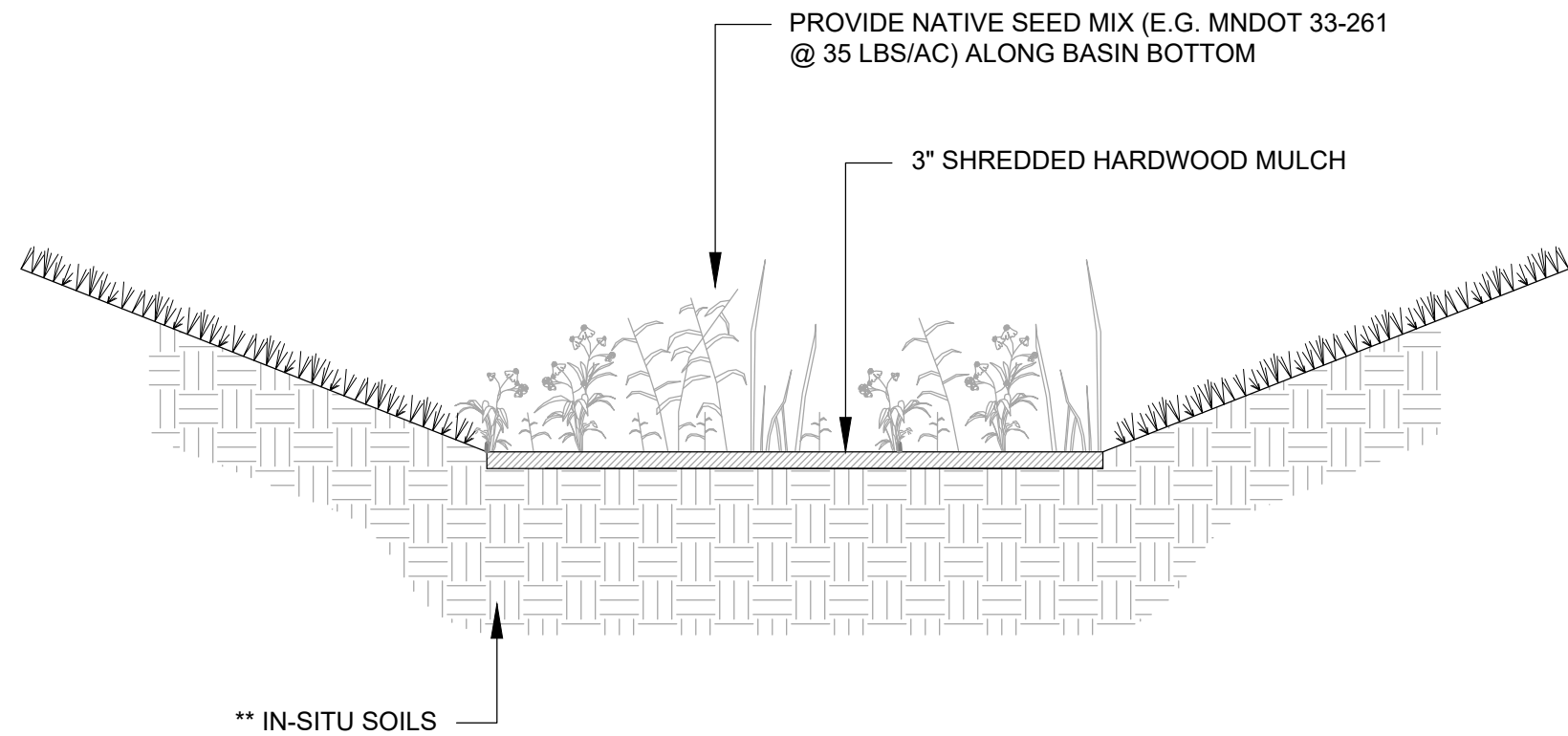


EBIT & DITCH SHOTS
SCALE = 1:50 (THIS DETAIL ONLY)



** ALLEVIATE ANY COMPACTED SOILS (BY USING A PRIMARY TILLING OPERATION SUCH AS A CHISEL PLOW, RIPPER OR SUBSOILER) TO A DEPTH NECESSARY TO ALLEVIATE COMPACTION (MIN. 18")

RAIN GARDEN
N.T.S.

GENERAL NOTES

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CALL "811" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS FOR EXISTING UTILITIES LOCATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
4. ALL WORK SHALL BE PERFORMED DURING CITY APPROVED WORKING HOURS.
5. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
6. NOTIFY CITY A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING, MAINTAINING TRAFFIC CONTROL, SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS, AS NECESSARY TO CONTROL THE MOVEMENT OF TRAFFIC.

NOTES

1. MARK-OFF BASIN AREA (E.G. FENCING, SILT FENCE, ETC.) TO PREVENT CONSTRUCTION TRAFFIC FROM ENTERING BASIN AREA.
2. USE LOW-IMPACT, EARTH MOVING EQUIPMENT (WIDE TRACK OR MARSH TRACK EQUIPMENT, OR LIGHT EQUIPMENT WITH TURF-TYPE TIRES) WITHIN BASIN.
3. PROTECT BASIN FROM RUN-OFF DURING CONSTRUCTION ACTIVITIES
4. DO NOT EXCAVATE BASIN TO FINAL GRADE UNTIL UPSTREAM DRAINAGE AREAS HAVE BEEN STABILIZED.
5. REMOVE ANY TOPSOIL AND/OR UNSUITABLE SOILS WITHIN INFILTRATION BASIN FOOTPRINT. ANY SEDIMENT THAT IS WASHED INTO THE BASIN SHALL BE REMOVED.
6. NO MINING OF SANDY SOILS ALLOWED IN BASIN AREA.
7. EXCAVATE BASIN TO FINAL GRADE ONLY UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREAS. ALLEVIATE ANY COMPACTED SOILS DUE TO FINAL GRADING OPERATIONS PRIOR TO SEEDING.
8. BOTTOM OF BASIN SHALL BE GRADED FLAT WITH NO DIPS OR SWALES.

