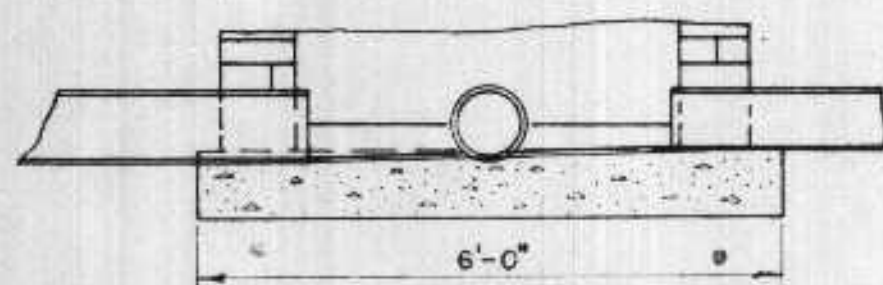
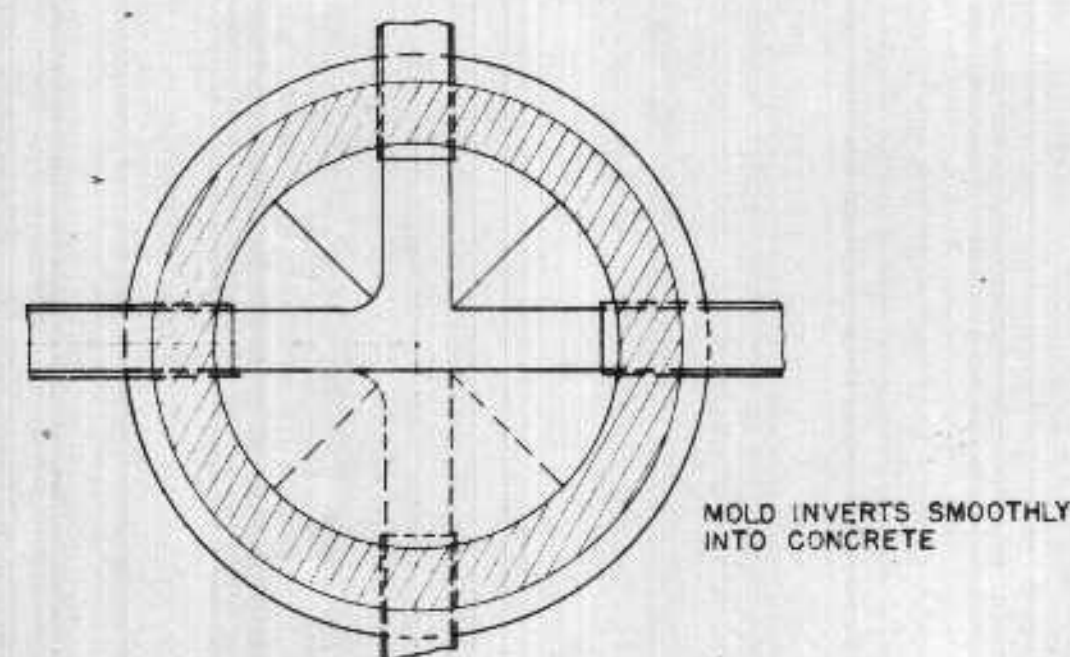


