

AWN BY: M.Q.A.	DESIGN BY: C.W.P.
CKD BY: M.Q.A.	PROJ. NO. 22-2011
GINAL DATE:	
JANUARY 10, 2022	
6/30/22	CITY REVIEW; TEP PANEL COMMENTS
07/01/22	ACHD REVIEW

# PRAIRIE HILLS

# EAST BETHEL, MINNESOTA

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## STREET PLAN & PROFILE

PREPARED FOR:  
CONSTRUCTION  
OF ANOKA, INC.

A 3D-style icon of a dark gray rectangular block with a lighter gray vertical section on the left side, suggesting a folder or a document.

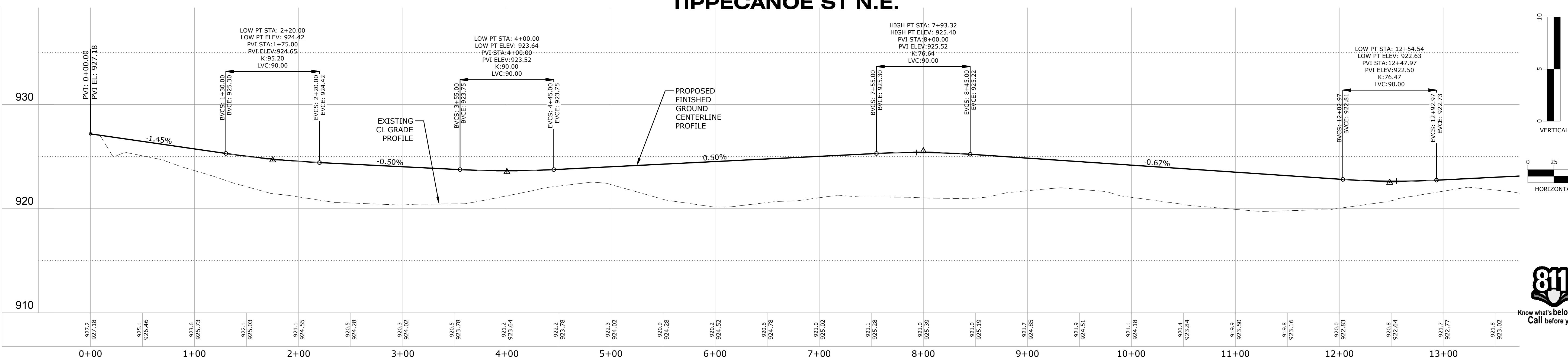
**PLOWE  
ENGINEERING, INC.**

76 LAKE DRIVE  
STE 110  
O LAKES, MN 55014

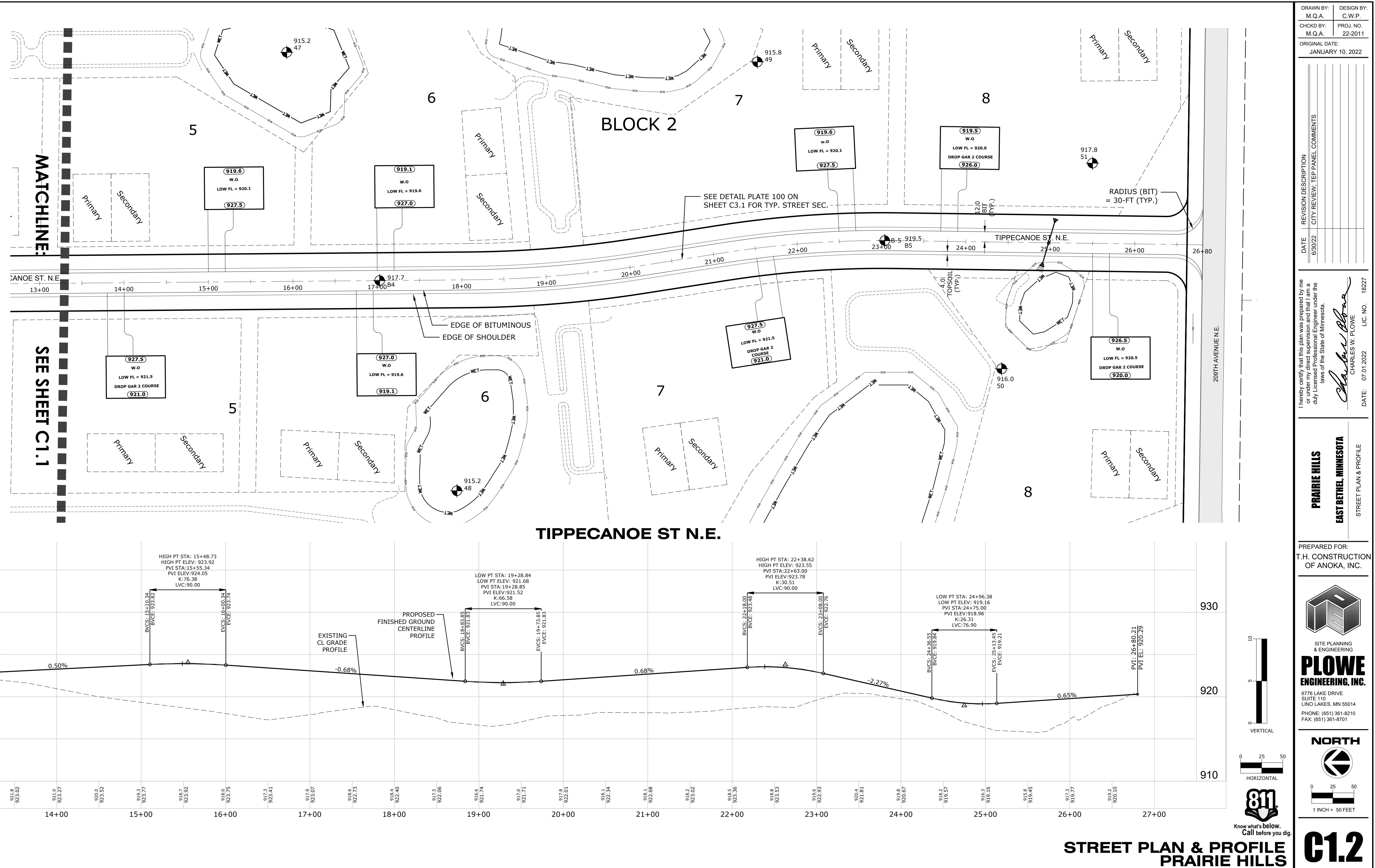
ONE: (651) 361-8210  
X: (651) 361-8701

A graphic element consisting of a large word "NORTH" in bold black capital letters at the top, a circular arrow icon with a thick black border and a white center containing a black L-shaped arrow pointing left, and a scale bar below it. The scale bar is a horizontal line with tick marks at 0, 25, and 50, with black bars above and below the 0 and 50 marks.

# C1.1



# STREET PLAN & PROFILE PRAIRIE HILLS



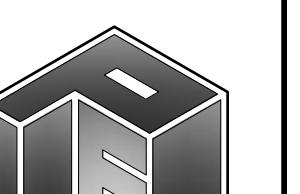
REVISION DESCRIPTION	
DATE	4/21/22
REVISION	REVISION BULK 1 LOTS 2 AND 3 GRADES; ADDED VMA
CITY REVIEW	CITY REVIEW - TEP PANEL COMMENTS
ACHD REVIEW	07/01/22

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.  
Charles W. PLOWE  
LIC. NO. 18227

DATE: 07/01/2022

PRairie Hills  
Grading, Drainage, and Erosion  
Control Plan  
EAST BETHEL, MINNESOTA

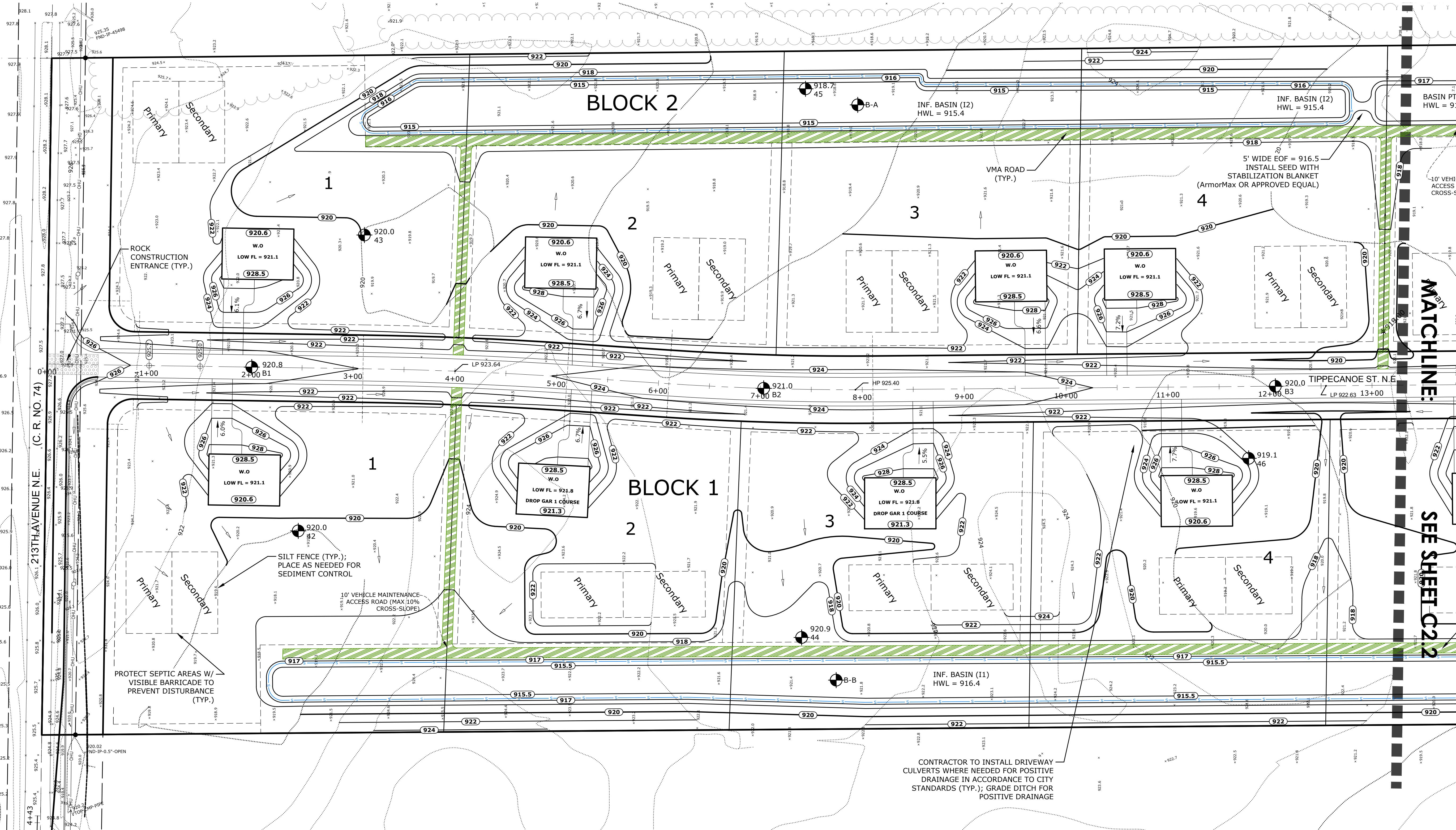
PREPARED FOR:  
T.H. CONSTRUCTION  
OF ANOKA, INC.



**PLOWE**  
ENGINEERING, INC.  
6776 LAKE DRIVE  
SUITE 110  
LINO LAKES, MN 55014  
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**NORTH**  
  
0 25 50  
1 INCH = 50 FEET

**C2.1**



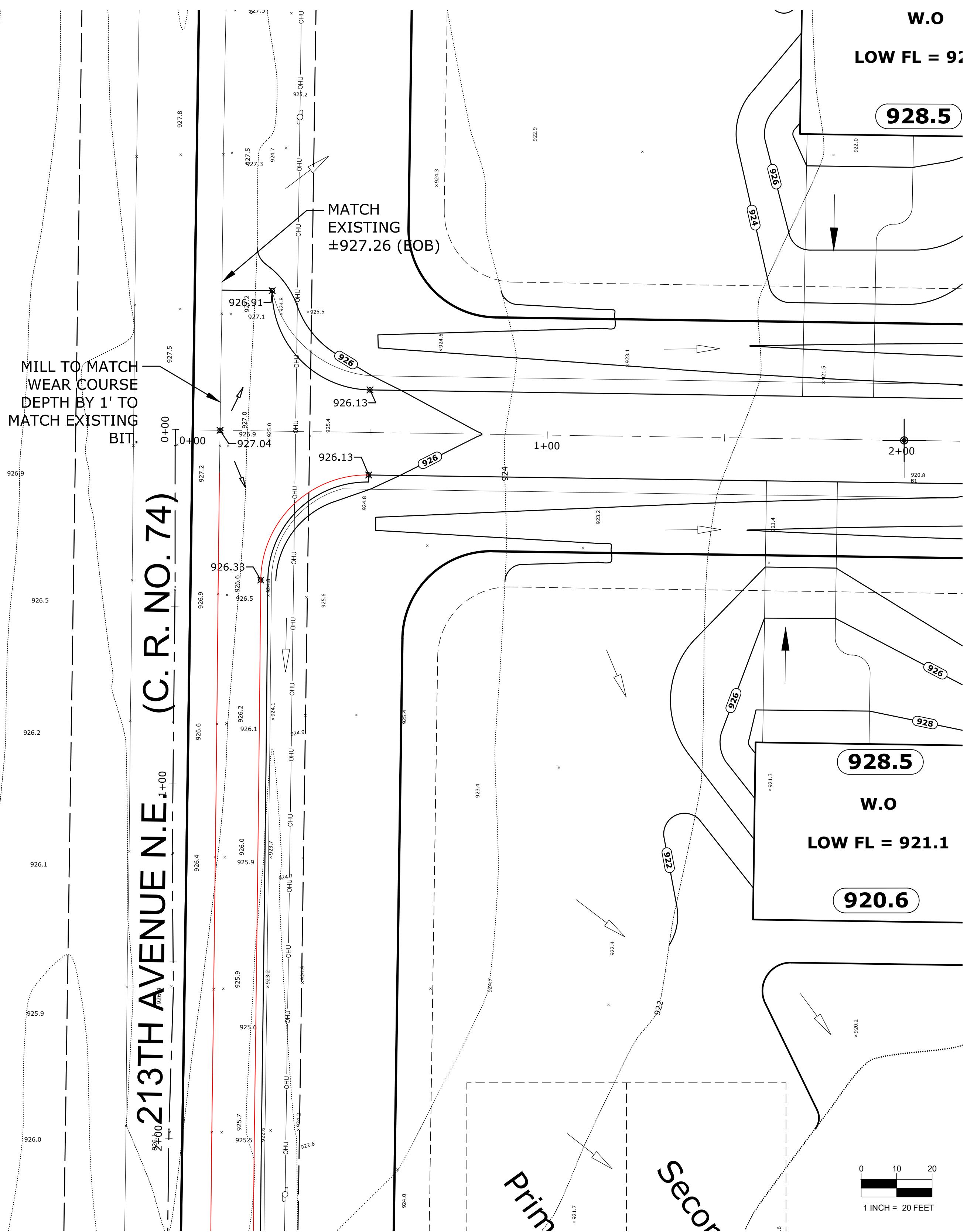
\*SEE SHEET C3.1 FOR GRADING AND EROSION CONTROL NOTES



Know what's below.  
Call before you dig.

**GRADING, DRAINAGE, AND EROSION CONTROL PLAN  
PRAIRIE HILLS**

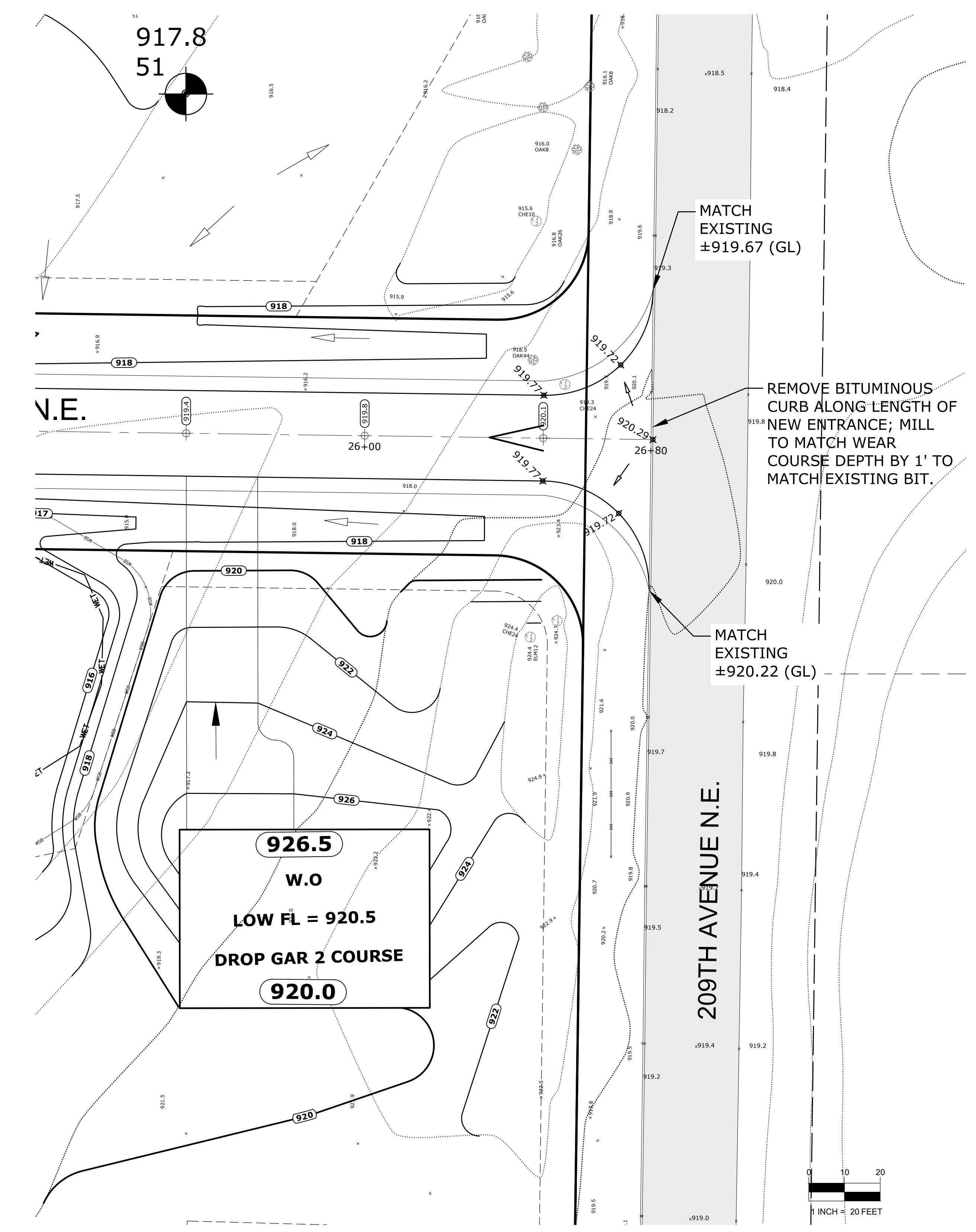




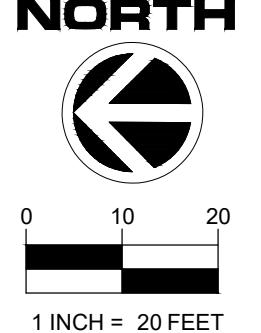
INTERSECTION (NORTH) OF TIPPECANOE ST N.E. WITH 213TH AVE N.E. (C.R. NO. 74)



**Know what's below.  
Call before you dig.**



INTERSECTION (SOUTH) OF TIPPECANOE ST N.E. WITH 209TH AVE N.E.



