

CITY OF WINNIPEG
 OPERATIONAL DIVISION
 DISTRICT NO. 1
APPROVAL FOR SERVICES
 AT HIGGINS AVE.
 CARMEN FACILITIES - CP RAIL
 CONDITIONS
 WATER 1 1/2" FROM PRIVATE MAIN
 W.W.S. 6" TO PRIVATE SEWER (TO MANHOLE)
 L.D.S. AS PER STREETS & TRANS
 APPROACH AS PER PLAN
 GRADES AS PER PLAN
 REMARKS
 DATE DEC 1 1992

- EXISTING SERVICES TO BE PROTECTED
 - BUILDING TO BE LOCATED A MINIMUM OF 15 FEET FROM 500mm WATER MAIN

ALL EXISTING SERVICES NOT IN USE MUST BE DISCONNECTED AS PER CITY OF WINNIPEG BY-LAWS

ROOF DRAINAGE - TO DISCHARGE TO PROPERTY VIA DOWN SPOUTS

ALL WORKS TO CONFORM WITH CITY OF WINNIPEG STANDARD CONSTRUCTION SPECIFICATIONS

LEGAL DESCRIPTION:
 WINNIPEG MAIN YARD
 PORTION OF LOT 35
 PARISH OF ST. JOHN, UNDER
 CROWN GRANT NO. 35982

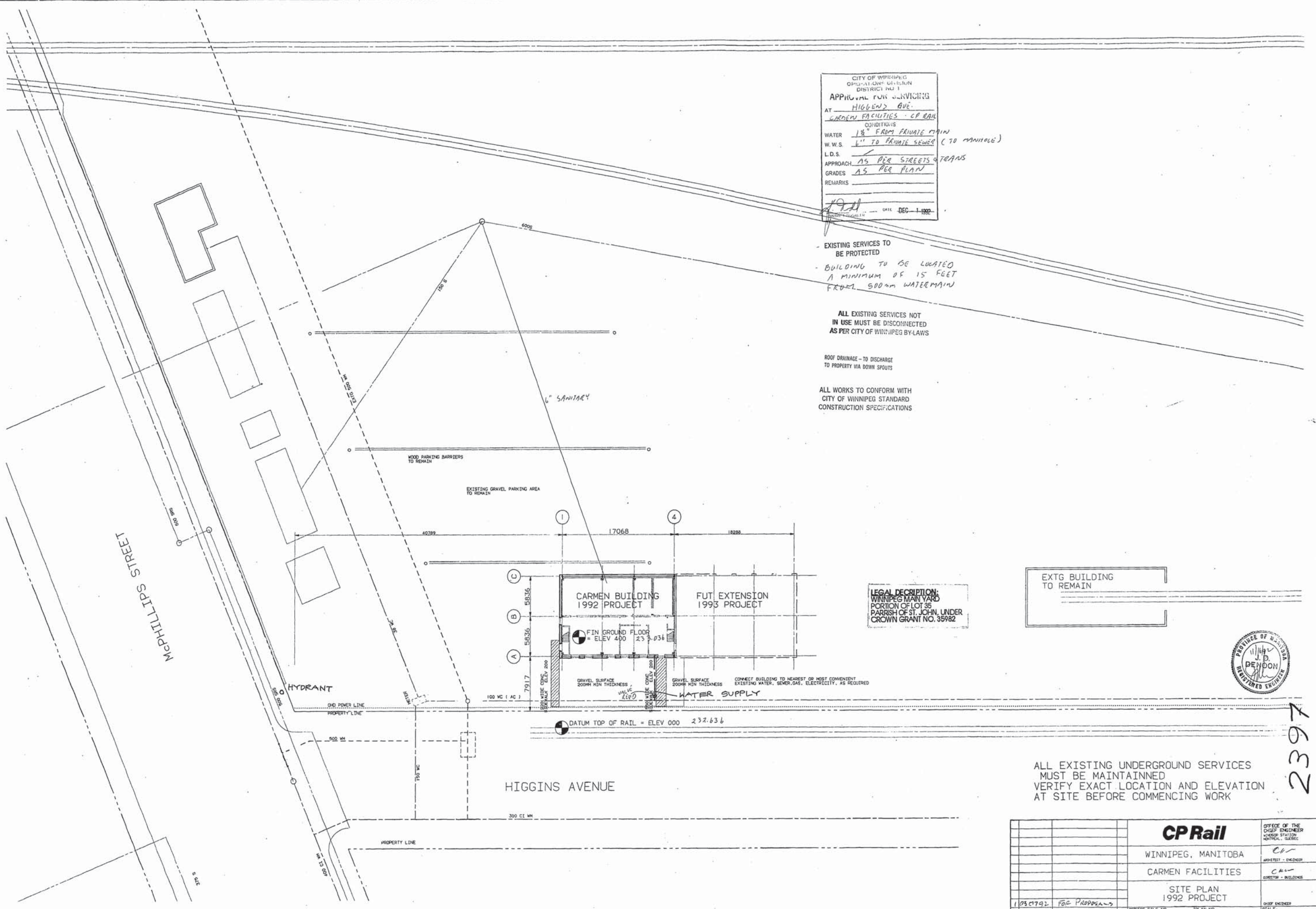
EXTG BUILDING TO REMAIN



2397

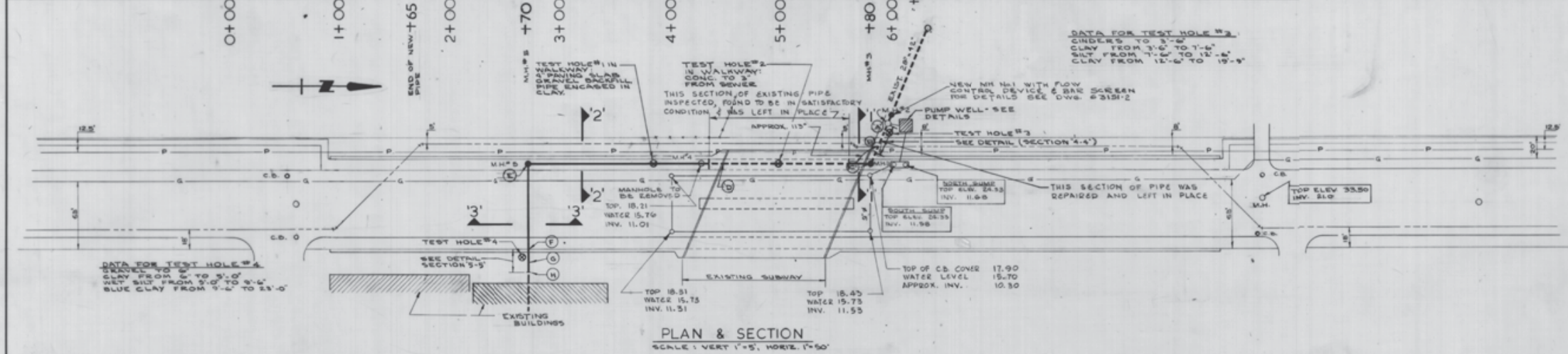
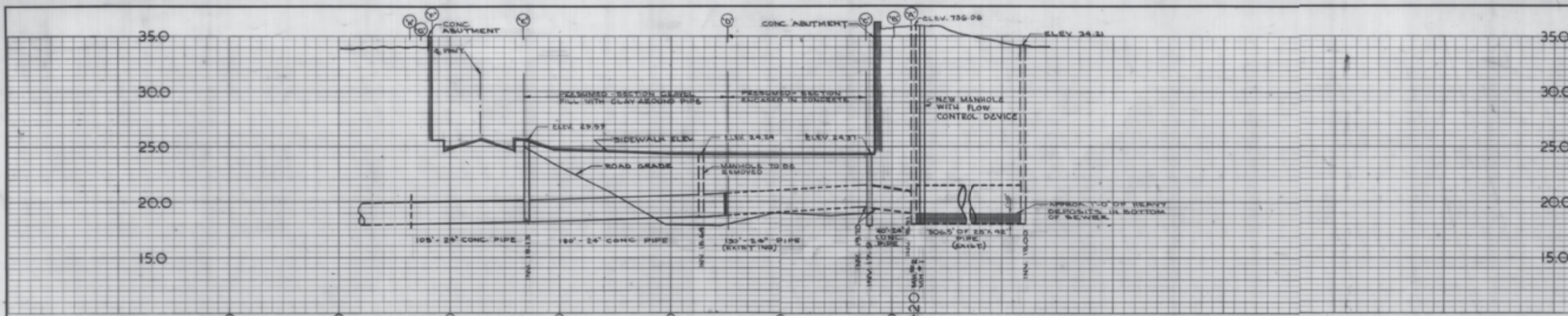
ALL EXISTING UNDERGROUND SERVICES MUST BE MAINTAINED
 VERIFY EXACT LOCATION AND ELEVATION AT SITE BEFORE COMMENCING WORK

		CP Rail		OFFICE OF THE CHIEF ENGINEER
		WINNIPEG, MANITOBA		CHIEF ENGINEER
		CARMEN FACILITIES		ARCHITECT - ENGINEER
		SITE PLAN		CHIEF ENGINEER
		1992 PROJECT		SCALE: 0.005 DR. CK
NO.	DATE	DESCRIPTION	BY	OFFICE FILE NO.
1031792		FOR PROPOSALS		700-34-163
				PLAN NO. 67654-A1A

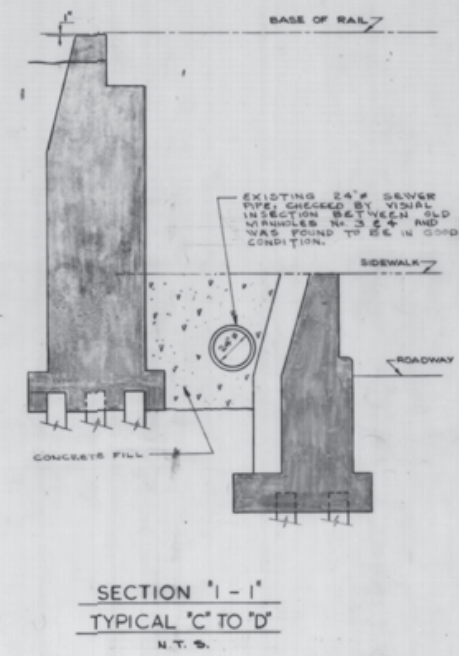
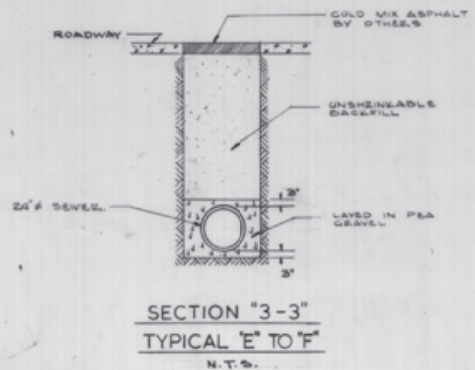
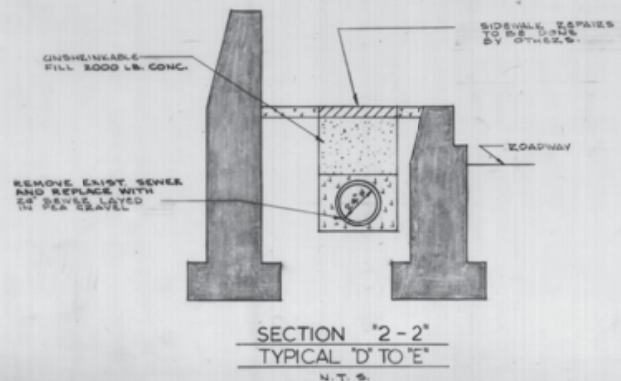


LEGEND

- P — POWER LINE (UNDER GROUND)
- G — GAS LINE
- O.C.B. CATCH BASIN
- M.H. MANHOLE
- ⊙ SOIL TEST HOLE
- CHAIN LINK FENCE
- WATERMAIN
- NEW 24" CONCRETE SEWER PIPE
- EXISTING SEWER



PLAN & SECTION
SCALE: VERT. 1"=5', HORIZ. 1"=50'



SW-29-1

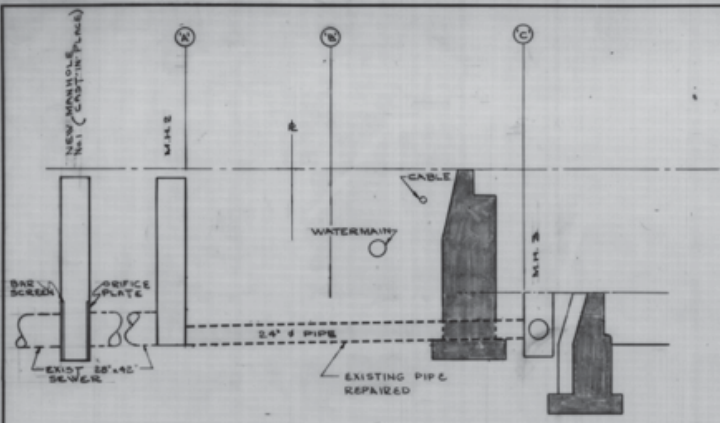


AS-BUILT		
DATE	FB NO.	PAGE
APR. 67	265	
REVISED		
MRZ. 68		

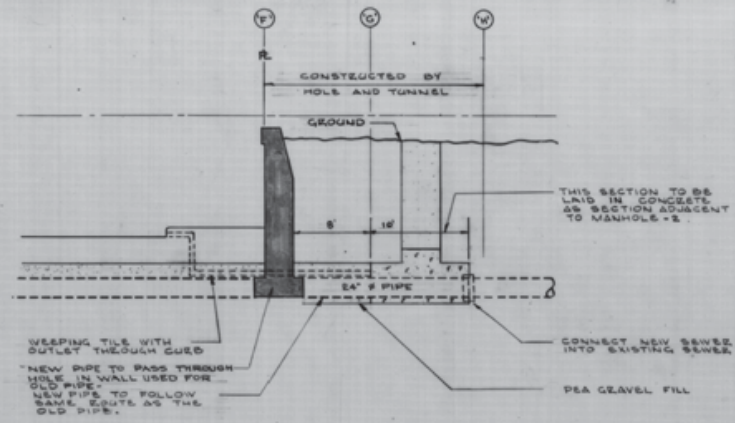
METROPOLITAN CORPORATION OF GREATER WINNIPEG
W. L. WARDROP & ASSOCIATES LTD.
ENGINEERING CONSULTANTS
WINNIPEG CANADA PORT ARTHUR

ALTERATIONS TO McPHILLIPS ST. DRAINAGE SUBWAY

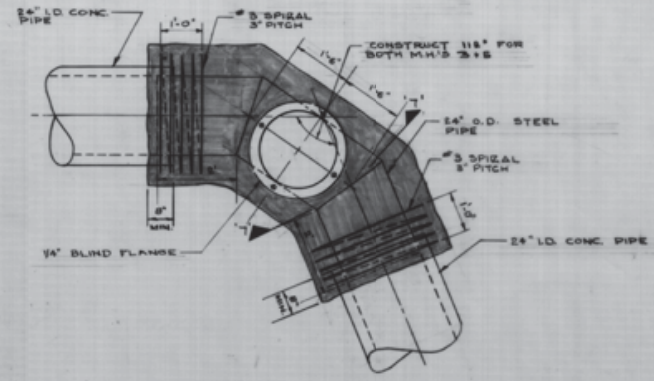
PLAN AND PROFILE OF 24" CONCRETE SEWER			
SCALE:	AS SHOWN	APPROVED BY:	<i>[Signature]</i>
DESIGNED BY:	C.D.H.	DATE:	SEPTEMBER 1965
DRAWN BY:	D.L.B.	PROJECT NO.:	63157
CHECKED BY:	<i>[Signature]</i>	DRAWING NO.:	63157-1



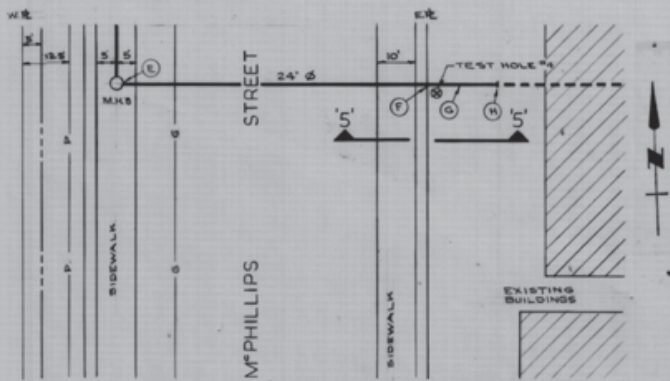
SECTION 4-4 FROM A TO C
SCALE: 1/8" = 1'-0"



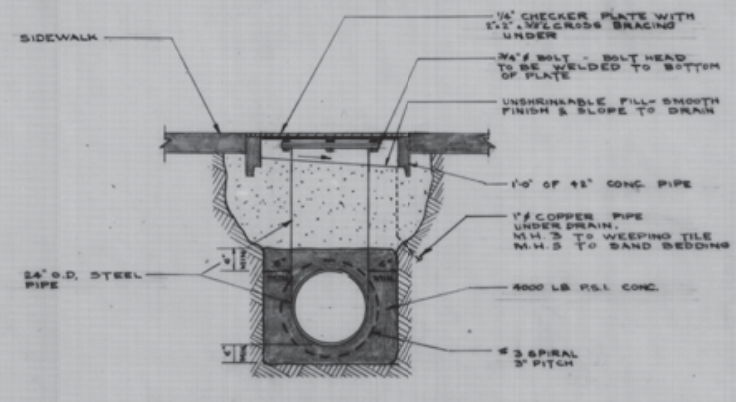
SECTION 5-5 FROM F TO H
SCALE 1/8" = 1'-0"



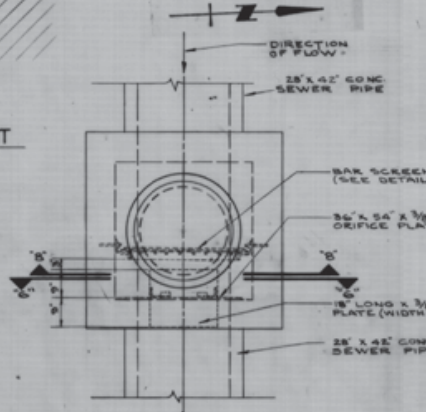
PRESSURE MANHOLE DETAIL (M.H. 3 & 4)
1/2" = 1'-0"



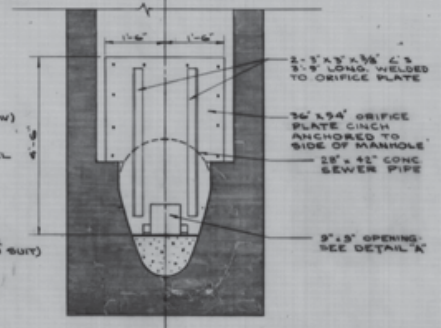
PLAN OF MANHOLE NO. 5 & AREA EAST
SCALE: 1" = 20'



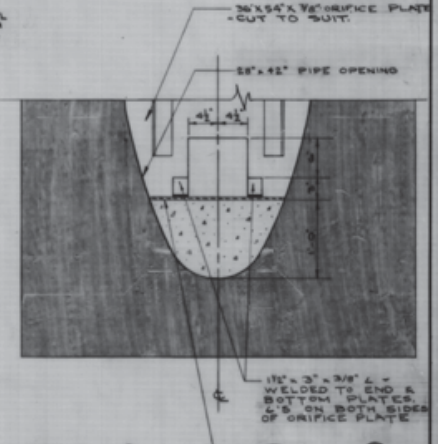
SECTION 7-7
N.T.S.



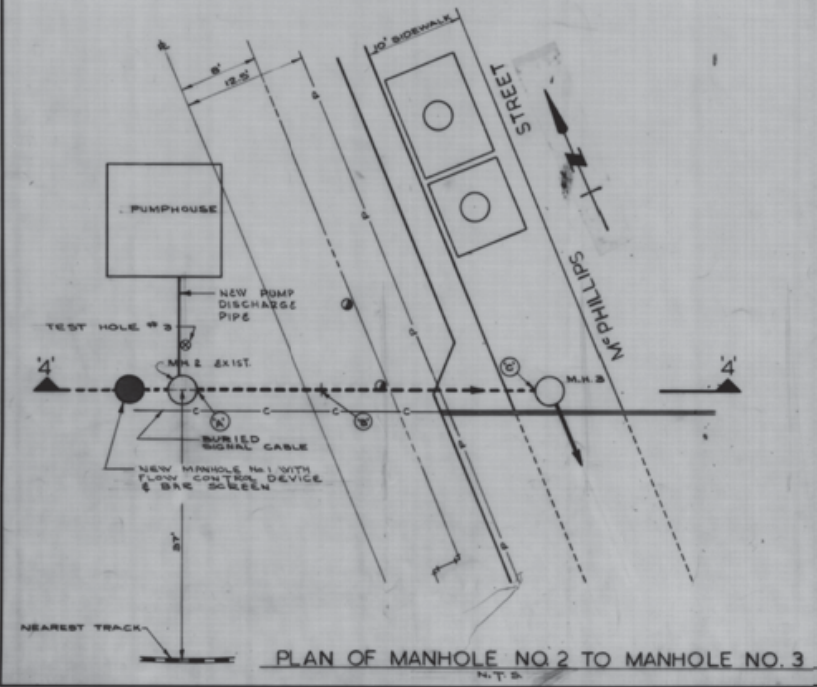
PLAN OF MANHOLE NO. 1
SCALE: 1/8" = 1'-0"



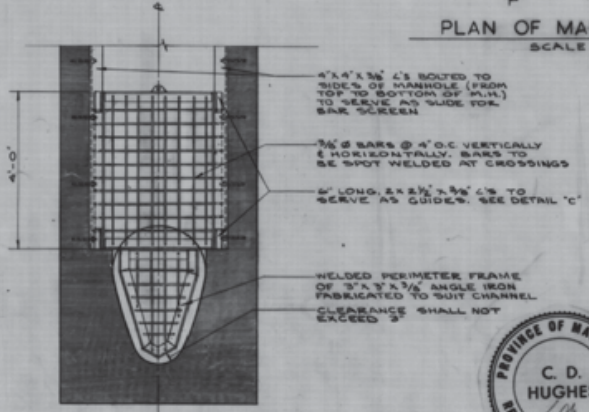
SECTION 6-6
SCALE: 1/8" = 1'-0"



DETAIL - A
SCALE: 1/2" = 1'-0"

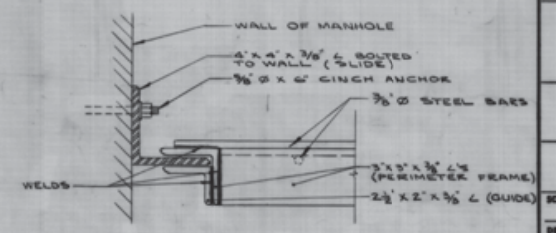


PLAN OF MANHOLE NO. 2 TO MANHOLE NO. 3
N.T.S.



SECTION 8-8 SHOWING BAR SCREEN
SCALE: 1/2" = 1'-0"

ORIFICE PLATE DETAILS



DETAIL - C
SCALE: 3" = 1'-0"



AS - BUILT		
DATE	FB. NO.	PAGE
APR. 67	265	
REVISED		
MAY 68		

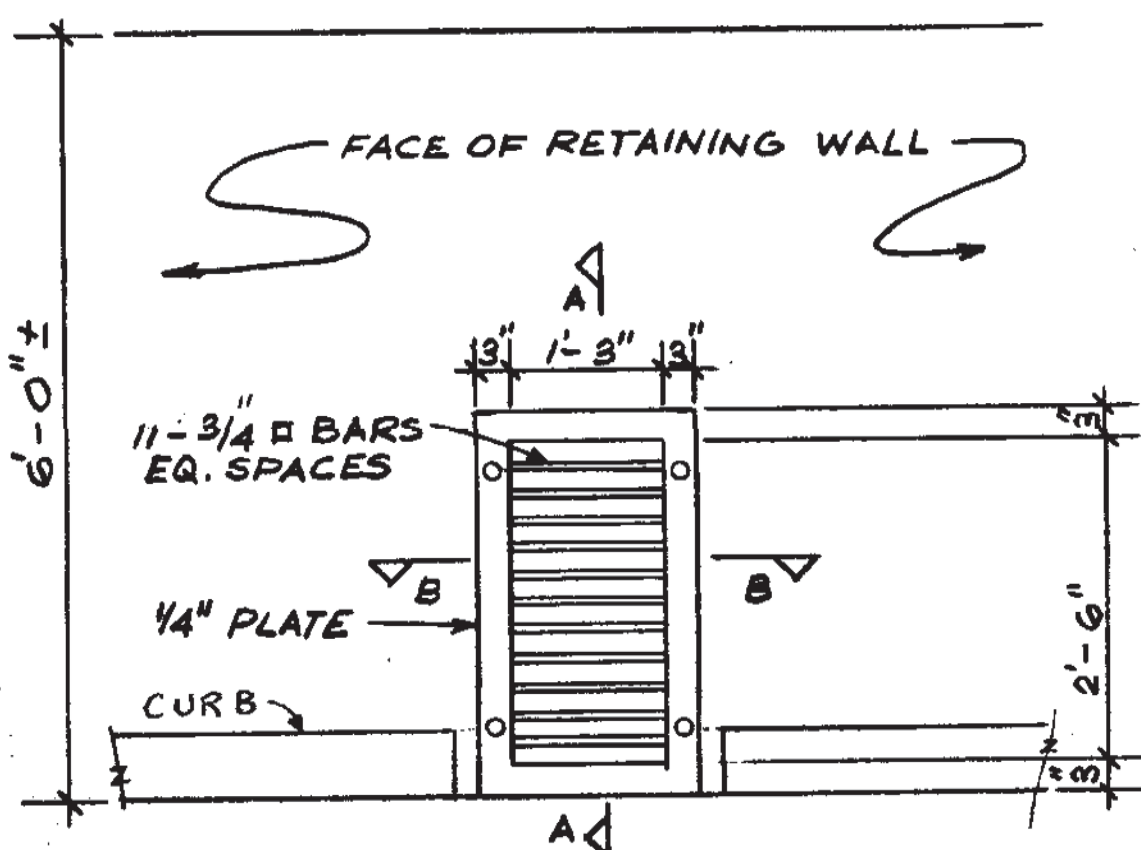
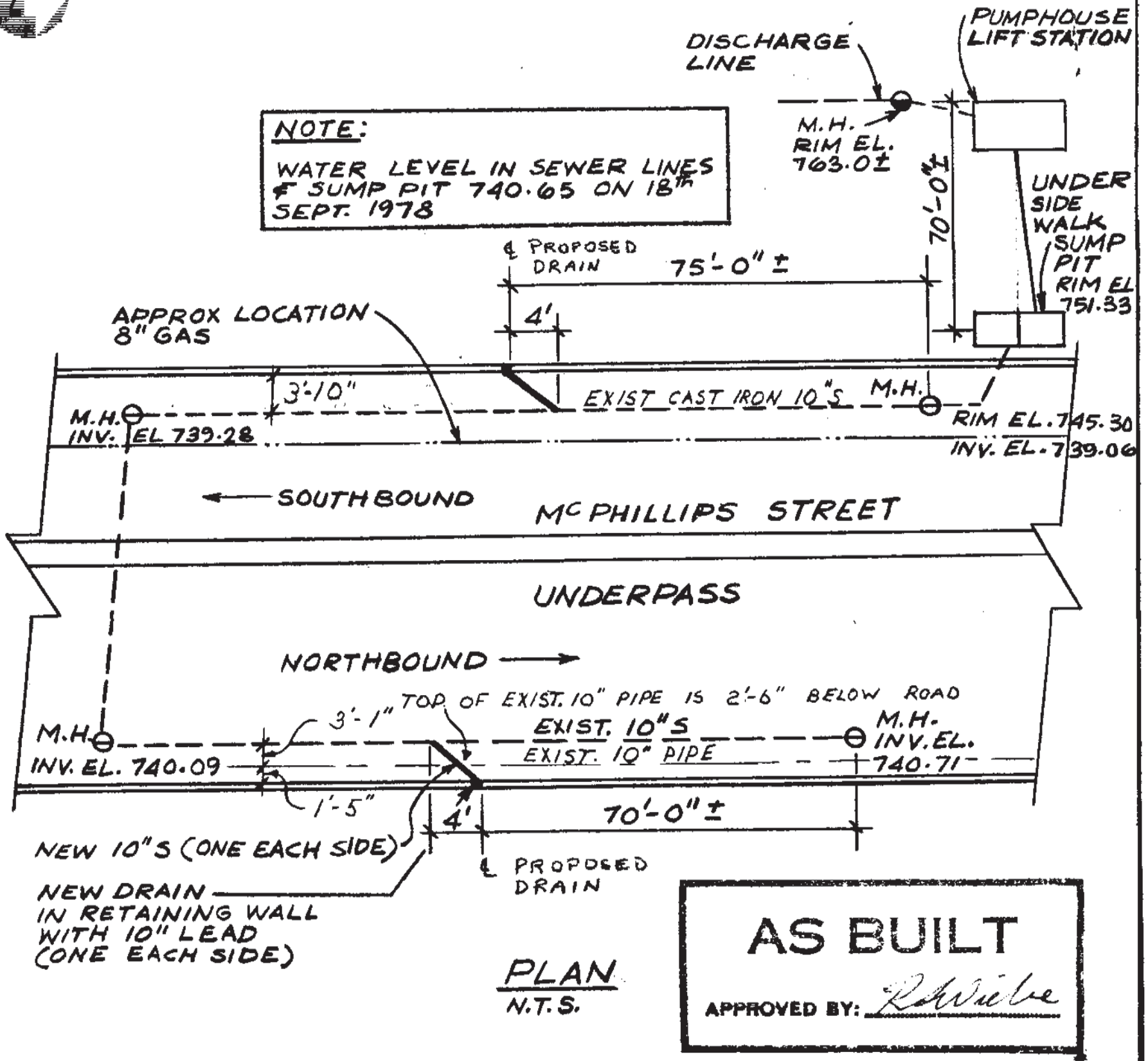
METROPOLITAN CORPORATION OF GREATER WINNIPEG