PROVIDE NATIVE SEED MIX (E.G. MNDOT 33-261 @ 35 LBS/AC) ALONG BASIN BOTTOM

3" SHREDDED HARDWOOD MULCH

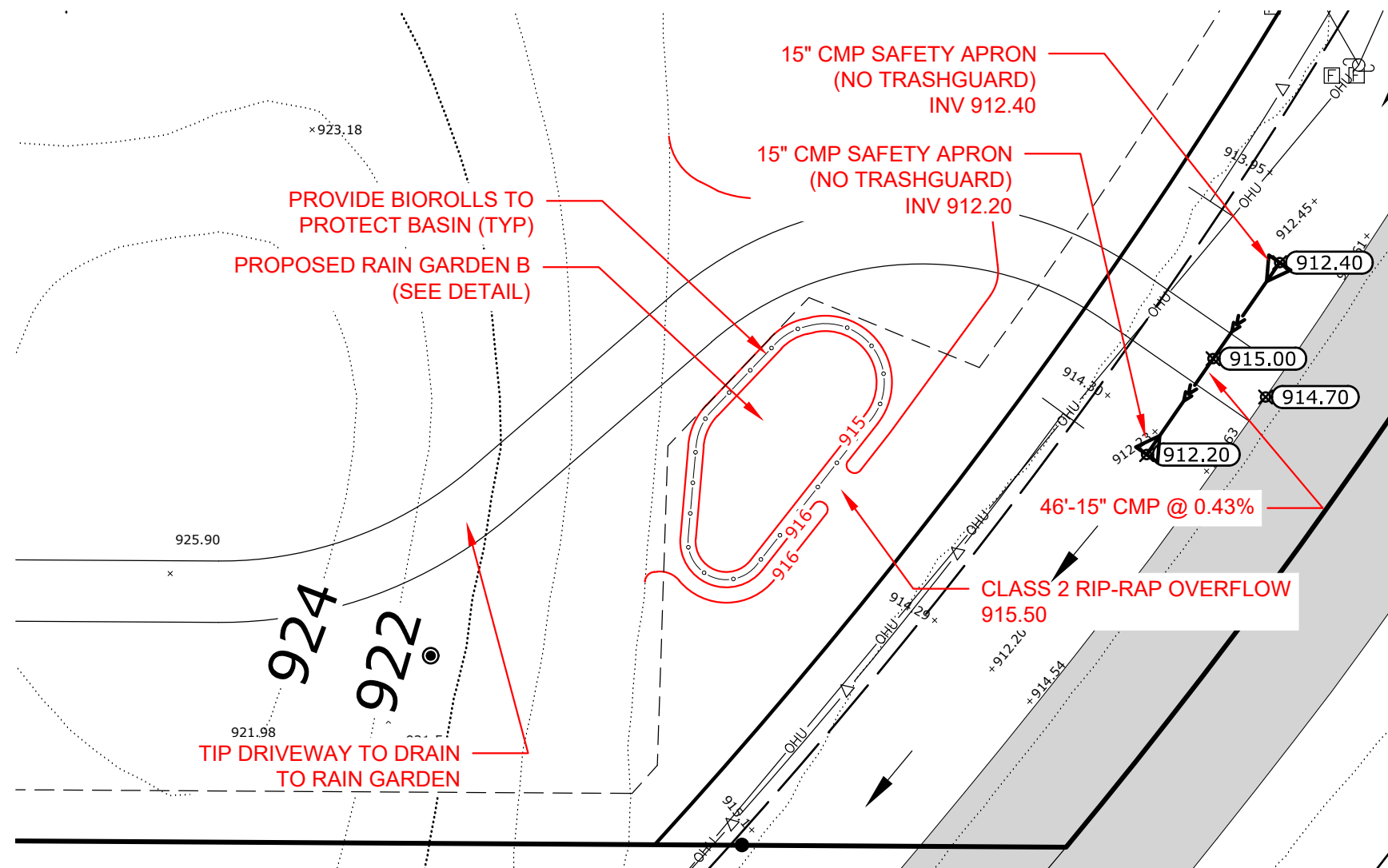
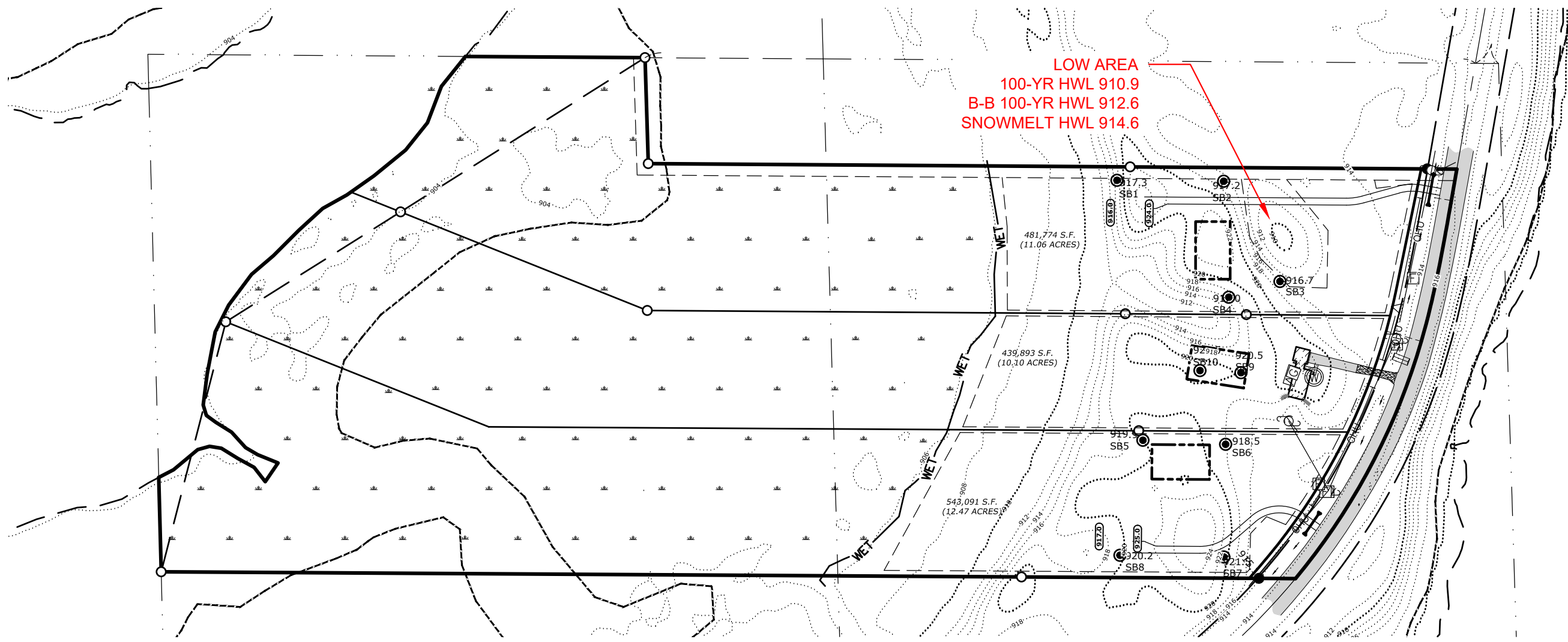
** IN-SITU SOILS

