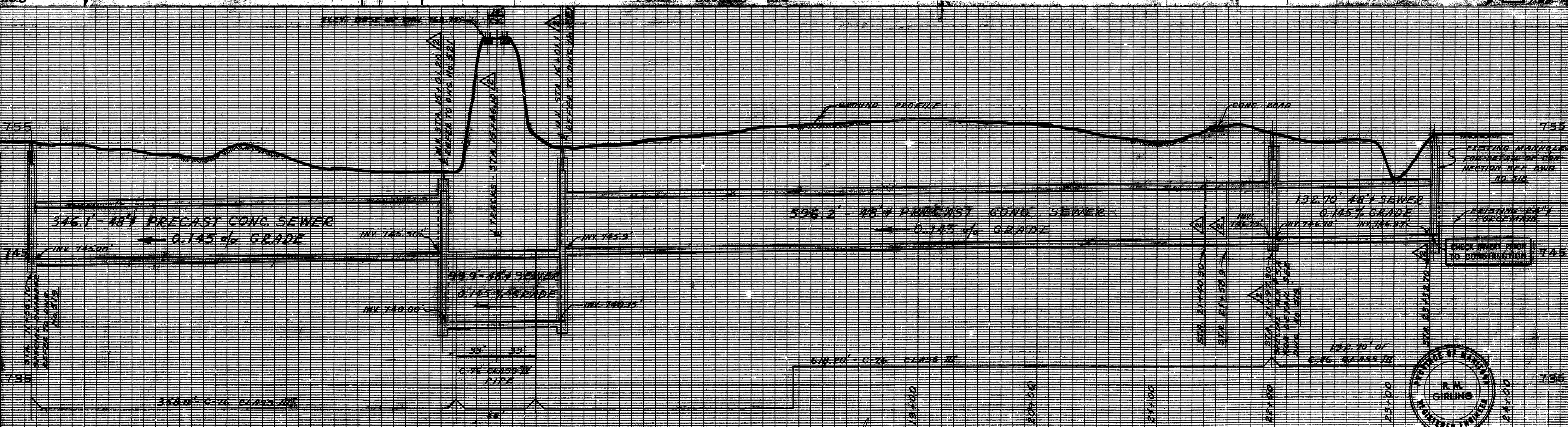
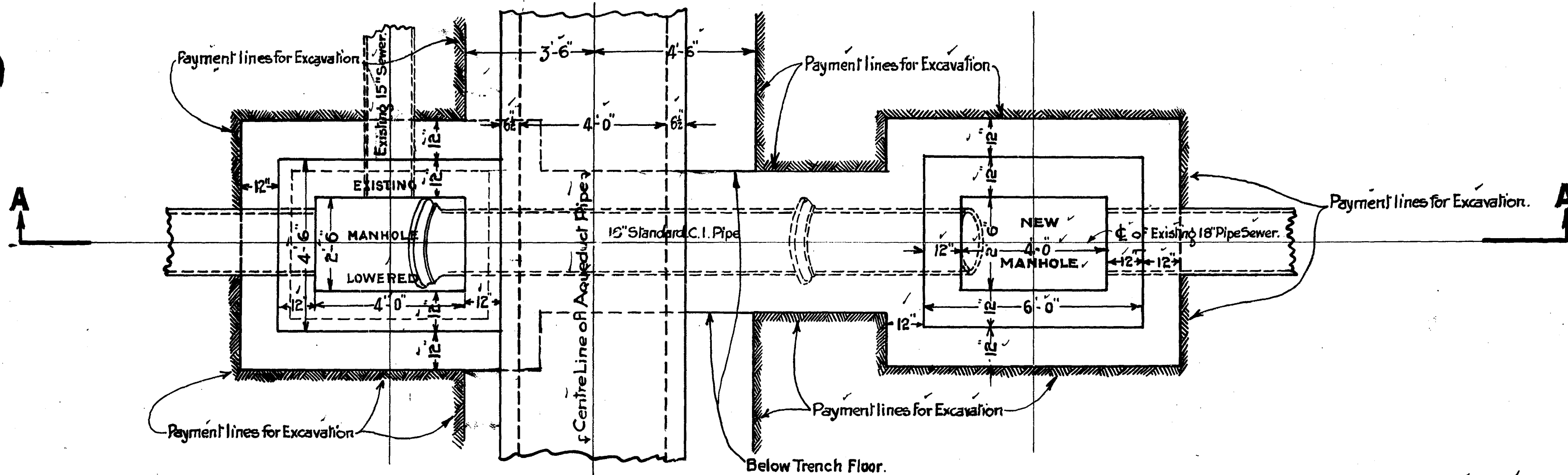


NOTE:
 POINT DOUGLAS AVENUE CLOSED FROM LANE EAST OF GRACE STREET TO RED RIVER BY CITY OF WINNIPEG BYLAW No. 18243, JULY 13, 1959.