W. L. WARDROP & ASSOCIATES LTD.
ENGINEERING CONSULTANTS
WINNIPEG, CANADA, PORT ARTHUR

ALTERATIONS TO M^C PHILLIPS ST. SUBWAY DRAINAGE

PLANS, SECTIONS AND DETAILS

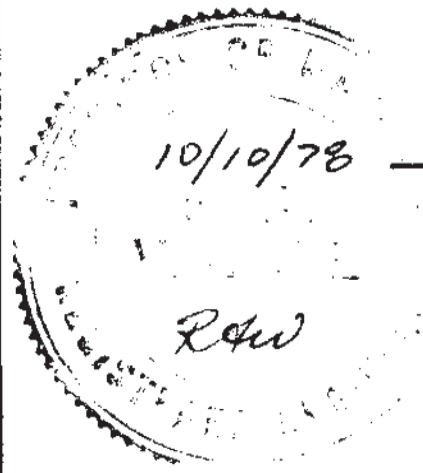
SCALE: AS SHOWN	APPROVED BY: <i>W. L. Wardrop</i>
DESIGNED BY: C. D. H.	DATE: SEPTEMBER 1965
DRAWN BY: D. L. B.	PROJECT NO. 63157
CHECKED BY: <i>L. B. B.</i>	DRAWING NO. 63157-2



DRAIN ELEVATION
(2 THUS)

B-5173-1

NOTE: DRAIN GRATE TO BE HOT DIP GALVANIZED

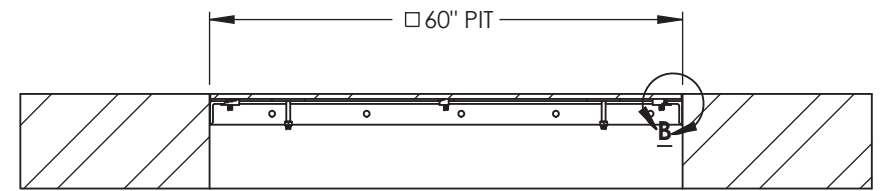
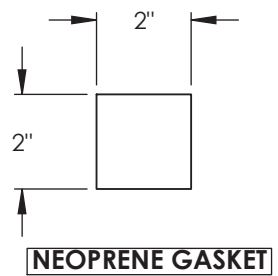
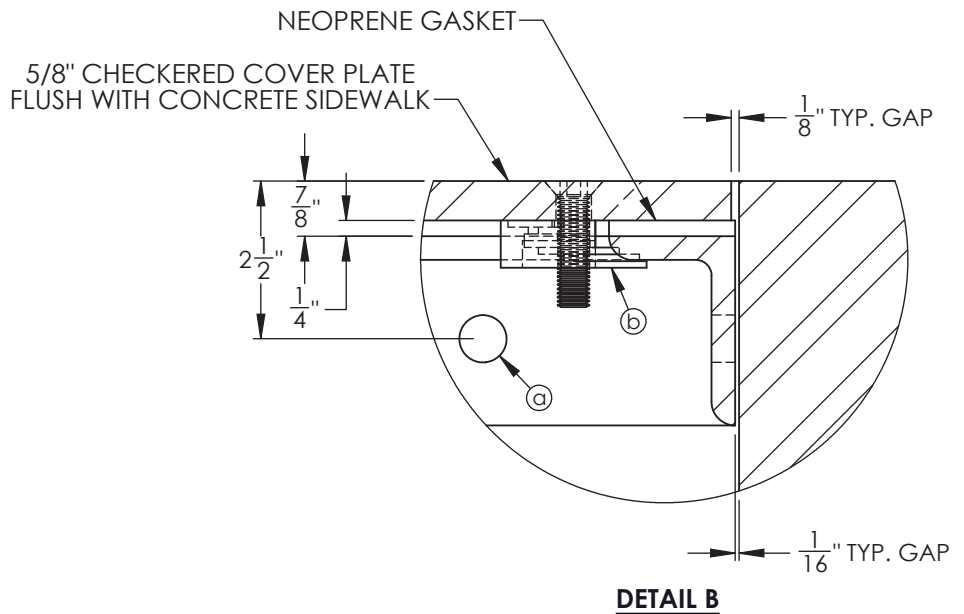
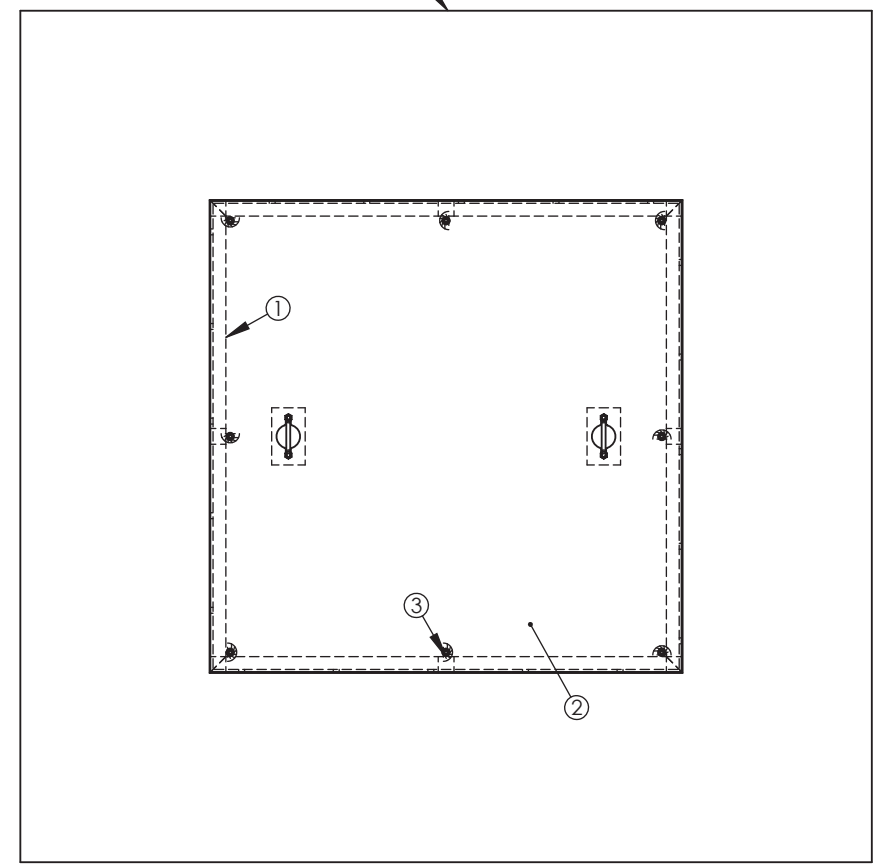


	Consulting Engineers & Planners	TITLE MC PHILLIPS ST. UNDERPASS UZ12	PROJECT NO. 8285-05
	PROJECT	DETAIL NO.	

8 7 6 5 4 3 2 1

GALVANIZED HARDWARE		
ITEM	TYPE/SIZE	QTY. PER
a	TR5/8" 300W x10" LONG c/w 1 A563-DH HEX NUT+1 F436 F.W.	20
b	FLOOR FAST FASTENER CLIP c/w 1/2"x2" FHSC SCREW	8

CONCRETE SIDEWALK SECTION SHOWN FOR REFERENCE



SECTION A-A

2x REQUIRED

TOLERANCE UNLESS NOTED: .x ± .060 .xx ± .010 .xxx ± .005		REFER TO YOUR DRAWING#: -
REV.	DESCRIPTION	DATE
A	ISSUED FOR APPROVAL	NOV-26-2018

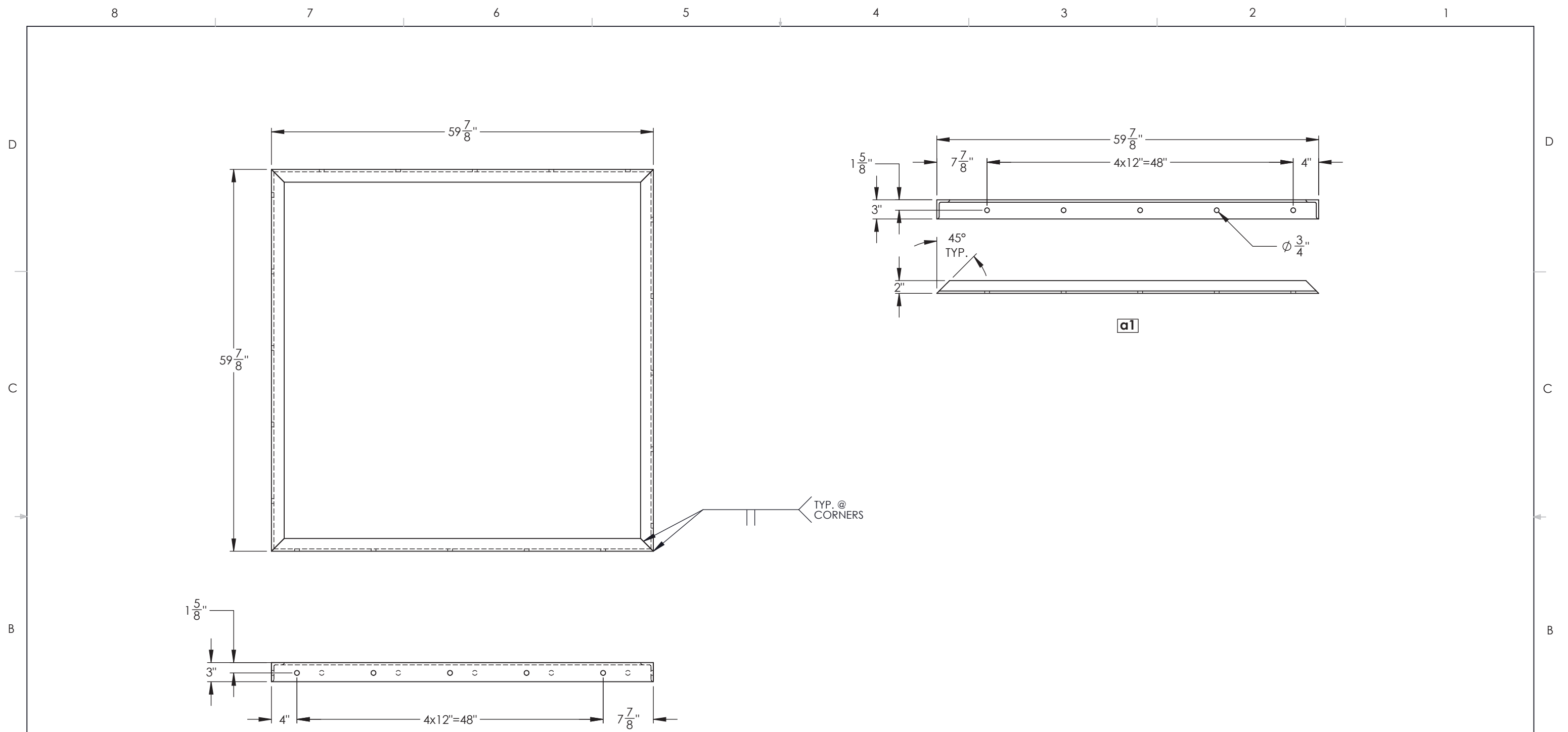
Falcon Manufacturing Ltd.
 57 DAWSON ROAD NORTH, WINNIPEG
 MANITOBA R2J 0S6
 PH:(204)927-7000 FAX:(204)927-7020

UNITS: in
 CONTRACTOR: GATEWAY CONSTRUCTION
 PROJECT: McPHILLIPS UNDERPASS
 DRWN BY: sw
 TITLE: CHECKERED COVER PLATE-OPTION 1
 DATE: NOV-23-2018
 PART NO.:
 FINISH: H.D.G. (ASTM A-123)

QTY. 2
 WORK ORDER # -
 PROJECTION
 SHEET: 1 OF 3
 REV.

ITEM NO.	PART NUMBER	QTY. PER	MATERIAL	GRADE	LENGTH in	WEIGHT Kg
	COVER PLATE	1				TOTAL WEIGHT: 350.07
3	NEOPRENE GASKET	8	1/4" FABREEKA PAD	SA-47	2x2	-
2	COVER PLATE	1	-	-	-	297.7
1	ANGLE FRAME	1	-	-	-	52.37

8 7 6 5 4 3 2 1



ANGLE FRAME

TOLERANCE UNLESS NOTED:
 .x ± .060
 .xx ± .010
 .xxx ± .005

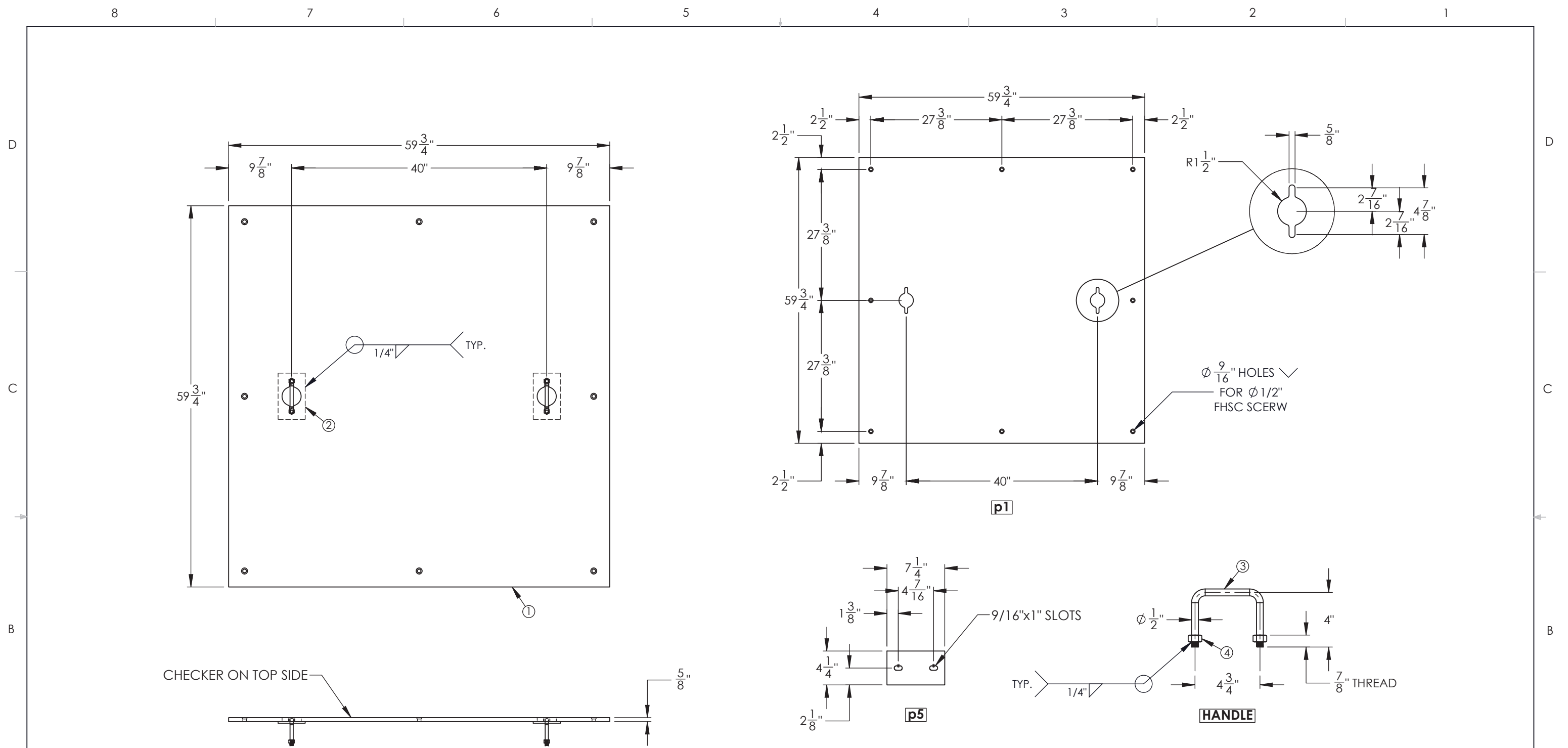
REFER TO YOUR DRAWING#:
 -



Falcon Manufacturing Ltd.
 57 DAWSON ROAD NORTH, WINNIPEG
 MANITOBA R2J 0S6
 PH:(204)927-7000 FAX:(204)927-7020

UNITS:	CONTRACTOR:		GATEWAY CONSTRUCTION	
in	PROJECT:		McPHILLIPS UNDERPASS	
DRWN BY	TITLE:		ANGLE FRAME	
sw	DATE	PART NO:	FINISH: H.D.G. (ASTM A-123)	
NOV-23-2018			SHEET.	REV.
QTY.	WORK ORDER #	PROJECTION	2 OF 3	
2	-			

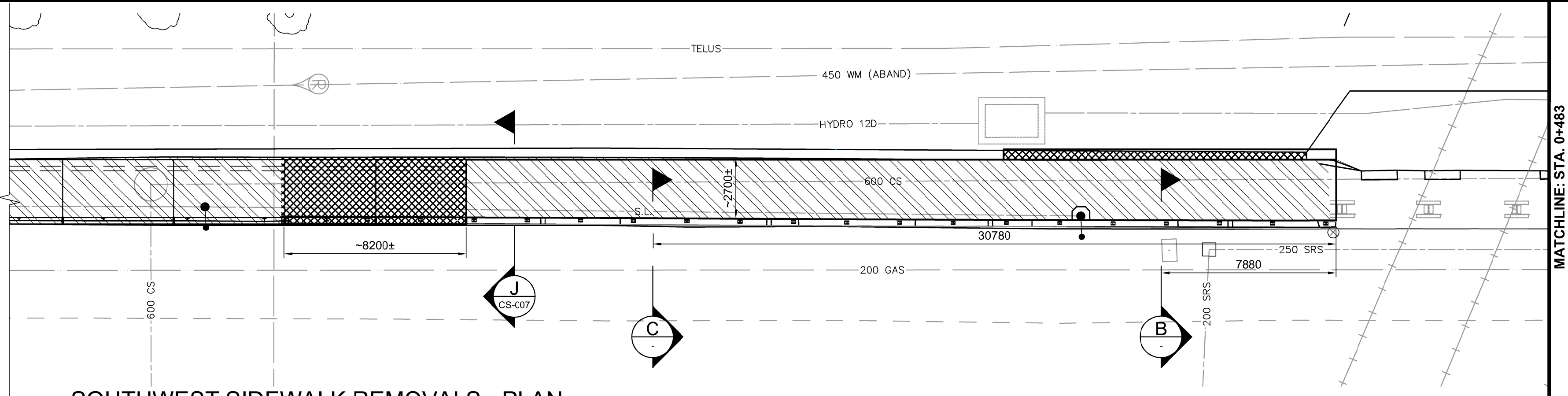
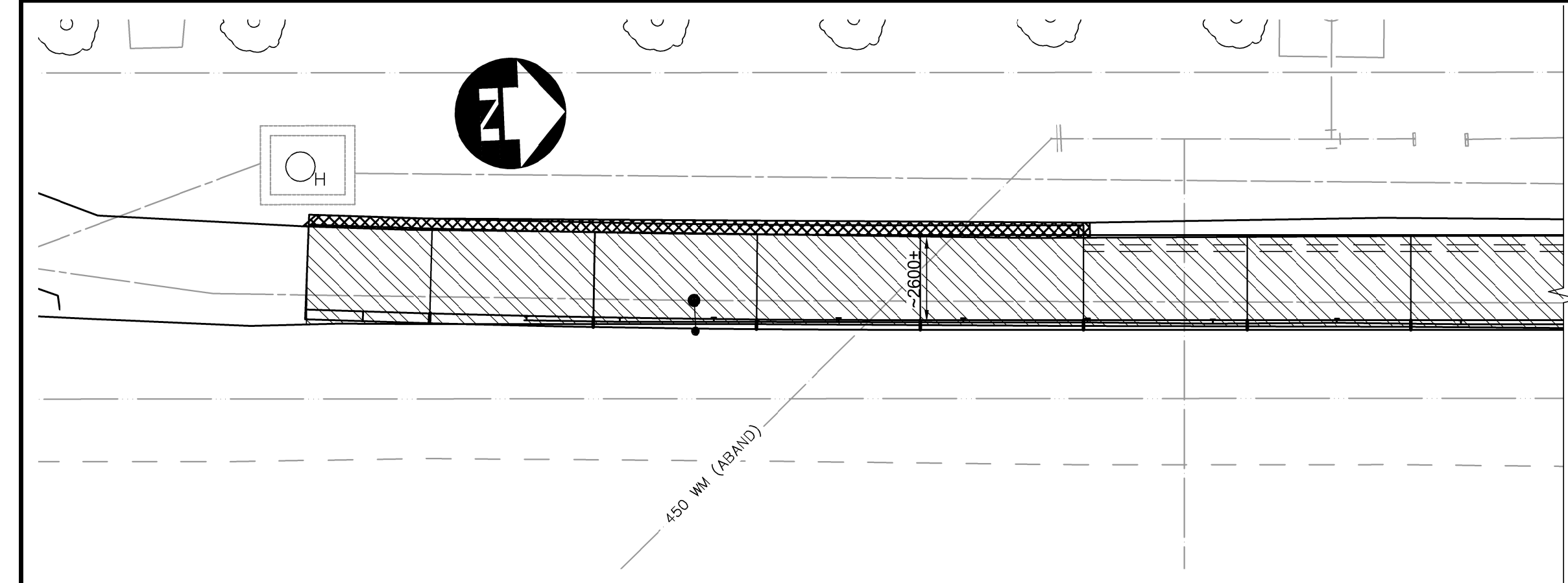
ITEM NO.	PART NUMBER	QTY. PER	MATERIAL	GRADE	LENGTH in	WEIGHT Kg
1	a1	4	L3"x2"x3/8"	300W	-	50.36
TOTAL WEIGHT:						52.37
4% GALV.						2.01



