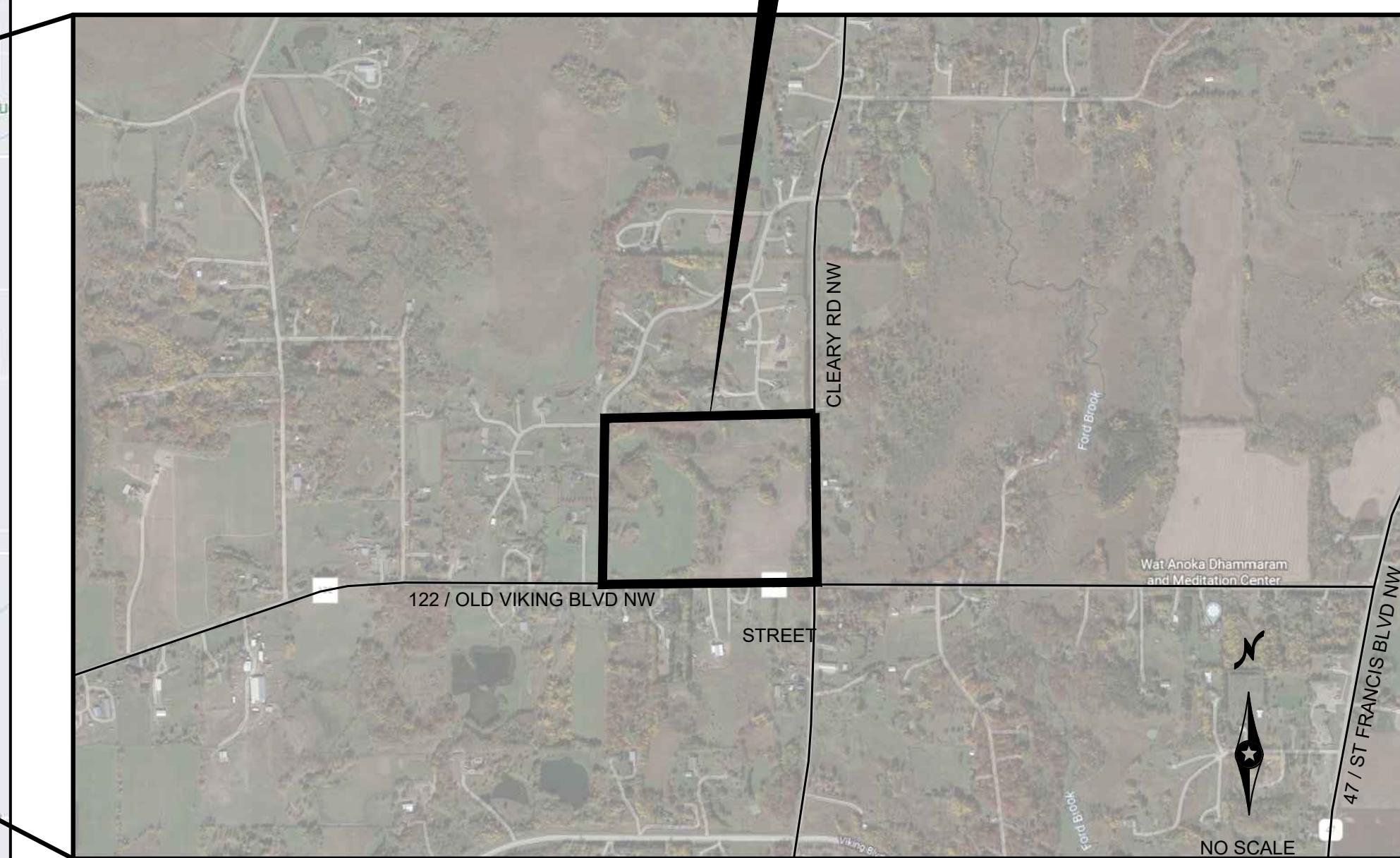
REVISED MAY, 2022

FINAL PLANS FOR CONSTRUCTION

**CIVIL & SURVEY PLANS PREPARED BY:**



PROJECT LOCATION

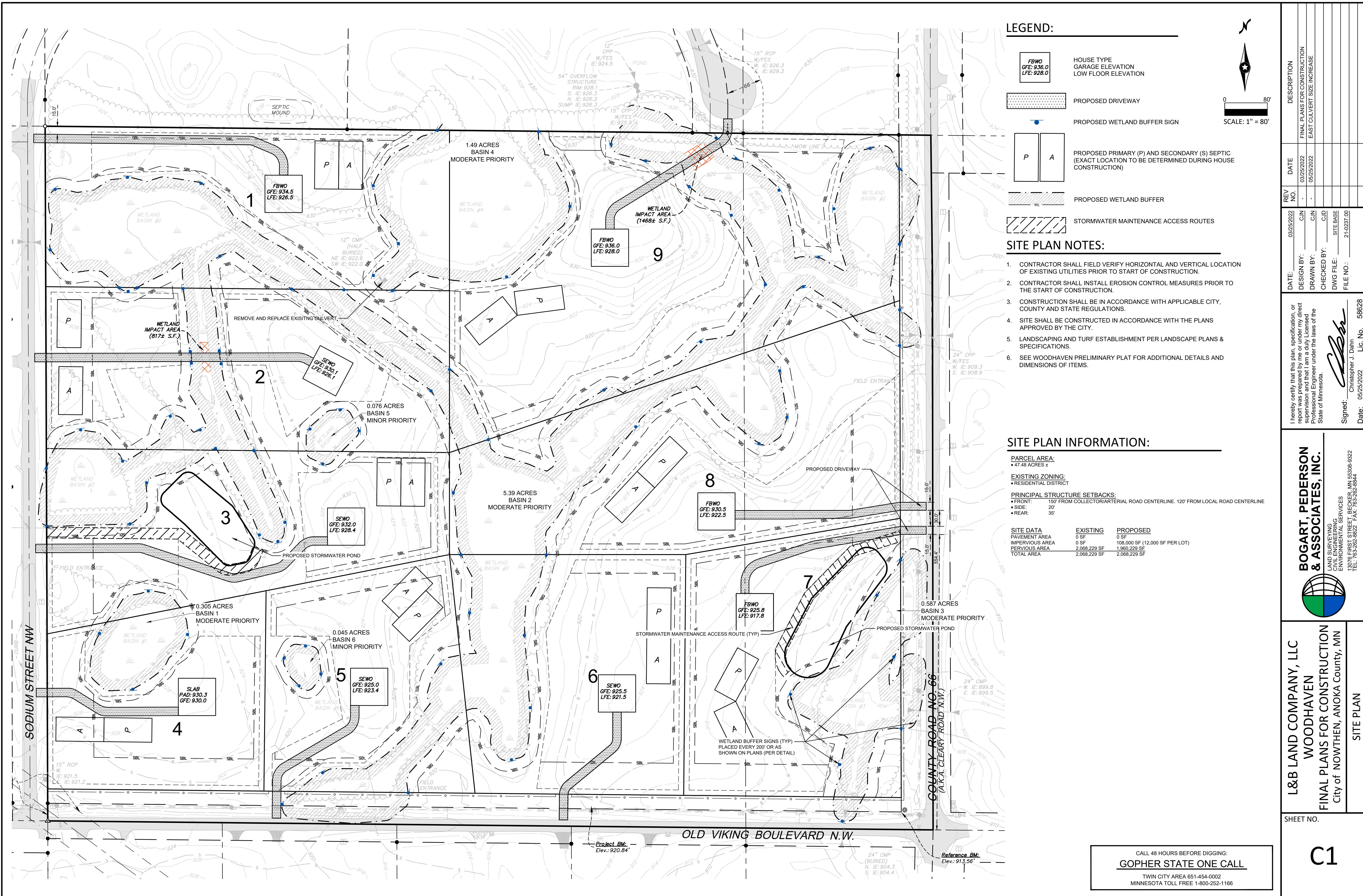


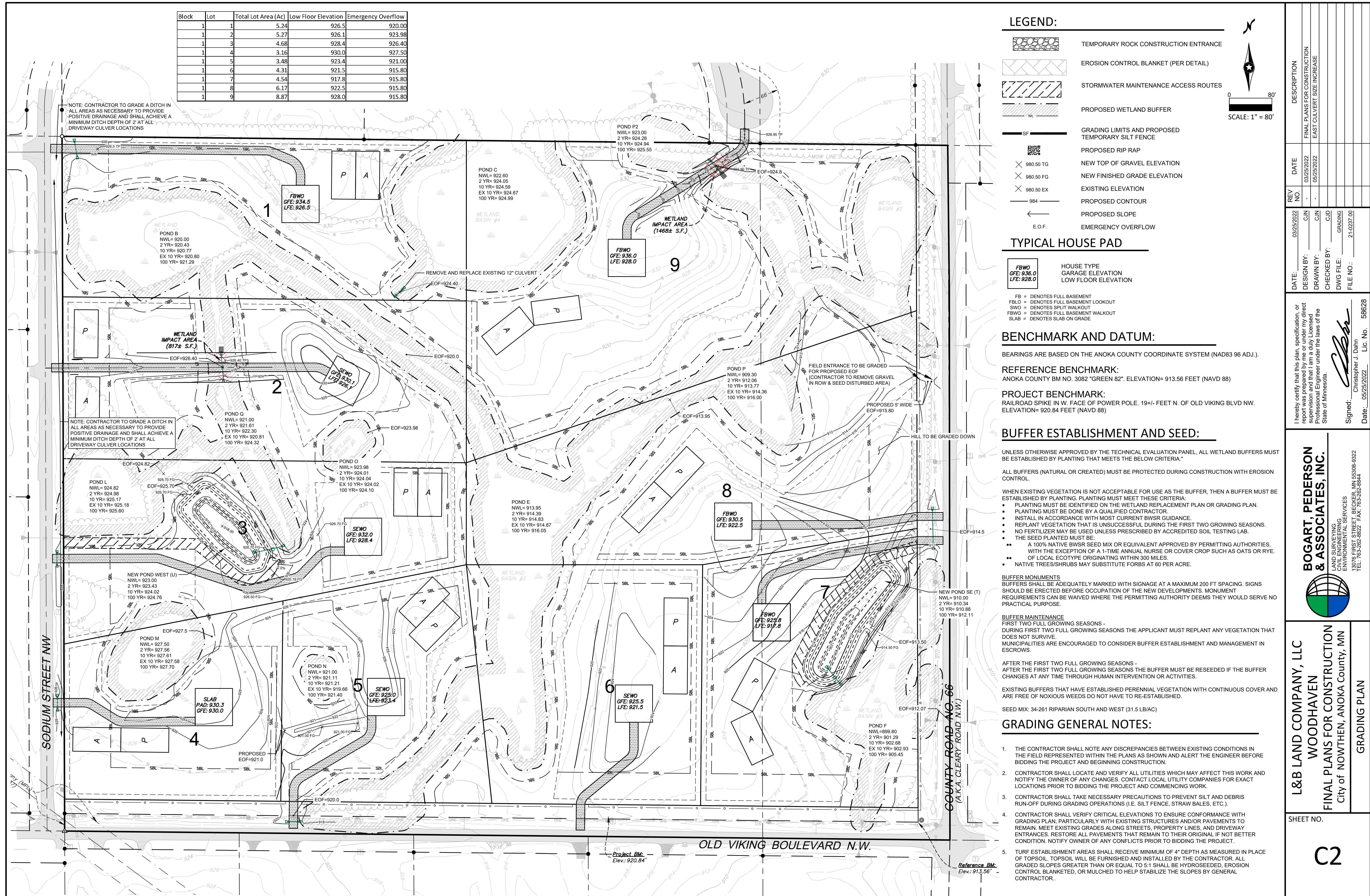
VICINITY MAP

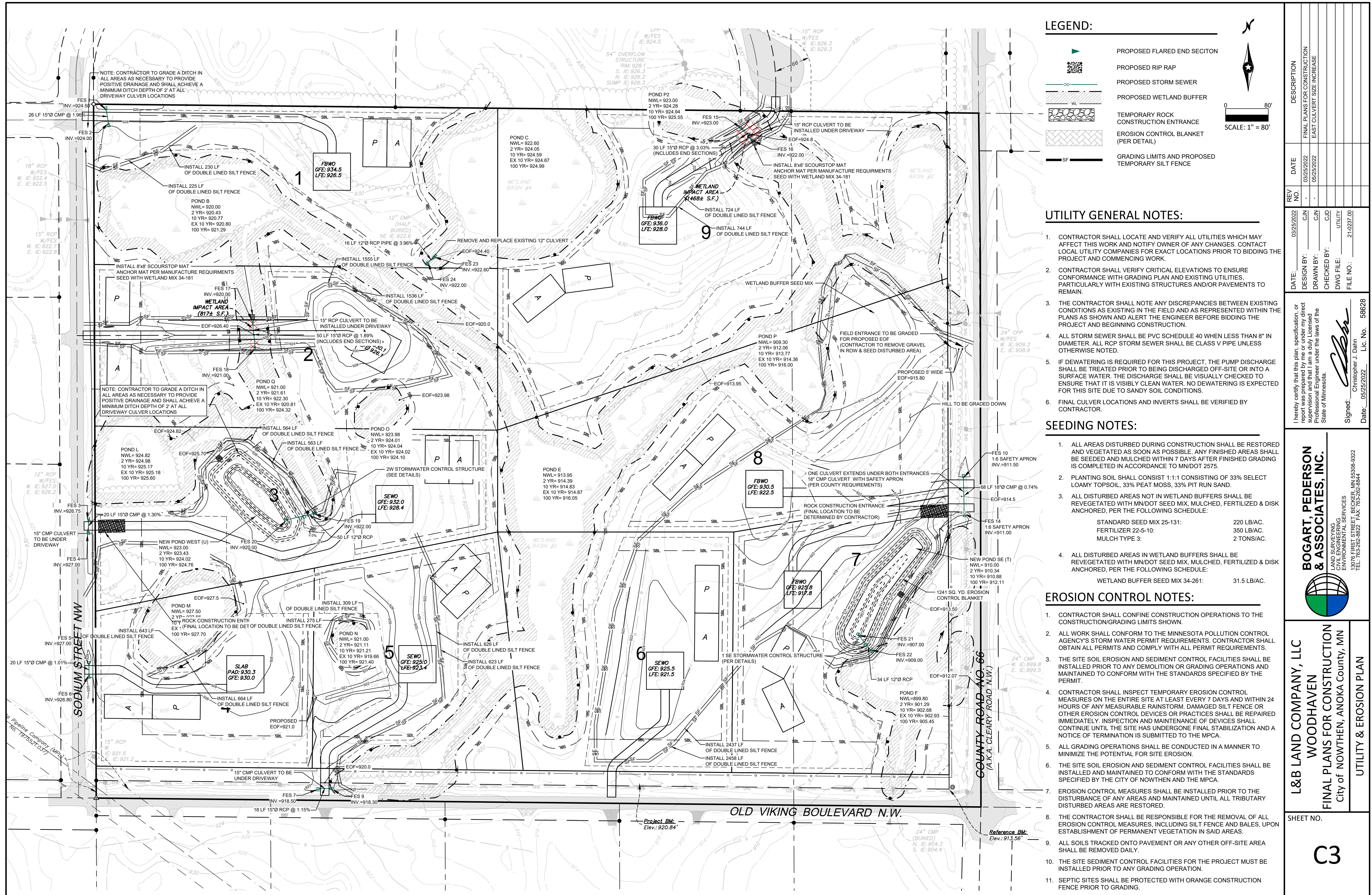
Sheet List Table	
Sheet Number	Sheet Title
C0	Cover
C1	Site Plan
C2	Grading Plan
C3	Utility & Erosion Plan
C4	Seeding & Maintenance Plan
C5	SWPPP Narrative
C6	Details

REV NO.	DATE	DESCRIPTION
-	03/25/2022	FINAL PLANS FOR CONSTRUCTION