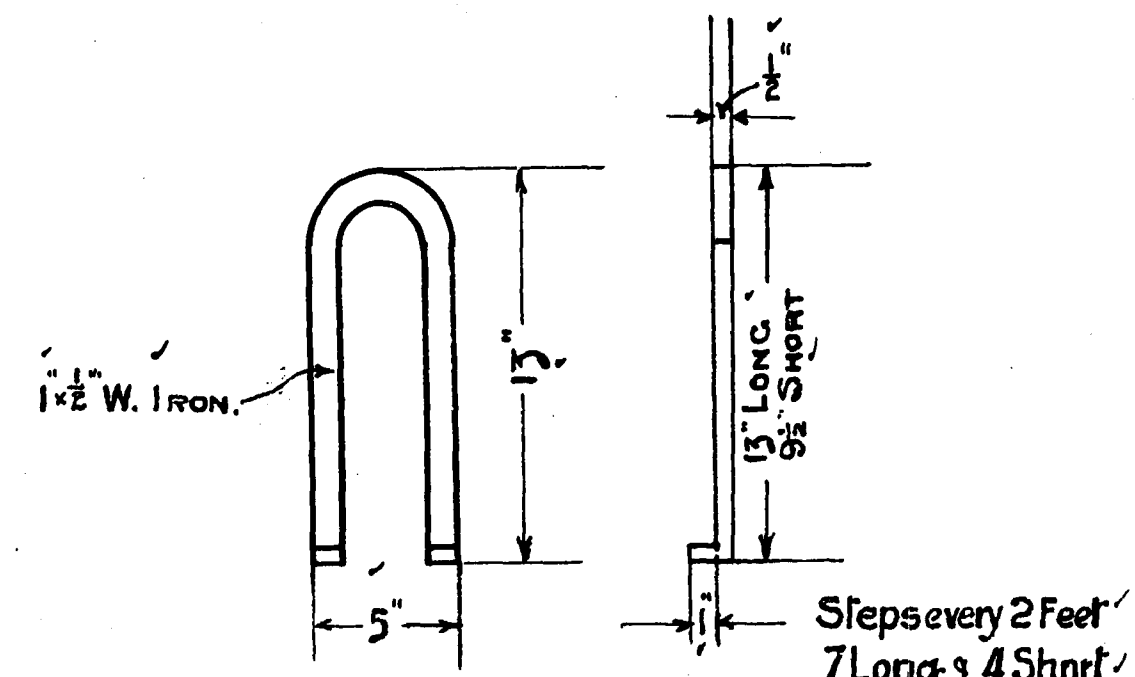


AS CONSTRUCTED	25 JAN 56	RE METROPOLITAN CORPORATION OF GREATER WINNIPEG	SEWAGE DISPOSAL DIV.	DATE	25 SEP 55	CHECK'D	BY	SCALE	HORIZ 1" = 40'	VERT 1" = 4'
REVISION NO. 1	27 SEP 56	WATERWORKS & WASTE DISPOSAL DIVISION	SUTHERLAND SECONDARY INTERCEPTOR SEWER	ENG. DES.				DRAWING NO.	516	
REVISION NO. 2	21 SEP 56		PLAN & PROFILE FROM STA. 11+88.20 TO STA. 21+15.7	ENG. O.P.R.						

C 264.



