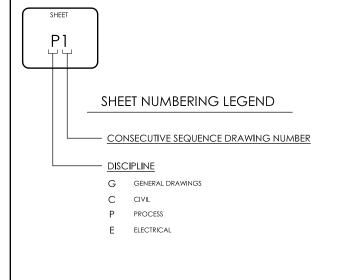
# WATER SYSTEM IMPROVEMENTS 75,000 GALLON SOUTH ZONE WATER TOWER HAMBURG, MINNESOTA







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### GENERAL NOTES

CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL.

BITUMINOUS SURFACING AND CONCRETE ITEMS REMOVED BY CONSTRUCTION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OUTSIDE OF THE PROJECT LIMITS, IN ACCORDANCE WITH THE PROVISIONS OF SPEC 2104 AND 2105.

WHERE MATCHING INTO EXISTING ROADWAYS. CUT VERTICALLY TO THE BOTTOM OF THE SURFACING AND THEN AT A 1:20 TAPER TO THE BOTTOM OF THE RECOMMENDED SUBGRADE EXCAVATION.

PRIOR TO REMOVAL OF BITUMINOUS SURFACE AND CURB AND GUTTER. THE CONTRACTOR SHALL TAKE ALL POSSIBLE MEASURES NECESSARY, AND AS DIRECTED BY THE ENGINEER, TO ALLOW DRAINAGE OF DISTURBED AREAS.

QUALITY CONTROL INCLUDING COMPACTION TESTING SHALL BE IN ACCORDANCE WITH THE PROJECT MANUAL.

THE EXISTING TOPSOIL THICKNESS IS ASSUMED TO BE APPROXIMATELY 4 INCHES. CONTRACTOR IS ENCOURAGED TO SALVAGE EXISTING TOPSOIL.

ADDITIONAL TOPSOIL, AS NEEDED SHALL BE IMPORTED AND SHALL MEET

SEWER AND WATER SERVICE LOCATIONS ARE APPROXIMATE.

TEMPORARY STOCKPILING OF EXCAVATION, EMBANKMENT AND/OR BORROW MATERIAL SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT FOR WHICH NO DIRECT COMPENSATION WILL BE MADE.

IN ANY PROPOSED ROADWAY CONSTRUCTION, THE CONTRACTOR SHOULD STRIVE TO SUBSTANTIALLY MATCH THE SOILS INPLACE IN THE UPPER 4.0 FEET OF THE ROADWAYS TO BE CONSTRUCTED. GRANULAR BACKFILL SHALL NOT BE PERMITTED ADJACENT TO INPLACE NON-GRANULAR SOILS IN ORDER TO PREVENT AN ABRUPT SOILS DIFFERENTIAL.

EXISTING BITUMINOUS IS ESTIMATED TO BE 3-4 INCHES THICK. CONTRACTOR TO MAKE OWN DETERMINATION OF BITUMINOUS THICKNESS PRIOR TO BIDDING PROJECT. NO ADDITIONAL PAYMENT WILL BE MADE FOR VARIABILITY IN EXISTING PAVEMENT THICKNESS.

## WARNING NOTE

CONTRACTOR SHALL CONTACT "GOPHER ONE" FOR LOCATION OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, VALVES, MANHOLES, OR OTHER BURIED STRUCTURE BEFORE DIGGING (1-800-252-1166).

CONTRACTOR SHALL REPAIR ANY OF THE ABOVE WHICH ARE REMOVED OR DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

### GOVERNING SPECIFICATION

THE 2018 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN, INCLUDING APPLICABLE TECHNICIAL MEMORANDUMS.

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND FIELD MANUAL.

THE SANITARY SEWER AND WATERMAIN SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH THE STANDARD UTILITY SPECIFICATIONS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA AND THE PROJECT MANUAL.

### GRADING NOTES

ONLY SUITABLE MATERIAL AS APPROVED BY THE ENGINEER SHALL BE USED FOR STREET CONSTRUCTION.

UNSUITABLE AND UNSTABLE MATERIAL SHALL BE REMOVED FROM STREET AREAS.

THE UPPER 3 FEET OF THE EMBANKMENT IN THE STREET AREAS SHALL BE COMPACTED TO 100 PERCENT OF THE STANDARD PROCTOR DENSITY.

	STANDARD PLATES
PLATE NO.	DESCRIPTION
7100 H	CONCRETE CURB AND GUTTER, DESIGN B

THE ABOVE STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT.

## SUBSURFACE UTILITY QUALITY LEVEL

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-2, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

EARTHWORK SUMMARY				
ITEMS	BASE PROJECT			
① COMMON EXCAVATION (P) (CUBIC YARDS)	1,409			
② SUBGRADE EXCAVATION (CUBIC YARDS)	100			
AGGREGATE BASE (CV) (P), (CUBIC YARDS)	1,446			
SELECT TOPSOIL BORROW (LV), (CUBIC YARDS)	149			

- (1) QUANTITY INCLUDES ALL MATERIAL BELOW EXISTING BITUMINOUS SURFACE.
- (2) QUANTITY INCLUDES SUBGRADE EXCAVATION AND SOILS CORRECTION BELOW THE GRADING GRADE
- (3) AGGREGATE BASE, QUANTITY BASED ON COMPUTED STREET PAVEMENT AND CURB SECTION AREAS

BLB DRAWN BY: BLB JLB CHECKED BY: DESIGN TEAM REVISIONS

PHONE: 800 838 8666

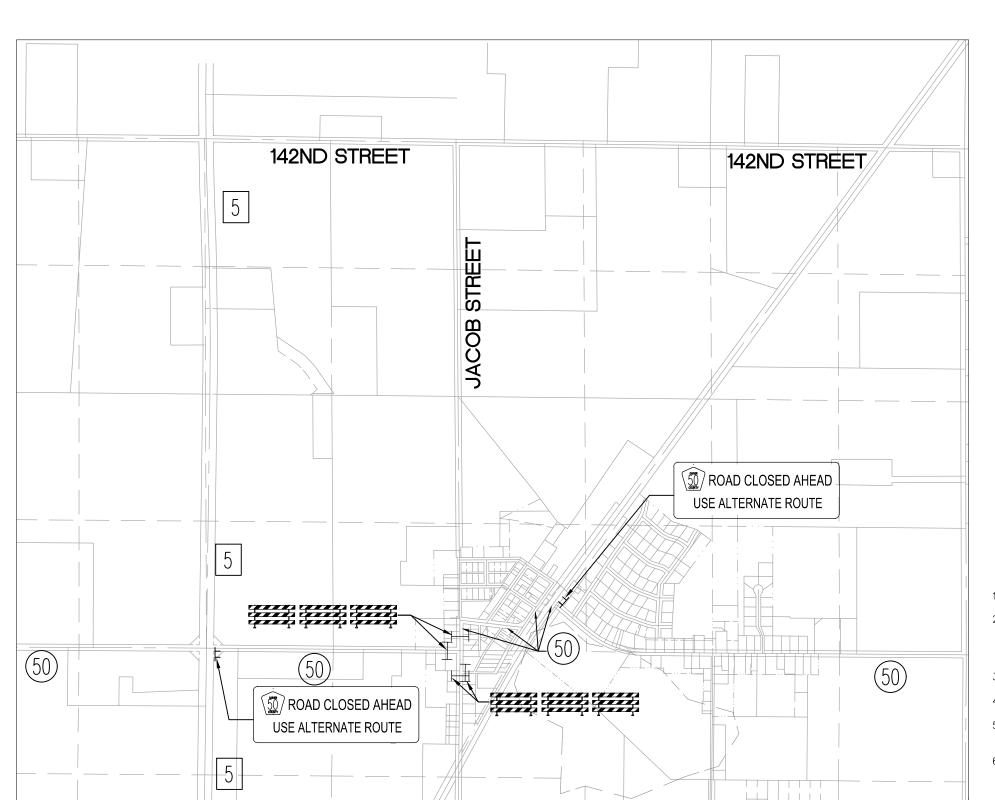
HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT THE LAWS OF THE STATE OF MINNESOTA. Justin Black JUSTIN BLACK, PE 2/12/19

Lic. No.

HAMBURG. **MINNESOTA** 

**CONSTRUCTION NOTES** 

FILE NO. 148674





### TRAFFIC CONTROL DEVICES & SYMBOLS LEGEND

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MNMUTCD - MAY 2005

**SYMBOL** 

**DESCRIPTION** 

 $\bot\bot$ 

TRAFFIC CONTROL SIGN

TYPE III BARRICADE =



## NOTES & GUIDELINES

## GENERAL INFORMATION:

- 1. SHUTDOWN OF CSAH 50 SHALL ONLY LAST ONE CALENDAR DAY TO ALLOW FOR WATER MAIN TIE IN @ JACOB ST. INTERSECTION. GRAVEL SURFACE TO BE CONSTRUCTED AND MAINTAINED WITHIN INTERSECTION UNTIL PAVEMENT IS RESTORED.
- THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN THE DEVICES IN THIS TRAFFIC CONTROL PLAN UNLESS OTHERWISE NOTED.
- FIELD CONDITIONS MAY REQUIRE MODIFICATIONS OF THIS LAYOUT AS DEEMED NECESSARY BY THE ENGINEER.

ALL DISTANCES ARE APPROXIMATE.

THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ANY WORK AREAS NEAR TRAFFIC IN ACCORDANCE WITH THE MNMUTCD.

### SIGNING:

- 1. ALL TRAFFIC CONTROL DEVICES THAT ARE NOT CONSISTENT WITH TRAFFIC OPERATIONS SHALL BE COVERED, REMOVED OR REVISED AS DIRECTED BY THE ENGINEER.
- 2. WHEN SIGNS ARE INSTALLED, THEY SHALL BE MOUNTED ON POSTS DRIVEN INTO THE GROUND AT THE PROPER HEIGHT AND LATERAL OFFSET AS DETAILED IN THE MNMUTCD. IF THIS IS NOT POSSIBLE THEY WILL BE MOUNTED ON PORTABLE SUPPORTS AS APPROVED BY THE ENGINEER. WHEN THE SIGNS ARE REMOVED THE SIGN POSTS SHALL ALSO BE REMOVED AS SOON AS POSSIBLE.
- 3. ALL ORANGE SIGNS SHALL BE MADE OF DIAMOND GRADE ORANGE REFLECTIVE SHEETING OR AN APPROVED SUBSTITUTE.
- 4. LONGITUDINAL DROPOFFS SHALL BE SIGNED AS SHOWN IN THE "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS" FIELD MANUAL UNLESS OTHERWISE SPECIFIED IN THESE PLANS.
- 5. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE FINAL SIGNS TO ASSURE THAT THE FINAL SIGNS ARE INSTALLED AS NEEDED, OR PROVIDE TEMPORARY SIGNING AT THEIR EXPENSE UNTIL THE FINAL SIGNING IS INSTALLED.
- 6. VERTICAL DROPOFFS IN EXCESS OF 1' BETWEEN EXISTING STREET SURFACES AND EXCAVATED STREET SURFACES ARE TO BE TEMPORARILY GRADED TO A 4:1 SLOPE BETWEEN THE TOP OF THE TWO SURFACES. PROVIDE TYPE B DEVICES (DRUMS) AS NECESSARY BETWEEN DRIVING LANE & EXCAVATION.