DETAIL OF MANHOLE - SEWER STRAIGHT THROUGH



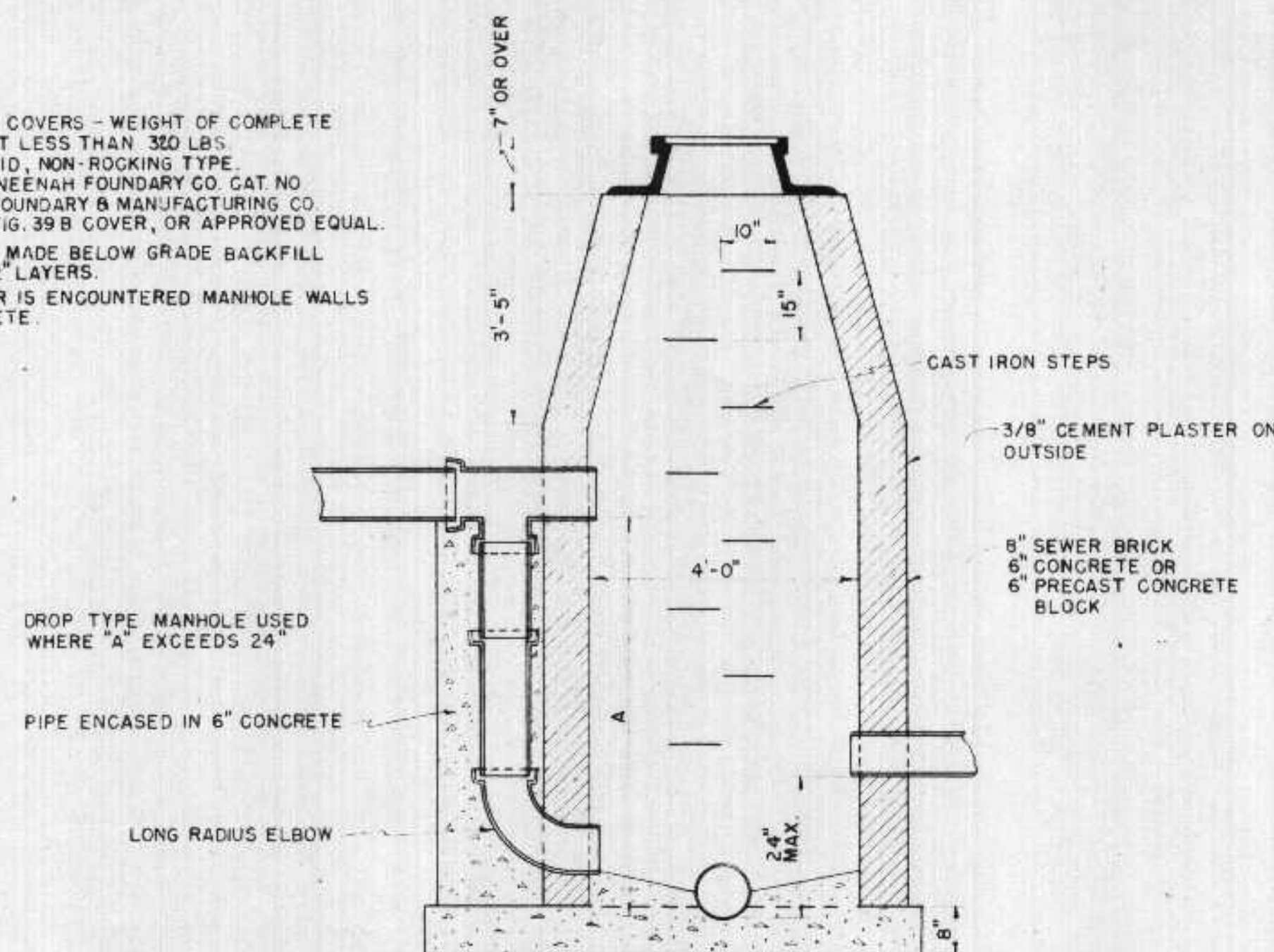
ALTERNATE DETAIL OF BOTTOM FOR BRANCH SEWERS



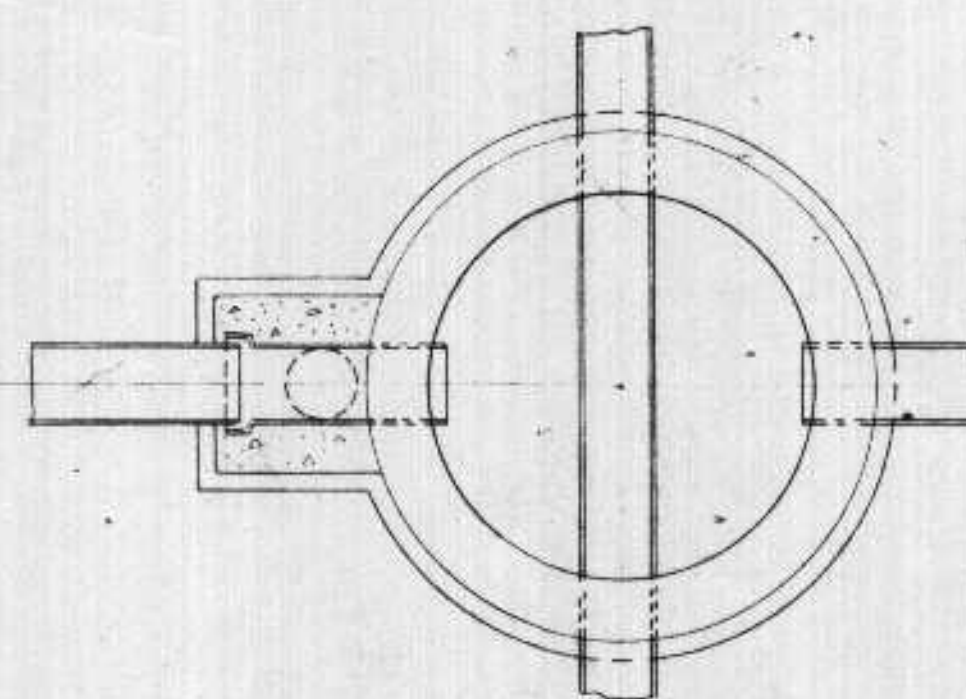
HORIZONTAL SECTION FOR BRANCH SEWERS

NOTES:

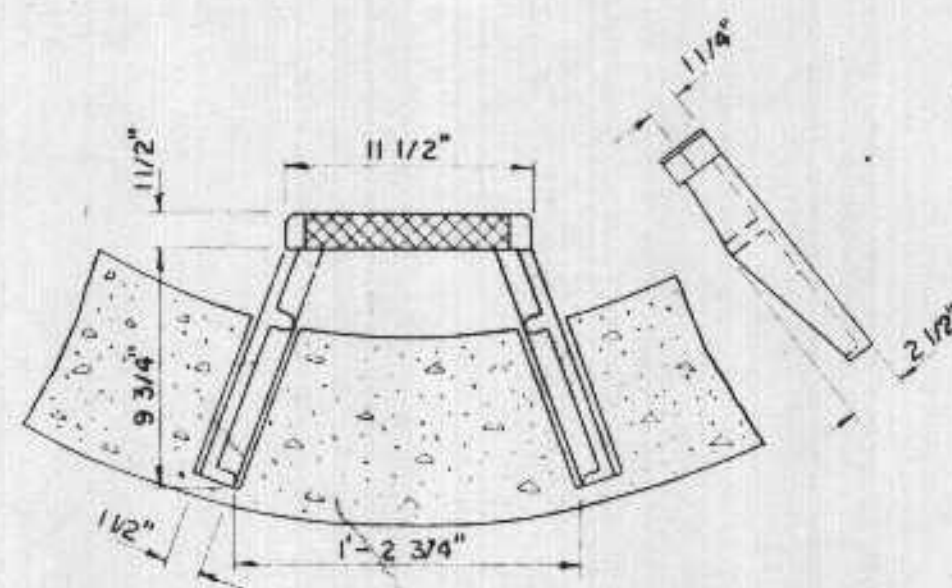
1. MANHOLE FRAMES & COVERS - WEIGHT OF COMPLETE ASSEMBLY TO BE NOT LESS THAN 300 LBS. COVER SHALL BE SOLID, NON-ROCKING TYPE. CASTINGS SHALL BE NEENAH FOUNDRY CO. CAT. NO. R 1077, OR ST. PAUL FOUNDRY & MANUFACTURING CO. FIG. 38-A1 FRAME & FIG. 39-B COVER, OR APPROVED EQUAL.
2. WHERE EXCAVATION IS MADE BELOW GRADE BACKFILL MUST BE TAMPED IN 12" LAYERS.
3. WHERE GROUND WATER IS ENCOUNTERED MANHOLE WALLS SHALL BE 12" CONCRETE.



