

AS CONSTRUCTED

NOTE  
THE CONTOURS SHOWN ARE ORIGINAL CONTOURS

REVISIONS:		THE METROPOLITAN CORPORATION OF GREATER WINNIPEG WATERWORKS AND WASTE DISPOSAL DIVISION	
NO.	DATE	DETAILS	
1	NOV. 1972	REVISED TO DATE	CHARLESWOOD SEWAGE LAGOON
			GENERAL SITE AND CONTOUR PLAN
DRAWN BY: <i>R. J. Clark</i>		APPROVED: <i>[Signature]</i> ENGINEER OF DESIGN	
CHECKED BY: <i>[Signature]</i>		ENGINEER OF WASTE DISPOSAL	
DESIGNED BY: <i>[Signature]</i>		DIRECTOR AND CHIEF ENGINEER	
LAYOUT BY: <i>[Signature]</i>		DATE: MAY 13/65	SCALE: 1" = 400'
		DRAWING NO.: 1822 265.08.01	SHEET: 12 OF 14

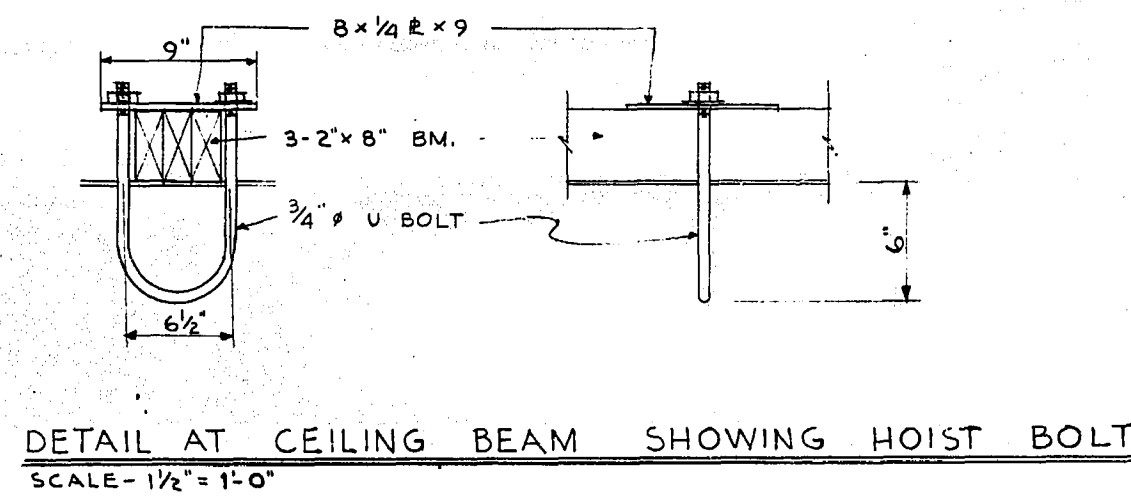
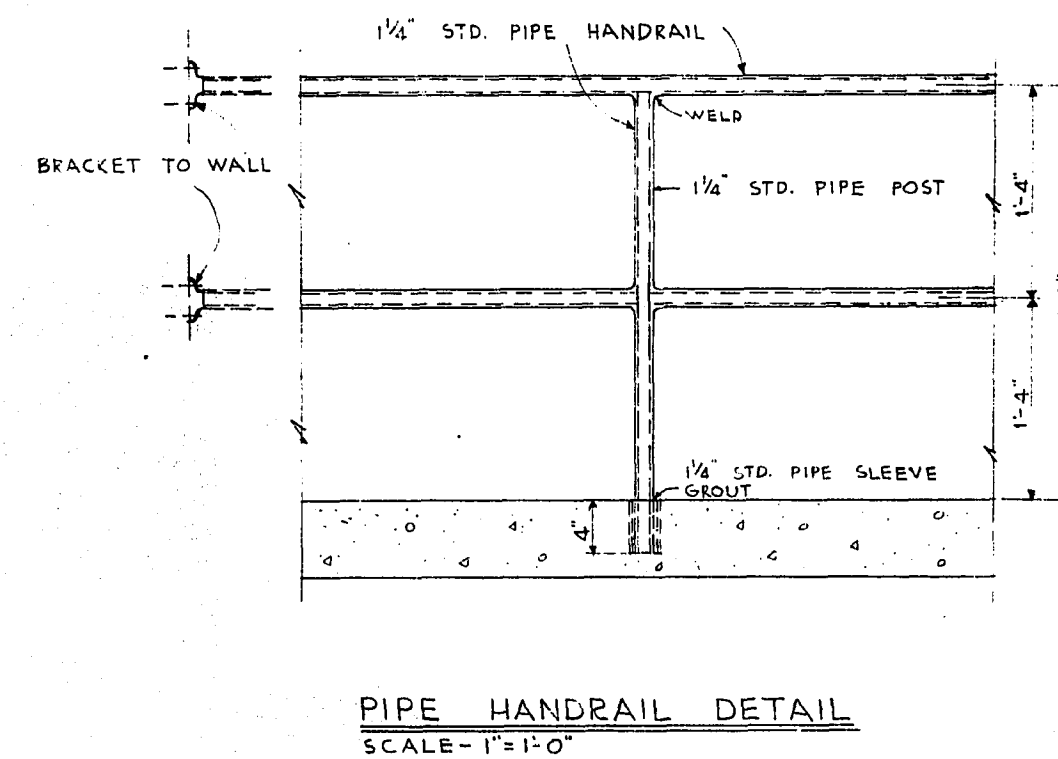
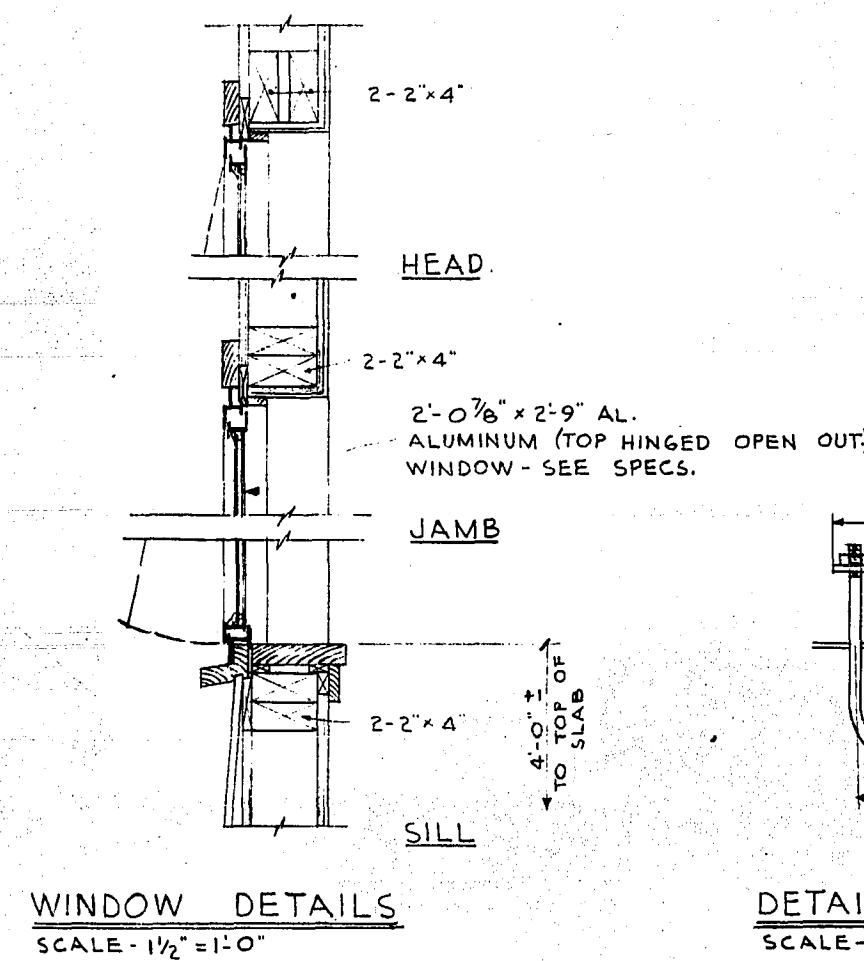
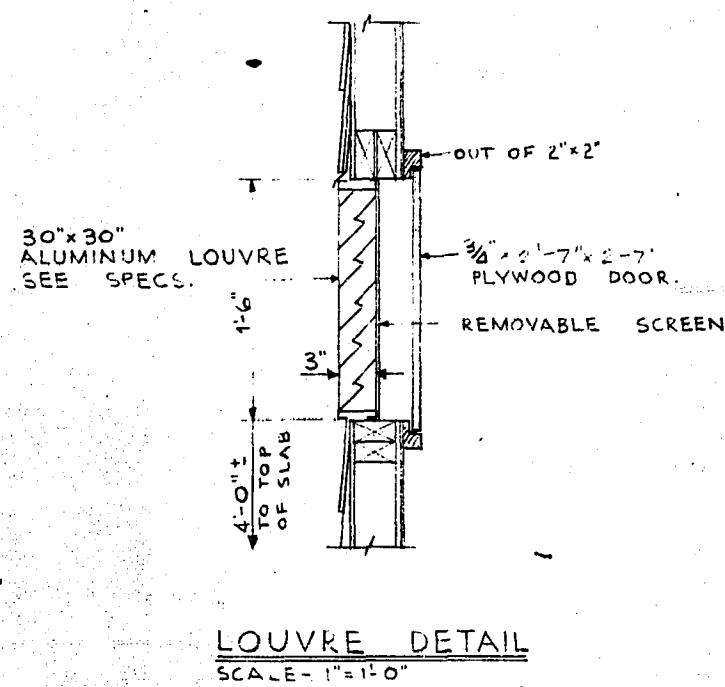
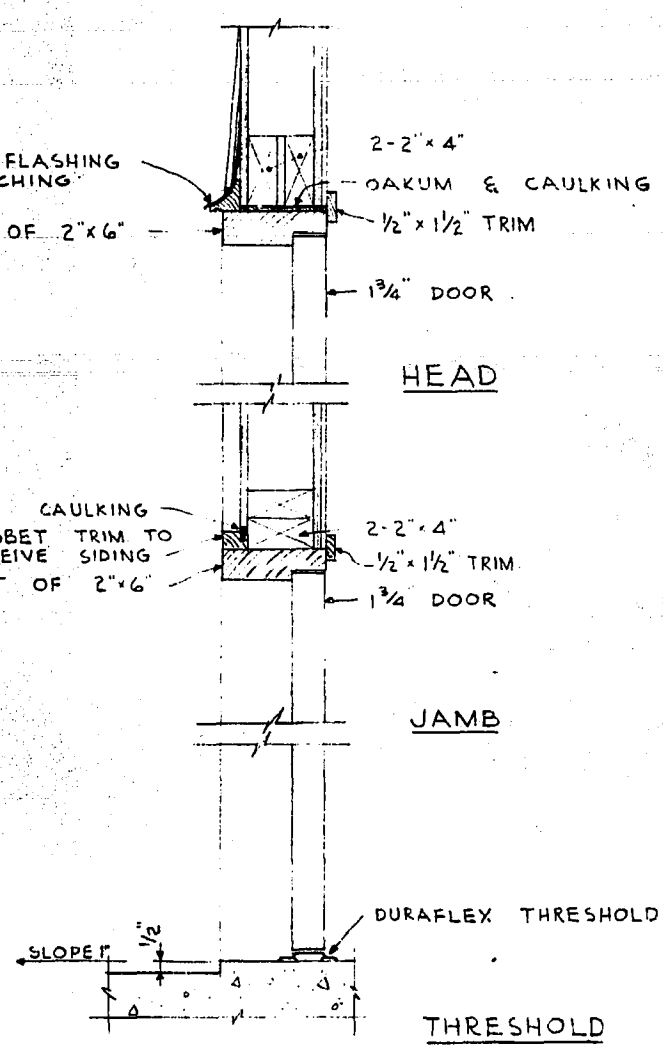
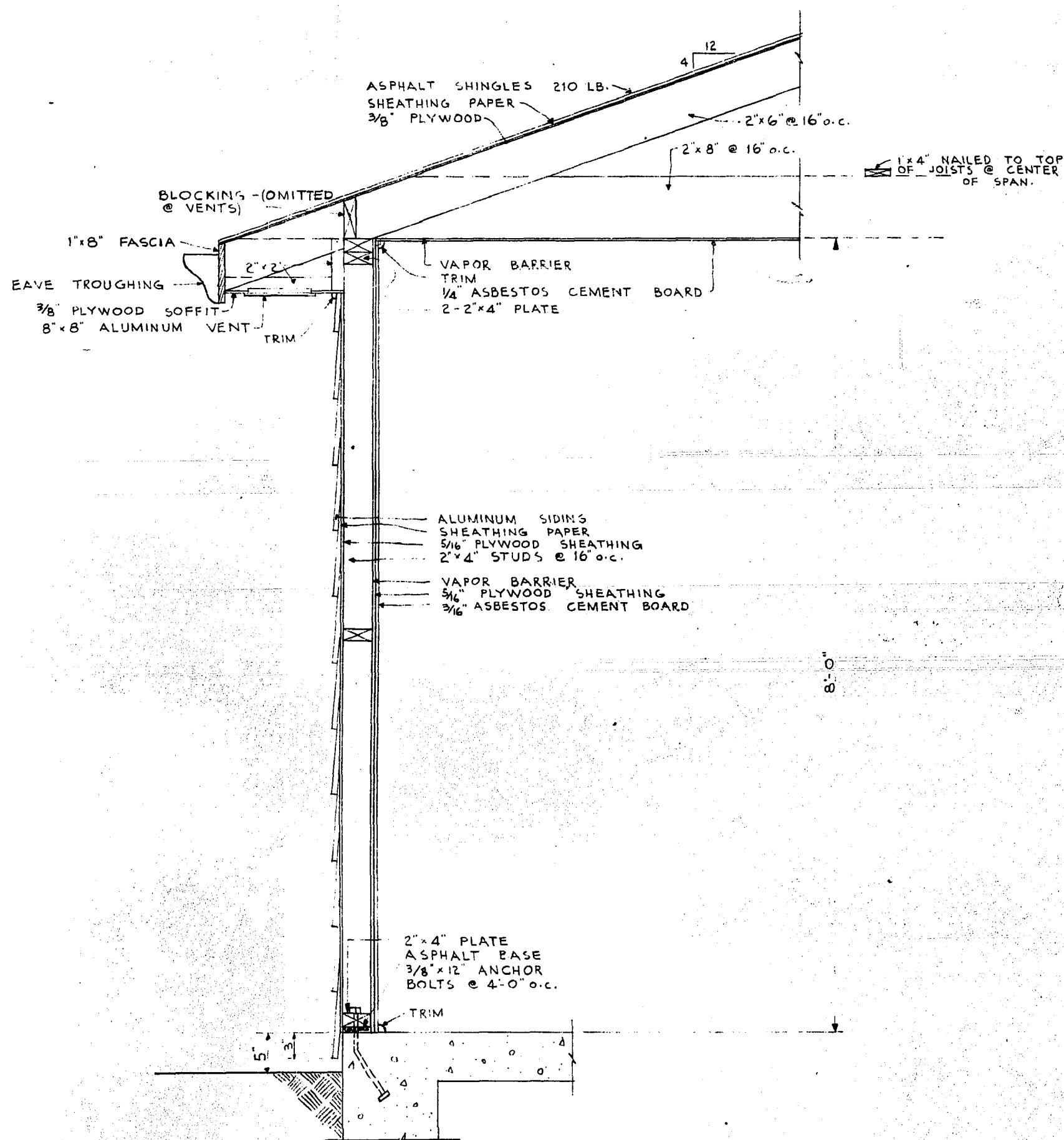
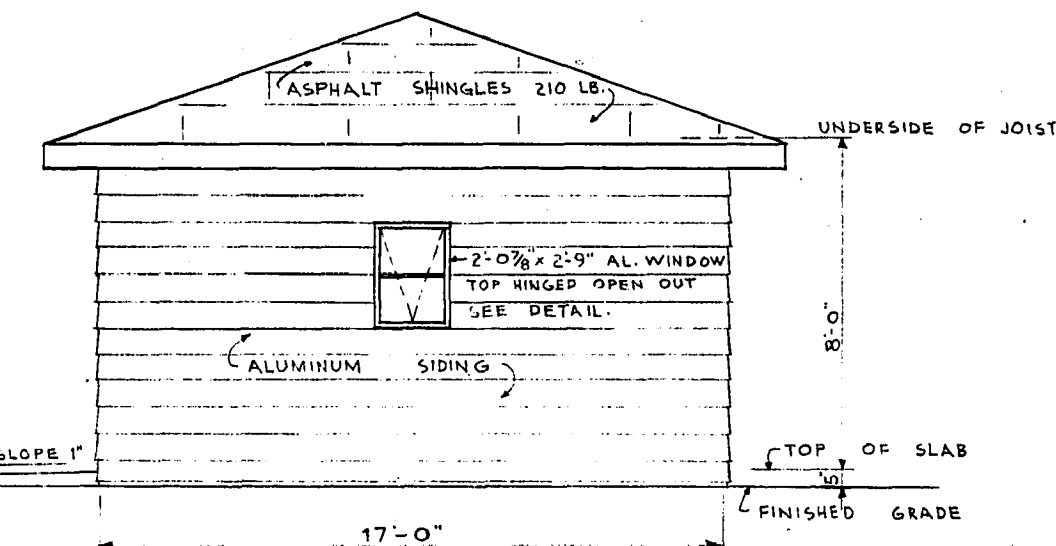
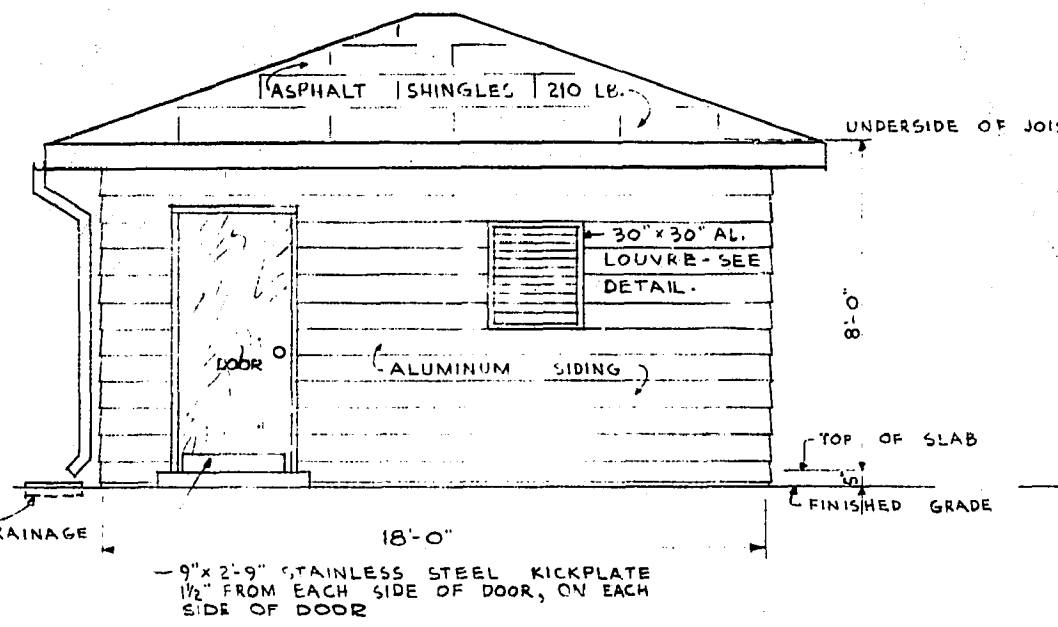
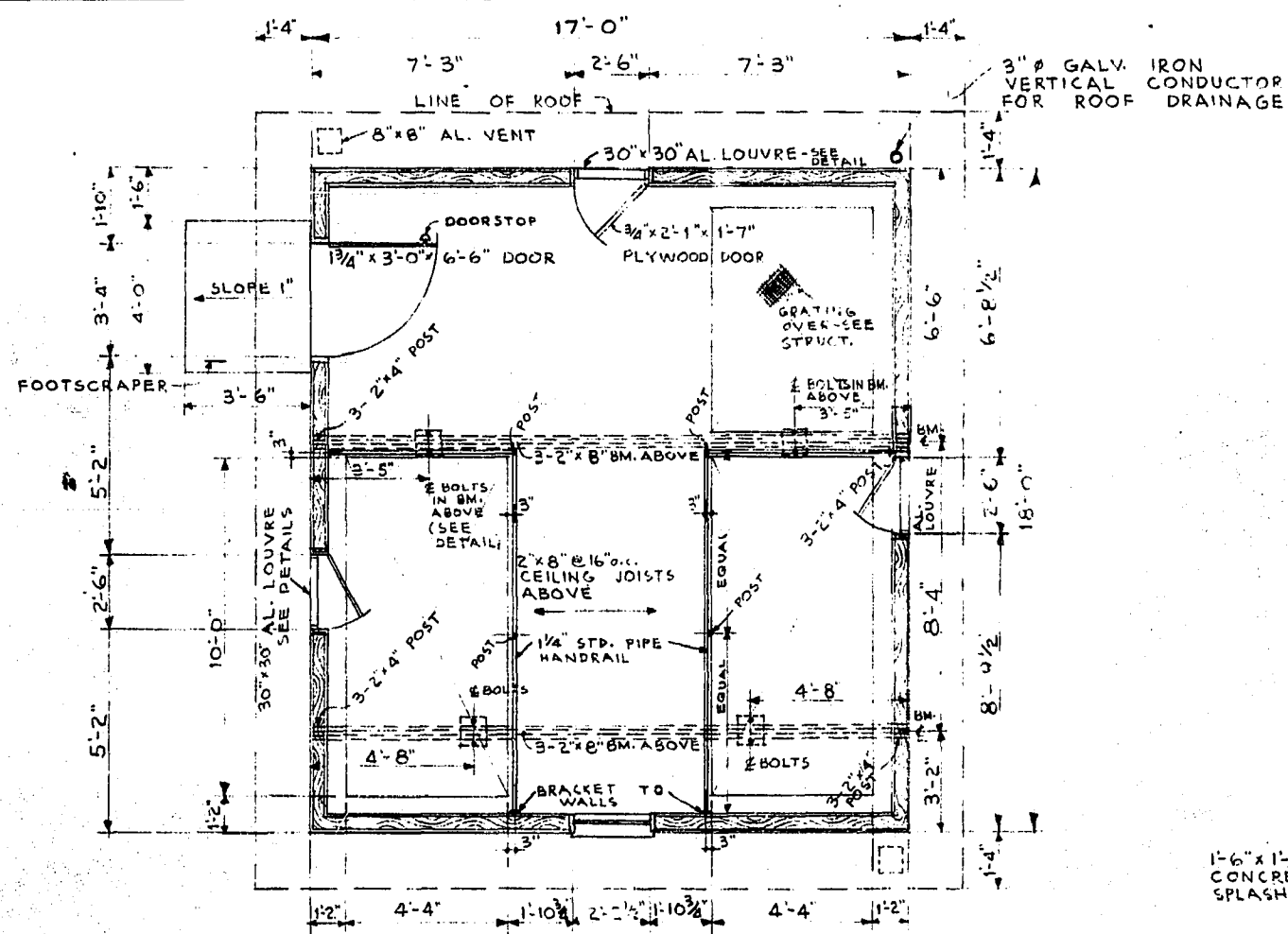
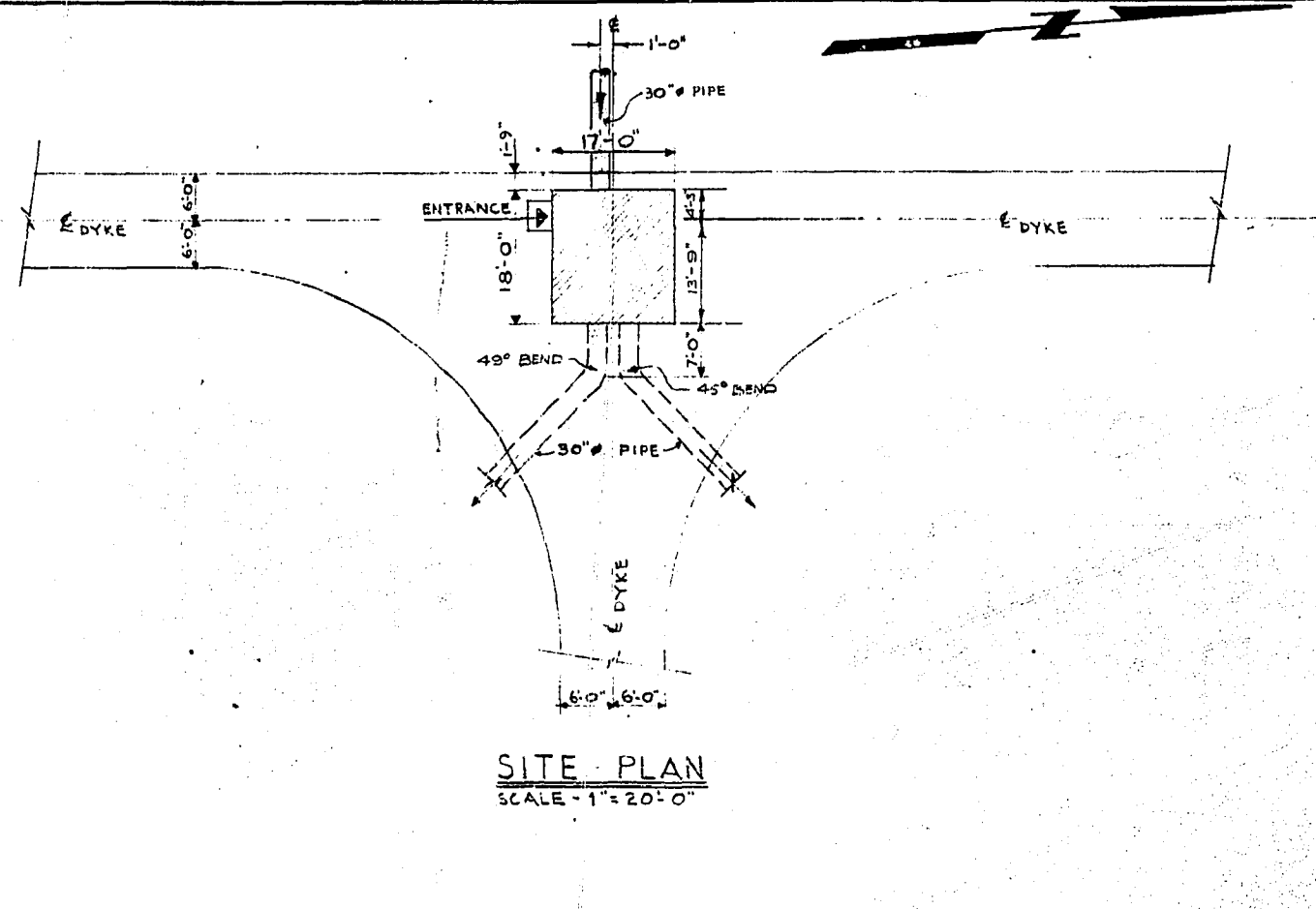
CSL-01

