ADDENDUM #2
2012 INDUSTRIAL PARK IMPROVEMENTS
CITY OF DULUTH
PROJECT 0959ST
BID NUMBER 12-0334
JUNE 19, 2012

NOTICE

Page 2 of 3

This Addendum is issued to modify, explain or correct the original drawings, specifications and/or previous addendums and is hereby made a part of the Contract Documents. Please note receipt of this Addendum on the Request for Bid. The bid date remains unchanged.

BID DOCUMENTS

Replace the original Exhibit A with the attached revised Exhibit A.

DRAWINGS

Revisions to the drawings have been made with and are noted with a "clouded" perimeter and triangular footnote with the number 2, representing addendum no. 2.

Additional changes to the drawings are as follows:

1. Eliminate all sidewalk on the cul-de-sac on the north end of Nick Glumac Drive
2. Provide perforated subdrains around the cul-de-sac island at the end of Nick Glumac Drive. Connect subdrains to PCB 35. The pavement in this cul-de-sac is sloped to the center and the subgrade slope shall match the slope of the pavement.
3. On plan sheet DM1-DM3, delete part of Note 2, which states "ALL AREAS DISTURBED SHALL BE RESTORED PER SWPPP.", replace with, "ALL AREAS DISTURBED SHALL BE RESTORED WITH 4" OF TOPSOIL BORROW (MnDOT 3877), MnDOT SEED MIX 250 AT 70 LBS/AC AND MULCH TYPE 1 OR 3 AT 2 TONS PER ACRE. EROSION CONTROL BLANKET WILL BE REQUIRED IN PLACE OF MULCH ON SLOPE 1:3 (v:h) OR GREATER AND ALL DITCH BOTTOMS AND EXTENDING 12" VERTICALLY UP THE SIDES PERPENDICULAR FROM THE DITCH BOTTOM."

SPECIFICATION: SPECIAL PROVISIONS

SP-2 (1505) COOPERATION WITH OTHERS

Add the following to this section:

CN Railroad – is the property owner along the entire southern and eastern boundary of the Atlas Industrial Park. No construction activity or disturbance is allowed on this property, including access of any kind.

SP-10 (2105) EXCAVATION AND EMBANKMENT

Add the following to this section:

Removal of the existing / original infrastructure not shown on the plans will be paid for following City Standard Construction Specification section 1904. Work shall be approved prior to removal and disposal.

LIFT STATION TECHNICAL SPECIFICATIONS

DIVISION 44

SECTION 44 42 56.40 – LIFT STATION SUBMERSIBLE PUMPS

REPLACE Part 2, Section 2.03 A with this section:

A. Each raw wastewater pump shall meet design pumping conditions as follows:

Lift Station No. 53

Number of Pumps	2
Material Being Pumped	Municipal Wastewater

Normal Operating Conditions (Operational Design Point(s))

Single Pump Operation (each pump):

Rated GPM	700 gpm
Min Efficiency at Ratted GPM	45%
Rated TDH	28 ft
Shut Off Head (0 gpm)	57 ft ±

Single Pump Operation (each pump):

Rated GPM (each pump)	300 gpm
Min Efficiency at Ratted GPM	56%
Rated TDH	47 ft
Shut Off Head (0 gpm)	57 ft ±

Single Pump Operation (each pump):

Rated GPM (each pump)	450 gpm
Min Efficiency at Ratted GPM	55%
Rated TDH	40 ft
Shut Off Head (0 gpm)	57 ft ±

Pump Characteristics

Model #	KRT F 80-250-265
Impeller design:	Vortex, non-clogging
Speed	1150 rpm
Min Solid Size	3.0"

Motor Characteristics

Explosion Proof	Yes
Max. HP	10 HP
Voltage & Phase	208 volt-3 phase
Service Factor	1.15
NEMA Code	H
Housing Type	Air filled
Max. Amp Draw (FLA)	23.2 amps

REPLACE Part 2, Section 2.04 A with this section:

A. Each raw wastewater pump shall meet design pumping conditions as follows:

Lift Station No. 53

Number of Pumps	2
Material Being Pumped	Municipal Wastewater

Normal Operating Conditions (Operational Design Point(s))

Single Pump Operation (each pump):

Rated GPM	700 gpm
Min Efficiency at Ratted GPM	62%
Rated TDH	38 ft
Shut Off Head (0 gpm)	71 ft ±

Single Pump Operation (each pump):

Rated GPM (each pump)	300 gpm
Min Efficiency at Ratted GPM	48%
Rated TDH	55 ft
Shut Off Head (0 gpm)	71 ft ±

Single Pump Operation (each pump):

Rated GPM (each pump)	450 gpm
Min Efficiency at Ratted GPM	60%
Rated TDH	47.5 ft
Shut Off Head (0 gpm)	71 ft ±

Pump Characteristics

Model #	NP3127.181
Impeller design:	Non-clogging
Speed	1750 rpm
Min Solid Size	3.0"

Motor Characteristics

Model	21-12-4AL
Explosion Proof	Yes
Max. HP	10 HP
Voltage & Phase	208 volt-3 phase
Service Factor	1.15

END OF ADDENDUM

CITY OF DULUTH

DEPARTMENT OF PUBLIC WORKS AND UTILITIES

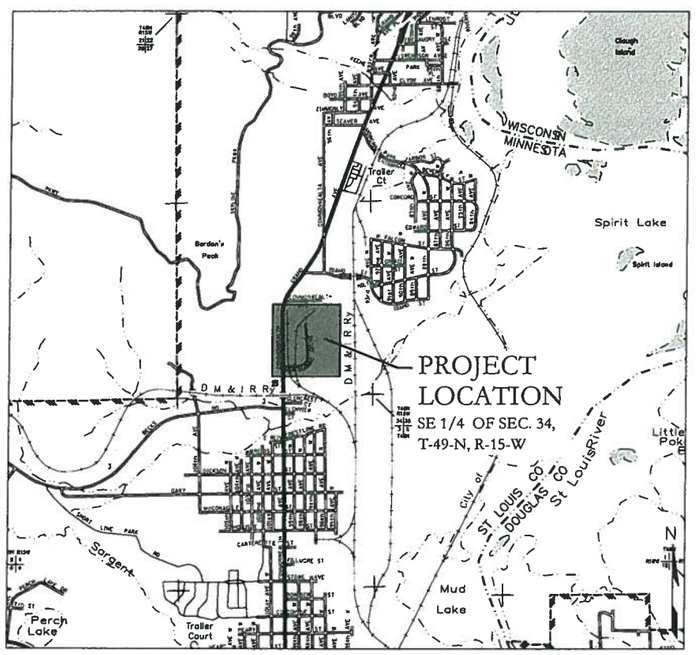
ENGINEERING DIVISION

ATLAS INDUSTRIAL PARK IMPROVEMENTS

CONSTRUCTION PLANS FOR: ROADWAY AND UTITLIY IMPROVEMENTS.

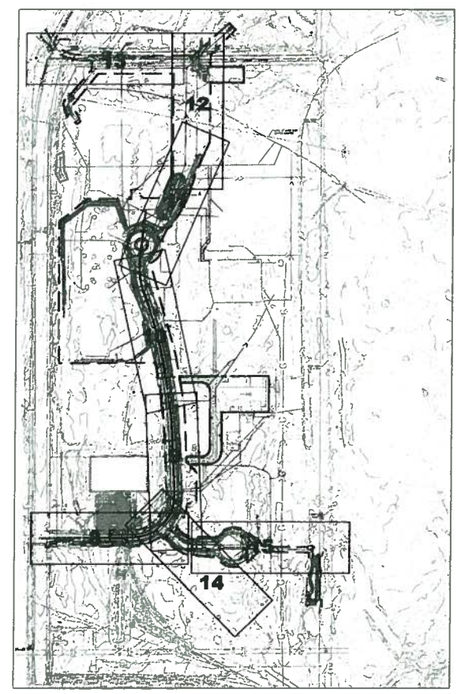
LOCATED ON: NICK GLUMAC DRIVE, COMMONWEALTH AVENUE.

GROSS LENGTH	--	FEET	--	MILE
BRIDGES-LENGTH	--	FEET	--	MILE
EXCEPTIONS-LENGTH	--	FEET	--	MILE
NET LENGTH	--	FEET	--	MILE



INDEX MAP

2000 0 2000 4000



PLAN & PROFILE SHEET INDEX

300 0 300 600

PROJECT LOCATION
ST. LOUIS COUNTY
CITY OF DULUTH

SCALES

PLAN	VARIES
PROFILE (HORIZONTAL)	VARIES
PROFILE (VERTICAL)	VARIES
CROSS SECTION	0 10
INDEX MAP	0 1000

WARNING

LOCATION OF UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR. CALL BEFORE DIGGING. GOPHER STATE ONE CALL 1-800-252-1166 REQUIRED BY LAW

NO	DATE	REVISION	SHEETS
3			
2			
1			
3			
2	06/11/12	ADDENDUM 2	--
1	06/01/12	ADDENDUM 1 - NO PLAN CHANGES	

GOVERNING SPECIFICATIONS

THE 2005 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

THE CITY OF DULUTH PUBLIC WORKS AND UTILITIES DEPARTMENT ENGINEERING DIVISION 2011 EDITION STANDARD CONSTRUCTION SPECIFICATION WITH 2012 AMENDMENTS SHALL APPLY.

THE 2360 PLANT MIXED ASPHALT PAVEMENT COMBINED 2360/2350 (GYRATORY/MARSHALL DESIGN) SPECIFICATION FOR 2012 CONSTRUCTION SEASON SHALL APPLY, AVAILABLE AT
http://www.mrr.dot.state.mn.us/pavement/bituminous/bituminous.asp

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MN MUTCD, INCLUDING THE FIELD MANUAL DATED FEBRUARY 2011.
http://www.dot.state.mn.us/trafficeng/atepubl/fieldmanual2011/index.html

INDEX

SHEET	DESCRIPTION
1	TITLE SHEET
EX1-EX3	EXISTING SITE PLAN
DM1-DM3	DEMOLITION AND TEMPORARY EROSION CONTROL PLAN
PP01-PP09	PLAN AND PROFILE - UTILITIES, EAST SPUR, AND NORTH CUL-DE-SAC
DTL1-DTL12	CONSTRUCTION DETAILS
G2-G3	LIFT STATION
PM1-PM2	LIFT STATION
E1-E3	LIFT STATION

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.