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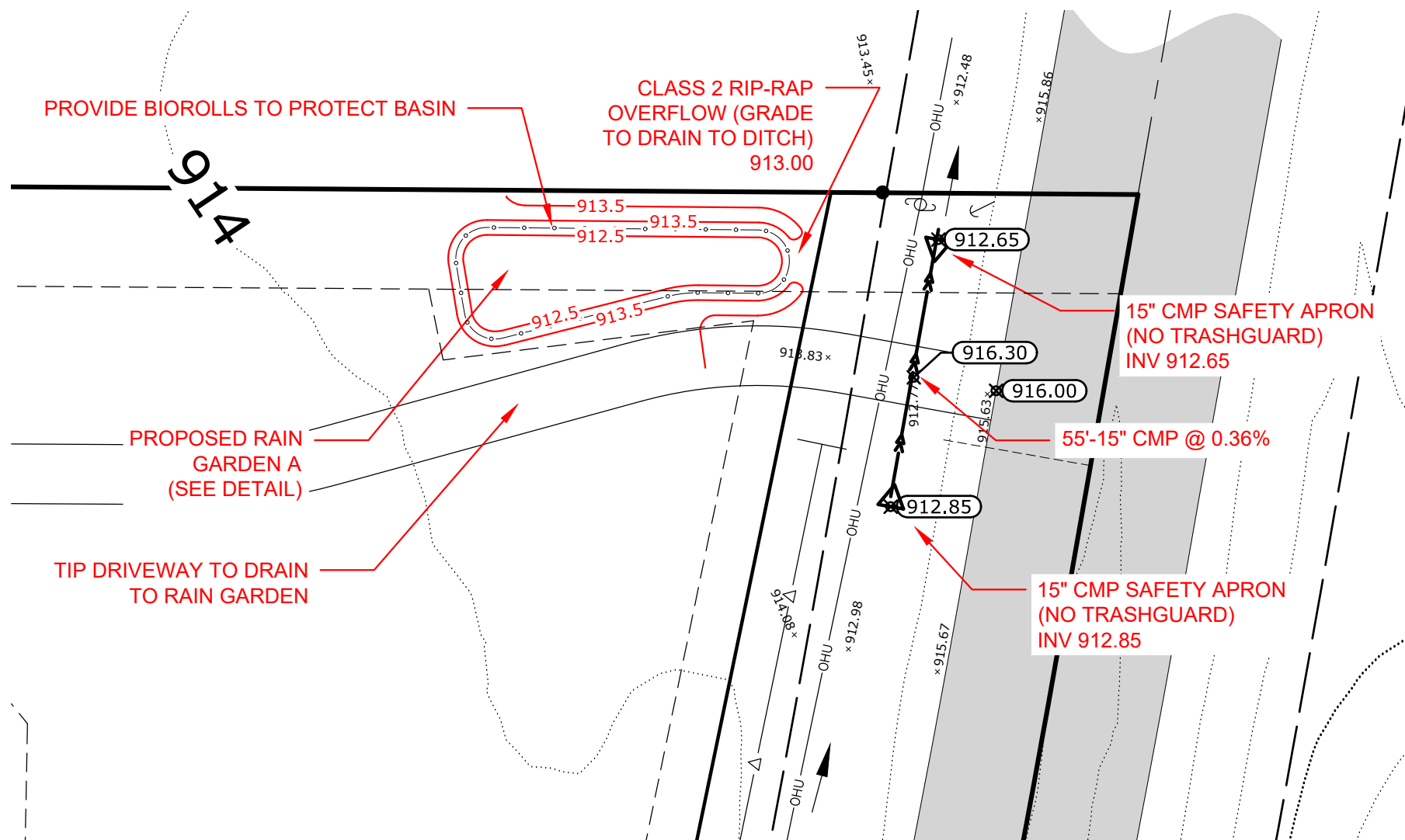
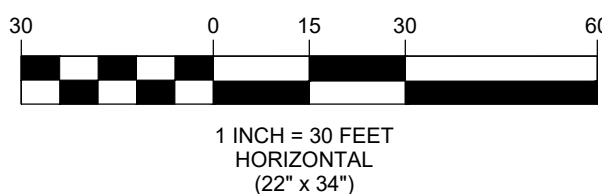
** IN-SITU SOILS

RAIN GARDEN
N.T.S.



NOTES:

1. 6:1 SIDE SLOPES REQUIRED OFF OF DRIVEWAYS WHEN IN COUNTY RIGHT-OF-WAY
2. ANY DISTURBED AREAS IN COUNTY RIGHT-OF-WAY TO BE RESTORED WITH SEED AND MULCH USING SEED TYPE 25-141 (DITCHES) AND 25-131 (BOULEVARD) AND TYPE 1 MULCH, DISC ANCHORED



PROJECT TITLE
CLIFFS PETERSON RIDGE

PROJECT LOCATION
20410 VIKING BLVD NE
LINWOOD TOWNSHIP, MN 55092
ANOKA COUNTY

LATITUDE: 45.33968
LONGITUDE: -93.13677

DEVELOPER
SHERO CONSTRUCTION
79 LAKE ST N
FOREST LAKE, MN 55025

CONTACT NAME: THOMAS A. CARLISLE
CONTACT PHONE: 651-888-4137
CONTACT E-MAIL: Tom.Carlisle@sherohomebuilders.com

GENERAL CONTRACTOR
TBD

NARRATIVE - PERMANENT STORMWATER TREATMENT SYSTEMS

PERMANENT STORMWATER MANAGEMENT FEATURES WILL INCLUDE TWO (2) RAIN GARDENS. ALSO SEE "STORMWATER DRAINAGE REPORT" FOR FURTHER DISCUSSION.

SITE IMPERVIOUS AREAS

	BEFORE CONSTRUCTION	AFTER CONSTRUCTION
TOTAL SITE AREA	34.74 ACRES	
TOTAL ESTIMATED IMPERVIOUS	0.11 ACRES	0.48 ACRES
TOTAL ESTIMATED PERVIOUS	34.63 ACRES	34.26 ACRES

TOTAL DISTURBED AREA
~1.2 ACRES

SITE MAP W/ EXISTING AND FINAL GRADES AND DESIGN CALCULATIONS

SEE "STORMWATER DRAINAGE REPORT" FOR EXISTING AND PROPOSED AREA MAPS. DENOTING DRAINAGE AREA BOUNDARIES, DIRECTIONS OF FLOW, AND DISCHARGE POINTS WHERE STORMWATER LEAVES THE SITE.