File # MS 10865

REF. or DRAWING NO. CSL-4

DETAILS ARCHITECT. SITE PLAN,  
FLOOR PLAN, ELEVATIONS,  
SECTION & DET.

EFFLUENT GATE CHAMBER



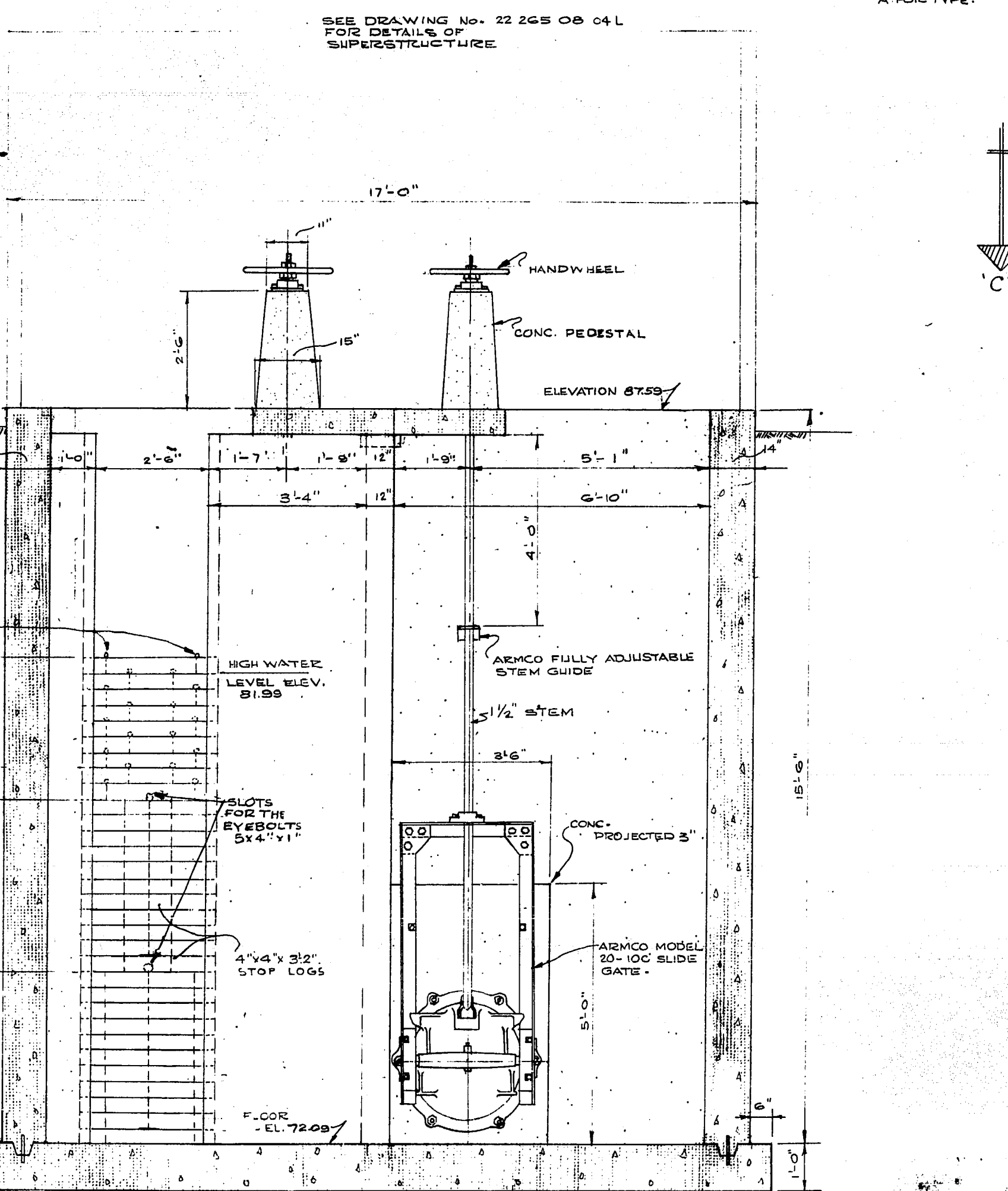
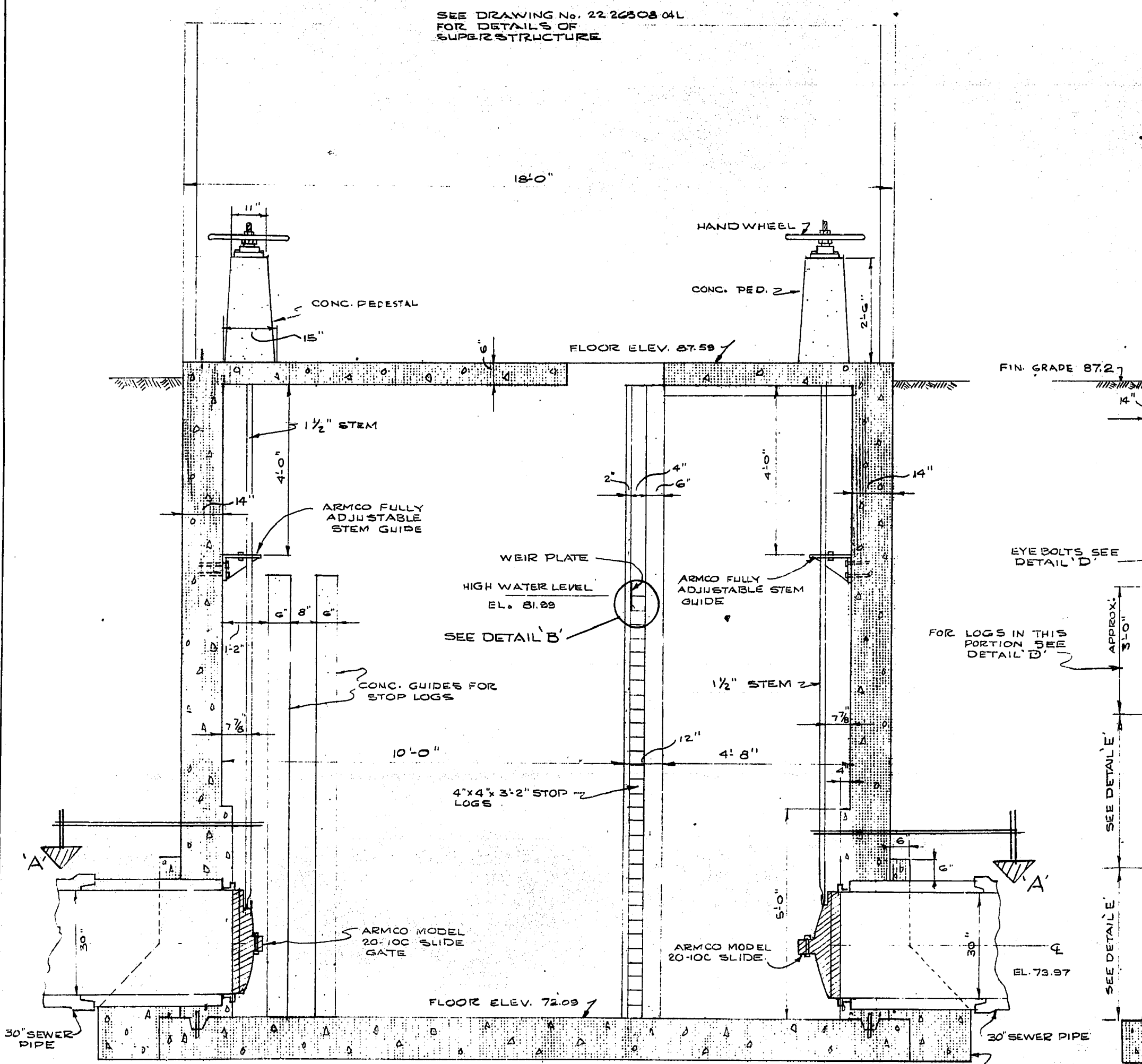
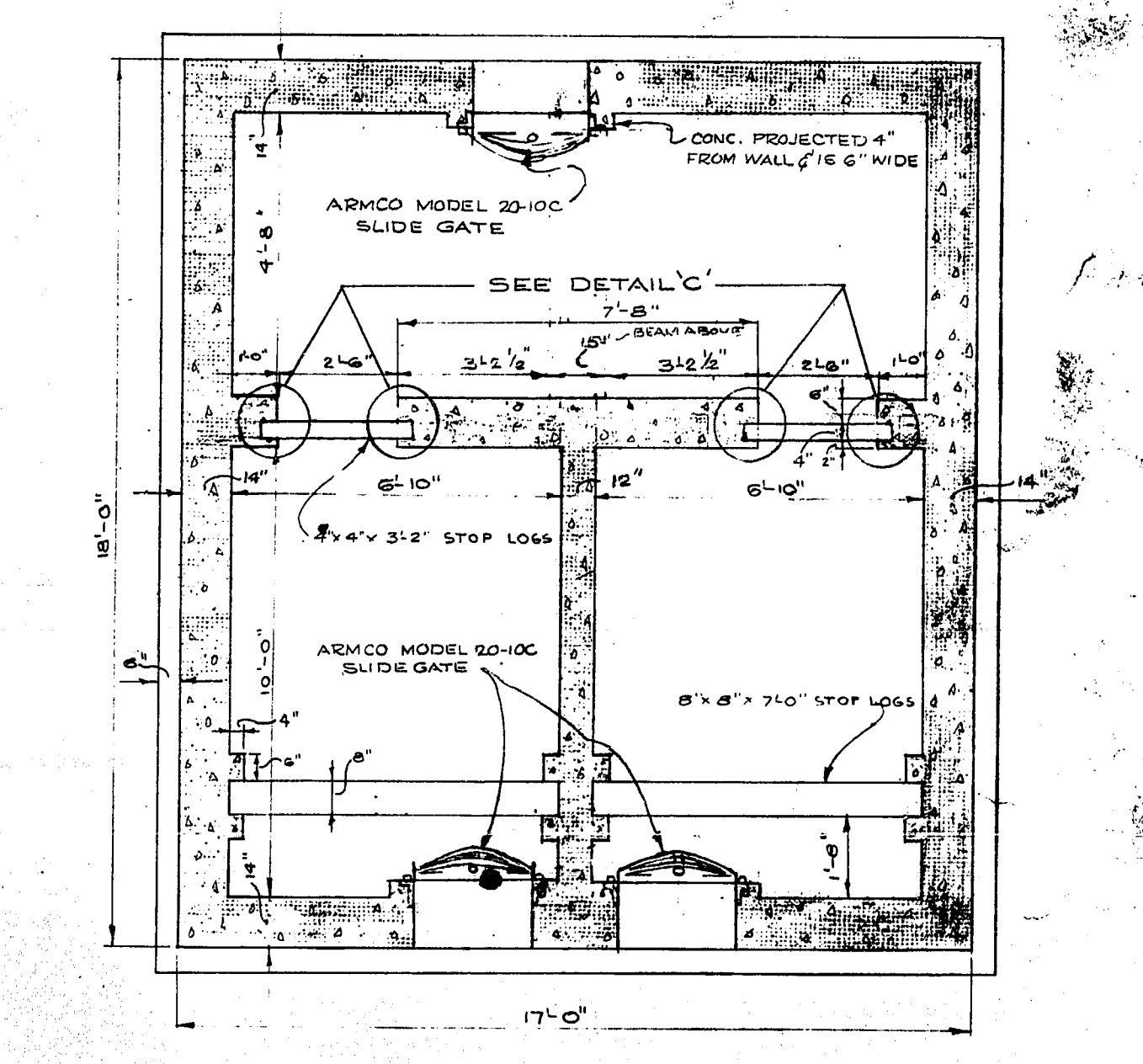
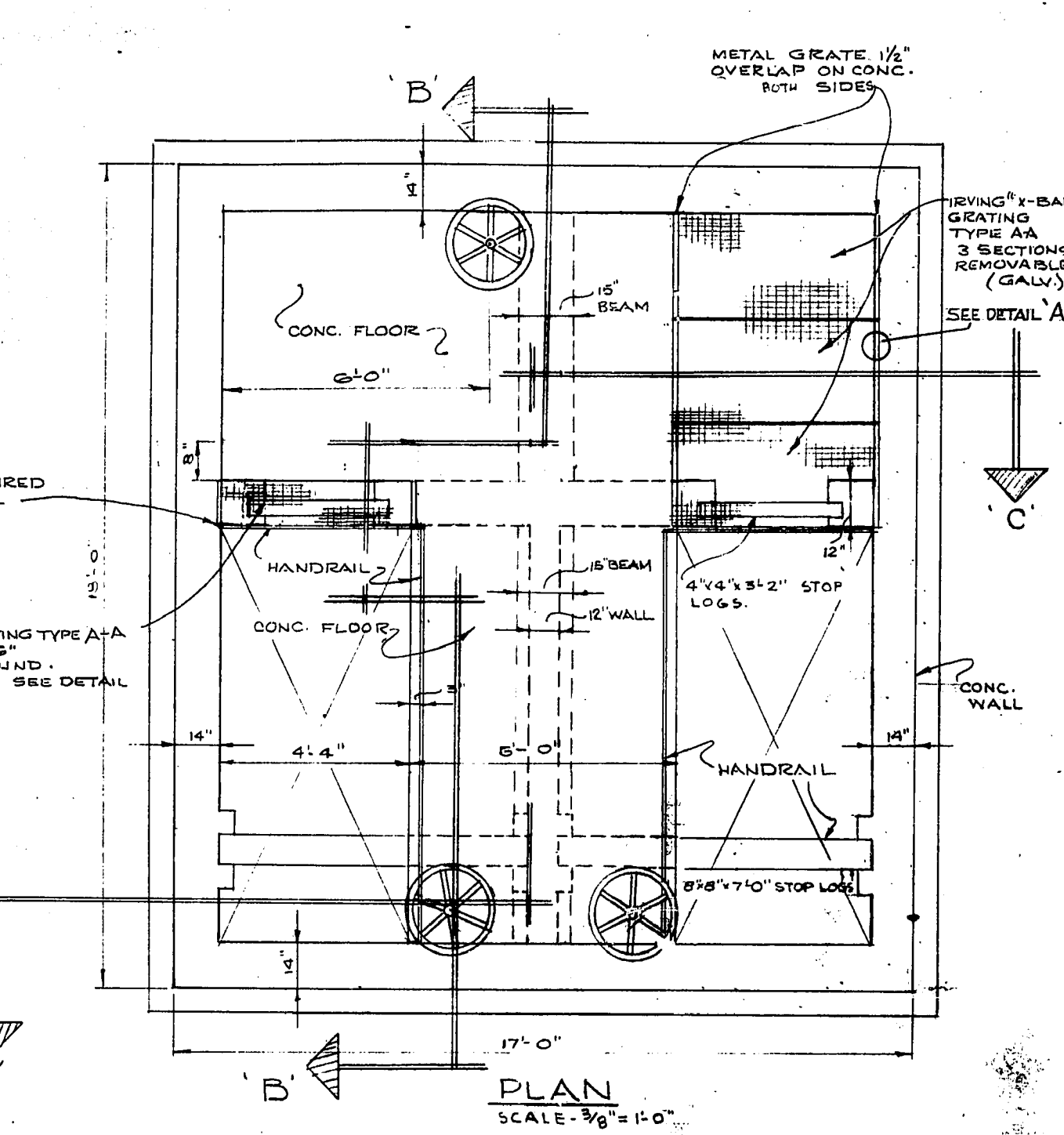
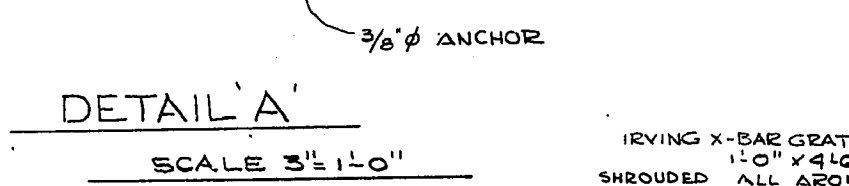
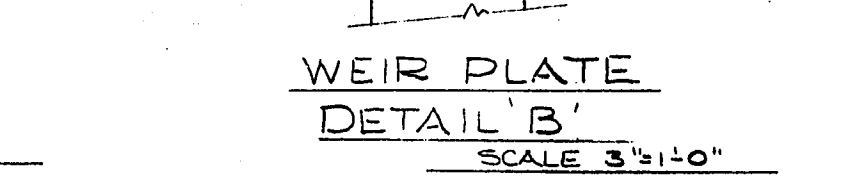
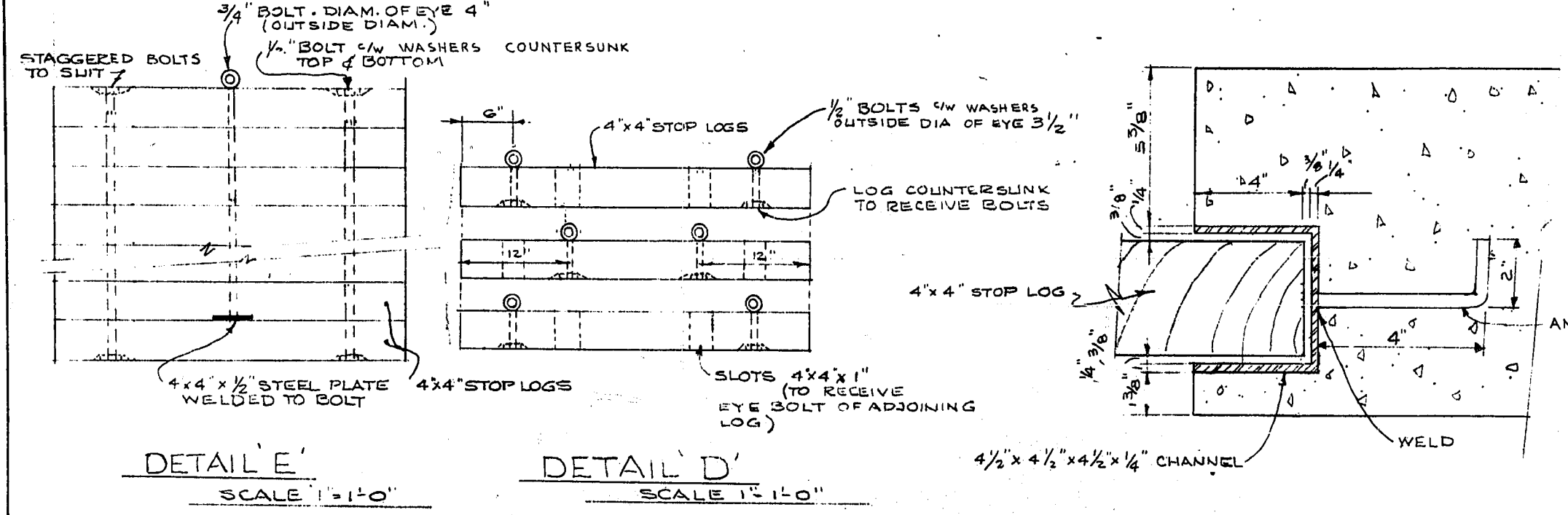
AS CONSTRUCTED