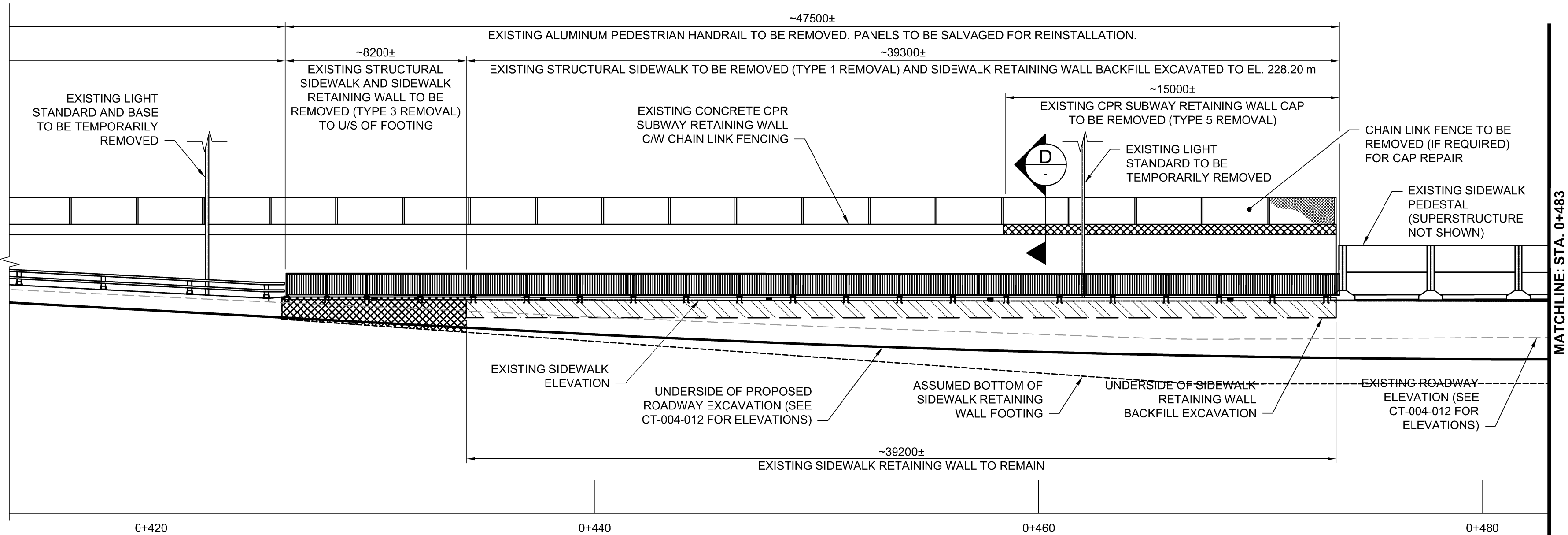
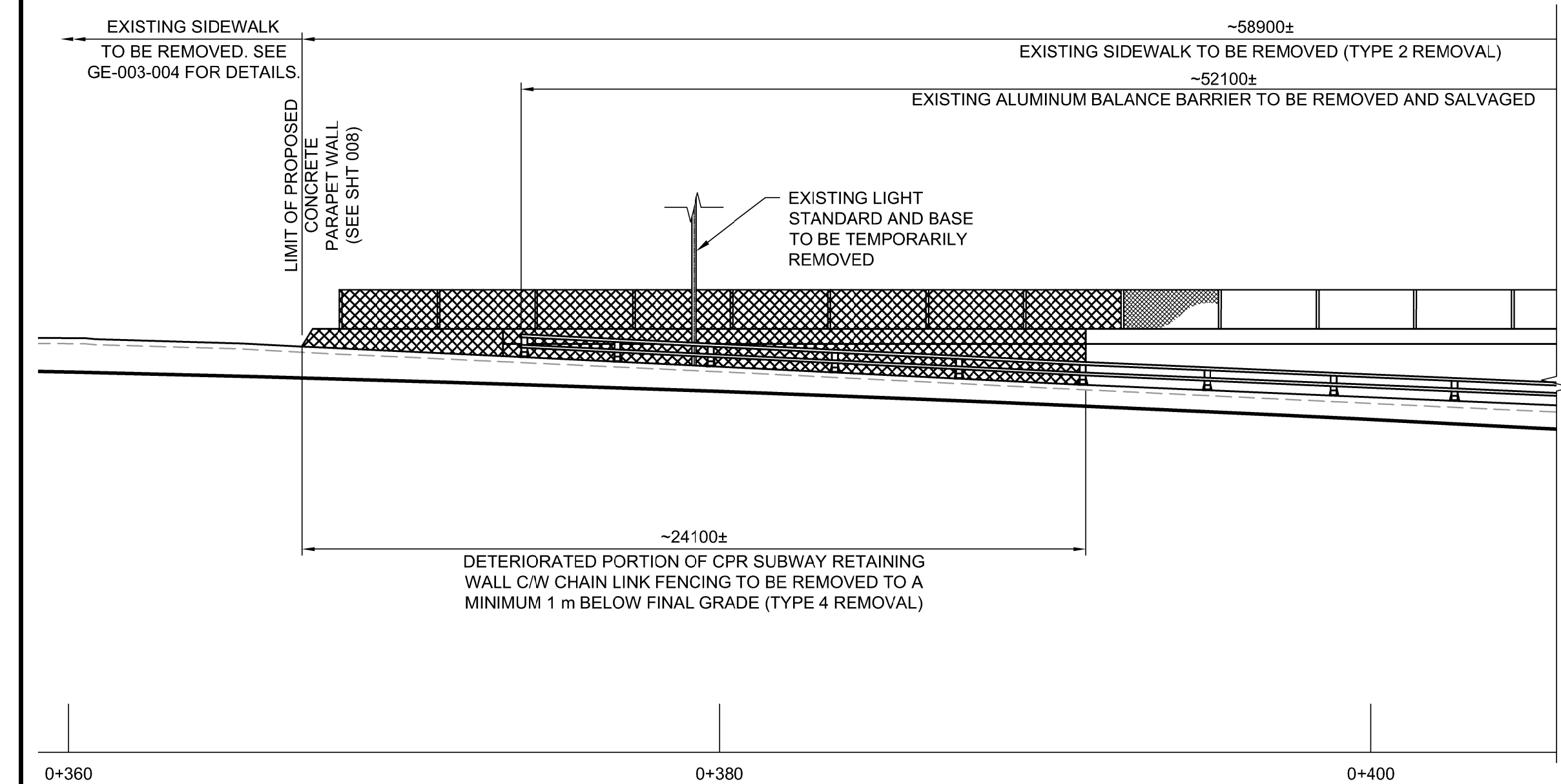
ITEM NO.	PART NUMBER	QTY. PER	MATERIAL	GRADE	LENGTH in	WEIGHT Kg
	COVER PLATE	1				TOTAL WEIGHT: 297.7
			4% GALV.			11.45
4	-	4	1/2" HEX NUT-BARE	A563-DH	-	0.12
3	m1	2	RB1/2"	300W	11 15/16 FLAT	0.6
2	p5	2	PL1/4"	300W	4 1/4x7 1/4	1.9
1	p1	1	PL5/8" CHECKERED	300W	59 3/4x59 3/4	283.63

REV.	DESCRIPTION	DATE
A	ISSUED FOR APPROVAL	NOV-26-2018

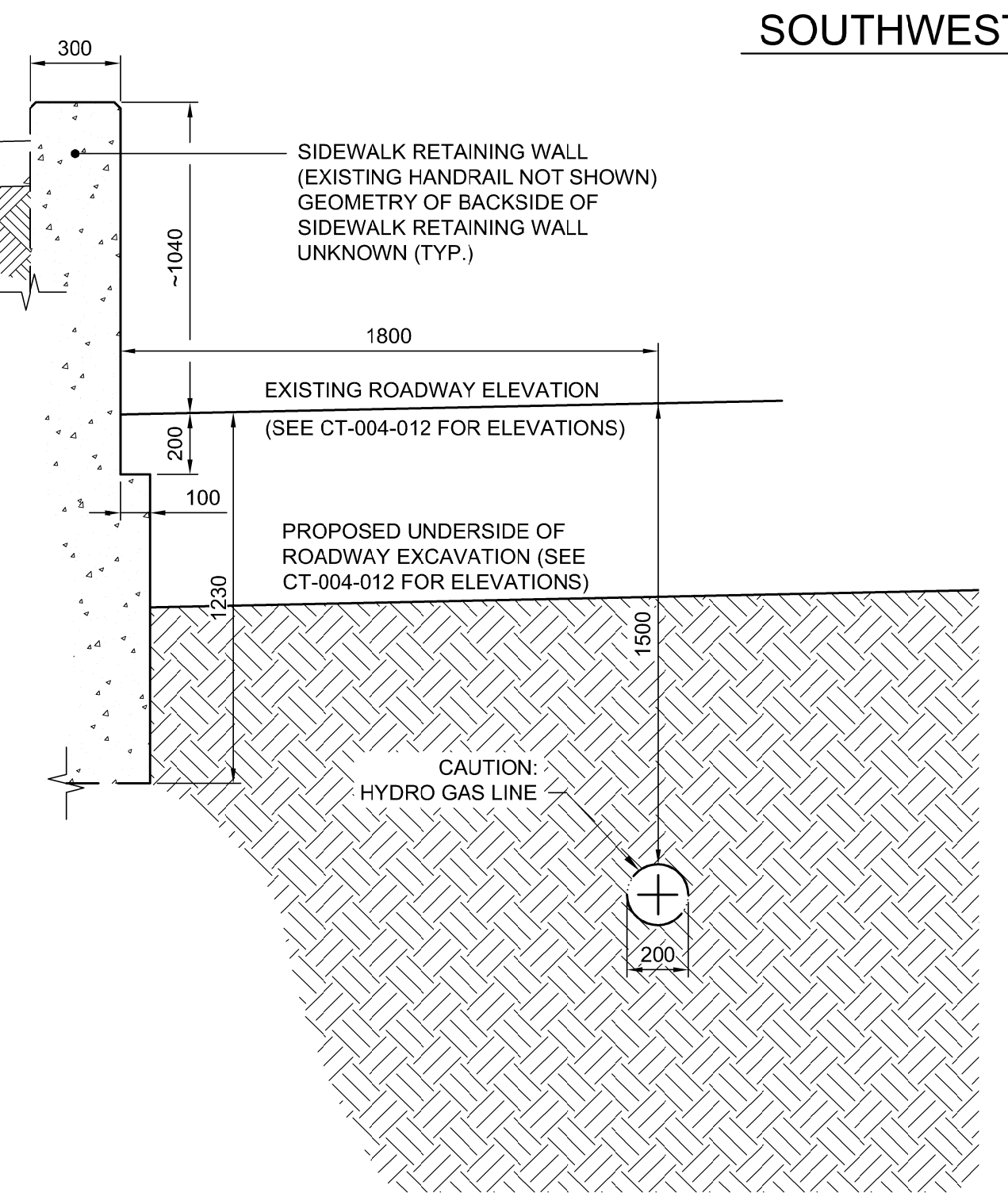
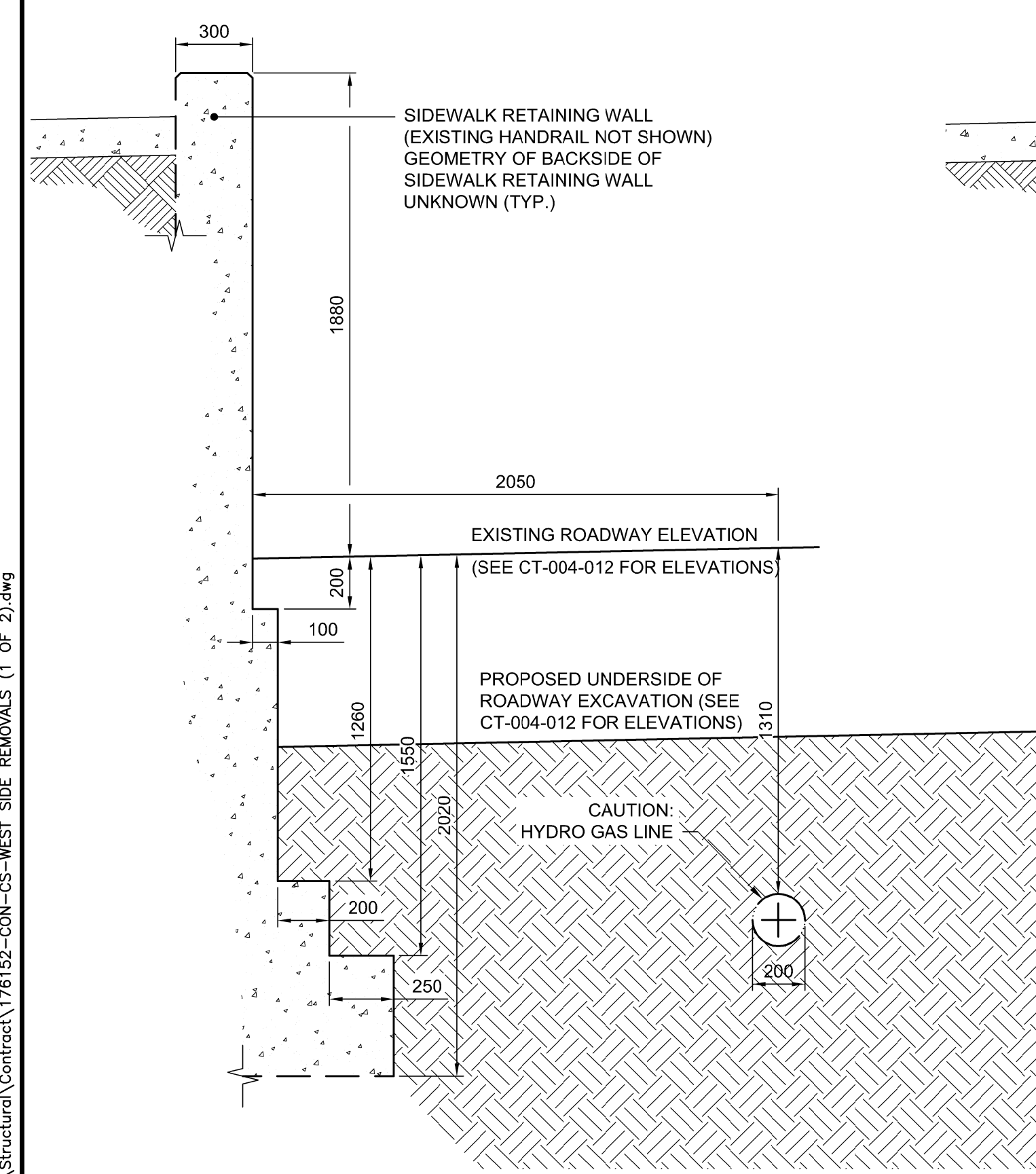
		Falcon Manufacturing Ltd. 57 DAWSON ROAD NORTH, WINNIPEG MANITOBA R2J 0S6 PH:(204)927-7000 FAX:(204)927-7020	
UNITS:	CONTRACTOR:	GATEWAY CONSTRUCTION	
in	PROJECT:	McPHILLIPS UNDERPASS	
DRWN BY:	TITLE:	COVER PLATE	
sw	PART NO.:	FINISH: H.D.G. (ASTM A-123)	
DATE:	QTY.:	WORK ORDER #	PROJECTION
NOV-23-2018	2	-	
			SHEET. REV.
			3 OF 3



SOUTHWEST SIDEWALK REMOVALS - PLAN
1:150



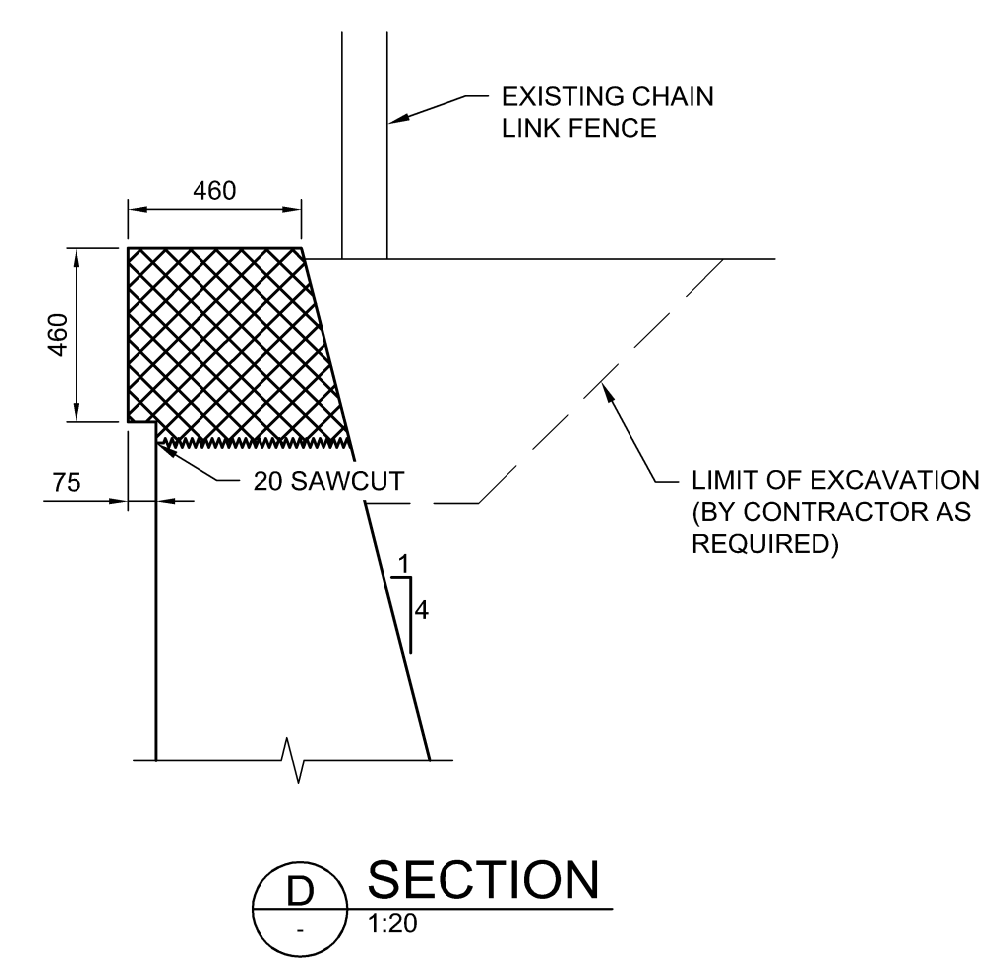
SOUTHWEST SIDEWALK REMOVALS - ELEVATION
1:150



B SECTION
1:20

C SECTION
1:20

RESULTS OF EXPLORATORY SOFT DIGGING



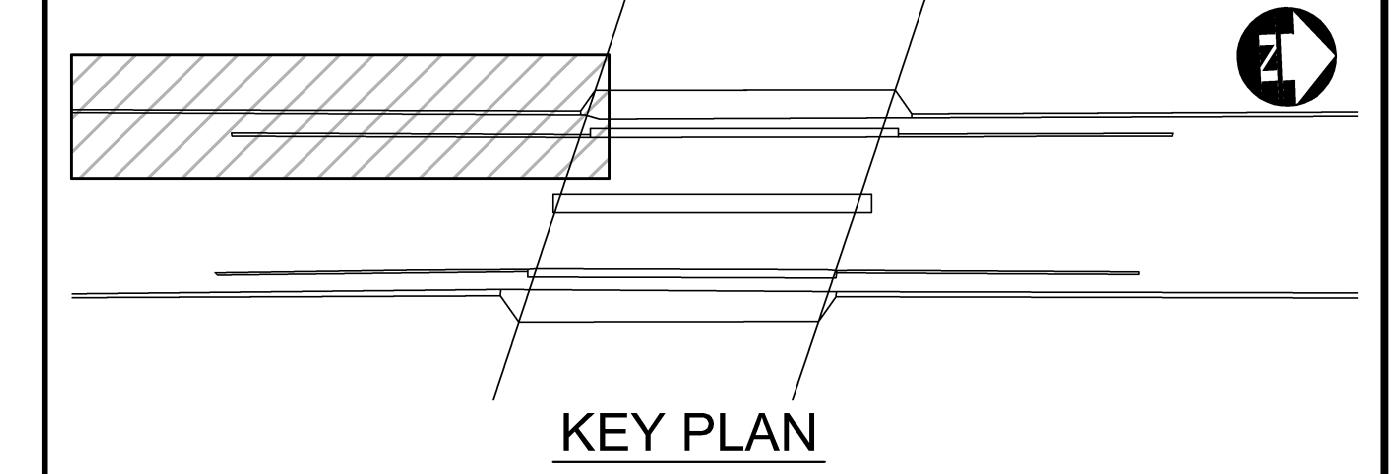
D SECTION
1:20

SCHEDULE OF SOUTHWEST REMOVALS

REMOVAL TYPE	UNIT	APPROX. QUANTITY
1	m ²	105
2	m ²	165
3	L.S.	1'
4	L.S.	1''
5	m	15
6	L.S.	N/A
7	m	4''

* INCLUDES ~8 m OF SIDEWALK RETAINING WALL AND ~22 m² OF STRUCTURAL SIDEWALK.
 ** INCLUDES ~24 m OF UNREINFORCED CONCRETE SUBWAY WALL C/W CHAIN LINK FENCE.
 *** SEE SHT 007 FOR DESCRIPTION OF REMOVAL.

NOTES:
 1. EXISTING RECORD DRAWINGS DO NOT PROVIDE DETAILED INFORMATION ON THE DEPTH OR WIDTHS OF THE SIDEWALK RETAINING WALL FOOTINGS. THE FRONT (ROADWAY) SIDE OF THE SIDEWALK RETAINING WALLS WERE SOFT DUG IN 6 LOCATIONS IN THE FALL OF 2017. THE GEOMETRY OF THE FRONT OF THE WALL DOWN TO THE U/S OF FOOTING AT EACH OF THESE LOCATIONS IS PROVIDED ON CS-003-006. THE CONTRACTOR IS ADVISED THAT THIS INFORMATION IS FOR REFERENCE ONLY AND IS ONLY REPRESENTATIVE OF THE WALL AT THE SPECIFIC LOCATION SOFT DUG.



KEY PLAN

APEGM
 Certificate of Authorization
 Dillon Consulting Limited (MB)
 No. 1789 Date: 18/03/16

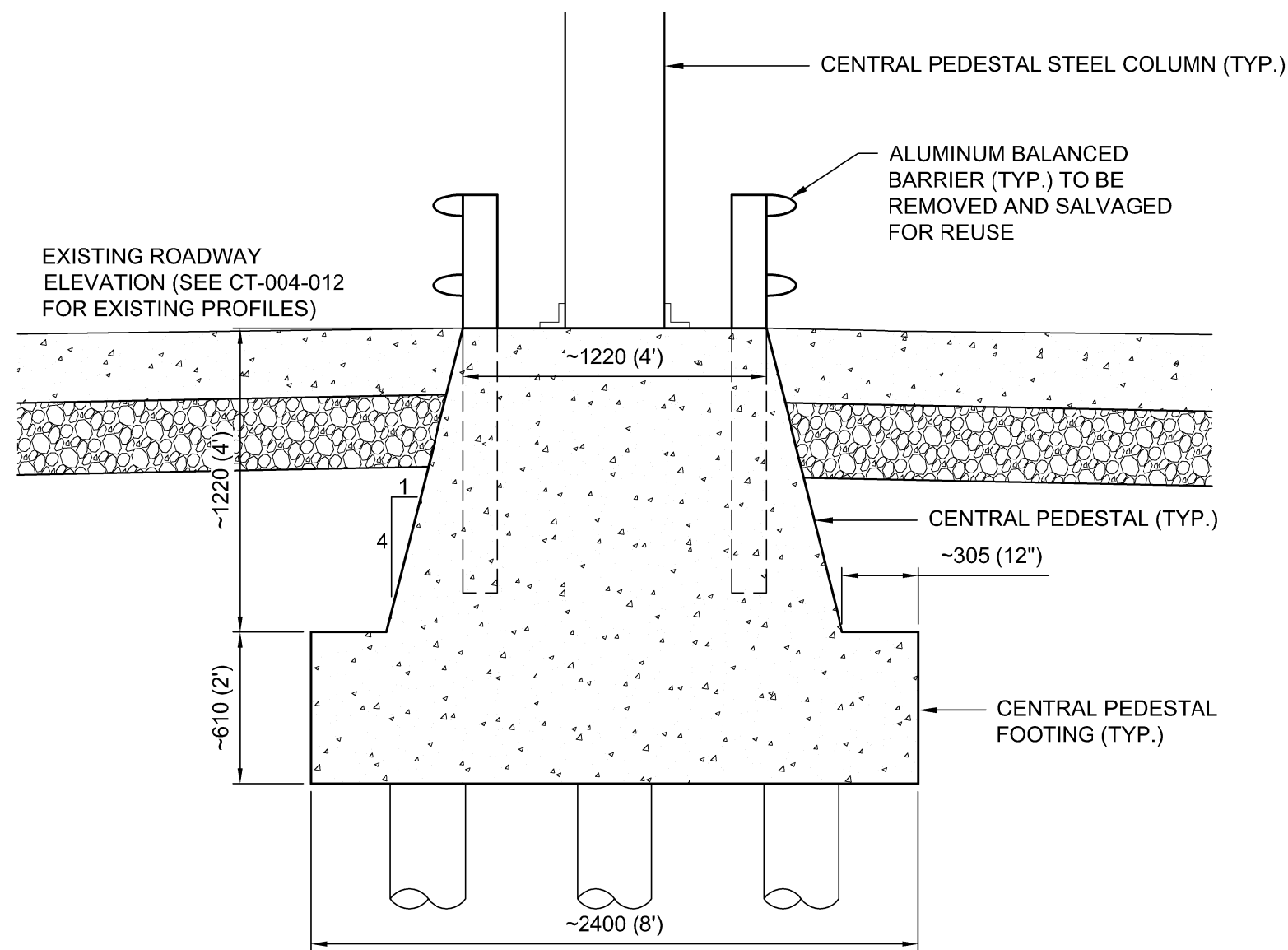
ENGINEER'S SEAL
 PROVINCE OF MANITOBA
 ORIGINAL CERTIFICATE
D.R.C. AMORIM
 18/03/16
 Member 33215
 REGISTERED PROFESSIONAL ENGINEER

THE CITY OF WINNIPEG
 PUBLIC WORKS DEPARTMENT
Winnipeg
 2018 REGIONAL STREET RENEWAL PROJECT
 McPHILLIPS STREET RECONSTRUCTION AND UNDERPASS
 STRUCTURAL IMPROVEMENTS
 LOGAN AVENUE TO JARVIS AVENUE
 CITY DRAWING NUMBER U212-18CS-003-R0
 SHEET 003 OF 026
 CONSULTANT DRAWING NUMBER CS-003

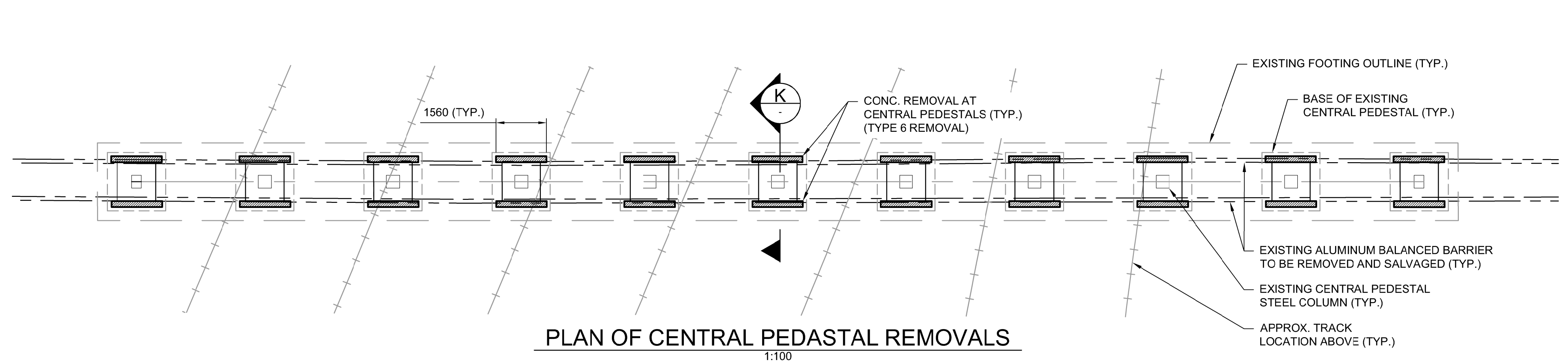
UNDERGROUND STRUCTURES	B.M. ELEV.	DESIGNED BY	DATE
SUPY. U/G STRUCTURES		DRA	
		DRAWN BY	KNL
		CHECKED BY	DRA
		APPROVED BY	TJP
		HOR. SCALE	AS SHOWN
		VERTICAL	AS SHOWN
0 ISSUED FOR TENDER	18/03/16	TJP	
NO. REVISIONS	DATE	BY	DATE