DRAWN BY: BLB JLB CHECKED BY: DESIGN TEAM

PHONE: 800 838 8666

HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT LAM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. JUSTIN BLACK, PE 2/12/19

HAMBURG. **MINNESOTA** 

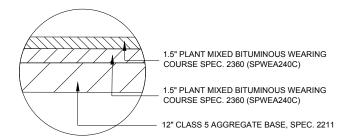
TRAFFIC CONTROL PLAN

FILE NO. 148674

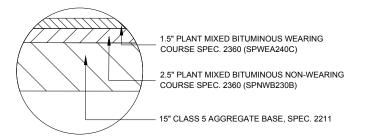
### **TYPICAL SECTION**

### JACOB STREET- BETWEEN SCHEELE AVE & BROADWAY AVE

## BITUMINOUS DRIVEWAY (RESIDENTIAL)

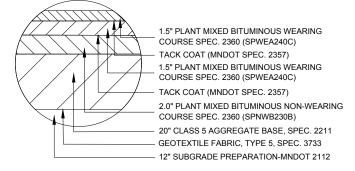


## WATER TOWER TURN-AROUND & CITY HALL PARKING LOT



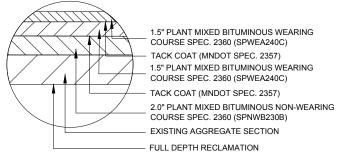
### INSET A

EAST LANE OF JACOB AVE (TYP.)



### INSET B - RECLAMATION AND PAVING

WEST LANE OF JACOB AVE (TYP.)



### BITUMINOUS PATCH WATER TREATMENT PLANT ROAD AND CSAH 50

AND CSAH 50

COURSE SPEC. 2360 (SPWEA240C)

2.5" PLANT MIXED BITUMINOUS NON-WEARING
COURSE SPEC. 2360 (SPNWB230B)

- 15" CLASS 5 AGGREGATE BASE, SPEC. 2211

1.5" PLANT MIXED BITUMINOUS WEARING

NOTE: CONTRACTOR TO MATCH IN-PLACE STREET SECTION WITHIN CSAH 50. TYPICAL SECTIONS ARE BASED OFF OF RECORD DRAWINGS.

 DRAWN BY:
 BLB

 DESIGNER:
 BLB

 CHECKED BY:
 JLB

 DESIGN TEAM
 NO.

 BY
 DATE

 REVISIONS

PHONE: 800.838.8666 1390 HWY. 15 S. SUITE 200, PO BOX 308 HUTCHINSON, MN 55350 www.sehinc.com HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

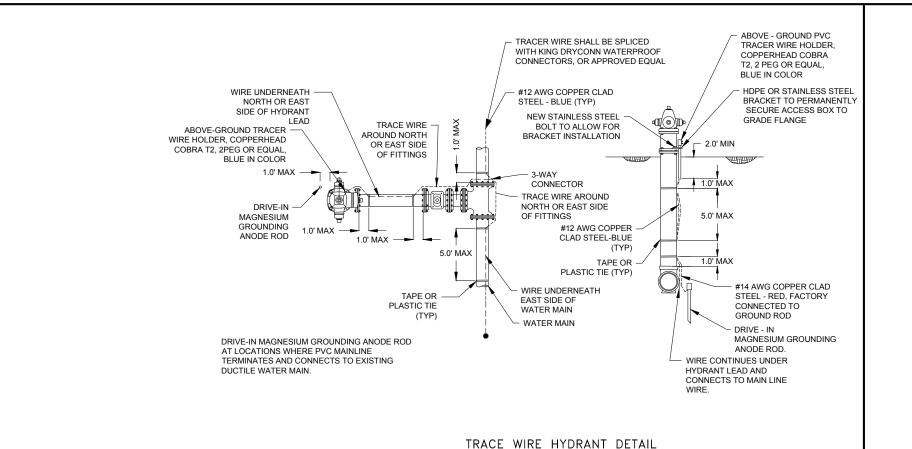
JUSTIN BLACK, PE
Date: 2/12/19 Lic. No. 43373

HAMBURG, MINNESOTA

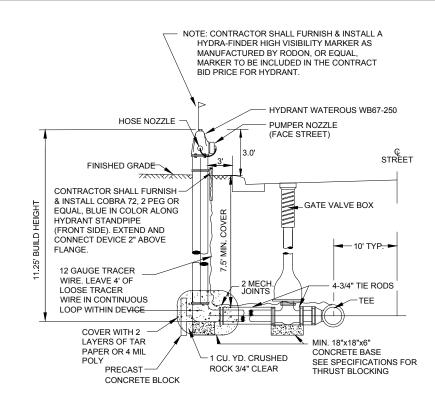
TYPICAL SECTIONS

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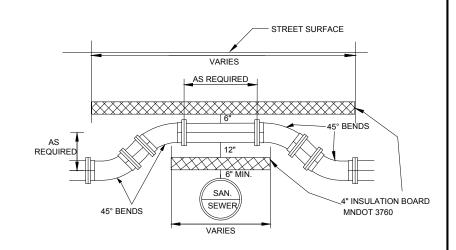
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REVISIONS



HYDRANT DETAIL WITH GATE VALVE IN THE STREET



NOTES: 1. THE WIDTH OF INSULATION BOARD SHALL BE A MINIMUM OF TWICE THE PIPE DIAMETER PLUS 1.5 FEET.

- 2. WHEN MULTIPLE LAYERS OF INSULATION ARE INSTALLED THE JOINTS SHALL BE STAGGERED.
- THE REMAINDER OF THE TRENCH SHALL BE BACKFILLED WITH CARE BEING TAKEN NOT TO DAMAGE OR DISPLACE THE INSULATION.
- 4. USE 4 3/4" TIE RODS ON ALL JOINTS

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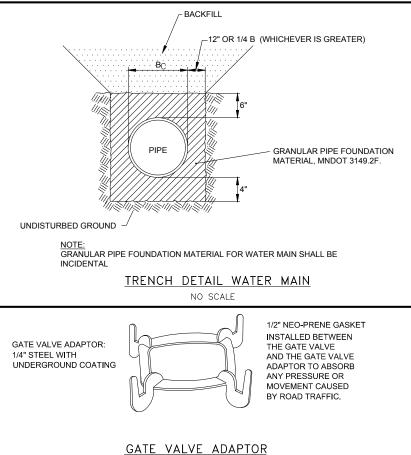
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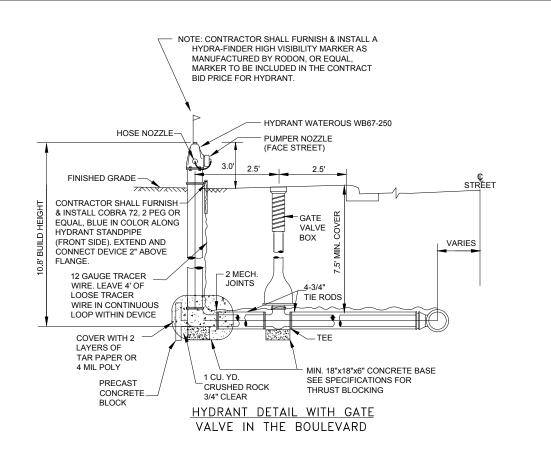
JLB

DESIGN TEAM

## RAISE WATER MAIN / FORCE MAIN & PLACE INSULATION BOARD

NO SCALE





PHONE: 800.838.8666
1390 HWY: 15 S.