REVISIONS			THE METROPOLITAN CORPORATION OF GREATER WINNIPEG WATERWORKS AND WASTE DISPOSAL DIVISION	
NO.	DATE	DETAILS	CHARLESWOOD SEWAGE LAGOON	
1	10/1/63	CHANGED SIZE OF DOOR AND LOUVRE DETAIL	ARCHITECTURAL SITE PLAN, FLOOR PLAN, ELEVATIONS, SECTION & DETAILS.	
			EFFLUENT GATE CHAMBER	
			UNDERWOOD McLELLAN AND ASSOCIATES CONSULTING PROFESSIONAL ENGINEERS CALGARY SASKATOON REGINA WINNIPEG	APPROVER <i>W. B. ...</i> ENGINEER OF DESIGN
				<i>A. ...</i> ENGINEER OF WASTE DISPOSAL
				<i>R. ...</i> DIRECTOR AND CHIEF ENGINEER
			DATE: MAY 13, 1965	DRAWING NO.: AB-22-265-08-04L
			SCALE: AS SHOWN	SHEET 4 OF 14



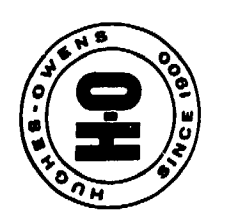
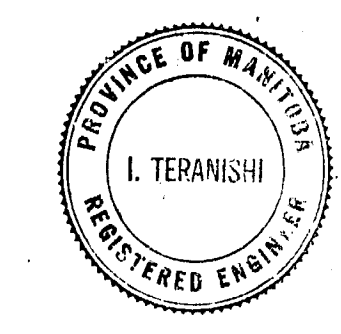


REF. OF DRAWING No. CSL-5  
**DETAILS EFFLUENT GATE  
 CHAMBER. DET.**

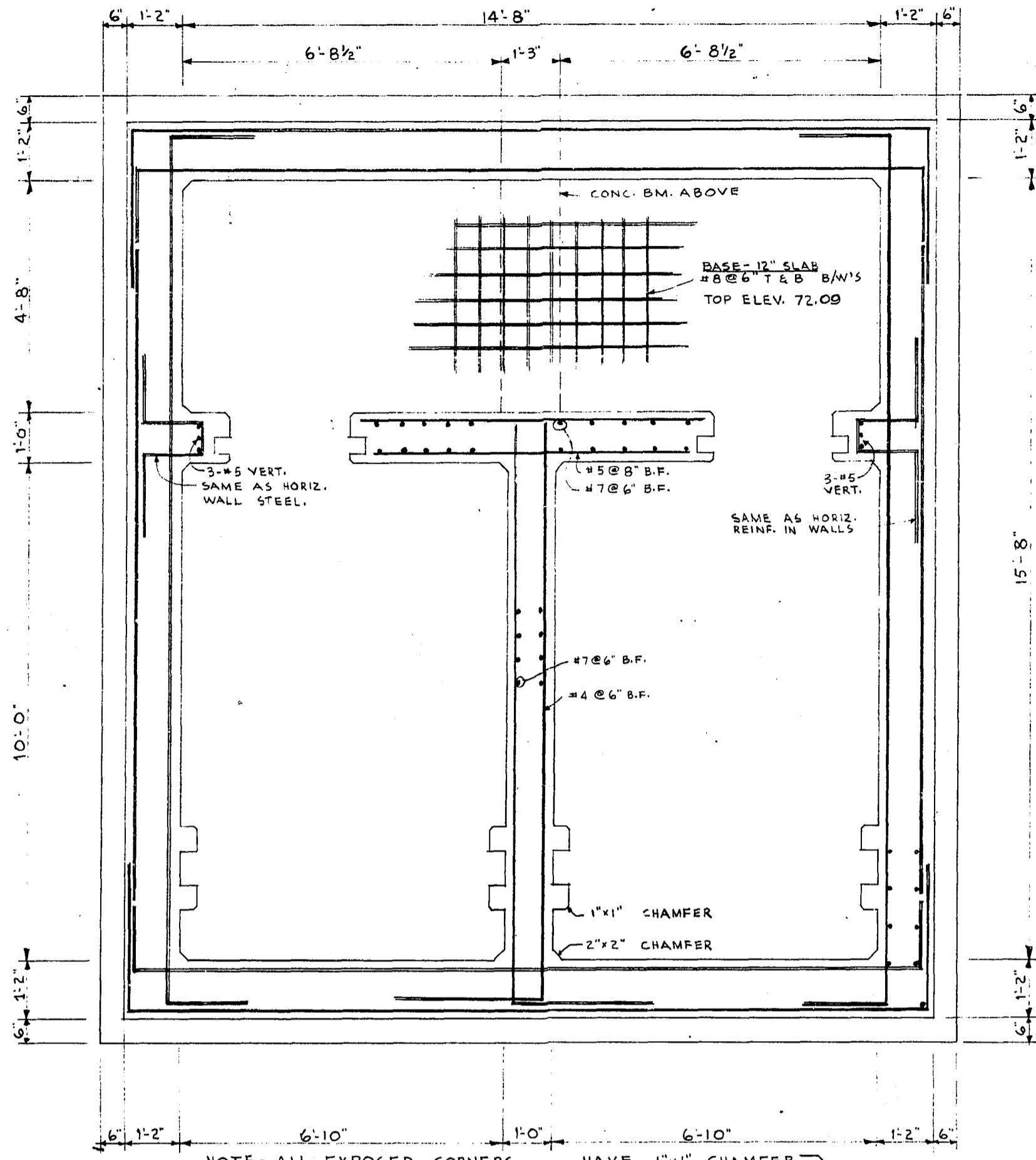


AS CONSTRUCTED

REVISIONS		THE METROPOLITAN CORPORATION OF GREATER WINNIPEG WATERWORKS AND WASTE DISPOSAL DIVISION	
NO.	DATE	DETAILS	
1	10/13/63	REVISED TO SHOW DIMENSIONS OF 22 1/2" X 4" SLATS AND SECTION A-A	
		CHARLESWOOD SEWAGE LAGOON	
		EFFLUENT GATE CHAMBER DETAILS	
DRAWN BY: <i>S. B. Smith</i>		APPROVED: <i>W. J. ...</i> ENGINEER OF DESIGN	
CHECKED BY: I. T.		APPROVED: <i>R. ...</i> ENGINEER OF WASTE DISPOSAL	
DESIGNED BY: I. T.		APPROVED: <i>...</i> DIRECTOR AND CHIEF ENGINEER	
DATE: MAY 13, 1965		DRAWING NO.: AB-22-265-DB-051	SCALE: AS SHOWN
DRAWN BY:		SHEET 5 OF 14	