# INTERSECTION DETAILS PRAIRIE HILLS

# C2.3

**ENGINEERING, INC.**  
6776 LAKE DRIVE  
SUITE 110  
LINO LAKES, MN 55014  
PHONE: (651) 361-8210  
FAX: (651) 361-8701

**NORTH**

A circular logo containing a stylized letter 'K' with a diagonal line through it, rendered in black and white.

1 INCH = 20 FEET

DRAWN BY: M.Q.A.	DESIGN BY: C.W.P.
CHCKD BY: M.Q.A.	PROJ. NO. 22-2011
ORIGINAL DATE:	
JANUARY 10, 2022	
DATE	REVISION DESCRIPTION
6/30/22	CITY REVIEW; TEP PANEL COMMENTS
07/01/22	ACHD REVIEW

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*Charles W. Plowe*

# PRAIRIE HILLS

# EAST BETHEL, MINNESOTA

---

## INTERSECTION DETAILS

PREPARED FOR:  
T.H. CONSTRUCTION  
OF ANOKA, INC.

**PLOWE**  
**ENGINEERING, INC.**

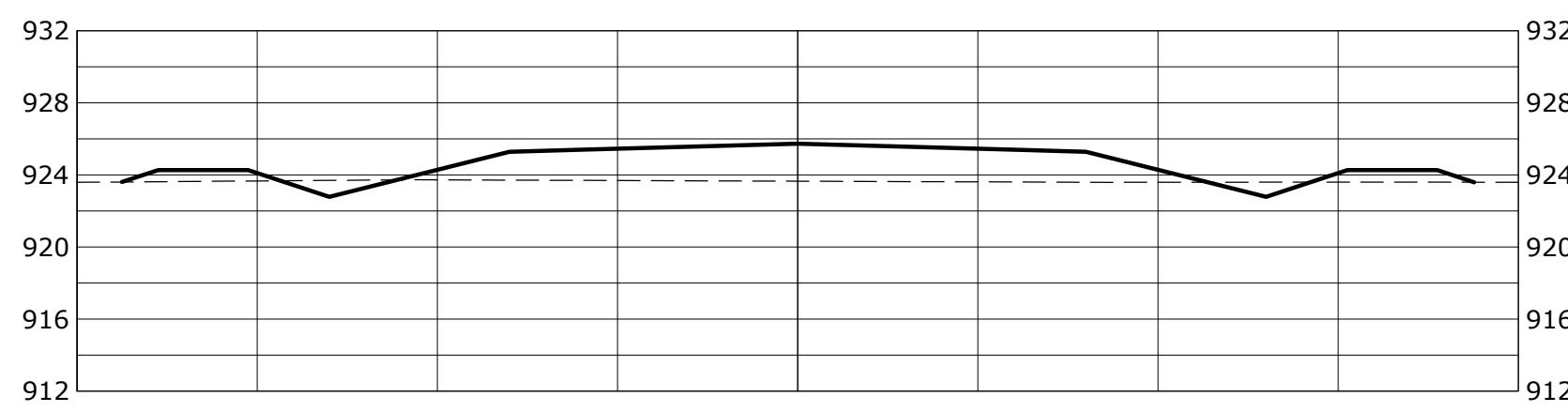
# **NORTH**

A circular logo containing a stylized letter 'K' with a diagonal line through it, rendered in black and white.

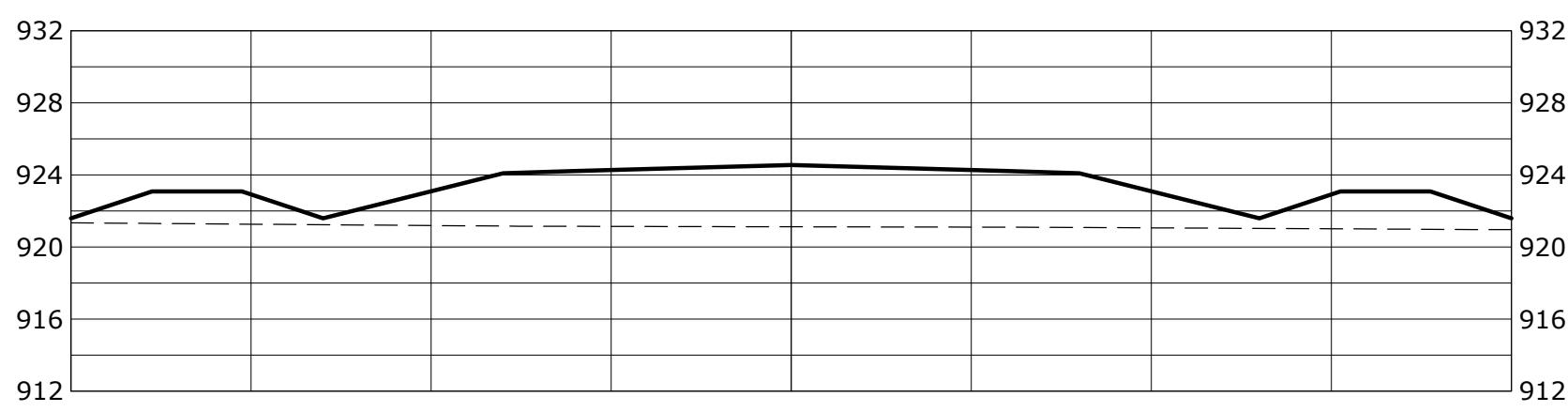
1 INCH = 20 FEET

# C2.3

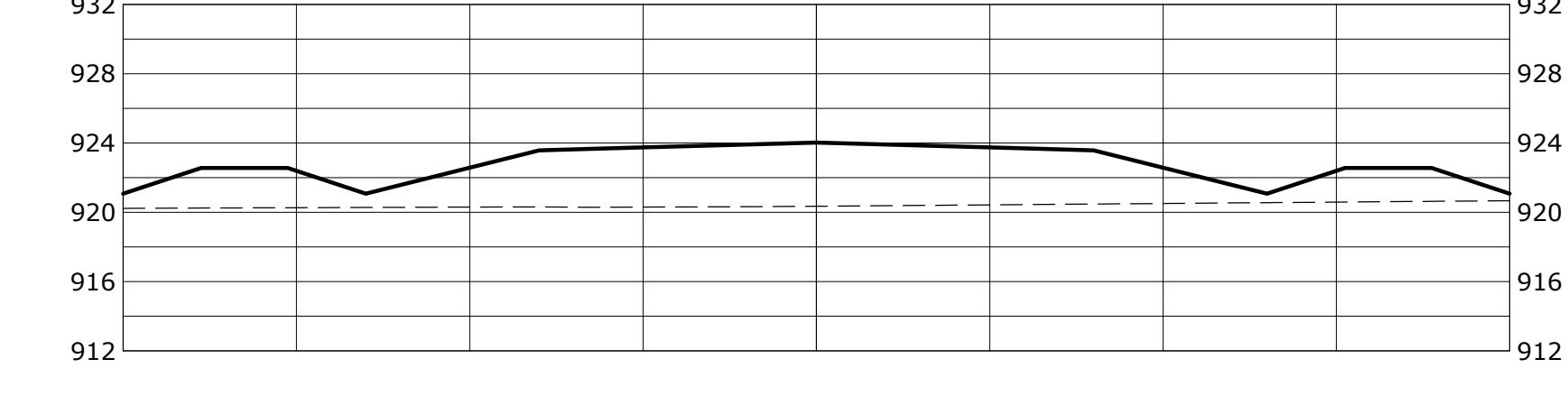
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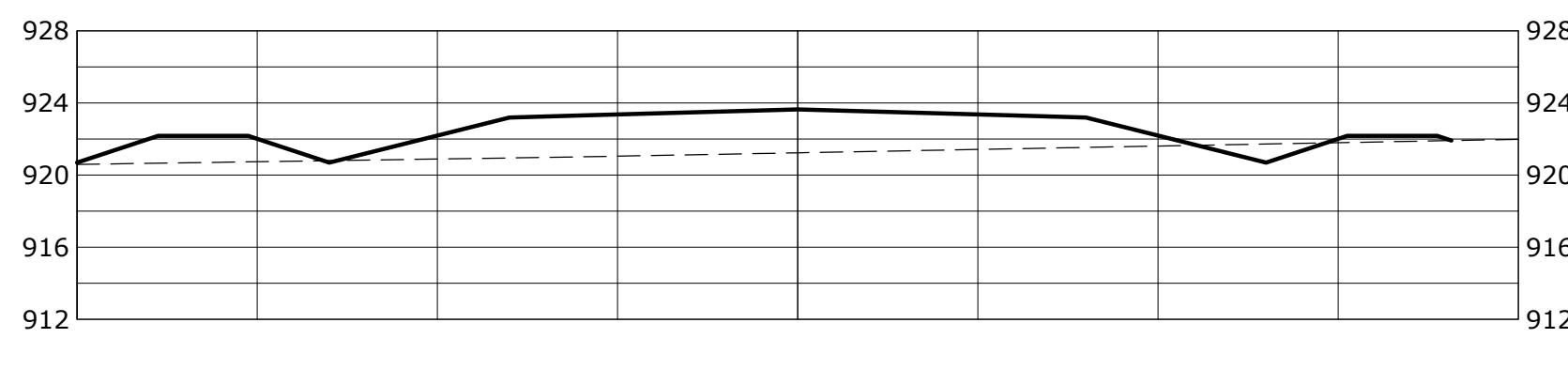
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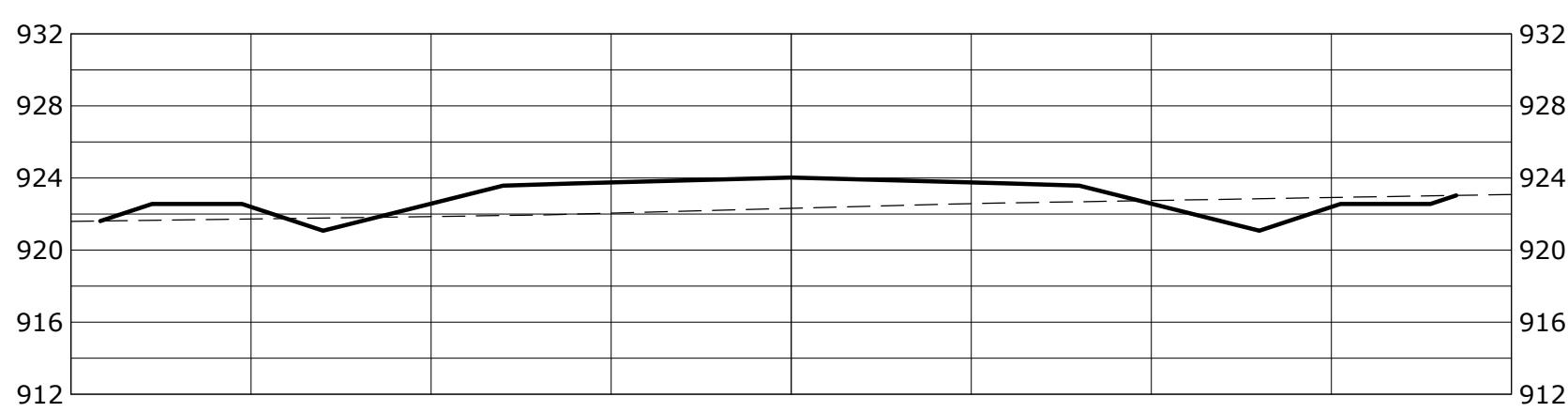
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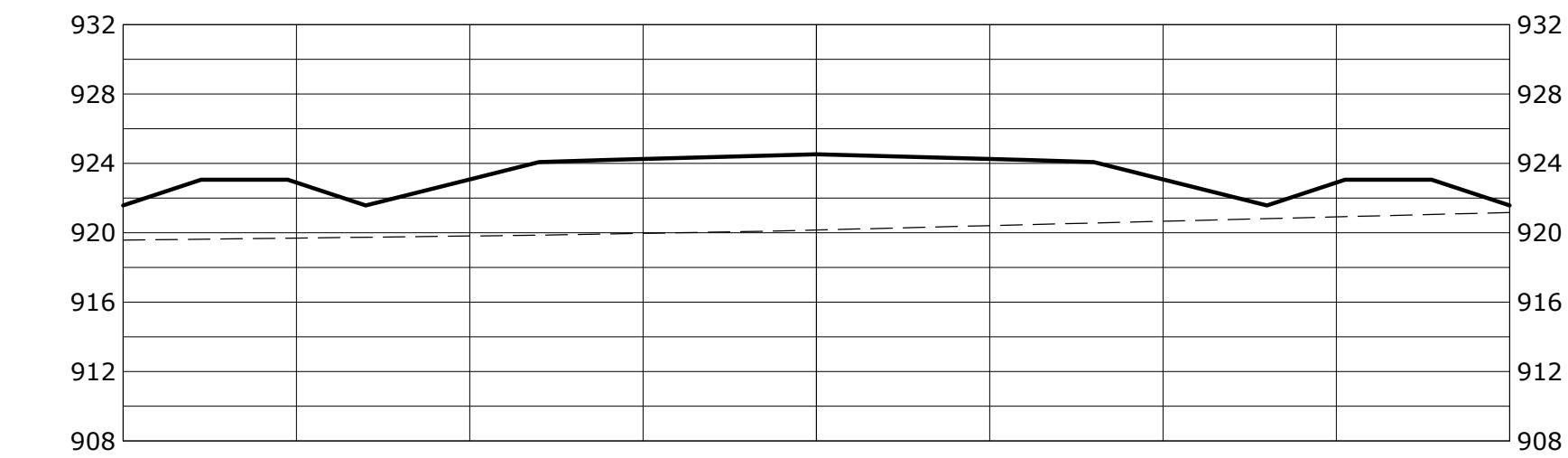
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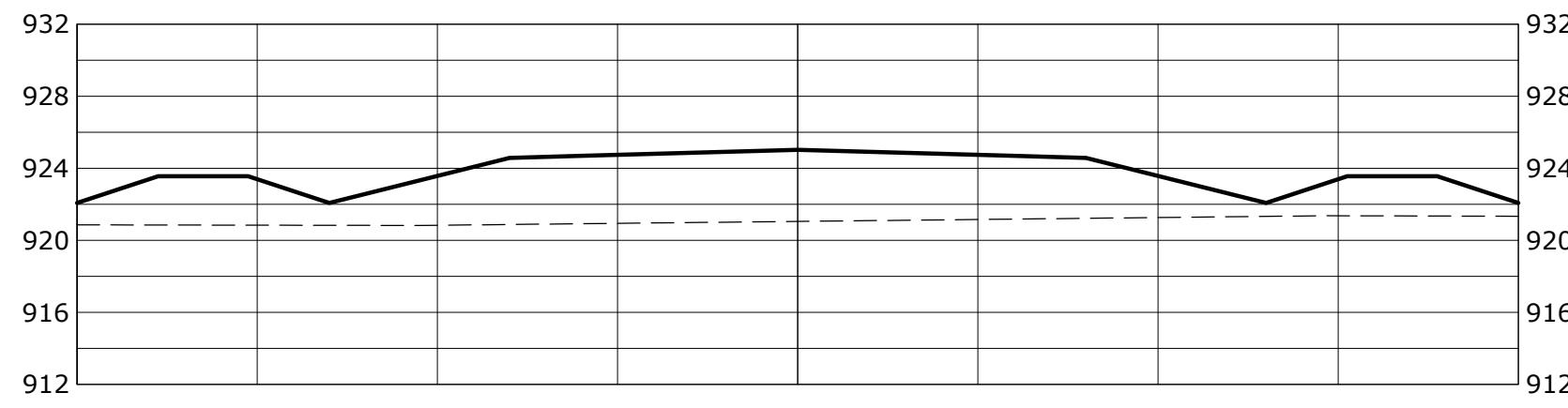
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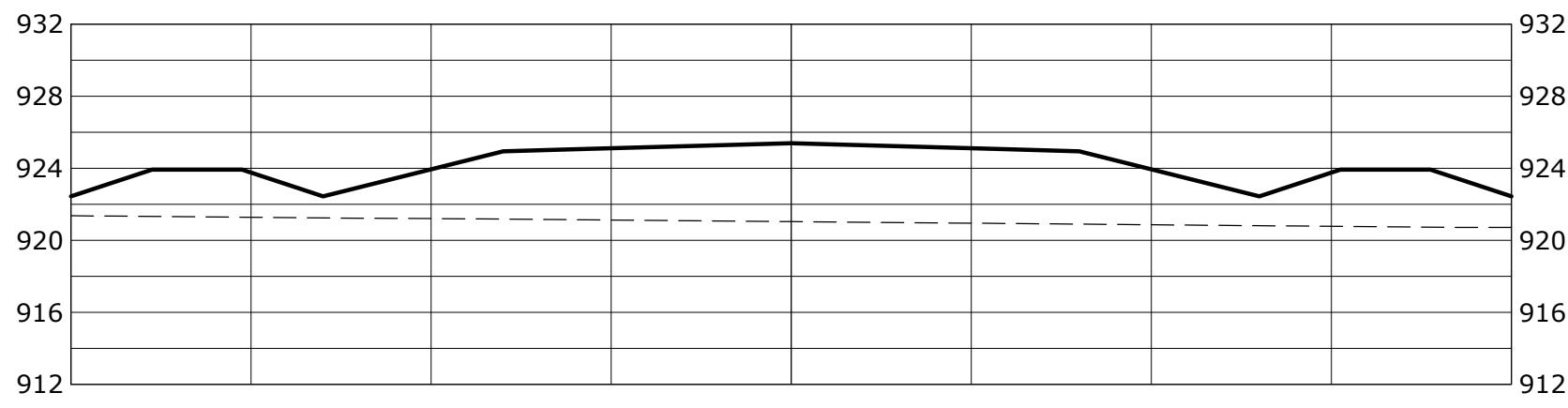
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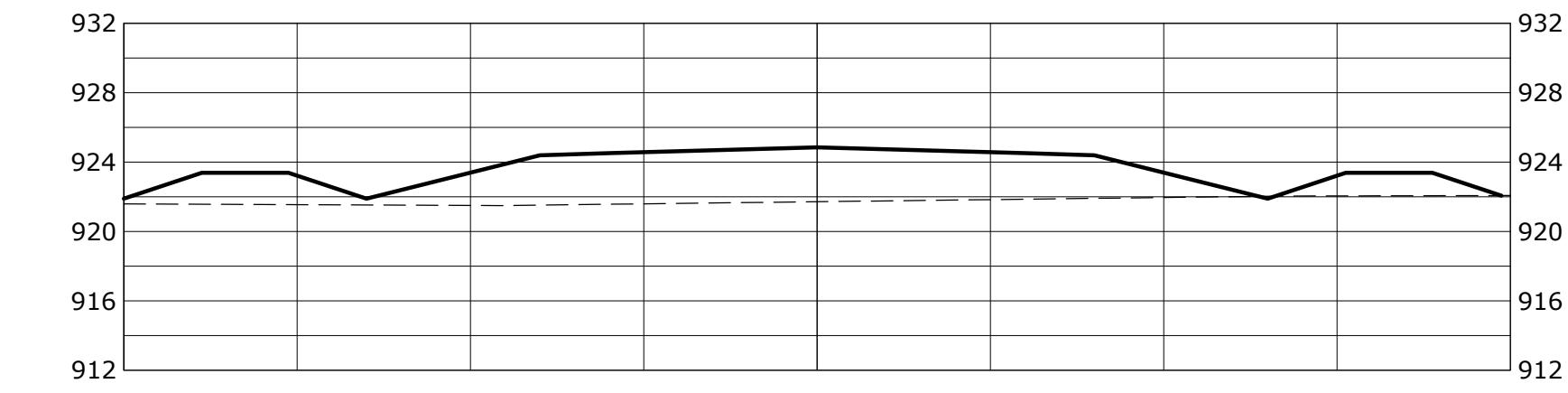
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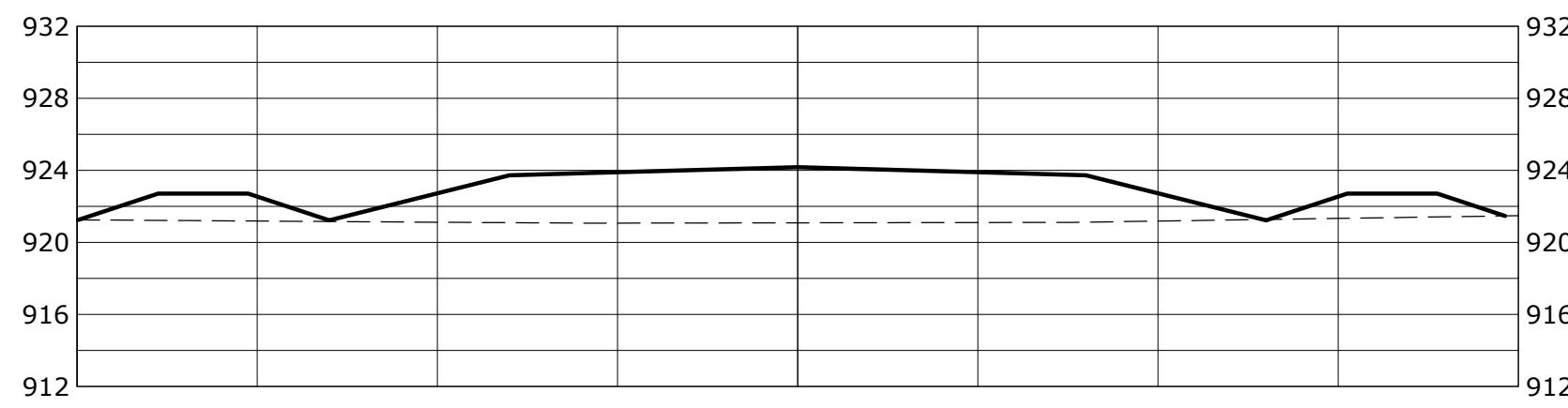
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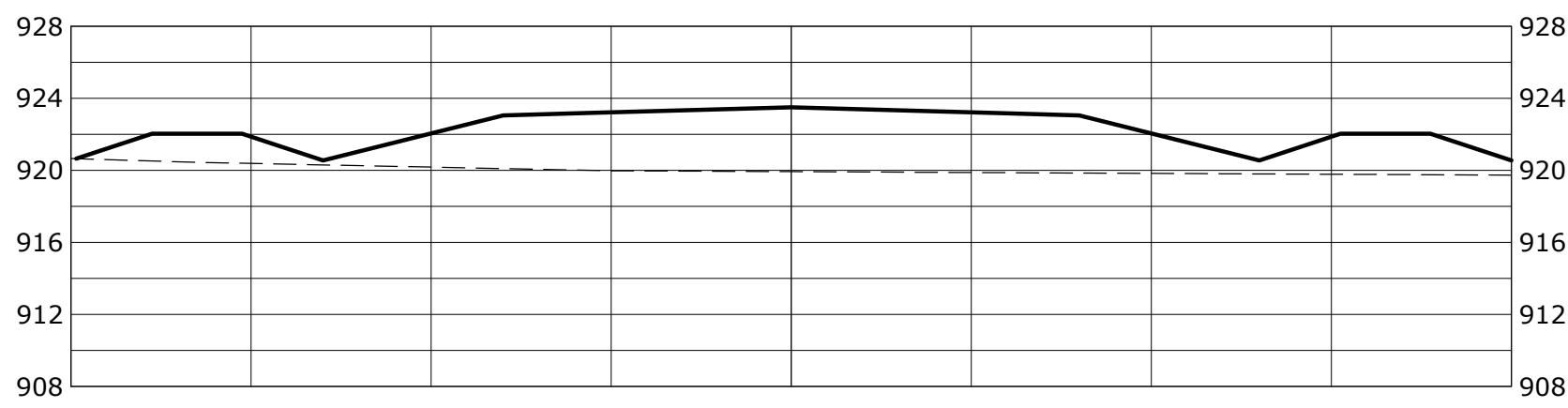
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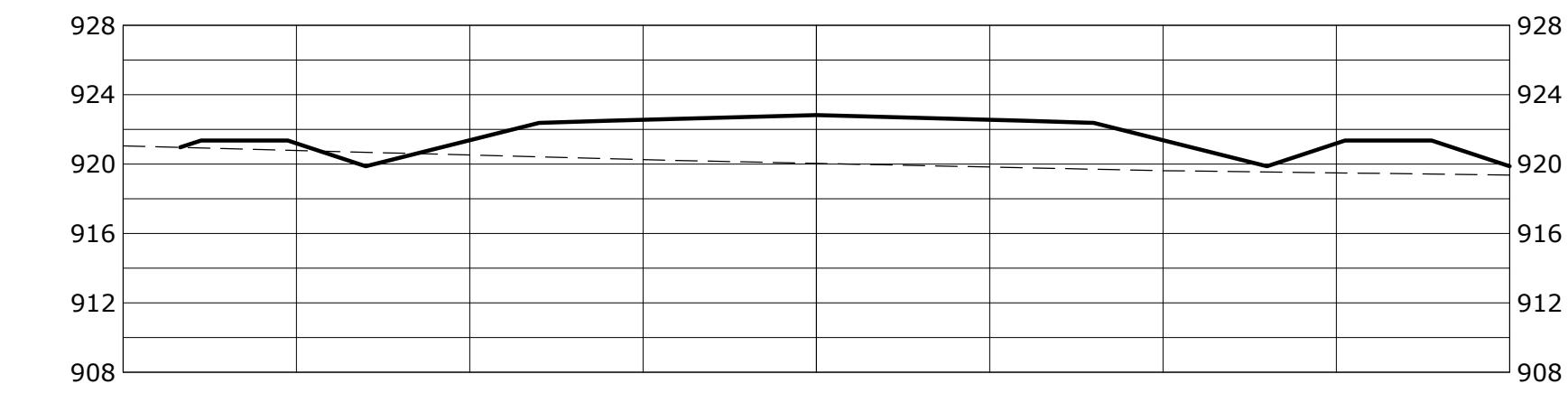
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11+00