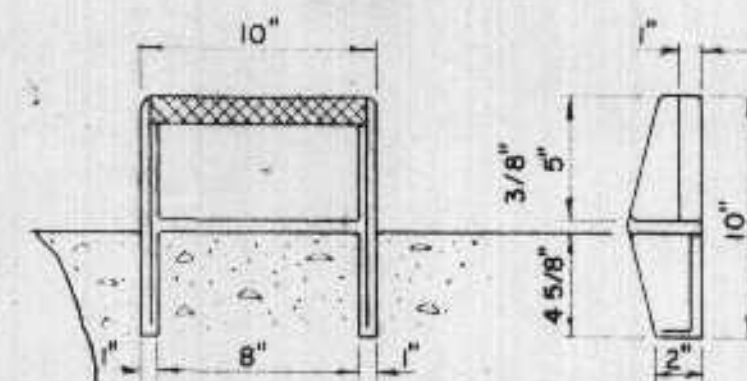
DETAIL OF DROP MANHOLE



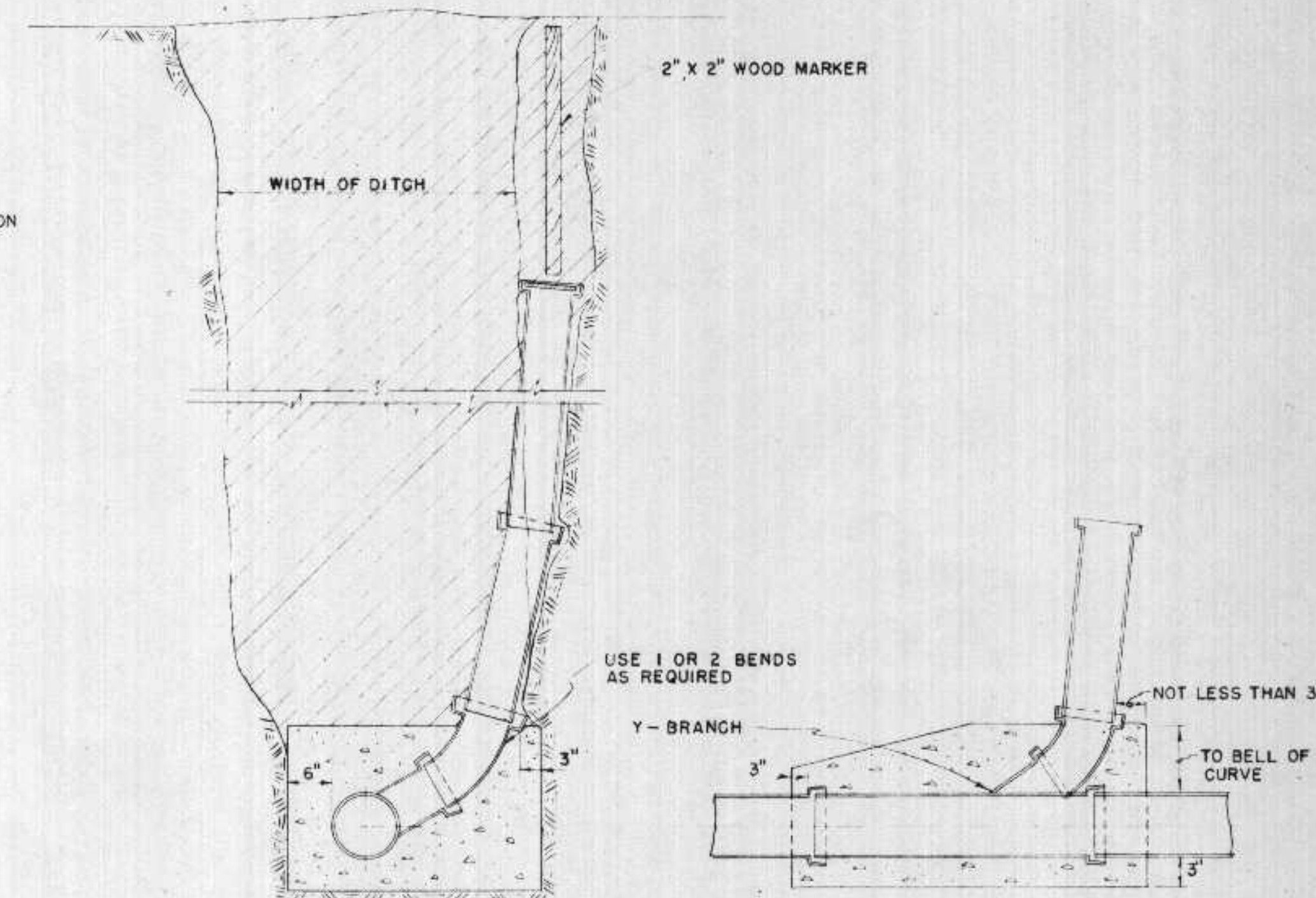
PLAN VIEW



CAST IRON MANHOLE STEP FOR CONCRETE BLOCK WALLS  
CLOW F-3660 OR APPROVED EQUAL



CAST IRON MANHOLE STEP FOR BRICK OR CONCRETE WALLS  
CLOW F-3650 OR APPROVED EQUAL



VERTICAL SECTION

LONGITUDINAL SECTION

METHOD OF SUPPORTING RISERS

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE

These Plans and Specifications submitted in connection with an Application for a permit under the construction of a sanitary sewer under the provisions of the Federal Water Pollution Control Act and the Act of 1907 and the regulations promulgated thereunder have been reviewed.

(Reviewing Engineer) \_\_\_\_\_ (Date) \_\_\_\_\_  
and are herewith APPROVED

(Regional Engineer) \_\_\_\_\_ (Date) \_\_\_\_\_  
Region V, Chicago, Illinois

EXAMINED and reported upon by the Section on Environmental Sanitation

O. J. MUEGGE  
State Sanitary Engineer

APPROVED by the State Board of Health, as required by Wisconsin Statutes, subject to conditions set forth in the letter of approval

JUL 6 1956  
CARL N. NEUPERT, M. D.  
State Health Officer

Verification *[Signature]*

REVISIONS		
DATE	DESCRIPTION	BY

SANITARY SEWER  
STANDARD DETAILS

SUPERIOR - WISCONSIN

HITCHCOCK & ESTABROOK, INC.  
CONSULTING ENGINEERS

300 LINCOLN BLDG.  
MINNEAPOLIS 1, MINN.

DR. TR.  
LEN JSS

CHKD. APPD.  
S.J.N. V.J.