SEH HUTCHINSON, MN 55350
www.sehinc.com

NO SCALE

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

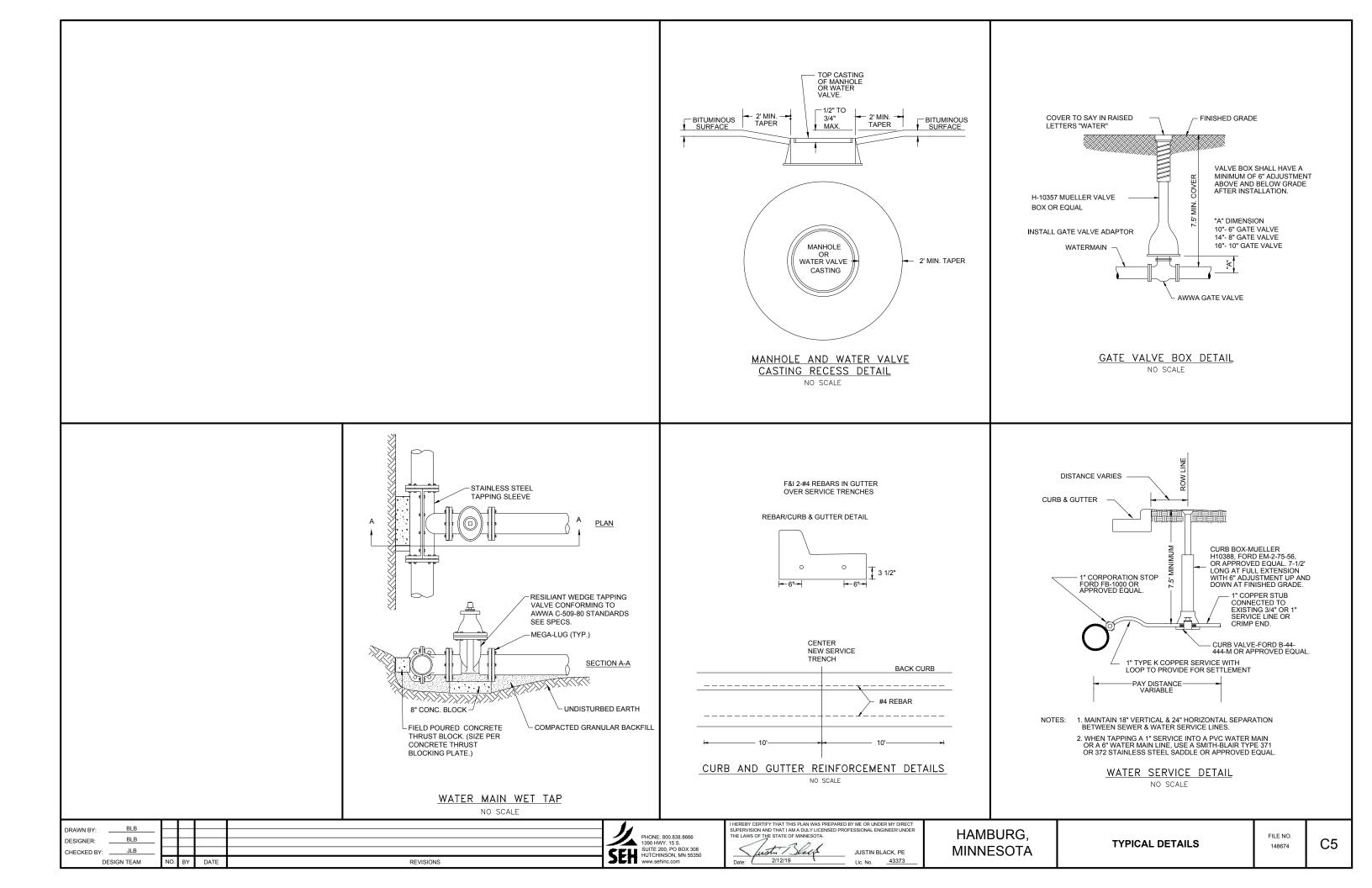
JUSTIN BLACK, PE

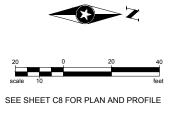
2/12/19

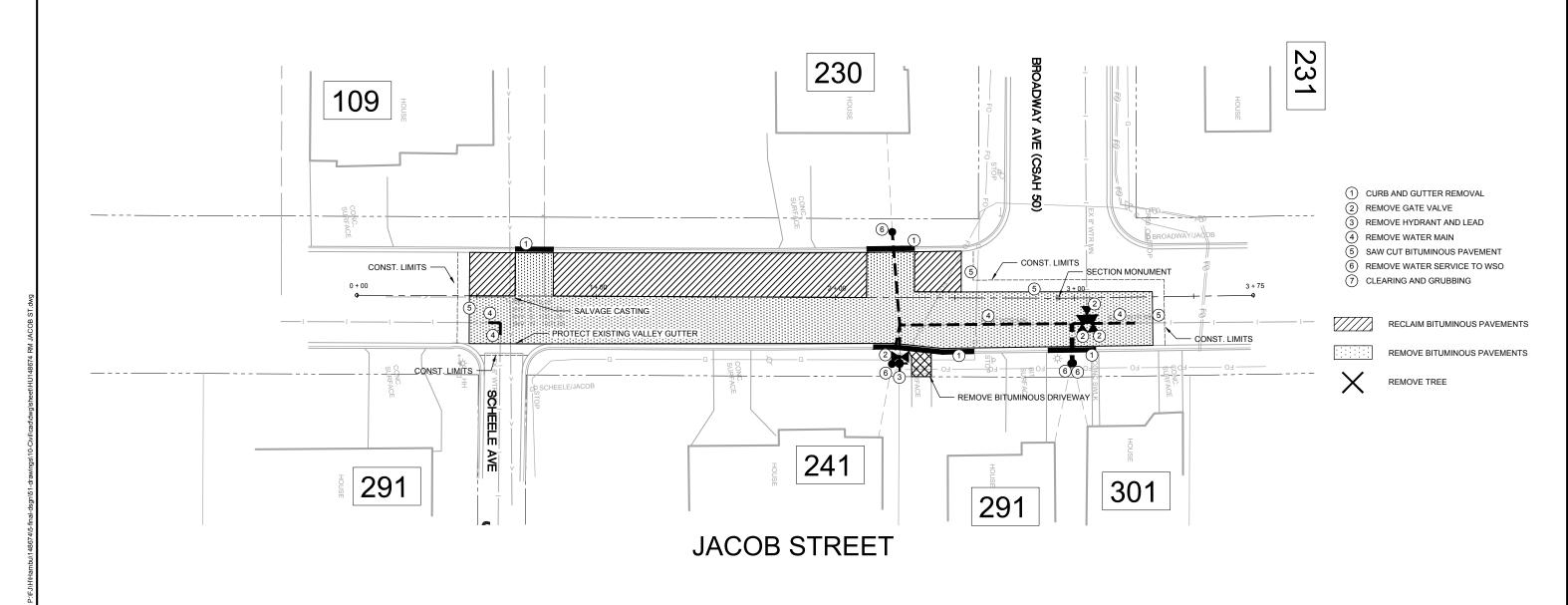
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TYPICAL DETAILS

FILE NO. 148674







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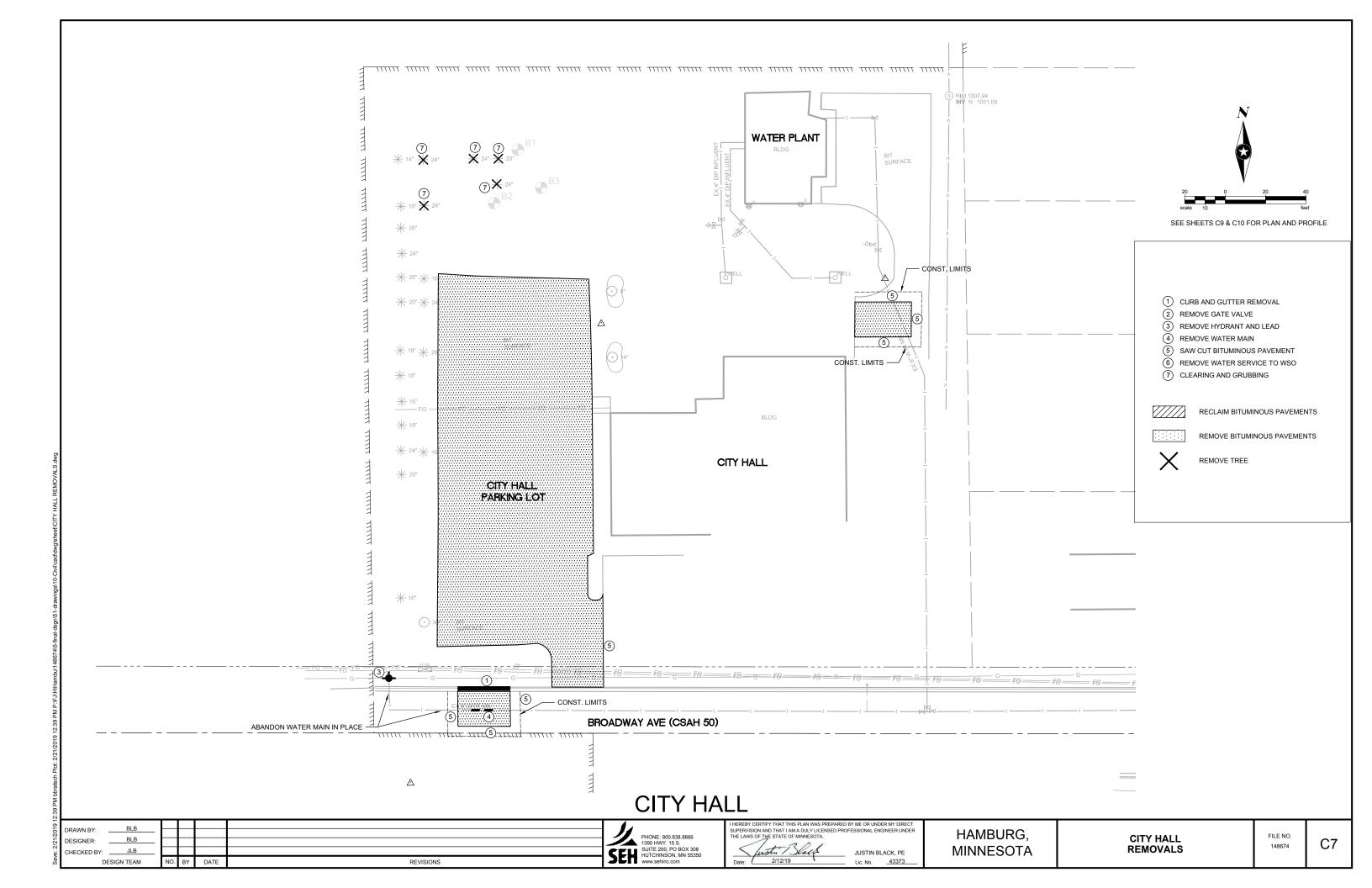
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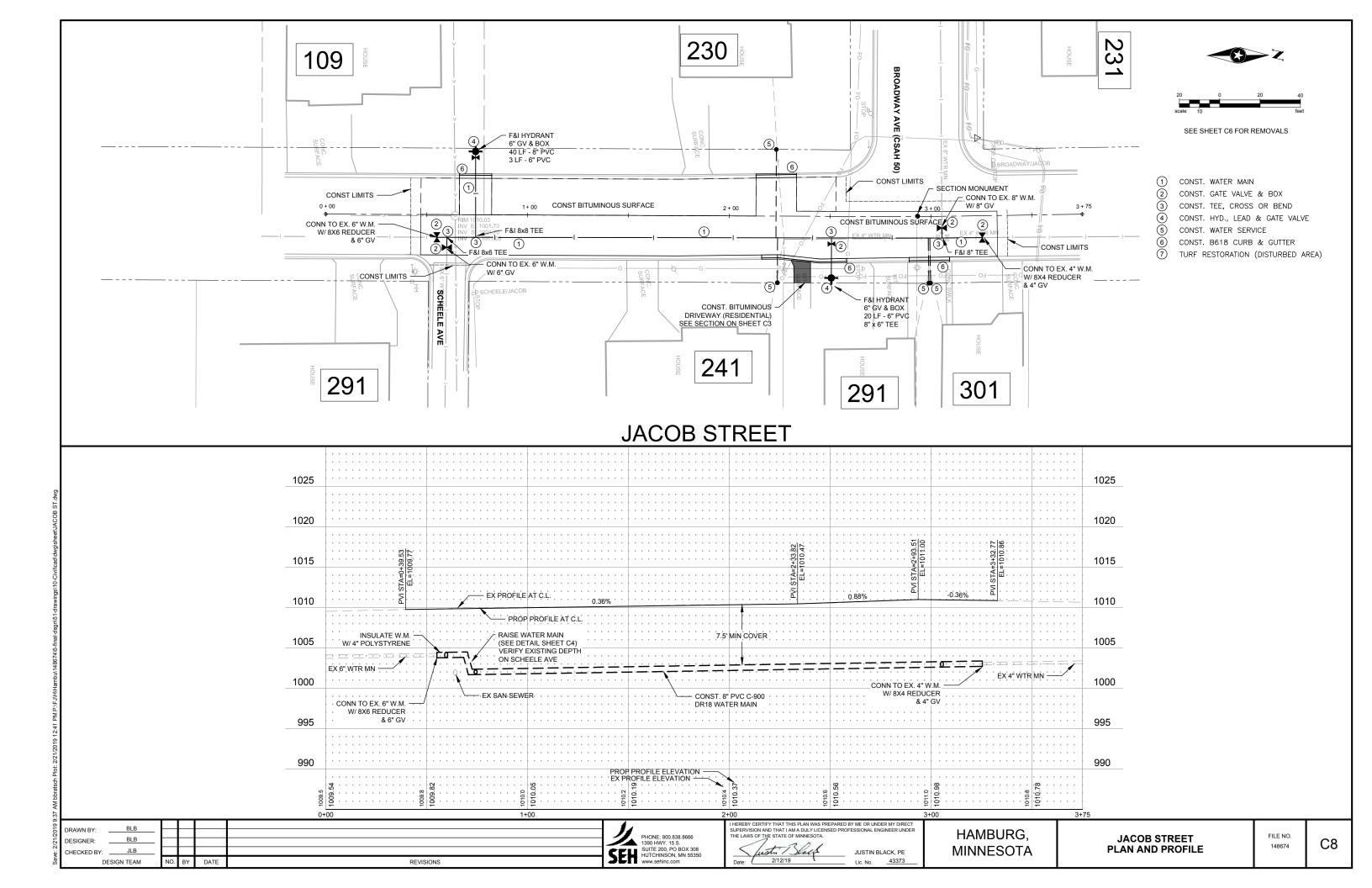
JUSTIN BLACK, PE Lic. No. 43373