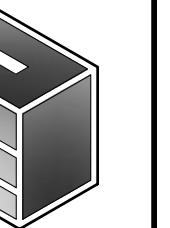
12+00



PRairie hills

STREET CROSS-SECTIONS

EAST BETHEL, MINNESOTA

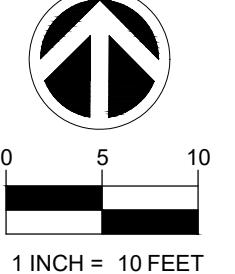


SITE PLANNING & ENGINEERING

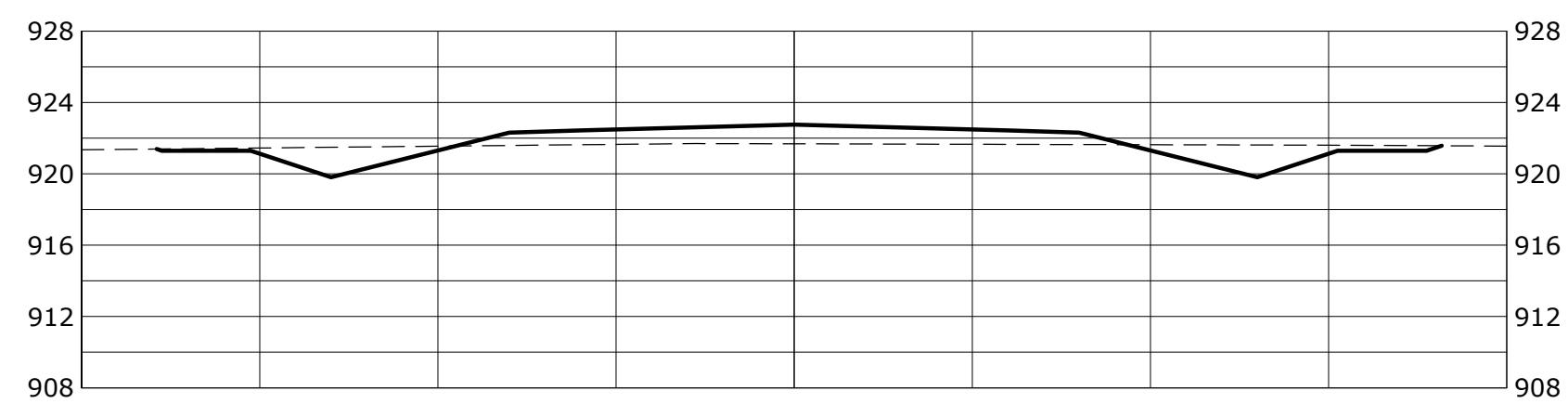
**PLOBE**  
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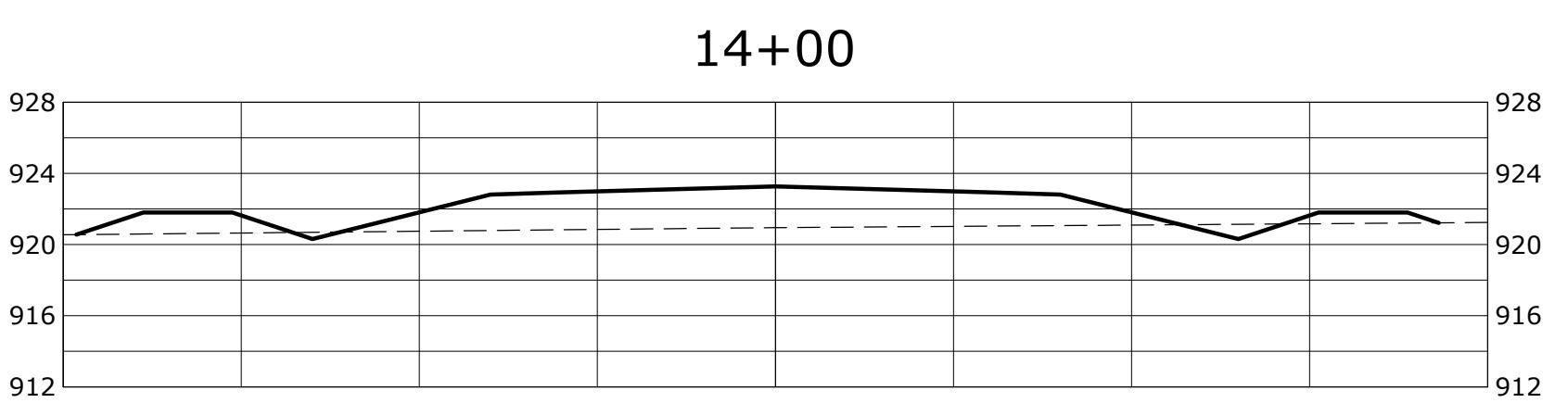
NORTH