1	05/25/2022	EAST CULVERT SIZE INCREASE

PRIVATE UTILITIES SHOWN ARE QUALITY LEVEL D  
QUALITY LEVEL D PROVIDES THE MOST BASIC LEVEL OF INFORMATION. IT INVOLVES  
COLLECTING DATA FROM EXISTING UTILITY RECORDS. RECORDS MAY INCLUDE AS-BUILT  
DRAWINGS, DISTRIBUTION AND SERVICES MAPS, EXISTING GEOGRAPHIC INFORMATION  
SYSTEM DATABASES, CONSTRUCTION PLANS, ETC.









## STORM WATER POLLUTION PREVENTION PLAN NARRATIVE:

### GENERAL INFORMATION

THIS STORMWATER POLLUTION PREVENTION PLAN IS PREPARED IN ACCORDANCE TO THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT NO. MN R100001 FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY.  
 PROJECT NAME: WOODHAVEN  
 LOCATION: OLD VIKING BLVD NW, NOWTHEN MN. 55330  
 ANOKA COUNTY  
 LAT/LONG: 45.336673, -93.421222

### DESCRIPTION OF CONSTRUCTION ACTIVITY:

DEVELOPMENT CONSISTS OF PAVING, GRADING, UTILITY INSTALLATION, AND TURF ESTABLISHMENT.

### PROJECT CONTACTS

L&B Land Company and the contractor are responsible for implementation of the SWPPP and the installation, inspection, and maintenance of the erosion prevention and sediment control BMPs before and during construction.

### SWPPP PREPARATION:

SWPPP PREPARER: CHRISTOPHER DAHN  
 BOGART, PEDERSON & ASSOCIATES  
 ENGINEER AND SWPPP DESIGNER (EXP 2022)  
 TRAINING:  
 ADDRESS: 13076 FIRST STREET  
 BECKER, MN 53308-9322  
 TELEPHONE: 763-262-8822  
 EMAIL: CDAHN@BOGART-PEDERSON.COM  
 OWNER:  
 OWNER CONTACT: LARRY SKOGQUIST  
 ADDRESS: 6840 213TH AVE NW, ELK RIVER, MN 55330  
 TELEPHONE: (612)-282-7093  
 EMAIL: SKOGQUIST@AOL.COM