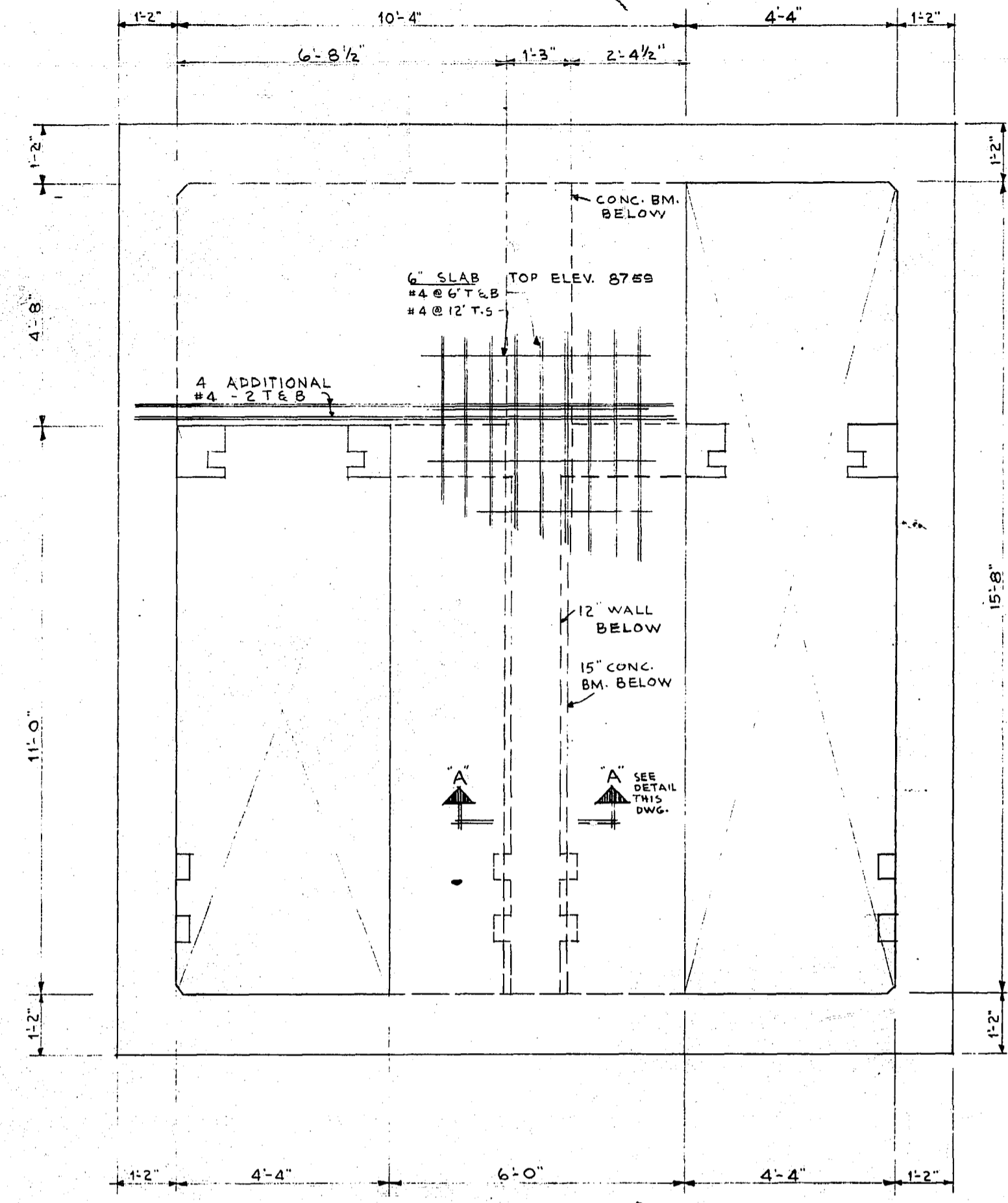


REF. or DRAWING NO. **CSL-6**  
**DETAILS EFFLUENT GATE**  
**CHAMBER. STRUC.**



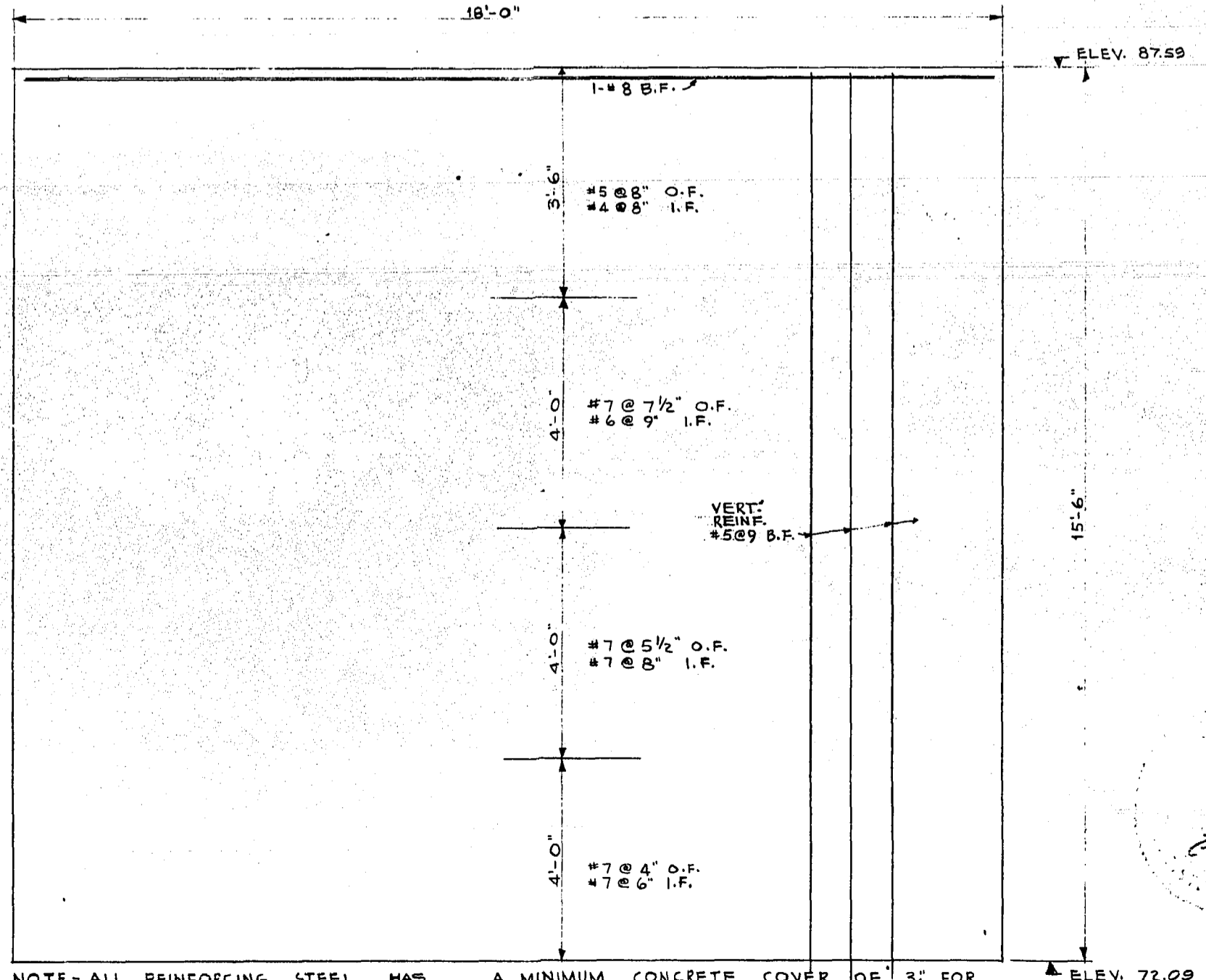
NOTE - ALL EXPOSED CORNERS HAVE 1"x1" CHAMFER  
 ALL RE-ENTRANT CORNERS HAVE 2"x2" CHAMFER

**BASE PLAN**  
 SCALE - 1/2" = 1'-0"



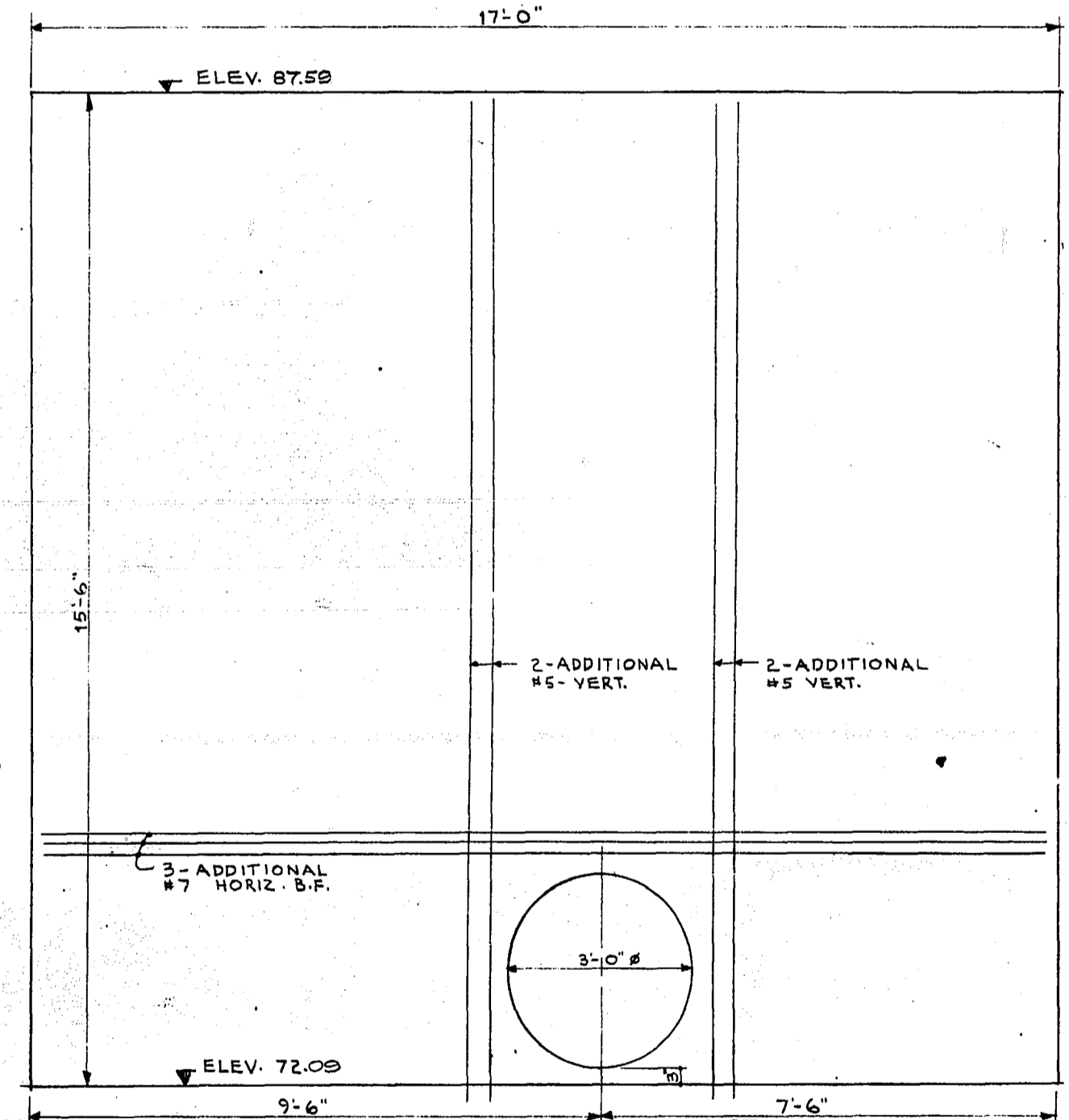
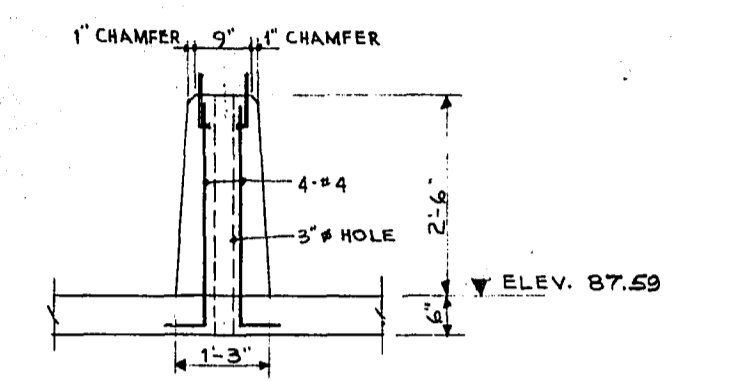
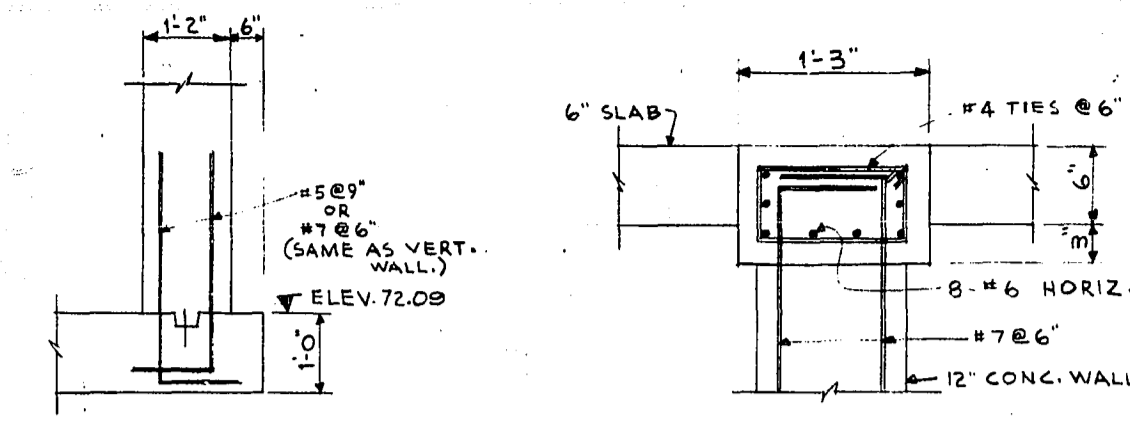
NOTE - ADDITIONAL REINF. SHOWN ONLY. FOR OTHER REINF. SAME AS NORTH & SOUTH WALLS.

**EAST WALL ELEVATION**  
 SCALE - 1/2" = 1'-0"



NOTE - ALL REINFORCING STEEL HAS A MINIMUM CONCRETE COVER OF 3/4" FOR TOP SLAB, 3" FOR BASE & 2" FOR WALLS. ALL CONCRETE 3000# P.S.I. @ 28 DAYS.

**WALL ELEVATION FOR NORTH & SOUTH WALLS**  
 SCALE - 1/2" = 1'-0"

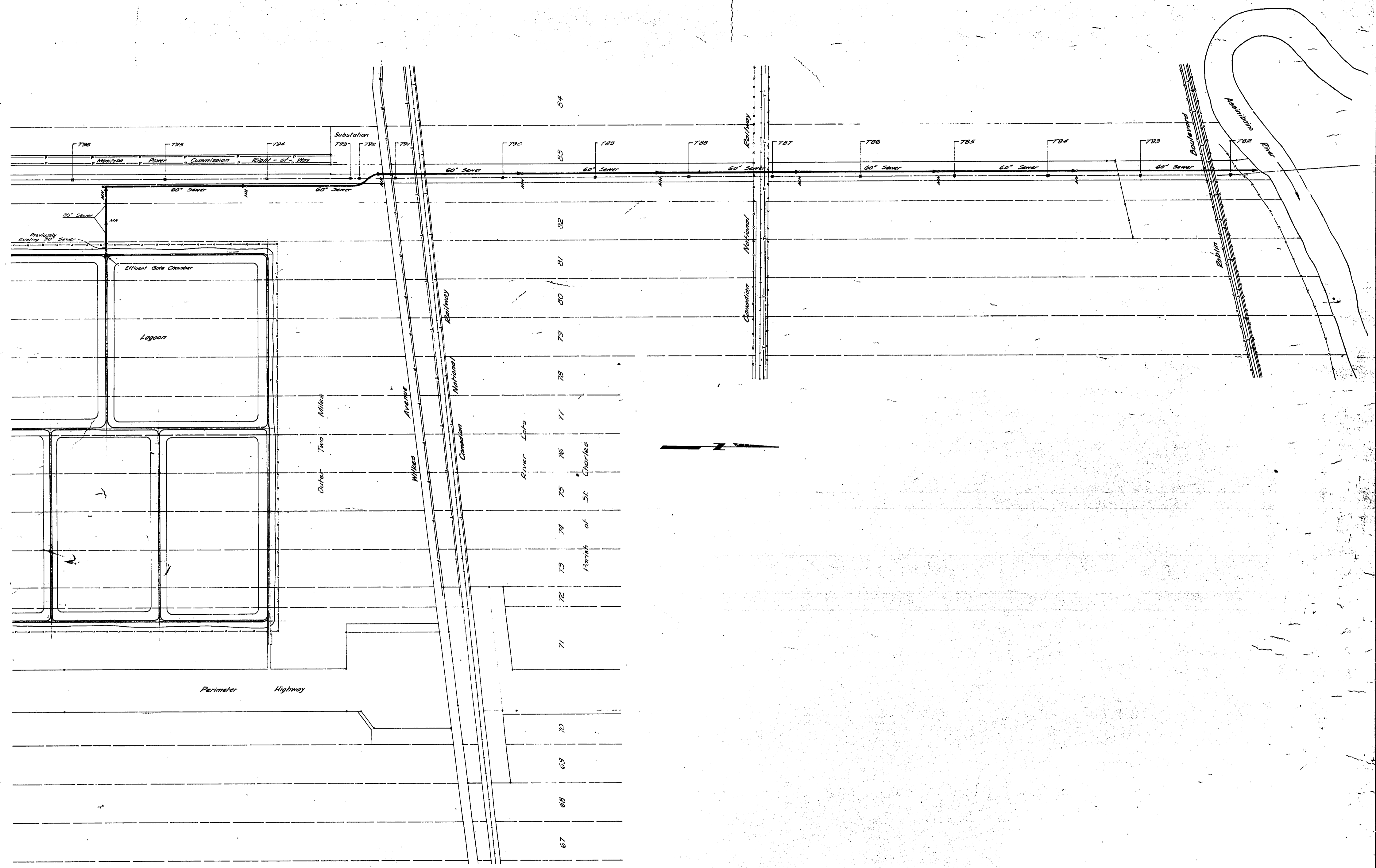


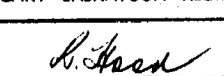
NOTE: FOR OTHER REINF. SEE ELEVATION FOR NORTH & SOUTH WALLS.

REVISIONS		THE METROPOLITAN CORPORATION OF GREATER WINNIPEG WATERWORKS AND WASTE DISPOSAL DIVISION	
NO.	DATE	DETAILS	

UNDERWOOD McLELLAN AND ASSOCIATES CONSULTING PROFESSIONAL ENGINEERS CALGARY SASKATOON REGINA WINNIPEG		APPROVED <i>[Signature]</i> ENGINEER OF DESIGN
DRAWN BY: D.B. TRACED BY: CHECKED BY: G.T. DESIGNED BY: G.T. LAYOUT BY:		APPROVED <i>[Signature]</i> ENGINEER OF WASTE DISPOSAL DIRECTOR AND CHIEF ENGINEER
DATE MAY 13, 1965	DRAWING NO. AB-22-265-08-06L	SCALE: AS SHOWN SHEET 6 OF 14

REF. or DRAWING No. **CSL-22**  
**DETAILS GEN. LAYOUT**  
 SCALE: 1" = 400'



REVISIONS			THE METROPOLITAN CORPORATION OF GREATER WINNIPEG WATERWORKS AND WASTE DISPOSAL DIVISION		
No.	DATE	DETAILS	CHARLESWOOD LAGOON EFFLUENT PIPE LINE		
			GENERAL LAYOUT SCALE: 1" = 400' (AS CONSTRUCTED)		
			UNDERWOOD McLELLAN AND ASSOCIATES CONSULTING PROFESSIONAL ENGINEERS CALGARY SASKATOON REGINA WINNIPEG		APPROVED ENGINEER OF DESIGN
			 APPROVED		ENGINEER OF WASTE DISPOSAL
			DATE: 1 / 2 / 65		DIRECTOR AND CHIEF ENGINEER
			DRAWING No. AB 22-265-08C-01		SCALE: AS SHOWN
			LAYOUT BY:		SHEET 1 OF 5