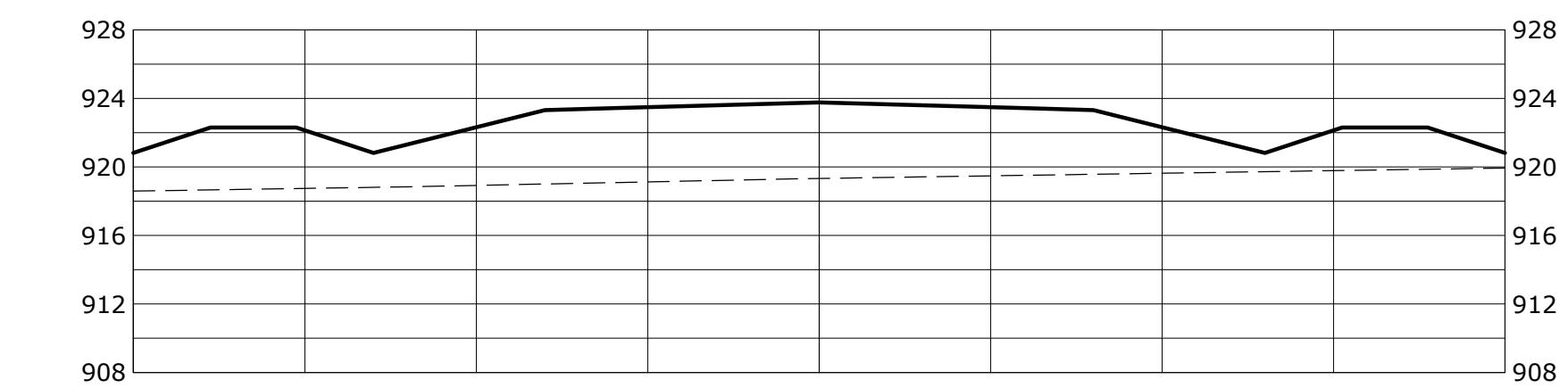
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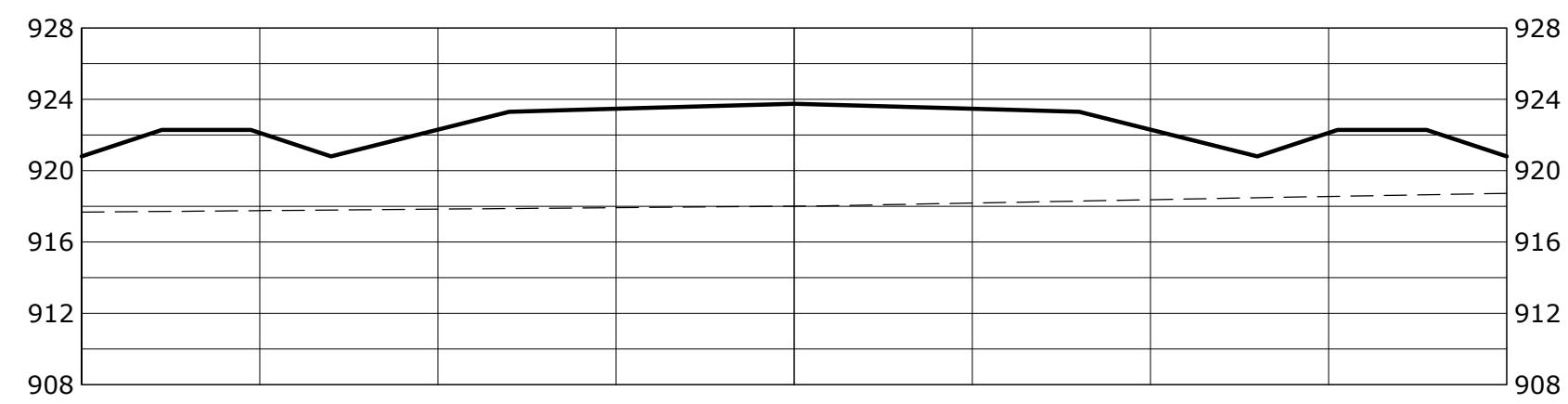
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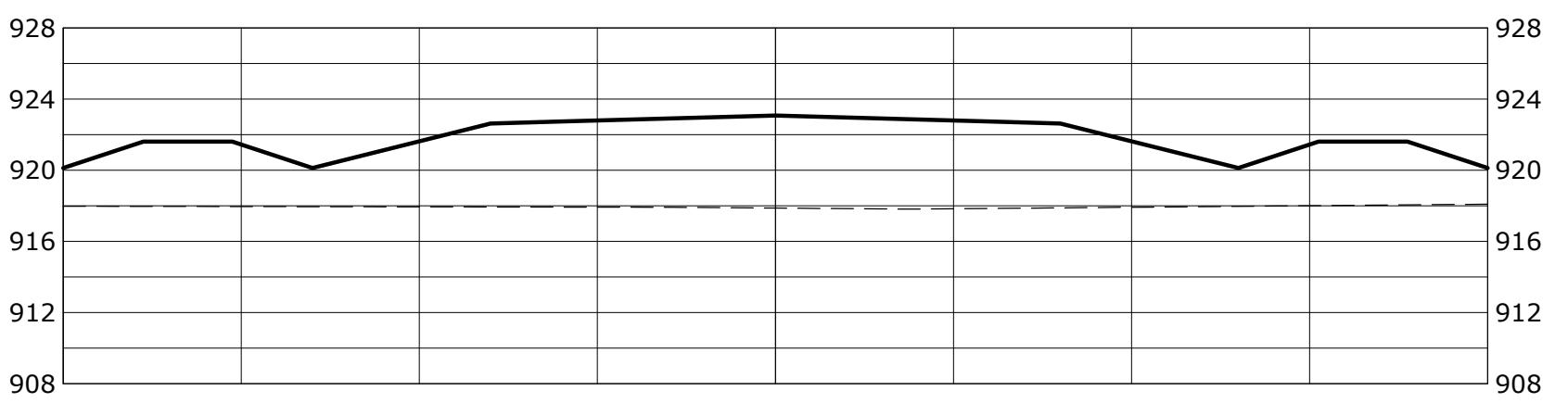
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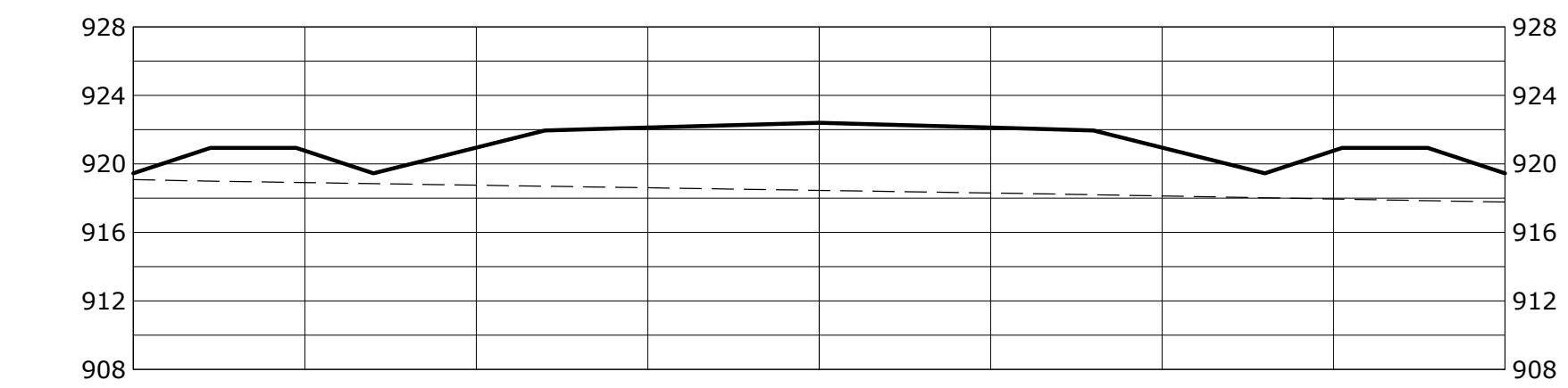
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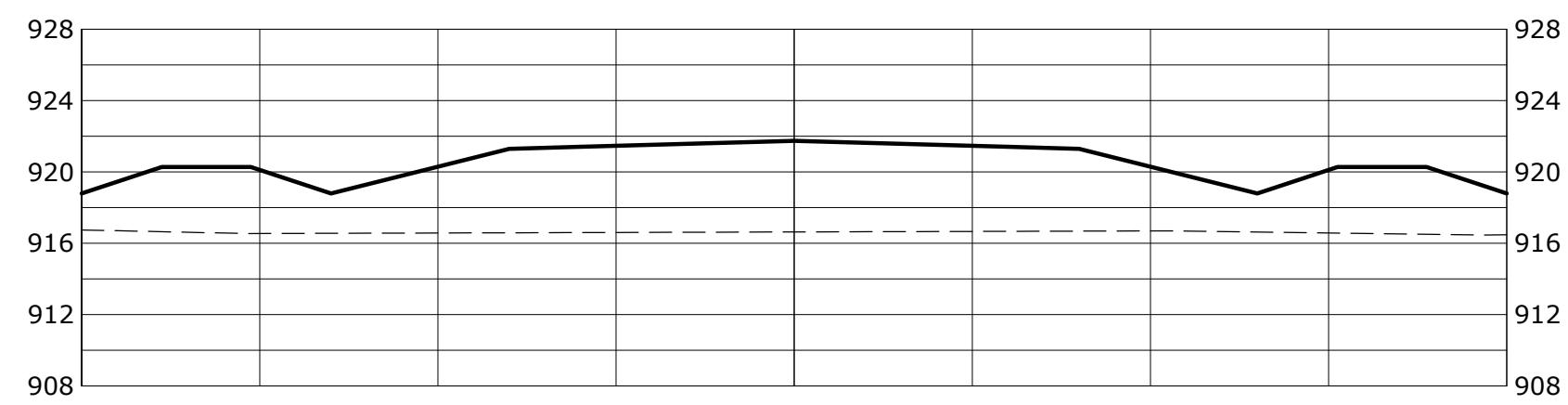
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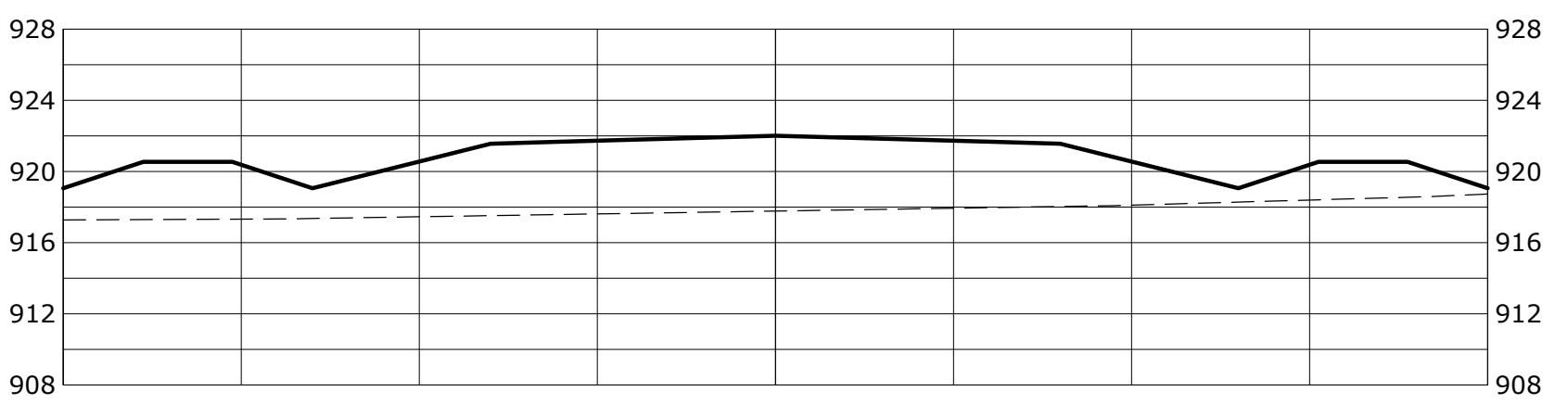
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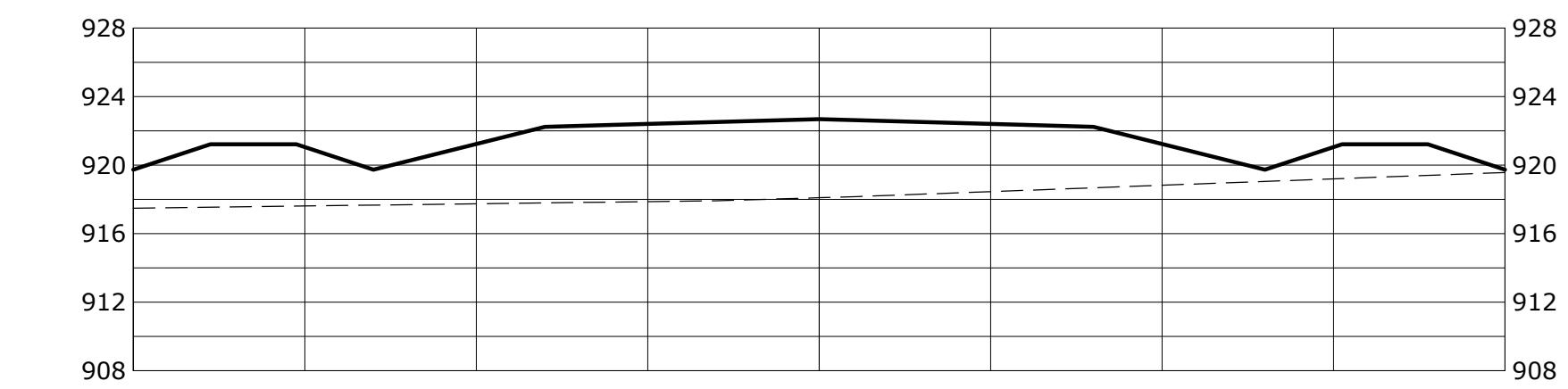
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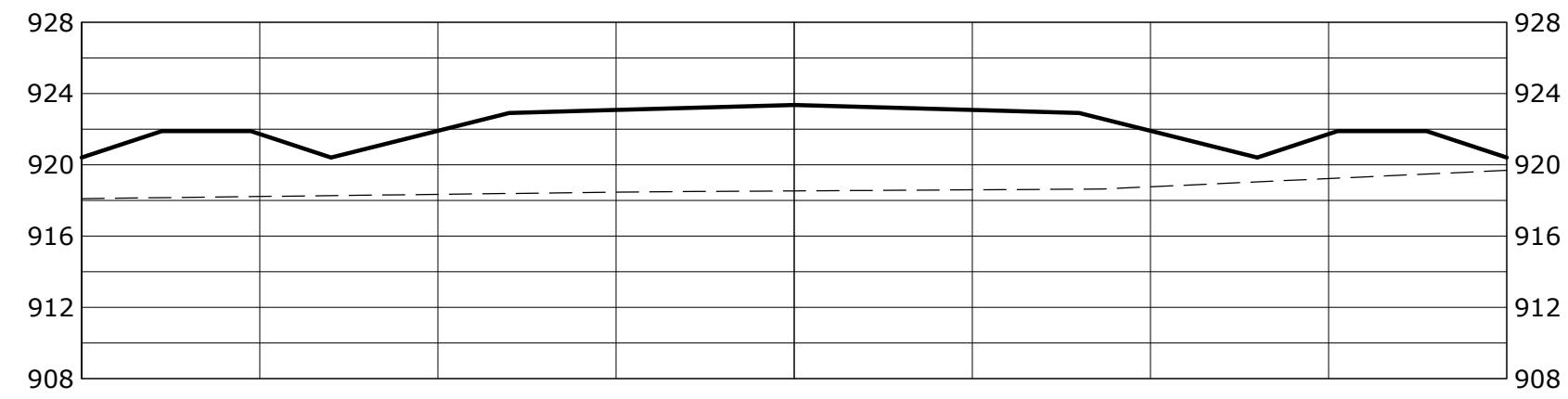
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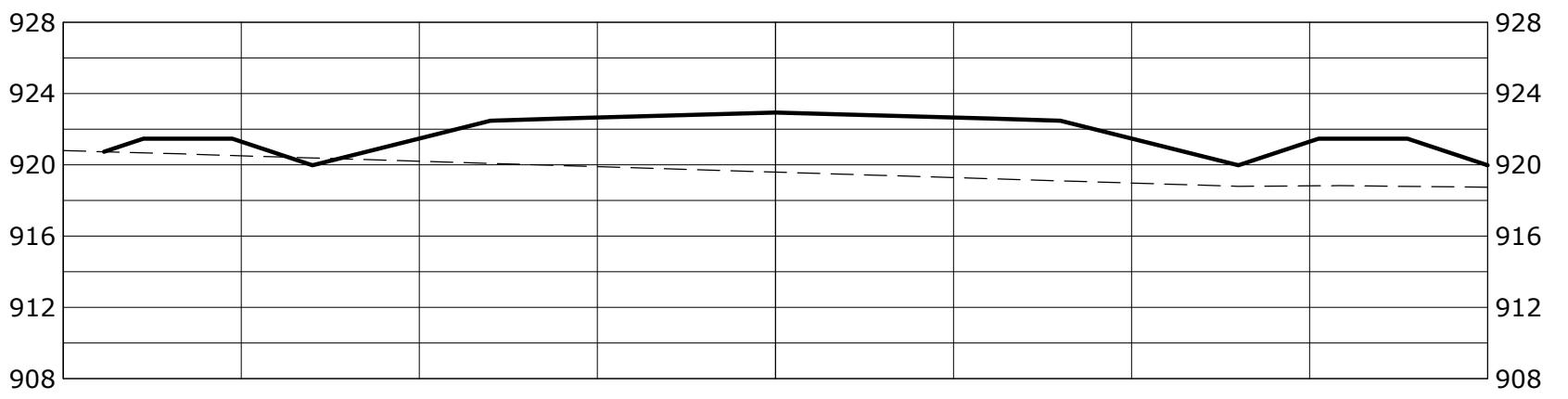
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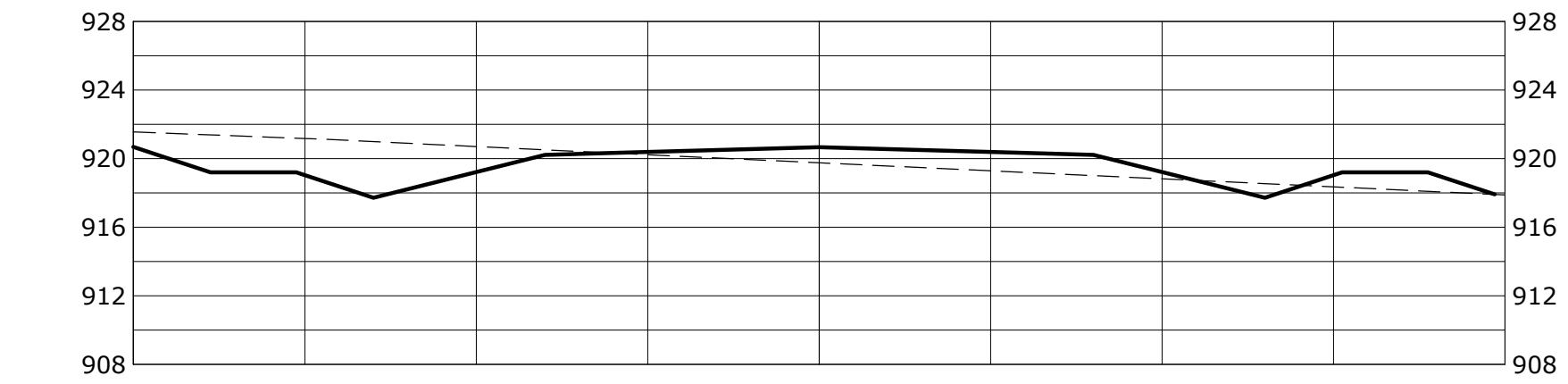
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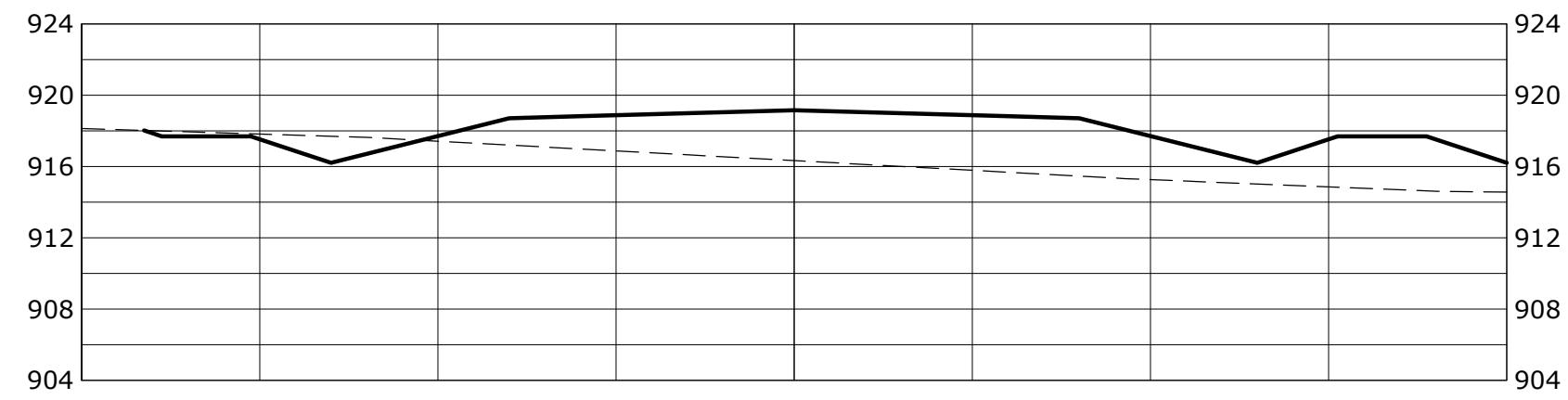
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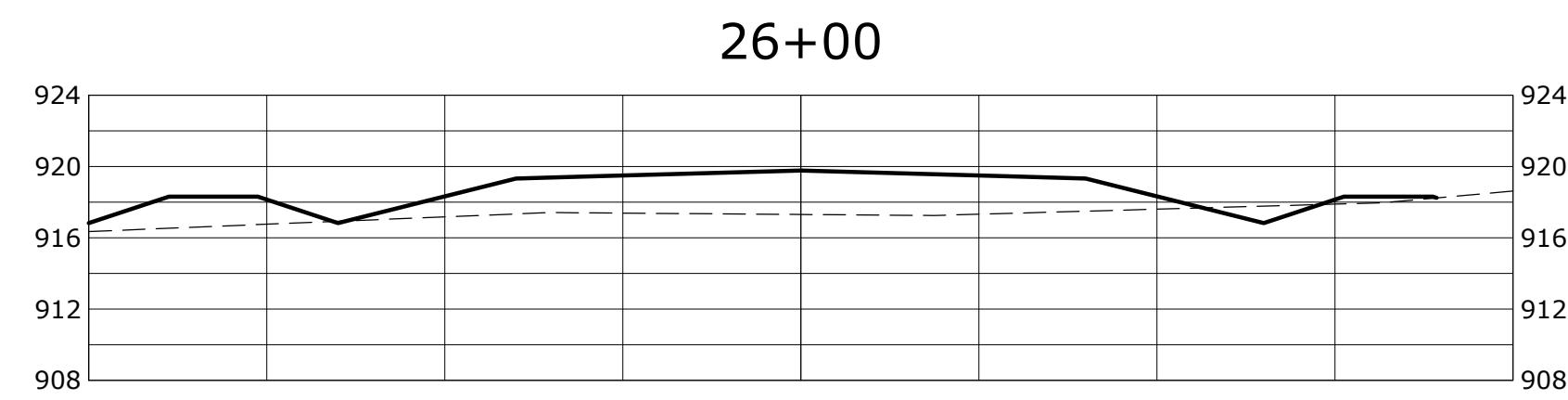
24+00



25+00



26+00



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.

*Charles W. Plowe*  
CHARLES W. PLOWE

DATE: 07/01/2022

LIC. NO. 18227

PRairie hills

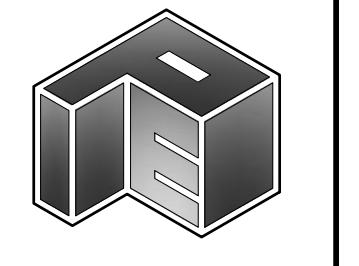
STREET CROSS-SECTIONS

STREET CROSS-SECTIONS

EAST BETHEL, MINNESOTA

PREPARED FOR:

T.H. CONSTRUCTION  
OF ANOKA, INC.