RECEIVING WATERS WITHIN ONE MILE

NAME OF WATER BODY	TYPE OF WATER BODY	SPECIAL WATER	IMPAIRED WATER
UNNAMED WETLAND	WETLAND	NO	NO
LINWOOD LAKE	LAKE	NO	YES
COON LAKE	LAKE	NO	YES
RICE LAKE	LAKE	NO	NO
BOOT LAKE SNA	LAKE	NO	YES

BUFFER TO SURFACE WATER

☐ YES ☐ NO ☒ N/A IF THE SITE DRAINS TO A SURFACE WATER, IS A 50-FT NATURAL BUFFER ADJACENT TO THE SURFACE WATER PRESERVED?

NOTE: NATURAL BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS.

A) A 50-FT NATURAL BUFFER IS PROVIDED TO THE ON-SITE WETLAND.

TEMPORARY SEDIMENTATION BASINS

☐ YES ☐ NO ☒ N/A IF TEN (10) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION, IS A TEMPORARY SEDIMENT BASIN PROVIDED FOR TREATMENT OF THE RUNOFF BEFORE IT LEAVES THE CONSTRUCTION SITE OR ENTERS SURFACE WATERS?

A) BECAUSE THIS SITE IS WITHIN ONE MILE OF AN IMPAIRED WATER, THIS REQUIREMENT BECOMES FIVE (5) MILES. SITE DISTURBANCE WILL BE WELL BELOW THE 5-ACRE THRESHOLD.

INFILTRATION FEASIBILITY

☐ YES ☒ NO ☐ N/A ARE THERE ANY INFILTRATION RESTRICTIONS FOR THE SITE (SEE 16.14 THROUGH 16.21?

A) THE SITE HAS ZIMMERMAN FINE SANDS IN UPLANDS, WHICH ARE WELL DRAINING HSG A SOILS.

ADDITIONAL STORMWATER MITIGATION MEASURES

☐ YES ☒ NO ARE THERE ANY STORMWATER MITIGATION MEASURES PER:

- ENVIRONMENTAL REVIEW DOCUMENT?
- ENDANGERED SPECIES REVIEW?
- ARCHAEOLOGICAL REVIEW?
- OTHER LOCAL, STATE OR FEDERAL REVIEW?

IF YES TO ANY OF THE ABOVE, DESCRIBE THE MITIGATION MEASURES. FOR PURPOSES OF THIS PERMIT, MITIGATION MEASURES MEANS ACTIONS NECESSARY TO AVOID, MINIMIZE, OR MITIGATE FOR IMPACTS RELATED TO EROSION PREVENTION, SEDIMENT CONTROL, THE PERMANENT STORMWATER TREATMENT SYSTEM, POLLUTION PREVENTION MANAGEMENT MEASURES AND DISCHARGES ASSOCIATED WITH THE PROJECT'S CONSTRUCTION ACTIVITY. [MINN. R. 7090]

DOCUMENTATION OF TRAINED INDIVIDUALS

A. INDIVIDUAL WHO PREPARED THE SWPPP:

ADAM GINKEL
PLOWE ENGINEERING, INC.
6776 LAKE DRIVE
LINO LAKES MN 55014
(651) 361-8234
adam@plowe.com

B. INDIVIDUAL(S) OVERSEEING IMPLEMENTATION OF, REVISING AND/OR AMENDING THE SWPPP AND INDIVIDUALS PERFORMING INSPECTIONS FOR THE PROJECT. ONE OF THESE INDIVIDUALS MUST BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE MPCA. [MINN. R. 7090]

CONTACT NAME _____

CONTACT PHONE _____

CONTACT E-MAIL: _____

C. INDIVIDUAL(S) PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AND REPAIR OF BMPS. [MINN. R. 7090]

CONTACT NAME _____

CONTACT PHONE _____

CONTACT E-MAIL: _____

LONG TERM OPERATION AND MAINTENANCE OF PERMANENT STORMWATER FACILITIES

THE PROPOSED STORMWATER MANAGEMENT FEATURES FOR THIS SITE ARE RAIN GARDENS. THESE WILL BE PRIVATE AND MAINTAINED BY THE FUTURE PROPERTY OWNERS.

REVEGETATION SPECIFICATIONS

ITEM	MNDOT SPECIFICATION	NOTES
SOD		3878
SEED **		3876
* FOR TURF ESTABLISHMENT		
COMMERCIAL TURF	MNDOT MIX 25-131 (120 LBS/ACRE)	
RESIDENTIAL TURF	MNDOT MIX 25-131 (120 LBS/ACRE)	
TEMPORARY FALL COVER	MNDOT MIX 21-112 (100 LBS/ACRE)	
SPRING/SUMMER	MNDOT MIX 21-111 (100 LBS/ACRE)	
SOIL-BUILDING COVER	MNDOT MIX 21-113 (110 LBS/ACRE)	
1-2 YEARS COVER	MNDOT MIX 22-111 (30.5 LBS/ACRE)	
2-5 YEARS COVER	MNDOT MIX 22-112 (40 LBS/ACRE)	
MULCH	3882 (TYPE 1 - DISC ANCHORED)	
HYDROMULCH	3884	
FERTILIZER	3881	
WOOD FIBER BLANKET	3885 (CATEGORY 2)	

* MOW A MINIMUM OF:
RESIDENTIAL TURF - ONCE PER 2 WEEKS
COMMERCIAL TURF - ONCE PER 4 WEEKS

** SEEDED AREAS SHALL BE EITHER MULCHED OR COVERED BY FIBROUS BLANKETS TO PROTECT SEEDS AND LIMIT EROSION.

QUANTITIES - ESTIMATED QUANTITIES FOR EROSION AND SEDIMENT CONTROL MEASURES

TYPE	QTY	UNIT
SILT FENCE		LINEAR FEET
BIO-ROLLS		EACH
RIP-RAP W. GEO-FABRIC		CUBIC YARDS
CATCH BASIN INLET PROTECTION		EACH
STABILIZED (SODDED) OVERFLOW		EACH
EROSION CONTROL BLANKET		SQUARE YARDS
SEED & MULCH (GENERAL)		ACRE
ROCK CONSTRUCTION ENTRANCE		EACH
EXIST. GRAVEL DRIVE TO BE USED AS ROCK ENTRANCE		