THOMAS A. JOHNSON
PROJECT ENGINEER (TYPED OR PRINTED NAME)

PROJECT ENGINEER — DATE 5/25/12 — REG. No. 46744

CITY APPROVALS:

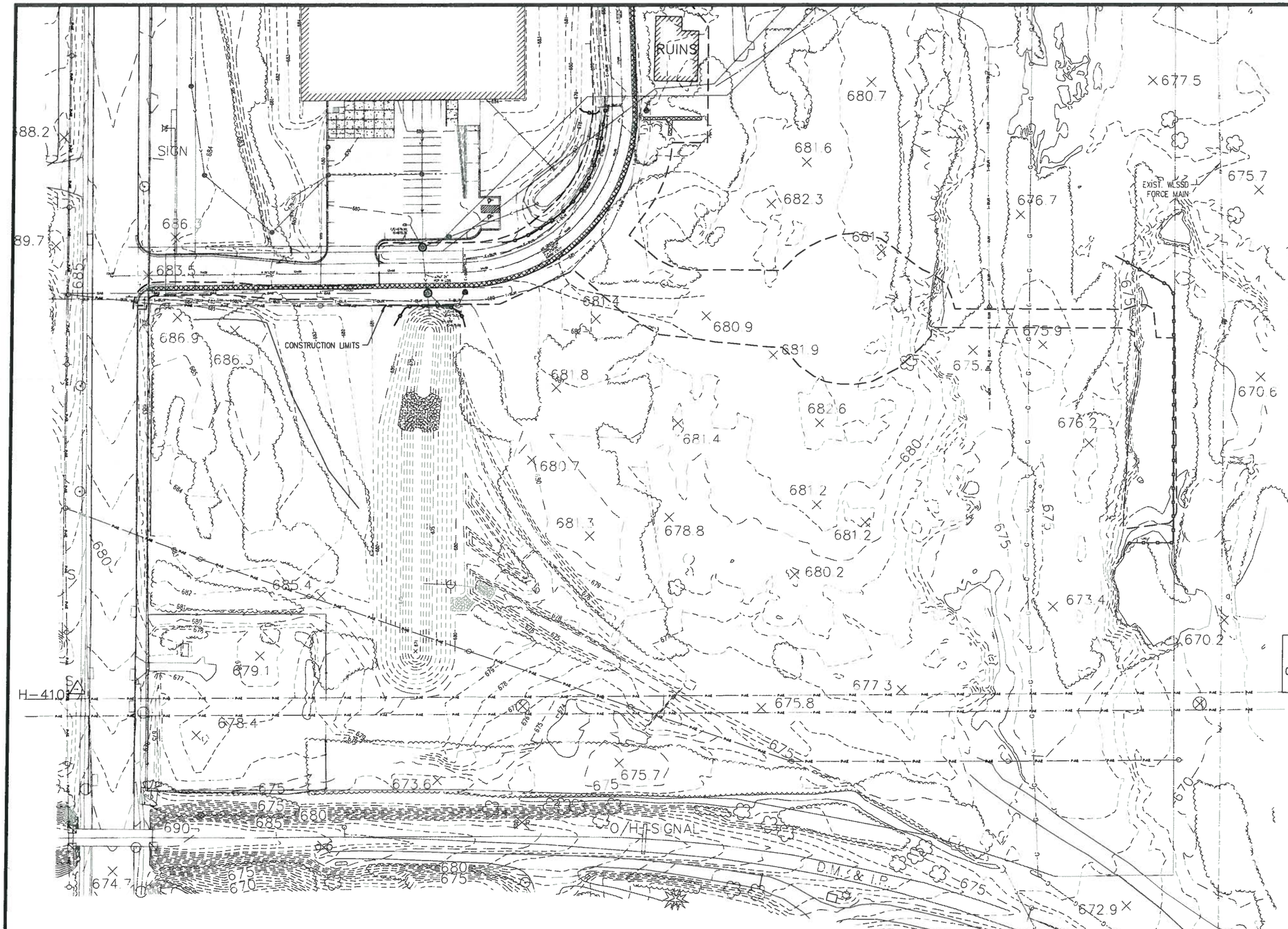
APPROVED — CHIEF ENGINEER OF TRANSPORTATION — DATE

APPROVED — CHIEF ENGINEER OF UTILITIES — DATE

APPROVED — CITY ENGINEER — DATE

CITY OF DULUTH PROJECT No. 0959 ST

TITLE SHEET 1



NOTES:

1. SITE CONTAINS ABANDONED IN-PLACE UTILITIES, PAVEMENTS, BUILDING SLABS, AND FOUNDATIONS. ANY OF THE ABOVE NOTED ITEMS SHOWN IN THE PLAN TO BE REMOVED TO PERFORM THE WORK SHALL BE INCLUDED IN THE BASE BID. ALL UTILITIES, PAVEMENTS, BUILDING SLABS, AND FOUNDATIONS NOT SHOWN AND REQUIRE REMOVAL FOR THE PROPOSED WORK SHALL FOLLOW ESTABLISHED PROCEDURES FOR UNIT PRICE REMOVAL ITEM.
2. CONTRACTOR SHALL CLEAR AND GRUB AS NEEDED TO COMPLETE THE WORK. ALL AREAS DISTURBED SHALL BE RESTORED PER SWPPP.
3. PROTECT EXISTING CONCRETE PAVEMENT FROM DAMAGE. UTILITY CROSSINGS SHALL BE DIRECTIONALLY DRILLED. UTILITY TRENCHING ADJACENT TO ROADWAY SHALL USE A TRENCH BOX AS NEEDED TO PREVENT DISTURBANCE TO THE CONCRETE PAVEMENT AND ITS BEARING ZONE.

THIS EROSION CONTROL PLAN AND THE SWPPP IS A STARTING POINT FOR THE PROJECT. CONTRACTOR SHALL PROVIDE ALL EROSION AND SEDIMENT CONTROL MEASURES NECESSARY TO COMPLETE THE WORK AND THE REQUIREMENTS OF THE NPDES-CA PERMIT AS DISCUSSED IN THE SWPPP. CONTRACTOR SHALL BE PROACTIVE AND INNOVATIVE TO ADDRESS THE EROSION/SEDIMENT CONTROL NEEDS OF THE PROJECT AND ADJUST/AMEND THE SWPPP AS SITE CONDITIONS AND CONSTRUCTION METHODS DICTATE.

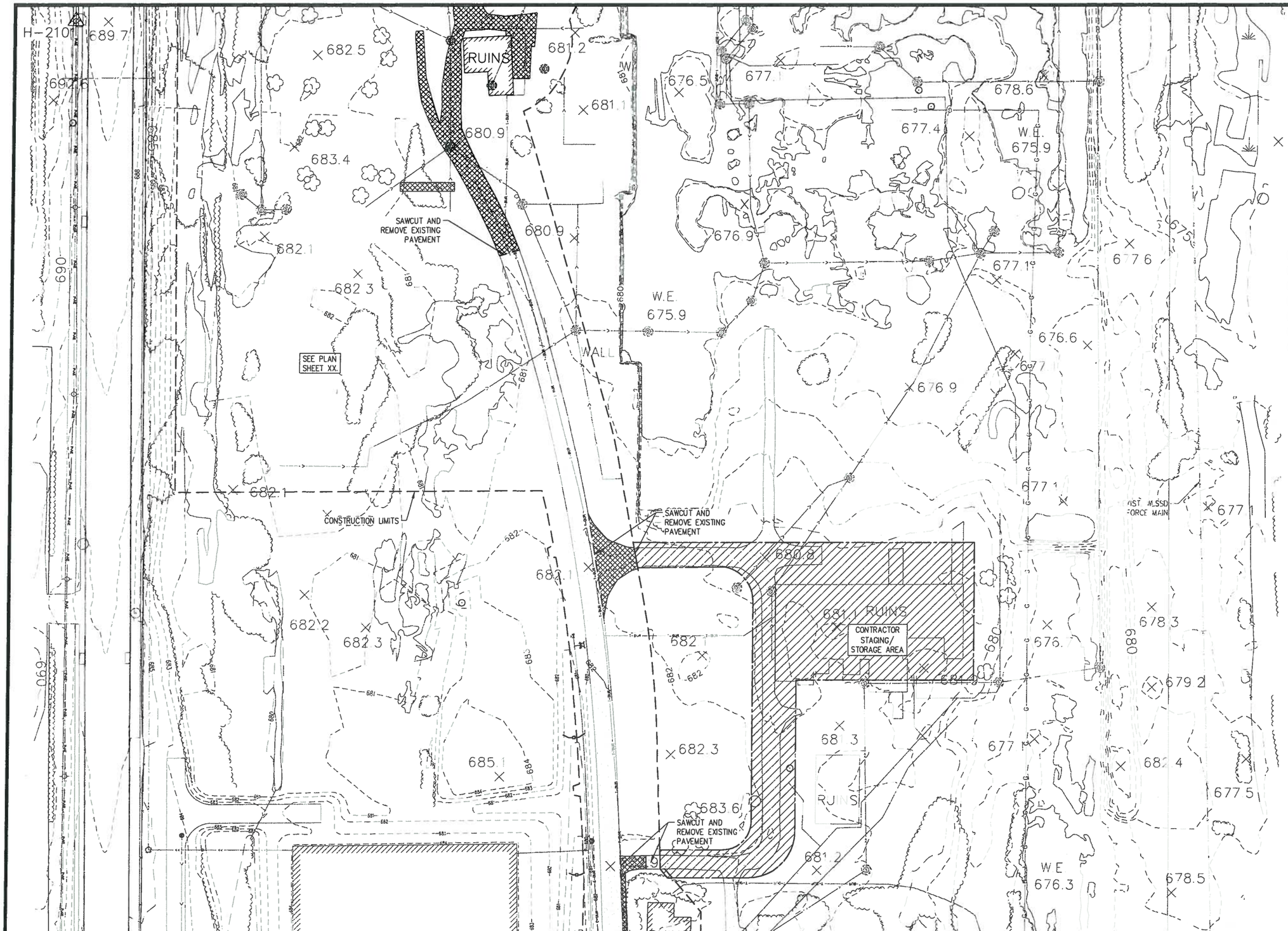
WARNING
BEFORE DIGGING
CALL 1-800-252-1166
REQUIRED BY LAW

0' 50'
SCALE 1"=50'