DATE: 8-19-53 SCALE: As Shown

JOB NO.  
400

SHEET NO.  
3 OF 71



# CITY OF SUPERIOR, WISCONSIN DEPARTMENT OF PUBLIC WORKS

## PLANS FOR THE CONSTRUCTION OF CONTRACT 1

### EAST 2ND STREET RELIEF SEWER

CITY OF SUPERIOR

HERBERT W. BERGSON  
MAYOR

CONSOER TOWNSEND & ASSOCIATES

THOMAS L. NOERENBERG, P.E.  
NO. E-23049

DEPT. OF PUBLIC WORKS

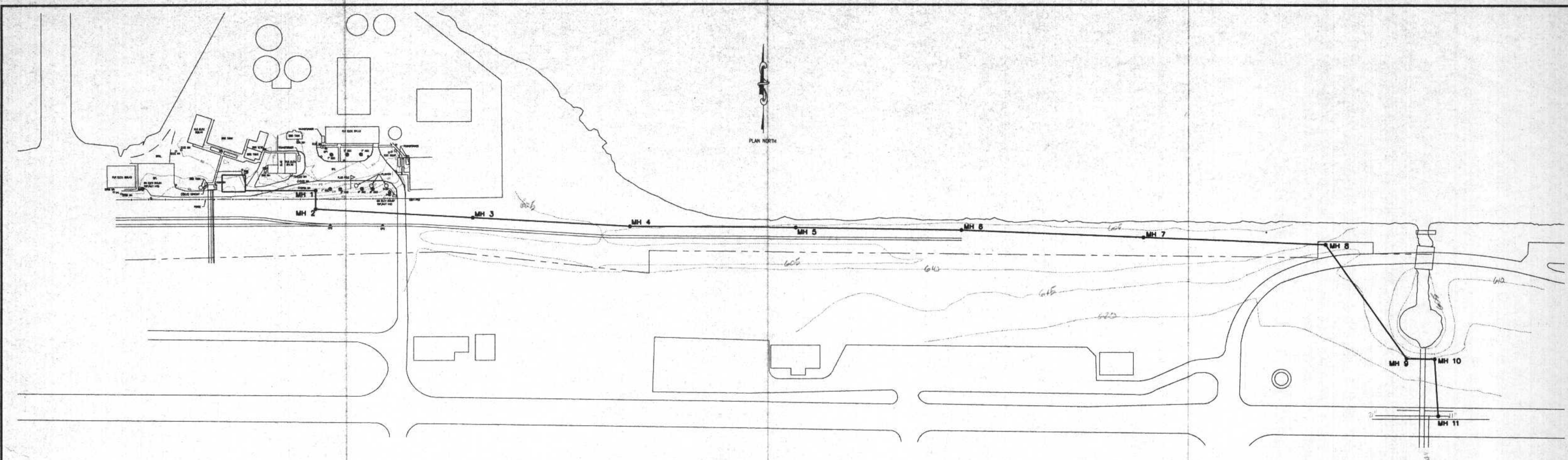
JEFF VITO  
DIRECTOR

MARK DRAKE  
SUPERINTENDENT


PRELIMINARY

APR 11 1994





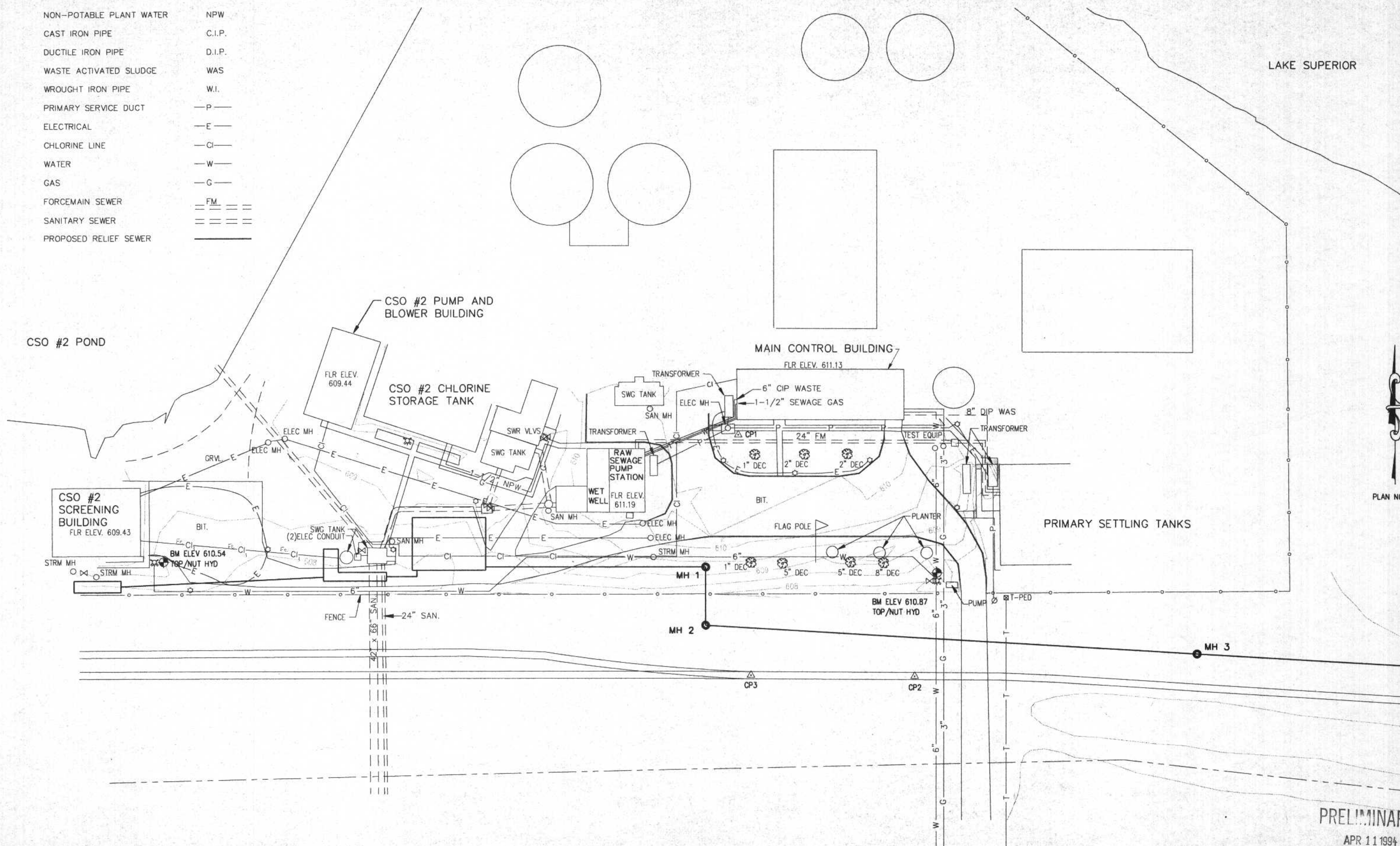
PRELIMINARY  
APR 11 1994