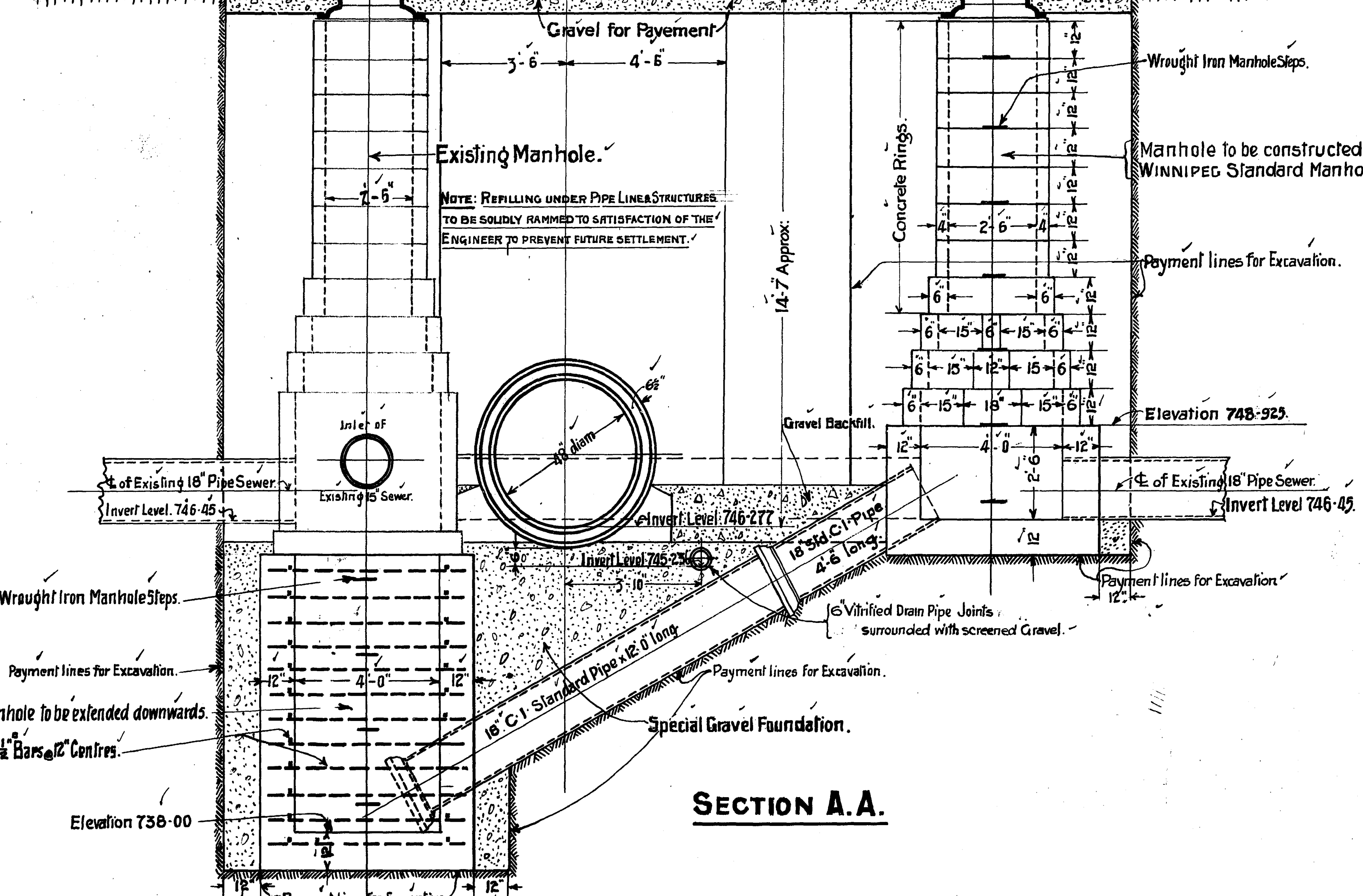
PLAN.



Detail of Manhole Step.

11 Req'd.

Scale: 1/2" = 1 Foot.



SECTION A.A.

BILL OF REINFORCING STEEL.