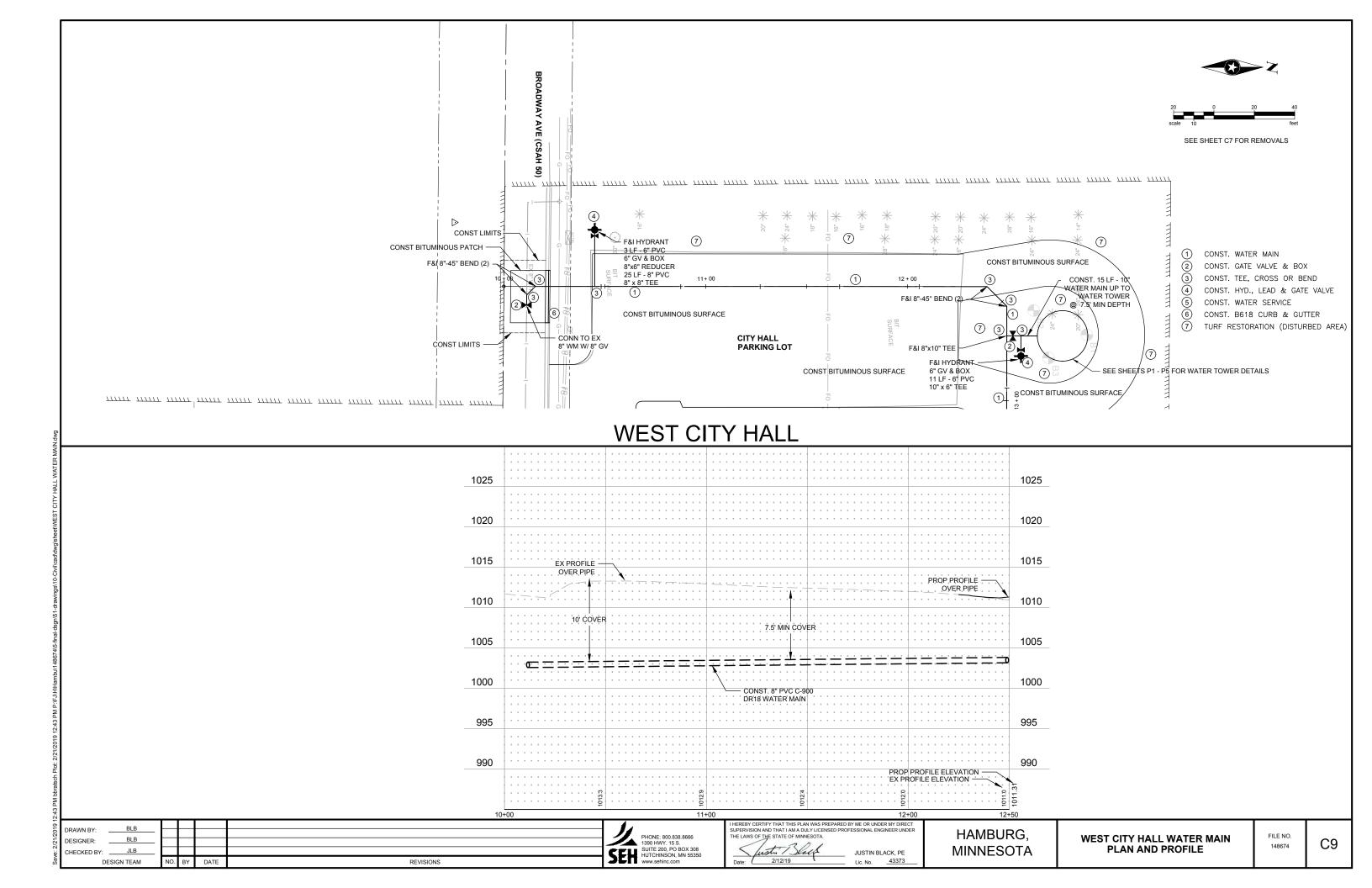
HAMBURG, MINNESOTA

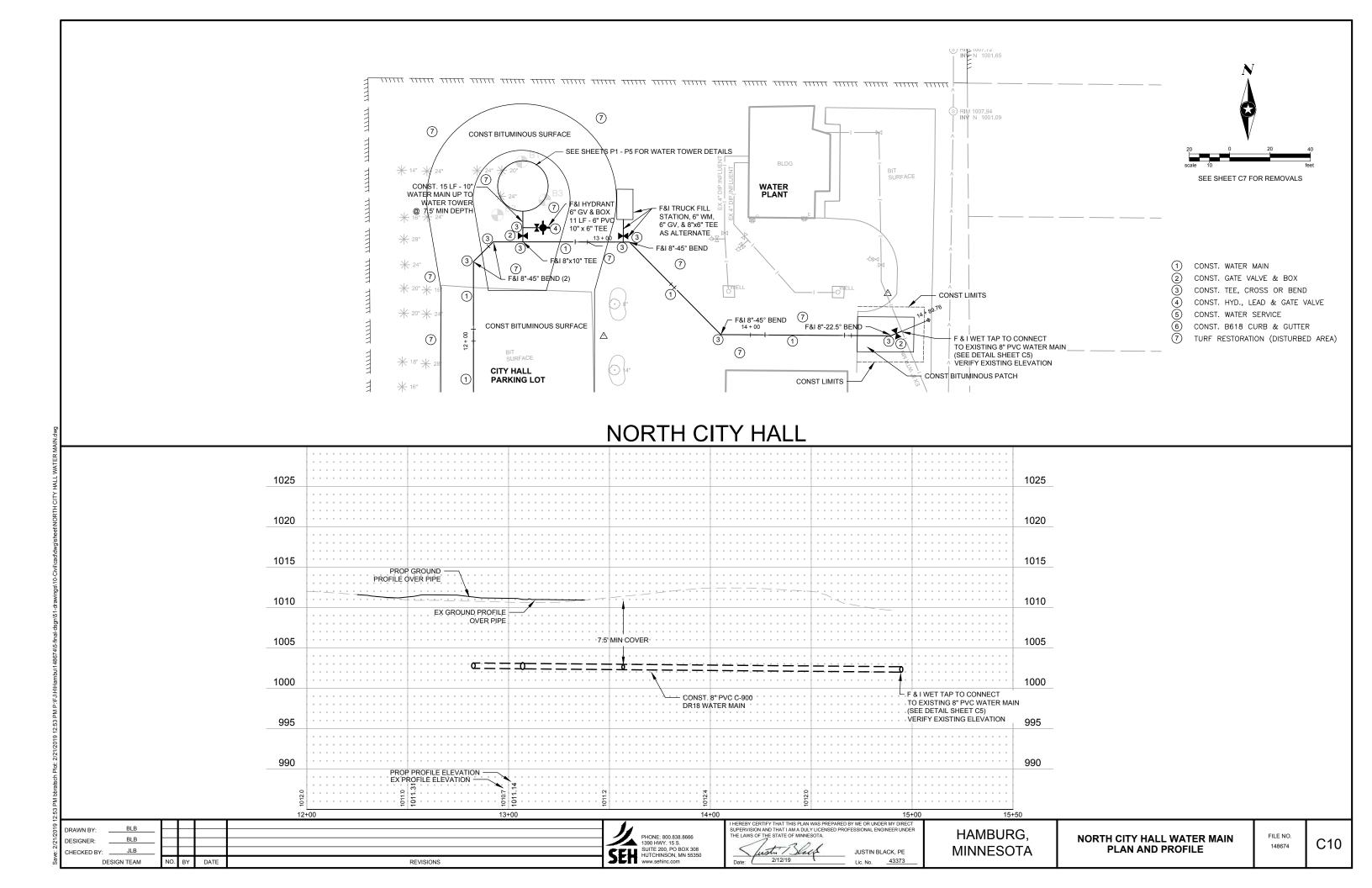
JACOB STREET REMOVALS

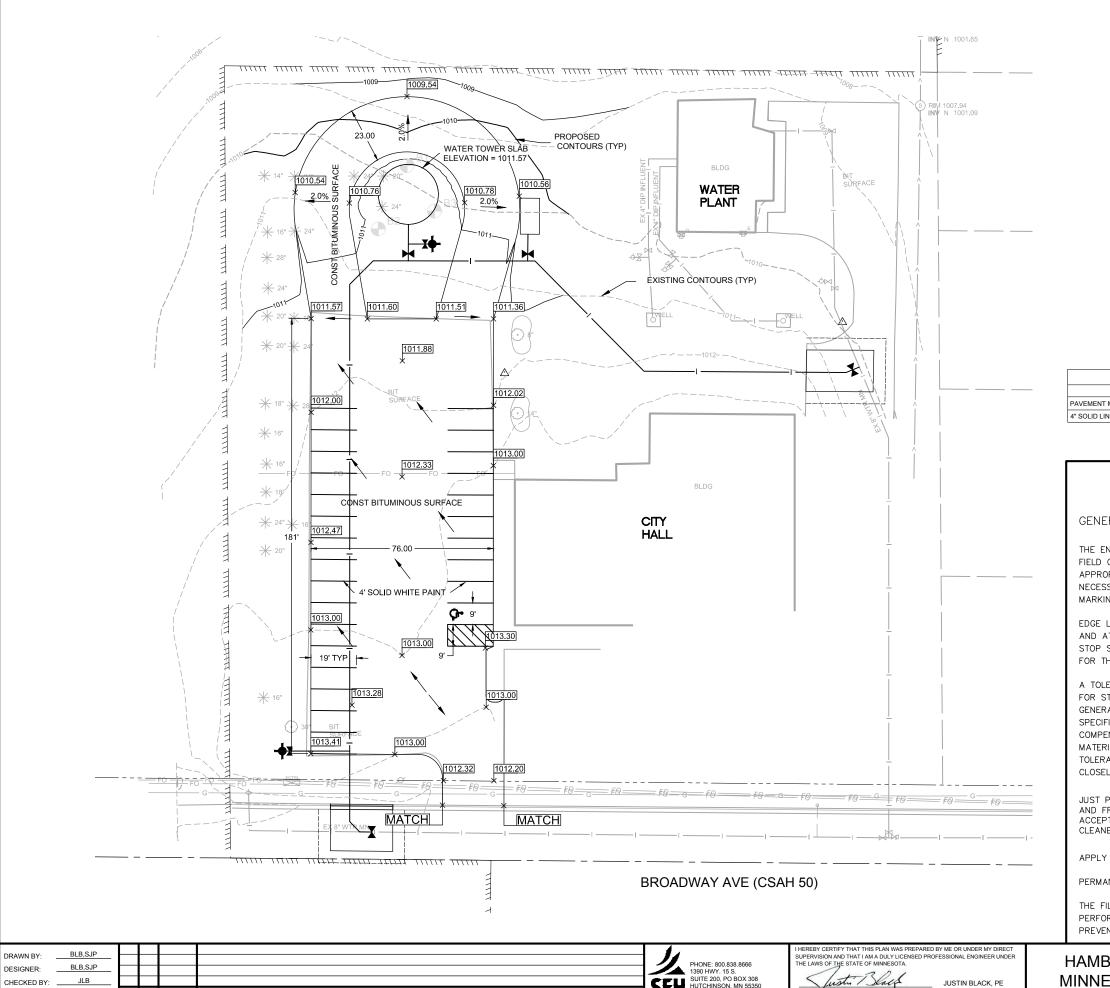
FILE NO. 148674





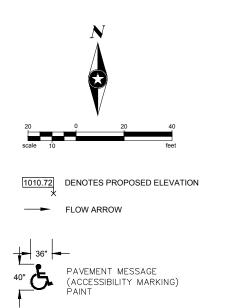






REVISIONS

DESIGN TEAM



PAVEMENT MARKINGS					
ITEM	UNIT	TOTALS	NOTES		
PAVEMENT MESSAGE PAINT	EACH	1	SYMBOL ACCESSIBILITY MARKING (3.53 SQ FT)		
4" SOLID LINE PAINT	LIN FT	617	WHITE, PARKING		

## PERMANENT PAVEMENT MARKING PLAN NOTES & GUIDELINES

GENERAL INFORMATION:

THE ENGINEER'S INVOLVEMENT IN THE APPLICATION OF THE MATERIAL SHALL BE LIMITED TO FIELD CONSULTATION AND INSPECTION. THE CONTRACTOR WILL PLACE NECESSARY "SPOTTING" AT APPROPRIATE POINTS TO PROVIDE HORIZONTAL CONTROL FOR STRIPING AND TO DETERMINE NECESSARY STARTING AND CUTOFF POINTS. LONGITUDINAL JOINTS, PAVEMENT EDGES AND EXISTING MARKINGS MAY SERVE AS HORIZONTAL CONTROL WHEN SO DIRECTED.

EDGE LINES AND LANE LINES ARE TO BE BROKEN ONLY AT INTERSECTIONS WITH PUBLIC ROADS AND AT PRIVATE ENTRANCES IF THEY ARE CONTROLLED BY A AGENCY PLACED YIELD SIGN, STOP SIGN OR TRAFFIC SIGNAL. THE BREAK POINT IS TO BE AT THE START OF THE RADIUS FOR THE INTERSECTION OR AT MARKED STOP LINES OR CROSSWALKS.

A TOLERANCE OF 1/4 INCH UNDER OR 1/4 INCH OVER THE SPECIFIED WIDTH WILL BE ALLOWED FOR STRIPING PROVIDED THE VARIATION IS GRADUAL AND DOES NOT DETRACT FROM THE GENERAL APPEARANCE. BROKEN LINE SEGMENTS MAY VARY UP TO 3 INCHES FROM THE SPECIFIED LENGTHS PROVIDED THE OVER AND UNDER VARIATIONS ARE REASONABLY COMPENSATORY. ALIGNMENT DEVIATIONS FROM THE CONTROL GUIDE SHALL NOT EXCEED 1 INCH. MATERIAL SHALL NOT BE APPLIED OVER LONGITUDINAL JOINTS. ESTABLISHMENT OF APPLICATION TOLERANCES SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLY AS CLOSELY AS PRACTICABLE WITH THE PLANNED DIMENSIONS.

JUST PRIOR TO THE PLACEMENT OF PAVEMENT MARKINGS THE ROAD SURFACE SHALL BE CLEANED AND FREE OF CONTAMINATION AS RECOMMENDED BY THE MATERIAL MANUFACTURER AND ACCEPTABLE TO THE ENGINEER. PORTLAND CEMENT CONCRETE SURFACES SHALL BE SANDBLAST CLEANED TO REMOVE ANY SURFACE TREATMENTS AND/OR LAITANCE.

APPLY ALL PAVEMENT MARKINGS AS RECOMMENDED BY THE MATERIAL MANUFACTURER.

PERMANENT PAVEMENT MARKINGS SHALL NOT BE PLACED OVER TEMPORARY TAPE MARKINGS.