LEGEND

- REMOVE EXISTING PAVEMENT
- EXISTING RUINS/FOUNDATION TO BE REMOVED
- CONSTRUCTION LIMITS
- SILT FENCE
- INLET PROTECTION

CERTIFIED BY: _____ LICENSED PROFESSIONAL ENGINEER DATE	ATLAS SITE IMPROVEMENTS	DEMOLITION AND TEMPORARY EROSION CONTROL PLAN
NAME: THOMAS A. JOHNSON LIC. NO. 46744 DATE	DULUTH PROJ No. 0959 ST	SHEET No. DM1

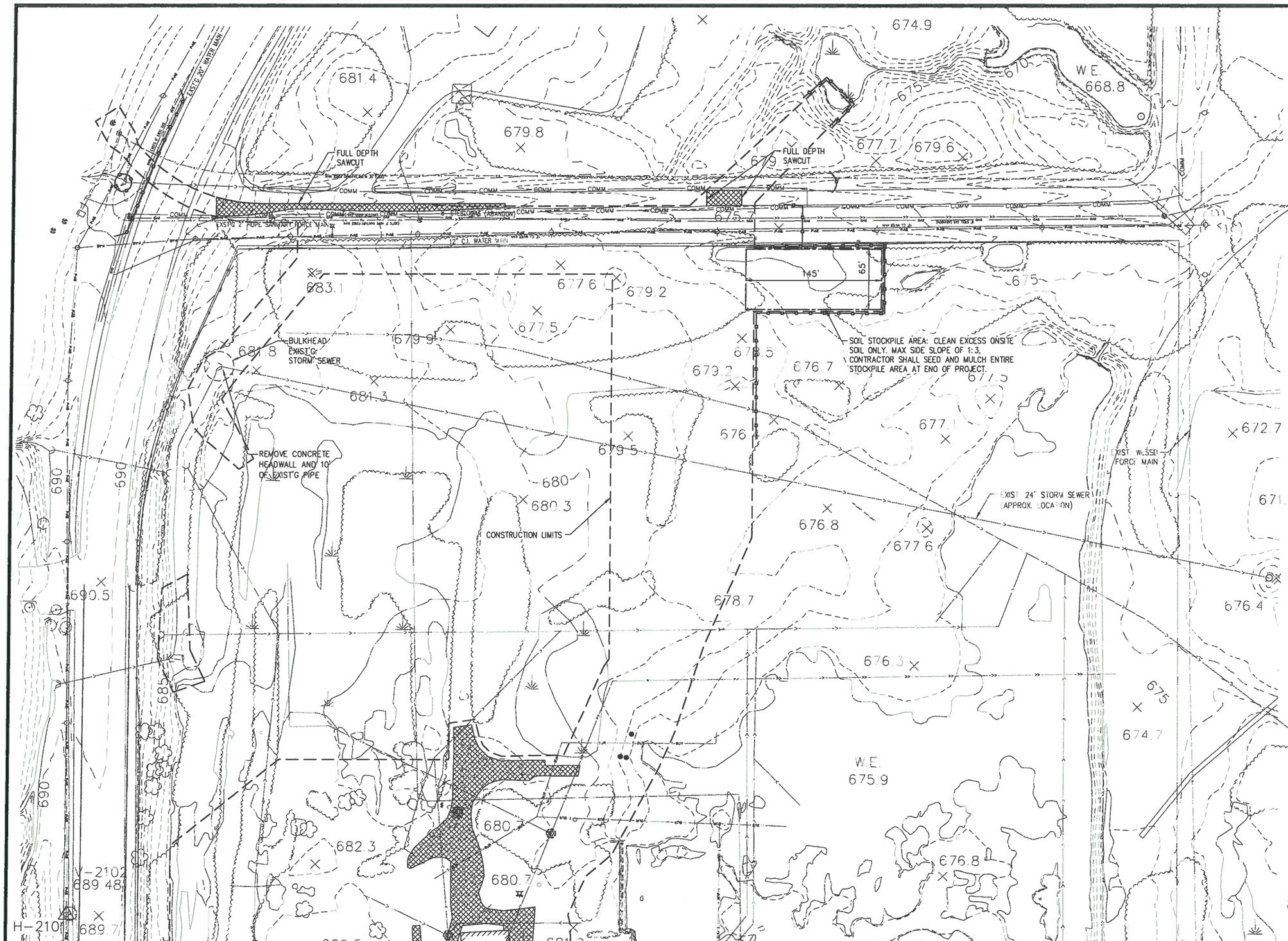


NOTES:

1. SITE CONTAINS ABANDONED IN-PLACE UTILITIES, PAVEMENTS, BUILDING SLABS, AND FOUNDATIONS. ANY OF THE ABOVE NOTED ITEMS SHOWN IN THE PLAN TO BE REMOVED TO PERFORM THE WORK SHALL BE INCLUDED IN THE BASE BID. ALL UTILITIES, PAVEMENTS, BUILDING SLABS, AND FOUNDATIONS NOT SHOWN AND REQUIRE REMOVAL FOR THE PROPOSED WORK SHALL FOLLOW ESTABLISHED PROCEDURES FOR UNIT PRICE REMOVAL ITEM.
2. CONTRACTOR SHALL CLEAR AND GRUB AS NEEDED TO COMPLETE THE WORK. ALL AREAS DISTURBED SHALL BE RESTORED PER SWPPP.
3. PROTECT EXISTING CONCRETE PAVEMENT FROM DAMAGE. UTILITY CROSSINGS SHALL BE DIRECTIONALLY DRILLED. UTILITY TRENCHING ADJACENT TO ROADWAY SHALL USE A TRENCH BOX AS NEEDED TO PREVENT DISTURBANCE TO THE CONCRETE PAVEMENT AND ITS BEARING ZONE.

THIS EROSION CONTROL PLAN AND THE SWPPP IS A STARTING POINT FOR THE PROJECT. CONTRACTOR SHALL PROVIDE ALL EROSION AND SEDIMENT CONTROL MEASURES NECESSARY TO COMPLETE THE WORK AND THE REQUIREMENTS OF THE NPDES-CA PERMIT AS DISCUSSED IN THE SWPPP. CONTRACTOR SHALL BE PROACTIVE AND INNOVATIVE TO ADDRESS THE EROSION/SEDIMENT CONTROL NEEDS OF THE PROJECT AND ADJUST/ AMEND THE SWPPP AS SITE CONDITIONS AND CONSTRUCTION METHODS DICTATE.

CERTIFIED BY: _____ LICENSED PROFESSIONAL ENGINEER	DATE	ATLAS SITE IMPROVEMENTS	DEMOLITION AND TEMPORARY EROSION CONTROL PLAN
NAME: THOMAS A. JOHNSON LIC. NO. 46744	DATE	DULUTH PROJ No. 0959 ST	SHEET No. DM2

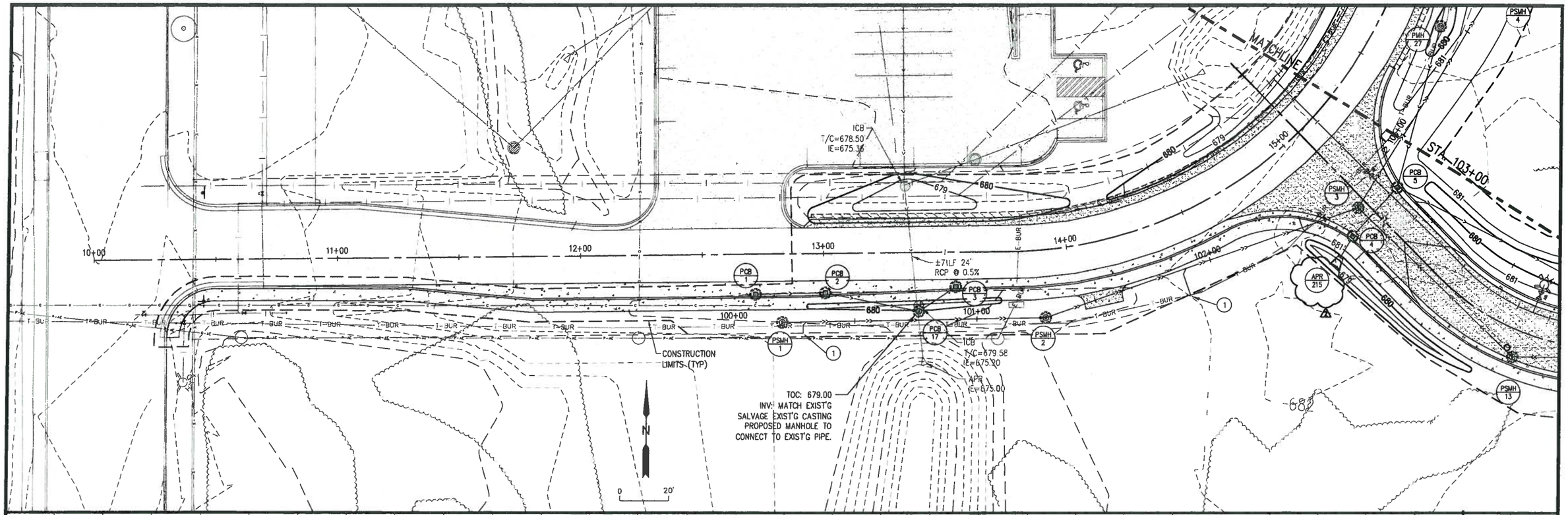


NOTES:

1. SITE CONTAINS ABANDONED IN-PLACE UTILITIES, PAVEMENTS, BUILDING SLABS, AND FOUNDATIONS. ANY OF THE ABOVE NOTED ITEMS SHOWN IN THE PLAN TO BE REMOVED TO PERFORM THE WORK SHALL BE INCLUDED IN THE BASE BID. ALL UTILITIES, PAVEMENTS, BUILDING SLABS, AND FOUNDATIONS NOT SHOWN AND REQUIRE REMOVAL FOR THE PROPOSED WORK SHALL FOLLOW ESTABLISHED PROCEDURES FOR UNIT PRICE REMOVAL ITEM.
2. CONTRACTOR SHALL CLEAR AND GRUB AS NEEDED TO COMPLETE THE WORK. ALL AREAS DISTURBED SHALL BE RESTORED PER SWPPP.
3. PROTECT EXISTING CONCRETE PAVEMENT FROM DAMAGE. UTILITY CROSSINGS SHALL BE DIRECTIONALLY DRILLED. UTILITY TRENCHING ADJACENT TO ROADWAY SHALL USE A TRENCH BOX AS NEEDED TO PREVENT DISTURBANCE TO THE CONCRETE PAVEMENT AND ITS BEARING ZONE.

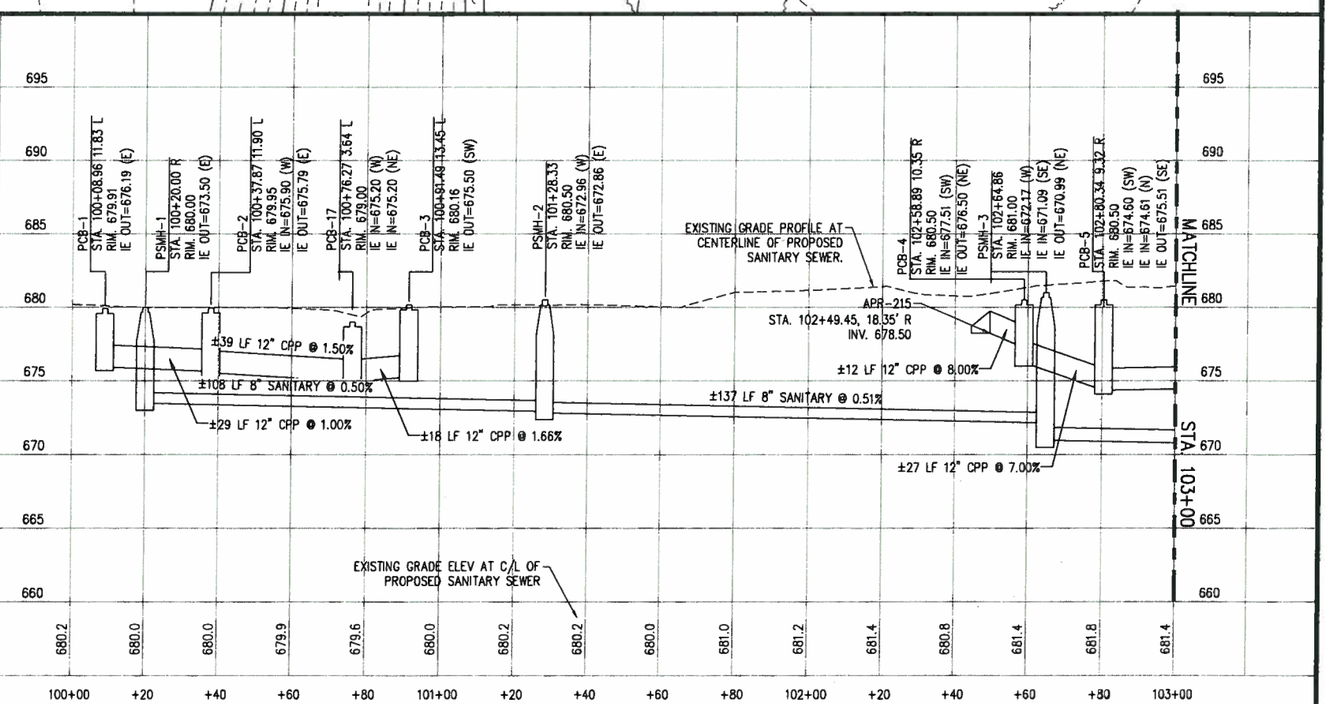
THIS EROSION CONTROL PLAN AND THE SWPPP IS A STARTING POINT FOR THE PROJECT. CONTRACTOR SHALL PROVIDE ALL EROSION AND SEDIMENT CONTROL MEASURES NECESSARY TO COMPLETE THE WORK AND THE REQUIREMENTS OF THE NPDES-CA PERMIT AS DISCUSSED IN THE SWPPP. CONTRACTOR SHALL BE PROACTIVE AND INNOVATIVE TO ADDRESS THE EROSION/SEDIMENT CONTROL NEEDS OF THE PROJECT AND ADJUST/AMEND THE SWPPP AS SITE CONDITIONS AND CONSTRUCTION METHODS DICTATE.

CERTIFIED BY: _____ LICENSED PROFESSIONAL ENGINEER DATE	ATLAS SITE IMPROVEMENTS	DEMOLITION AND TEMPORARY EROSION CONTORL PLAN
NAME: THOMAS A. JOHNSON LIC. NO. 46744 DATE	DULUTH PROJ No. 0959 ST	SHEET No. DM3

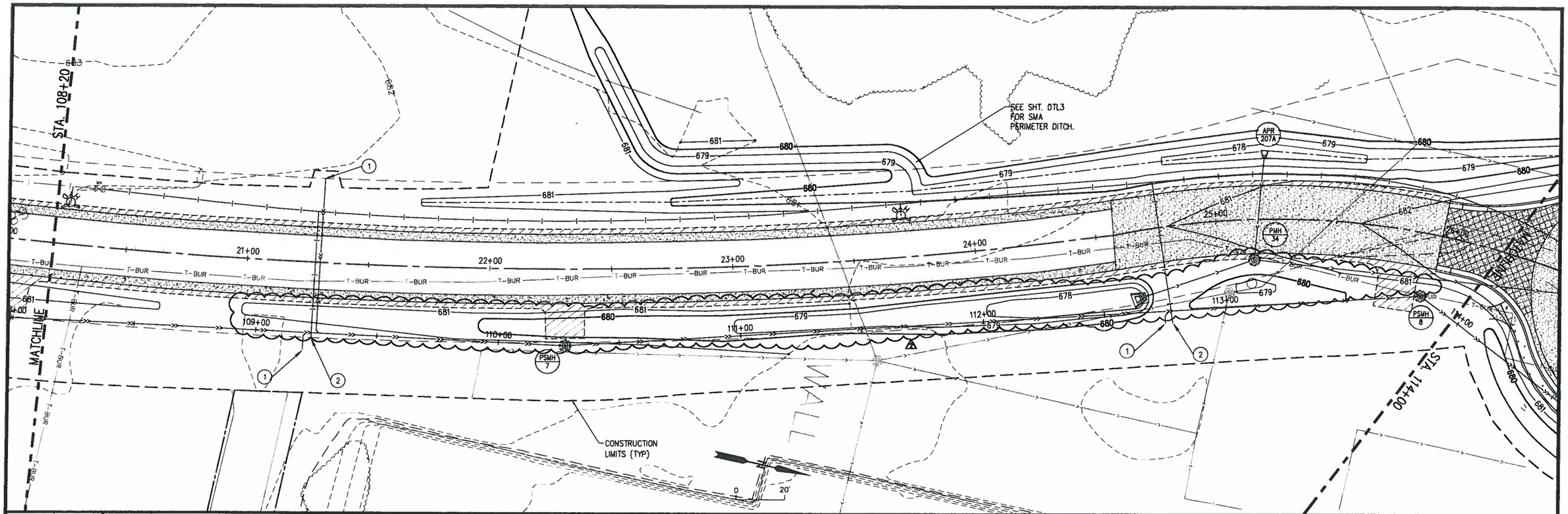


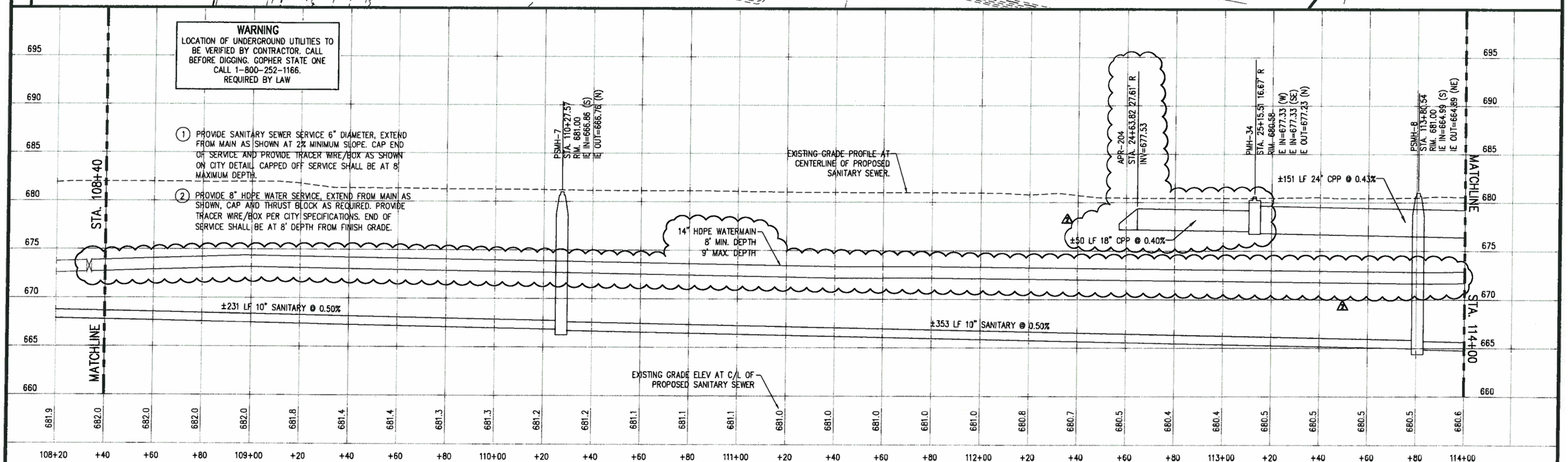
WARNING
LOCATION OF UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR. CALL BEFORE DIGGING. GOPHER STATE ONE CALL 1-800-252-1166. REQUIRED BY LAW