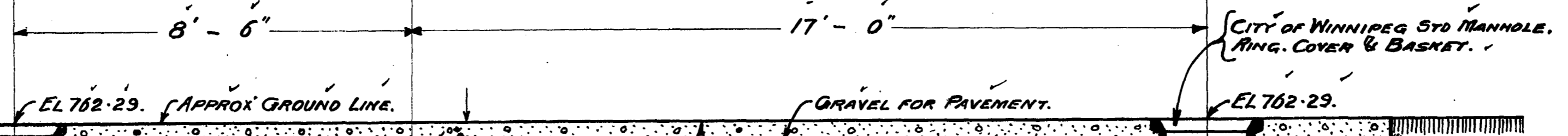
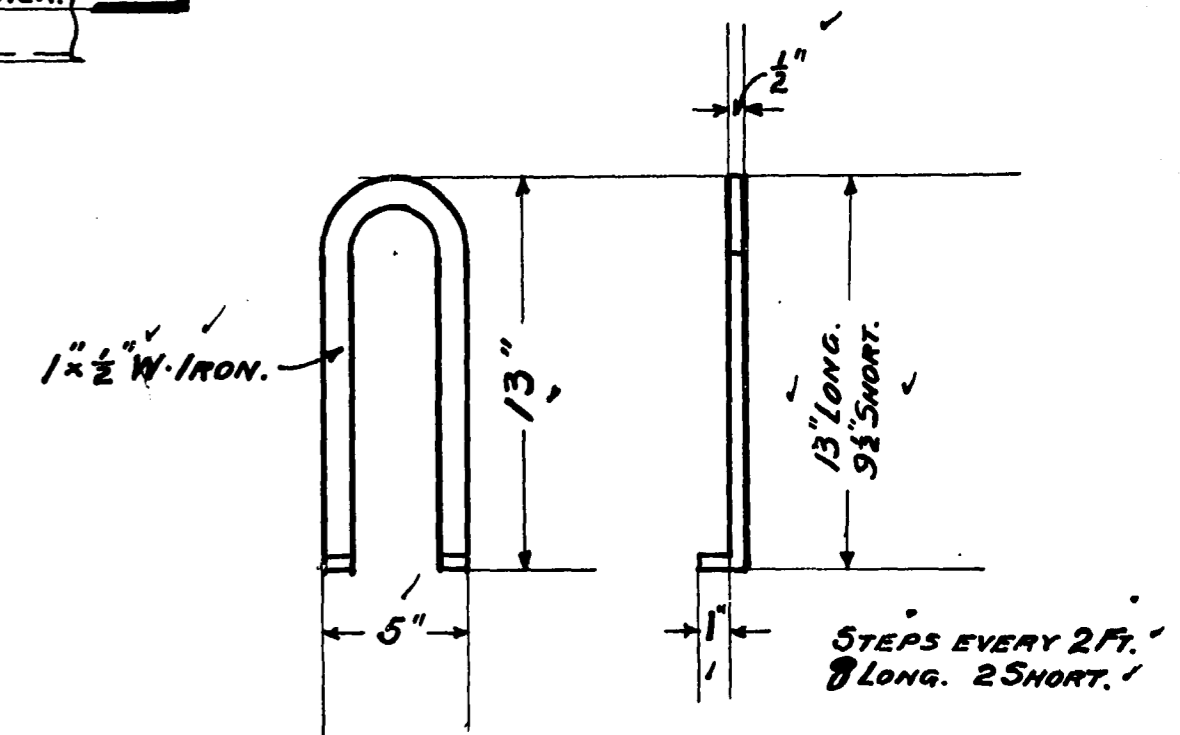
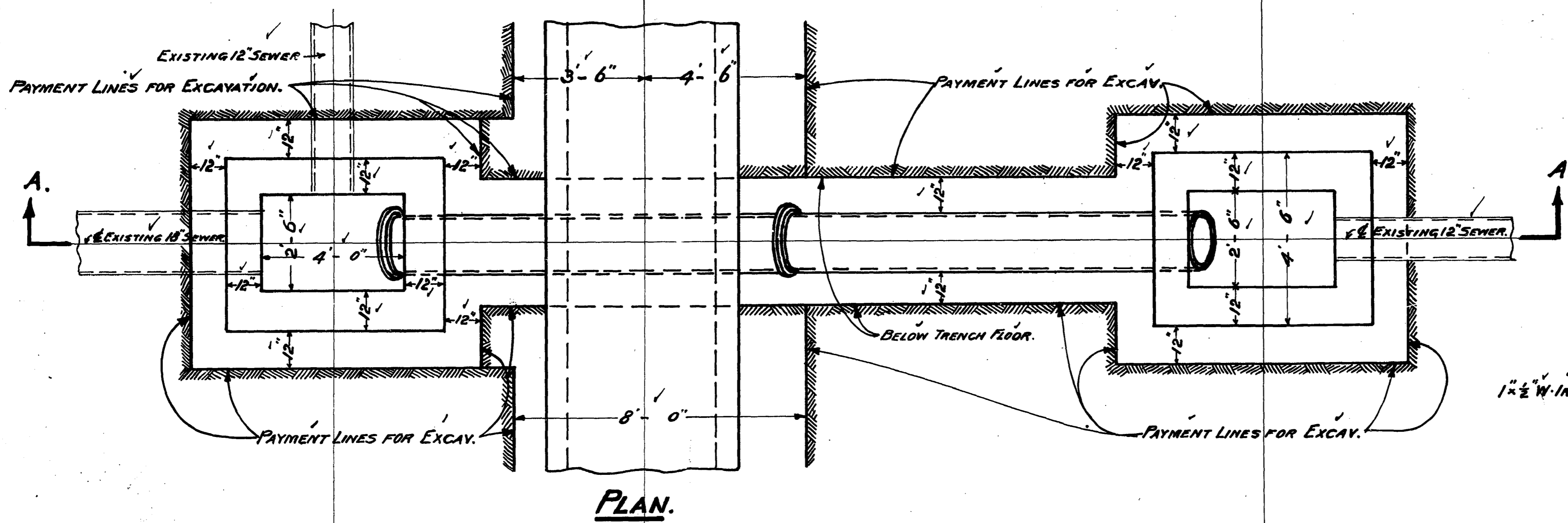
LETTER NO.	SIZE	LENGTH	DESCRIPTION.
A1	16 1/2"	5'-6"	Straight.
A2	14 "	4'-0"	"