NARRATIVE - TIMING FOR INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES

- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND SWPPP MUST BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES.
- CONTRACTOR SHALL INSTALL SILT FENCE AS SHOWN ON PLAN.
 - ADDITIONAL SILT FENCE MAY BE NECESSARY IF LOCAL CONDITIONS REQUIRE.
 - THE CONTRACTOR SHALL MAINTAIN SILT FENCE, INCLUDING THE REMOVAL OF ACCUMULATED SEDIMENT, THROUGH COMPLETION OF BUILDING CONSTRUCTION.
 - SILT FENCE SHALL REMAIN IN-PLACE UNTIL SITE HAS BEEN STABILIZED.
- CONTRACTOR SHALL INSTALL A ROCK CONSTRUCTION ENTRANCE AT ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC WILL ENTER/EXIT SITE.
- CONTRACTOR TO INSTALL TREE PROTECTION FENCING AS APPLICABLE.
- CONTRACTOR SHALL PERFORM SITE GRADING ON AN AREA-BY-AREA BASIS TO MINIMIZE UNSTABILIZED AREAS.
 - CONTRACTOR MUST IMMEDIATELY INITIATE STABILIZATION OF EXPOSED SOIL AREAS, AS DESCRIBED IN ITEM 8.4 OF THE PERMIT, AND COMPLETE THE STABILIZATION WITHIN SEVEN (7) CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE TEMPORARILY OR PERMANENTLY CEASES.
 - CONTRACTOR TO PROVIDE TEMPORARY SEDIMENTATION BASINS AS REQUIRED IN SECTION 14.1 THROUGH 14.10.
- CONTRACTOR TO SHALL PAY SPECIAL ATTENTION TO ADJACENT PROPERTY LINES TO ENSURE THE EROSION CONTROL PRACTICES INPLACE IN THOSE AREAS PREVENT MIGRATION OF SEDIMENT ONTO ADJACENT PROPERTIES.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS OR IMPLEMENTED IN THE FIELD SHALL BE IN ACCORDANCE WITH THE CITY AND NPDES PHASE II PERMIT REQUIREMENTS.
- CONTRACTOR TO PROVIDE ADDITIONAL SILT FENCE, BIOROLLS, EROSION CONTROL BLANKET, OR OTHER APPROVED EQUAL FOR ANY SLOPES THAT APPEAR TO BE FAILING.
- CONTRACTOR TO STABILIZE SOIL STOCKPILES; STABILIZATION SHALL BE INITIATED IMMEDIATELY.
- CONTRACTOR SHALL FINAL GRADE SWALE AREAS UPON STABILIZATION OF UPSTREAM AREAS.
- CONTRACTOR SHALL BE RESPONSIBLE TO SWEEP/SCRAPE ADJACENT STREETS WHEN MATERIALS OR DEBRIS HAVE WASHED/FLOWED ONTO ADJACENT STREETS OR AS DIRECTED BY CITY.
- COORDINATE SMALL UTILITIES INSTALLATIONS (GAS, PHONE, ELECTRIC, CABLE, FIBEROPTIC, ETC.) AFTER PAVEMENT INSTALLATION.

NPDES DEFINITIONS

"BEST MANAGEMENT PRACTICES (BMPS)" MEANS THE MOST EFFECTIVE AND PRACTICABLE MEANS OF EROSION PREVENTION AND SEDIMENT CONTROL, AND WATER QUALITY MANAGEMENT PRACTICES THAT ARE THE MOST EFFECTIVE AND PRACTICABLE MEANS OF TO CONTROL, PREVENT, AND MINIMIZE DEGRADATION OF SURFACE WATER, INCLUDING AVOIDANCE OF IMPACTS, CONSTRUCTION-PHASING, MINIMIZING THE LENGTH OF TIME SOIL AREAS ARE EXPOSED, PROHIBITIONS, POLLUTION PREVENTION THROUGH GOOD HOUSEKEEPING, AND OTHER MANAGEMENT PRACTICES PUBLISHED BY STATE OR DESIGNATED AREA-WIDE PLANNING AGENCIES. [MINN. R. 7090]

"CONSTRUCTION ACTIVITY" MEANS ACTIVITIES INCLUDING CLEARING, GRADING, AND EXCAVATING, THAT RESULT IN LAND DISTURBANCE OF EQUAL TO OR GREATER THAN ONE ACRE, INCLUDING THE DISTURBANCE OF LESS THAN ONE ACRE OF TOTAL LAND AREA THAT IS PART OF A LARGER COMMON PLAN OF DEVELOPMENT OR SALE IF THE LARGER COMMON PLAN WILL ULTIMATELY DISTURB EQUAL TO OR GREATER THAN ONE ACRE. THIS INCLUDES A DISTURBANCE TO THE LAND THAT RESULTS IN A CHANGE IN THE TOPOGRAPHY, EXISTING SOIL COVER, BOTH VEGETATIVE AND NONVEGETATIVE, OR THE EXISTING SOIL TOPOGRAPHY THAT MAY RESULT IN ACCELERATED STORMWATER RUNOFF THAT MAY LEAD TO SOIL EROSION AND MOVEMENT OF SEDIMENT. CONSTRUCTION ACTIVITY DOES NOT INCLUDE A DISTURBANCE TO THE LAND OF LESS THAN FIVE ACRES FOR THE PURPOSE OF ROUTINE MAINTENANCE PERFORMED TO MAINTAIN THE ORIGINAL LINE AND GRADE, HYDRAULIC CAPACITY, AND ORIGINAL PURPOSE OF THE FACILITY. ROUTINE MAINTENANCE DOES NOT INCLUDE ACTIVITIES SUCH AS REPAIRS, REPLACEMENT AND OTHER TYPES OF NON-ROUTINE MAINTENANCE. PAVEMENT REHABILITATION THAT DOES NOT DISTURB THE UNDERLYING SOILS (E.G., MILL AND OVERLAY PROJECTS) IS NOT CONSTRUCTION ACTIVITY. [MINN. R. 7090]

"DEWATERING" MEANS THE REMOVAL OF SURFACE OR GROUND WATER TO DRY AND/OR SOLIDIFY A CONSTRUCTION SITE TO ENABLE CONSTRUCTION ACTIVITY. DEWATERING MAY REQUIRE A MINNESOTA DEPARTMENT OF NATURAL RESOURCES WATER APPROPRIATION PERMIT AND, IF DEWATERING WATER IS CONTAMINATED, DISCHARGE OF SUCH WATER MAY REQUIRE AN INDIVIDUAL MPCA NPDES/SDS PERMIT. [MINN. R. 7090]