### CONTRACTOR (TO BE FILLED OUT BY THE CONTRACTOR):

BUSINESS NAME  
 OWNER NAME  
 MAILING ADDRESS  
 CITY  
 TELEPHONE  
 EMAIL  
 CONTACT NAME  
 MAILING ADDRESS  
 CITY  
 TELEPHONE  
 EMAIL

### ESTIMATED DATES OF CONSTRUCTION:

START DATE / / (TO BE FILLED IN BY CONTRACTOR)  
 COMPLETION DATE / / (TO BE FILLED IN BY CONTRACTOR)

### PERMANENT STORMWATER DESIGN CALCULATIONS:

SEE THE STORM WATER MANAGEMENT REPORT FOR MORE INFORMATION. CONTACT BOGART, PEDERSON & ASSOCIATES FOR REPORT. PROPOSED FLOW RATE IS LIMITED THROUGH LESS IMPERVIOUS SURFACE AND STORM WATER BEING DIRECTED TO AN WET RETENTION BASIN.

SOIL GROUP: A

### DESCRIPTION OF EROSION CONTROL ACTIVITY:

EROSION CONTROL CONSISTS OF SILT FENCE PERIMETER CONTROL, TURF ESTABLISHMENT THROUGH SEEDING AND EROSION CONTROL BLANKET, AND ROCK CONSTRUCTION ENTRANCE PLACEMENT.

### CUMULATIVE IMPERVIOUS SURFACES:

AREA OF DISTURBANCE: 14.38 ACRES  
 PRE-CONSTRUCTION IMPERVIOUS AREA: 0.00 ACRES  
 POST CONSTRUCTION IMPERVIOUS AREA: 2.48 ACRES  
 NEW IMPERVIOUS AREA: 2.48 ACRES

### RECEIVING WATERS:

STORM WATER FROM THIS SITE DISCHARGES INTO SURROUNDING WETLANDS AND WILL ULTIMATELY BE DISCHARGED TO FORD BROOK.

### PLANS AND SPECIFICATIONS

THE PLAN SHEETS OF THIS PLAN SET INDICATE THE FOLLOWING ITEMS:  
 • THE PROJECT LOCATION AND CONSTRUCTION LIMITS.  
 • LOCATIONS OF IMPERVIOUS SURFACES.  
 • LOCATIONS OF AREAS NOT TO BE DISTURBED (E.G., BUFFER ZONES, WETLANDS, ETC.).  
 • STEEP SLOPE LOCATIONS.  
 • LOCATIONS OF ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL BMP'S TO BE INSTALLED ON THE PROJECT.  
 • THE DETAIL SHEETS INDICATE EROSION AND SEDIMENT CONTROL BMP'S TO BE INSTALLED ON THE PROJECT.  
 • IF DEWATERING IS REQUIRED FOR THIS PROJECT, THE PUMP DISCHARGE SHALL BE TREATED PRIOR TO BEING DISCHARGED OFF-SITE OR INTO A SURFACE WATER. THE DISCHARGE SHALL BE VISUALLY CHECKED TO ENSURE THAT IT IS VISIBLY CLEAN WATER.

### TEMPORARY SEDIMENT CONTROL PRACTICES

DOWN GRADIENT SILT FENCE AND SEDIMENT LOG INSTALLATIONS ARE TO BE INPLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK OPERATIONS.

TOPSOIL IS TO BE WINDROWED ALONG THE CONSTRUCTION LIMITS AND PLACED AS SLOPE DRESSING IMMEDIATELY FOLLOWING COMPLETION OF THE GRADING OPERATIONS, AS THE GRADING OPERATIONS PROCEED.

TOPSOIL PLACEMENT ALONG THE EMBANKMENT SLOPES THOUGH THE WETLANDS AREA IS TO BE SPREAD BY A LOW IMPACT CRAWLER TRACTOR OPERATING UP AND DOWN THE SLOPES SO AS TO PROVIDE TRACK PRINTS PARALLEL WITH THE CONTOURS.

INSTALLATION OF MN/DOT CATEGORY 3 EROSION CONTROL BLANKET ALONG THE EMBANKMENT SLOPES ADJACENT THE WETLANDS AREA.

ALL TEMPORARY SOILS STOCKPILES WILL REQUIRE AN EFFECTIVE MEANS OF SEDIMENT CONTROL SUCH AS AN EROSION CONTROL BLANKET COVERING OR SILT FENCE INSTALLATION ALONG THE TOE OF SLOPE.

ALL COMPLETED SWALES SLOPES AND BOTTOMS NOT DRAINING TOWARDS WETLAND AREAS ARE TO BE STABILIZED WITHIN 7 DAYS.

TEMPORARY STABILIZATION WILL BE REQUIRED IN AREAS WHERE GRADING OPERATIONS ARE SUSPENDED OR CEASED FOR A PERIOD OF 7 DAYS OR GREATER.