CONTRACT 65. C.264.

Drawn by J.L.T.
 Traced by J.L.T.
 Checked by [Signature]
 Approved by [Signature]

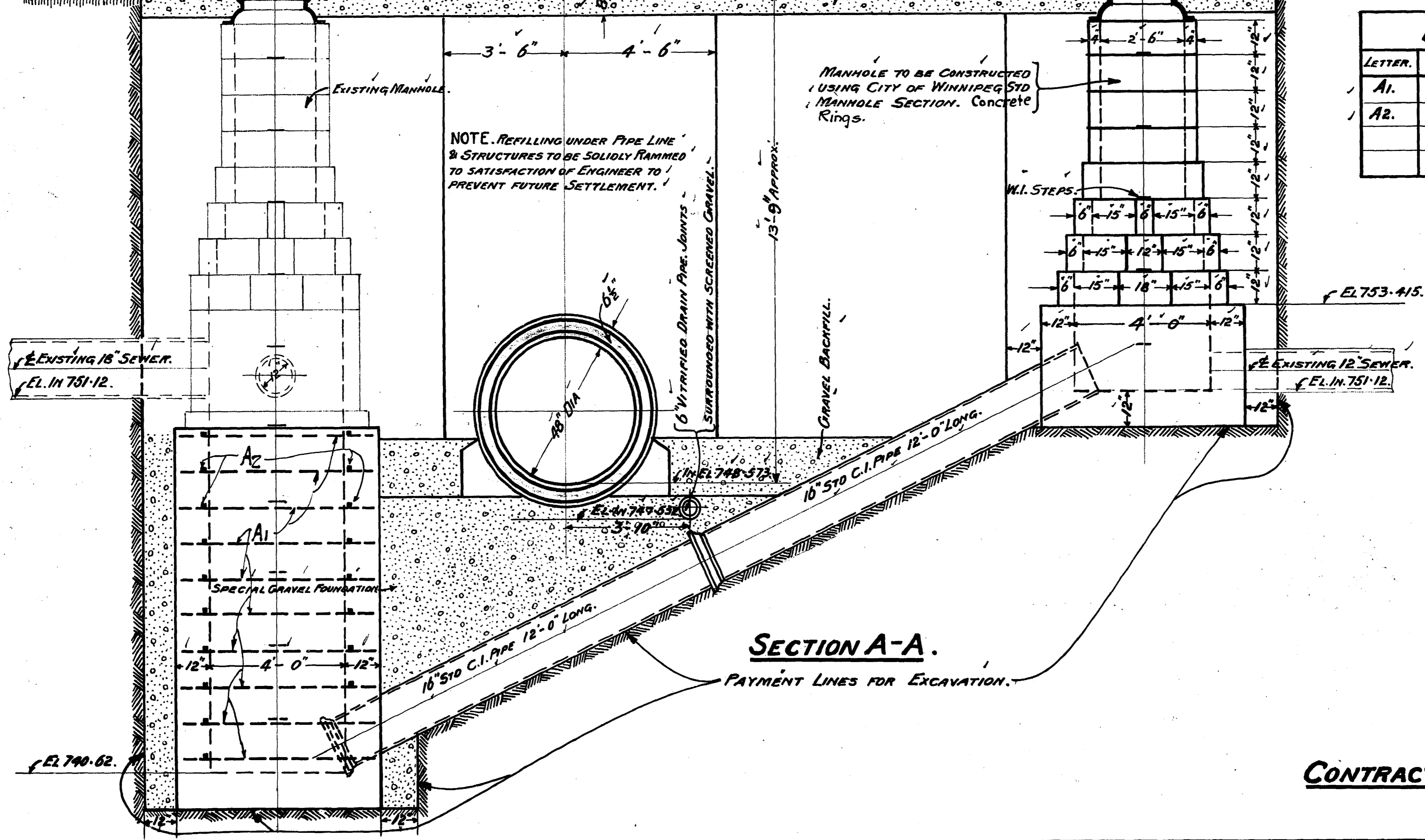
W.G. Chace
 Chief Engineer.