THE FILLING OF TANKS, POURING OF MATERIALS OR CLEANING OF EQUIPMENT SHALL NOT BE PERFORMED ON UNPROTECTED PAVEMENT SURFACES UNLESS ADEQUATE PROVISIONS ARE MADE TO PREVENT SPILLAGE OF MATERIAL.

HAMBURG, MINNESOTA

2/12/19

CITY HALL GRADING PLAN FILE NO. 148674

## STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

### PROJECT NAME/LOCATION

CITY OF HAMBURG CONSTRUCTION PLANS FOR JACOB ST FROM BROADWAY AVE (CSAH 50) TO SCHEELE AVE, CITY HALL PROPERTY AND PATCH ON BROADWAY AVE (CSAH 50), AND DEMOLITION OF EXISTING TOWER 80' NORTH OF SCHEELE AVE. WITHIN THE CITY OF HAMBURG, CARVER COUNTY, MINNESOTA.

LATITUDE: 44.675028 LONGITUDE: -93.971603 ZIP CODE: 55339

THIS PROJECT WILL DISTURB 1.07 ACRES AND DRAINS TO LATERAL 4 OF JD 3A AND LATERAL 3 OF JD 3A WEST OF THE CITY LIMITS.

### LAND FEATURE CHANGES

TOTAL DISTURBED AREA: 1.07 ACRES

TOTAL EXISTING IMPERVIOUS SURFACE AREA: 0.60 ACRES

TOTAL PROPOSED IMPERVIOUS SURFACE AREA: 0.69 ACRES

TOTAL PROPOSED NET CHANGE IN IMPERVIOUS SURFACE AREA: 0.09 ACRES

THE PROJECT WILL NOT CREATE A NET INCREASE OF IMPERVIOUS SURFACE AREA GREATER THAN OR EQUAL TO ONE ACRE THEREFORE THERE IS NOT A REQUIRED WATER QUALITY VOLUME THAT MUST BE TREATED BEFORE LEAVING THE SITE.

### ENVIRONMENTAL REVIEW

THERE ARE NO STORM WATER MITIGATION MEASURES REQUIRED AS A RESULT OF AN ENVIRONMENTAL, ARCHEOLOGICAL OR AGENCY REVIEW. ALL MITIGATION MEASURES HAVE BEEN ADDRESSED IN THIS PLAN SET OR THE SPECIAL PROVISIONS.

THIS PROJECT IS LOCATED IN A WELL HEAD PROTECTION AREA.

### PROJECT DESCRIPTION/NARRATIVE

GRADING, BASE, BITUMINOUS PAVEMENT, CURB & GUTTER, WATERMAIN, TURF ESTABLISHMENT, WATER TOWER CONSTRUCTION. WATER TOWER

### LONG TERM MAINTENANCE AND OPERATION

THE CITY OF HAMBURG IS RESPONSIBLE FOR ONGOING MAINTENANCE OF THE STREETS AND WATER TOWER.

THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP AND INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE, DURING AND AFTER CONSTRUCTION UNTIL THE NOTICE OF TERMINATION (NOT) HAS BEEN SUBMITTED WITH THE MINNESOTA POLLUTION CONTROL AGENCY (MPCA). THE PROJECT ENGINEER, MNDOT DISTRICT 7 STAFF, AND MEMBERS OF MNDOT5/32S OFFICE OF ENVIRONMENTAL STEWARDSHIP ARE ALSO AVAILABLE FOR TECHNICAL ASSISTANCE.