"EROSION PREVENTION" MEANS MEASURES EMPLOYED TO PREVENT EROSION SUCH AS SOIL STABILIZATION PRACTICES, PERMANENT COVER OR CONSTRUCTION PHASING. [MINN. R. 7090]

"GENERAL CONTRACTOR" MEANS THE PARTY WHO SIGNS THE CONSTRUCTION CONTRACT WITH THE OWNER TO CONSTRUCT THE ENTIRE PROJECT DESCRIBED IN THE FINAL PLANS AND SPECIFICATIONS. WHERE THE CONSTRUCTION PROJECT INVOLVES MORE THAN ONE CONTRACTOR, THE GENERAL CONTRACTOR IS THE PARTY RESPONSIBLE FOR MANAGING THE ENTIRE PROJECT ON BEHALF OF THE OWNER. IN SOME CASES, THE OWNER IS THE GENERAL CONTRACTOR. IN THESE CASES, THE OWNER SIGNS THE PERMIT APPLICATION AS THE OPERATOR AND BECOMES THE SOLE PERMITTEE. [MINN. R. 7090]

"GROUNDWATER" MEANS THE WATER CONTAINED BELOW THE SURFACE OF THE EARTH IN THE SATURATED ZONE INCLUDING, WITHOUT LIMITATION, ALL WATERS WHETHER UNDER CONFINED, UNCONFINED, OR PERCHED CONDITIONS, IN NEAR SURFACE UNCONSOLIDATED SEDIMENT OR REGOLITH, OR IN ROCK FORMATIONS DEEPER UNDERGROUND. [MINN. R. 7090]

"HOMEOWNER FACT SHEET" MEANS AN MPCA FACT SHEET AVAILABLE ON THE MPCA CONSTRUCTION STORMWATER WEBSITE FOR PERMITTEES TO GIVE TO HOMEOWNERS AT THE TIME OF SALE. [MINN. R. 7090]

"INFEASIBLE" MEANS NOT TECHNOLOGICALLY POSSIBLE OR NOT ECONOMICALLY PRACTICABLE AND ACHIEVABLE IN LIGHT OF THE BEST INDUSTRY PRACTICES. [MINN. R. 7090]

"INITIATED IMMEDIATELY" MEANS TAKING AN ACTION TO COMMENCE SOIL STABILIZATION AS SOON AS PRACTICABLE, BUT NO LATER THAN THE END OF THE WORK DAY, FOLLOWING THE DAY WHEN THE LAND-DISTURBING ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE, IF THE PERMITTEES KNOW THAT CONSTRUCTION WORK ON THAT PORTION OF THE SITE WILL BE TEMPORARILY CEASED FOR 14 OR MORE ADDITIONAL CALENDAR DAYS OR 7 CALENDAR DAYS WHERE ITEM 23.9 APPLIES. PERMITTEES CAN INITIATE STABILIZATION BY:

- PREPPING THE SOIL FOR VEGETATIVE OR NON-VEGETATIVE STABILIZATION; OR
- APPLYING MULCH OR OTHER NON-VEGETATIVE PRODUCT TO THE EXPOSED SOIL AREA; OR
- SEEDING OR PLANTING THE EXPOSED AREA; OR
- STARTING ANY OF THE ACTIVITIES IN A - C ON A PORTION OF THE AREA TO BE STABILIZED, BUT NOT ON THE ENTIRE AREA; OR
- FINALIZING ARRANGEMENTS TO HAVE STABILIZATION PRODUCT FULLY INSTALLED IN COMPLIANCE WITH THE APPLICABLE DEADLINE FOR COMPLETING STABILIZATION. [MINN. R. 7090]

"IMPERVIOUS SURFACE" MEANS A CONSTRUCTED HARD SURFACE THAT EITHER PREVENTS OR RETARDS THE ENTRY OF WATER INTO THE SOIL AND CAUSES WATER TO RUN OFF THE SURFACE IN GREATER QUANTITIES AND AT AN INCREASED RATE OF FLOW THAN PRIOR TO DEVELOPMENT. EXAMPLES INCLUDE ROOFTOPS, SIDEWALKS, DRIVEWAYS, PARKING LOTS, AND CONCRETE, ASPHALT, OR GRAVEL ROADS. BRIDGES OVER SURFACE WATERS ARE CONSIDERED IMPERVIOUS SURFACES. [MINN. R. 7090]

"NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)" MEANS THE PROGRAM FOR ISSUING, MODIFYING, REVOKING, REISSUING, TERMINATING, MONITORING, AND ENFORCING PERMITS UNDER THE CLEAN WATER ACT, AS AMENDED (33 U.S.C. 1251 ET SEQ. SECTION 1342 AND 40 CFR PARTS 122, 123, 124 AND 450). [MINN. R. 7090]

"NATURAL BUFFER" MEANS AN AREA OF UNDISTURBED COVER SURROUNDING SURFACE WATERS WITHIN WHICH CONSTRUCTION ACTIVITIES ARE RESTRICTED. NATURAL BUFFER INCLUDES THE VEGETATION, EXPOSED ROCK, OR BARREN GROUND THAT EXISTS PRIOR TO COMMENCEMENT OF EARTH-DISTURBING ACTIVITIES. [MINN. R. 7090]

"NOTICE OF TERMINATION (NOT)" MEANS THE FORM (ELECTRONIC OR PAPER) REQUIRED FOR TERMINATING COVERAGE UNDER THE CONSTRUCTION GENERAL PERMIT. [MINN. R. 7090]

"OPERATOR" MEANS THE PERSON (USUALLY THE GENERAL CONTRACTOR), FIRM, GOVERNMENTAL AGENCY, OR OTHER ENTITY DESIGNATED BY THE OWNER WHO HAS DAY TO DAY OPERATIONAL CONTROL AND/OR THE ABILITY TO MODIFY PROJECT PLANS AND SPECIFICATIONS RELATED TO THE SWPPP. THE PERMIT APPLICATION MUST LIST THE OPERATOR AS A PERMITTEE. SUBCONTRACTORS HIRED BY AND UNDER SUPERVISION OF THE GENERAL CONTRACTOR ARE NOT OPERATORS. [MINN. R. 7090]

"OWNER" MEANS THE PERSON, FIRM, GOVERNMENTAL AGENCY, OR OTHER ENTITY POSSESSING THE TITLE OF THE LAND ON WHICH THE CONSTRUCTION ACTIVITIES WILL OCCUR OR, IF THE CONSTRUCTION ACTIVITY IS FOR A LEASE, EASEMENT, OR MINERAL RIGHTS LICENSE HOLDER, THE PARTY OR INDIVIDUAL IDENTIFIED AS THE LEASE, EASEMENT OR MINERAL RIGHTS LICENSE HOLDER; OR THE CONTRACTING GOVERNMENT AGENCY RESPONSIBLE FOR THE CONSTRUCTION ACTIVITY. [MINN. R. 7090]