A ROCK CONSTRUCTION ENTRANCE FOR SEDIMENT CONTROL IS TO BE PROVIDED AT THE PROJECT ENTRANCE ON OLD VIKING BLVD.

STREET SWEEPING OF THE PAVED SURFACES WILL BE REQUIRED AS DIRECTED BY THE ENGINEER.

### TIMING OF EROSION CONTROL:

SILT FENCE AND SEDIMENT LOGS WILL BE INSTALLED PRIOR TO CONSTRUCTION.

RIPRAP AND FILTER BLANKET WILL BE PLACED AT THE OUTLETS WITHIN 24 HOURS OF THE OUTLET PLACEMENT.

THE CONTRACTOR MUST STABILIZE ALL EXPOSED SOIL AREAS IMMEDIATELY FOLLOWING CONSTRUCTION WHEREVER CONSTRUCTION WILL NOT OCCUR FOR A PERIOD GREATER THAN OR EQUAL TO 7 DAYS.

STABILIZATION WORK MUST BE COMPLETE WITHIN 7 CALENDAR DAYS AFTER THE CONSTRUCTION WORK IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED.

AREAS THAT ARE WITHIN 200 FT OF A PUBLIC WATER MUST BE STABILIZED WITHIN 24 HOURS OF COMPLETING CONSTRUCTION DURING PERIODS OF "WORK IN WATER RESTRICTIONS" FOR TIME PERIODS DECLARED BY THE DNR.

THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN THE DISTURBED AREA UNTIL VEGETATION IS ESTABLISHED.

ONCE VEGETATION IS ESTABLISHED AND CONSTRUCTION IS COMPLETE, THE SILT FENCE AND ANY OTHER TEMPORARY EROSION CONTROL THAT IS NOT BIODEGRADABLE SHALL BE REMOVED.

STREET SWEEPING TO BE PROVIDED AS DIRECTED BY THE ENGINEER OR OWNER. THE CITY REQUIRES STREET SWEEPING TO OCCUR WITHIN 8 HOURS OF NOTICE FROM THE CITY.

APPLYING MULCH, HYDROMULCH, TACKIFIER, POLYACRYLAMIDE OR SIMILAR EROSION PREVENTION PRACTICES IS NOT ACCEPTABLE STABILIZATION IN ANY PART OF A TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE. BLANKETS OR OTHER APPROVED, BY THE ENGINEER, METHOD SHALL BE USED.

### INSPECTION AND MAINTENANCE ACTIVITIES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING THE WORK OF ALL OPERATIONS, INCLUDING SUBCONTRACTORS AND UTILITY COMPANIES, SUCH THAT EROSION AND SEDIMENT CONTROL MEASURES ARE FULLY EXECUTED FOR EACH OPERATION AND IN A TIMELY MANNER OVER THE DURATION OF THE PROJECT. OPERATORS HAVE DAILY ACCESS TO THE PROJECT SITE. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE SWPPP IMPLEMENTATION UNTIL THE ENTIRE SITE HAS UNDERGONE FINAL STABILIZATION AND N.O.T HAS BEEN SUBMITTED TO THE MPCA.

THE CONTRACTOR IS TO PROVIDE A TRAINED INDIVIDUAL RESPONSIBLE FOR THE IMPLEMENTATION, INSPECTION AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROL BMP'S ON THE PROJECT. THAT INDIVIDUAL IS TO BE IDENTIFIED AT THE PRE-CONSTRUCTION CONFERENCE AND LISTED IN THE MINUTES THEREOF.

THE APPOINTED INDIVIDUAL IS TO PERFORM A ROUTINE INSPECTION OF THE ENTIRE SITE AT LEAST ONCE EVERY SEVEN DAYS DURING CONSTRUCTION OPERATIONS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS.

A INSPECTION FORM WILL BE PROVIDED BY THE CONTRACTOR. ANY DEFICIENCIES IN THE EROSION AND SEDIMENT CONTROL BMP'S ARE TO BE NOTED ON THE INSPECTION FORM AND CORRECTED BY THE END OF THE NEXT BUSINESS DAY.

PERIMETER CONTROL DEVICES ARE TO BE REPAIRED OR REPLACED WHEN THEY ARE NO LONGER EFFECTIVE OR WHEN THE SEDIMENT REACHES ONE-HALF THE HEIGHT OF THE DEVICE.