OWNER: CITY OF HAMBURG, MN CONTACT NAME: JUSTIN BLACK, PE TITLE: CITY ENGINEER MAILING ADDRESS: 1390 HWY 15 SOUTH, SUITE 200

CITY: HUTCHINSON STATE: MN ZIP CODE: 55350 E-MAIL ADDRESS: JBLACK@SEHINC.COM TELEPHONE:800.838.8666

PROJECT ENGINEER: SHORT ELLIOTT HENDRICKSON INC. CONTACT NAME: JUSTIN BLACK, PE TITLE: PROJECT MANAGER MAILING ADDRESS: 1390 HWY 15 SOUTH, SUITE 200 CITY: HUTCHINSON STATE: MN ZIP CODE: 55350 E-MAIL ADDRESS: JBLACK@SEHINC.COM TELEPHONE:800.838.8666

CONTRACTOR:			
CONTACT NAME:		_ TITLE:	
MAILING ADDRESS:			
CITY:	STATE:	ZIP CODE: _	
-MAII ADDRESS:		TELEPHONE	

MPCA 24 HOUR EMERGENCY NOTIFICATION: 651-649-5451 TOLL FREE: 800-422-0798

### EROSION CONTROL SUPERVISOR

IN ACCORDANCE WITH SPEC. 2573.3 A1 THE CONTRACTOR SHALL PROVIDE AN EROSION CONTROL SUPERVISOR WITH A VALID CERTIFICATION TO DIRECT THE CONTRACTOR AND SUBCONTRACTORS OPERATIONS AND INSURE COMPLIANCE WITH FEDERAL, STATE AND LOCAL ORDINANCES AND REGULATIONS.

THE EROSION CONTROL SUPERVISOR WILL WORK WITH THE PROJECT ENGINEER TO OVERSEE THE IMPLEMENTATION OF THE SWPPP AND THE INSTALLATION, INSPECTION, AND MAINTENANCE AND REPAIR OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE, DURING AND AFTER CONSTRUCTION UNTIL THE NOT HAS BEEN FILED WITH THE MPCA.

THE EROSION CONTROL SUPERVISOR IS RESPONSIBLE FOR COMPLYING WITH ALL THE INSPECTION AND MAINTENANCE REQUIREMENTS STATED IN THE NPDES PERMIT. INSPECTIONS OF THE ENTIRE CONSTRUCTION SITE WILL OCCUR A MINIMUM OF ONCE EVERY SEVEN DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. THE EROSION CONTROL SUPERVISOR WILL OVERSEE INSPECTION OF ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS TO ENSURE INTEGRITY AND EFFECTIVENESS OF EACH BMP. ALL INSPECTIONS AND MAINTENANCE CONDUCTED DURING CONSTRUCTION MUST BE RECORDED IN WRITING (WITHIN 24 HRS.) AND THESE RECORDS MUST BECOME PART OF THE SWPPP. INSPECTION REPORTS MUST BE SUBMITTED TO THE PROJECT ENGINEER IN A FORMAT THAT MEETS OR EXCEEDS THE PROJECT ENGINEER'S EXPECTATIONS. RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY SHALL INCLUDE:

- DATE AND TIME OF INSPECTIONS;
- NAME OF PERSONS CONDUCTING INSPECTIONS:
- FINDINGS OF INSPECTIONS, INCLUDING SPECIFIC LOCATIONS WHERE CORRECTIVE ACTIONS ARE NEEDED; CORRECTIVE ACTIONS TAKEN, INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES;
- DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCH IN 24 HOURS;
- PHOTOGRAPH AND DESCRIPTION OF DISCHARGE (I.E. COLOR, ODOR, FLOATING, SETTLED OR SUSPENDED SOLIDS, FOAM, OIL SHEEN,ETC.); AND DOCUMENTS AND CHANGES MADE TO THE SWPPP.

### LOCATION OF SWPPP REQUIREMENTS

THE REQUIRED SWPPP ELEMENTS ARE LOCATED IN SEVERAL PLACES WITHIN THE PLAN SET AS WELL AS IN THE SPECIAL PROVISIONS AND MNDOT SPEC BOOK (2016 EDITION). SOILS REPORTS ARE ON FILE AT THE SEH OFFICE. THE NOTES AND TABLE BELOW ARE A QUICK REFERENCE FOR THE CONTRACTOR AND PROJECT ENGINÉER TO USE IN THE FIELD. THERE MAY BE ADDITIONAL REQUIRED SWPPP ELEMENTS INCLUDED ON THE PROJECT THAT ARE NOT LISTED ON THIS SHEET.

THIS SWPPP WAS PREPARED BY <u>BRODY BRATSCH, EIT</u> — SEH CERTIFIED IN DESIGN OF CONSTRUCTION STORM WATER POLLUTIC PREVENTION PLANS THROUGH THE UNIVERSITY OF MINNESOTA EROSION AND STORM WATER CERTIFICATION PROGRAM. COPIES OF THE - SEH CERTIFIED IN DESIGN OF CONSTRUCTION STORM WATER POLLUTION CERTIFICATIONS ARE AVAILABLE UPON REQUEST. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AN EROSION CONTROL SUPERVISOR WITH VALID CERTIFICATION THAT IS RESPONSIBLE FOR OVERSEEING THE IMPLEMENTATION OF THE SWPPP. THE CONTRACTOR MUST PROVIDE PROOF OF CERTIFICATION AT THE PRE-CONSTRUCTION MEETING AND WILL NOT BE ALLOWED TO COMMENCE WORK UNTIL PROOF OF CERTIFICATION HAS BEEN PROVIDED TO THE PROJECT ENGINEER.

### LOCATION OF SWPPP REQUIREMENTS IN PROJECT PLAN

DESCRIPTION	LOCATION	DESCRIPTION	LOCATION	
SITE MAP & EROSION CONTROL SHEETS	SHEETS G1,C14,C15	EROSION AND SEDIMENT CONTROL DETAILS	SHEET C15	
DIRECTION OF FLOW	SHEETS C14,C15	EROSION CONTROL SCHEDULE	SHEET C12	
FINAL STABILIZATION	SHEETS C14,C15	SOILS AND CONSTRUCTION NOTES	SHEET C1	

### PROJECT WATER BODIES

THE FOLLOWING WATER BODIES ARE LOCATED WITHIN ONE MILE OF THE PROJECT LIMITS AND RECEIVE RUNOFF FROM THE PROJECT SITE. IF ANY OF THE WATER BODIES ARE SPECIAL OR IMPAIRED WATERS, THE BMPS DESCRIBED IN APPENDIX A OF THE NPDES PERMIT WILL APPLY TO ALL AREAS OF THE SITE, APPROVED TMDL IMPLEMENTATION PLANS ARE ALSO LISTED.

NAME	TYPE	SPECIAL?	IMPAIRED?	APPROVED TMDL?
LATERAL 4 OF JD 3A	DITCH	NO	NO	NO
LATERAL 3 OF JD 3A	DITCH	NO	NO	NO

### ADDITIONAL SWPPP REQUIREMENTS

- -TIMING FOR INSTALLATION IS DESCRIBED IN GENERAL SWPPP NOTES AND ARE SPECIFIED RELATIVE TO CONTRACTOR SCHEDULE.
- -BMP DESIGN FACTORS ARE INCORPORATED IN THE DESIGN OF BMP STANDARD DETAIL SHEETS.

SOIL TYPES TYPICALLY FOUND ON THIS PROJECT ARE GROUP C/D.

PRESERVATION PROJECTS: ALL WORK IS DONE WITHIN ROAD CORE SO THERE WILL BE NO DISTURBANCE OR COMPACTION OUTSIDE OF ROAD CORE. GRADING PROJECTS: SUB-SOILING AND SEEDING PRACTICES WILL BE DONE TO MITIGATE FOR COMPACTION AND DISTURBANCE BEYOND ROAD CORE.

-ALL MPCA CONSTRUCTION ACTIVITY REQUIREMENTS ARE INCORPORATED INTO THIS SWPPP AND ASSOCIATED PLAN DOCUMENTS.

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EROSION CONTROL SCHEDULE								
STREET/LOCATION	SEDIMENT CONTROL LOG, TYPE WOOD FIBER (LF)	DUST CONTROL WATER (MGAL)	SWEEPER HOURS (HRS)	ROCK ENTRANCE (EA)				
JACOB ST	50	10	15	4				
BROADWAY AVE/CITY HALL 450 5 15 2								
TOTALS	500	15	30	6				

TURF RESTORATION						
STREET/LOCATION TURF RESTORATION WATER (MGAL) BOF						
JACOB AVE	130	60	16			
BROADWAY AVE/CITY HALL	1190	150	133			
TOTALS	1320	210	149			

- (1) SUBSOILING, SOIL BED PREPARATION, WEED SPRAYING AND MIXTURE INCIDENTAL TO SEEDING.
- SEED MIX SHALL BE 25-151 WITH AN APPLICATION RATE OF 120 LBS/AC. TO BE USED FOR RESIDENTIAL TURF RESTORATION.
- ALL DISTURBED TURF AREAS TO BE RESTORED BY HYDROSEEDING, NATURAL TACKIFIER, MULCH, AND MATRIX SHALL BE APPLIED IN ACCORDANCE WITH MNDOT 2475.3.E. THE EXCEPTION IS AREAS WHERE TEMPORARY COVER CROP HAS BEEN ESTABLISHED, WHICH SHOULD INSTEAD BE DRILL SEEDED.
- ESTIMATED AT 0.5" APPLICATION PER WEEK FOR 8 WEEKS
- IMPORTED SELECT TOPSOIL BORROW SHALL BE LOOSELY SPREAD AND GRADED AT 4" DEPTH OVER ALL DISTURBED GRASS AREAS.

ESIMATED QUANTITIES ONLY, CONTRACTOR IS RESPONSIBLE FOR EROSION AND SEDIMENT CONTROL AND IS TO PROVIDE ADEQUATE EROSION AND SEDIMENT CONTROL DEVICES AND BEST MANAGEMENT PRACTICES. ADDITIONAL EROSION CONTROL DEVICES AND RAPID STABILIZATION MAY BE NECESSARY FOR THE PROJECT. DEVICES SHALL BE PAID AT CONTRACT PRICES.