SITE PLANNING & ENGINEERING

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6776 LAKE DRIVE  
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1 INCH = 10 FEET

STREET CROSS-SECTIONS  
PRAIRIE HILLS

**C2.5**

## SITE SEQUENCING

- PRIOR TO ANY GRADING OPERATIONS, THE CONTRACTOR SHALL INSTALL ROCK CONSTRUCTION ENTRANCE (LOCATIONS TO BE DETERMINED - COORDINATE WITH OWNER) AND PERIMETER SILT FENCE AS SHOWN ON PLAN. (CONTACT CITY TO INSPECT EROSION CONTROL MEASURES PRIOR TO GRADING OPERATIONS, IF NECESSARY.) ADDITIONAL SILT FENCE MAY BE NECESSARY IF LOCAL CONDITIONS REQUIRE.
- THE CONTRACTOR SHALL PROVIDE ALL SOD, SEED, MULCH AND FERTILIZER WHICH SHALL CONFORM WITH THE FOLLOWING MNDOT SPECIFICATIONS AS MODIFIED BELOW.

ITEM	MNDOT SPECIFICATION/NOTES
SOD	3878
SEED **	3876
* FOR TURF ESTABLISHMENT	
COMMERCIAL TURF	MNDOT MIX 25-131 (220 LBS/ACRE)
RESIDENTIAL TURF	MNDOT MIX 25-131 (120 LBS/ACRE)
TEMPORARY	FALL COVER
	MNDOT MIX 21-112 (100 LBS/ACRE)
	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)
FERTILIZER	3881
WOOD FIBER BLANKET	3885 (CATEGORY 2)

\* MOW A MINIMUM OF ONCE PER 2 WEEKS  
\*\* SEEDED AREAS SHALL BE EITHER MULCHED OR COVERED BY FIBROUS BLANKETS  
TO PROTECT SEEDS AND LIMIT EROSION.

- ALL EXPOSED SOILS MUST HAVE TEMPORAL EROSION CONTROL PROTECTION OR PERMANENT COVER WITHIN FOURTEEN (14) DAYS.
- THE CONTRACTOR SHALL PAY SPECIAL ATTENTION TO ALL ADJACENT PROPERTY LINES AND MAKE SURE THE EROSION CONTROL PRACTICES IN PLACE IN THOSE AREAS PREVENT MIGRATION OF SEDIMENT ONTO ADJACENT PROPERTIES.
- THE CONTRACTOR SHALL MAINTAIN SILT FENCE, INCLUDING THE REMOVAL OF ACCUMULATED SEDIMENT, THROUGH COMPLETION OF BUILDING CONSTRUCTION. SILT FENCE TO BE REMOVED ONLY AFTER COMPLETION OF BUILDING CONSTRUCTION AND UPON ESTABLISHMENT OF VEGETATION.
- THE CONTRACTOR SHALL PROVIDE WOOD FIBER BLANKET FOR ALL AREAS OF CONCENTRATED FLOW AND FOR ALL SLOPES 3:1 OR GREATER.
- PROTECT ALL STORM WATER MANAGEMENT FACILITIES FROM CONSTRUCTION RUN-OFF. CONTRACTOR TO INSTALL AND CONSTRUCT SAID FACILITIES ONCE SITE HAS BEEN STABILIZED.
- IF ANY SLOPES APPEAR TO BE FAILING, THE CONTRACTOR SHALL PROVIDE ADDITIONAL SILT FENCE, BIOROLLS AND EROSION CONTROL BLANKET AS NEEDED.
- THE CONTRACTOR SHALL FINAL GRADE SWALE AREAS UPON STABILIZATION OF UPSTREAM AREAS.
- THE CONTRACTOR SHALL SOD ALL DISTURBED DRAINAGE AREAS, INCLUDING SWALES & OVERFLOWS.
- UPON GRADING COMPLETION THE CONTRACTOR SHALL PROVIDE NATIVE TOPSOIL WITH SOD OR SEED, AND MULCH ANCHORED WITH A STRAIGHT SET DISC WITHIN 48 HOURS OF FINAL GRADING.
- EXCESS SOIL SHOULD BE TREATED LIKE OTHER EXPOSED SOIL AND STABILIZED WITHIN 72 HOURS. ANY SOIL STOCKPILES ARE TO HAVE SILT FENCE PLACED ON DOWNSTREAM SIDES.
- IF A STREET, ALLEY, SIDEWALK OR OTHER PUBLIC PLACE SHOULD BECOME SOILED OR LITTERED, THE CONTRACTOR SHALL CAUSE SUCH SOILING OR LITTERING TO BE CLEANED UP BY SWEEPING NOT LATER THAN THE END OF THE WORKING DAY IN WHICH SUCH SOILING OR LITTERING SHALL HAVE OCCURRED OR BEEN OBSERVED.

## OTHER POLLUTION CONTROL MEASURES

CONSTRUCTION WASTE MATERIALS - ALL WASTE MATERIALS GENERATED AS A RESULT OF SITE CONSTRUCTION SHALL BE COLLECTED AND REMOVED ACCORDING TO ALL LOCAL AND/OR STATE WASTE MANAGEMENT REGULATIONS BY A LICENSED SOLID WASTE MANAGEMENT COMPANY. THE CONTRACTOR WILL ENSURE THAT ALL SITE PERSONNEL ARE INSTRUCTED IN THESE PRACTICES.

HAZARDOUS WASTES - ALL HAZARDOUS WASTE MATERIALS SHALL BE STORED PROPERLY TO PREVENT SPILLS AND VANDALISM. WHEN NECESSARY, HAZARDOUS WASTES WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL AND/OR STATE REGULATION OR BY THE MANUFACTURER.

SANITARY WASTE - ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS BY A LOCAL, LICENSED WATER MANAGEMENT COMPANY, AS REQUIRED BY LOCAL REGULATION.

OFF-SITE VEHICLE TRACKING - A ROCK CONSTRUCTION ENTRANCE HAS BEEN PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENT. IF A STREET, ALLEY, SIDEWALK OR OTHER PUBLIC PLACE SHOULD BECOME SOILED OR LITTERED, THE CONTRACTOR SHALL CAUSE SUCH SOILING OR LITTERING TO BE CLEANED UP BY SWEEPING NOT LATER THAN THE END OF THE WORKING DAY IN WHICH SUCH SOILING OR LITTERING SHALL HAVE OCCURRED OR BEEN OBSERVED. DUMP TRUCKS HAULING LOOSE MATERIALS (SAND, TOPSOIL, ETC.) TO AND/OR FROM THE SITE SHALL BE COVERED WITH A TARPULIN.

VEHICLE CLEANING - NO ENGINE DECREASING IS ALLOWED ON-SITE. EXTERNAL WASHING OF VEHICLES TO BE CONFINED TO A DEFINED AREA ("DOME YARD") ON-SITE. CONTRACTOR TO PROVIDE DESIGNATED TRUCK WASHOUT AREA WITH APPROPRIATE SIGNAGE. WASHOUT AREA IS TO BE A MINIMUM OF 50' FROM DITCHES, PONDS, OR OTHER STORMWATER FEATURES. ALL LIQUID AND SOLID WASTE GENERATED BY WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER (E.G. COMPACTED CLAY LINER, IMPERMEABLE GEO-MEMBRANE) AND DISPOSED OF PROPERLY.

SPILL PREVENTION AND CONTROL - ALL VEHICLES WILL BE CHECKED FOR LEAKING OIL AND FLUIDS. VEHICLES LEAKING FLUIDS WILL NOT BE ALLOWED ON-SITE. SPILL KITS WILL BE STORED ON-SITE AND ALL SPILLS WILL BE CLEANED UP IMMEDIATELY. SPILLED ABSORBENT MATERIALS AND RAGS WILL BE HAULED OFF-SITE IMMEDIATELY AFTER THE SPILL IS CLEANED UP AND PROPERTY DISPOSED OF. SPILL PREVENTION AND CONTROL MEASURES SHALL BE IMPLEMENTED ONCE CONSTRUCTION BEGINS.

SOIL STOCKPILES - INSTALL SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS AROUND ALL TEMPORARY SOIL STOCKPILES. LOCATE SOIL OR DIRT STOCKPILES SUCH THAT DOWNSLOPE DRAINAGE LENGTH IS NO LESS THAN 8 M (25 FEET). LOCATE SURFACE WATER INGATES, DRAINAGE TRENCHES, DITCHES, CURB AND GUTTER SYSTEMS, OR CONDUITS AND DITCHES UNLESS THERE IS A BYPASS IN PLACE FOR THE STORMWATER. IF REMAINING FOR MORE THAN 7 DAYS, STABILIZE THE STOCKPILES BY MULCHING, VEGETATIVE COVERS, TARPS, OR OTHER MEANS. DURING STREET REPAIR, COVER CONSTRUCTION SOIL OR DIRT STOCKPILES LOCATED CLOSER THAN 8 M (25 FEET) TO A ROADWAY OR DRAINAGE CHANNEL WITH TARPS, AND PROTECT STORM SEWER INLETS WITH SILT SOCKS OR STAKED SILT FENCE.

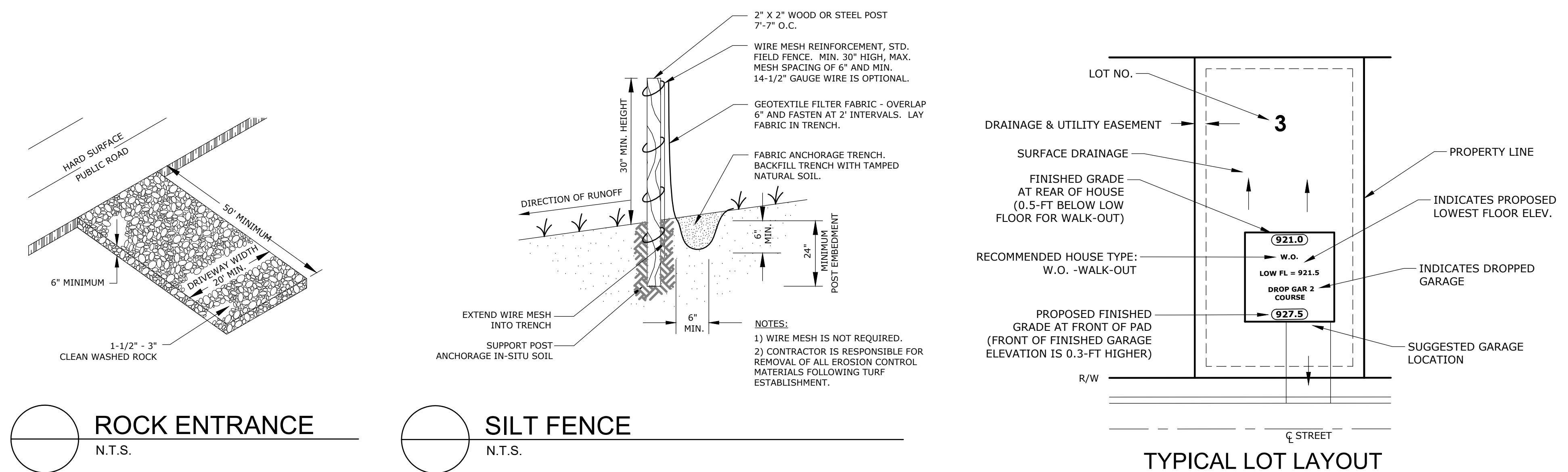
PROVIDE WIMCO (OR APPROVED EQUAL) FOR INLET PROTECTION AT ALL EXISTING STORM SEWER INLETS THAT WILL RECEIVE RUN-OFF DURING CONSTRUCTION. INLET PROTECTION TO REMAIN IN-PLACE UNTIL AT LEAST 70% OF SITE VEGETATION HAS BEEN ESTABLISHED.

CONTRACTOR TO PROVIDE DESIGNATED CONCRETE TRUCK WASHOUT AREA WITH APPROPRIATE SIGNAGE. KEEP WASHOUT AREAS AS FAR AS PRACTICAL FROM STORM DRAINS, DITCHES AND PONDS. DO NOT ALLOW RUN-OFF FROM THIS AREA BY CONSTRUCTING A TEMPORARY PIT OR BERMED AREA LARGE ENOUGH FOR LIQUID AND SOLID WASTE. AFTER WASTE CONCRETE IS SET, BREAK-UP AND DISPOSE OF PROPERLY.

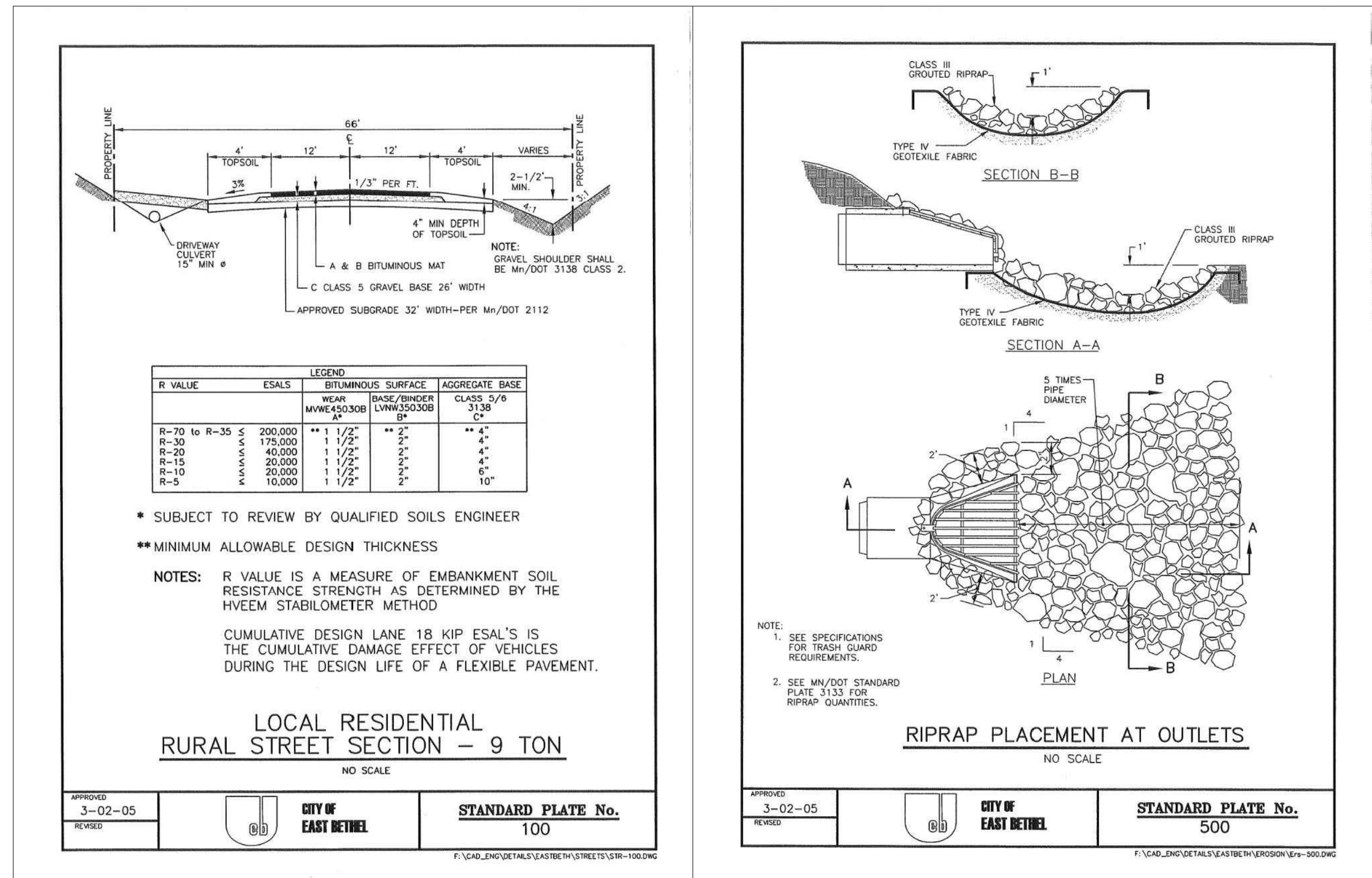
THE CONTRACTOR MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATERS RELATED TO DEWATERING (E.G., PUMPED DISCHARGES, TRENCH/DITCH CUTS FOR DRAINAGE) AS A TEMPORARY OR PERMANENT SEDIMENTATION BASIN ON THE PROJECT SITE UNLESS INEFFECTIVE. THE CONTRACTOR MAY DISCHARGE FROM THE TEMPORARY OR PERMANENT SEDIMENTATION BASIN TO SURFACE WATERS IF THE BASIN WATER HAS BEEN VISUALLY CHECKED TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED IN THE BASIN AND THAT NUISANCE CONDITIONS (SEE MINN. R. 7050.0210, SUBP. 2) WILL NOT RESULT FROM THE DISCHARGE. IF THE WATER CANNOT BE DISCHARGED TO A SEDIMENTATION BASIN PRIOR TO ENTERING THE SURFACE WATER, IT MUST BE TREATED WITH THE APPROPRIATE BMPs, SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE RECEIVING WATER OR DOWNSTREAM PROPERTIES.

DRAWN BY: M.Q.A. DESIGN BY: C.W.P.  
CHECKED BY: M.Q.A. PROJ. NO.: 22-2011

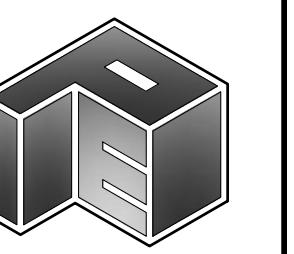
ORIGINAL DATE: JANUARY 10, 2022



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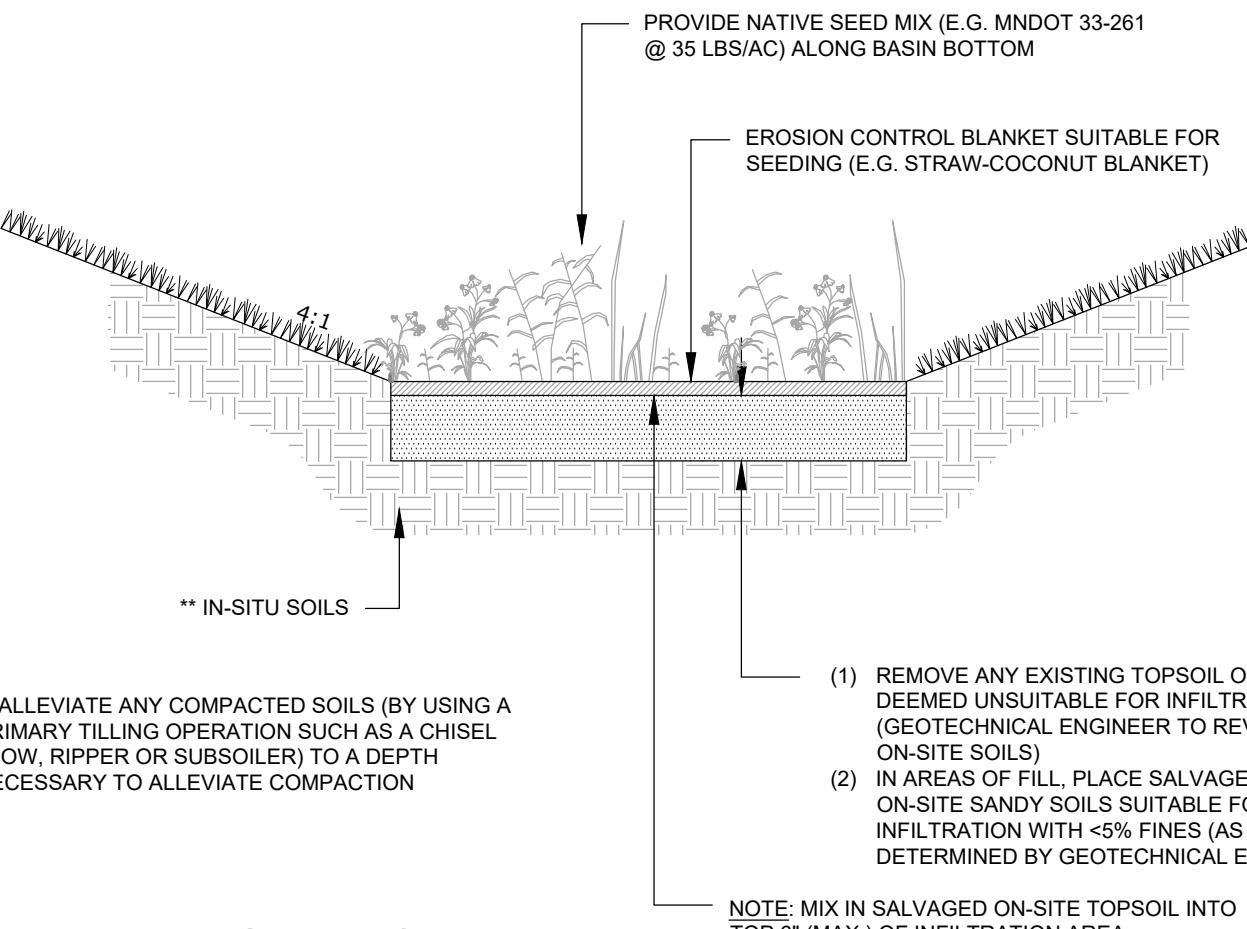
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PHONE: (651) 361-8210  
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DETAILS & NOTES  
PRAIRIE HILLS  
C3.1

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) WITH LIGHT-EGO OR RRF-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.