### TRAINING DOCUMENTATION:

SWPPP IMPLEMENTATION, REVISING, AMENDING, AND INSPECTING (TO BE FILLED IN BY THE CONTRACTOR)

NAME OF INDIVIDUAL  
 OVERSEEING & INSPECTING  
 DATE OF TRAINING  
 NAME OF INSTRUCTOR  
 ENTITY PROVIDING TRAINING  
 CONTENT OF TRAINING  
 TOTAL HOURS OF TRAINING

### BMP INSTALLATION, MAINTENANCE, AND REPAIR (TO BE FILLED IN BY THE CONTRACTOR)

NAME OF INDIVIDUAL  
 OVERSEEING & INSPECTING  
 DATE OF TRAINING  
 NAME OF INSTRUCTOR  
 ENTITY PROVIDING TRAINING  
 CONTENT OF TRAINING  
 TOTAL HOURS OF TRAINING

### POLLUTION PREVENTION

FERTILIZERS ARE TO BE APPLIED ONLY IN THE AMOUNTS AS SPECIFIED AND WORKED INTO THE SOIL TO MINIMIZE EXPOSURE TO STORMWATER RUNOFF.

ON SITE FUELING OPERATIONS ARE TO BE CONDUCTED WITH CARE. ANY INADVERTENT SPILLAGE OF FUEL OR CHEMICALS IS TO BE IMMEDIATELY CLEANED UP REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE TO STATE AND LOCAL REGULATIONS. MAJOR SPILLS ARE TO BE REPORTED TO THE MPCA 24 HOUR NOTIFICATION NETWORK AT 800 422 0798. ALL VEHICLES ON-SITE ARE TO BE MONITORED FOR LEAKS AND SUBJECT TO ROUTINE PREVENTIVE MAINTENANCE EFFORTS TO REDUCE THE LIKELIHOOD OF LEAKAGE AND OR SPILLS.

PORTABLE SANITARY WASTE FACILITIES ARE TO BE PROVIDED ON-SITE AND EMPTIED ON A BI-WEEKLY BASIS.

CONCRETE BATCH TRUCKS WILL NOT BE ALLOWED TO DISCHARGE DRUM AND CHUTE WASHOUT DIRECTLY ON THE GROUND. A PORTABLE WASHOUT RECEPTACLE IS TO BE PROVIDED BY THE CONTRACTOR AT THE LOCATION AS PROVIDED BY THE OWNER.

### FINAL STABILIZATION

FINAL STABILIZATION OCCURS WHEN 70 PERCENT OF THE PERVIOUS AREA IS COVERED WITH UNIFORM, PERMANENT VEGETATION.

ALL TEMPORARY EROSION AND SEDIMENT CONTROL FEATURES ARE TO BE REMOVED AND THE NPDES NOTICE OF TERMINATION IS TO BE PREPARED AND SUBMITTED TO THE MPCA.

### LOCATION OF SWPPP REQUIREMENTS IN PROJECT PLAN

DESCRIPTION TITLE LOCATION  
 EROSION CONTROL DETAILS CONSTRUCTION DETAILS C6  
 EROSION CONTROL LOCATIONS EROSION CONTROL LOCATIONS C3

### 24 HOUR MPCA EMERGENCY NOTIFICATION: TELEPHONE NUMBERS: 651-649-5451 800-422-0798

### ESTIMATED QUANTITIES:

THE FOLLOWING QUANTITIES IS AN ESTIMATED PRELIMINARY AMOUNT REQUIRED FOR SEDIMENT CONTROL BMP'S AT THE START OF THE PROJECT. THIS ESTIMATE IS PROVIDED AS REQUIRED BY THE MINNESOTA POLLUTION CONTROL AGENCY GENERAL STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY. ANY ADDITIONAL AND/OR REPLACEMENT BMP'S QUANTITIES WILL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

### ESTIMATED PRELIMINARY QUANTITIES AT START OF PROJECT:

ITEM	UNIT	ESTIMATED INITIAL QUANTITY
TEMPORARY CONSTRUCTION ENTRANCE	EA	2
TEMPORARY SILT FENCE	LF	14,186
EROSION CONTROL BLANKET FOR POND	CU YD	2166

### TIMING OF EROSION CONTROL:

### TIMING OF EROSION AND SEDIMENT CONTROL SPECIFICATIONS

#### PART 1 GENERAL

1.01 SECTION INCLUDES  
 A. PREVENTION OF SEDIMENTATION OF WATERWAYS, OPEN DRAINAGE WAYS, AND STORM AND SANITARY SEWERS DUE TO CONSTRUCTION ACTIVITIES.  
 1.02 REFERENCE STANDARDS

A. GENERAL PERMIT AUTHORIZATION TO DISCHARGE STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM. MINNESOTA PERMIT NO: MN R100001.