RAWN BY: BLB					4.	
						DUONE: 000 000 000
ESIGNER: BLB						PHONE: 800.838.8666 1390 HWY. 15 S.
HECKED BY:JLB						SUITE 200, PO BOX 3 HUTCHINSON, MN 55
DESIGN TEAM	NO.	BY	DATE	REVISIONS	<b>3</b> EN	www.sehinc.com

HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER HE LAWS OF THE STATE OF MINNESOTA. lusti, JUSTIN BLACK, PE 2/12/19

HAMBURG. **MINNESOTA** 

**SWPPP NOTES** 

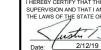
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## STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (CONTINUED)

### GENERAL SWPPP NOTES FOR CONSTRUCTION ACTIVITY

- CONSTRUCTION SHALL BE GOVERNED BY THE NPDES CONSTRUCTION STORM WATER PERMIT, MNDOT SPEC BOOK (2018 EDITION), PROJECT PLANS, AND SPECIAL PROVISIONS.REFERENCE SPECIAL PROVISION 1717 FOR ADDITIONAL MPCA NPDES REQUIREMENTS.
  THE CONTRACTOR WILL DEVELOP A CHAIN OF COMMAND WITH ALL OPERATORS ON THE SITE TO ENSURE THAT THE SWPPP WILL BE IMPLEMENTED AND STAY IN EFFECT UNTIL THE CONSTRUCTION PROJECT IS COMPLETE, THE ENTIRE SITE HAS UNDERGONE FINAL STABILIZATION, AND THE NOT HAS BEEN SUBMITTED.
- 2. THE CONTRACTOR WILL PREPARE A WRITTEN, WEEKLY SCHEDULE OF PROPOSED EROSION CONTROL ACTIVITIES FOR THE PROJECT ENGINEER'S APPROVAL AS PER MNDOT SPEC 1717.2C.
- 3. THE CONTRACTOR WILL PREPARE AND SUBMIT A SITE PLAN FOR THE ENGINEER'S APPROVAL AS PER MNDOT SPEC 1717.2D FOR CONCRETE MANAGEMENT, WORK IN ENVIRONMENTALLY SENSITIVE AREAS, AREAS IDENTIFIED IN THE PLANS AS "SITE PLAN REQUIREMENT AREA", ANY WORK THAT WILL REQUIRE DEWATERING, THE STAGING OF INLET PROTECTION DEVICES OVER THE LIFE OF THE CONTRACT, AND AS REQUESTED BY THE ENGINEER.ALL SITE PLANS MUST BE SUBMITTED TO THE ENGINEER IN WRITING.THE CONTRACTOR SHALL ALLOW A MINIMUM OF 7 DAYS FOR MNDOT TO REVIEW AND APPROVE SITE PLAN SUBMITTALS.THE CONTRACTOR WILL NOT BE ALLOWED TO COMMENCE WORK FOR WHICH A SITE PLAN IS REQUIRED UNTIL APPROVAL HAS BEEN GRANTED BY THE ENGINEER. THE CONTRACTOR WILL NOT BE GIVEN ANY EXTRA TIME IN THE CONTRACT DUE TO THE UNTIMELY SUBMITTAL OF A
- 4. THE CONTRACTOR WILL COMPLY WITH THE REQUIREMENTS REGARDING POLLUTION PREVENTION MANAGEMENT DURING CONSTRUCTION, WHICH WILL INCLUDE, BUT NOT BE LIMITED TO:
  - A. CONCRETE WASHOUT AREAS FOR USE BY ALL SUBCONTRACTORS AND MNDOT PERSONNEL MUST BE IDENTIFIED BY SIGNAGE. THESE AREAS MUST BE AT LEAST 200' FROM SITE PLAN REQUIREMENT AREAS OR ENVIRONMENTALLY SENSITIVE AREAS, AND UTILIZE A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER THAT PREVENTS RUNOFF ONTO ADJACENT SOILS. AN ENGINEERED COLLECTION SYSTEM CAN ALSO BE USED IF IT IS APPROVED BY THE PROJECT ENGINEER. LIQUID AND SOLID WASTE MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH ALL MPCA REGULATIONS.
  - B. SOLID WASTE INCLUDING, BUT NOT LIMITED TO, COLLECTED SEDIMENT, ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS, AND OTHER WASTES, MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA DISPOSAL REQUIREMENTS.
  - C. HAZARDOUS WASTE, SUCH AS, OIL, GASOLINE, PAINT, AND OTHER HAZARDOUS SUBSTANCES, MUST BE PROPERLY STORED, INCLUDING SECONDARY CONTAINMENT, TO PREVENT SPILLS, LEAKS, OR OTHER DISCHARGE.RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MPCA REGULATIONS
  - D. EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE AND RUNOFF MUST BE CONTAINED AND PROPERLY DISPOSED OF, ENGINE DEGREASING IS NOT ALLOWED ON SITE.
  - E. CHEMICAL SPILL KITS MUST BE AVAILABLE ON SITE AT ALL TIMES.
  - F. PORTABLE RESTROOM FACILITIES MUST BE ANCHORED TO PREVENT TIPPING.
- 5. CHEMICALS MUST BE KEPT IN A SECURE STORAGE AREA WHEN NOT IN USE. CHEMICAL STORAGE CONTAINERS MUST HAVE SECONDARY CONTAINMENT WHEN BEING USED OR STORED ON THE PROJECT SITE.CHEMICAL SPILLS OF ANY KIND (OIL, FUEL, FERTILIZER, ETC.) MUST BE CLEANED UP AND REMOVED FROM THE SITE IMMEDIATELY.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR CREATING AND FOLLOWING A WRITTEN DISPOSAL PLAN FOR ALL WASTE MATERIALS. AND SUBMITTING THE PLAN TO THE ENGINEER. THE PLAN WILL INCLUDE HOW THE MATERIAL WILL BE DISPOSED OF AND THE LOCATION
- 7. BURNING OF ANY MATERIAL IS NOT ALLOWED WITHIN PROJECT BOUNDARY.
- 8. THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS SHALL BE PLACED AS NECESSARY TO MINIMIZE EROSION FROM DISTURBED SURFACES AND TO CAPTURE SEDIMENT ONSITE. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO STARTING ANY REMOVAL WORK AND/OR GROUND DISTURBING ACTIVITIES AND SHALL BE MAINTAINED UNTIL TEMPORARILY OR PERMANENTLY
- 9. SEDIMENT CONTROL DEVICES MUST BE ESTABLISHED ON ALL DOWN GRADIENT PERIMETERS BEFORE ANY UP GRADIENT LAND DISTURBING ACTIVITIES BEGIN.
- 10. STORM SEWER INLETS WILL BE PROTECTED AT ALL TIMES WITH THE APPROPRIATE INLET PROTECTION FOR EACH SPECIFIC PHASE OF CONSTRUCTION.INLET PROTECTION DEVICES MAY NEED TO BE PLACED MULTIPLE TIMES IN THE SAME LOCATION OVER THE LIFE OF THE CONTRACT.INLET PROTECTION DEVICES WILL BE PAID FOR ONCE PER INLET REGARDLESS OF THE NUMBER OF TIMES THE BMP IS PLACED. ALL STORM SEWER INLET PROTECTION DEVICES WILL BE KEPT IN GOOD FUNCTIONAL CONDITION AT ALL TIMES. IF THE PROJECT ENGINEER DEEMS AN INLET PROTECTION DEVICE TO BE NONFUNCTIONAL. IN POOR CONDITION, INEFFECTIVE, OR NOT APPROPRIATE FOR THE CURRENT CONSTRUCTION ACTIVITIES IT WILL BE REPLACED WITH A SUITABLE ALTERNATIVE AT NO
- 11. THE CONTRACTOR WILL PLACE CONSTRUCTION EXITS, AS NECESSARY, TO PREVENT TRACKING OF SEDIMENT ONTO PAVED SURFACES AND IN COMPLIANCE WITH PART IV OF THE NPDES PERMIT. CONSTRUCTION EXITS WILL BE SUFFICIENTLY SIZED AND MAINTAINED TO PREVENT TRACK OUT. TYPE 5 MULCH (SLASH MULCH) OR AN APPROVED ENGINEERED PRODUCT WILL BE ALLOWED FOR CONSTRUCTION EXITS IN LIEU OF CRUSHED ROCK.
- 12. ALL STORM WATER, INCLUDING DEWATERING, MUST BE DISCHARGED IN A MANNER THAT DOES NOT CAUSE NUISANCE CONDITIONS OR EROSION IN RECEIVING CHANNELS. DOWNSLOPE PROPERTIES OR INUNDATION IN WETLANDS CAUSING AN ADVERSE IMPACT TO THE WETLAND AS DETERMINED BY THE ENGINEER.
- 13. BACKFILL PLACED IN STREAMS SHALL CONSIST OF ROCK OR GRANULAR MATERIAL FREE OF FINES, SILTS, AND MUD. MACHINERY SHALL BE CLEANED OF ALL SUCH MATERIAL AND FREE OF GREASE, OIL, ETC. BEFORE ENTERING THE STREAM