CSL-22



REF. OF DRAWING No. **CSL-23**  
**DETAILS CHARLESWOOD LAGOON**  
**EFFLUENT PIPE LINE.**

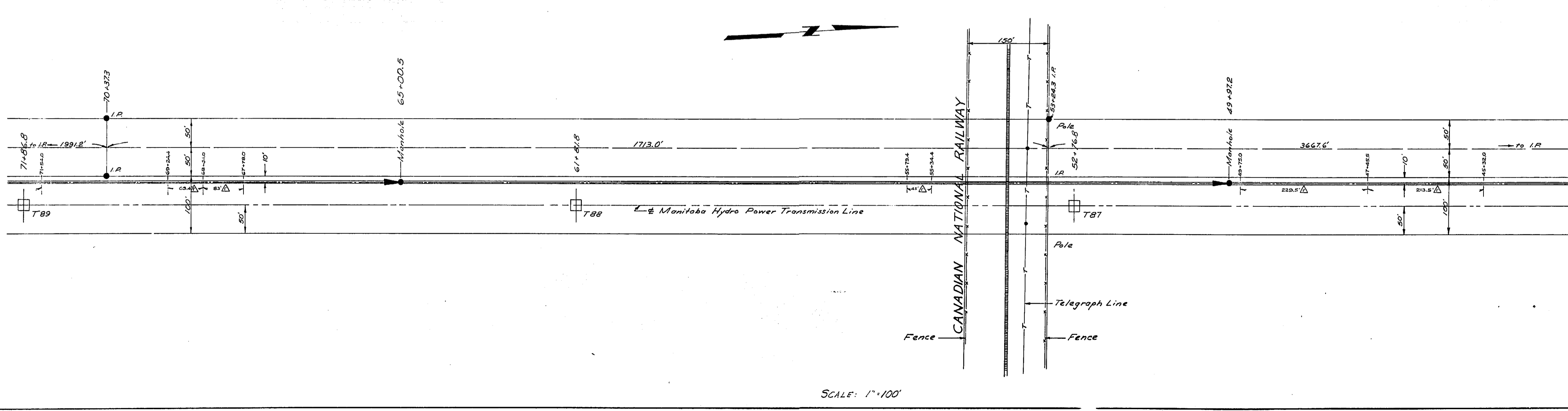
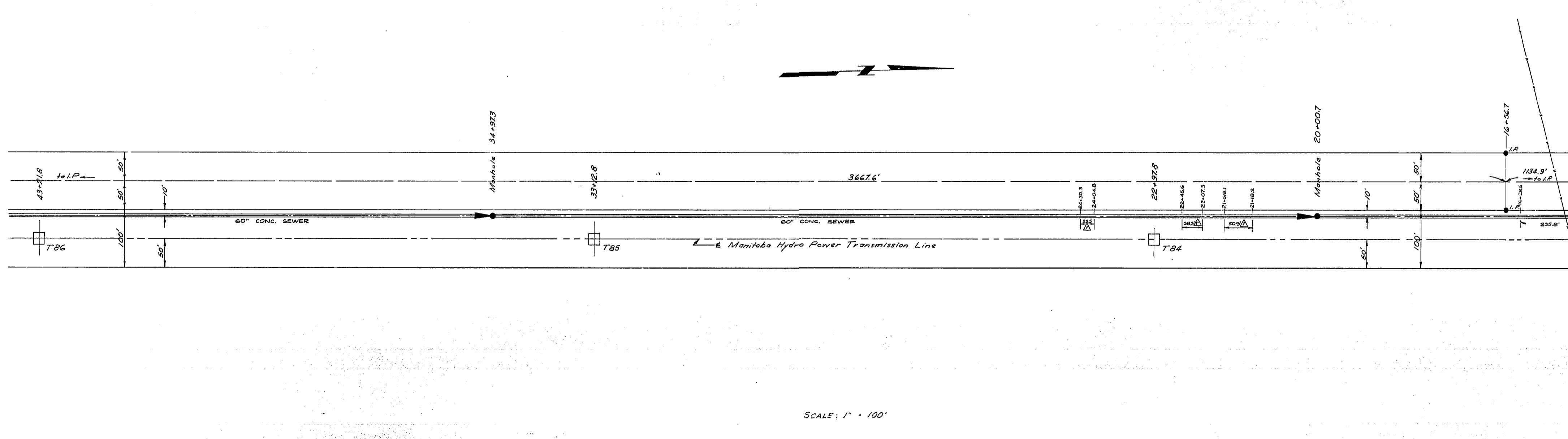
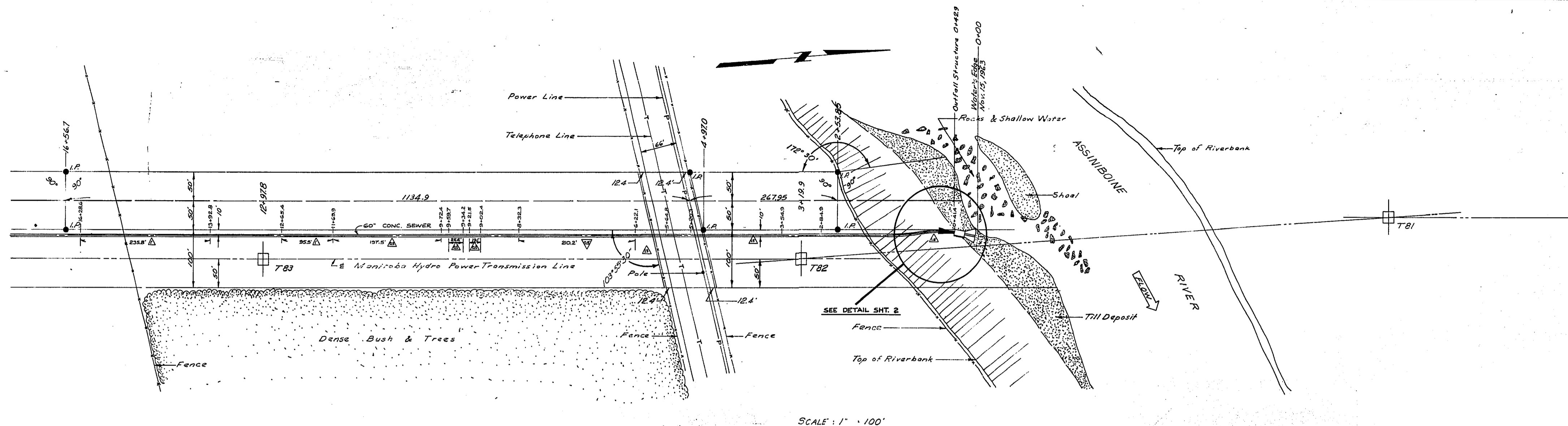


TABLE OF MANHOLE INVERT ELEVATIONS

MANHOLE STATION	TOP ELEVATION	INVERTS				FINAL TOP ELEV.
		NORTH	SOUTH	EAST	WEST	
65+00.5	760.39 <sup>#</sup>	760.39 <sup>#</sup>				779.86
49+97.2	759.31	759.31				778.19 <sup>#</sup>
34+97.3	757.66	757.66				779.78
20+00.7	756.76 <sup>#</sup>	756.76 <sup>#</sup>				778.60
OUTFALL STRUCTURE - 754.8						

- NOTES:
1. ALL CHANGES ARE REFERRED TO THE E OF THE 60" P. PRECAST CONC. EFFLUENT SEWER PIPE.
  2.  $\Delta$  - DEPTH OF CRUSHED ROCK BASE BENEATH PIPE.
  3.  $\nabla$  - DEPTH OF CRUSHED ROCK BASE BENEATH PIPE.
  4.  $\square$  - DEPTH OF CRUSHED ROCK BASE BENEATH PIPE.

DESCRIPTION	SYMBOL
SANITARY SEWER & MH.	
STORM SEWER & MH.	
CATCH BASINS	
WATER MAIN	
GATE VALVE, CROSS OR TEE	
FIRE HYDRANT (OFF LINE WITH VALVE)	
FIRE HYDRANT (ON LINE)	
SEWAGE FORCE MAIN	
CURB STOP	
CURB	
SIDEWALK	
DIRECTION OF DRAINAGE	
AREA PAVED	

THE METROPOLITAN CORPORATION OF GREATER WINNIPEG  
 WATERWORKS AND WASTE DISPOSAL DIVISION

CHARLESWOOD LAGOON EFFLUENT PIPE LINE  
 (AS CONSTRUCTED)

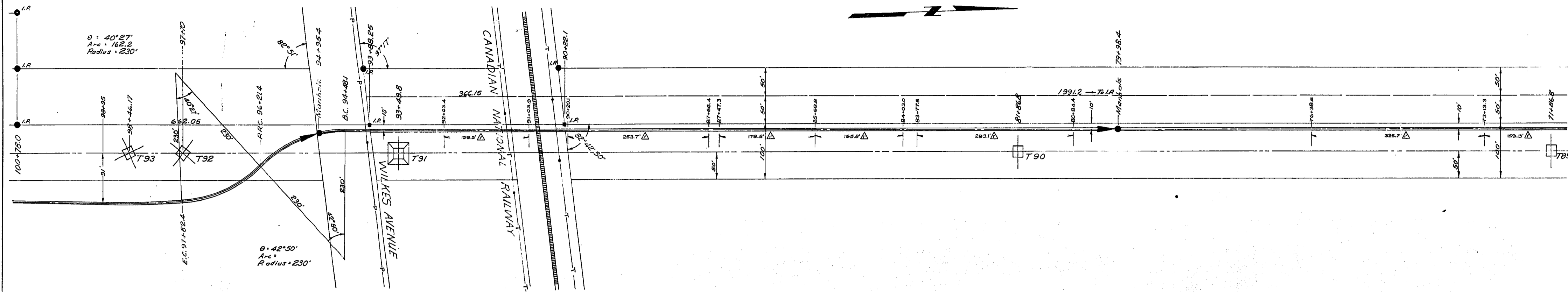
DRAWN BY E.B.  
 TRACED BY  
 CHECKED BY  
 SHEET 2 OF 5  
 SCALE: AS SHOWN

UNDERWOOD McLELLAN & ASSOCIATES LIMITED  
 CONSULTING PROFESSIONAL ENGINEERS  
 CALGARY REGINA SASKATOON WINNIPEG

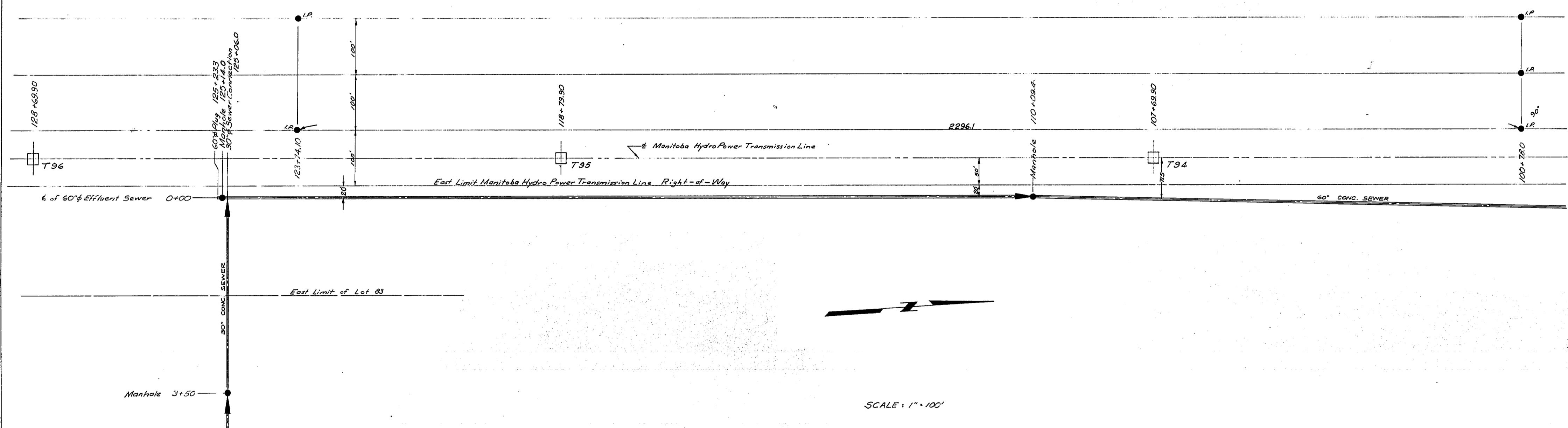
APPROVED BY  
 DATE 1/2/65

DWG. No. AB.22-265-OBC-02

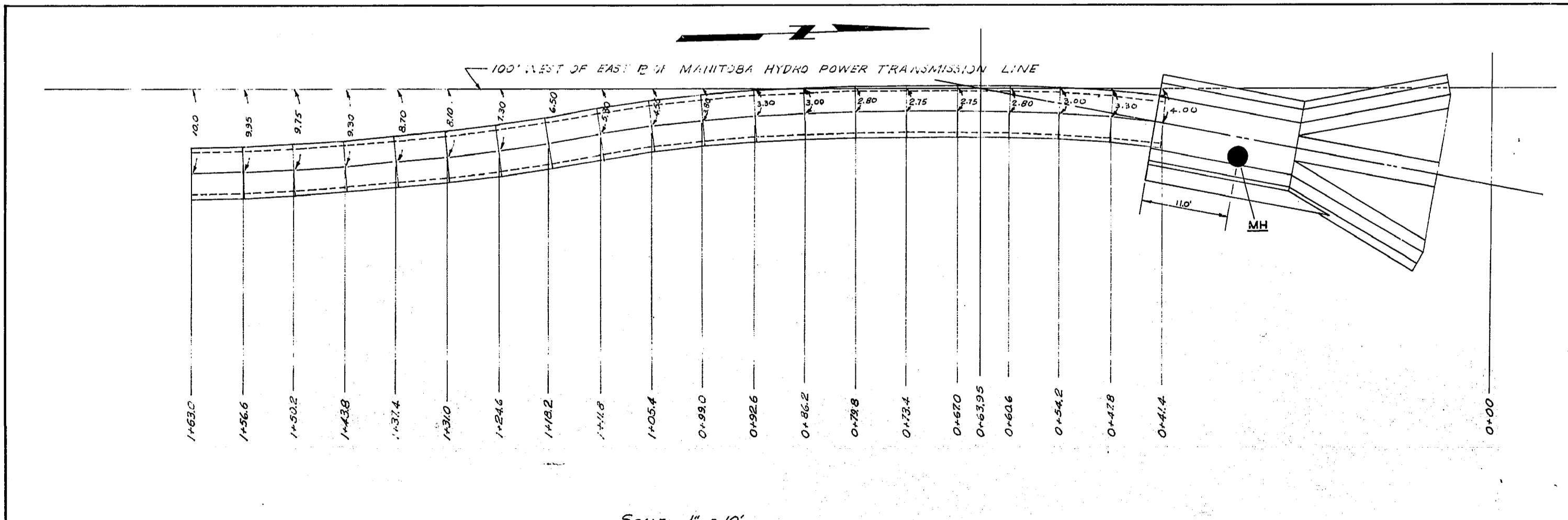
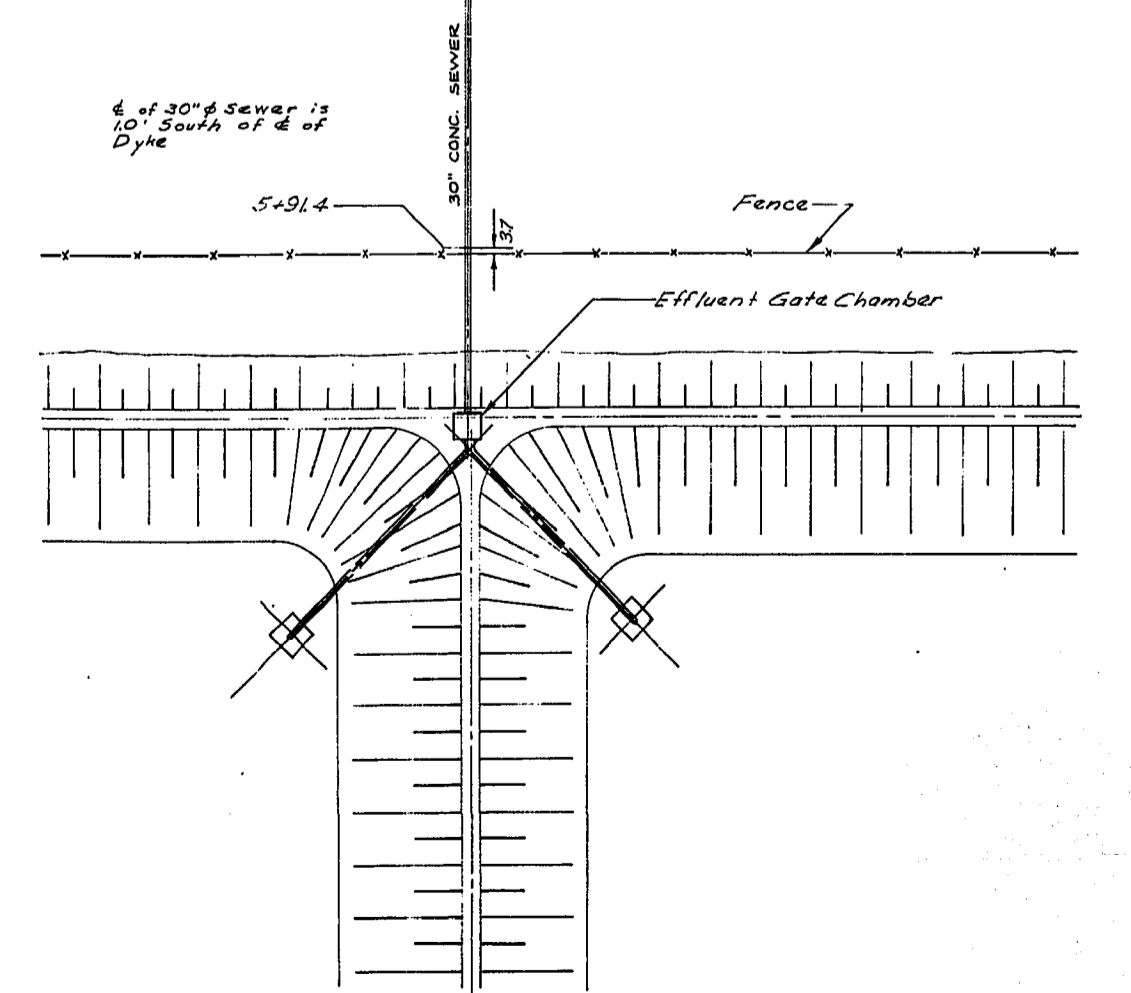
REF. OF DRAWING NO. **CSL-24**  
**DETAILS CHARLESWOOD LAGOON**  
**EFFLUENT PIPE LINE**



SCALE: 1" = 100'



SCALE: 1" = 100'



SCALE: 1" = 10'

TABLE OF MANHOLE INVERT ELEVATIONS

MANHOLE STATION	TOP ELEVATION	INVERTS				FINAL TOP ELEV.
		NORTH	SOUTH	EAST	WEST	
125+140		765.93	765.93	767.18		784.72
110+094		764.62 <sup>5</sup>	764.62 <sup>5</sup>			781.63
94+95.4		763.30 <sup>5</sup>	763.30 <sup>5</sup>			782.20 <sup>6</sup>
79+98.4		762.08 <sup>4</sup>	762.08 <sup>4</sup>			782.43
3+50	*			770.99	770.99	786.13

**NOTES:**  
 \* Manhole @ 43+50 on 30" Sewer Line.  
 All chainages are referred to the centerline of the 60" Effluent Sewer.  
 Δ - Depth of crushed rock base beneath pipe.