AFTER INFILTRATION BASIN  
AFTER EXCAVATION ADDED TO FINAL GRADE, PERFORM A  
DOUBLE-RING INFILTROMETER TEST TO VERIFY INFILTRATION  
CAPACITY OF IN-SITU SOILS.



INFILTRATION BASIN  
N.T.S.

DATE | REVISION DESCRIPTION

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

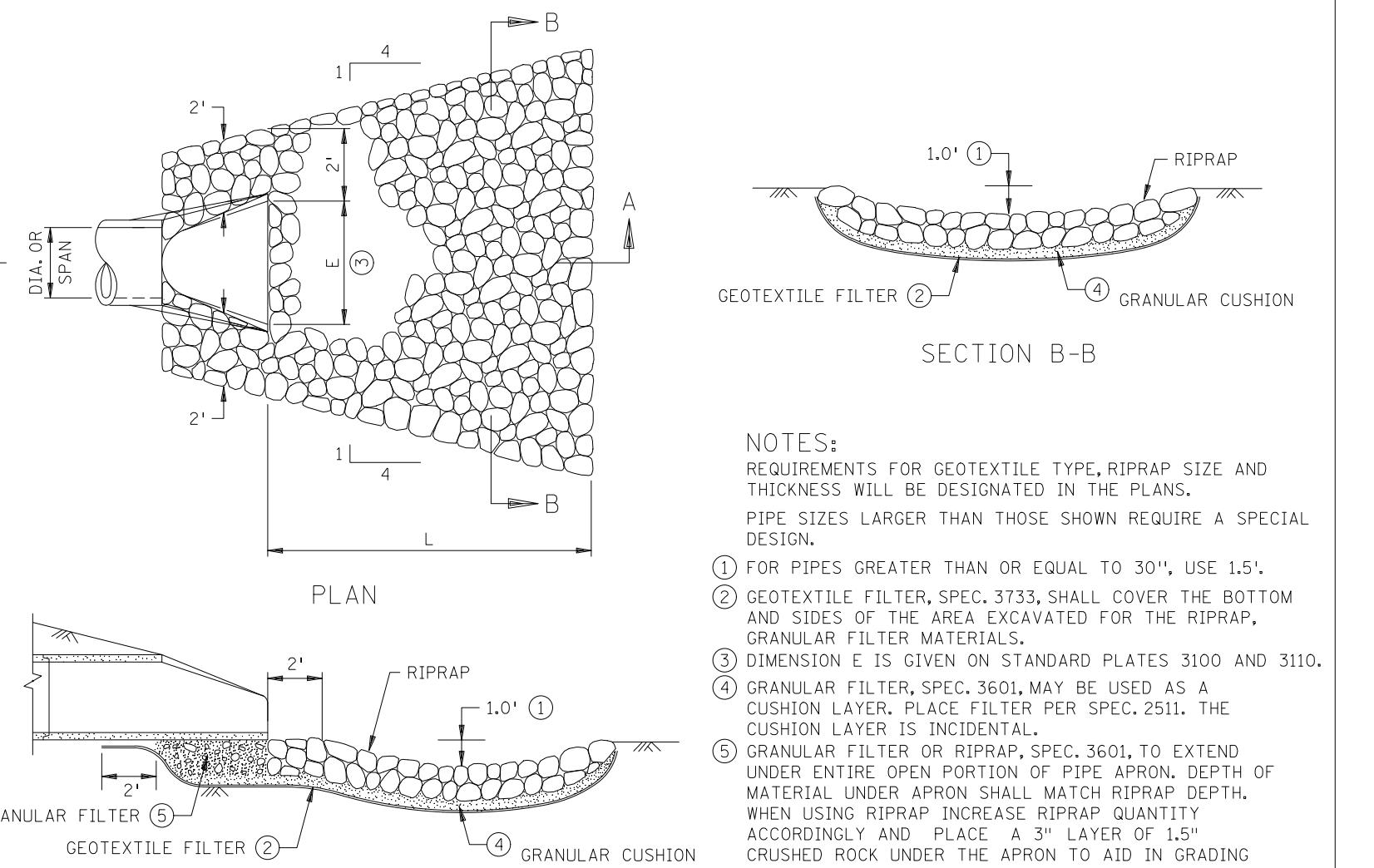
Charles W. PLOWE  
CHARLES W. PLOWE  
LIC. NO. 18227  
DATE: 07-01-2022

TABLE OF QUANTITIES  
RIPRAP AT RCP OUTLETS

DIA. OF ROUND PIPE (IN.)	L (FT.)	CLASS II $d_{50} = 6"$			CLASS III $d_{50} = 9"$			CLASS IV $d_{50} = 12"$		
		GEO- TEXTILE FILTER (CU.YD.)	GRANULAR UNDER APRON (CU.YD.)	12" DEPTH RIPRAP (CU.YD.)	GEO- TEXTILE FILTER (CU.YD.)	GRANULAR UNDER APRON (CU.YD.)	18" DEPTH RIPRAP (CU.YD.)	GEO- TEXTILE FILTER (CU.YD.)	GRANULAR UNDER APRON (CU.YD.)	24" DEPTH RIPRAP (CU.YD.)
12	8	16.9	0.2	3.1	19.6	0.3	4.7	22.6	0.4	5.9
15	8	18.0	0.2	3.2	20.8	0.3	4.8	23.9	0.4	6.4
18	10	22.4	0.3	4.3	25.6	0.4	6.4	29.0	0.5	8.5
21	10	24.1	0.4	4.7	27.4	0.6	7.1	30.9	0.7	9.4
24	12	29.7	0.5	6.2	33.4	0.8	9.2	37.3	1.0	12.3
27	12	31.4	0.6	6.6	35.2	0.9	9.9	39.2	1.2	13.2
30	14	37.4	0.8	8.2	41.6	1.1	12.3	46.0	1.5	16.4
36	16	45.9	1.1	10.6	50.5	1.6	15.8	54.4	2.1	21.1
42	18	52.8	1.2	12.5	57.8	1.7	18.7	63.0	2.3	24.9
48	20	61.1	1.5	14.8	66.5	2.2	22.2	72.0	2.9	29.6

TABLE OF QUANTITIES  
RIPRAP AT RCP-A OUTLETS

SPAN OF PIPE ARCH (IN.)	L (FT.)	CLASS II $d_{50} = 6"$			CLASS III $d_{50} = 9"$			CLASS IV $d_{50} = 12"$		
		GEO- TEXTILE FILTER (CU.YD.)	GRANUL. UNDER APRON (CU.YD.)	12" DEPTH RIPRAP (CU.YD.)	GEO- TEXTILE FILTER (CU.YD.)	GRANUL. UNDER APRON (CU.YD.)	18" DEPTH RIPRAP (CU.YD.)	GEO- TEXTILE FILTER (CU.YD.)	GRANUL. UNDER APRON (CU.YD.)	24" DEPTH RIPRAP (CU.YD.)
22	10	22.5	0.3	4.1	25.6	0.4	6.7	29.1	0.5	8.1
26	12	29.5	0.5	5.7	32.2	0.7	8.5	37.1	0.9	11.3
36	14	37.3	0.8	7.5	41.5	1.1	11.2	45.8	1.5	14.9
43	16	45.9	1.1	9.5	50.5	1.6	14.3	55.3	2.1	19.0
51	18	52.5	1.2	11.3	57.5	1.7	16.9	62.7	2.3	22.5
58	20	59.9	1.3	13.2	65.2	1.9	19.8	70.7	2.5	26.4



APPROVED DECEMBER 9, 2013

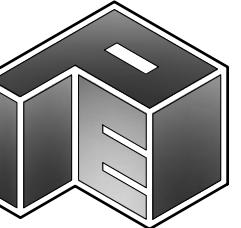
Charles W. PLOWE  
STATE DESIGN ENGINEER

STATE OF MINNESOTA  
DEPARTMENT OF TRANSPORTATION  
RIPRAP AT RCP OUTLETS

SPECIFICATION  
REFERENCE  
3100  
3110  
3601  
3733  
2511  
STANDARD  
PLATE  
NO.  
3133D

DETAILS & NOTES

EAST BETHEL, MINNESOTA  
PREPARED FOR:  
T.H. CONSTRUCTION  
OF ANOKA, INC.



SITE PLANNING & ENGINEERING  
PLOWE  
ENGINEERING, INC.  
6776 LAKE DRIVE  
SUITE 110  
LINO LAKES, MN 55014  
PHONE: (651) 361-8210  
FAX: (651) 361-8701

DETAILS & NOTES  
PRAIRIE HILLS  
C3.2

4.1 TERMINATION OF COVERAGE. [MINN. R. 7090]

4.2 PERMITTees MUST SUBMIT A NOT WITHIN 30 DAYS AFTER ALL TERMINATION CONDITIONS LISTED IN SECTION 13 ARE COMPLETE. [MINN. R. 7090]  
4.3 PERMITTees MUST SUBMIT A NOT WITHIN 30 DAYS AFTER SELLING OR OTHERWISE LEGALLY TRANSFERRING THE ENTIRE SITE, INCLUDING PERMIT RESPONSIBILITY FOR ROADS (E.G., STREET SWEEPING) AND STORMWATER INFRASTRUCTURE FINAL CLEAN OUT, OR TRANSFERRING PORTIONS OF A SITE TO ANOTHER PARTY. THE PERMITTees' COVERAGE UNDER THIS PERMIT TERMINATES AT MIDNIGHT ON THE SUBMISSION DATE OF THE NOT. [MINN. R. 7090]  
4.4 PERMITTees MAY TERMINATE PERMIT COVERAGE PRIOR TO COMPLETION OF ALL CONSTRUCTION ACTIVITY IF THEY MEET ALL OF THE FOLLOWING CONDITIONS:  
A. CONSTRUCTION ACTIVITY HAS CEASED FOR AT LEAST 90 DAYS; AND  
B. AT LEAST 90 PERCENT (BY AREA) OF ALL ORIGINALLY PROPOSED CONSTRUCTION ACTIVITY HAS BEEN COMPLETED AND PERMANENT COVER HAS BEEN ESTABLISHED ON THOSE AREAS; AND  
C. ON AREAS WHERE CONSTRUCTION ACTIVITY IS NOT COMPLETE, PERMANENT COVER HAS BEEN ESTABLISHED; AND  
D. THE SITE COMPLETES WITH ITEM 13.3 THROUGH 13.7.  
AFTER PERMIT COVERAGE IS TERMINATED UNDER THIS ITEM, ANY SUBSEQUENT DEVELOPMENT ON THE REMAINING PORTIONS OF THE SITE WILL REQUIRE PERMIT COVERAGE IF THE SUBSEQUENT DEVELOPMENT ITSELF OR AS PART OF THE REMAINING COMMON PLANS OF DEVELOPMENT OR SALE WILL RESULT IN LAND DISTURBING ACTIVITIES OF ONE (1) OR MORE ACRES IN SIZE. [MINN. R. 7090]  
4.5 PERMITTees MAY TERMINATE COVERAGE UPON MPCA APPROVAL AFTER SUBMITTING INFORMATION DOCUMENTING THE OWNER CANCELED THE PROJECT. [MINN. R. 7090]

5.1 STORMWATER POLLUTION PREVENTION PLAN (SWPPP) CONTENT [MINN. R. 7090]

5.3 THE SWPPP MUST INCORPORATE SPECIFIC BEST MANAGEMENT PRACTICES (BMP) USED TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT. [MINN. R. 7090]  
5.4 THE SWPPP MUST INCLUDE A NARRATIVE DESCRIBING THE TIMING FOR INSTALLATION OF ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPs AND A DESCRIPTION OF THE PERMANENT STORMWATER TREATMENT SYSTEMS. [MINN. R. 7090]  
5.5 THE SWPPP MUST INCLUDE THE LOCATION AND TYPE OF ALL TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMPs ALONG WITH PROCEDURES USED TO ESTABLISH ADDITIONAL TEMPORARY BMPs AS NECESSARY FOR THE SITE CONDITIONS DURING CONSTRUCTION. STANDARD DETAILS AND/OR SPECIFICATIONS FOR BMPs MUST BE INCLUDED IN THE FINAL PLANS AND SPECIFICATIONS FOR THE PROJECT. [MINN. R. 7090]  
5.6 THE SWPPP MUST INCLUDE THE CALCULATIONS AND OTHER INFORMATION USED FOR THE DESIGN OF TEMPORARY SEDIMENT BINS AND ANY OF THE PERMANENT STORMWATER TREATMENT SYSTEMS REQUIRED IN SECTION 15. [MINN. R. 7090]  
5.7 THE SWPPP MUST INCLUDE ESTIMATED QUANTITIES ANTICIPATED AT THE START OF THE PROJECT FOR THE LIFE OF THE PROJECT FOR ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPs (E.G., LINEAR FEET OF SILT FENCE OR SQUARE FEET OF EROSION CONTROL BLANKET). [MINN. R. 7090]  
5.8 THE SWPPP MUST INCLUDE THE NUMBER OF ACRES OF IMPERVIOUS SURFACE FOR BOTH PRE- AND POST-CONSTRUCTION. [MINN. R. 7090]

5.9 THE SWPPP MUST INCLUDE A SITE MAP WITH EXISTING AND FINAL GRADES, INCLUDING DRAINAGE AREA BOUNDARIES, DIRECTION OF FLOW AND ALL DISCHARGE POINTS WHERE STORMWATER IS LEAVING THE SITE OR ENTERING A SURFACE WATER. THE SITE MAP MUST INCLUDE IMPERVIOUS SURFACES, SOIL TYPES AND LOCATIONS OF POTENTIAL POLLUTANT-GENERATING ACTIVITIES AS IDENTIFIED IN SECTION 12. [MINN. R. 7090]  
5.10 THE SWPPP MUST INCLUDE A MAP OF ALL SURFACE WATERS, EXISTING WETLANDS, AND STORMWATER PONDS OR BASINS THAT CAN BE IDENTIFIED ON MAPS SUCH AS UNITED STATES GEOLOGICAL SURVEY 7.5 MINUTE QUADRANGLE MAPS, THE NATIONAL WETLAND INVENTORY MAP OR EQUIVALENT MAPS AND ARE WITHIN ONE MILE (AERIAL RADIUS MEASUREMENT) FROM THE PROJECT BOUNDARY THAT WILL RECEIVE STORMWATER FROM THE CONSTRUCTION SITE DURING OR AFTER CONSTRUCTION. THE SWPPP MUST IDENTIFY IF THE SURFACE WATERS ARE SPECIAL OR IMPAIRED WATERS. [MINN. R. 7090]  
5.11 THE SWPPP MUST INCLUDE A SITE MAP SHOWING CONSTRUCTION ACTIVITY AREAS THAT ARE ADJACENT TO AND DRAIN TO PUBLIC WATERS FOR WHICH THE DNR HAS PROMULGATED "WORK IN WATER RESTRICTIONS" DURING SPECIFIED FISH SPAWNING TIME FRAMES. [MINN. R. 7090]  
5.12 PERMITTees MUST IDENTIFY LOCATIONS OF 50' BUFFER ZONES AS REQUIRED IN ITEM 9.17 AND 100' PERMANENT BUFFER ZONES AS REQUIRED IN ITEM 23.11, ON PLAN SHEETS IN THE SWPPP. [MINN. R. 7090]  
5.13 IF PERMITTees DETERMINE COMPLIANCE WITH THE FOLLOWING REQUIREMENTS IS INFEASIBLE, THEY MUST DOCUMENT THE DETERMINATION IN THE SWPPP:  
a. TEMPORARY SEDIMENT BINS AS DESCRIBED IN SECTION 14; AND  
b. FOR LINEAR PROJECTS, IF THE PERMANENT STORMWATER TREATMENT SYSTEM CANNOT BE CONSTRUCTED WITHIN THE RIGHT-OF-WAY, A REASONABLE ATTEMPT MUST BE MADE TO OBTAIN ADDITIONAL RIGHT-OF-WAY (ITEM 15.9); AND  
c. BUFFER ZONES AS DESCRIBED IN ITEM 9.17 AND ITEM 23.11. [MINN. R. 7090]  
5.14 IF PERMITTees DETERMINE THAT A TEMPORARY SEDIMENT BIN IS INFEASIBLE AS DESCRIBED IN ITEM 14.10, THE SWPPP MUST DESCRIBE THE ALTERNATIVE BMPs USED. [MINN. R. 7090]  
5.15 WHERE SYSTEMS CANNOT MEET THE FULL VOLUME REDUCTION REQUIREMENT ON SITE, (E.G., THE SITE HAS INFILTRATION PROBLEMS, SEE ITEM 16.14 THROUGH ITEM 16.21) THE PERMITTee MUST DOCUMENT THE REASONS IN THE SWPPP.