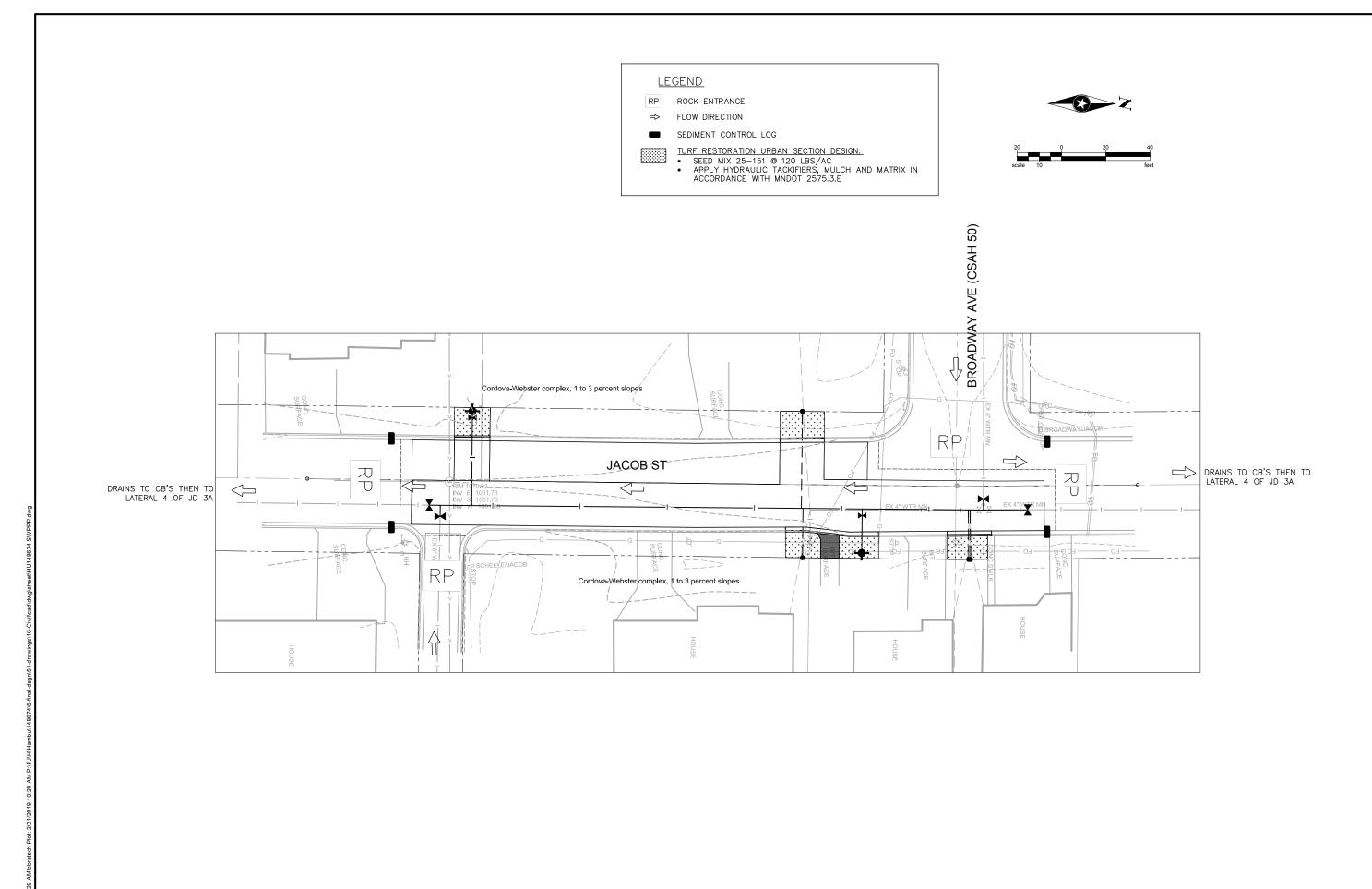
- 14. SLOPES STEEPER THAN 1:3 (V:H) AND GREATER THAN 75' IN LENGTH SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED IN INCREMENTS NOT TO EXCEED 75' IN LENGTH PRIOR TO CONSTRUCTING OR DISTURBING A NEW INCREMENT. IF TEMPORARY OR PERMANENT STABILIZATION IS NOT FEASIBLE AT A PARTICULAR SITE, A SEDIMENT BASIN OR OTHER APPROVED SEDIMENT CONTROL MEASURE WILL BE ALLOWED AS APPROVED BY THE ENGINEER
- 15. LAND DISTURBANCE AND REMOVAL OF RIPARIAN (STREAMSIDE) VEGETATION SHALL BE MINIMIZED.
- 16. ALL EXPOSED SOIL AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED NO MORE THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY ON THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. IN MANY INSTANCES, THIS WILL REQUIRE STABILIZATION TO OCCUR MORE THAN ONCE DURING ROUGH GRADING. RAPID STABILIZATION METHODS 1, 2, 3 OR 4 WILL BE USED TO PROVIDE TEMPORARY COVER, AS APPROPRIATE, IN THESE AREAS,
- 17. ALL TEMPORARY OR PERMANENT DRAINAGE DITCHES OR SWALES THAT DRAIN WATER FROM THE CONSTRUCTION SITE OR DIVERT WATER AROUND THE CONSTRUCTION SITE MUST BE STABILIZED TO TOP OF BANK WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE OR POINT OF DISCHARGE TO ANY SURFACE WATER. STABILIZATION MUST OCCUR WITHIN 24 HOURS OF CONNECTION TO SURFACE WATER, EXISTING GUTTER, STORM SEWER INLET, DRAINAGE DITCH, OR OTHER STORM WATER CONVEYANCE SYSTEM ACCORDING TO MNDOT SPEC 1717.2A2. RAPID STABILIZATION METHOD 4 WILL BE USED TO STABILIZE THESE AREAS. THE REMAINDER OF THE DITCH MUST BE STABILIZED WITHIN 7 DAYS OF CONNECTING TO THE SURFACE WATER. PERMANENT EROSION CONTROL BLANKET OR RAPID STABILIZATION METHOD 4 WILL BE USED TO STABILIZE THESE AREAS. DISC ANCHORED MULCH AND HYDRAULIC SOIL STABILIZERS ARE NOT ALLOWED TO BE USED FOR PERMANENT DITCH STABILIZATION.
- 18. OUTLETS SHALL BE PERMANENTLY OR TEMPORARILY STABILIZED WITH ENERGY DISSIPATION WITHIN 24 HOURS OF BEING CONSTRUCTED.
- 19. ALL EXPOSED SOIL AREAS WILL BE STABILIZED PRIOR TO THE ONSET OF WINTER. ANY WORK STILL BEING PERFORMED WILL BE SNOW MULCHED, SEEDED, OR BLANKETED WITHIN THE TIME FRAMES INDICATED IN THE NPDES PERMIT.
- 20. THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING INSPECTION AND MAINTENANCE REQUIREMENTS:
  - PERIMETER CONTROL DEVICES MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WHEN IT BECOMES NON-FUNCTIONAL OR SEDIMENT REACHES 1/2 THE HEIGHT OF THE DEVICE. REPAIRS MUST BE MADE WITHIN 24 HOURS OF DISCOVERY.
  - INLET PROTECTION DEVICES SHOULD BE REPAIRED WHEN THEY BECOME NON-FUNCTIONAL OR SEDIMENT REACHES 1/3 THE HEIGHT AND/OR DEPTH OF THE DEVICE.
  - TEMPORARY AND PERMANENT SEDIMENT BASINS MUST BE DRAINED AND HAVE THE SEDIMENT REMOVED ONCE THE SEDIMENT HAS REACHED 1/2 THE STORAGE VOLUME WITHIN 72 HOURS OF DISCOVERY.
  - TRACKED SEDIMENT MUST BE REMOVED WITHIN 24 HOURS OF DISCOVERY OF TRACKING ONTO PAVED SURFACES.
  - ALL OTHER NON-FUNCTIONAL BMPS MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITHIN 24 HOURS OF DISCOVERY.
  - F. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL BMPS UNTIL ALL SOIL DISTURBING WORK HAS BEEN COMPLETED, SITE HAS GONE UNDER FINAL STABILIZATION. AND THE NOT HAS BEEN SUBMITTED.
- 21. IF SEDIMENT DEPOSITS IN A SURFACE WATER (INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS), THE MATERIAL MUST BE REMOVED WITHIN 7 DAYS.
- 22. PAVEMENT SURFACES SHALL BE SWEPT WITHIN 24 HOURS OF DISCOVERY OF SEDIMENT OR TRACKING ONTO PAVEMENT THAT DRAINS TO CURBS, INLETS, DITCHES, OR PONDS. PAVEMENT SHALL BE LIGHTLY WETTED PRIOR TO SWEEPING.
- 23. TEMPORARY DEWATERING ACTIVITIES MAY BE REQUIRED FOR ROADWAY CONSTRUCTION AND UTILITY WORK. THEREFORE IT IS POSSIBLE THAT A PERMIT FOR THE TEMPORARY APPROPRIATION OF WATERS OF THE STATE, NON-IRRIGATION FROM MNDNR WILL BE REQUIRED FOR THIS PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING THIS PERMIT. ALL TEMPORARY DEWATERING SHALL BE DISCHARGED TO AN APPROVED LOCATION FOR TREATMENT PRIOR TO DISCHARGE TO THE RECEIVING WATER. THE CONTRACTOR IS REQUIRED TO SUBMIT SITE PLANS TO MNDOT ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK ACCORDING TO MNDOT SPEC 1717.2E.
- 24. FINAL STABILIZATION REQUIRES THAT:
  - A. ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED.
  - B. ALL SOILS HAVE BEEN STABILIZED BY A UNIFORM PERENNIAL COVER WITH A DENSITY OF 70% OR OTHER EQUIVALENT MEANS TO PREVENT SOIL FAILURE UNDER FROSIVE CONDITIONS.
  - C. ALL ACCUMULATED SEDIMENT HAS BEEN REMOVED FROM PERMANENT WATER QUALITY BASINS.
  - D. THE PERMANENT STORM WATER MANAGEMENT SYSTEM HAS BEEN CONSTRUCTED AND IS OPERATING AS DESIGNED.
  - E. ALL TEMPORARY SYNTHETIC AND STRUCTURAL EROSION PREVENTION AND SEDIMENT CONTROL BMPS HAVE BEEN REMOVED.
- 25. THE SIZE AND ELEVATION OF STORM SEWER PIPES, INLETS AND OVERFLOW DEVICES HAVE BEEN SPECIFICALLY DESIGNED TO CONFORM TO MNDOT DESIGN STANDARDS, MPCA AND WATERSHED DISTRICT PERMIT REQUIREMENTS. THE DESIGN COMPUTATIONS ARE ON FILE WITH SHORT ELLIOT HENDRICKSON. CHANGING FLOW DIRECTIONS, QUANTITIES, OR PATTERNS IS NOT PERMITTED. ANY CHANGES TO THE SIZE, ELEVATION OR DIRECTION OF FLOW OF THE DRAINAGE SYSTEM MUST BE APPROVED BY THE HYDRAULICS ENGINEER
- 26. THE NOT FORM CAN BE FOUND ON THE MPCA STORM WATER PROGRAM FOR CONSTRUCTION ACTIVITY WEB PAGE. SUBMIT THE COMPLETED NOT FORM TO THE CITY OF HAMBURG FOR FINAL SUBMITTAL TO MPCA.



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

HAMBURG. **MINNESOTA** 

**SWPPP NOTES** 



PHONE: 800.838.8666
1390 HWY. 15 S.

SEH HUTCHINSON, MM 55350
www.sehinc.com
www.sehinc.com

DRAWN BY:

CHECKED BY:

BLB

JLB

DESIGN TEAM

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.

JUSTIN BLACK, PE
Date: 2/12/19 Lic. No. 43373

HAMBURG, MINNESOTA

JACOB STREET EROSION CONTROL PLAN

FILE NO. 148674