DILLON CONSULTING
 RELEASED FOR CONSTRUCTION
 DATE

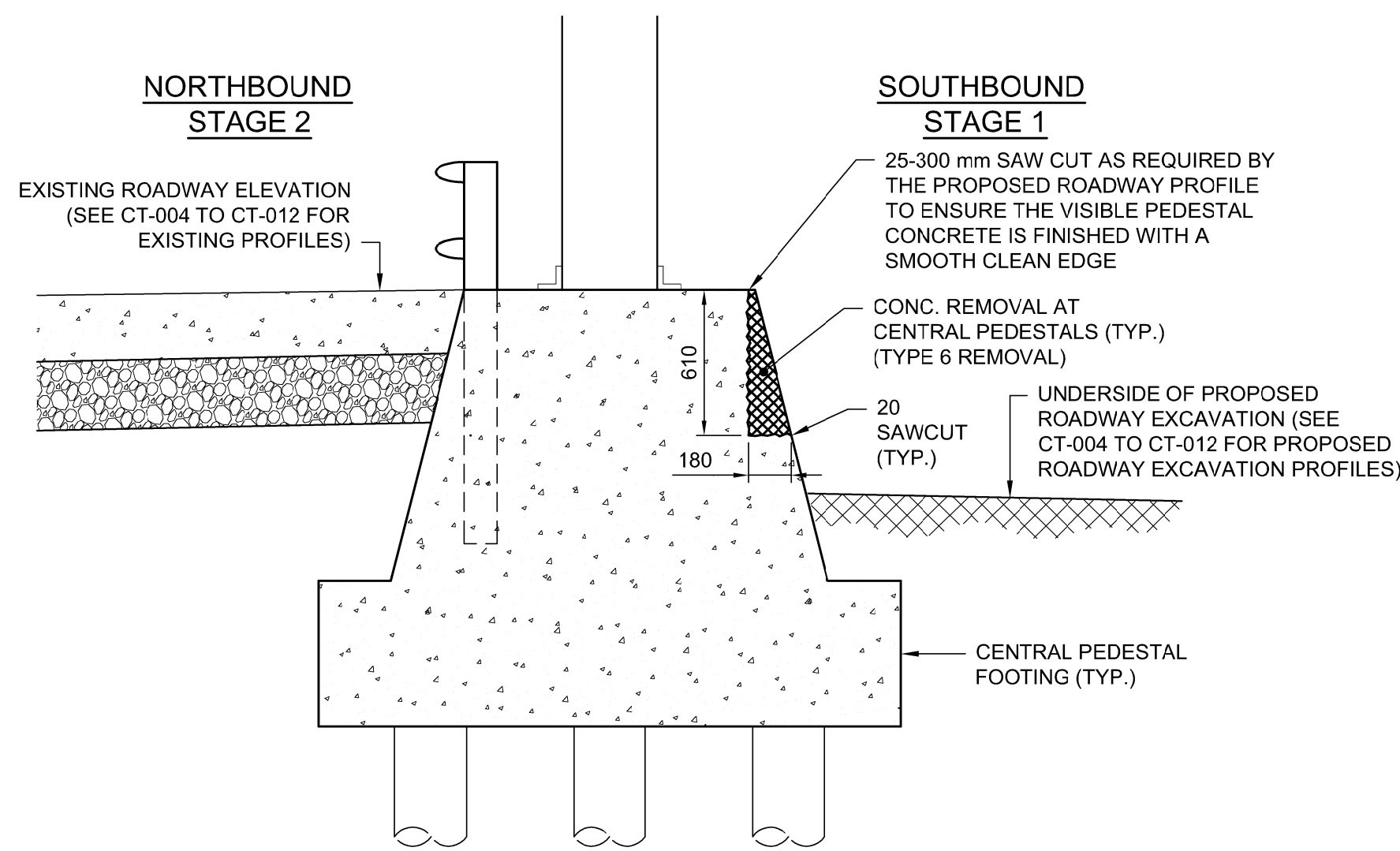
G:\CAD\176152\Drawings\Structural\Contract\176152-COIN-CS-WEST_SIDE_REMOVALS (1 OF 2).dwg



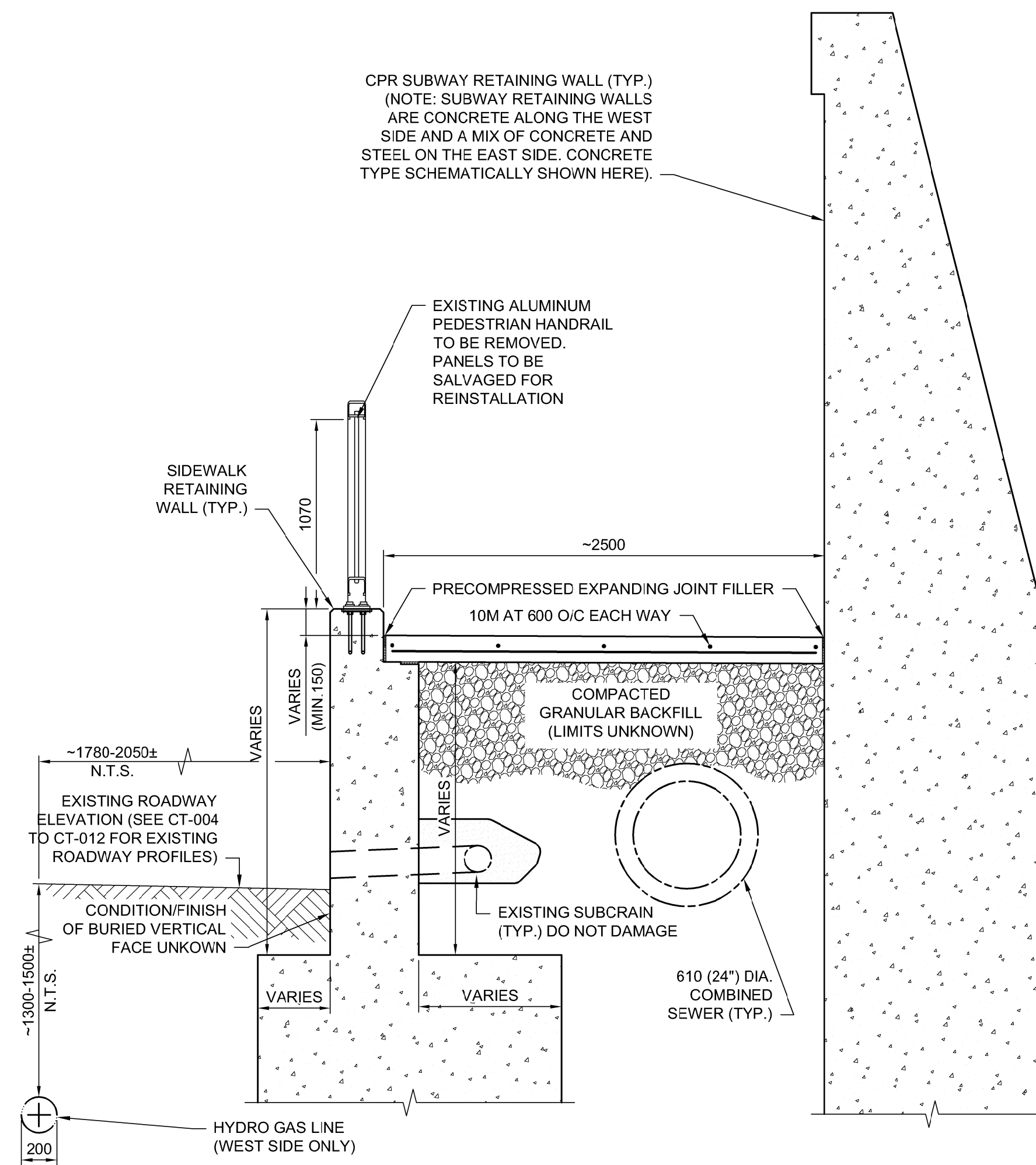
K EXISTING CENTRAL PEDESTAL SECTION
1:25



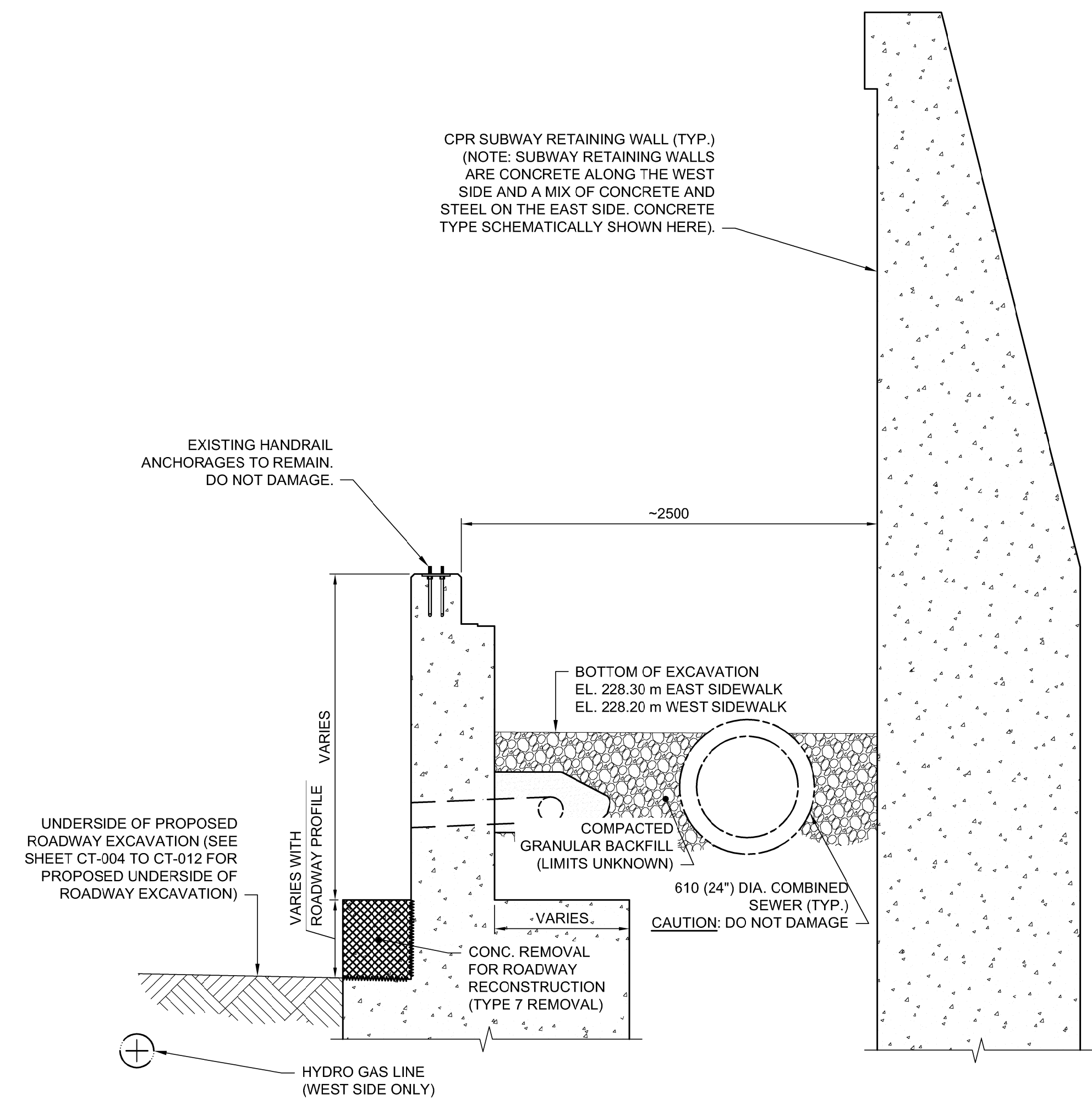
PLAN OF CENTRAL PEDESTAL REMOVALS
1:100



K CENTRAL PEDESTAL REMOVALS SECTION
1:25
STAGE 1 REMOVALS SHOWN
STAGE 2 SIMILAR



J EXISTING SIDEWALK SECTION
1:25



J EXCAVATED SIDEWALK SECTION
1:25
CS-004
CS-005
CS-006

NOTES:

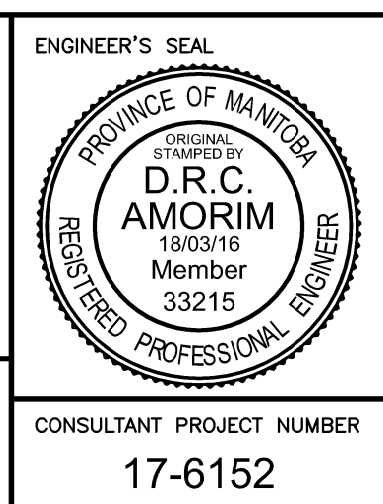
- EXISTING RECORD DRAWINGS DO NOT PROVIDE DETAILED INFORMATION ON THE DEPTH OR WIDTHS OF THE SIDEWALK RETAINING WALL FOOTINGS. THE FRONT (ROADWAY) SIDE OF THE SIDEWALK RETAINING WALLS WERE SOFT DUG IN 6 LOCATIONS IN THE FALL OF 2017. THE GEOMETRY OF THE FRONT OF THE WALL DOWN TO THE U/S OF FOOTING AT EACH OF THESE LOCATIONS IS PROVIDED ON SHEETS CS-003 TO CS-006. THE CONTRACTOR IS ADVISED THAT THIS INFORMATION IS FOR REFERENCE ONLY AND IS ONLY REPRESENTATIVE OF THE WALL AT THE SPECIFIC LOCATION SOFT DUG.
- THERE EXISTS THE POSSIBILITY THAT IN SOME LOCATIONS, THE EXISTING ROADWAY SITS DIRECTLY ON THE SIDEWALK RETAINING WALL FOOTING AS SHOWN ON THIS DRAWING. IN THESE INSTANCES, THE FRONT (ROADWAY) SIDE OF THE WALL SHALL BE NOTCHED AS REQUIRED TO ALLOW FOR THE FULL PLACEMENT OF THE PROPOSED ROADWAY STRUCTURE INCLUDING SUBBASE AND CONCRETE PAVEMENT.
- THE SECTIONS SHOWN ON THIS PAGE HAVE BEEN DEVELOPED BASED ON THE RESULTS OF THE SOFT DIG AT THE LOCATION SHOWN IN SECTION 'G' ON SHEET CS-005. GENERALLY, THE NOTES/DETAILS SHOWN ON THIS PAGE ARE APPLICABLE TO THE ENTIRE LENGTH OF THE SIDEWALK RETAINING WALL.
- SEQUENCE OF WORK:
 - REMOVE AND SAFELY STORE THE EXISTING ALUMINUM HANDRAIL. THE CONTRACTOR SHALL TAKE GREAT CARE NOT TO DAMAGE THE EXISTING HANDRAIL PANELS OR HANDRAIL ANCHORAGES AS THEY ARE EXPECTED TO BE REUSED.
 - REMOVE AND DISPOSE OF THE EXISTING REINFORCED CONCRETE SIDEWALK TO THE LIMITS SHOWN ON THE DRAWINGS.
 - EXCAVATE EXISTING SIDEWALK RETAINING WALL BACKFILL TO THE ELEVATIONS SHOWN ON THE DRAWINGS. GREAT CARE SHALL BE TAKEN AROUND ANY KNOWN UTILITIES. THE CONTRACTOR IS ADVISED THAT THERE ARE EXISTING SUBDRAINS BEHIND THE SIDEWALK RETAINING WALLS WHICH ARE TO REMAIN. ANY DAMAGE TO UTILITIES OR THE SUBDRAINS DURING EXCAVATION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
 - COMPLETE ROADWAY RECONSTRUCTION WORKS. NOTE: EXCAVATION FOR ROADWAY RECONSTRUCTION SHALL NOT COMMENCE UNTIL THE EXCAVATION TO THE SPECIFIED LIMITS IS COMPLETED BEHIND THE SIDEWALK RETAINING WALLS.
 - BACKFILL SIDEWALK EXCAVATION WITH CELLULAR CONCRETE AND CONSTRUCT NEW REINFORCED STRUCTURAL SIDEWALK.
 - REATTACH SALVAGED ALUMINUM HANDRAIL PANELS COMPLETE WITH NEW ALUMINUM POSTS AND BICYCLE RAIL.



UNDERGROUND STRUCTURES	B.M. ELEV.	DESIGNED BY	DRA
SUPV. U/G STRUCTURES	DATE	DRAWN BY	KNL
		CHECKED BY	DRA
		APPROVED BY	TJP
		HOR. SCALE	AS SHOWN
		VERTICAL	AS SHOWN
		ISSUED FOR TENDER	18/03/16 TJP
		NO. REVISIONS	DATE BY

RELEASED FOR CONSTRUCTION	DATE

DESIGNED BY	DRA
DRAWN BY	KNL
CHECKED BY	DRA
APPROVED BY	TJP
HOR. SCALE	AS SHOWN
VERTICAL	AS SHOWN



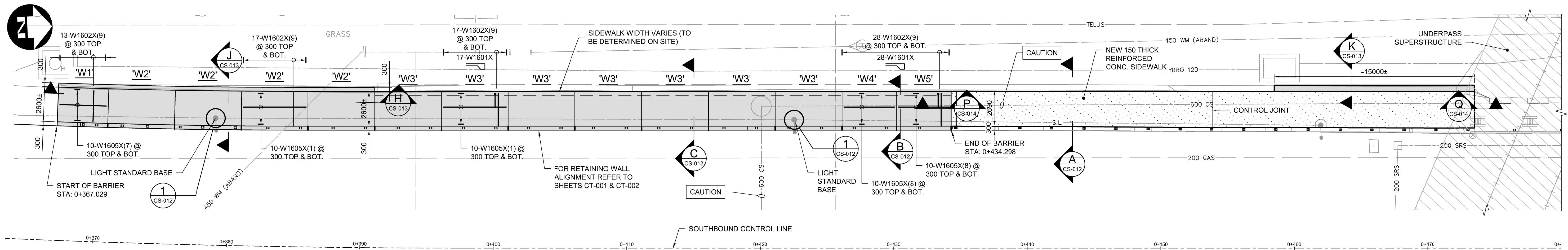
THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT

2018 REGIONAL STREET RENEWAL PROJECT
McPHERSON STREET RECONSTRUCTION AND UNDERPASS
STRUCTURAL IMPROVEMENTS
LOGAN AVENUE TO JARVIS AVENUE

CITY DRAWING NUMBER
U212-18-CS-007-R0
SHEET 007 OF 026
CONSULTANT DRAWING NUMBER
CS-007

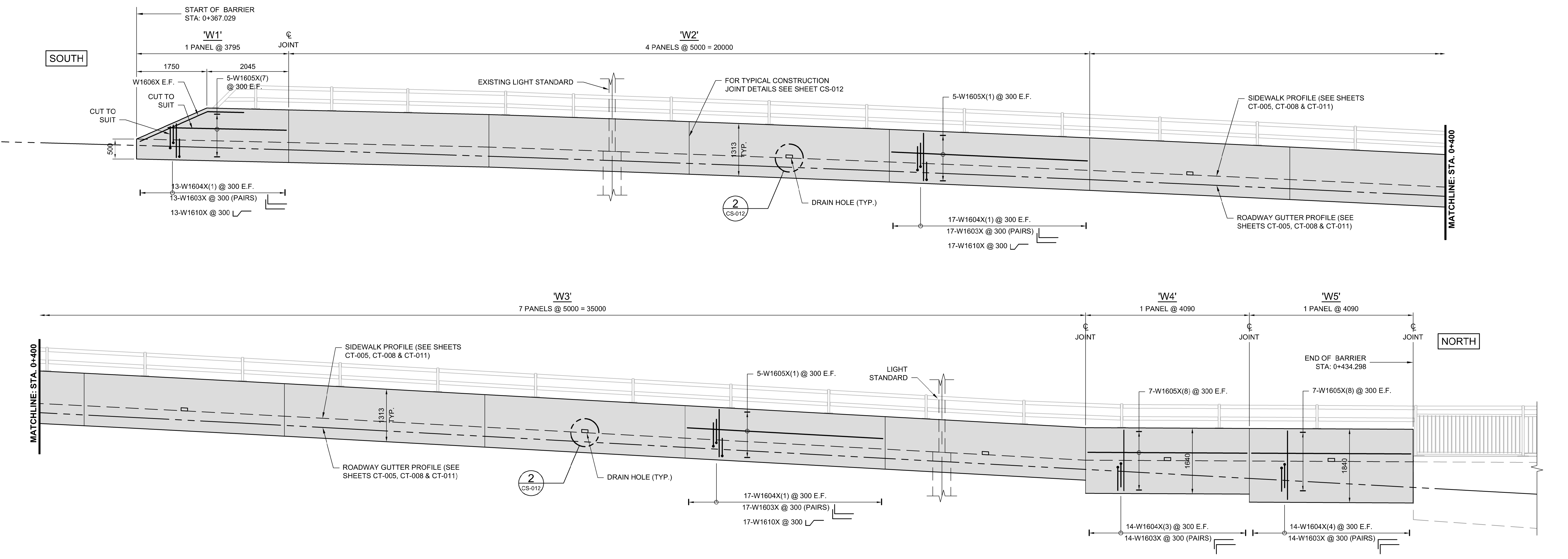
REMOVALS - SECTIONS AND DETAILS

G:\CAD\176152\Drawings\Structural\176152-CON-CS-PIER-MODIFICATION-DETAILS.dwg



SOUTHWEST SIDEWALK RECONSTRUCTION - PLAN

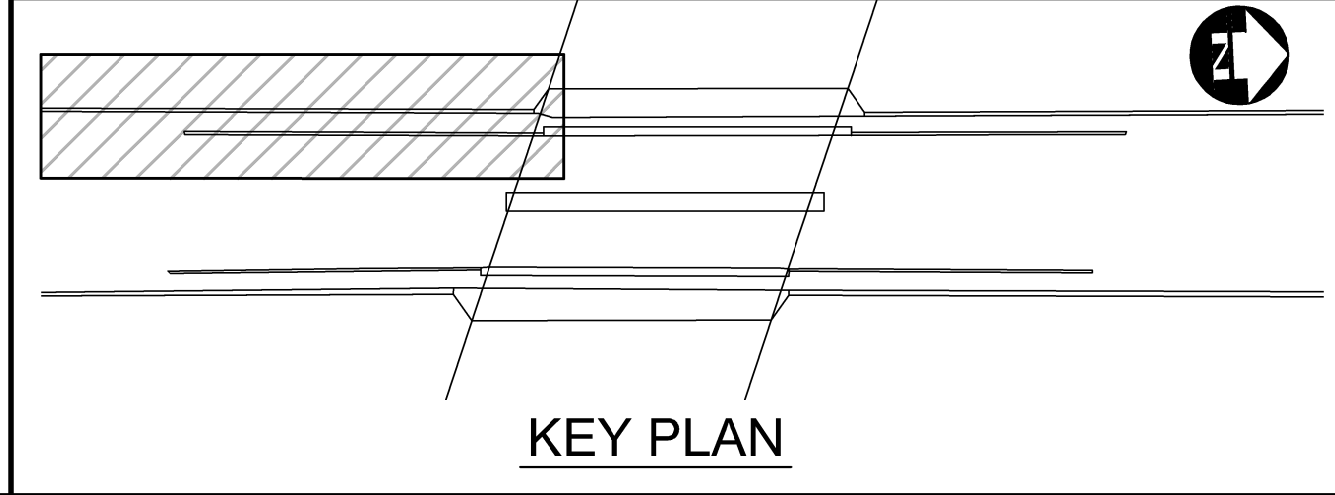
1:150



SOUTHWEST SIDEWALK RECONSTRUCTION - ELEVATION

1:50

NOTES:
 1. FOR PEDESTRIAN HANDRAIL AND BICYCLE RAIL POST LAYOUT AND BILL OF MISCELLANEOUS METAL FOR PRESET ANCHOR UNITS MK. "Q1", REFER TO SHEETS CS-020 TO CS-025.



UNDERGROUND STRUCTURES		B.M. ELEV.	DESIGNED BY
SUPPLY U/G STRUCTURES	DATE		DRA
			DRAWN BY CGC
			CHECKED BY DRA
			APPROVED BY TJP
			HOR. SCALE -
			VERTICAL -
0	ISSUED FOR TENDER	18/03/16	TJP
NO.	REVISIONS	DATE	BY

RELEASER FOR CONSTRUCTION	DATE

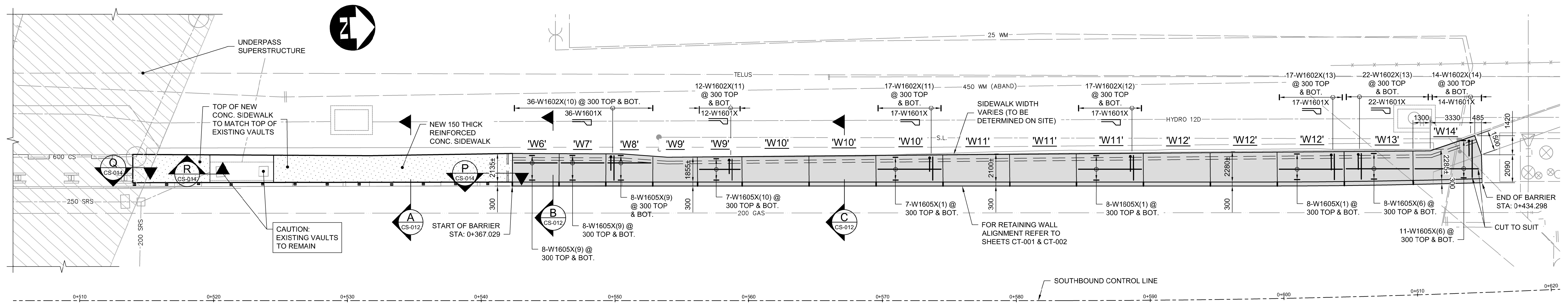
ENGINEER'S SEAL
 PROVINCE OF MANITOBA
 ORIGINAL REGISTERED
D.R.C. AMORIM
 18/03/16
 Member
 33215
 REGISTERED PROFESSIONAL ENGINEER
 CONSULTANT PROJECT NUMBER
 17-6152

THE CITY OF WINNIPEG
 PUBLIC WORKS DEPARTMENT
 2018 REGIONAL STREET RENEWAL PROJECT
 McPHILLIPS STREET RECONSTRUCTION AND UNDERPASS
 STRUCTURAL IMPROVEMENTS
 LOGAN AVENUE TO JARVIS AVENUE
 WEST SIDE RECONSTRUCTION (1 OF 2)

CITY DRAWING NUMBER
 U212-18-CS-008-R0
 SHEET 008 OF 026
 CONSULTANT DRAWING NUMBER
 CS-008

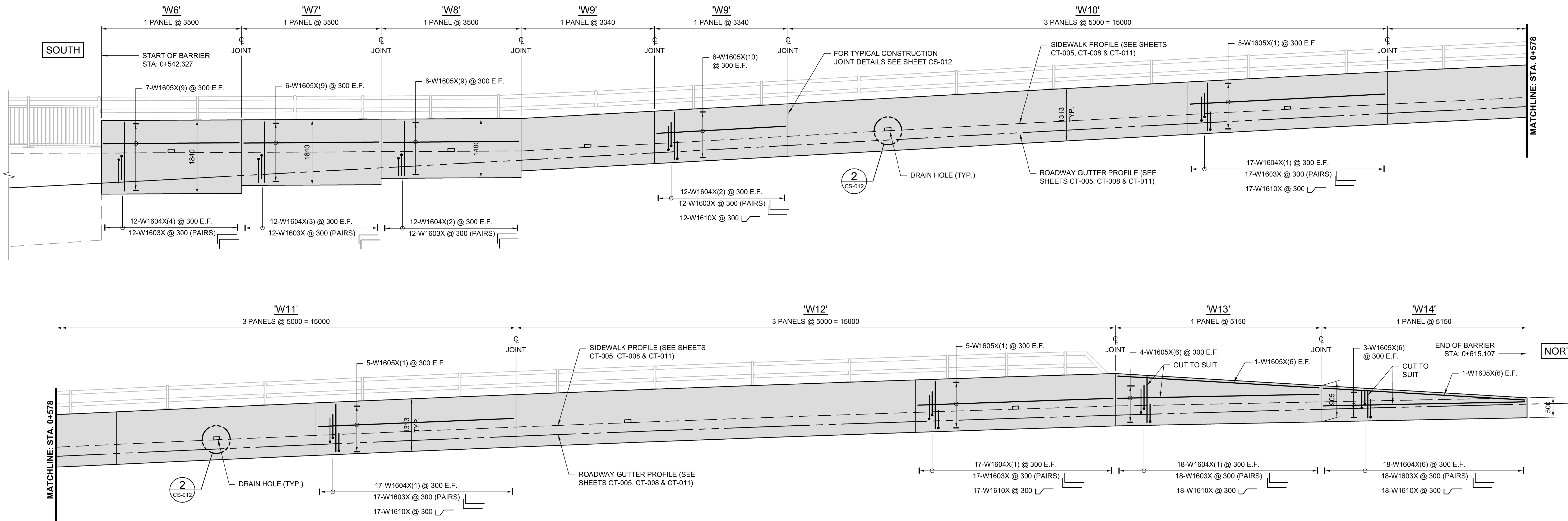
APEGM
 Certificate of Authorization
 Dillon Consulting Limited (MB)
 No. 1789 Date: 18/03/16

G:\CAD\176152\Drawings\Structural\Contract\176152-CON-CS-WEST_SIDE_RECONSTRUCTION (1 OF 2).dwg



NORTHWEST SIDEWALK RECONSTRUCTION - PLAN

1:150

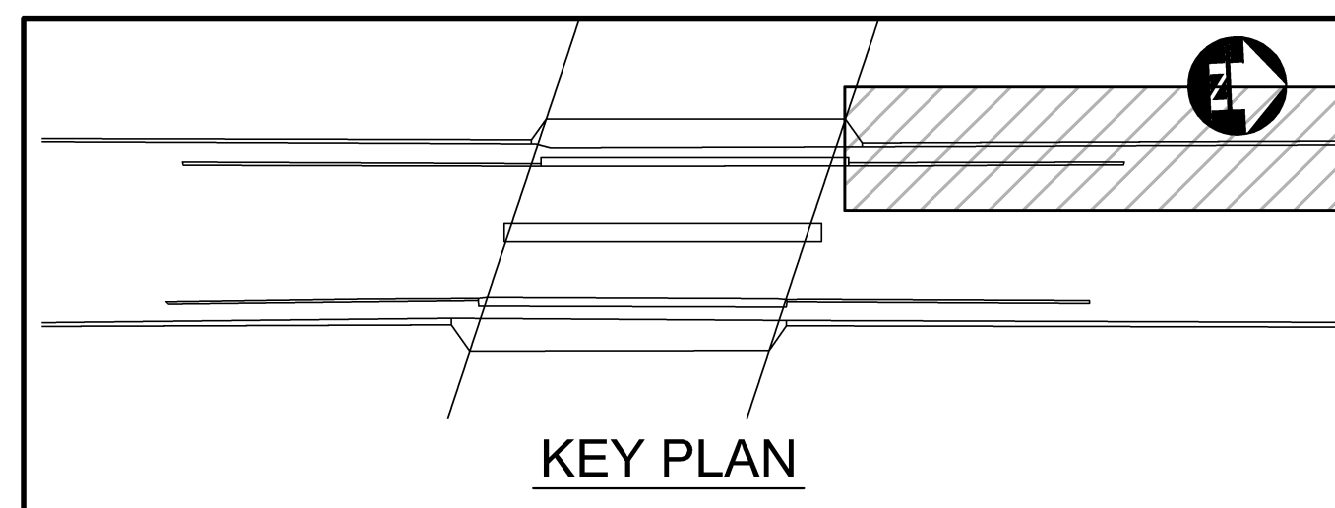


NORTHWEST SIDEWALK RECONSTRUCTION - ELEVATION

1:50

NOTES:

- FOR PEDESTRIAN HANDRAIL AND BICYCLE RAIL POST LAYOUT AND BILL OF MISCELLANEOUS METAL FOR PRESET ANCHOR UNITS MK. "Q1", REFER TO SHEETS CS-020 TO CS-025.