(1) PROVIDE SANITARY SEWER SERVICE 6" DIAMETER, EXTEND FROM MAIN AS SHOWN AT 2% MINIMUM SLOPE. CAP END OF SERVICE AND PROVIDE TRACER WIRE/BOX AS SHOWN ON CITY DETAIL. CAPPED OFF SERVICE SHALL BE AT 8' MAXIMUM DEPTH.

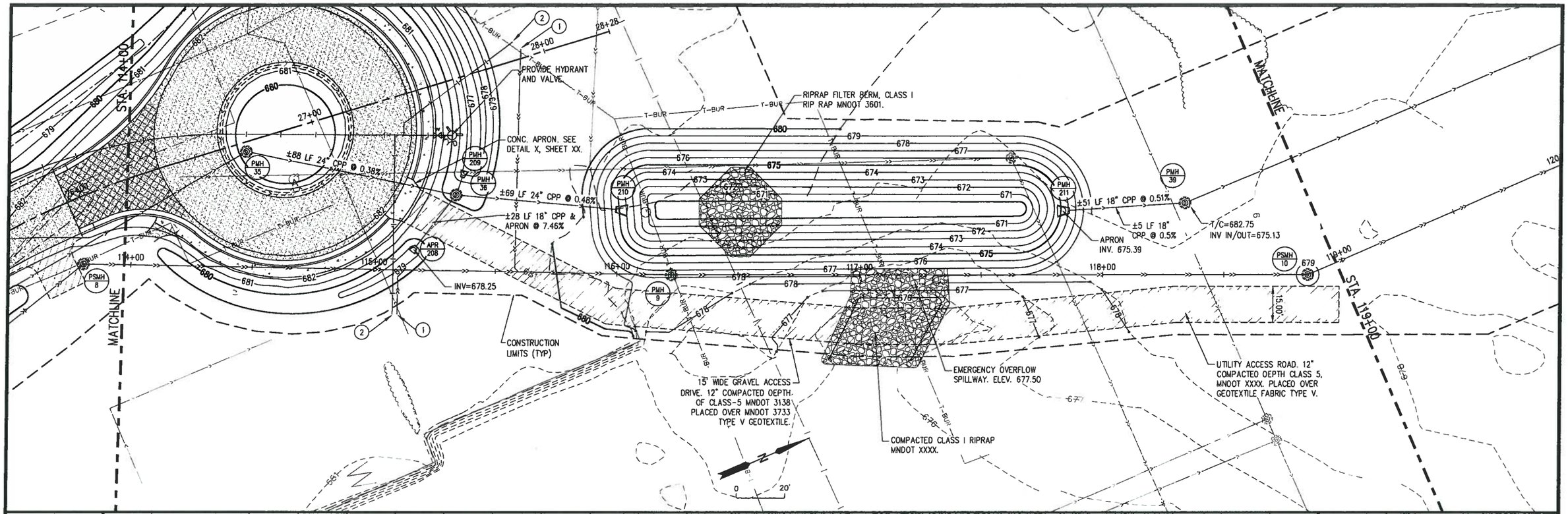


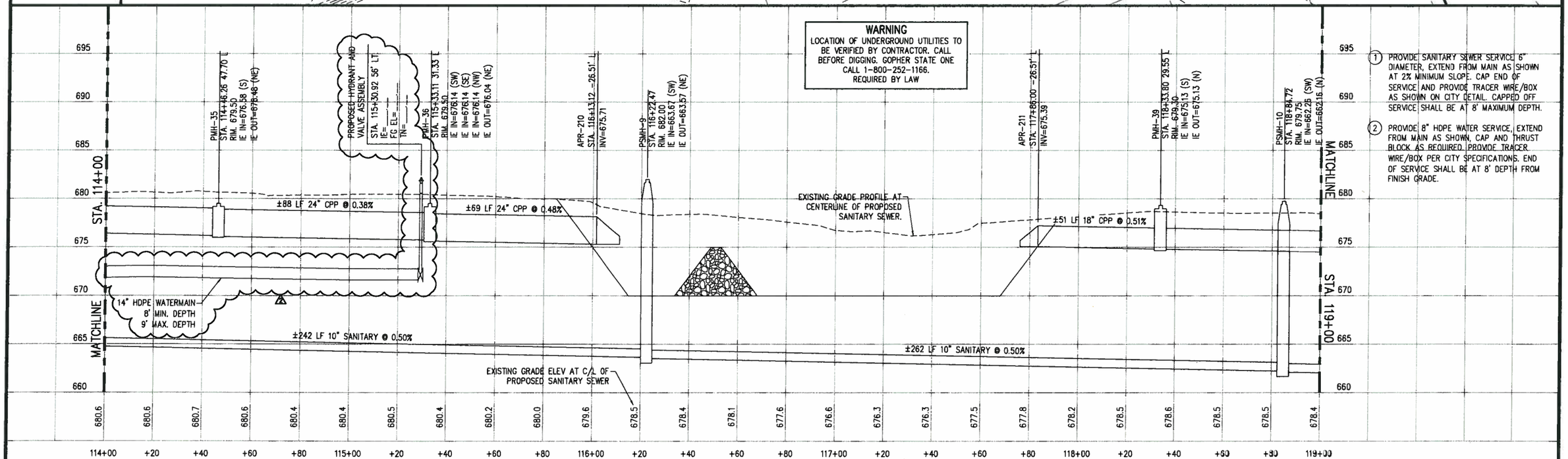
CERTIFIED BY: _____ UCENSED PROFESSIONAL ENGINEER	DATE / DATE	ATLAS SITE IMPROVEMENTS	PLAN & PROFILE – SANITARY SEWER
NAME: THOMAS A. JOHNSON	LIC. NO. 46744	DULUTH PROJ No. 0959 ST	SHEET No. PP01





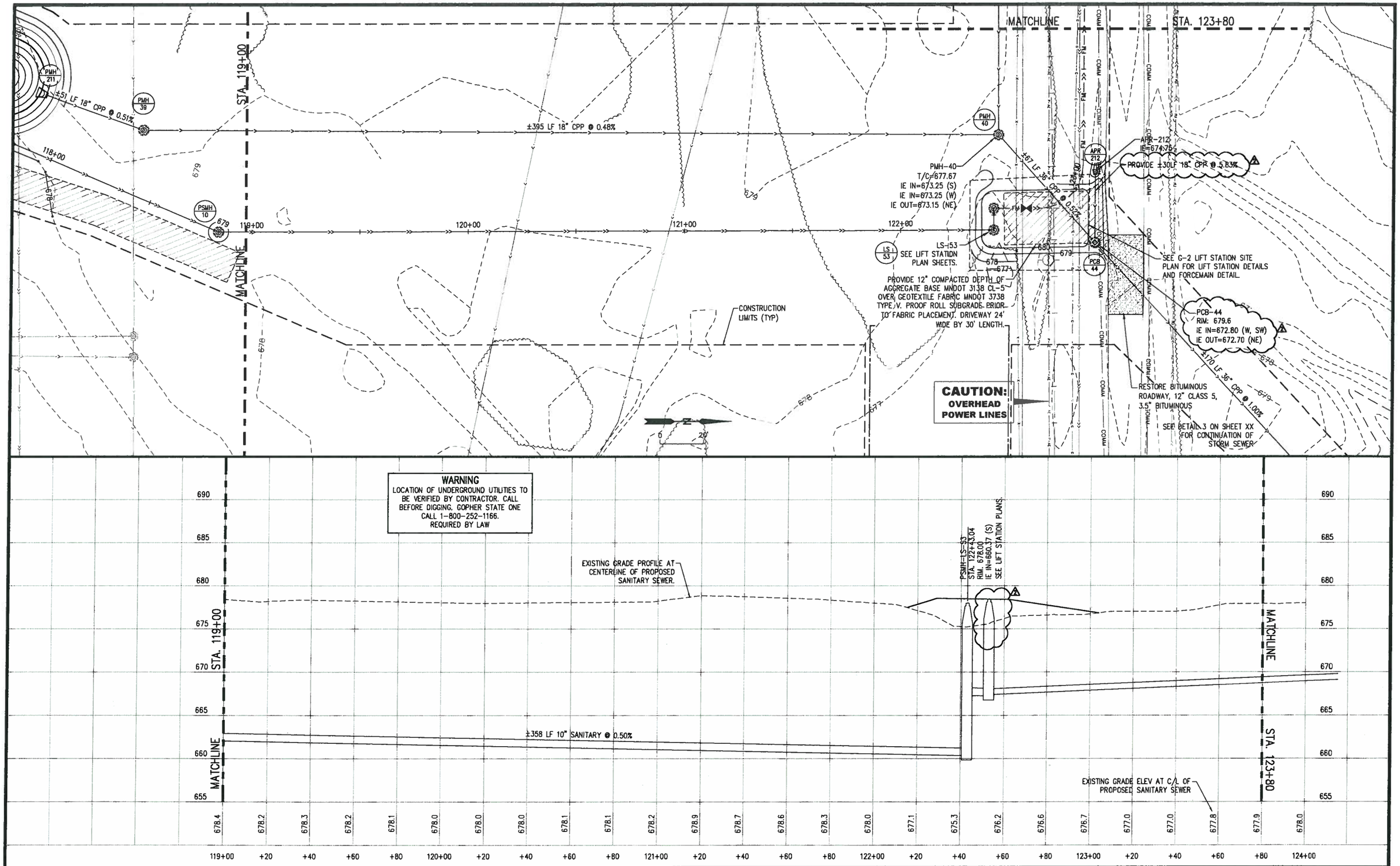
CERTIFIED BY: _____ LICENSED PROFESSIONAL ENGINEER DATE	ATLAS SITE IMPROVEMENTS	PLAN & PROFILE – SANITARY SEWER
NAME: THOMAS A. JOHNSON LIC. NO. 46744 DATE	DULUTH PROJ No. 0959 ST	SHEET No. PP03