DESCRIPTION	SYMBOL
SANITARY SEWER & MH.	—●—
STORM SEWER & MH.	—○—
CATCH BASINS	—□—
WATER MAIN	—◇—
GATE VALVE, CROSS OR TEE	—T—
FIRE HYDRANT (OFF LINE WITH VALVE)	—H—
FIRE HYDRANT (ON LINE)	—F—
SEWAGE FORCE MAIN	—■—
CURB STOP	—C—
CURB	—K—
SIDEWALK	—S—
DIRECTION OF DRAINAGE	—>—
AREA PAVED	—//—

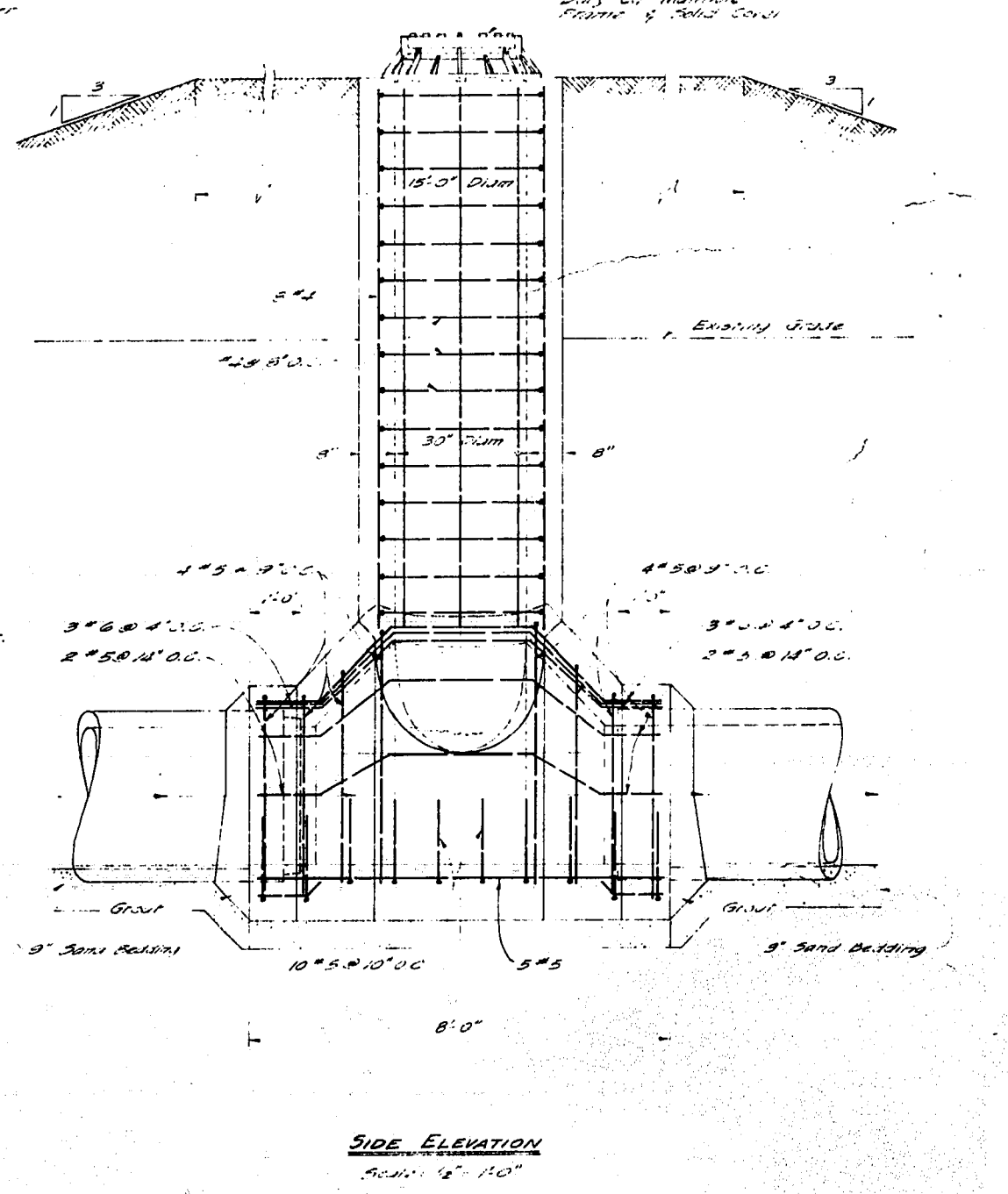
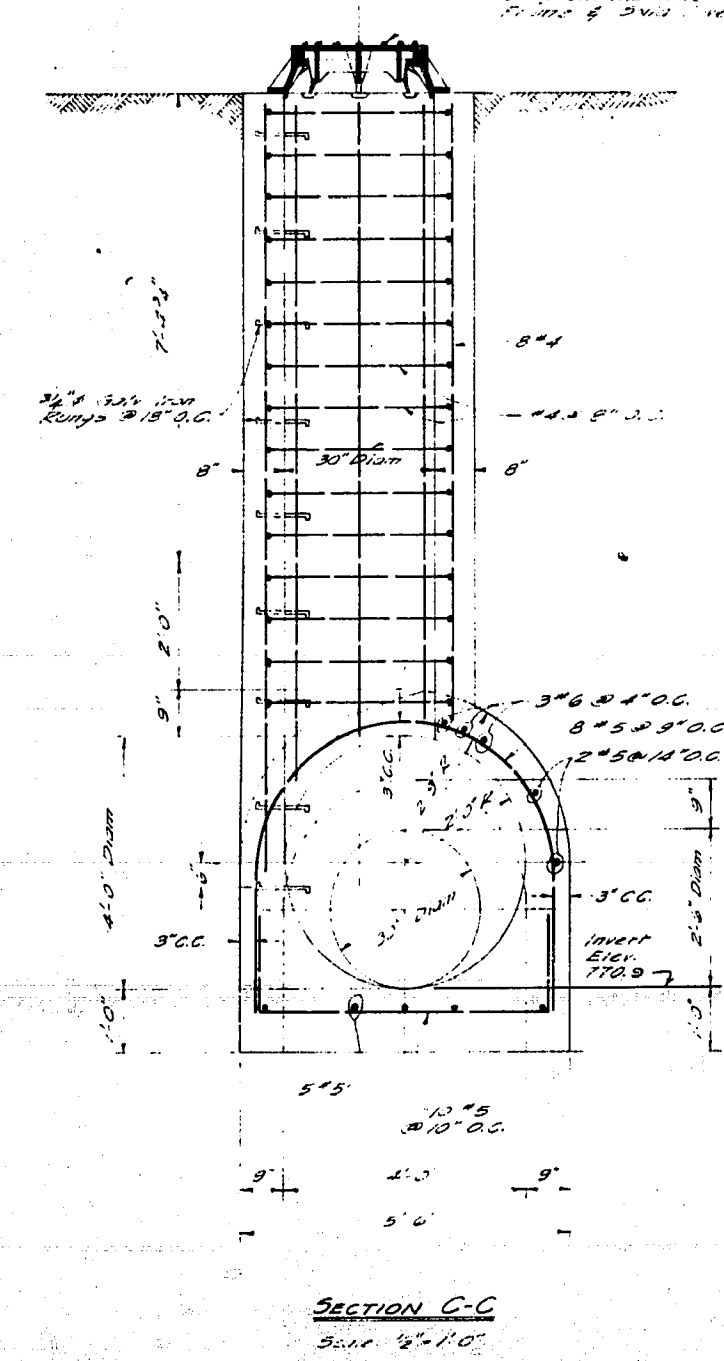
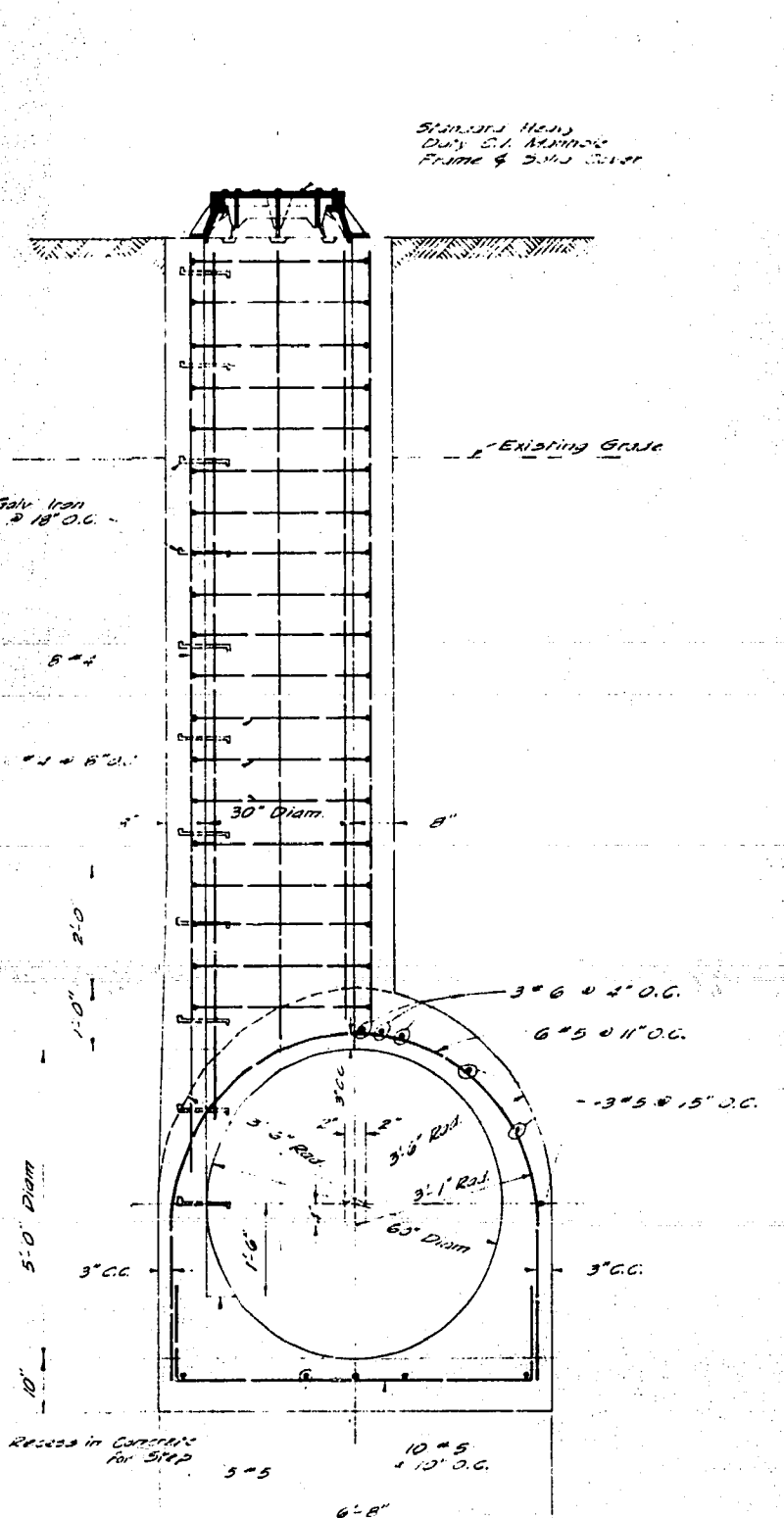
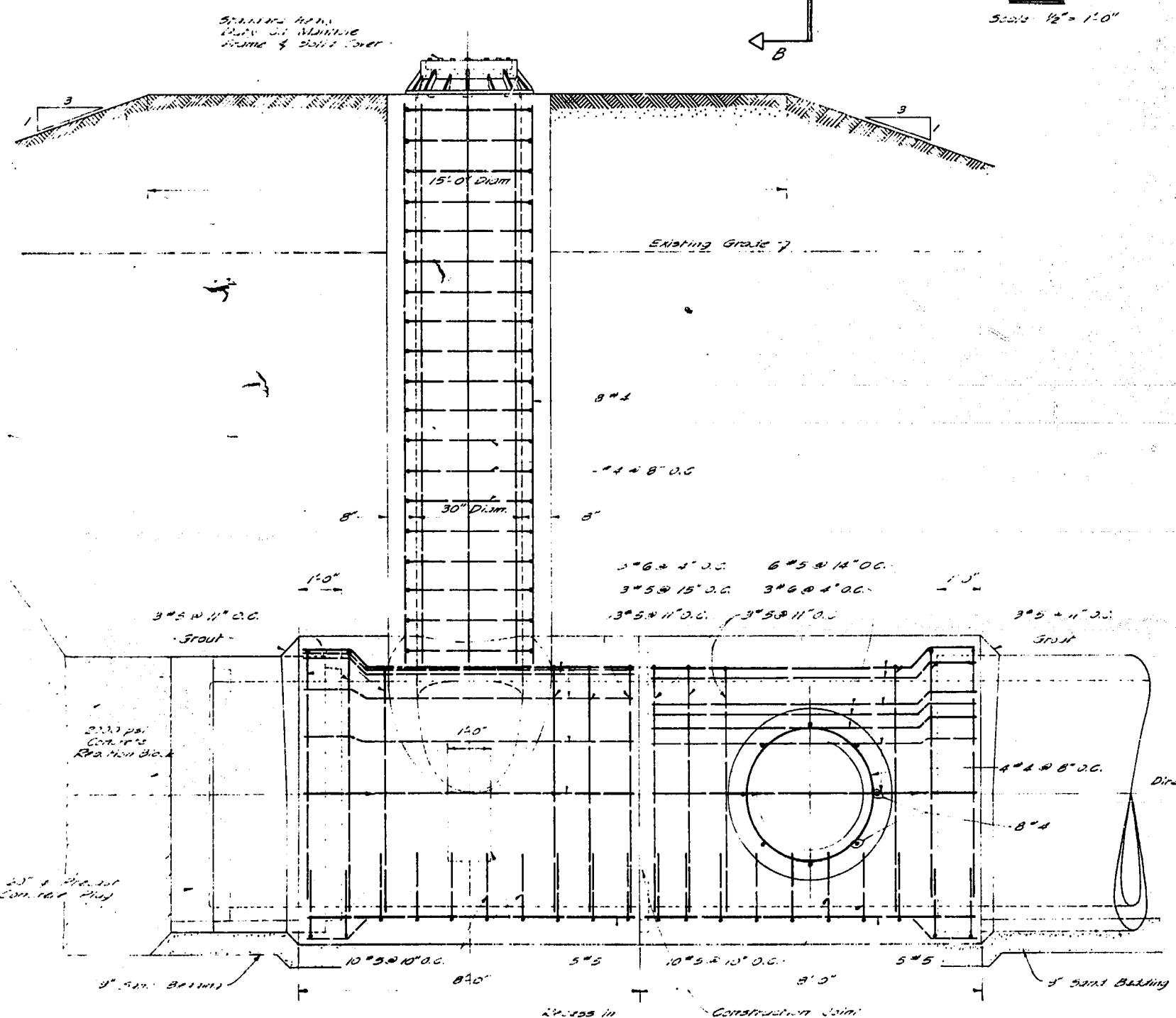
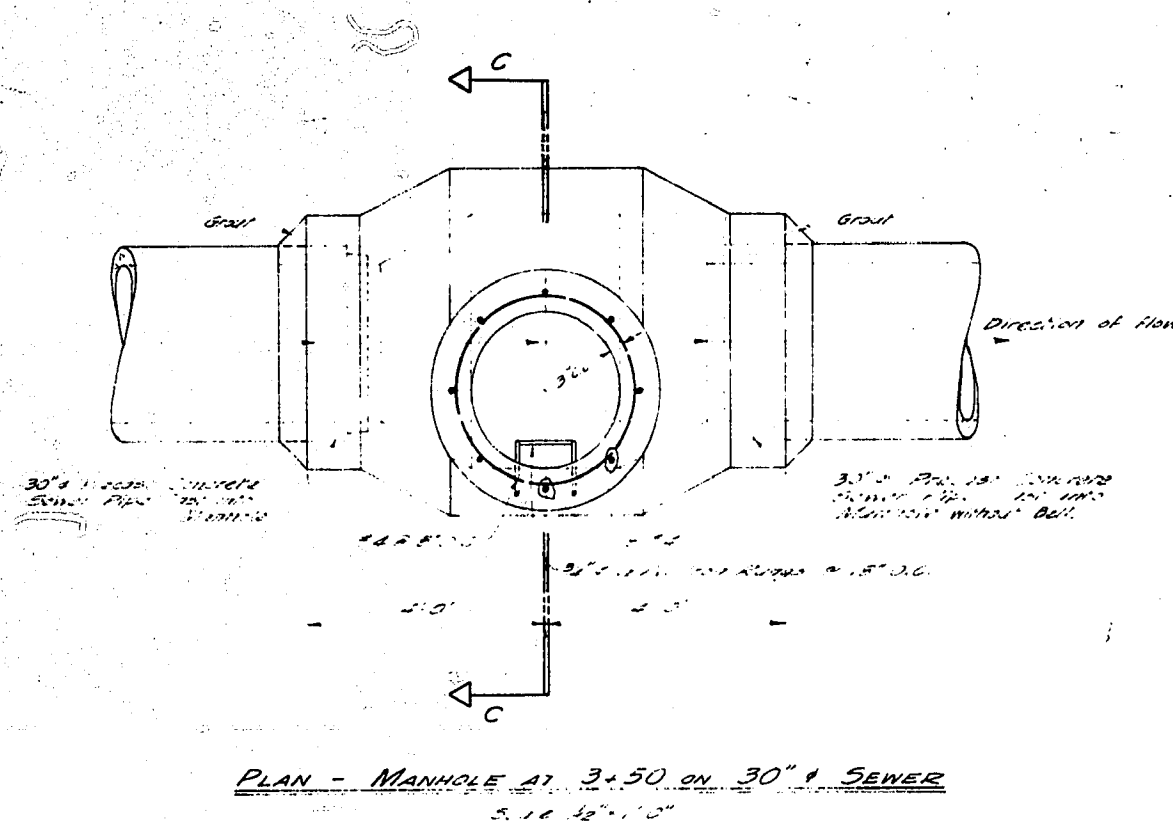
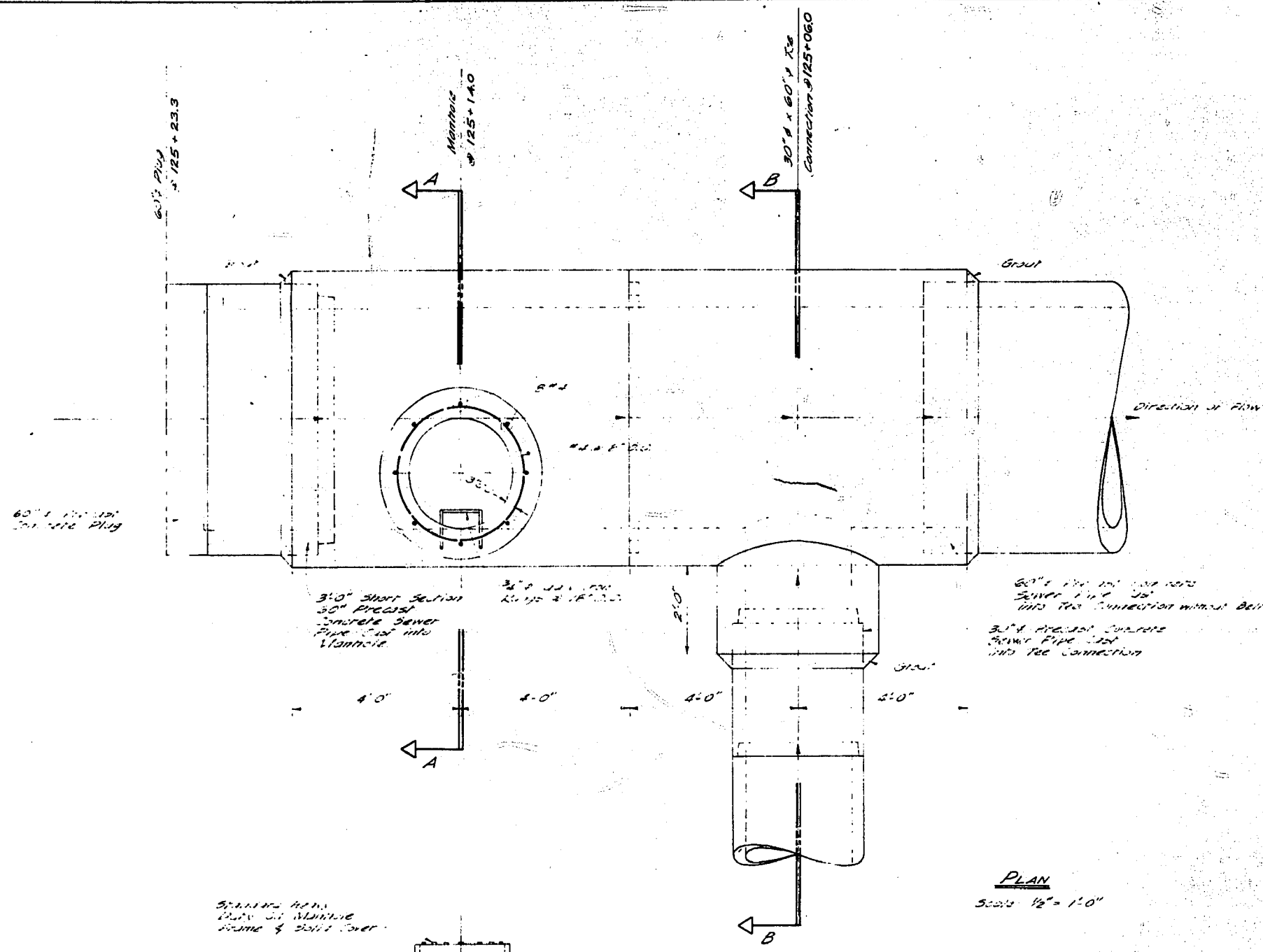
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG  
 WATERWORKS AND WASTE DISPOSAL DIVISION