DESIGNED TN		SCALE	DEPARTMENT OF PUBLIC WORKS CITY OF SUPERIOR, WISCONSIN		SHEET OF SHEETS
DRAWN LED					
CHECKED					
DATE APRIL 1994					
REVISIONS				CT&A PROJECT NO.	



**LEGEND**

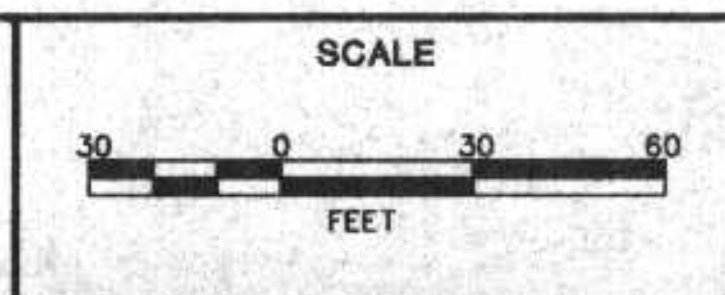
NON-POTABLE PLANT WATER	NPW
CAST IRON PIPE	C.I.P.
DUCTILE IRON PIPE	D.I.P.
WASTE ACTIVATED SLUDGE	WAS
WROUGHT IRON PIPE	W.I.
PRIMARY SERVICE DUCT	-P-
ELECTRICAL	-E-
CHLORINE LINE	-Cl-
WATER	-W-
GAS	-G-
FORCEMAIN SEWER	FM
SANITARY SEWER	San
PROPOSED RELIEF SEWER	SR



PRELIMINARY  
APR 11 1994

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED TN  
DRAWN LED  
CHECKED  
DATE APRIL, 1994