[MINN. R. 7090]  
5.16 THE SWPPP MUST INCLUDE ANY STORMWATER MITIGATION MEASURES PROPOSED TO BE PART OF THE FINAL PROJECT IN ANY ENVIRONMENTAL REVIEW DOCUMENT, ENDANGERED SPECIES REVIEW, ARCHAEOLOGICAL OR OTHER REQUIRED LOCAL, STATE OR FEDERAL REVIEW CONDUCTED FOR THE PROJECT. 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]  
5.17 THE SWPPP MUST DESCRIBE THE METHODS USED FOR PERMANENT COVER OF ALL EXPOSED SOIL AREAS. [MINN. R. 7090]  
5.18 PERMITTees MUST IDENTIFY THE LOCATIONS OF AREAS WHERE CONSTRUCTION WILL BE PHASED TO MINIMIZE THE DURATION OF EXPOSED SOIL AREAS IN THE SWPPP. [MINN. R. 7090]  
5.19 FOR PROJECTS WITH A DISCHARGE POINT ON THE PROJECT WITHIN ONE (1) MILE (AERIAL RADIUS MEASUREMENT) OF AND WHICH FLOWS TO AN IMPAIRED WATER, PERMITTees MUST IDENTIFY THE IMPAIRED WATER(S), AND ANY UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (USEPA)-APPROVED TOTAL MAXIMUM DAILY LOAD (TMDL) FOR THE POLLUTANT(S) OR STRESSOR(S) DESCRIBED IN ITEM 23.7. PERMITTees' IDENTIFICATION MUST INCLUDE THOSE TMDLs APPROVED AT ANY TIME PRIOR TO PERMIT APPLICATION SUBMITTAL, AND ARE STILL IN EFFECT. [MINN. R. 7090]  
5.20 PERMITTees MUST DOCUMENT IN THE SWPPP, ALL TRAINED INDIVIDUALS IDENTIFIED IN ITEM 21.2. DOCUMENTATION MUST INCLUDE:  
a. NAMES OF PERSONNEL REQUIRED TO BE TRAINED; AND  
b. DATES OF TRAINING AND NAME OF INSTRUCTOR(S) AND ENTITY PROVIDING TRAINING; AND  
c. CONTENT OF TRAINING COURSE.

IF PERMITTees DO NOT KNOW THE NAMES OF THE INDIVIDUALS AT THE TIME OF APPLICATION, THE PERMITTees MUST ENSURE THEY DOCUMENT TRAINING BEFORE CONSTRUCTION ACTIVITY COMMENCES. [MINN. R. 7090]

5.21 THE SWPPP MUST IDENTIFY A PERSON KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMPs WHO WILL COORDINATE WITH ALL CONTRACTORS, SUBCONTRACTORS, AND OPERATORS ON-SITE TO OVERSEE THE IMPLEMENTATION OF THE SWPPP. [MINN. R. 7090]

5.22 THE SWPPP MUST DESCRIBE ANY SPECIFIC CHEMICALS AND CHEMICAL TREATMENT SYSTEMS USED FOR ENHANCING THE SEDIMENTATION PROCESS AND HOW IT ACHIEVES COMPLIANCE WITH ITEM 9.18. [MINN. R. 7090]

5.23 THE SWPPP MUST IDENTIFY THE PERSON(S), ORGANIZATIONS, OR ENTITIES RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PERMANENT STORMWATER TREATMENT SYSTEMS. [MINN. R. 7090]

5.24 THE SWPPP MUST DESCRIBE METHODS TO MINIMIZE SOIL COMPACTION AND PRESERVE TOPSOIL, MINIMIZING SOIL COMPACTION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA DictATES COMPACTION. [MINN. R. 7090]

5.25 THE SWPPP MUST INCLUDE ANY SITE ASSESSMENTS FOR GROUNDWATER OR SOIL CONTAMINATION REQUIRED IN ITEM 16.15. [MINN. R. 7090]

5.26 THE SWPPP MUST ACCOUNT FOR THE FOLLOWING FACTORS IN DESIGNING TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL BMPs:

a. THE EXPECTED AMOUNT, FREQUENCY, INTENSITY, AND DURATION OF PRECIPITATION; AND  
b. THE NATURE OF STORMWATER RUNOFF AND RUN-ON AT THE SITE, INCLUDING FACTORS SUCH AS EXPECTED FLOW FROM IMPERVIOUS SURFACES, SLOPES, AND SITE DRAINAGE FEATURES; AND  
c. THE STORMWATER VOLUME, VELOCITY, AND PEAK FLOW RATES TO MINIMIZE DISCHARGE OF POLLUTANTS IN STORMWATER AND TO MINIMIZE CHANNEL AND STREAMBANK EROSION AND SOUR IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS; AND  
d. THE RANGE OF SOIL PARTICLES SIZES EXPECTED TO BE PRESENT. [MINN. R. 7090]

6.1 SWPPP AMENDMENTS. [MINN. R. 7090]

6.2 ONE OF THE INDIVIDUALS DESCRIBED IN ITEM 21.2.A OR ITEM 21.2.B OR ANOTHER QUALIFIED INDIVIDUAL MUST COMPLETE ALL SWPPP CHANGES, CHANGES INVOLVING THE USE OF A LESS STRINGENT BMP MUST INCLUDE A JUSTIFICATION DESCRIBING HOW THE REPLACEMENT BMP IS EFFECTIVE FOR THE SITE CHARACTERISTICS. [MINN. R. 7090]

6.3 PERMITTees MUST AMEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMPs AS NECESSARY TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS HAVING A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER. [MINN. R. 7090]

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6.6 PERMITTees MUST INSPECT CONSTRUCTION SITE VEHICLE EXIT LOCATIONS, STREETS AND CURB AND GUTTER SYSTEMS WITHIN AND ADJACENT TO THE PROJECT FOR SEDIMENTATION FROM EROSION OR TRACKED SEDIMENT FROM VEHICLES. PERMITTees MUST REMOVE SEDIMENT FROM ALL PAVED SURFACES WITHIN ONE (1) CALENDAR DAY OF DISCOVERY OR, IF APPLICABLE, WITHIN A SHORTER TIME TO AVOID A SAFETY HAZARD TO USERS OF PUBLIC STREETS. [MINN. R. 7090]

7.1 BMP SELECTION AND INSTALLATION. [MINN. R. 7090]

7.2 PERMITTees MUST SELECT, INSTALL, AND MAINTAIN THE BMPs IDENTIFIED IN THE SWPPP AND IN THIS PERMIT IN AN APPROPRIATE AND FUNCTIONAL MANNER AND IN ACCORDANCE WITH RELEVANT MANUFACTURER SPECIFICATIONS AND ACCEPTED ENGINEERING PRACTICES. [MINN. R. 7090]  
7.3 PERMITTees MUST SUBMIT A NOT WITHIN 30 DAYS AFTER SELLING OR OTHERWISE LEGALLY TRANSFERRING THE ENTIRE SITE, INCLUDING PERMIT RESPONSIBILITY FOR ROADS (E.G., STREET SWEEPING) AND STORMWATER INFRASTRUCTURE FINAL CLEAN OUT, OR TRANSFERRING PORTIONS OF A SITE TO ANOTHER PARTY, THE PERMITTees' COVERAGE UNDER THIS PERMIT TERMINATES AT MIDNIGHT ON THE SUBMISSION DATE OF THE NOT. [MINN. R. 7090]  
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B. AT LEAST 90 PERCENT (BY AREA) OF ALL ORIGINALLY PROPOSED CONSTRUCTION ACTIVITY HAS BEEN COMPLETED AND PERMANENT COVER HAS BEEN ESTABLISHED ON THOSE AREAS; AND  
C. ON AREAS WHERE CONSTRUCTION ACTIVITY IS NOT COMPLETE, PERMANENT COVER HAS BEEN ESTABLISHED; AND  
D. THE SITE COMPLETES WITH ITEM 13.3 THROUGH 13.7.

AFTER PERMIT COVERAGE IS TERMINATED UNDER THIS ITEM, ANY SUBSEQUENT DEVELOPMENT ON THE REMAINING PORTIONS OF THE SITE WILL REQUIRE PERMIT COVERAGE IF THE SUBSEQUENT DEVELOPMENT ITSELF OR AS PART OF THE REMAINING COMMON PLANS OF DEVELOPMENT OR SALE WILL RESULT IN LAND DISTURBING ACTIVITIES OF ONE (1) OR MORE ACRES IN SIZE. [MINN. R. 7090]

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5.18 PERMITTees MUST IDENTIFY THE LOCATIONS OF AREAS WHERE CONSTRUCTION WILL BE PHASED TO MINIMIZE THE DURATION OF EXPOSED SOIL AREAS IN THE SWPPP. [MINN. R. 7090]  
5.19 FOR PROJECTS WITH A DISCHARGE POINT ON THE PROJECT WITHIN ONE (1) MILE (AERIAL RADIUS MEASUREMENT) OF AND WHICH FLOWS TO AN IMPAIRED WATER, PERMITTees MUST IDENTIFY THE IMPAIRED WATER(S), AND ANY UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (USEPA)-APPROVED TOTAL MAXIMUM DAILY LOAD (TMDL) FOR THE POLLUTANT(S) OR STRESSOR(S) DESCRIBED IN ITEM 23.7. PERMITTees' IDENTIFICATION MUST INCLUDE THOSE TMDLs APPROVED AT ANY TIME PRIOR TO PERMIT APPLICATION SUBMITTAL, AND ARE STILL IN EFFECT. [MINN. R. 7090]  
5.20 PERMITTees MUST DOCUMENT IN THE SWPPP, ALL TRAINED INDIVIDUALS IDENTIFIED IN ITEM 21.2. DOCUMENTATION MUST INCLUDE:  
a. NAMES OF PERSONNEL REQUIRED TO BE TRAINED; AND  
b. DATES OF TRAINING AND NAME OF INSTRUCTOR(S) AND ENTITY PROVIDING TRAINING; AND  
c. CONTENT OF TRAINING COURSE.

IF PERMITTees DO NOT KNOW THE NAMES OF THE INDIVIDUALS AT THE TIME OF APPLICATION, THE PERMITTees MUST ENSURE THEY DOCUMENT TRAINING BEFORE CONSTRUCTION ACTIVITY COMMENCES. [MINN. R. 7090]

5.21 THE SWPPP MUST IDENTIFY A PERSON KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMPs WHO WILL COORDINATE WITH ALL CONTRACTORS, SUBCONTRACTORS, AND OPERATORS ON-SITE TO OVERSEE THE IMPLEMENTATION OF THE SWPPP. [MINN. R. 7090]

5.22 THE SWPPP MUST DESCRIBE ANY SPECIFIC CHEMICALS AND CHEMICAL TREATMENT SYSTEMS USED FOR ENHANCING THE SEDIMENTATION PROCESS AND HOW IT ACHIEVES COMPLIANCE WITH ITEM 9.18. [MINN. R. 7090]

5.23 THE SWPPP MUST IDENTIFY THE PERSON(S), ORGANIZATIONS, OR ENTITIES RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PERMANENT STORMWATER TREATMENT SYSTEMS. [MINN. R. 7090]

5.24 THE SWPPP MUST DESCRIBE METHODS TO MINIMIZE SOIL COMPACTION AND PRESERVE TOPSOIL, MINIMIZING SOIL COMPACTION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA DictATES COMPACTION. [MINN. R. 7090]

5.25 THE SWPPP MUST INCLUDE ANY SITE ASSESSMENTS FOR GROUNDWATER OR SOIL CONTAMINATION REQUIRED IN ITEM 16.15. [MINN. R. 7090]

5.26

18.1 WET SEDIMENTATION BASIN, [MINN. R. 7090]  
18.2 PERMITTees using a wet sedimentation basin to meet the permanent stormwater treatment requirements of this permit must incorporate the design parameters in item 18.3 through 18.10. [MINN. R. 7090]

18.3 PERMITTees must design the basin to have a permanent volume of 1,800 cubic feet of storage below the outlet pipe for each acre that drains to the basin. The basin's permanent volume must reach a minimum depth of at least three (3) feet and must have no depth greater than 10 feet. Permittees must configure the basin to minimize scour and resuspension of solids. [MINN. R. 7090]

18.4 PERMITTees must design the basin to provide live storage for a water quality volume (calculated as an instantaneous volume of one (1) inch of runoff, or one (1) inch minus the volume of stormwater treated by another system on the site, from the net increase in impervious surfaces created by the project). [MINN. R. 7090]

18.5 PERMITTees must design basin outlets so the water quality volume discharges at no more than 5.6 cubic feet per second (cfs) per acre of surface area of the basin. [MINN. R. 7090]

18.6 PERMITTees must design basin outlets to prevent short-circuiting and the discharge of floating debris. Basin outlets must have energy dissipaters. [MINN. R. 7090]

18.7 PERMITTees must design the basin to include a stabilized emergency overflow to accommodate storm events in excess of the basin's hydraulic design. [MINN. R. 7090]

18.8 PERMITTees must design a maintenance access, typically eight (8) feet wide, for the basin. [MINN. R. 7090]

18.9 PERMITTees must locate basins outside of surface waters and any buffer zone required in item 25.11. PERMITTees must design basins to avoid draining water from wetlands unless the impact to the wetland complies with the requirements of section 22. [MINN. R. 7090]

18.10 PERMITTees must design basins using an impermeable liner if located within active karst terrain. [MINN. R. 7090]

19.1 REGIONAL WET SEDIMENTATION BASINS, [MINN. R. 7090]  
19.2 When the entire water quality volume cannot be retained onsite, permittees can use or create regional wet sedimentation basins provided they are constructed basins. Not a natural wetland or water body. (Wetlands used as regional basins must be mitigated for, see section 22). The owner must ensure the regional basin conforms to all requirements for a wet sedimentation basin as described in items 18.3 through 18.10 and must be large enough to account for the entire area that drains to the regional basin. Permittees must verify that the regional basin is located at no more than 5 miles per acre from the outlet of the basin and must provide a live storage volume of one (1) inch minus the impervious area contributing to the basin. Permittees cannot significantly degrade waterways between the project and the regional basin. The owner must obtain written authorization from the applicable lgu or private entity that owns and maintains the regional basin. [MINN. R. 7090]

20.1 SWPPP AVAILABILITY, [MINN. R. 7090]  
20.2 PERMITTees must keep the swppp, including all changes to it, and inspections and maintenance records at the site during normal working hours by permittees who have operational control of that portion of the site. [MINN. R. 7090]

21.1 TRAINING REQUIREMENTS, [MINN. R. 7090]  
21.2 PERMITTees must ensure all of the following individuals receive training and the content and extent of the training is commensurate with the individual's job duties and responsibilities with regard to activities covered under this permit:  
A. INDIVIDUALS PREPARING THE SWPPP FOR THE PROJECT.  
B. INDIVIDUALS OVERSEEN IN IMPLEMENTATION OF, REVISING AND/OR AMENDING THE SWPPP AND INDIVIDUALS PERFORMING INSPECTIONS FOR THE PROJECT. ONE OF THESE INDIVIDUALS MUST BE AVAILABLE FOR AN ON SITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE MPCA.  
C. INDIVIDUALS PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AND REPAIR OF BMPs. [MINN. R. 7090]  
21.3 PERMITTees must maintain a minimum of one (1) individual identified in section 21.2 receive training from local, state, tribal, federal agencies, professional organizations, or other entities with expertise in erosion prevention, sediment control, professional stormwater treatment and the minnesota npdes/sds construction stormwater permit. PERMITTees must ensure these individuals attend a refresher-training course every three (3) years. [MINN. R. 7090]

23.1 ADDITIONAL REQUIREMENTS FOR DISCHARGES TO SPECIAL (PROHIBITED, RESTRICTED, OTHER) AND IMPAIRED WATERS, [MINN. R. 7090]  
23.6 DISCHARGES TO THE TROUT STREAMS (OTHER SPECIAL WATER) LISTED IN MINN. R. 6264.0050, SUBP. 4 MUST INCORPORATE THE BMPs OUTLINED IN ITEMS 23.9, 23.10, 23.11, AND 23.12. [MINN. R. 6264.0050, SUBP. 4]  
23.9 PERMITTees must immediately initiate stabilization of exposed soil areas, as described in item 8.4 and complete stabilization within seven (7) calendar days after the construction activity in that portion of the site temporarily or permanently ceases. [MINN. R. 7090]  
23.10 PERMITTees must provide a temporary sediment basin as described in section 14 for common drainage locations that serve an area of one (1) or more acres disturbed at one time. [MINN. R. 7090]  
23.11 PERMITTees must include an undisturbed buffer zone of at least 50 feet (100 linear feet) from a special water (not including trout streams) and must maintain this buffer zone at all times, both during construction and as a permanent feature post construction, except where a water crossing or other encroachment is necessary to complete the project. PERMITTees must fully document the circumstance and reasons the buffer encroachment is necessary in the swppp and include restoration activities. This permit allows replacement of existing impervious surface within the buffer. PERMITTees must minimize all potential water quality, scenic and other environmental impacts of these exceptions by the use of additional or redundant (doubling) BMPs to maintain this standard. [MINN. R. 7090]  
a. PROVIDE STORMWATER INFILTRATION OR OTHER VOLUME REDUCTION PRACTICES AS DESCRIBED IN ITEM 15.4 AND 15.5, TO REDUCE RUNOFF. INFILTRATION SYSTEMS MUST DISCHARGE ALL STORMWATER ROUTED TO THE SYSTEM WITHIN 24 HOURS.  
b. PROVIDE STORMWATER FILTRATION AS DESCRIBED IN SECTION 17. FILTRATION SYSTEMS MUST DISCHARGE ALL STORMWATER ROUTED TO THE SYSTEM WITHIN 24 HOURS.  
c. MINIMIZE THE DISCHARGE FROM CONNECTED IMPERVIOUS SURFACED BY DISCHARGING TO VEGETATED AREAS, OR GRASS SWALES, AND THROUGH THE USE OF NON-STRUCTURAL CONTROLS.  
d. IF PONDING IS USED, THE DESIGN MUST INCLUDE AN APPROPRIATE COMBINATION OF MEASURES SUCH AS SHADING, VEGETATED SWALE DISCHARGES OR CONSTRUCTED WETLAND TREATMENT CELLS THAT LIMIT TEMPERATURE INCREASES. THE POND MUST BE DESIGNED AS A DRY POND AND SHOULD DRAW DOWN IN 24 HOURS OR LESS.  
e. OTHER METHODS THAT MINIMIZE ANY INCREASE IN THE TEMPERATURE OF THE TROUT STREAM. [MINN. R. 7090]