**CHARLESWOOD LAGOON EFFLUENT PIPE LINE**  
 (AS CONSTRUCTED)

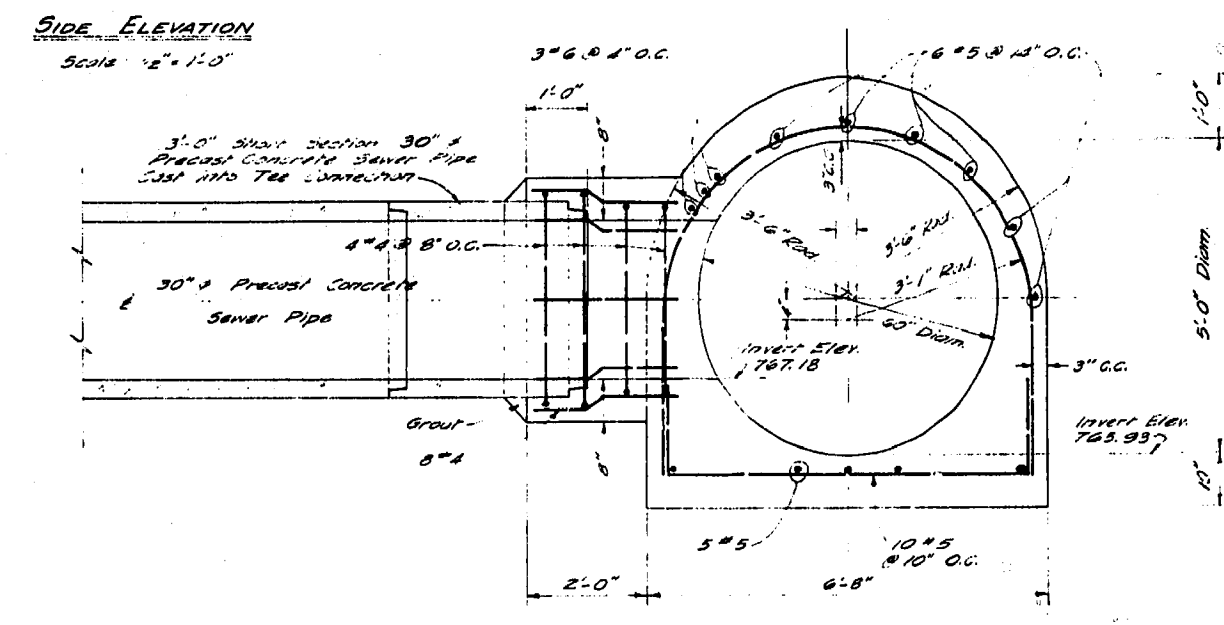
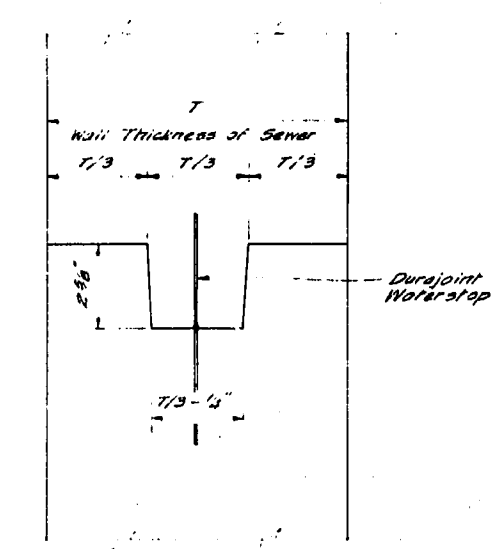
DRAWN BY: E.B.  
 TRACED BY: J.H.  
 CHECKED BY: J.H.  
 SHEET 3 OF 5  
 SCALE: AS SHOWN

UNDERWOOD McLELLAN & ASSOCIATES LIMITED  
 CONSULTING PROFESSIONAL ENGINEERS  
 CALGARY REGINA SASKATOON WINNIPEG  
 APPROVED BY: [Signature]  
 DATE: 1/2/65  
 DWG. No. AB22-265-08C-03

REF. OF DRAWING No. **CSL-25**  
**DETAILS STAND. MANHOLE**  
**DETAILS**



**NOTE: TYPICAL MANHOLE ON 30" SEWER**  
 Similar to joints of 42" diameter, but with joints in process of 30" sewer in 2002 data.

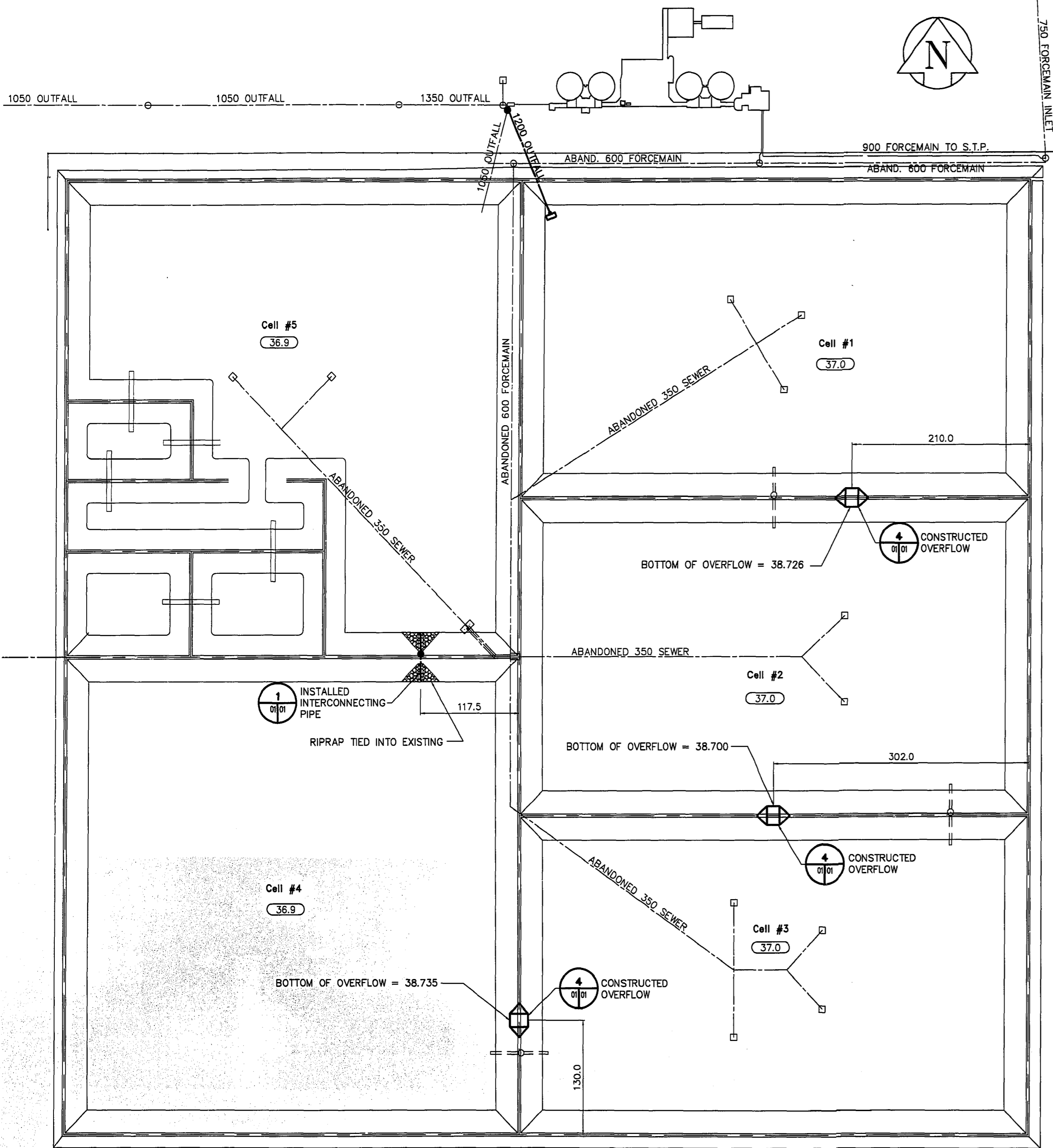


**60" SEWER**

REVISIONS		THE METROPOLITAN CORPORATION OF GREATER WINNIPEG WATERWORKS AND WASTE DISPOSAL DIVISION	
No.	DATE	DETAILS	<b>CHARLEWOOD LAKE EFFLUENT PIPELINE</b>
		<b>STANDARD MANHOLE DETAILS (AS CONSTRUCTED)</b>	
		UNDERWOOD McLELLAN AND ASSOCIATES CONSULTING PROFESSIONAL ENGINEERS CALGARY SASKATOON REGINA WINNIPEG	APPROVED ENGINEER OF DESIGN
			ENGINEER OF WASTE DISPOSAL
		APPROVED <i>S. Head</i>	DIRECTOR AND CHIEF ENGINEER
DRAWN BY	TRACED BY	DATE	SCALE AS SHOWN
CHECKED BY	DESIGNED BY	1/2/65	AB 22-265-08C-04
LAYOUT BY			SHEET 4 OF 5

**CSL-25**





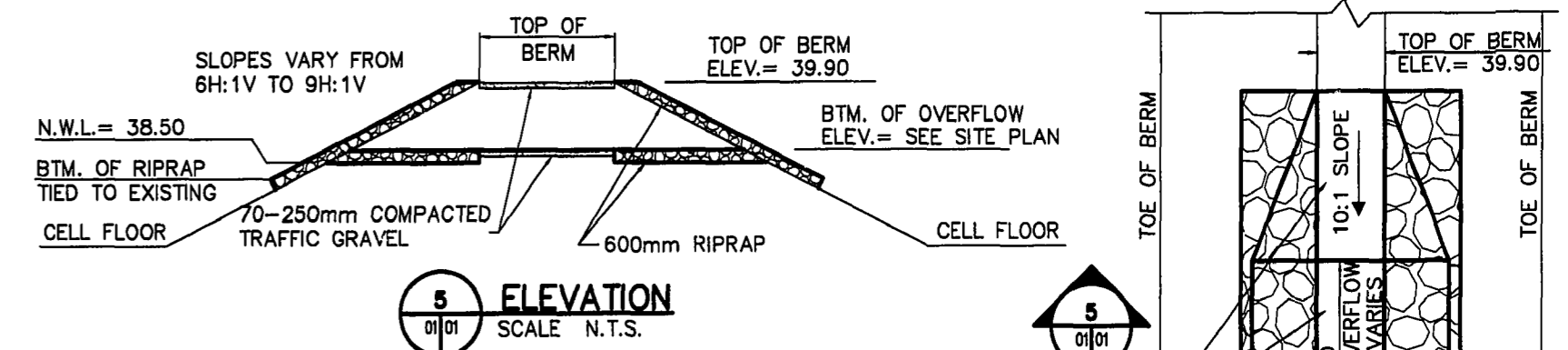
REID, CROWTHER & PARTNERS LIMITED  
WINNIPEG  
**AS CONSTRUCTED**  
SIGNED: *[Signature]* DATE: July 14/98

**SITE PLAN**  
SCALE 1:3000

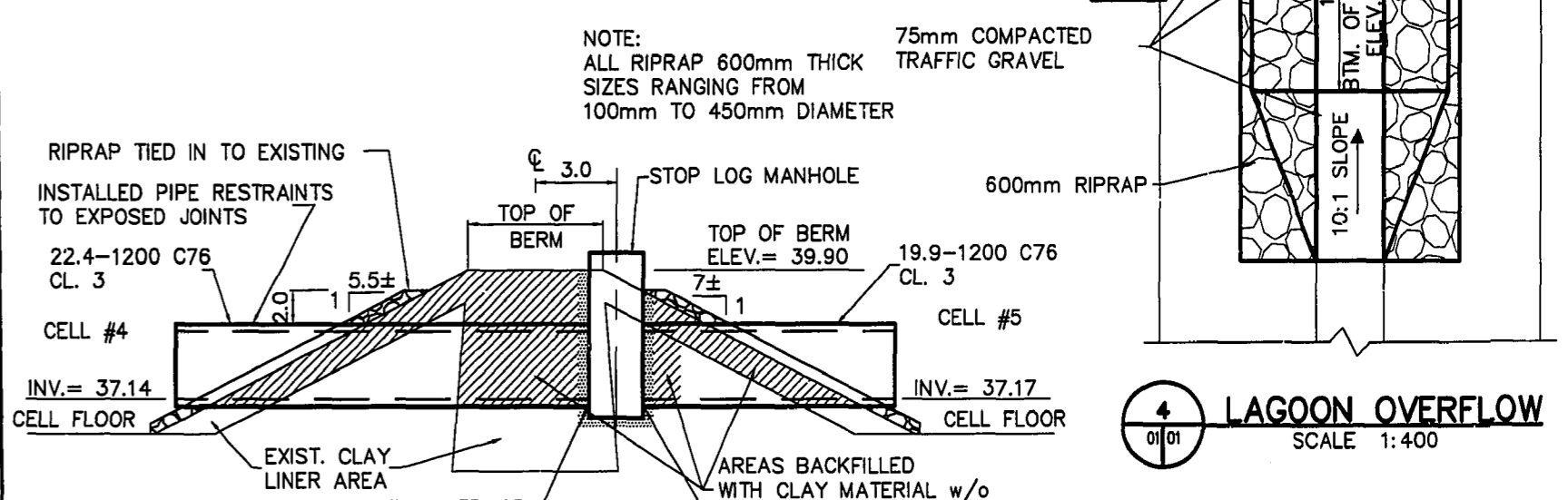
BENCH MARK:  
W. side of Perimeter Hwy. (P.T.H. No. 100) along service Rd., Btwn. Wilkes Ave. & Four Mile Rd., 19mm x 6.1m I.B. in Valve Box, 192.3m S. of C.L. of main gate to Charleswood Sewage Lagoon & 51.8m W. of W. edge of conc. pav't. of S. bound traffic lane (P.T.H. No. 100) & 457.2m N. of C.L. of 1st. Intersection of service roads, & (P.T.H. No. 100), S. of Wilkes Ave.