UNDERGROUND STRUCTURES

SUPPLY U/G STRUCTURES DATE

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.

B.M. ELEV.	DESIGNED BY	DATE
	DRA	
	DRAWN BY	CGC
	CHECKED BY	DRA
	APPROVED BY	TJP
	HOR. SCALE	-
	VERTICAL	-
0	ISSUED FOR TENDER	18/03/16 TJP
NO.	REVISIONS	DATE BY

DESIGNED BY	DRA
DRAWN BY	CGC
CHECKED BY	DRA
APPROVED BY	TJP
HOR. SCALE	-
VERTICAL	-
DATE	

DILLON CONSULTING

RELEASED FOR CONSTRUCTION

DATE

ENGINEER'S SEAL

CONSULTANT PROJECT NUMBER
17-6152

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT

2018 REGIONAL STREET RENEWAL PROJECT
McPHILLIPS STREET RECONSTRUCTION AND UNDERPASS
STRUCTURAL IMPROVEMENTS
LOGAN AVENUE TO JARVIS AVENUE

CITY DRAWING NUMBER
U212-18-CS-009-R0

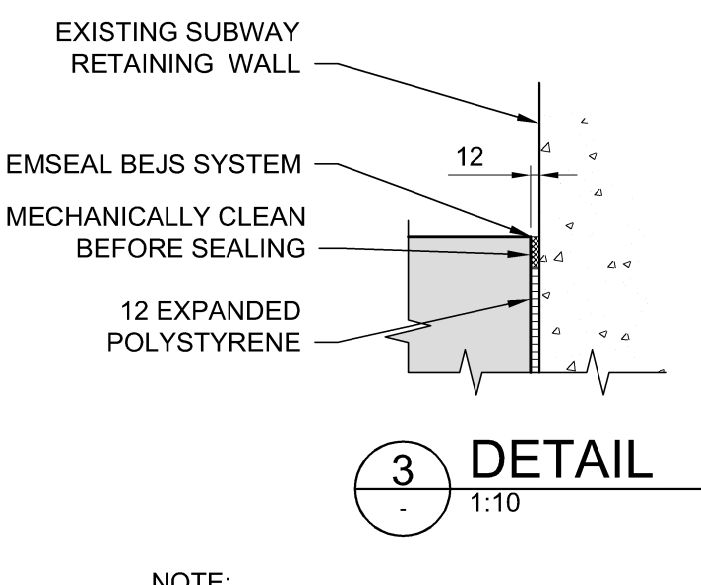
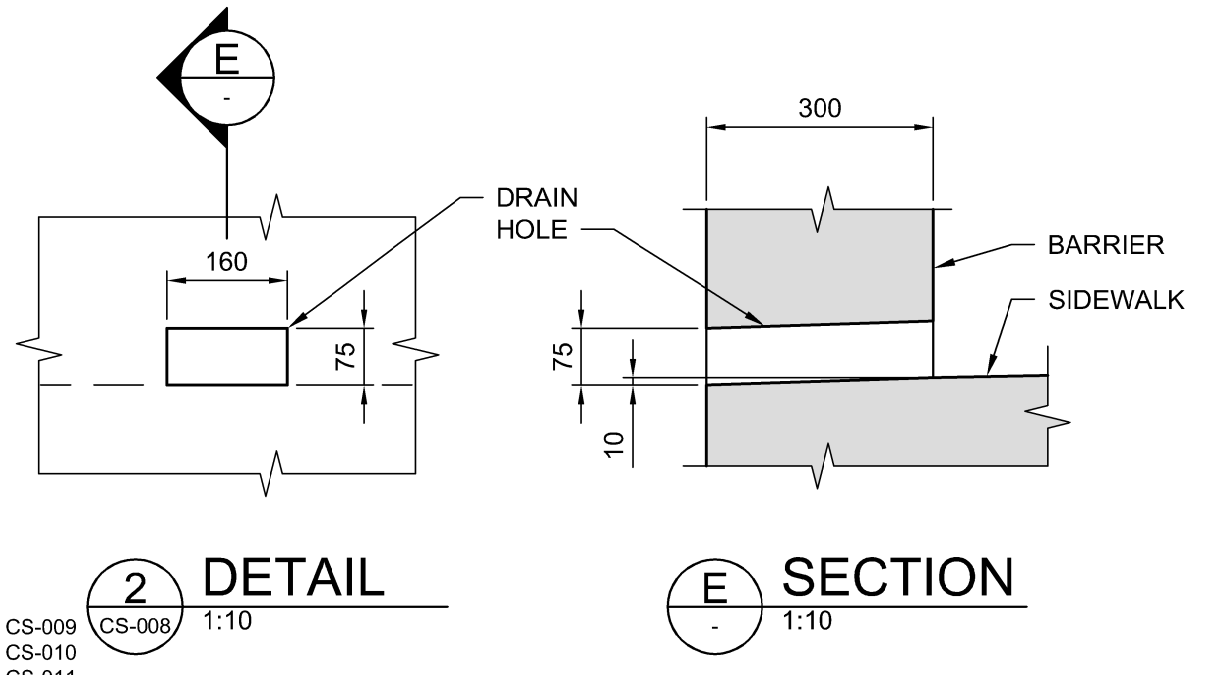
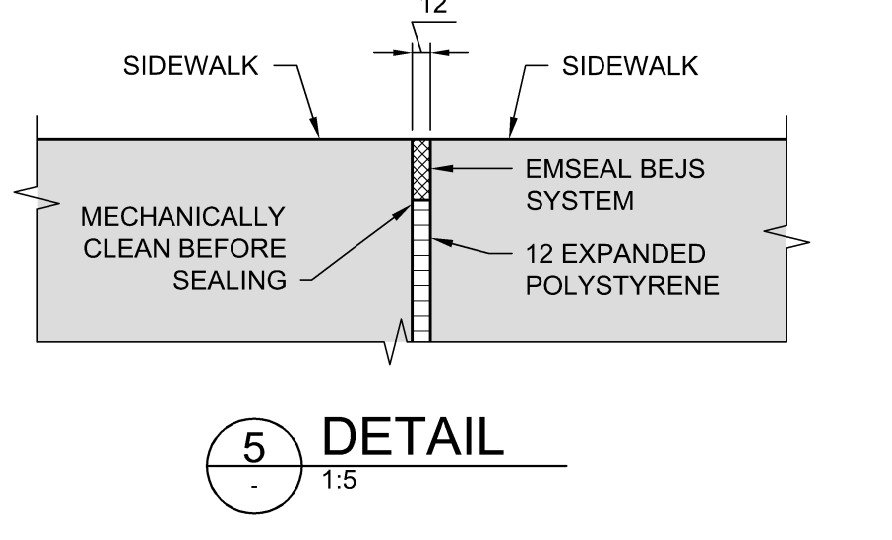
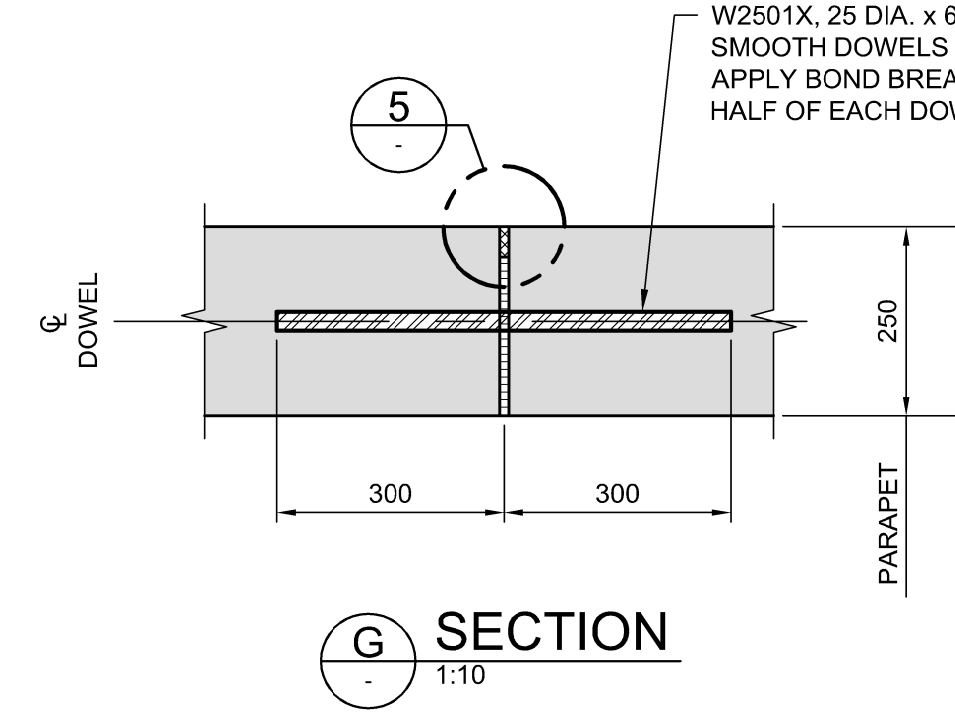
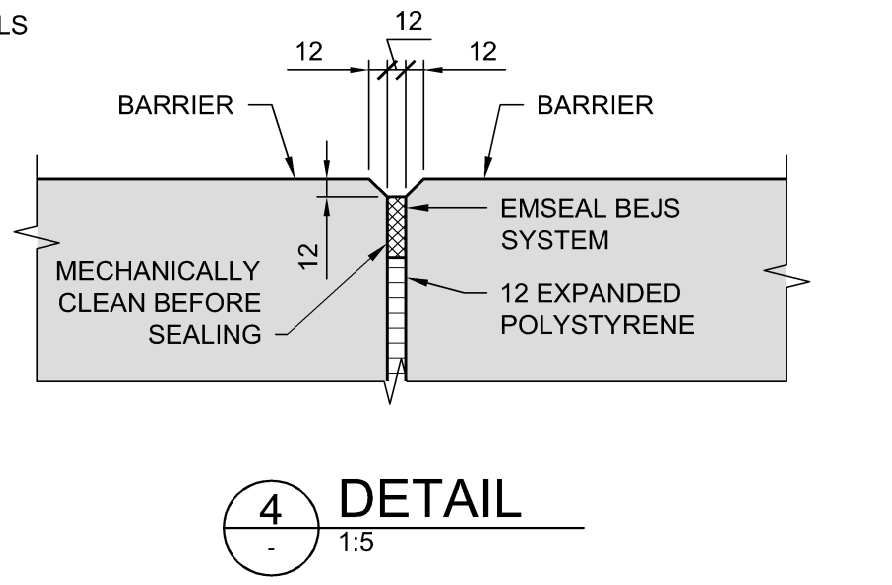
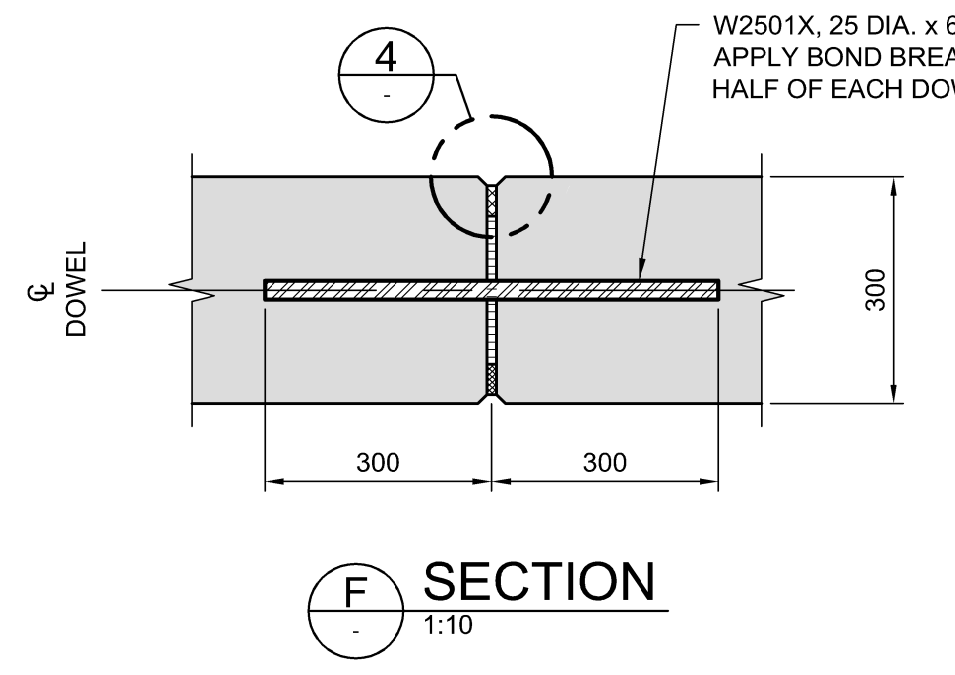
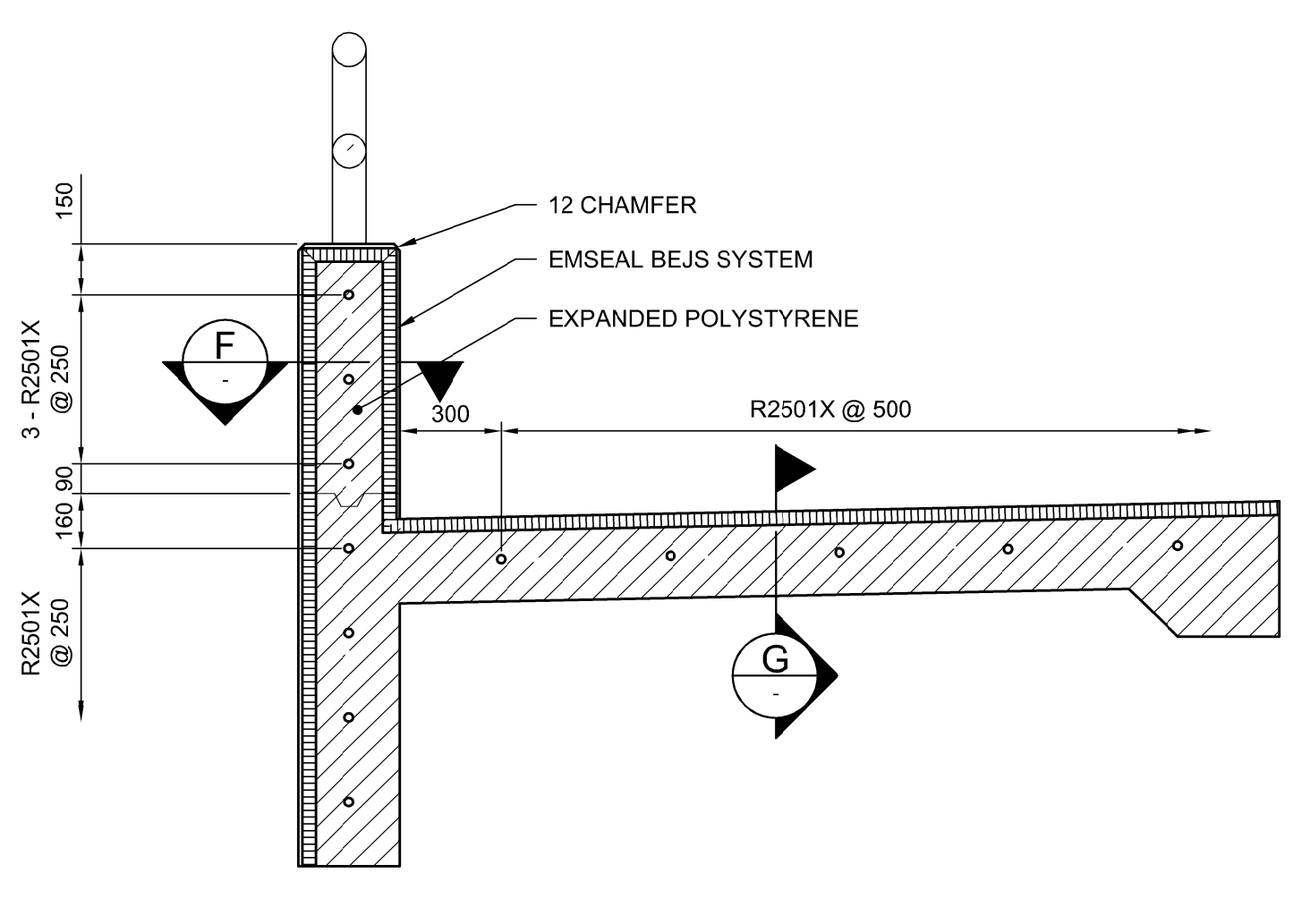
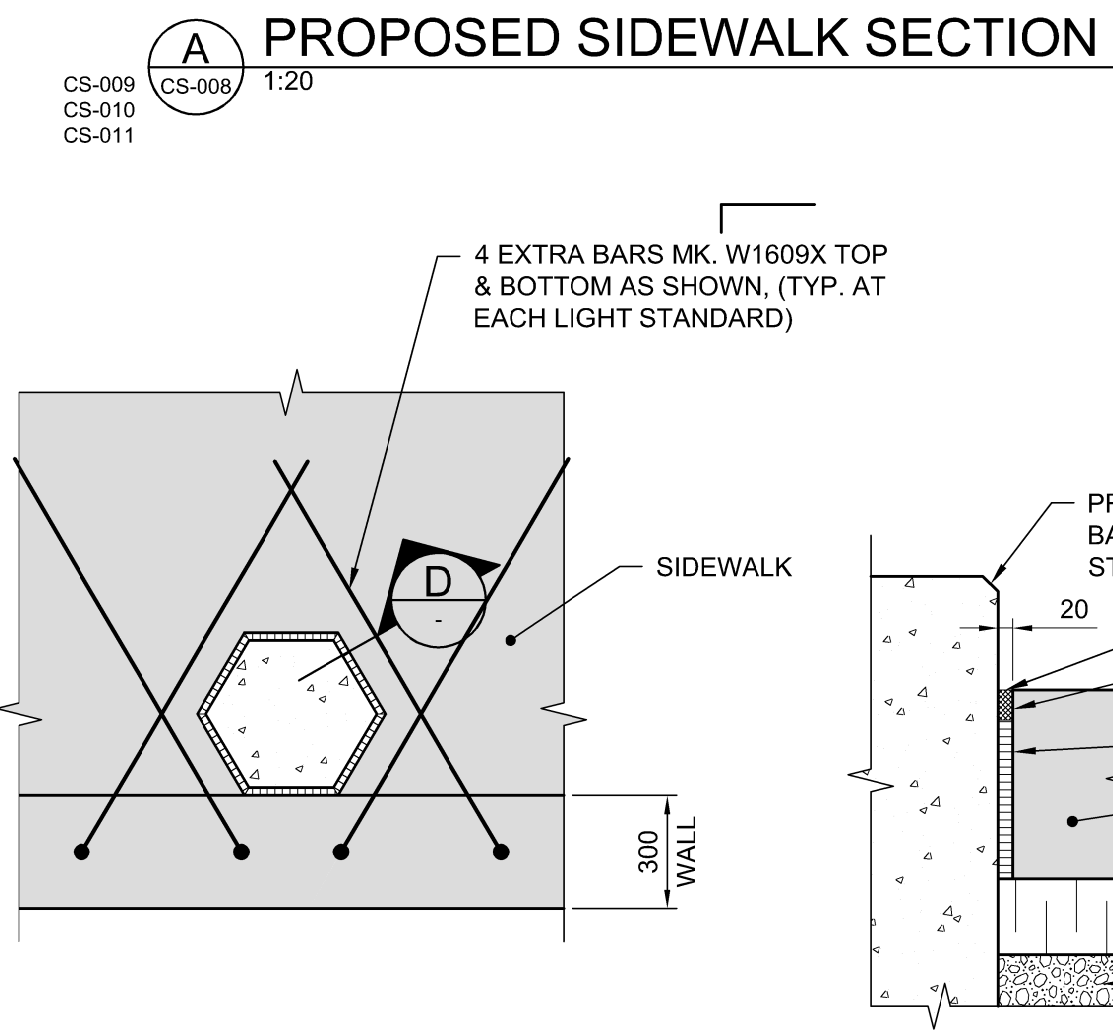
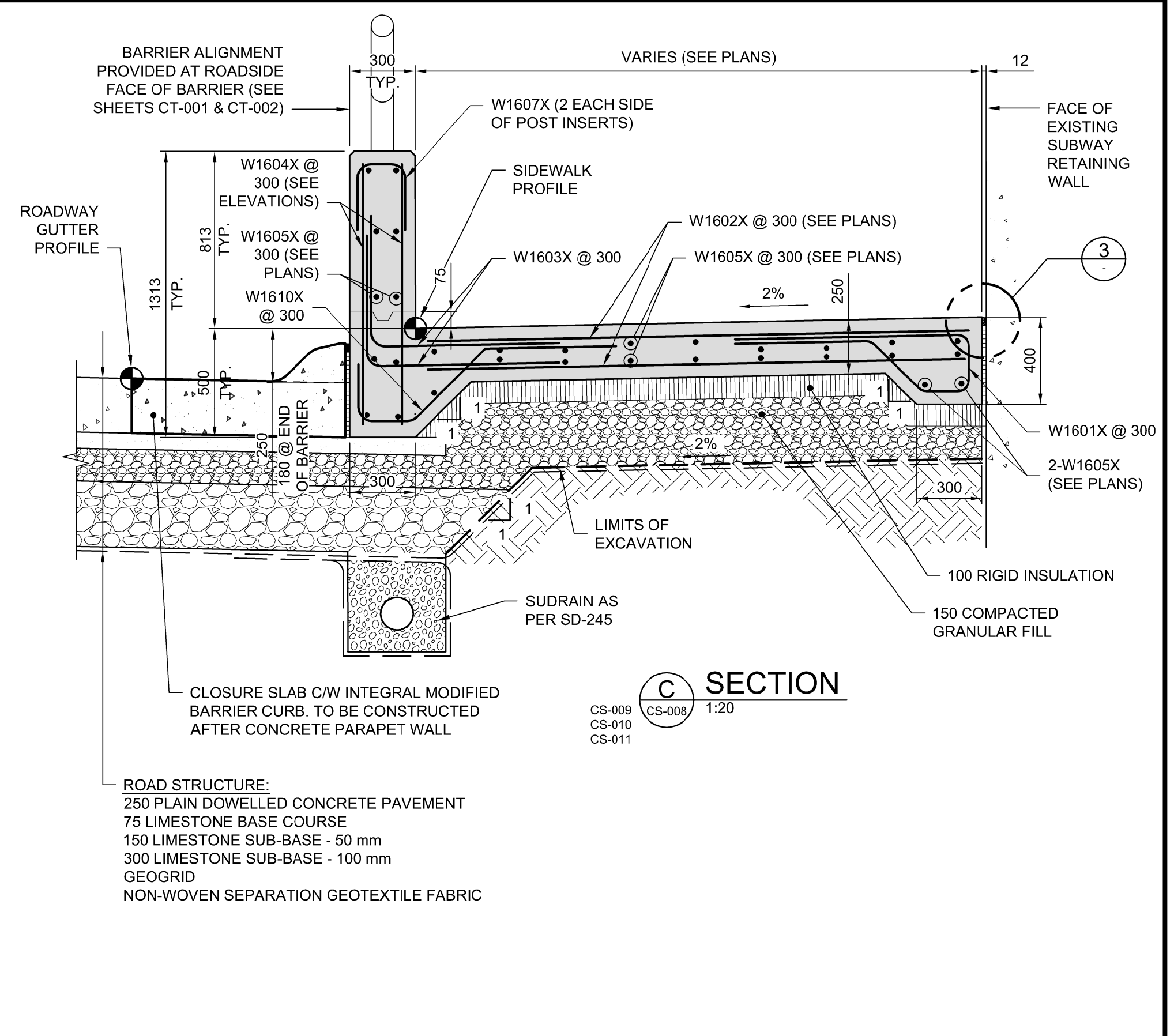
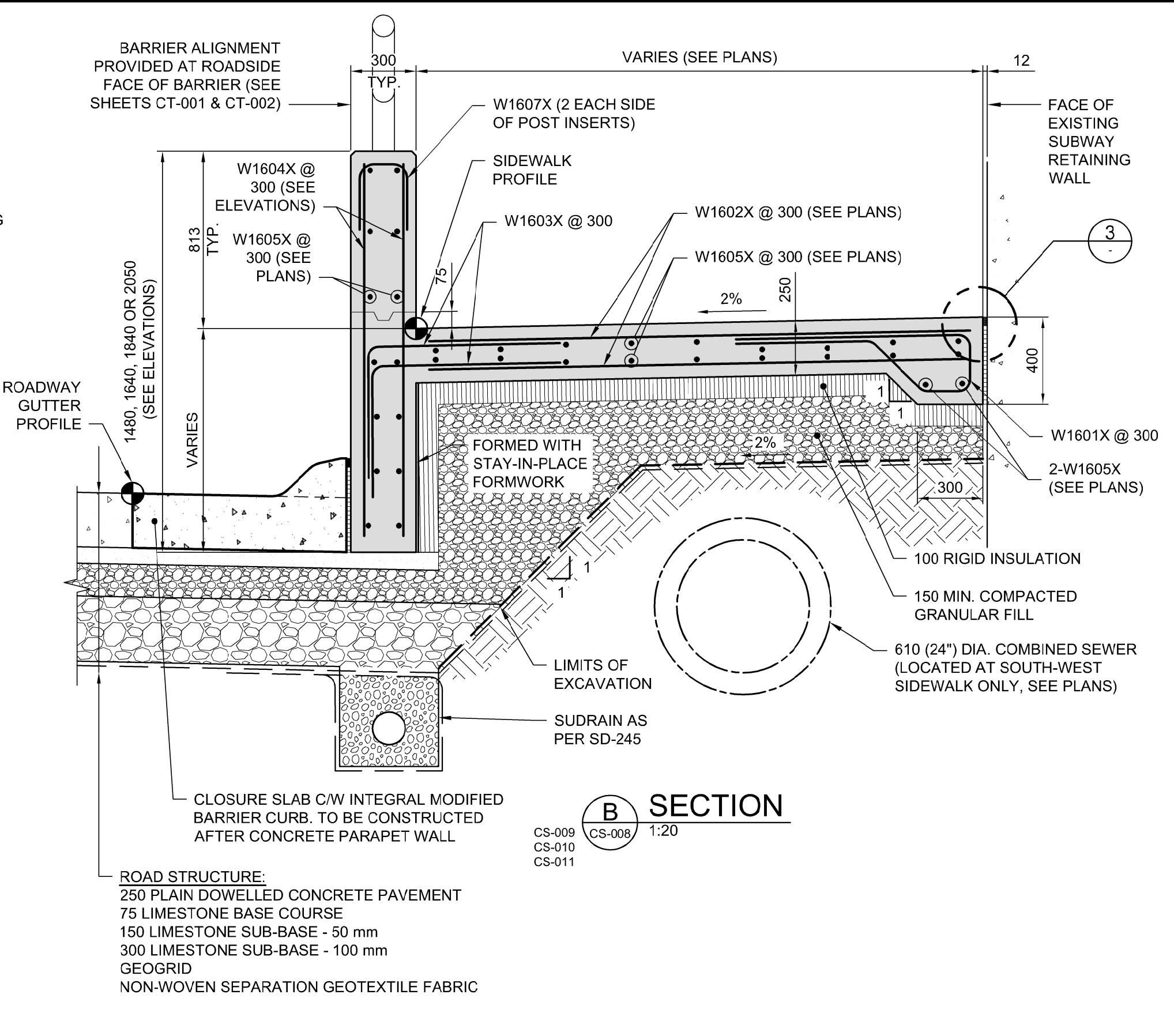
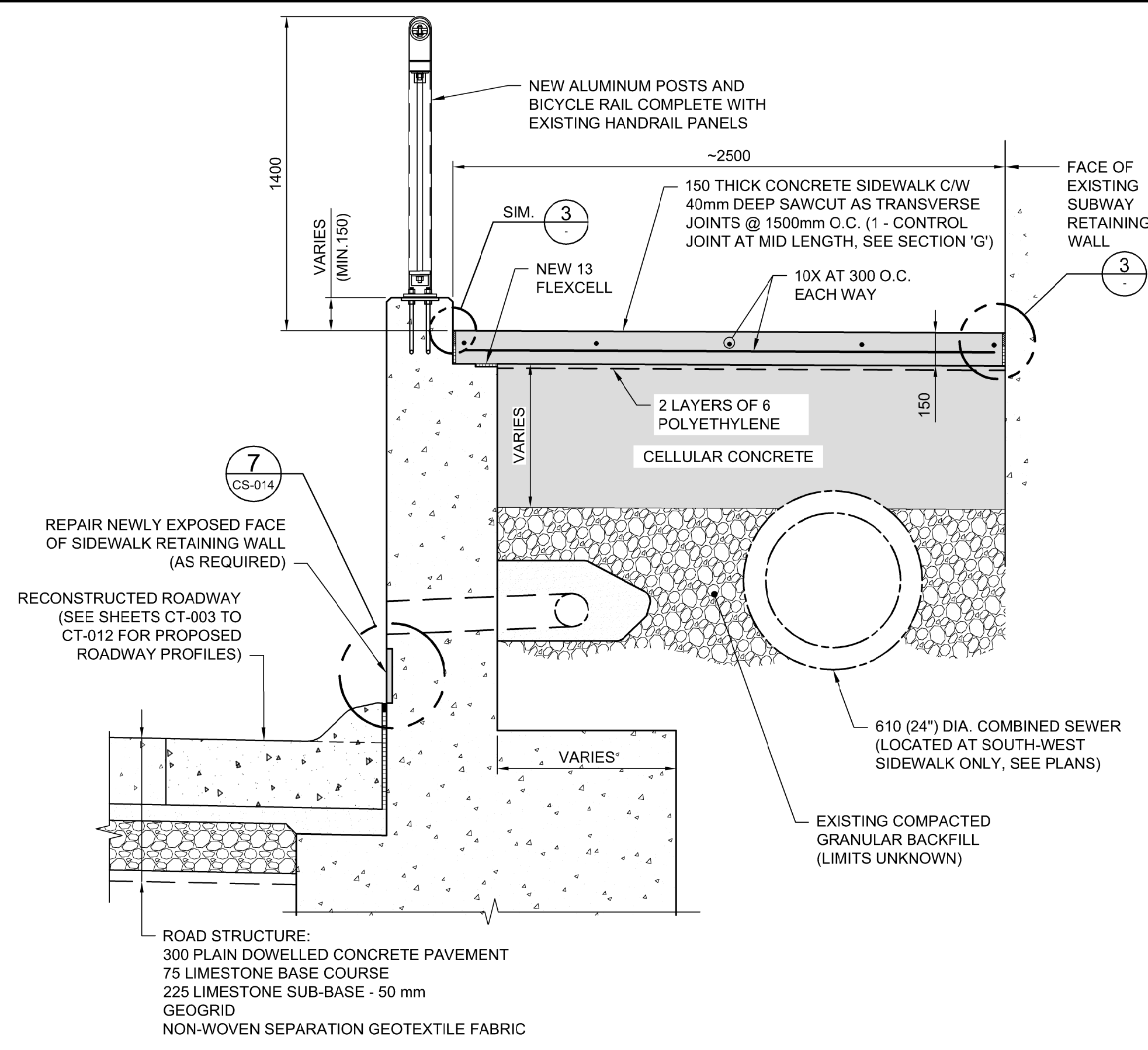
SHEET **009** OF **026**