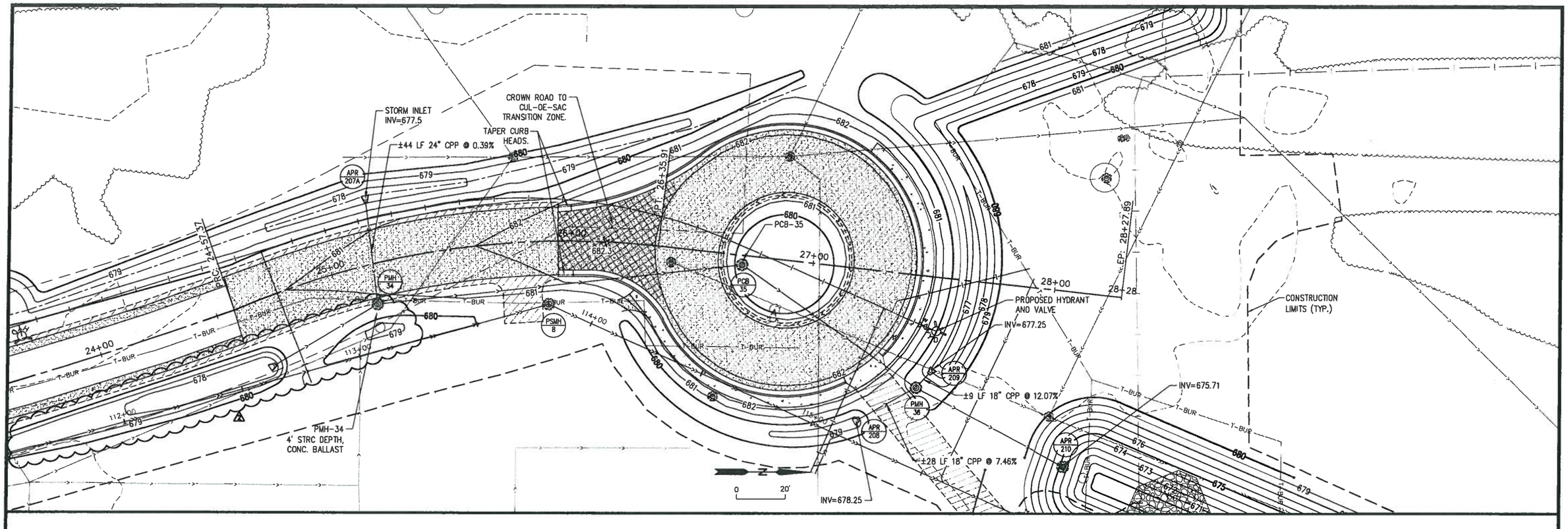


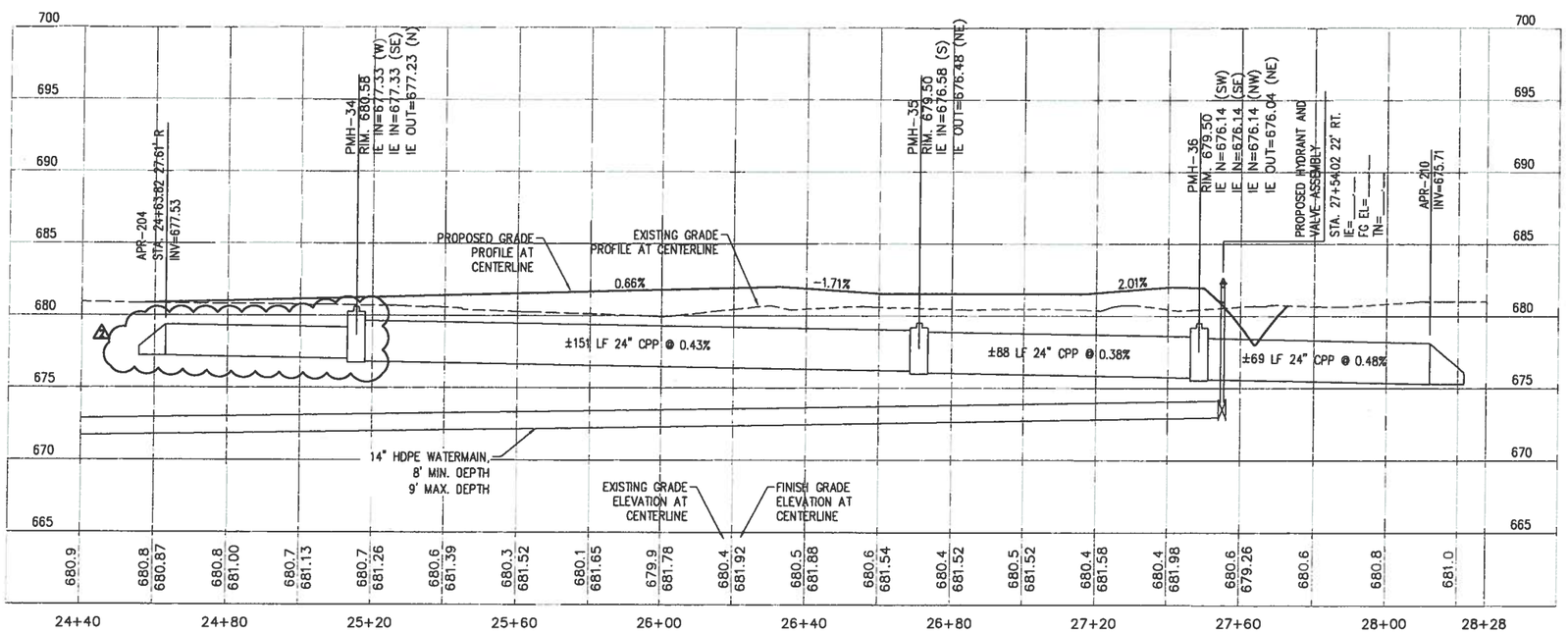
1. PROVIDE SANITARY SEWER SERVICE 6" DIAMETER, EXTEND FROM MAIN AS SHOWN AT 2% MINIMUM SLOPE. CAP END OF SERVICE AND PROVIDE TRACER WIRE/BOX AS SHOWN ON CITY DETAIL. CAPPED OFF SERVICE SHALL BE AT 8' MAXIMUM DEPTH.
2. PROVIDE 8" HDPE WATER SERVICE, EXTEND FROM MAIN AS SHOWN, CAP AND THRUST BLOCK AS REQUIRED. PROVIDE TRACER WIRE/BOX PER CITY SPECIFICATIONS. END OF SERVICE SHALL BE AT 8' DEPTH FROM FINISH GRADE.

CERTIFIED BY: _____ LICENSED PROFESSIONAL ENGINEER DATE _____ DATE	ATLAS SITE IMPROVEMENTS	PLAN & PROFILE – SANITARY SEWER
NAME: THOMAS A. JOHNSON LIC. NO. 46744	DULUTH PROJ No. 0959 ST	SHEET No. PP04