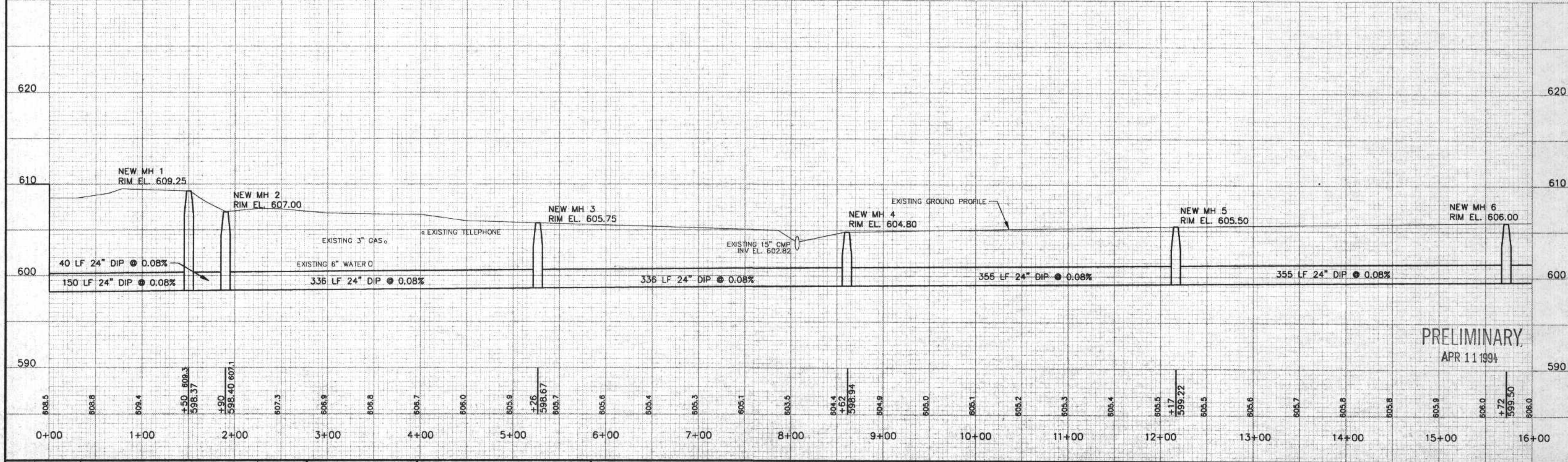
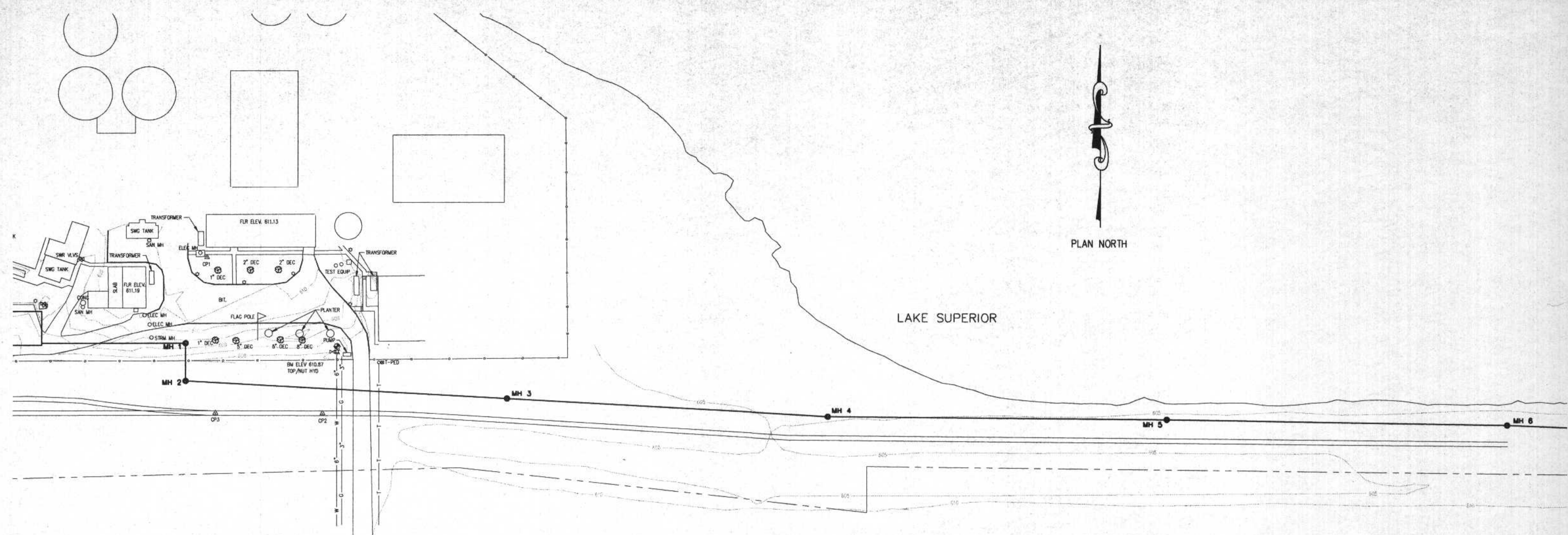
DEPARTMENT OF PUBLIC WORKS  
CITY OF SUPERIOR, WISCONSIN

**CONSON**  
ENGINEERING PLANNING MANAGEMENT  
2855 ANTHONY LANE SOUTH, SUITE 145  
MINNEAPOLIS, MN. 55418-3255

SUPERIOR WASTEWATER TREATMENT PLANT  
UNDERGROUND UTILITY SITE MAP

SHEET OF SHEETS  
RECORD MAP NO. CT&A PROJECT NO. 3899-00





P:\SUPERIOR\RELIEF\SR\F1.DWG Plotted on 4/8/1994 @ 8:28 A.M. by ACAD1

PRELIMINARY  
APR 11 1994

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED TN  
DRAWN LED  
CHECKED  
DATE APRIL, 1994