CONSULTANT DRAWING NUMBER
CS-009

WEST SIDE RECONSTRUCTION (2 OF 2)

AP EGM

Certificate of Authorization
Dillon Consulting Limited (MB)
No. 1789 Date: 18/03/16

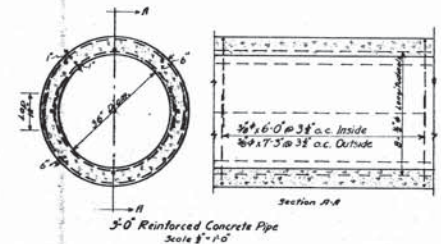


UNDERGROUND STRUCTURES SUPV. U/G STRUCTURES DATE	B.M. ELEV.	DESIGNED BY: DRA DRAWN BY: CGC CHECKED BY: DRA APPROVED BY: TJP		ENGINEER'S SEAL PROVINCE OF MANITOBA ORIGINAL CERTIFICATION D.R.C. AMORIM 18/03/16 Member 33215 REGISTERED PROFESSIONAL ENGINEER	
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE 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.	0 ISSUED FOR TENDER 18/03/16 TJP NO. REVISIONS DATE BY DATE	HOR. SCALE: - VERTICAL: -	RELEASED FOR CONSTRUCTION DATE	CONSULTANT PROJECT NUMBER 17-6152	THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT 2018 REGIONAL STREET RENEWAL PROJECT McPHILLIPS STREET RECONSTRUCTION AND UNDERPASS STRUCTURAL IMPROVEMENTS LOGAN AVENUE TO JARVIS AVENUE
				CITY DRAWING NUMBER U212-18-CS-012-R0 SHEET 012 OF 026 CONSULTANT DRAWING NUMBER CS-012	PARAPET WALL REINFORCING DETAILS

G:\CAD\176152\Drawings\Structural\Contract\176152-COM-CS-PARAPET WALL REINFORCING DETAILS.dwg

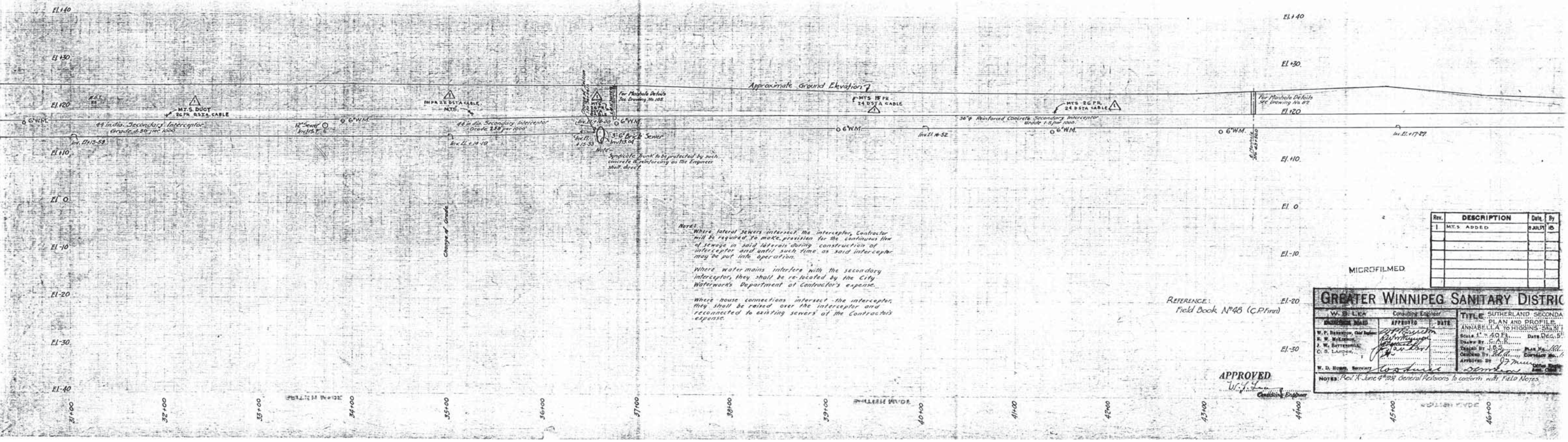
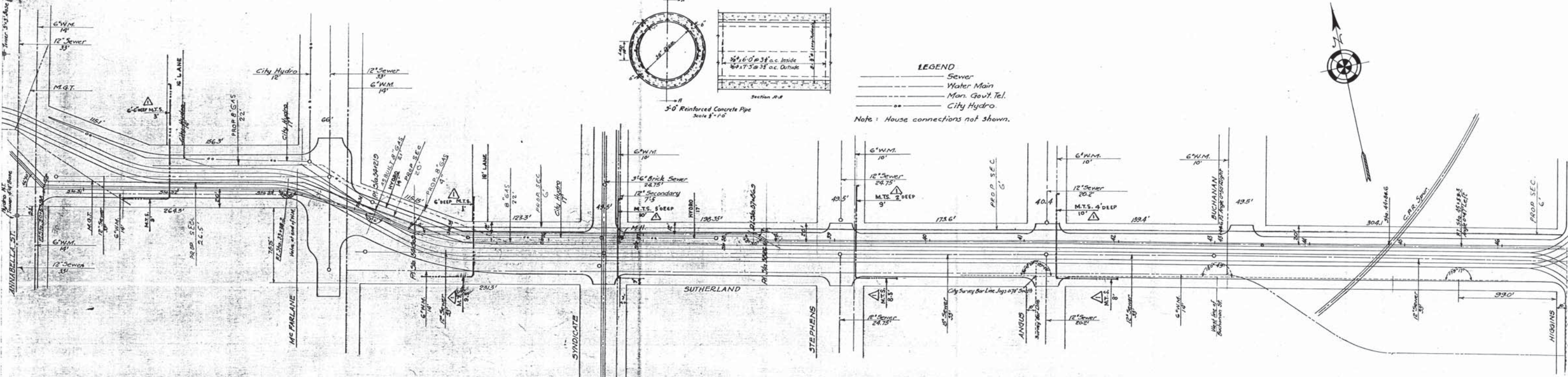
file # SS 10021

101



LEGEND
 --- Sewer
 --- Water Main
 --- Man. Gov't. Tel.
 --- City Hydro

Note: House connections not shown.



Notes:
 Where lateral sewers intersect the interceptor, Contractor will be required to make provision for the continuous flow of sewage in said laterals during construction of interceptor and until such time as said interceptor may be put into operation.
 Where water mains interfere with the secondary interceptor, they shall be re-located by the City Waterworks Department at Contractor's expense.
 Where house connections intersect the interceptor, they shall be raised over the interceptor and reconnected to existing sewers at the Contractor's expense.

REFERENCE:
 Field Book N°48 (C.P. Form)

REV.	DESCRIPTION	DATE	BY
1	M.T.S. ADDED	AUG 15	IS

MICROFILMED

GREATER WINNIPEG SANITARY DISTRICT

W. B. LICA Consulting Engineer

TITLE: SUTHERLAND-SECONDARY INTERCEPTOR PLAN AND PROFILE

APPROVED: [Signature] DATE: [Date]

ANNABELLA TO HIGGINS: [Signature]

W. P. BARRON: [Signature]

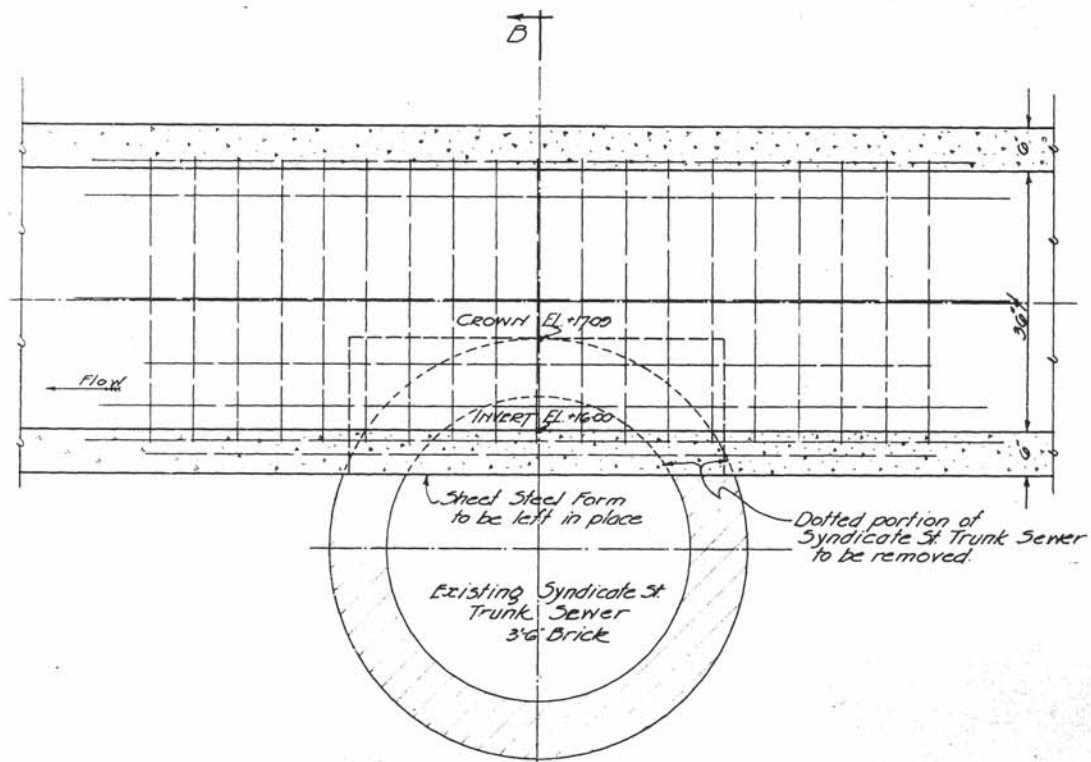
J. W. BAYNE: [Signature]

C. S. LAMON: [Signature]

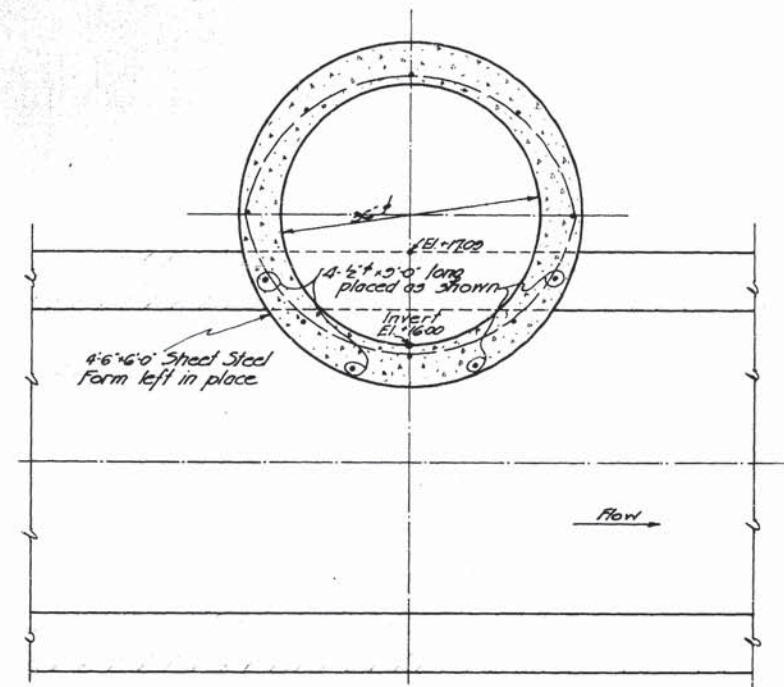
W. D. BROWN: [Signature]

NOTES: See A. June 4, 1925, General Orders to confirm with Field Notes.

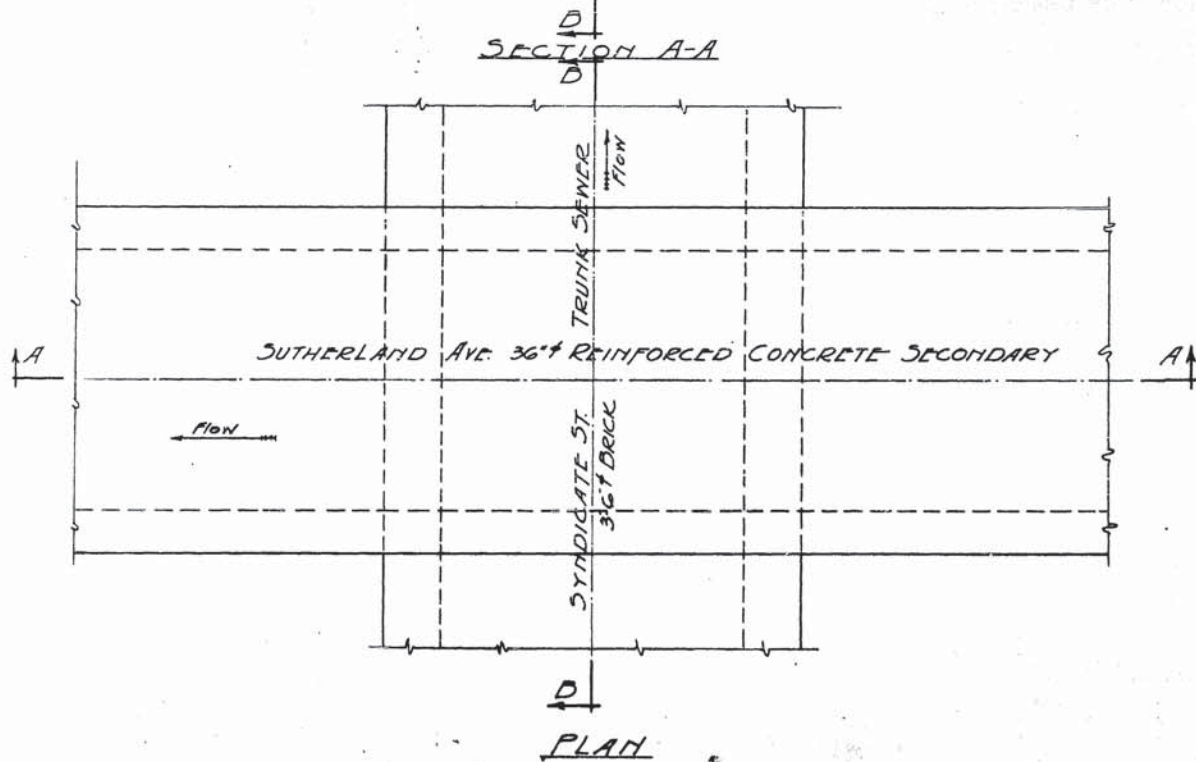
APPROVED
 [Signature]



SECTION A-A



SECTION B-B

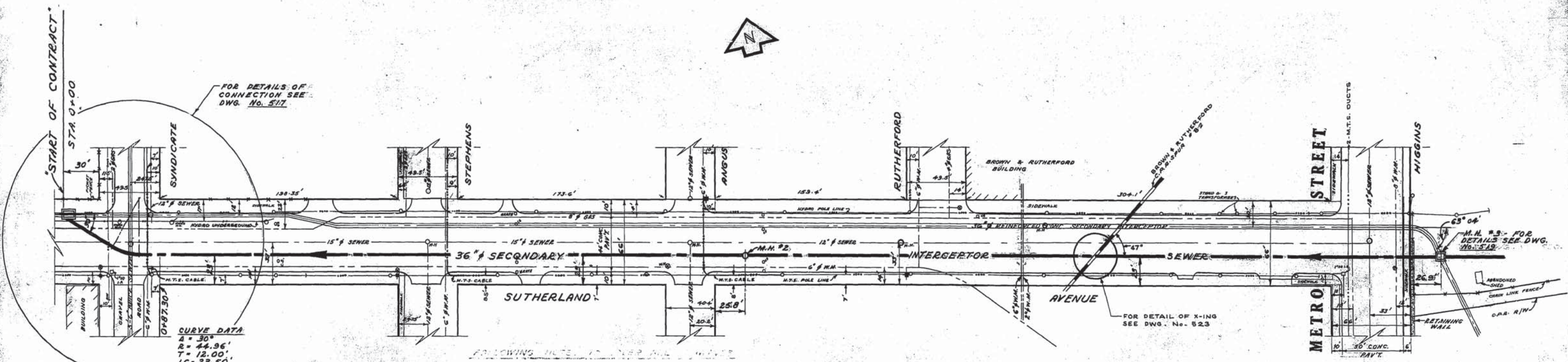


PLAN

Reinforcing shown but not called for on this drawing, is typical for this Secondary Sewer.

APPROVED

GREATER WINNIPEG SANITARY DISTRICT		
PROJECT NO. _____ DATE _____	TITLE SUTHERLAND SECONDARY CROSSING 142	SCALE 1" = 10'-0"
DESIGNED BY CHECKED BY APPROVED BY	DRAWN BY DATE	SHEET NO. 142



THE FOLLOWING NOTES APPLY TO THIS AND ALL OTHER SHEETS OF THIS PROJECT:

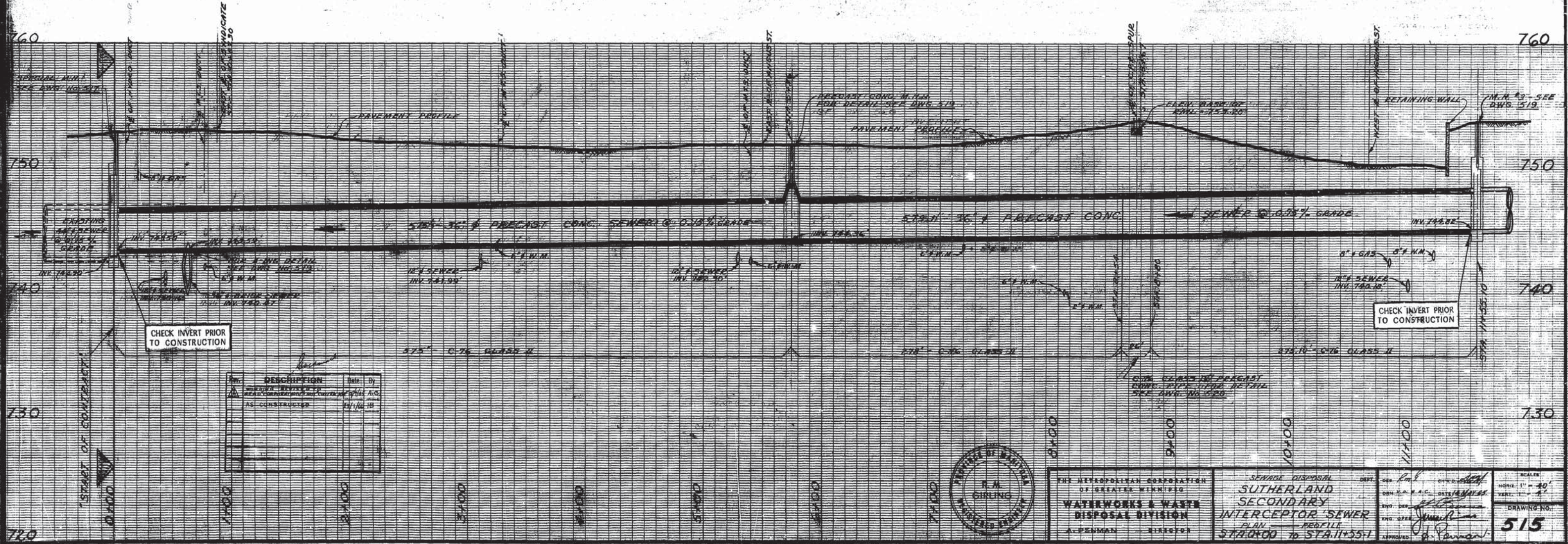
1. ALL DIMENSIONS ARE IN FEET AND INCHES.