#### 1.03 PERFORMANCE REQUIREMENTS

A. COMPLY WITH ALL REQUIREMENTS OF THE MINNESOTA POLLUTION CONTROL AGENCY FOR EROSION AND SEDIMENT CONTROL.

B. DO NOT BEGIN CLEARING, GRADING, OR OTHER WORK INVOLVING DISTURBANCE OF GROUND SURFACE COVER UNTIL APPLICABLE PERMITS HAVE BEEN OBTAINED; FURNISH ALL DOCUMENTATION REQUIRED TO OBTAIN APPLICABLE PERMITS.

C. OBTAIN AND PAY FOR PERMITS REQUIRED BY AUTHORITY HAVING JURISDICTION.

D. EROSION OFF-SITE: PREVENT EROSION OF SOIL AND DEPOSITION OF SEDIMENT ON OTHER PROPERTIES CAUSED BY WATER LEAVING THE PROJECT SITE DUE TO CONSTRUCTION ACTIVITIES FOR THIS PROJECT.

1. PREVENT TRACKING OF MUD ON PUBLIC ROADS OUTSIDE SITE.

2. PREVENT MUD AND SEDIMENT FROM FLOWING ONTO PAVEMENTS.

E. SEDIMENTATION OF WATERWAYS OFF-SITE: PREVENT SEDIMENTATION OF WATERWAYS OFF THE PROJECT SITE, INCLUDING RIVERS, STREAMS, LAKES, PONDS, OPEN DRAINAGE WAYS, STORM SEWERS, AND SANITARY SEWERS.

1. IF SEDIMENTATION OCCURS, INSTALL OR CORRECT PREVENTIVE MEASURES IMMEDIATELY AT NO COST TO OWNER; REMOVE DEPOSITED SEDIMENTS; COMPLY WITH REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.

F. MAINTENANCE: MAINTAIN TEMPORARY PREVENTIVE MEASURES UNTIL PERMANENT MEASURES HAVE BEEN ESTABLISHED.

#### PART 2 PRODUCTS

##### 2.01 MATERIALS

A. TEMPORARY SILT FENCE: WOVEN POLYPROPYLENE GEOTEXTILE RESISTANT TO COMMON SOIL CHEMICALS, MILDEW, AND INSECTS; NON-BIODEGRADABLE; IN LONGEST LENGTHS POSSIBLE; FABRIC INCLUDING SEAMS WITH THE FOLLOWING MINIMUM AVERAGE ROLL LENGTHS:

1. AVERAGE OPENING SIZE: 20 U.S. STD. SIEVE, MAXIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM D4751.

2. PERMITTIVITY: 0.05 SEC-1, MINIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM D4491.

3. ULTRAVIOLET RESISTANCE: RETAINING AT LEAST 70 PERCENT OF TENSILE STRENGTH, WHEN TESTED IN ACCORDANCE WITH ASTM D4355/D4356 AFTER 500 HOURS EXPOSURE.

4. TENSILE STRENGTH: 100 LB-F, MINIMUM, IN CROSS-MACHINE DIRECTION; 124 LB-F, MINIMUM, IN MACHINE DIRECTION, WHEN TESTED IN ACCORDANCE WITH ASTM D4632.

5. ELONGATION: 15 TO 30 PERCENT, WHEN TESTED IN ACCORDANCE WITH ASTM D4632.

6. TEAR STRENGTH: 55 LB-F, MINIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM D4533.

7. COLOR: MANUFACTURER'S STANDARD, WITH LAYERED COATINGS AND FASTENER LINES PREPRINTED.

8. SILT FENCE POSTS: ONE OF THE FOLLOWING, WITH MINIMUM 5 FEET LONG:

a. STEEL U-ON-T SECTION, WITH A MINIMUM MASS OF 1.33 LB PER LINEAR FOOT.

b. SOFTWOOD: 4 BY 4 INCHES IN CROSS SECTION.

c. HARDWOOD: 2 BY 3 INCHES IN CROSS SECTION.

B. TEMPORARY SEDIMENT LOG: FILTER LOGS SHALL CONSIST OF TYPE WOOD FIBER BIOROLLS AND THE REQUIREMENTS OF MNDOT SPEC 399.

1. SHALL BE ONE OF THE FOLLOWING:

a. SHALL BE SILOXX PERIMETER CONTROL BY FILTREXX, INC., OR EQUAL.

C. TEMPORARY SEDIMENT FILTER:

1. SHALL BE ONE OF THE FOLLOWING:

a. DROP-IN FILTER UNIT THAT INSERTS INTO THE INLET.

1) SHALL BE FLEXSTORM PURE: PERMANENT INLET FILTER BY ADS, INC., OR EQUAL.

(a) PROVIDE CURB OPENING PROTECTION FOR EXISTING INLETS WITH CURB OPENINGS.