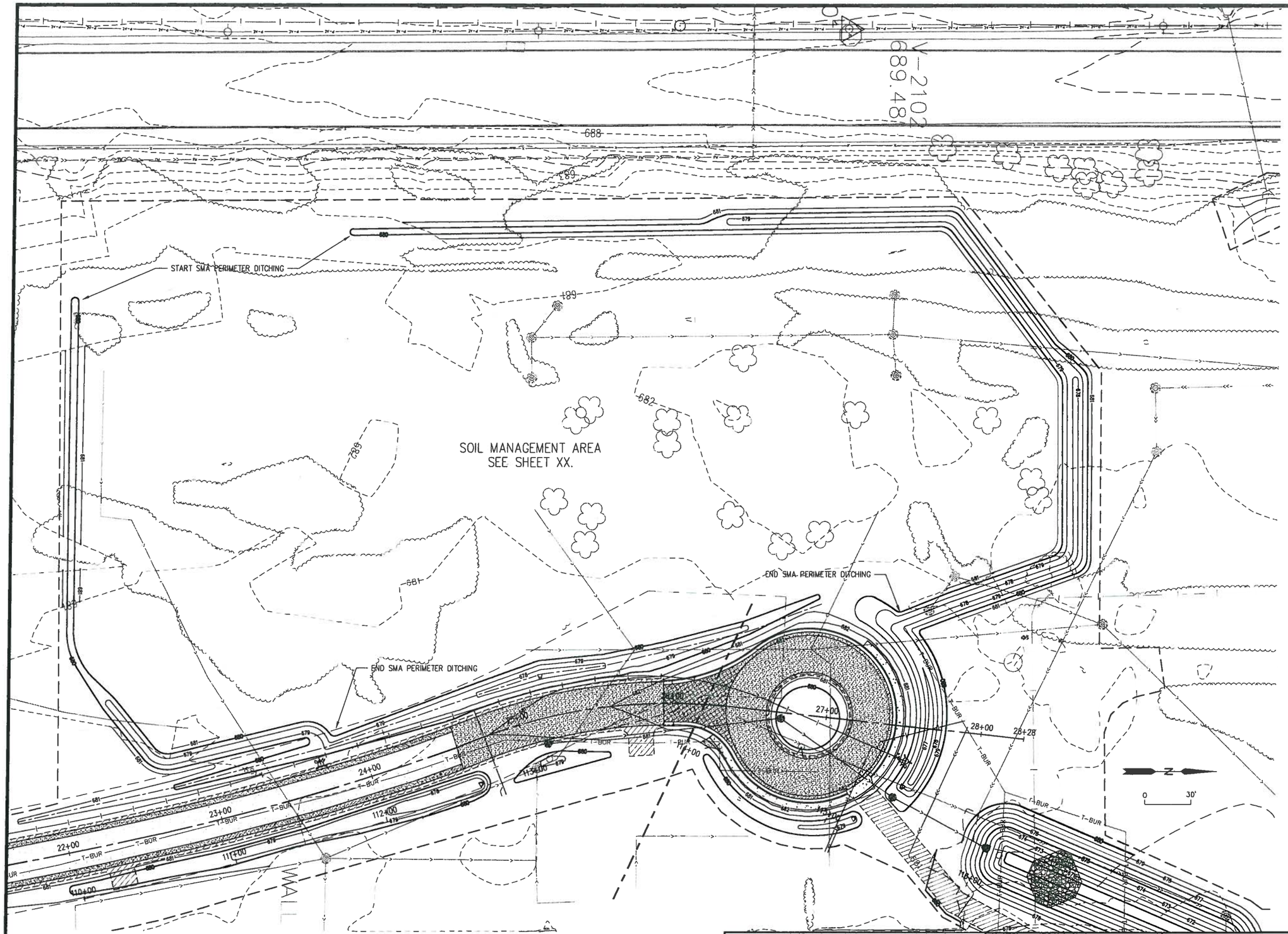


CERTIFIED BY: _____ LICENSED PROFESSIONAL ENGINEER	DATE	ATLAS SITE IMPROVEMENTS	PLAN & PROFILE – SANITARY SEWER
NAME: THOMAS A. JOHNSON	LIC. NO. 46744 DATE	DULUTH PROJ No. 0959 ST	SHEET No. PP05





CERTIFIED BY: _____ LICENSED PROFESSIONAL ENGINEER	DATE	ATLAS SITE IMPROVEMENTS	PLAN & PROFILE – NORTH CUL-DE-SAC
NAME: THOMAS A. JOHNSON	LIC. NO. 46744	DULUTH PROJ No. 0959 ST	SHEET No. PP09

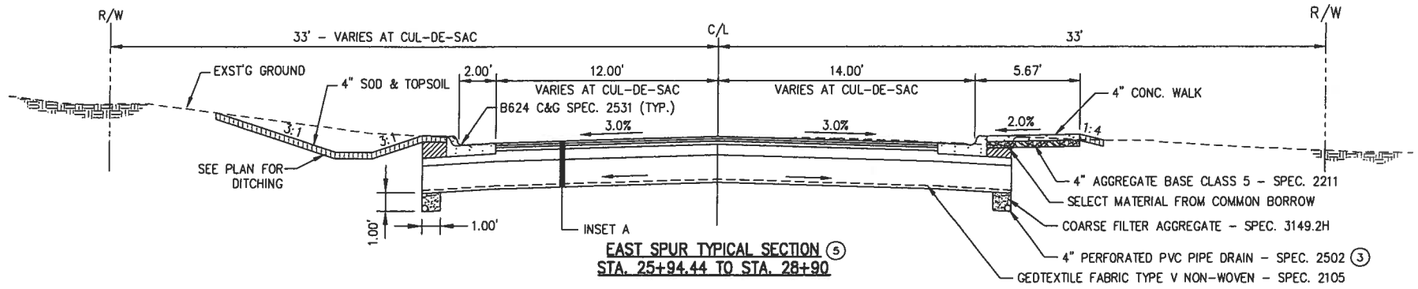


NOTES:

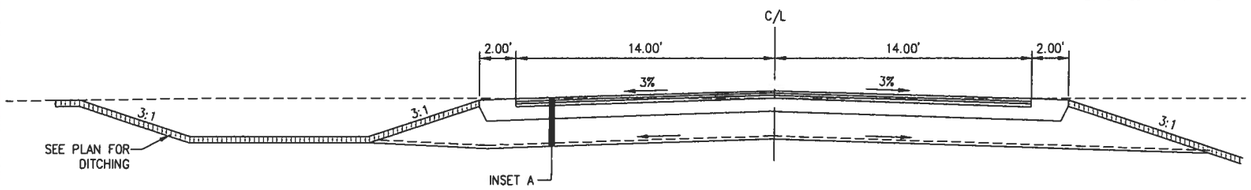
SMA – PERIMETER DITCHING:
DITCH: 1:3 SIDE SLOPES (MAX)
4' DITCH BOTTOM WIDTH
SEED MIX AND EROSION CONTROL BLANKET CAT. 3

ALL DISTURBED SOILS TO BE RESTORED. ALL SOIL EXCAVATED FOR DITCH SHALL BE PLACED AND SPREAD IN SMA BOUNDED BY DITCH.

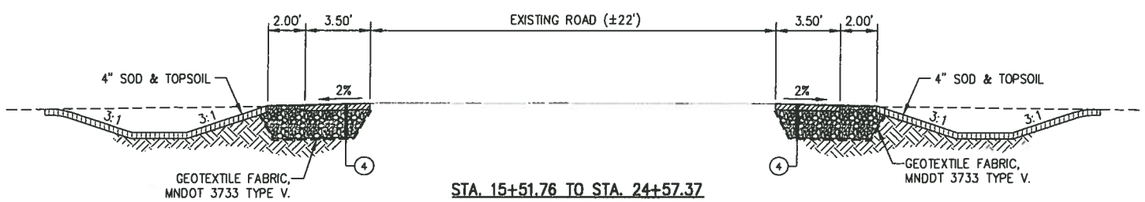
CERTIFIED BY: _____ LICENSED PROFESSIONAL ENGINEER DATE	ATLAS SITE IMPROVEMENTS	SMA PERIMETER DITCH
NAME: THOMAS A. JOHNSON LIC. NO. ????? DATE	DULUTH PROJ No. Add Project Path Here	SHEET No. DTL3 OF SHEETS



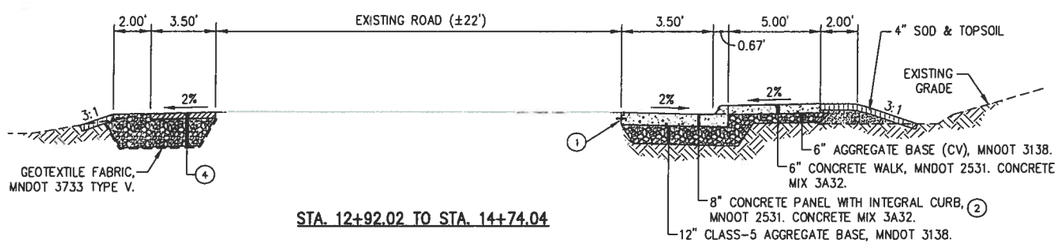
EAST SPUR TYPICAL SECTION (5)
STA. 25+94.44 TO STA. 28+90



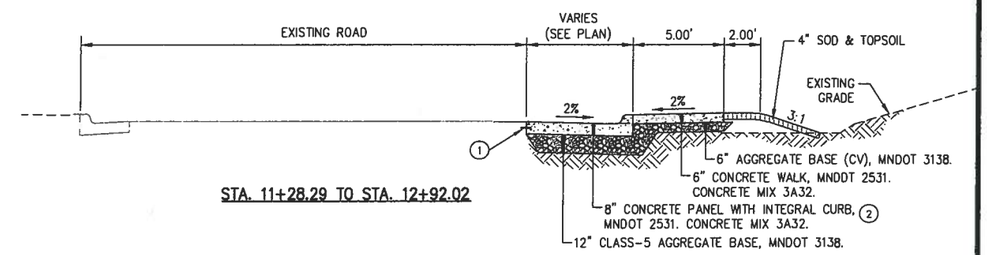
STA. 24+57.37 TO STA. 25+94.44



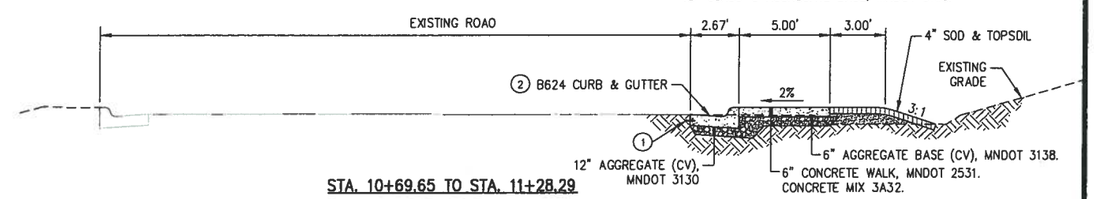
STA. 15+51.76 TO STA. 24+57.37



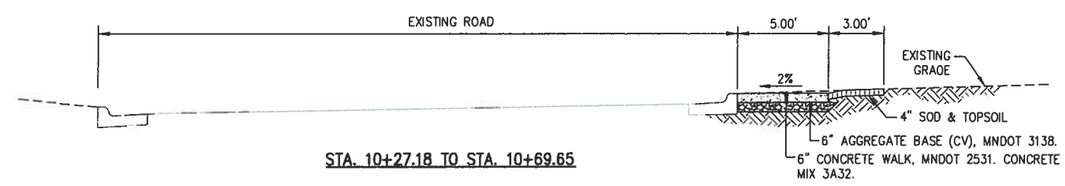
STA. 12+92.02 TO STA. 14+74.04



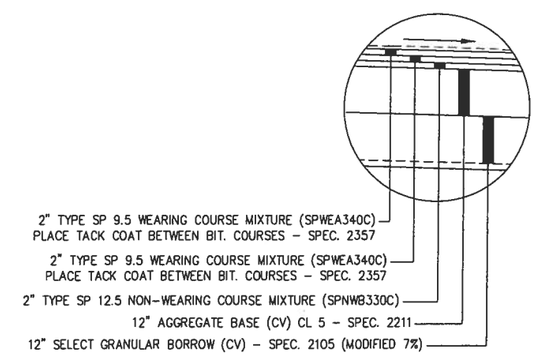
STA. 11+28.29 TO STA. 12+92.02



STA. 10+69.65 TO STA. 11+28.29



STA. 10+27.18 TO STA. 10+69.65



INSET A

KEYED NOTES:

(1) EXPOXY COATED DOWEL BARS DRILLED 10" INTO EXISTING CONCRETE PAVEMENT, 3 DOWEL BARS PER CONCRETE PANEL.