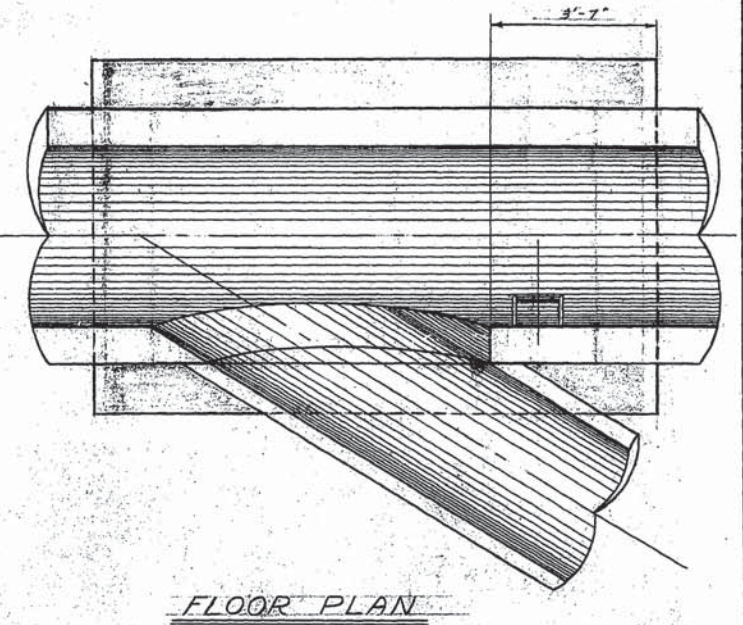
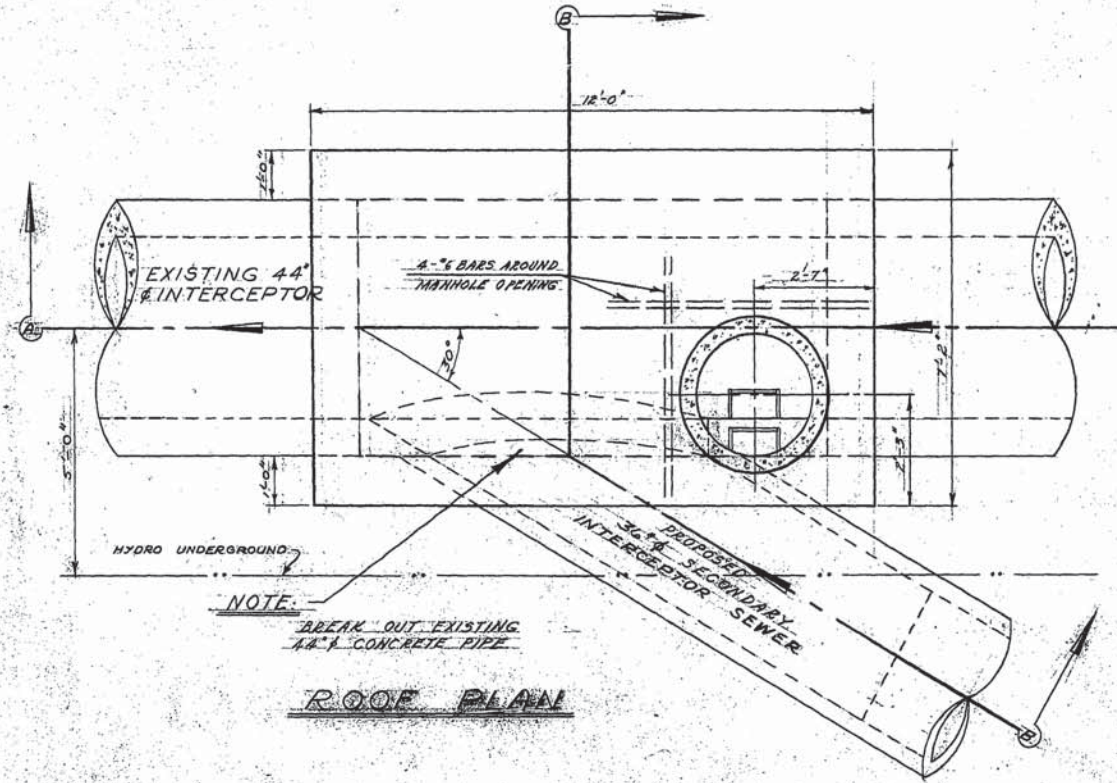
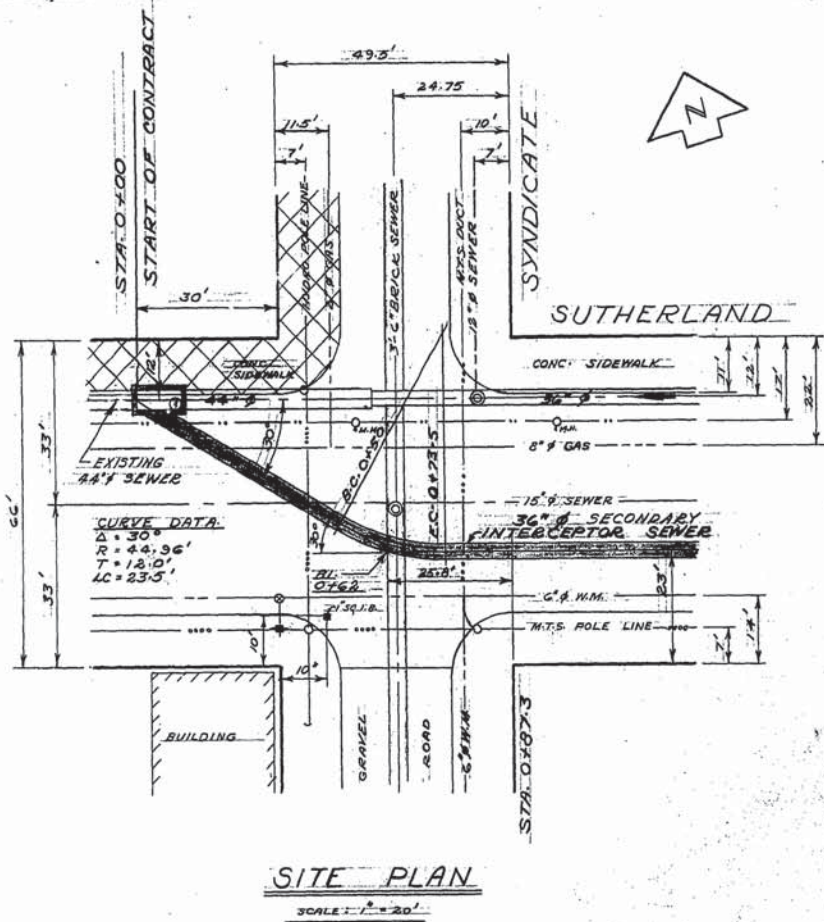
2. ALL UTILITIES SHOWN ARE BASED ON RECORD DRAWINGS AND FIELD SURVEY.

3. THE LOCATION OF ALL UTILITIES MUST BE CHECKED PRIOR TO CONSTRUCTION.

4. THE LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON BEST INFORMATION AVAILABLE, BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN AND EXACT LOCATION OF ALL UNDERGROUND INCLUDING SERVICE CONNECTIONS MUST BE CHECKED WITH UTILITIES CONCERNED BEFORE PROCEEDING WITH CONSTRUCTION.

LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON BEST INFORMATION AVAILABLE, BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN AND EXACT LOCATION OF ALL UNDERGROUND INCLUDING SERVICE CONNECTIONS MUST BE CHECKED WITH UTILITIES CONCERNED BEFORE PROCEEDING WITH CONSTRUCTION.





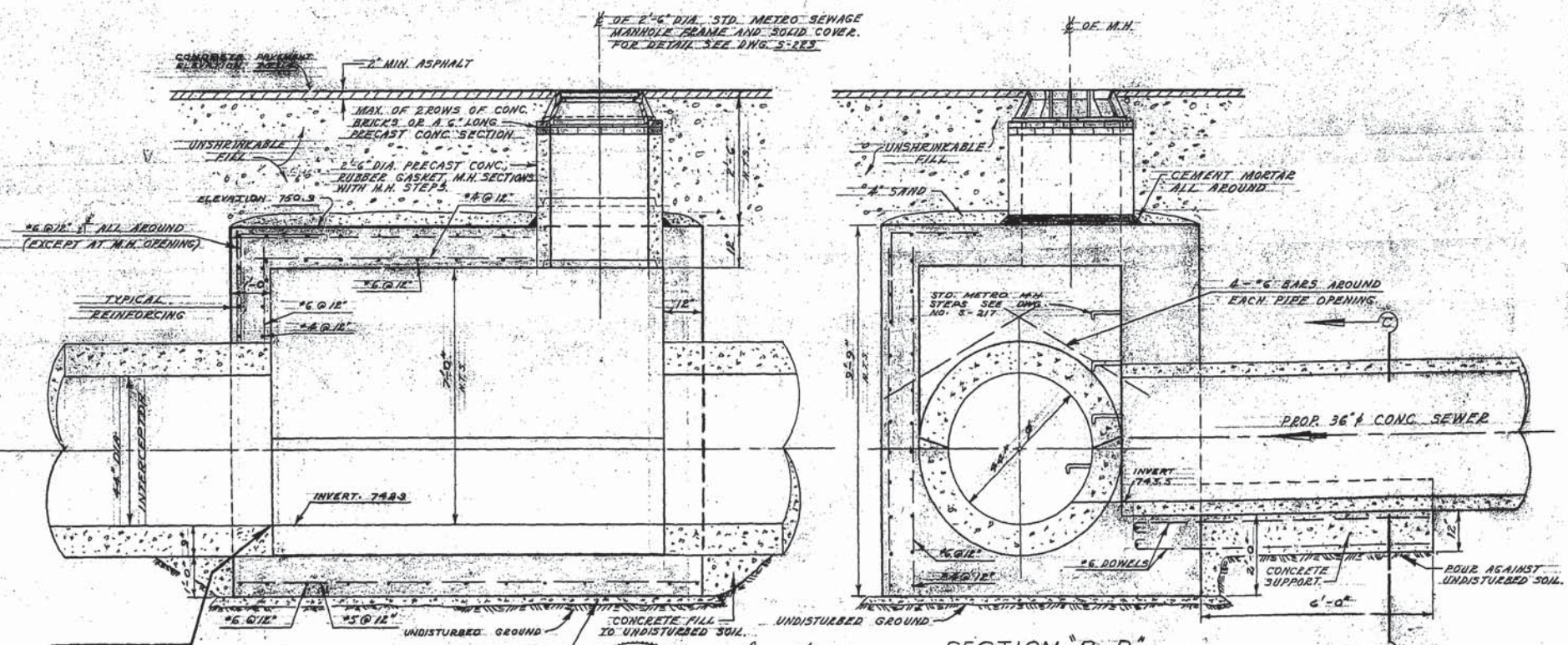
SITE PLAN
SCALE: 1" = 20'

ROOF PLAN

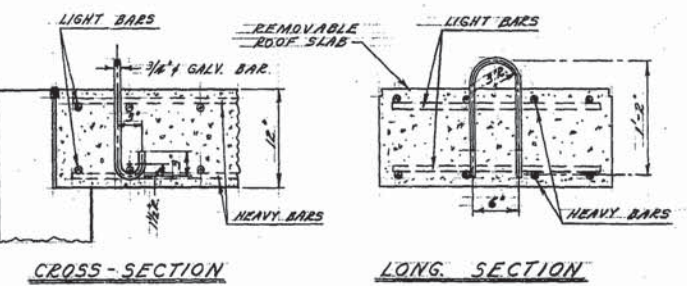
FLOOR PLAN

NOTES

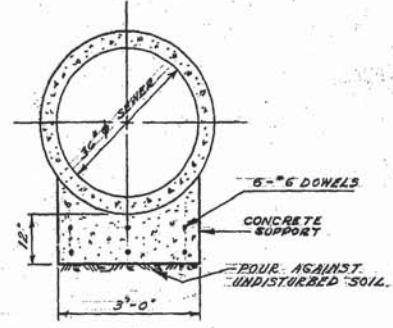
1. MANHOLE WALLS AND ROOF TO BE CONSTRUCTED WHILE EXISTING SEWER IN OPERATION.
2. SHUT DOWN OF EXISTING 44" SEWER AND FINAL BREAKING OUT OF 44" PIPE TO BE ONE OF THE LAST CONSTRUCTION ITEMS TO BE COMPLETED.
3. DURATION OF SHUT DOWN SHALL BE KEPT TO A VERY MINIMUM.
4. SHUT DOWN OF EXISTING SEWER AND CONNECTION TO BE CO-ORDINATED WITH CONNECTION AT STA. 11+35.1 AND CONNECTION OF EXISTING MANHOLE ON POINT DOUGLAS AVE.
5. ALL CONCRETE TO HAVE COMPRESSIVE STRENGTHS AND SLUMPS AS OUTLINED FOR STRUCTURES IN THE SPECIFICATIONS.
6. MINIMUM COVER ON REINFORCING BARS TO BE 2" FROM OUTSIDE WALL WHERE FORMED AND 3" WHERE CONCRETE IS POURED AGAINST EARTH FACE.
7. No. 6 DOWELS, EACH FACE AT ALL CONSTRUCTION JOINTS.



CHECK INVERT PRIOR TO CONSTRUCTION



DETAIL OF LIFTING LUG
SCALE: 1" = 1'-0"



SECTION C-C

SECTION A-A
SCALE: 1/2" = 1'-0"

SECTION B-B

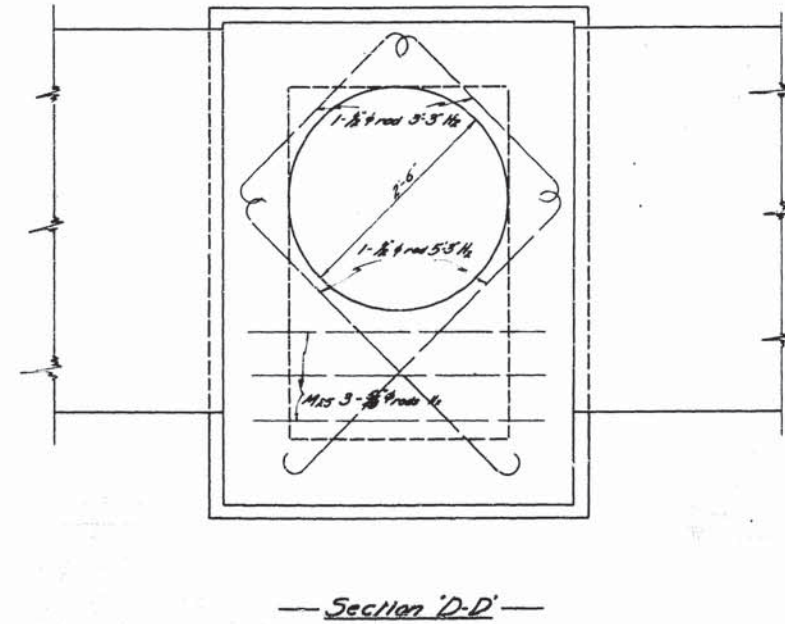
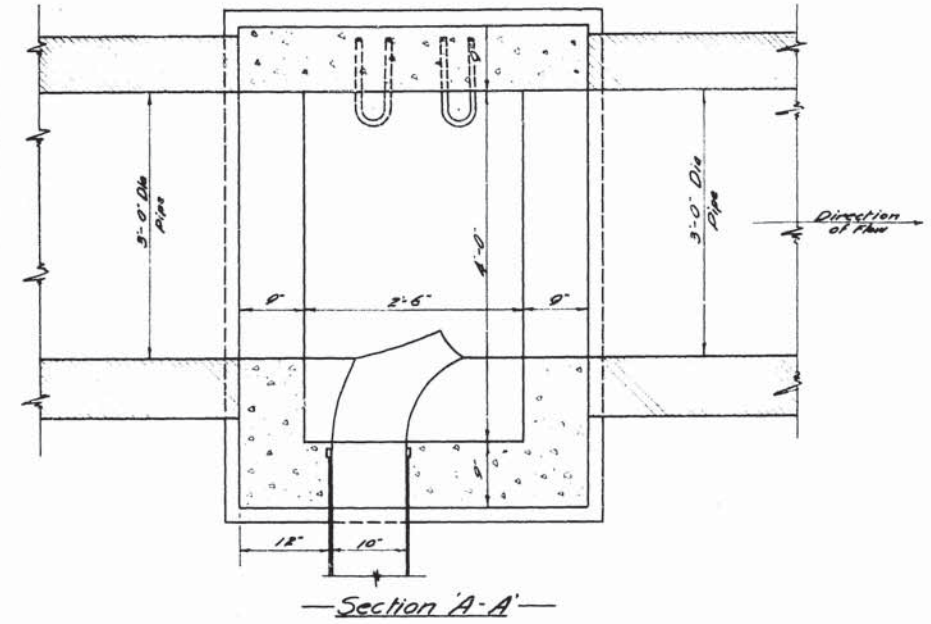
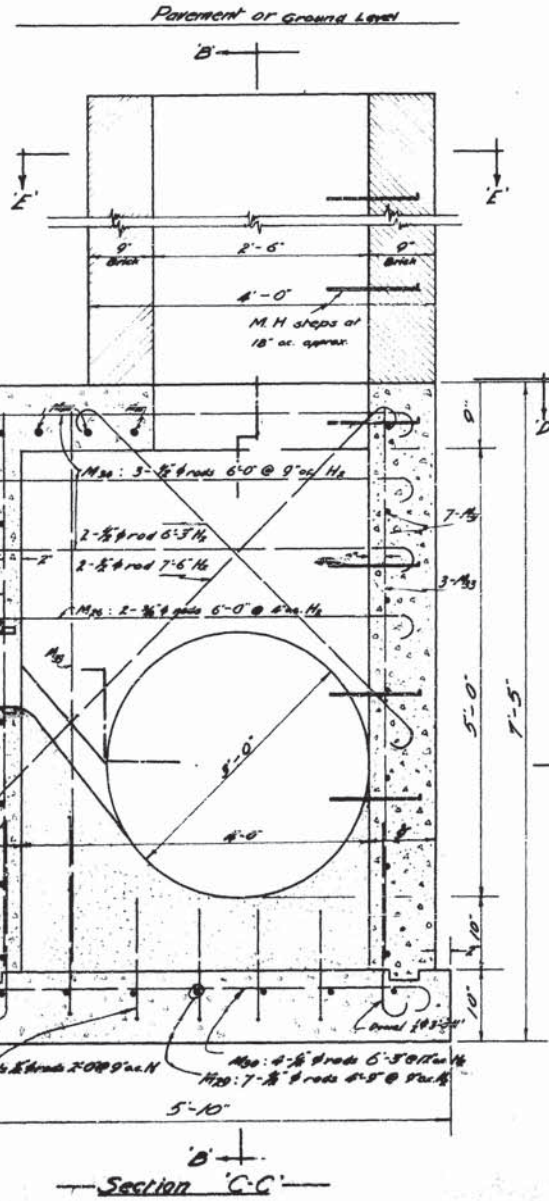
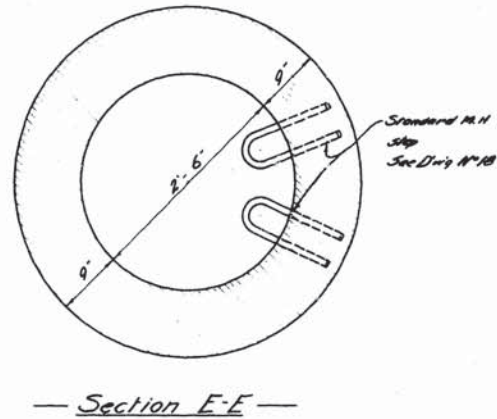
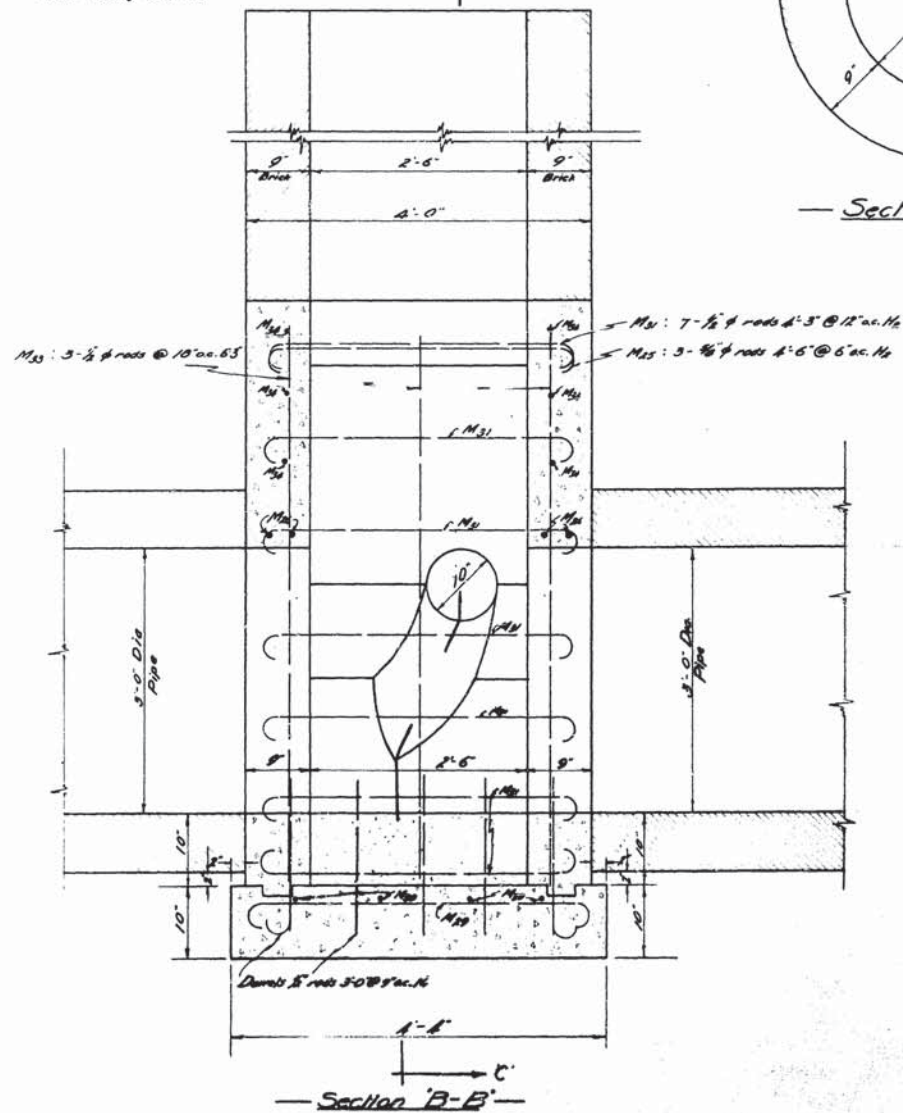


THE METROPOLITAN CORPORATION OF GREATER WINNIPEG
WATERWORKS & WASTE DISPOSAL DIVISION
A. PENMAN - DIRECTOR

SEWAGE DISPOSAL DEPT. DES. *R.G.* CHK'D *[Signature]*
SUTHERLAND SECONDARY INTERCEPTOR SEWER
DETAIL OF SPECIAL MANHOLE AT STA. 0+00
ENG. DES. *[Signature]*
ENG. OPR. *[Signature]*
APPROVED *[Signature]*

AS CONSTRUCTED 25 JAN. 66 '66
SCALE: 1" = 1'-0"
DRAWING NO. **517**

Pavement or Ground Level
 Greater Winnipeg Sanitary District Standard
 manhole cover, frame and mud basket
 See Dwg No 18



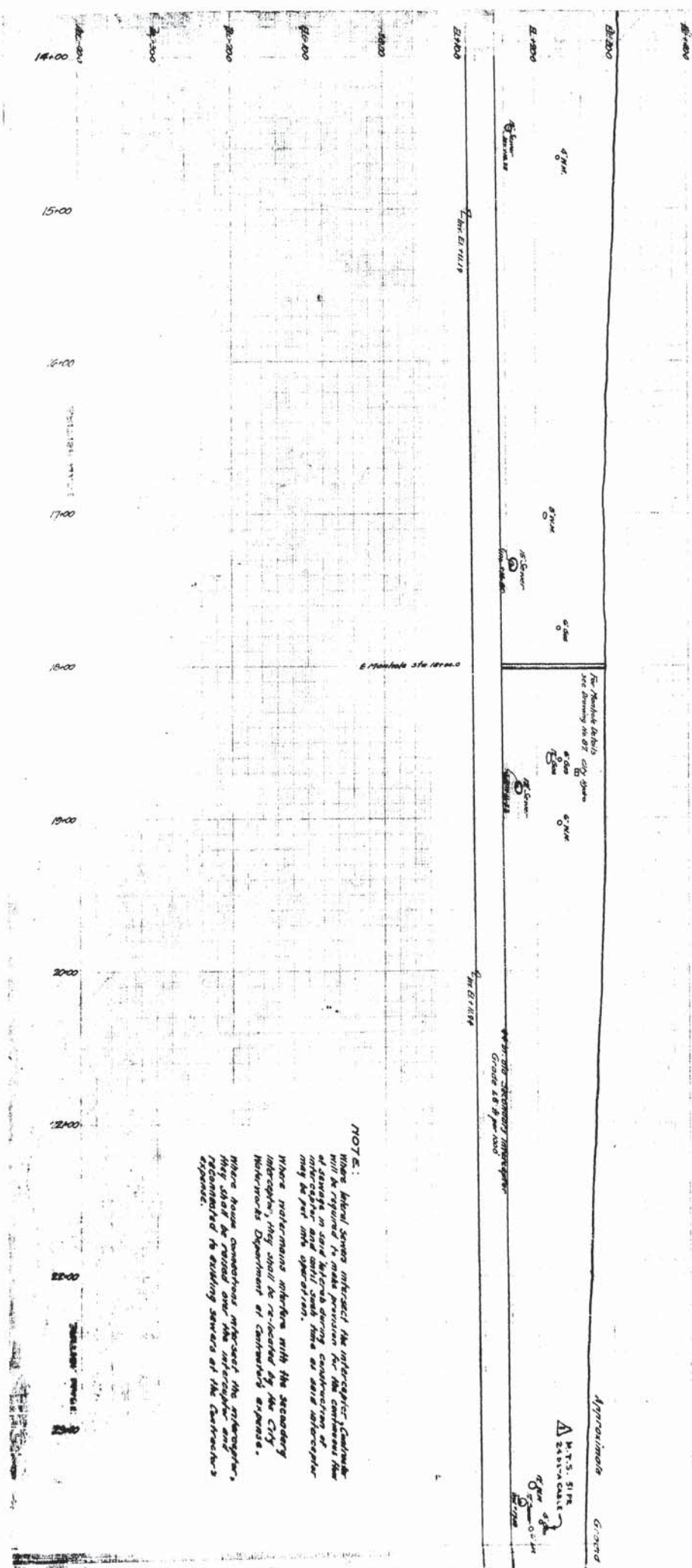
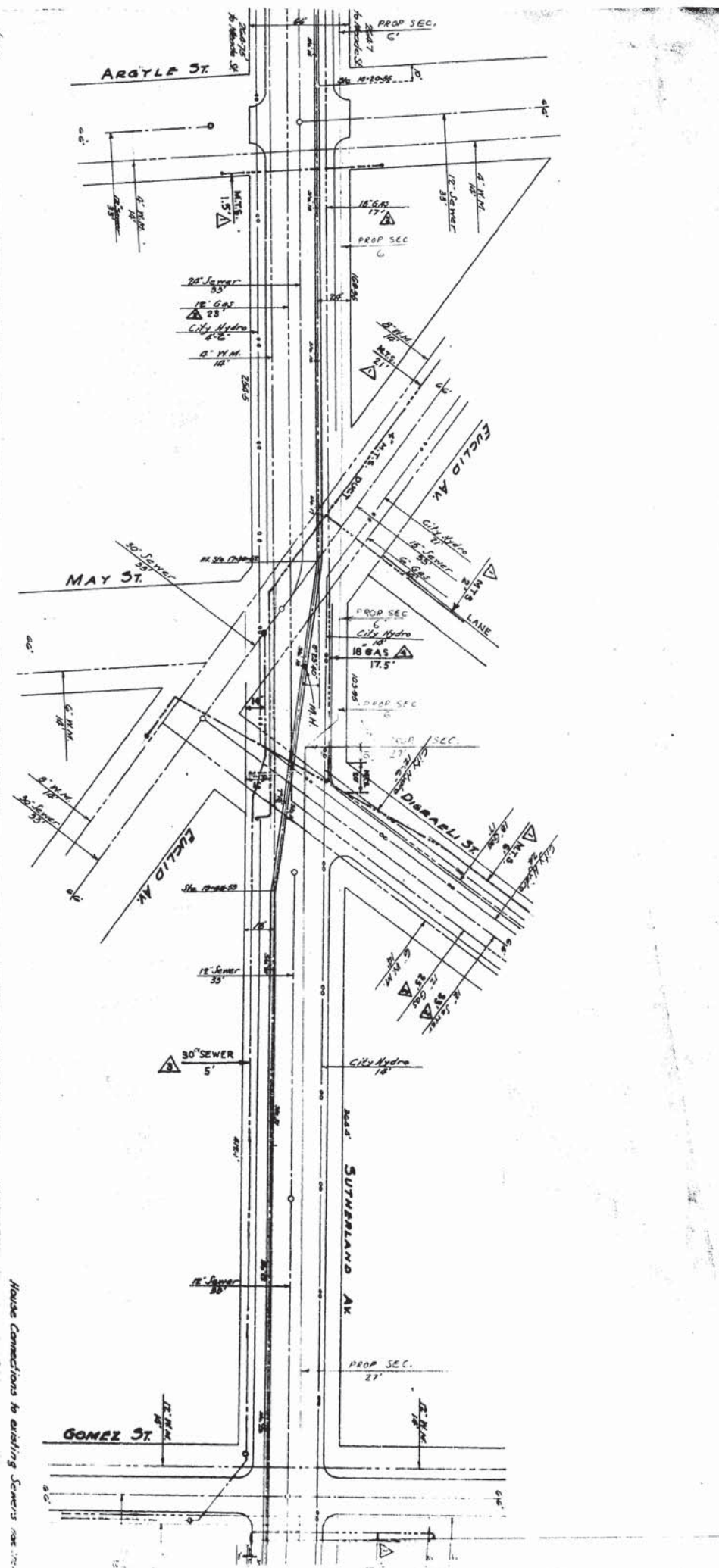
Note:
 One manhole as shown at Syndicate and Sutherland
 One similar manhole opposite bank at Grace St & Port Douglas