GREATER WINNIPEG WATER DISTRICT.
 48" PRESSURE PIPE LINE.
 ELLEN STREET SEWER CROSSING
 Scale: 3/8" = 1 Foot.
 28-5-18.



BILL OF REINFORCING STEEL.

LETTER.	N ^o .	SIZE.	LENGTH.	DESCRIPTION.
A1.	20.	1/2" 0	5'-6"	STRAIGHT.
A2.	18.	" "	4'-0"	"



CONTRACT #65.

C267.

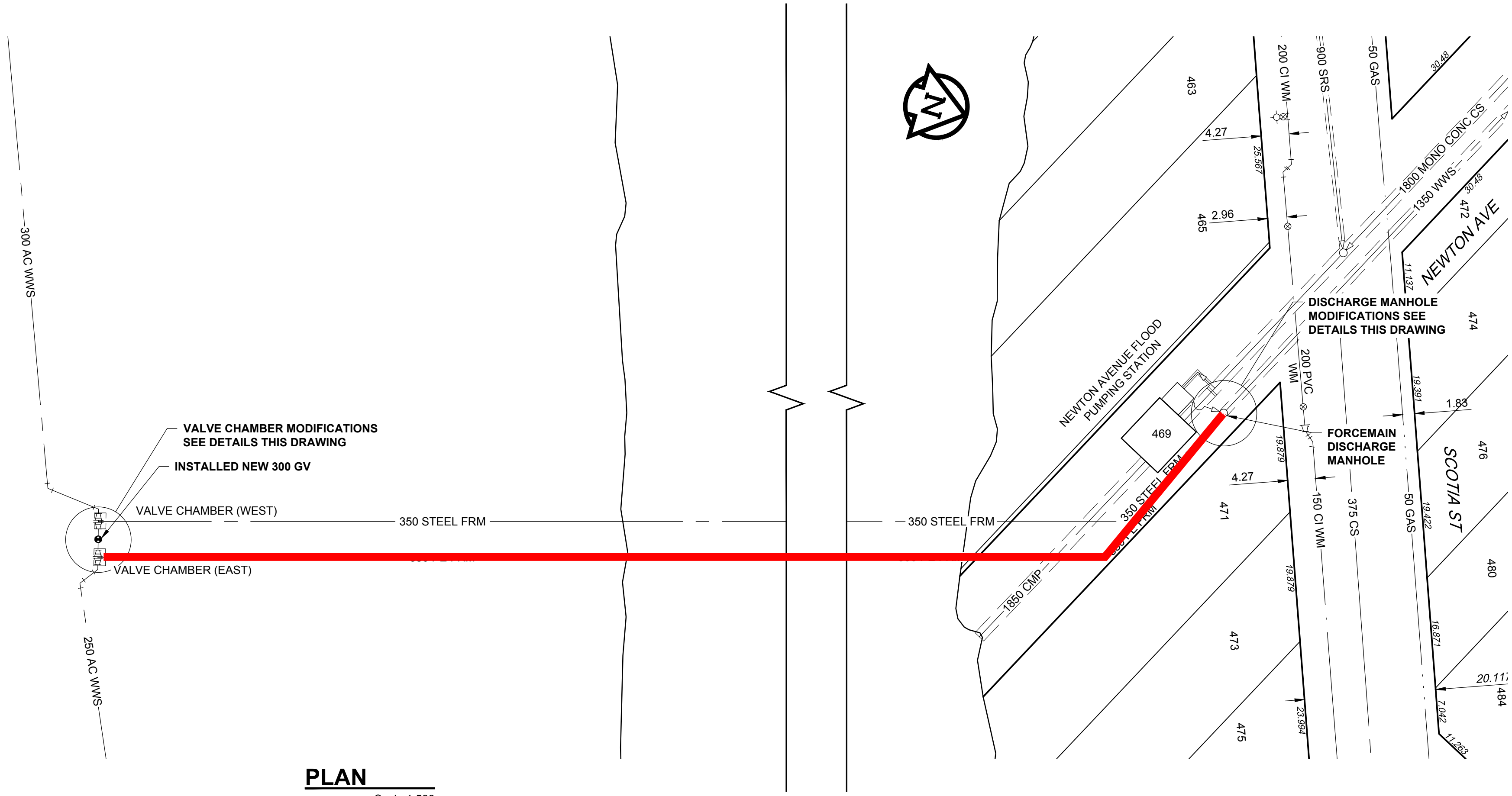
DRAWN BY R.S.
 TRACED BY R.S.
 CHECKED BY *[Signature]*
 APPROVED. *[Signature]*