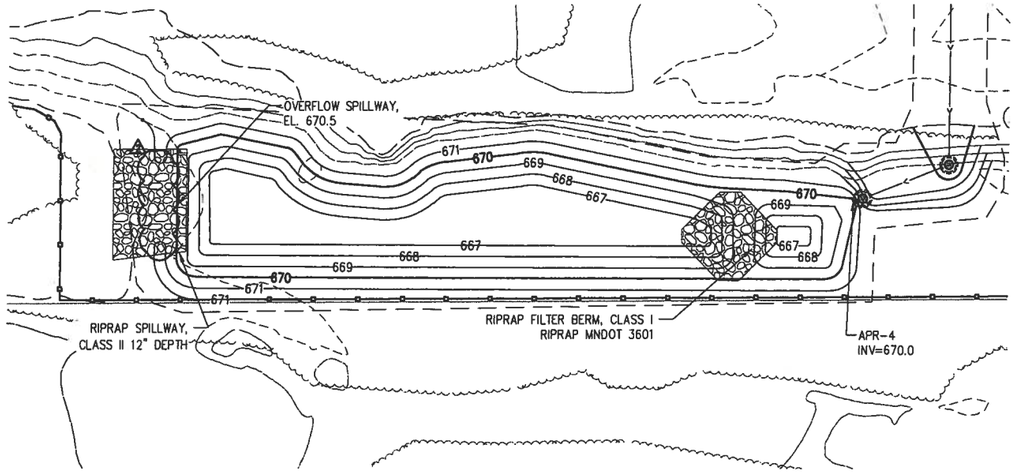
(2) PROVIDE JOINTING TO MATCH ADJACENT JOINTS OF EXISTING CONCRETE PAVEMENT.

(3) CONNECT SUBDRAINS TO DOWNGRADIENT CATCH BASIN INLETS.

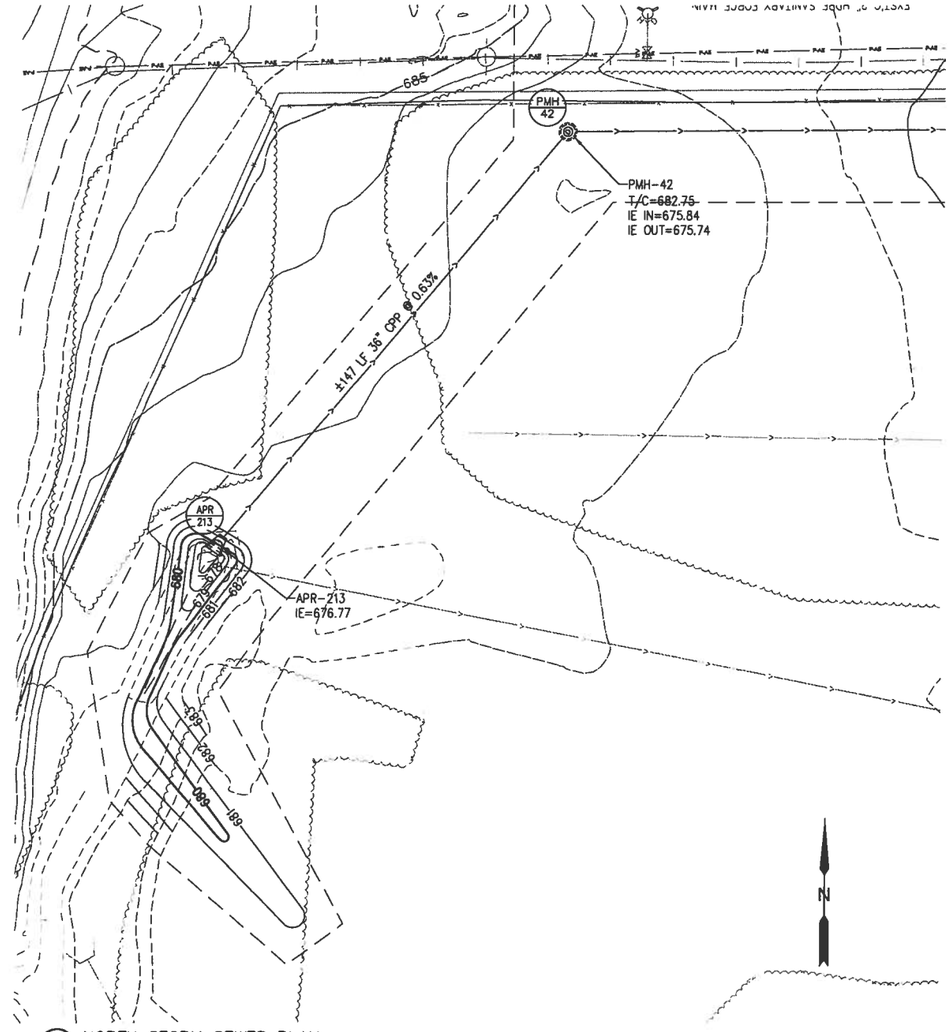
(4) ROAD WIDENING - NICK GLUMAC DRIVE
- 2" TYPE SP 9.5 WEARING COURSE MIXTURE (SPWEA340C), PLACE TACK COAT BETWEEN BIT. COURSES - SPEC. 2357
- 2" TYPE SP 9.5 WEARING COURSE MIXTURE (SPWEA340C), PLACE TACK COAT BETWEEN BIT. COURSES - SPEC. 2357
- 2" TYPE SP 12.5 NON-WEARING COURSE MIXTURE (SPNWB330C)
- 18" CLASS-5 AGGREGATE BASE, MNDOT 2211

(5) SEE PLAN/PROFILE VIEW FOR GRADES AND ROAD CROSS SLOPE, SUBGRADE SLOPE TO MATCH.

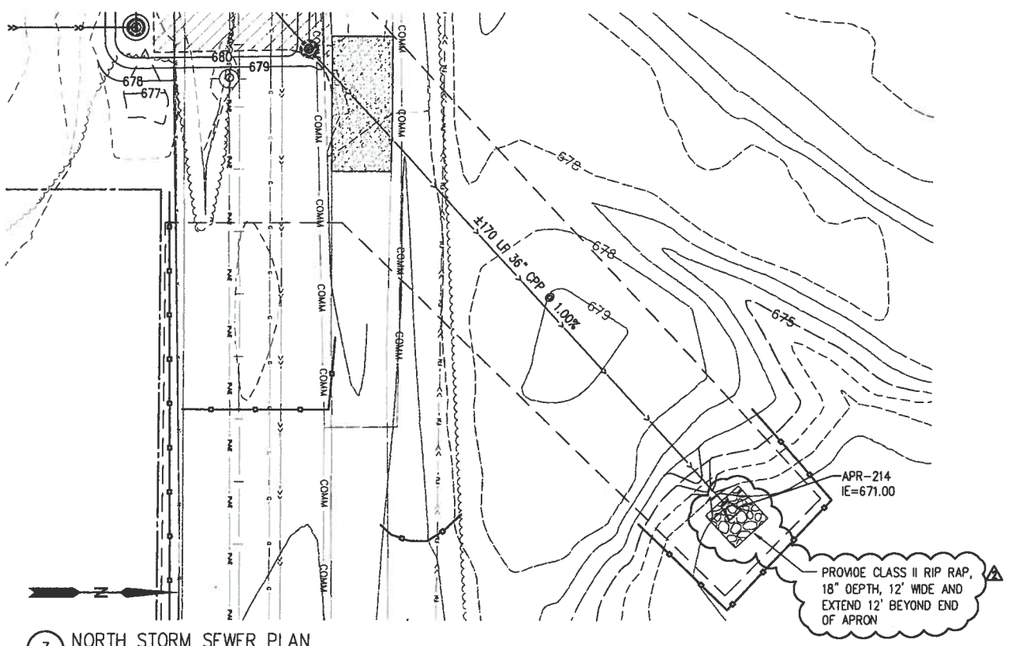
CERTIFIED BY: _____ LICENSED PROFESSIONAL ENGINEER DATE	ATLAS SITE IMPROVEMENTS	TYPICAL SECTIONS	
NAME: THOMAS A. JOHNSON LIC. NO. 46744 DATE	DULUTH PROJ No. 0959 ST	SHEET No. DTL4	



1 EAST SPUR STORMWATER BASIN
1" - 20' [FULL SCALE]



2 NORTH STORM SEWER PLAN
1" - 20' [FULL SCALE]



3 NORTH STORM SEWER PLAN
1" - 20' [FULL SCALE]

CERTIFIED BY: _____ LICENSED PROFESSIONAL ENGINEER	DATE	ATLAS SITE IMPROVEMENTS	CONSTRUCTION DETAILS
NAME: THOMAS A. JOHNSON	LIC. NO. 46744	DULUTH PROJ No. 0959 ST	SHEET No. DTL5