FOR WINNIPEG SANITARY DISTRICT

MIDLAND, SECONDARY

105

107-108-109

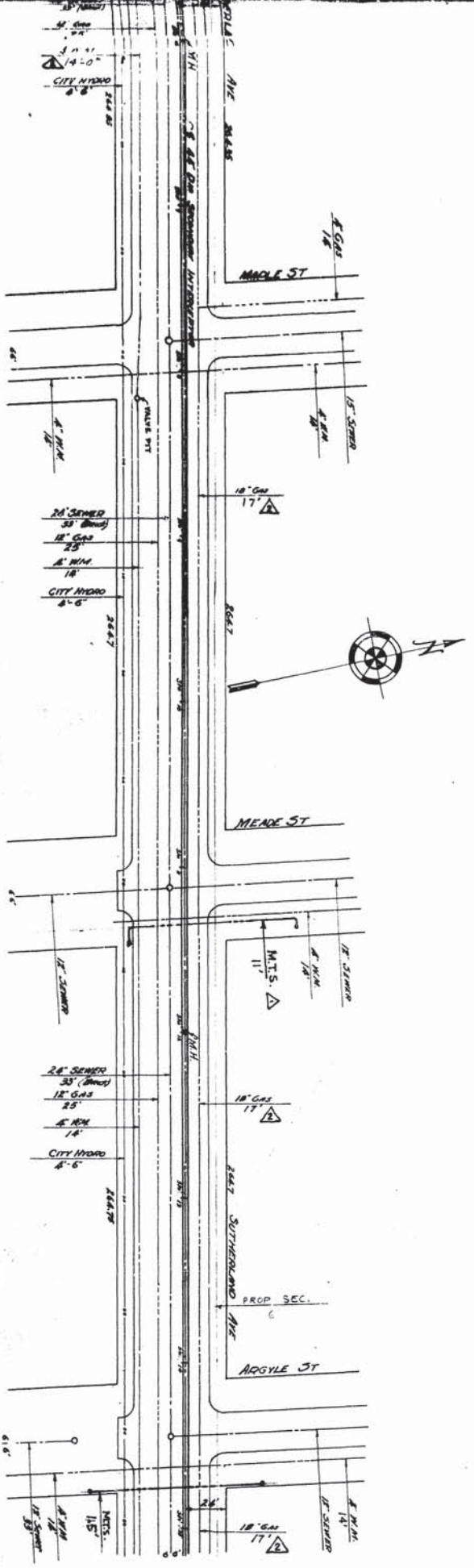


NOTE:
 Where lateral sewers intersect the interceptor, combine with a regard to water pressure conditions at the intersection and will such flow as said interceptor may be put into operation.
 Where watermain interferes with the secondary intercepter, they shall be connected by the City Waterworks Department at contractor's expense.
 Where house connections intersect the intercepter, they shall be raised over the intercepter and reconstructed to existing sewers at the contractor's expense.

For Manhole Details see drawing No. 102 City of St. Paul
 8" M.H. 10' 0" dia.
 6" M.H. 8' 0" dia.
 4" M.H. 6' 0" dia.

Vertical Curvature Interceptor
 Grade 4.8 ft per 100'

Approximate Ground
 M.T.S. SITE
 2415-CALTE
 8' 0" dia.
 6' 0" dia.



LEGEND:
 Sewer
 Water Mains
 Main Gas 18"
 Gas
 City Hydro

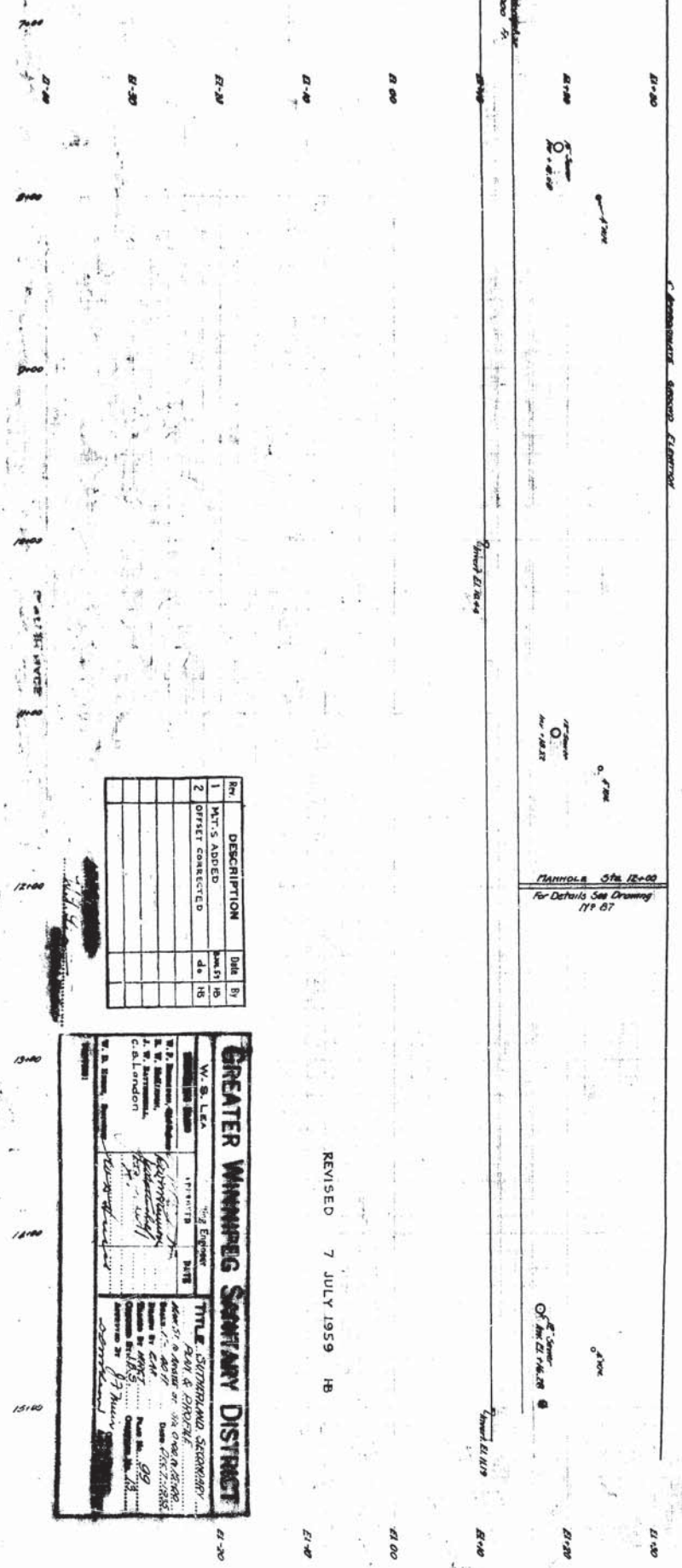
MOUSE CONNECTIONS TO EXISTING SERVICE NOT SHOWN

CONNECTIONS SERVICE CLEARANCE

7/27/59
 W. S. L. E. A.
 CIVIL ENGINEER

Scale 1/8" = 1' for 3000'

Plan No. 574 (R-50)
 For Details See Drawing
 174 57



REVISED 7 JULY 1959 HB

No.	DESCRIPTION	Date	By
1	M.T.'S ADDED	5/25/58	HB
2	OFFSET CORRECTED	4/1/58	HB

GREATER WINNIPEG SEWARIY DISTRICT

W. S. L. E. A.
 CIVIL ENGINEER

174 57

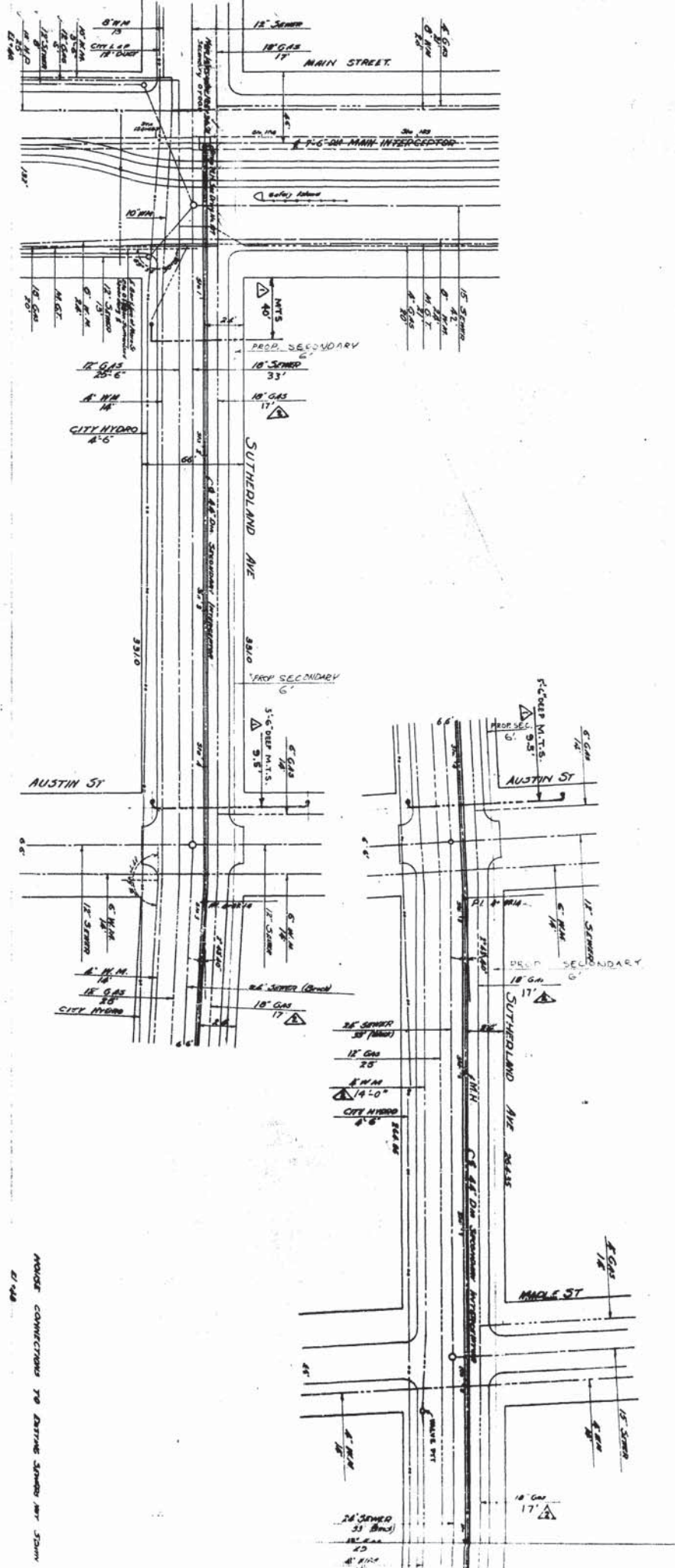
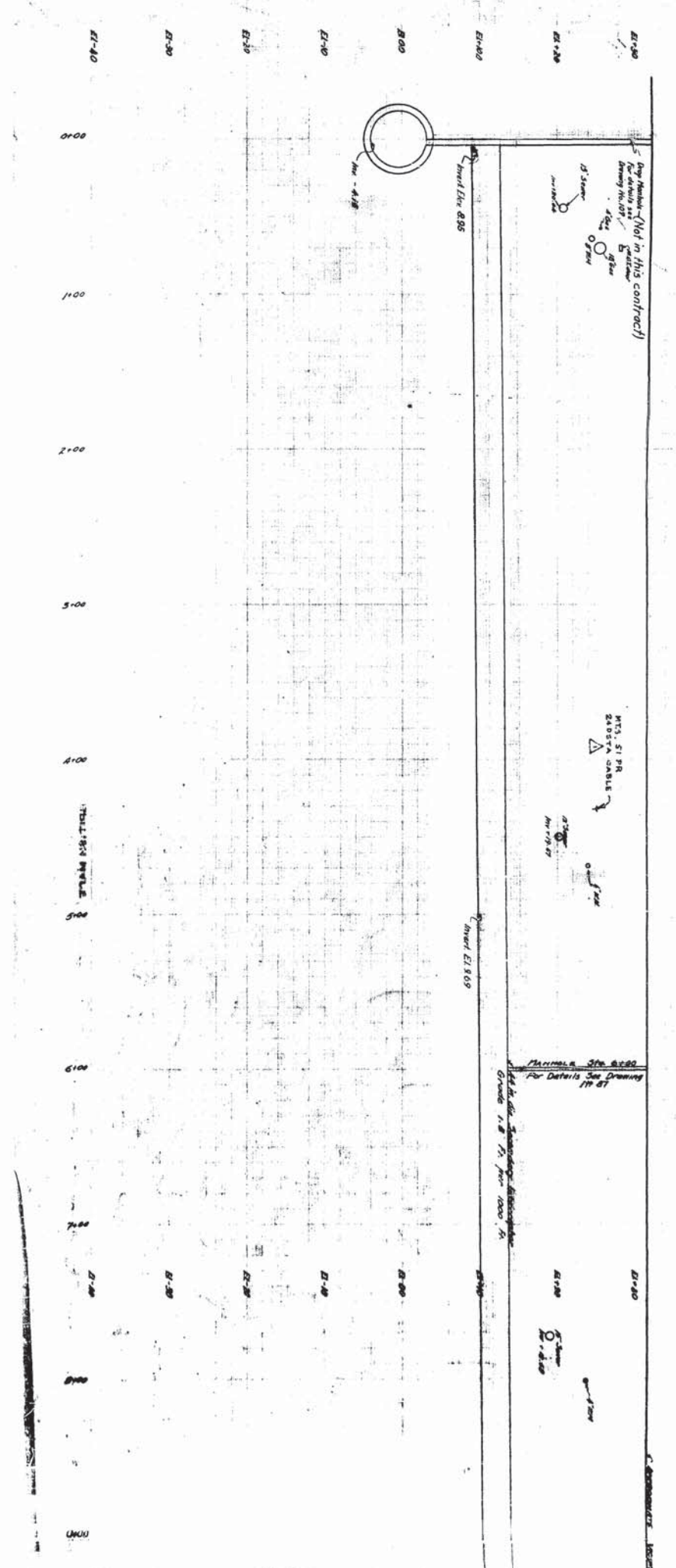
DATE: 7/27/59

TITLE: SEWER AND WATER MAINS CONNECTIONS TO EXISTING SERVICE NOT SHOWN

BY: W. S. L. E. A.

DATE: 7/27/59

SCALE: 1/8" = 1' for 3000'

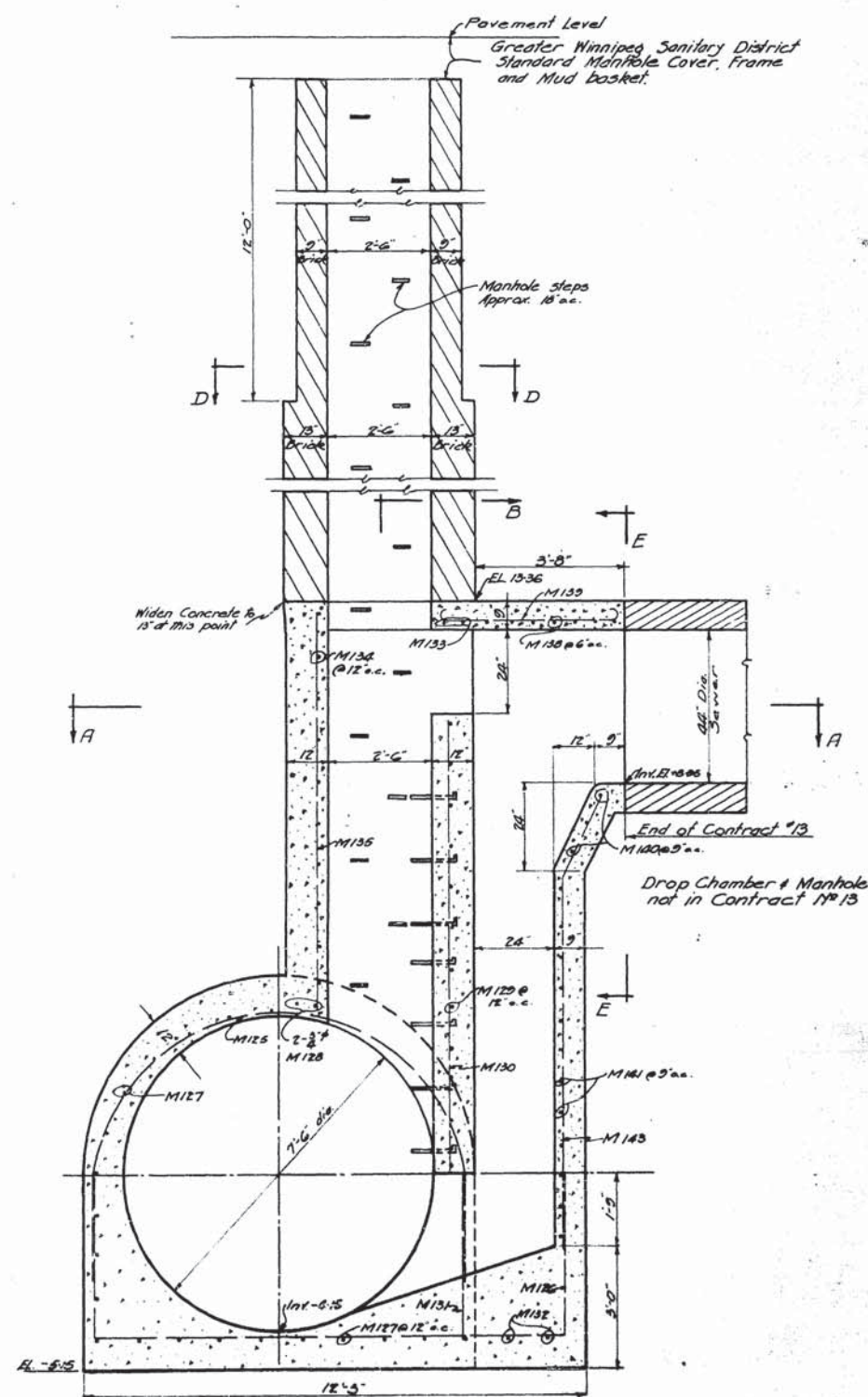


Deep Manhole (Not in this contract)
 For details see Drawing 19 ST

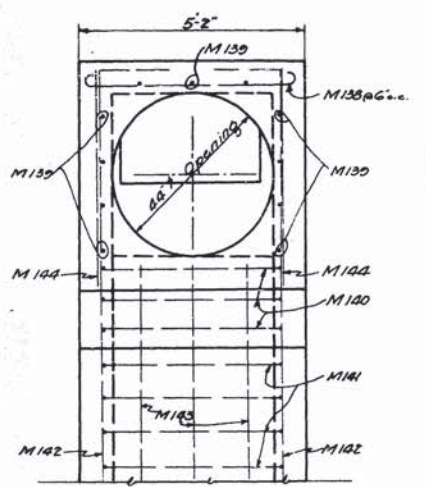
12\"/>

Manhole 30\"/>

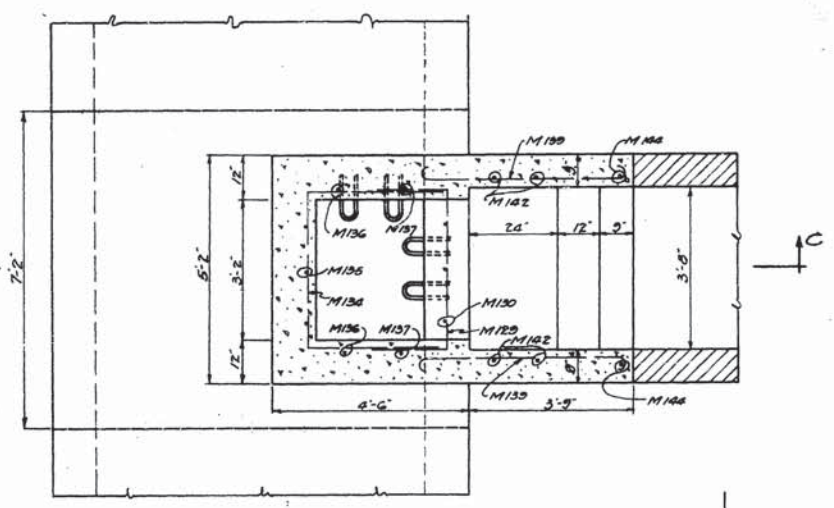
PROPOSE CONNECTION TO EXISTING SANITARY AND SEWER



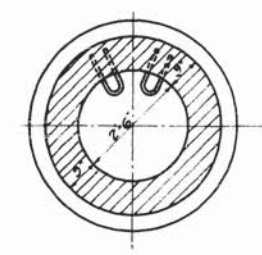
SECTION C-C



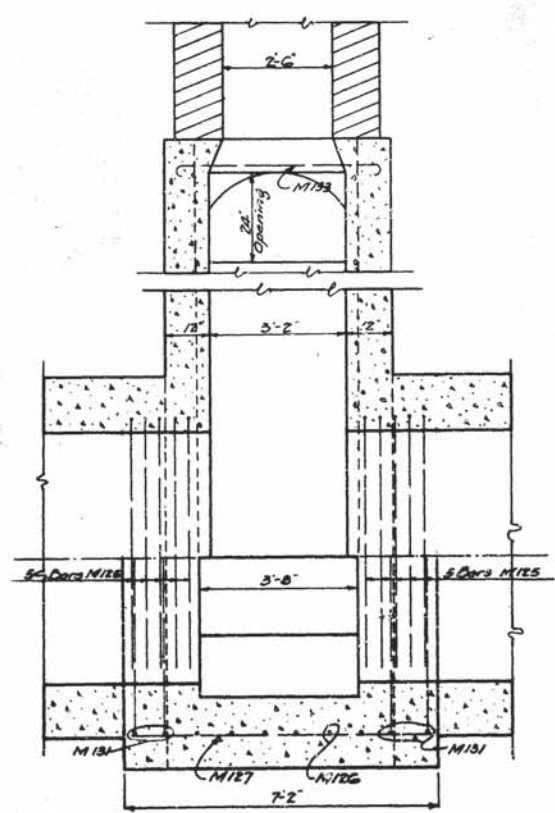
SECTION E-E



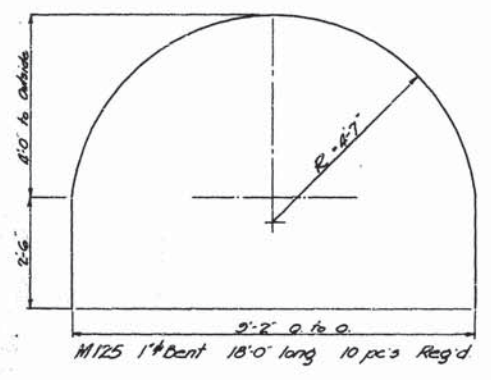
SECTION A-A



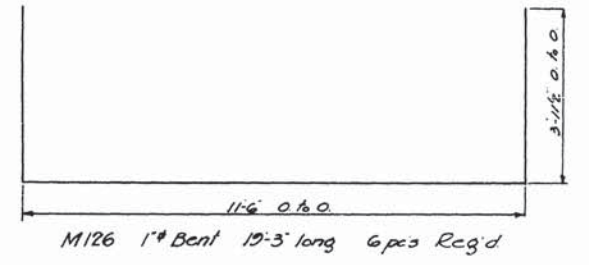
SECTION D-D



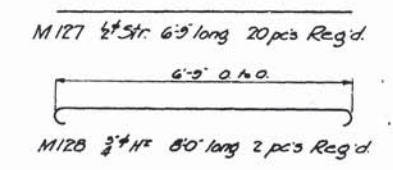
SECTION B-B



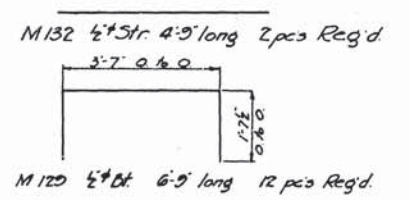
M125 1\"/>



M126 1\"/>

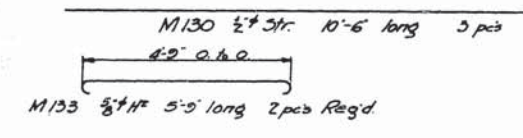


M127 1/2\"/>



M128 3/4\"/>

M129 1/2\"/>



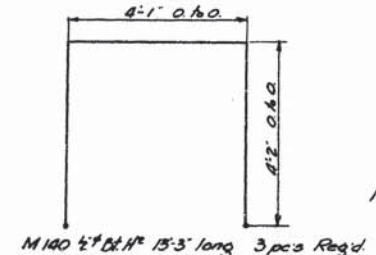
M130 1/2\"/>

M133 3/4\"/>

M135 1/2\"/>

M136 1/2\"/>

M137 1/2\"/>

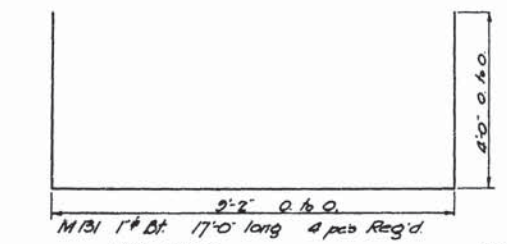


M140 1/2\"/>

M143 1/2\"/>

M144 1/2\"/>

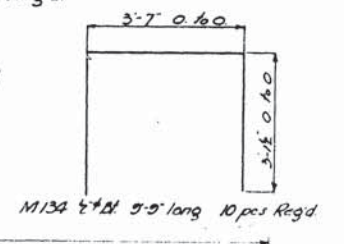
M141 1/2\"/>



M131 1\"/>

M135 1/2\"/>

M139 1/2\"/>



M134 1/2\"/>

M142 1/2\"/>

GREATER WINNIPEG SANITARY DISTRICT

<p>B. L. F. A. <i>[Signature]</i> ENGINEER</p>	<p>TITLE: SUTHERLAND SECONDARY NO. 12 OF DROP CHAMBER AT MAIN INTERCEPTOR.</p>
<p>W. P. BULLOCK <i>[Signature]</i> W. W. McKEOWN J. A. BAYNE C. D. LONDON</p>	<p>107</p>

APPROVED
[Signature]