SCALE  
1" = 5' VERTICAL  
1" = 50' HORIZONTAL

DEPARTMENT OF PUBLIC WORKS  
CITY OF SUPERIOR, WISCONSIN

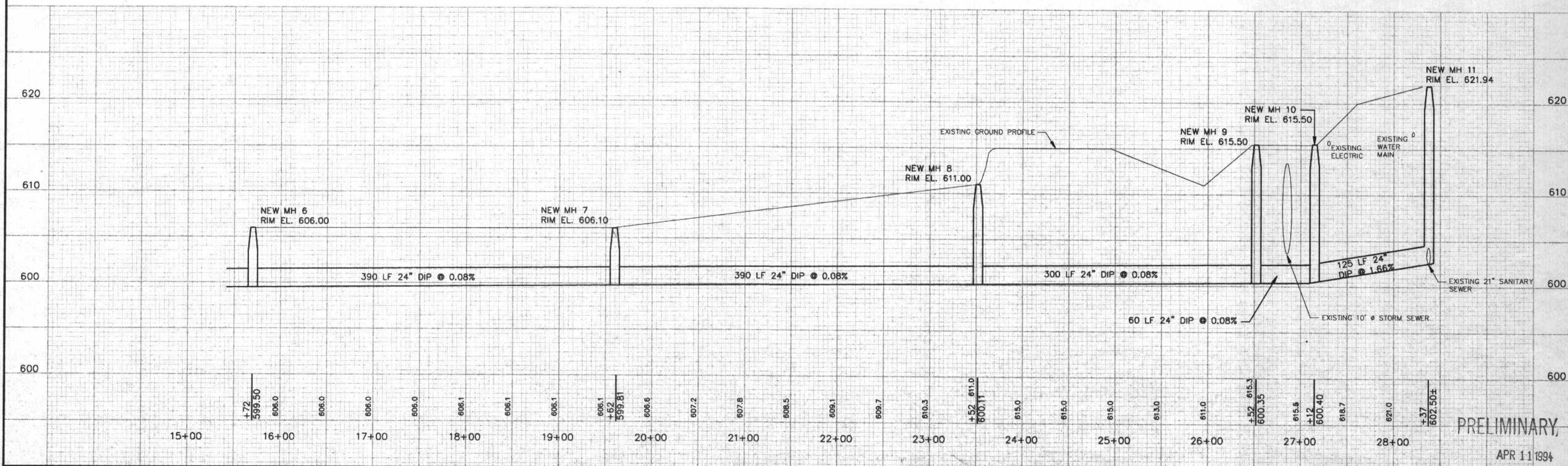
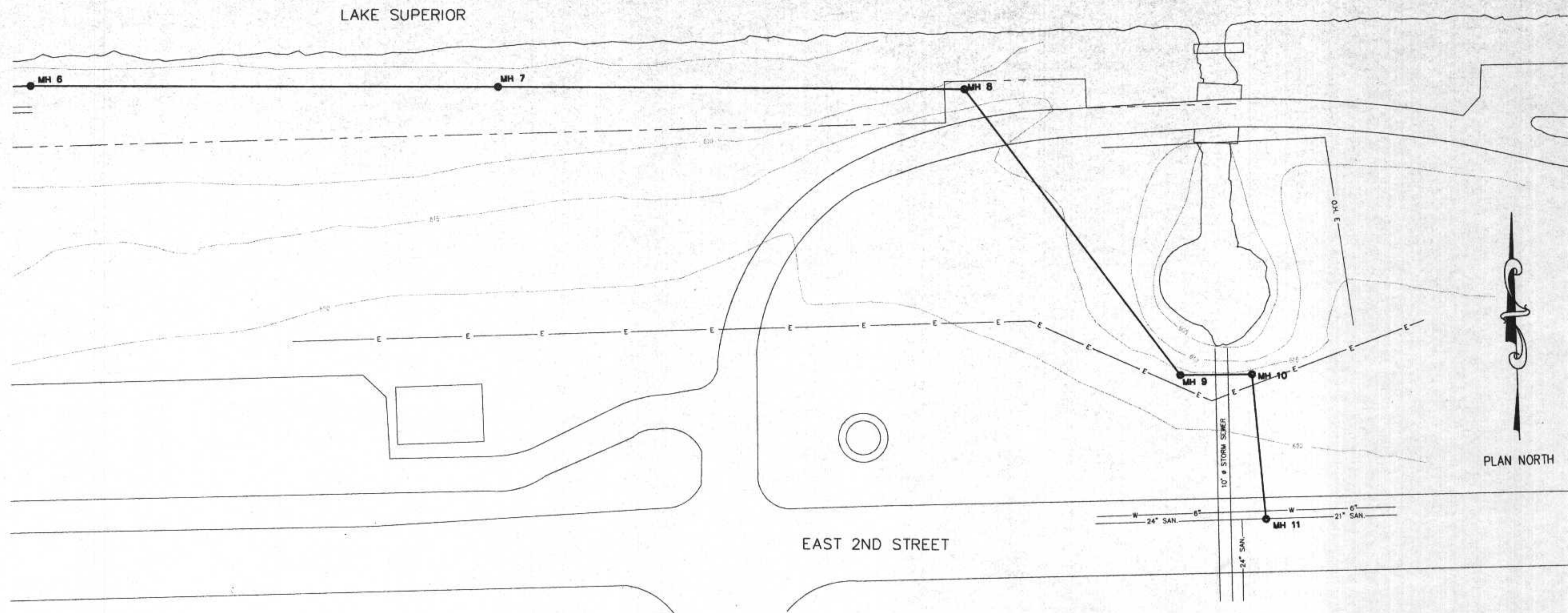


EAST 2ND STREET RELIEF SEWER  
PLAN AND PROFILE  
STA. 0+00 THRU STA. 15+72

SHEET OF SHEETS  
RECORD MAP NO. CT&A PROJECT NO. 3899-00

11APR94





PRELIMINARY,  
APR 11 1994

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED TN  
 DRAWN LED  
 CHECKED  
 DATE APRIL, 1994

SCALE  
 1" = 5' VERTICAL  
 1" = 50' HORIZONTAL

DEPARTMENT OF PUBLIC WORKS  
 CITY OF SUPERIOR, WISCONSIN

ENGINEERING PLANNING MANAGEMENT  
 2855 ANTHONY LANE SOUTH, SUITE 145  
 MINNEAPOLIS, MN. 55418-3265

EAST 2ND STREET RELIEF SEWER  
 PLAN AND PROFILE  
 STATION 15+72 THRU STA. 28+37

SHEET OF SHEETS  
 RECORD MAP NO. CT&A PROJECT NO. 3899-00