"PERMANENT COVER" MEANS SURFACE TYPES THAT WILL PREVENT SOIL FAILURE UNDER EROSION CONDITIONS. EXAMPLES INCLUDE: GRAVEL, CONCRETE, PERENNIAL COVER, OR OTHER LANDSCAPED MATERIAL THAT WILL PERMANENTLY ARREST SOIL EROSION. PERMITTEES MUST ESTABLISH A UNIFORM PERENNIAL VEGETATIVE COVER (I.E., EVENLY DISTRIBUTED, WITHOUT LARGE BARE AREAS) WITH A DENSITY OF 70 PERCENT OF THE NATIVE BACKGROUND VEGETATIVE COVER ON ALL AREAS NOT COVERED BY PERMANENT STRUCTURES, OR EQUIVALENT PERMANENT STABILIZATION MEASURES. PERMANENT COVER DOES NOT INCLUDE TEMPORARY BMPS SUCH AS WOOD FIBER BLANKET, MULCH, AND ROLLED EROSION CONTROL PRODUCTS. [MINN. R. 7090]

"PERMITTEES" MEANS THE PERSONS, FIRM, GOVERNMENTAL AGENCY, OR OTHER ENTITY IDENTIFIED AS THE OWNER AND OPERATOR ON THE APPLICATION SUBMITTED TO THE MPCA AND ARE RESPONSIBLE FOR COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT. [MINN. R. 7090]

"PROJECT(S)" MEANS ALL CONSTRUCTION ACTIVITY PLANNED AND/OR CONDUCTED UNDER A PARTICULAR PERMIT. THE PROJECT OCCURS ON THE SITE OR SITES DESCRIBED IN THE PERMIT APPLICATION, THE SWPPP AND IN THE ASSOCIATED PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS. [MINN. R. 7090]

"PUBLIC WATERS" MEANS ALL WATER BASINS AND WATERCOURSES DESCRIBED IN MINN. STAT. SECT. 103G.005 SUBP. 15. [MINN. R. 7090]

"SEDIMENT CONTROL" MEANS METHODS EMPLOYED TO PREVENT SUSPENDED SEDIMENT IN STORMWATER FROM LEAVING THE SITE (E.G. SILT FENCES, COMPOST LOGS AND STORM DRAIN INLET PROTECTION). [MINN. R. 7090]

"STABILIZE", "STABILIZED", "STABILIZATION" MEANS THE EXPOSED GROUND SURFACE HAS BEEN COVERED BY APPROPRIATE MATERIALS SUCH AS MULCH, STAKED SOD, RIPRAP, EROSION CONTROL BLANKET, MATS OR OTHER MATERIAL THAT PREVENTS EROSION FROM OCCURRING, GRASS SEEDING, AGRICULTURAL CROP SEEDING OR OTHER SEEDING ALONE IS NOT STABILIZATION. MULCH MATERIALS MUST ACHIEVE APPROXIMATELY 90 PERCENT GROUND COVERAGE (TYPICALLY 2 TON/ACRE). [MINN. R. 7090]

"STORMWATER" MEANS PRECIPITATION RUNOFF, STORMWATER RUNOFF, SNOWMELT RUNOFF, AND ANY OTHER SURFACE RUNOFF AND DRAINAGE. [MINN. R. 7090]

"STEEP SLOPES" MEANS SLOPES THAT ARE 1:3 (V:H) (33.3 PERCENT) OR STEEPER IN GRADE. [MINN. R. 7090]

"STORM WATER POLLUTION PREVENTION PLAN (SWPPP)" MEANS A PLAN FOR STORMWATER DISCHARGE THAT INCLUDES ALL REQUIRED CONTENT UNDER IN SECTION 5 THAT DESCRIBES THE EROSION PREVENTION, SEDIMENT CONTROL AND WASTE CONTROL BMPS AND PERMANENT STORMWATER TREATMENT SYSTEMS. [MINN. R. 7090]

"SURFACE WATER OR WATERS" MEANS ALL STREAMS, LAKES, PONDS, MARSHES, WETLANDS, RESERVOIRS, SPRINGS, RIVERS, DRAINAGE SYSTEMS, WATERWAYS, WATERCOURSES, AND IRRIGATION SYSTEMS WHETHER NATURAL OR ARTIFICIAL, PUBLIC OR PRIVATE, EXCEPT THAT SURFACE WATERS DO NOT INCLUDE STORMWATER TREATMENT SYSTEMS CONSTRUCTED FROM UPLAND. THIS PERMIT DOES NOT CONSIDER STORMWATER TREATMENT SYSTEMS CONSTRUCTED IN WETLANDS AND MITIGATED IN ACCORDANCE WITH SECTION 22 AS SURFACE WATERS. [MINN. R. 7090]

"WATERS OF THE STATE" (AS DEFINED IN MINN. STAT. SECT. 115.01, SUBP. 22) MEANS ALL STREAMS, LAKES, PONDS, MARSHES, WATERCOURSES, WATERWAYS, WELLS, SPRINGS, RESERVOIRS, AQUIFERS, IRRIGATION SYSTEMS, DRAINAGE SYSTEMS AND ALL OTHER BODIES OR ACCUMULATIONS OF WATER, SURFACE OR UNDERGROUND, NATURAL OR ARTIFICIAL, PUBLIC OR PRIVATE, WHICH ARE CONTAINED WITHIN, FLOW THROUGH, OR BORDER UPON THE STATE OR ANY PORTION THEREOF. [MINN. STAT. 115.01, SUBP. 22]

"WATER QUALITY VOLUME" MEANS ONE (1) INCH OF RUNOFF FROM THE NET INCREASE IN IMPERVIOUS SURFACES CREATED BY THE PROJECT (CALCULATED AS AN INSTANTANEOUS VOLUME). [MINN. R. 7090]