24.1 GENERAL PROVISIONS, [MINN. R. 7090]  
24.2 IF THE MPCA DETERMINES THAT AN INDIVIDUAL PERMIT WOULD MORE APPROPRIATELY REGULATE THE CONSTRUCTION ACTIVITY, THE MPCA MAY REQUIRE AN INDIVIDUAL PERMIT TO CONTINUE THE CONSTRUCTION ACTIVITY. COVERAGE UNDER THIS GENERAL PERMIT WILL REMAIN IN EFFECT UNTIL THE MPCA ISSUES AN INDIVIDUAL PERMIT. [MINN. R. 7001.0210, SUBP. 6]  
24.3 IF THE PERMITTEE CANNOT MEET THE TERMS AND CONDITIONS OF THIS GENERAL PERMIT, AN OWNER MAY REQUEST AN INDIVIDUAL PERMIT, IN ACCORDANCE WITH MINN. R. 7001.0210 SUBP. 6, MINN. R. 7001.0210, SUBP. 6]  
24.4 ANY INTERESTED PERSON MAY PETITION THE MPCA TO REQUIRE AN INDIVIDUAL NPDES/SDS PERMIT IN ACCORDANCE WITH 40 CFR 122.28(b)(3), (40 CFR 122.28(b)(3))  
24.5 PERMITTees must make the swppp, including all inspection reports, maintenance records, training records and other information required by this permit, available to federal, state, and local officials within three (3) days upon request for the duration of the permit and for three (3) years following the not. [MINN. R. 7090]  
24.6 PERMITTees may not assign or transfer this permit except when the transfer occurs in accordance with the applicable requirements of item 3.7 and 3.8. [MINN. R. 7090]  
24.7 nothing in this permit must be construed to relieve the permittees from civil or criminal penalties for noncompliance with the terms and conditions provided herein. nothing in this permit must be construed to preclude the initiation of any legal action or relieve the permittees from any responsibilities, liabilities, or penalties to which the permittees are or may be subject to under section 311 of the clean water act and minn. stat. sect. 115 and 116, as amended. permittees are not liable for permit requirements for activities occurring outside of the state where the permit has been transferred to another party as required in item 3.7 and the permittees have submitted a written request in section 4. [MINN. R. 7090]  
24.8 THE PROVISIONS OF THIS PERMIT ARE SEVERABLE. IF ANY PROVISION OF THIS PERMIT OR THE APPLICATION OF ANY PROVISION OF THIS PERMIT TO ANY CIRCUMSTANCES IS HELD INVALID, THE APPLICATION OF SUCH PROVISION TO OTHER CIRCUMSTANCES, AND THE REMAINDER OF THIS PERMIT MUST NOT BE AFFECTED THEREBY. [MINN. R. 7090]  
24.9 THE PERMITTees must comply with the provisions of minn. R. 7001.0150, subp. 3 and minn. R. 7001.1090, subp. 1(A), (B), (C), (D), (E), (F), (G), (H), (I), (J), (K), and (L). [MINN. R. 7090]  
24.10 THE PERMITTees must allow access as provided in 40 CFR 122.41(i) and minn. stat. sect. 115.04. THE PERMITTees must allow representatives of the mPCA or any member, employee or agent thereof, when authorized by it, upon presentation of credentials, to enter upon any property, public or private, for the purpose of obtaining information or examination of records or conducting surveys or investigations. [40 CFR 122.41(i)]  
24.11 for the purposes of minn. R. 7090 and other documents that reference specific sections of this permit, "STORMWATER DISCHARGE DESIGN REQUIREMENTS" corresponds to sections 5, 6 and 14 through 21; "CONSTRUCTION ACTIVITY REQUIREMENTS" corresponds to sections 7 through 13; and "APPENDIX A" corresponds to sections 22 and 23. [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

UNIVERSITY OF MINNESOTA  
Adam Ginkel  
Design of Construction SWPPP (May 31 2023)

Erosion and Stormwater Management  
The bearer of this card has been tested and is certified in the area(s) shown on the reverse of this card. Certification expiration dates appear after each certification area.  
Gary Sank, Director  
Department of Civil, Environmental and Biological Engineering  
University of Minnesota  
http://www.civil.umn.edu  
Card issued: 6/1/2023

#### PROJECT NAME

PRairie Hills  
PID: 14-33-23-21-0003

LATITUDE: 45.354  
LONGITUDE: -93.177

#### DEVELOPER

T.H. CONSTRUCTION OF ANOKA  
617 E. MAIN STREET, SUITE 3  
EAST BETHLEHEM, MN 55303

CONTACT NAME: TONY HENNEN  
CONTACT PHONE: 763-422-8809  
CONTACT E-MAIL: THOFAOKA@GMAIL.COM

#### NARRATIVE - PERMANENT STORMWATER TREATMENT SYSTEMS

THE PROJECT CONSISTS OF THE CONSTRUCTION OF 16 SINGLE-FAMILY RESIDENCES AND SEVERAL INFILTRATION BASINS FOR STORMWATER TREATMENT.

PERMANENT STORMWATER MANAGEMENT TREATMENT SYSTEMS PER MPCA RULES, CITY OF EAST BETHLEHEM, AND SUNRISE RIVER WATERSHED MANAGEMENT ORGANIZATION ARE REQUIRED FOR THIS PROJECT.

#### SITE IMPERVIOUS AREAS

	BEFORE CONSTRUCTION	AFTER CONSTRUCTION
TOTAL SITE AREA		40.67 ACRES
TOTAL ESTIMATED IMPERVIOUS	0.12 ACRES	3.98 ACRES
TOTAL ESTIMATED PERVIOUS	40.55 ACRES	36.69 ACRES

APPROX. 3.86 ACRE INCREASE IN IMPERVIOUS

#### TOTAL DISTURBED AREA

30.03 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
DEVIL LAKE	CREEK	NO	NO
COUNTY DITCH 16	DITCH	NO	NO
ON-SITE WETLANDS	CREEK	NO	NO
ON-SITE RAIN INFILTRATION BASINS	BASIN	NO	NO

#### BUFFER TO SURFACE WATER

IF THE SITE TRAVERS 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. WHERE A 50-FT BUFFER CANNOT BE MAINTAINED, REDUNDANT SEDIMENT CONTROL MEASURES (E.G. SECOND ROW OF SILT FENCE, BIO-ROLL, OR OTHER ENGINEER APPROVED EQUAL) WILL BE PROVIDED

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) THE CONTRACTOR WILL PROVIDE TEMPORARY SEDIMENTATION BASINS IF 10 (10) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION.

#### INFILTRATION FEASIBILITY

ARE THERE ANY INFILTRATION RESTRICTIONS FOR THE SITE (SEE 16.14 THROUGH 16.21)?

A) THE SITE HAS HSG A SOILS AND A LOW WATER TABLE; INFILTRATION IS FEASIBLE.

#### ADDITIONAL STORMWATER MITIGATION MEASURES

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]

#### LONG TERM OPERATION AND MAINTENANCE OF PERMANENT STORMWATER FACILITIES

THE PERMANENT STORMWATER MANAGEMENT FACILITIES ARE PUBLICLY OWNED AND THE LONG-TERM OPERATIONS AND MAINTENANCE WILL BE PROVIDED BY THE CITY OF EAST BETHLEHEM.

24.10 THE PERMITTees MUST ALLOW ACCESS AS PROVIDED IN 40 CFR 122.41(I) AND MINN. STAT. SECT. 115.04. THE PERMITTees MUST ALLOW REPRESENTATIVES OF THE MPCA OR ANY MEMBER, EMPLOYEE OR AGENT THEREOF, WHEN AUTHORIZED BY IT, UPON PRESENTATION OF CREDENTIALS, TO ENTER UPON ANY PROPERTY, PUBLIC OR PRIVATE, FOR THE PURPOSE OF OBTAINING INFORMATION OR EXAMINATION OF RECORDS OR CONDUCTING SURVEYS OR INVESTIGATIONS. [40 CFR 122.41(I)]

24.11 FOR THE PURPOSES OF MINN. R. 7090 AND OTHER DOCUMENTS THAT REFERENCE SPECIFIC SECTIONS OF THIS PERMIT, "STORMWATER DISCHARGE DESIGN REQUIREMENTS" CORRESPONDS TO SECTIONS 5, 6 AND 14 THROUGH 21; "CONSTRUCTION ACTIVITY REQUIREMENTS" CORRESPONDS TO SECTIONS 7 THROUGH 13; AND "APPENDIX A" CORRESPONDS TO SECTIONS 22 AND 23. [MINN. R. 7090]

#### REVEGETATION SPECIFICATIONS

ITEM	MNDOT SPECIFICATION/NOTES
SOD	3878
SEED **	3876
* FOR TURF ESTABLISHMENT COMMERCIAL TURF RESIDENTIAL TURF	MNDOT MIX 25-131 (220 LBS/ACRE) MNDOT MIX 25-131 (120 LBS/ACRE)
TEMPORARY FALL COVER SPRING/SUMMER SOIL-BUILDING COVER	MNDOT MIX 21-112 (100 LBS/ACRE) MNDOT MIX 21-113 (100 LBS/ACRE) MNDOT MIX 22-111 (30.5 LBS/ACRE)
1-2 YEARS COVER 2-5 YEARS COVER	MNDOT MIX 22-112 (40 LBS/ACRE)
MULCH	3882 (TYPE 1 - DISC ANCHORED)
FERTILIZER	3881
WOOD FIBER BLANKET	3885 (CATEGORY 0)

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

\*\* SEEDDED 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	11,254	LINEAR FEET
RIP-RAP W. GEO-FABRIC	12	CUBIC YARDS
TURF REINFORCEMENT MAT		





## NOTES & GUIDELINES

### GENERAL INFORMATION:

- 1) ALL DISTANCES ARE APPROXIMATE. REFERENCE THE TEMPORARY TRAFFIC CONTROL FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL SIGN AND DEVICE SPACING.
- 2) FIELD CONDITIONS MAY REQUIRE MODIFICATIONS OF THIS LAYOUT AS DEEMED NECESSARY BY THE ENGINEER.
- 3) THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ANY WORK AREAS NEAR TRAFFIC IN ACCORDANCE WITH THE MN MUTCD.
- 4) IF THE CONTRACTOR DECIDES TO PERFORM THE CONSTRUCTION WORK IN A SEQUENCE OTHER THAN SHOWN IN THIS TRAFFIC CONTROL PLAN THE CONTRACTOR SHALL PROVIDE COMPLETE REVISED TRAFFIC CONTROL PLANS TO BE APPROVED BY THE ENGINEER.
- 5) ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM AND BE PLACED IN ACCORDANCE TO THE MN MUTCD PART VI, THE TEMPORARY TRAFFIC CONTROL FIELD MANUAL, AND MNDOT STANDARD SIGNS MANUAL.

### SIGNING:

- 1) ALL TEMPORARY SIGNS ARE REQUIRED TO BE CRASHWORTHY PER THE AASHTO MANUAL FOR ASSESSING SAFETY HARDWARE 2016 (MASH-2016). TEMPORARY SIGN STRUCTURES THAT ARE CRASHWORTHY UNDER THE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM REPORT 350 (NCHRP-350) MAY BE USED PROVIDED THE DEVICES WERE ACQUIRED BY THE CONTRACTOR PRIOR TO DECEMBER 31ST, 2019. THE MINNESOTA TYPE "C" AND "D" U-CHANNEL (KNEE BRACE) SIGN SUPPORT IS NOT ALLOWED.
- 2) WHEN A SIGN OR BARRICADE IS ORIENTED SUCH THAT VISIBILITY TO ROAD USERS INCLUDING BIKES AND PEDESTRIANS IS REDUCED ENOUGH TO CAUSE A HAZARD, DELINEATE THE SIGN / BARRICADE WITH APPROPRIATE DEVICES.
- 3) TEMPORARY SIGNS SHALL BE PLACED SUCH THAT OBSTACLES DO NOT BLOCK THEM FROM BEING VIEWED BY APPROACHING ROAD USERS. OBSTACLES MAY INCLUDE, BUT ARE NOT LIMITED TO, LIGHT POLES, TREES, SIGNS AND BUILDINGS.
- 4) TEMPORARY SIGNS SHALL BE PLACED AND ORIENTED APPROXIMATELY AS SHOWN IN THE PLAN. AT RIGHT ANGLES TO DIRECTION OF AND FACING THE TRAFFIC THEY ARE INTENDING TO SERVE, UNLESS OTHERWISE SPECIFIED.
- 5) ALL TRAFFIC CONTROL DEVICES, INCLUDING OVERHEAD SIGNS, ON ROADS OPEN TO TRAFFIC THAT ARE NOT CONSISTENT WITH TRAFFIC OPERATIONS SHALL BE COVERED, REMOVED OR REVISED AS DIRECTED BY THE ENGINEER. ONCE WORK IS COMPLETE, SIGNS SHALL BE UNCOVERED.
- 6) LONGITUDINAL DROPOFFS SHALL BE SIGNED AS SHOWN IN THE "MINNESOTA TEMPORARY TRAFFIC CONTROL FIELD MANUAL" PAGES (6K-aj) THRU (6K-al) UNLESS OTHERWISE SPECIFIED IN THESE PLANS.

### CONSTRUCTION INFORMATION SIGNING:

- 1) THE CONTRACTOR SHALL USE CONSTRUCTION INFORMATION SIGNING AS SHOWN IN THE PLAN WHICH ARE TO BE USED AS FOLLOWS:
- 2) PLACE G20-X1 ADVANCE CLOSURE NOTICES SIGN(S) 7 DAYS PRIOR TO THE PLANNED CLOSURE DATE.
- 3) IF CONSTRUCTION INFORMATION SIGNING IS NO LONGER VISIBLE TO THE MOTORING PUBLIC ONCE WORK BEGINS, MOVE SAID SIGNING TO A SITE IN ADVANCE OF THE WORK ZONE OR CLOSURE AS DIRECTED BY THE PLAN OR ENGINEER.

## TRAFFIC CONTROL DEVICES & SYMBOLS LEGEND

SYMBOL	DESCRIPTION
	WORK ZONE
	TEMPORARY TRAFFIC CONTROL SIGN
	TYPE III OR TYPE II BARRICADE

SHEET NO.	DESCRIPTIONS
1	TITLE SHEET
2	TEMPORARY TRAFFIC CONTROL TABULATION
3-5	TRAFFIC CONTROL PLAN

## INDEX

REV	DATE	BY	APP	COMMENT	DESIGNED BY: NS	DRAWN BY: NS	PRINT NAME: <i>Janell L. Bowen, PE, PTOE</i>	CSAH 74 (213TH AVE NE) - ROAD CLOSURE	N	TITLE SHEET		
					DRAWN BY: NS	PRINT NAME: <i>Janell L. Bowen, PE, PTOE</i>	SIGNATURE: <i>Janell L. Bowen</i>	CSAH 74 (213TH AVE NE) - ROAD CLOSURE	N	SHEET NO. 1 OF 5 SHEETS		
					CHECKED BY: JB	DATE: 09/22/2022	LICENSE #: 42674	PRAIRIE HILLS - TH CONSTRUCTION	N	SHEET NO. 1 OF 5 SHEETS		

## TEMPORARY TRAFFIC CONTROL TABULATION

<b>"G" SERIES</b>			
<b>SIGN</b>	<b>SIGN NO.</b>	<b>COLOR</b>	<b>SIZE</b>

## **"M" SERIES CONTINUED**



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.

PRINT NAME: Janelle L. Borgen, PE, PT  
AT  
SIGNATURE: Janelle Borgen  
DATE 09/22/2012 LICENSE # 4

**CSAH 74 (213TH AVE NE) - ROAD CLOSURE  
PRAIRIE HILLS - TH CONSTRUCTION**

## TRAFFIC CONTROL TABULATION

SHEET NO. 2 OF 5 SHEETS



REV	DATE	BY	APP	COMMENT
1	9/22/2022	NS		
				DESIGNED BY: NS
				DRAWN BY: NS



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.

PRINT NAME: Janell L. Bogen, PE, PTOE  
SIGNATURE: Janell L. Bogen  
DATE 09/22/2022 LICENSE # 42674

CSAH 74 (213TH AVE NE) - ROAD CLOSURE  
PRAIRIE HILLS - TH CONSTRUCTION



TRAFFIC CONTROL PLAN  
SHEET NO. 3 OF 5

SHEETS



REV	DATE	BY	APP	COMMENT	DESIGNED BY:	NS
1	9/22/2022	NS			DRAWN BY:	NS
					CHECKED BY:	JB



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.

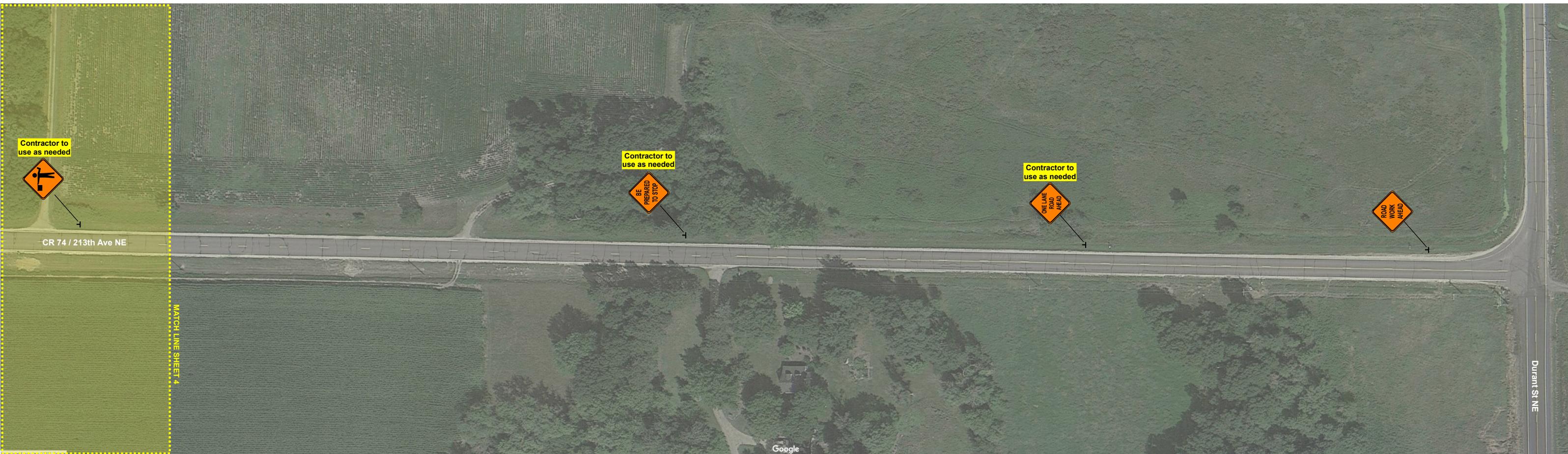
PRINT NAME: Janell L. Bogen, PE, PTOE  
SIGNATURE: Janell L. Bogen  
DATE 09/22/2022 LICENSE # 42674

CSAH 74 (213TH AVE NE) - ROAD CLOSURE  
PRAIRIE HILLS - TH CONSTRUCTION



TRAFFIC CONTROL PLAN  
SHEET NO. 4 OF 5

SHEETS



REV	DATE	BY	APP	COMMENT	DESIGNED BY:	NS
1	9/22/2022	NS			DRAWN BY:	NS
					CHECKED BY:	JB



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.

PRINT NAME: Janell L. Bogen, PE, PTOE  
SIGNATURE: Janell L. Bogen  
DATE 09/22/2022 LICENSE # 42674

CSAH 74 (213TH AVE NE) - ROAD CLOSURE  
PRAIRIE HILLS - TH CONSTRUCTION



TRAFFIC CONTROL PLAN  
SHEET NO. 5 OF 5

SHEETS