[Signature]
 CHIEF ENGINEER.

GREATER WINNIPEG WATER DISTRICT.
 48" PRESSURE PIPE LINE.
 ARLINGTON ST SEWER CROSSING.
 MAY 16th 1918. SCALE 3/8" = 1 FT.



SITE PLAN
Scale 1:2000
0 50 100 m



PLAN
Scale 1:500
0 12.5 25 m

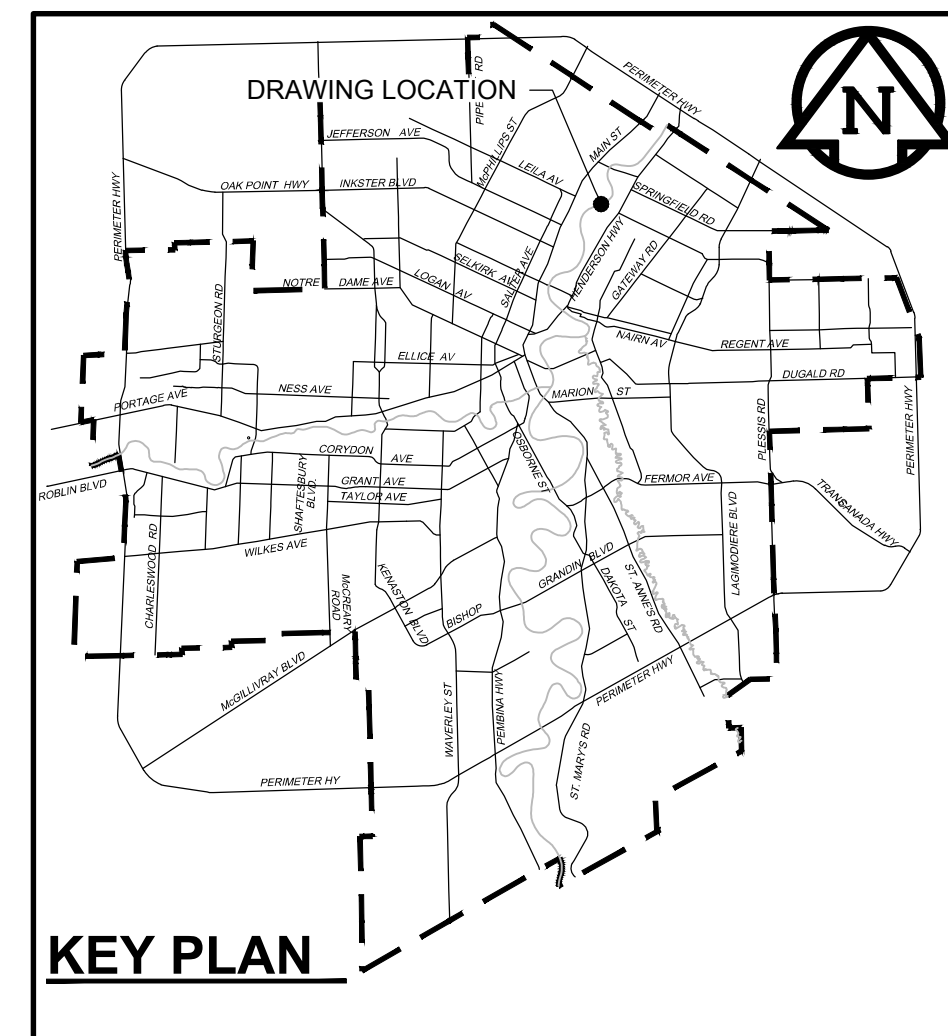
NOTES:

SEQUENCE OF WORK:

1. LOCATE PIPE, CONFIRM MATERIAL AND OUTSIDE DIAMETER.
2. ISOLATE CROSSING PIPE (BY CITY).
3. INSTALL 600 FLANGED DUCTILE IRON WYE (SEE DETAIL THIS DRAWING).
4. INSTALL TEMPORARY BEND AND PIPE TO ALLOW FOR LAUNCH OF CLEANING PIGS AND INSPECTION TOOLS.
5. COMPLETE CLEANING, INSPECTION, AND DISINFECTION OF WATERMAIN.
6. REMOVE TEMPORARY PIPING AND INSTALL BLIND FLANGE ON WYE.
7. BACKFILL & RESTORE SITE.

CONSTRUCTION NOTES:

1. SEE DRAWING FOR CLEANING AND FLUSHING WATER DISCHARGE MANHOLE LOCATIONS.
2. RESTORE BOULEVARDS, SIDEWALKS AND ROADWAYS DAMAGED DURING CONSTRUCTION.
3. ENSURE PIPELINE IS NOT DEWATERED DURING CLEANING AND INSPECTION WORK.



KEY PLAN

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

EXISTING	LEGEND - PLAN	NEW	EXISTING	LEGEND - PLAN	NEW	EXISTING	LEGEND - PROFILE	NEW	EXISTING	LEGEND - PROFILE	NEW
150 WM	WATERMAIN	150 WM	150 WM	CURB STOP	150 WM	WATERMAIN	150 WM	WATERMAIN	150 WM	WATERMAIN	150 WM
300 LDS	LAND DRAINAGE SEWER	300 LDS	300 LDS	REDUCER	300 LDS	LAND DRAINAGE SEWER	300 LDS	HYDRANT	300 LDS	LAND DRAINAGE SEWER	300 LDS
250 WWS	WASTE WATER SEWER	250 WWS	250 WWS	COUPLING	250 WWS	WASTE WATER SEWER	250 WWS	VALVE	250 WWS	WASTE WATER SEWER	250 WWS
○	MANHOLE	●	○	ANODE	○	PAVEMENT CROWN	○	HYDRANT	○	PAVEMENT CROWN	○
□	CATCH BASIN	■	□	HYDRO	□	N/W PROPERTY LINE	□	VALVE	□	N/W PROPERTY LINE	□
△	CURB INLET	▲	△	MTS	△	S/E PROPERTY LINE	△	COUPLING	△	S/E PROPERTY LINE	△
—	CULVERT	—	—	GAS	—	N/W GUTTER	—	ANODE	—	N/W GUTTER	—
—	PIPE ABANDONMENTS	—	—	TESTHOLE	—	S/E GUTTER	—	HYDRO	—	S/E GUTTER	—
+	SURVEY BAR	+	+	LAMP STANDARD	+	TREE	+	MTS	+	TREE	+
+	LEGEND - PLAN	+	+	LEGEND - PLAN	+	LEGEND - PROFILE	+	LEGEND - PROFILE	+	LEGEND - PROFILE	+

LOCATION APPROVED

UNDERGROUND STRUCTURES
SUPR. U/G STRUCTURES DATE COMMITTEE
NOTE: LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE. BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

NO.	REVISIONS	DATE	BY
A	ISSUED FOR REVIEW	XX/XX/18	KLC

AECOM

DESIGNED BY: ADB
CHECKED BY:
DRAWN BY: KLC
APPROVED BY:
HOR. SCALE: AS NOTED
VERT. SCALE: N/A
DATE:

APEGM
Certificate of Authorization
AECOM Canada Ltd.
No. 4671 Date:

PROFESSIONAL'S SEAL

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

PROVISION OF PIPELINE ACCESS MODIFICATIONS,
CLEANING AND SUPPORT SERVICES FOR
RIVER CROSSING INSPECTIONS - Phase 2

SHEET XX OF X
CITY DRAWING NUMBER
MA70021128
REV A

SITE 4
NEWTON AVENUE WWS
FORCE MAIN

BID OPPORTUNITY NO. XXX-2018