"WETLANDS" (AS DEFINED IN MINN. R. 7050.0186, SUBP. 1A.B.) MEANS THOSE AREAS THAT ARE INUNDATED OR SATURATED BY SURFACE WATER OR GROUNDWATER AT A FREQUENCY AND DURATION SUFFICIENT TO SUPPORT, AND UNDER NORMAL CIRCUMSTANCES DO SUPPORT, A PREVALENCE OF VEGETATION TYPICALLY ADAPTED FOR LIFE IN SATURATED SOIL CONDITIONS. WETLANDS GENERALLY INCLUDE SWAMPS, MARSHES, BOGS, AND SIMILAR AREAS. CONSTRUCTED WETLANDS DESIGNED FOR WASTEWATER TREATMENT ARE NOT WATERS OF THE STATE. WETLANDS MUST HAVE THE FOLLOWING ATTRIBUTES:

- A PREDOMINANCE OF HYDRIC SOILS; AND
- INUNDATED OR SATURATED BY SURFACE WATER OR GROUNDWATER AT A FREQUENCY AND DURATION SUFFICIENT TO SUPPORT A PREVALENCE OF HYDROPHYTIC VEGETATION TYPICALLY ADAPTED FOR LIFE IN A SATURATED SOIL CONDITION; AND
- UNDER NORMAL CIRCUMSTANCES SUPPORT A PREVALENCE OF SUCH VEGETATION. [MINN. R. 7050.0186, SUBP. 1A.B]

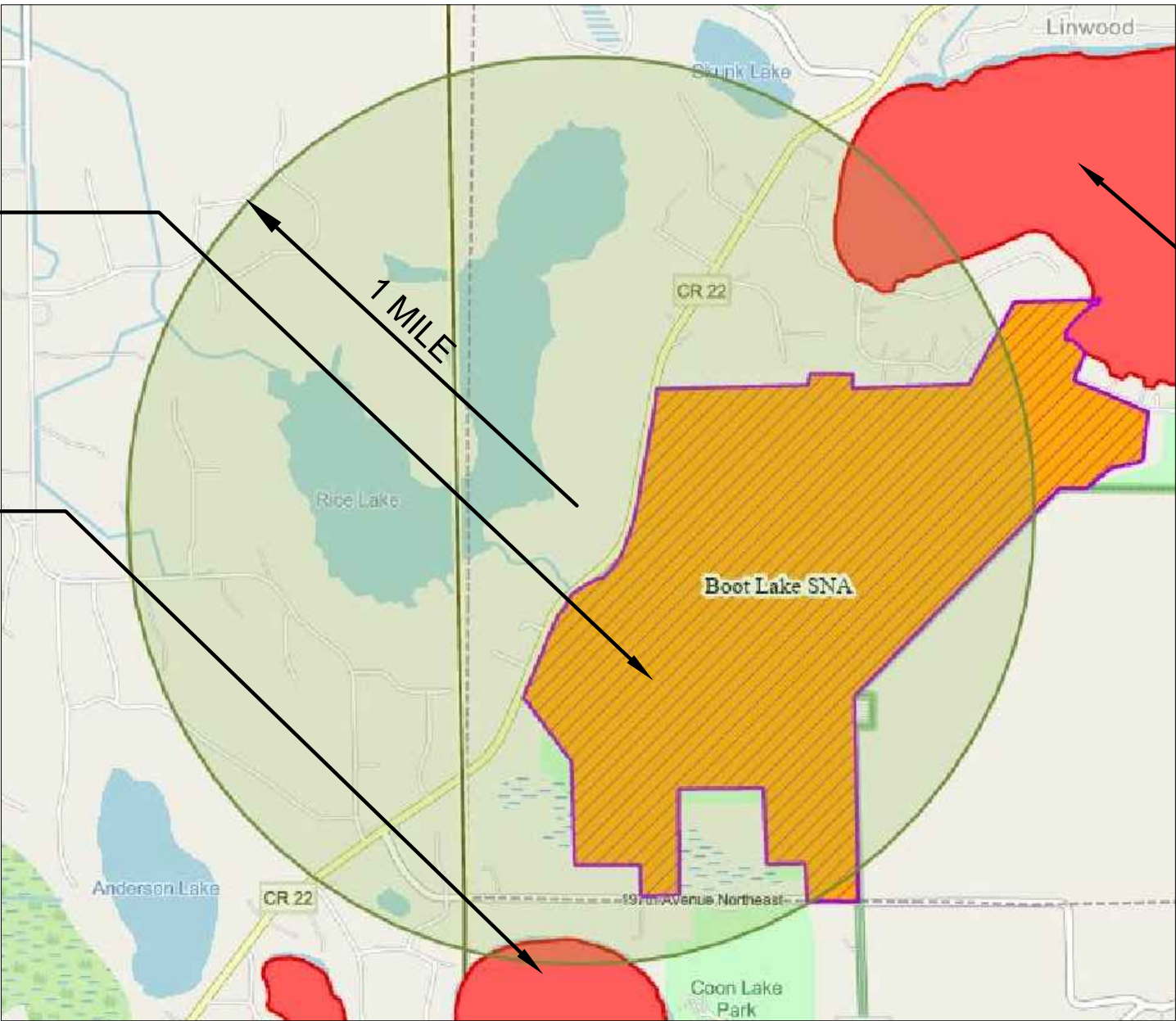
MAP OF SURFACE WATERS

ORVW - SNA: BOOT LAKE SNA

THE BOOT LAKE SNA IS AN ORVW OWNED BY MN DNR FISH & WILDLIFE (SCIENTIFIC AND NATURAL AREAS)

IMPAIRED LAKES: COON
ASSESSMENT UNIT: 02-0042-00

APPROVED TMDL PLAN FOR: MERCURY IN FISH
ADDITIONAL IMPAIRMENTS: NOTE
NEW IMPAIRMENTS: NONE



IMPAIRED LAKES: LINWOOD
ASSESSMENT UNIT: 02-0026-00

APPROVED TMDL PLAN FOR: NUTRIENTS; NUTRIENTS
ADDITIONAL IMPAIRMENTS: NONE
NEW IMPAIRMENTS: NONE

CLIFFS PETERSON RIDGE
LINWOOD TOWNSHIP, MN
SWPPP

PREPARED FOR: SHERO CONSTRUCTION

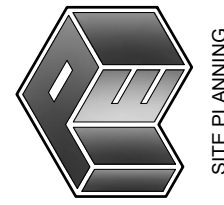
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ADAM GINKEL
Date: 06/08/2023 License No. 43683

DRAWN BY: AG
JOB NO: 23-0005
CHECK BY: CWP
DATE: 06/023

NO. DATE DESCRIPTION

1 2 3 4 5 6 7 8



PLOWE
ENGINEERING, INC.
6776 LAKE DRIVE
LINO LAKES, MN 55014
PHONE: (651) 361-8210
FAX: (651) 361-8701

SHEET
C2.2