HIGHWAY

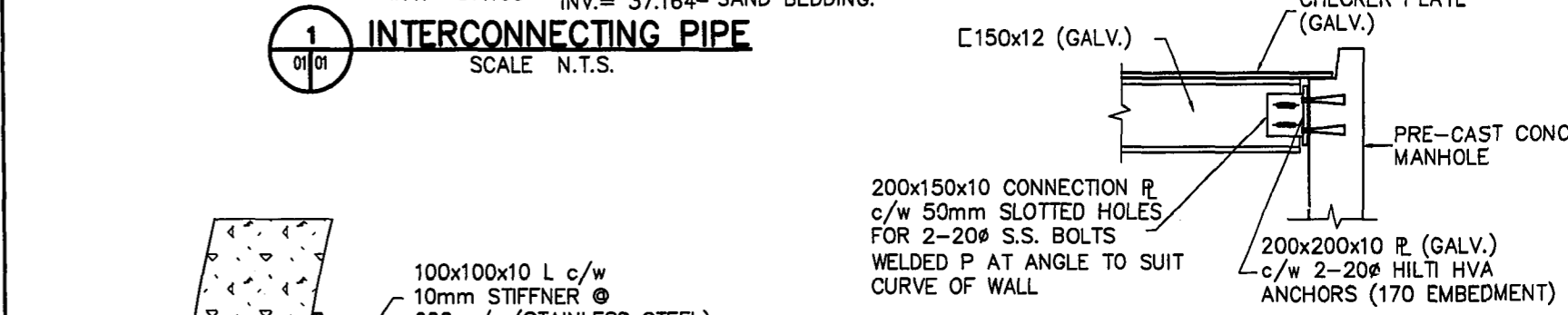
PERIMETER



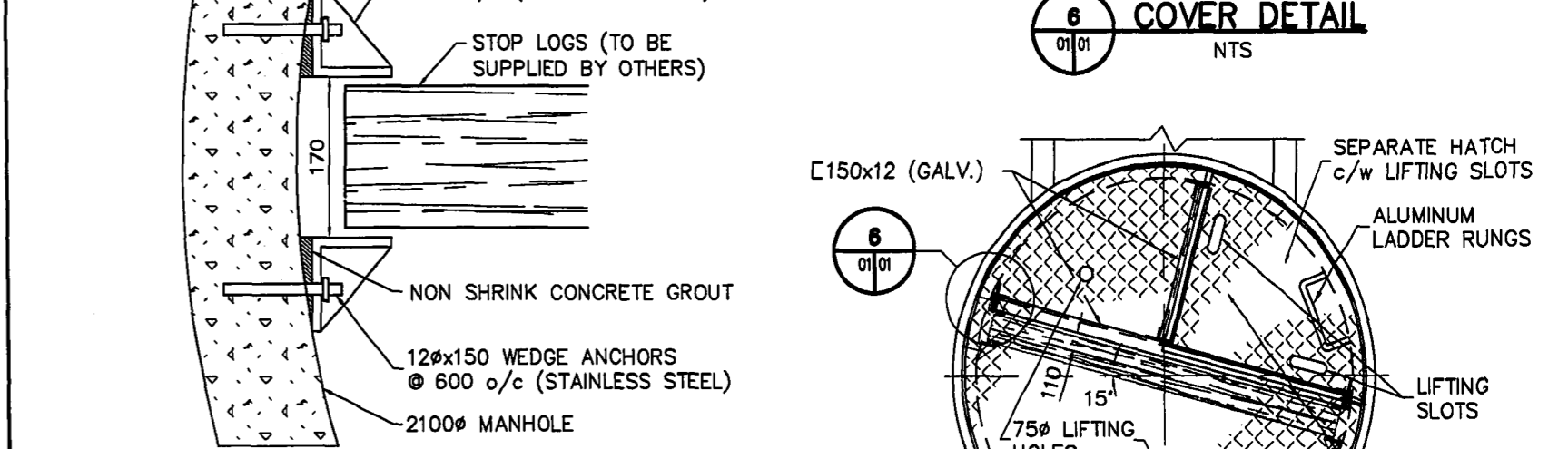
**5 ELEVATION**  
SCALE N.T.S.



**4 LAGOON OVERFLOW**  
SCALE 1:400



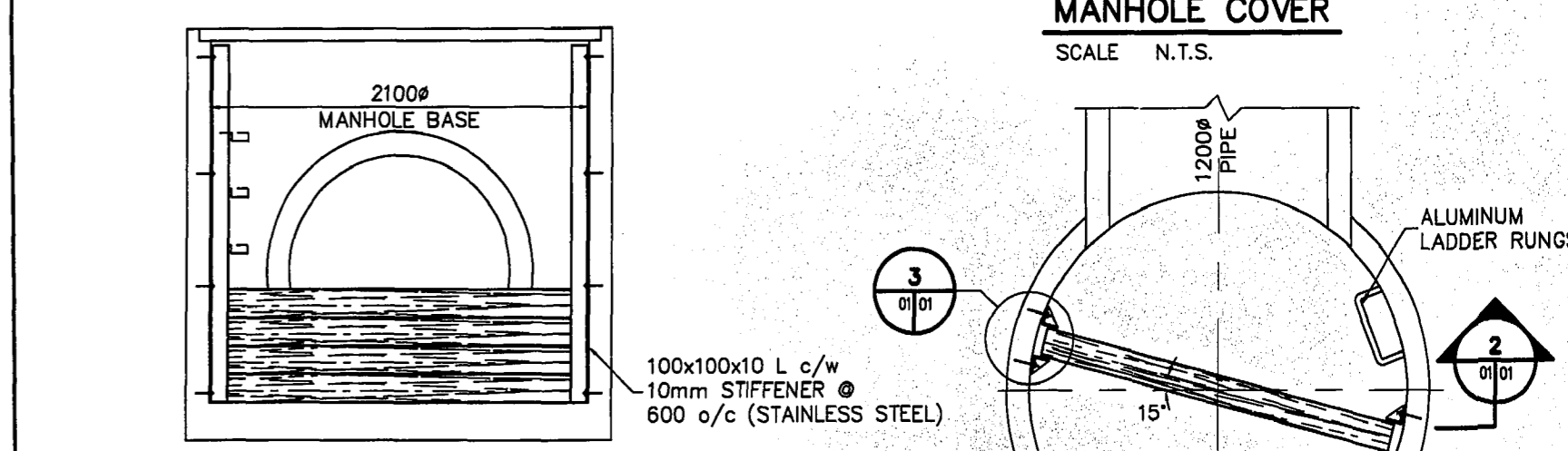
**1 INTERCONNECTING PIPE**  
SCALE N.T.S.



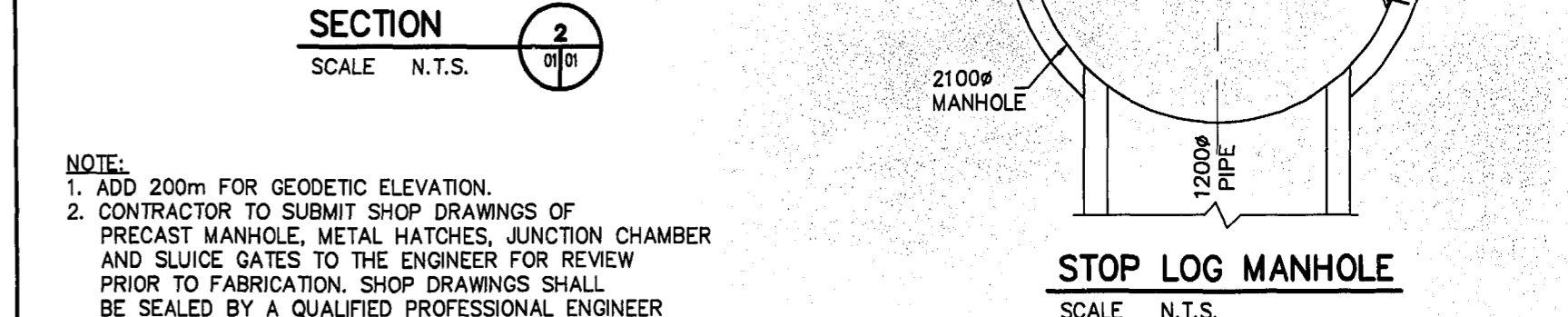
**6 COVER DETAIL**  
SCALE N.T.S.



**3 STOP LOG GUIDE DETAIL**  
SCALE N.T.S.



**MANHOLE COVER**  
SCALE N.T.S.



**2 SECTION**  
SCALE N.T.S.

NOTE:  
1. ADD 200m FOR GEODETIC ELEVATION.  
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS OF PRECAST MANHOLE, METAL HATCHES, JUNCTION CHAMBER AND SLUICE GATES TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS SHALL BE SEALED BY A QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA.

**STOP LOG MANHOLE**  
SCALE N.T.S.

EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PROFILE	PROPOSED
150 mm W.M.	WATERMAIN	150 mm W.M.	HYDRO	150 mm W.M.	WATERMAIN	150 mm W.M.	WATERMAIN	150 mm W.M.
300mm L.D.S.	LAND DRAINAGE SEWER	300mm L.D.S.	CONCRETE ASPHALT	300mm L.D.S.	LAND DRAINAGE SEWER	300mm L.D.S.	LAND DRAINAGE SEWER	300mm L.D.S.
250mm W.W.S.	WASTEWATER SEWER	250mm W.W.S.	PROPERTY LINE	250mm W.W.S.	WASTE WATER SEWER	250mm W.W.S.	WASTE WATER SEWER	250mm W.W.S.
MANHOLE	MANHOLE	MANHOLE	SURVEY BAR	SURVEY BAR	SURVEY BAR	SURVEY BAR	SURVEY BAR	SURVEY BAR
CATCH BASIN	CATCH BASIN	CATCH BASIN	ELEVATION	ELEVATION	ELEVATION	ELEVATION	ELEVATION	ELEVATION
CURB INLET	CURB INLET	CURB INLET	TREE	TREE	TREE	TREE	TREE	TREE
JUNCTIONS	JUNCTIONS	JUNCTIONS	SIDEWALK RAMP	SIDEWALK RAMP	SIDEWALK RAMP	SIDEWALK RAMP	SIDEWALK RAMP	SIDEWALK RAMP
CULVERT	CULVERT	CULVERT	CONCRETE SIDEWALK	CONCRETE SIDEWALK	CONCRETE SIDEWALK	CONCRETE SIDEWALK	CONCRETE SIDEWALK	CONCRETE SIDEWALK
GAS	GAS	GAS	FENCE	FENCE	FENCE	FENCE	FENCE	FENCE

**LOCATION APPROVED UNDERGROUND STRUCTURES**  
SUPV. 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.

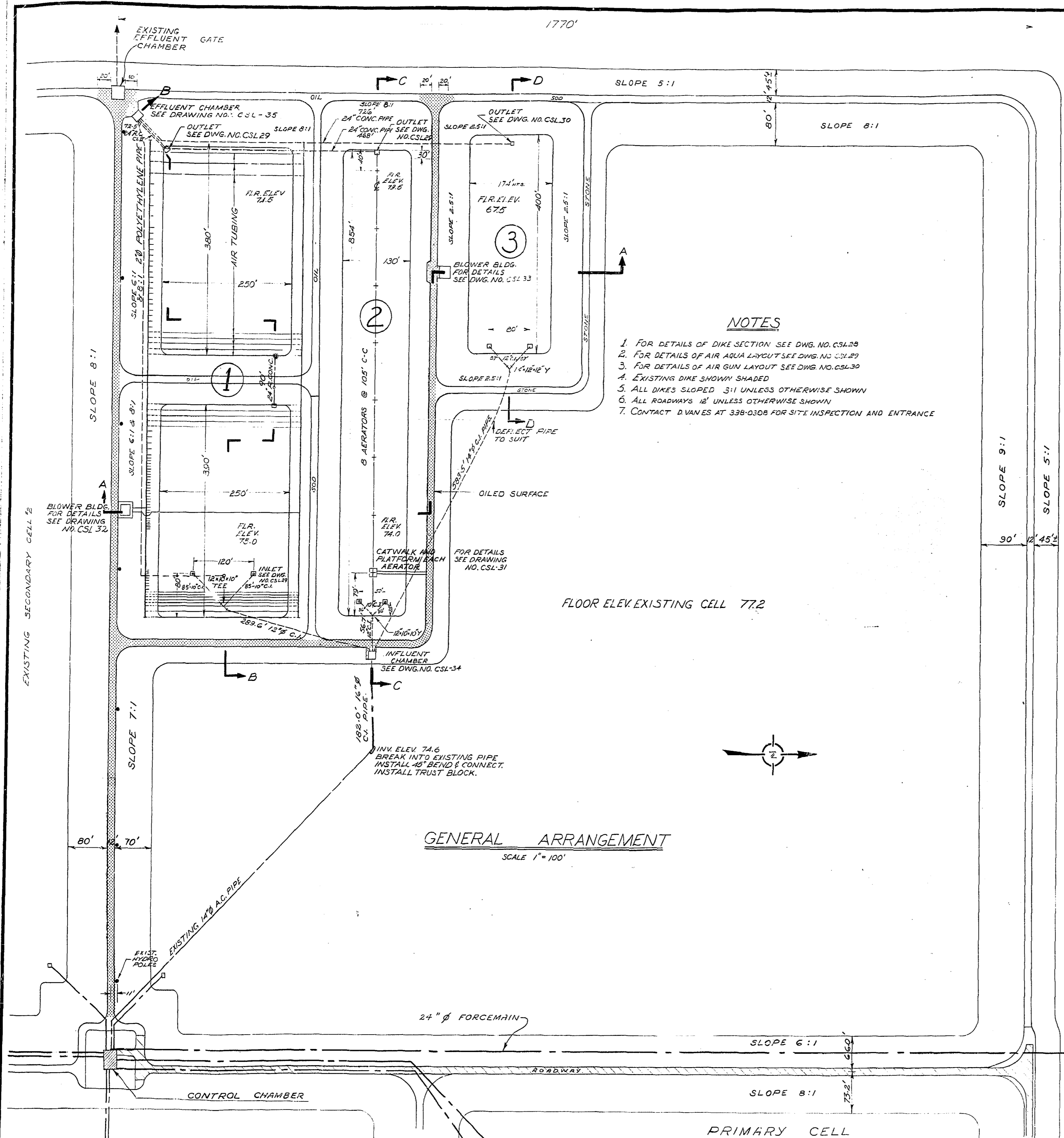
NO.	REVISIONS	DATE	BY
1	AS CONSTRUCTED	98/07/02	TWS
0	ISSUED FOR TENDER	98/03/02	GDL
A	ISSUED FOR REVIEW	98/02/02	GDL

**Reid Crowther**  
Reid Crowther and Partners Limited  
Consulting Engineering Worldwide  
DESIGNED BY: KGM  
CHECKED BY:  
DRAWN BY: GDL  
APPROVED BY:  
HOR. SCALE: AS SHOWN  
RELEASED FOR CONSTRUCTION BY:  
VERTICAL:  
DATE: 98/01/30  
DATE:

ENGINEER'S SEAL  
PROVINCE OF MANITOBA  
ORIGINAL SIGNED AND SEALED  
K & G MILLER  
DATED 26/02/98  
REGISTERED PROFESSIONAL ENGINEER  
CONSULTANT DRAWING NO. 60910-06-01

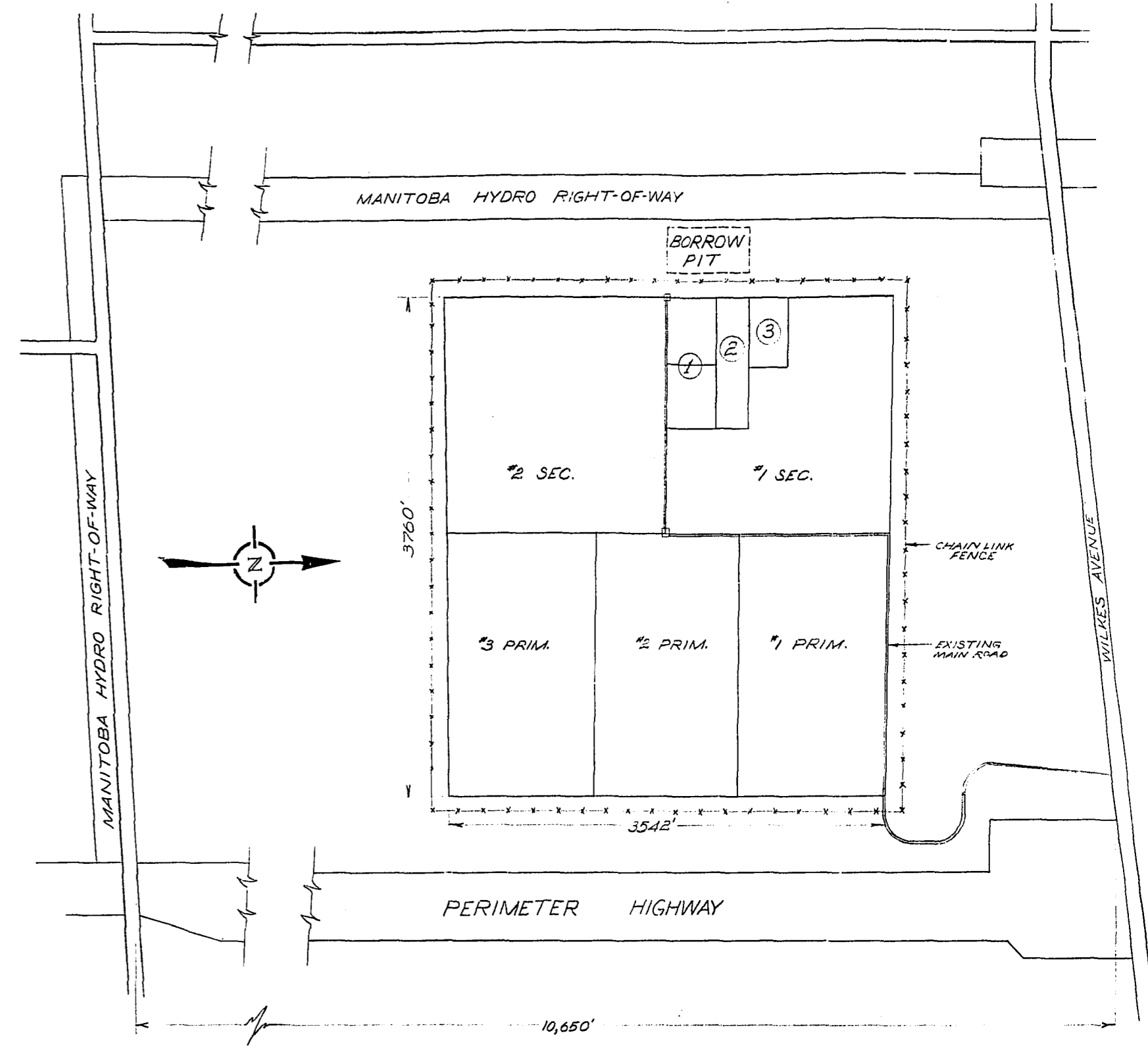
**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT  
**WEST END WATER POLLUTION CONTROL CENTRE LAGOON MODIFICATIONS**  
OVERFLOW AND INTERCONNECTION PIPE LOCATION PLAN AND TYPICAL DETAILS  
CITY DRAWING NUMBER WEP-688  
SHEET 1 OF 2

DETAILS AERATED LAGOONS  
SITE PLAN



GENERAL ARRANGEMENT  
SCALE 1" = 100'

- NOTES**
1. FOR DETAILS OF DIKE SECTION SEE DWG. NO. CSL-28
  2. FOR DETAILS OF AIR AQUA LAYOUT SEE DWG. NO. CSL-29
  3. FOR DETAILS OF AIR GUN LAYOUT SEE DWG. NO. CSL-30
  4. EXISTING DIKE SHOWN SHADED
  5. ALL DIKES SLOPED 3:1 UNLESS OTHERWISE SHOWN
  6. ALL ROADWAYS 12' UNLESS OTHERWISE SHOWN
  7. CONTACT DIVANES AT 338-0308 FOR SITE INSPECTION AND ENTRANCE



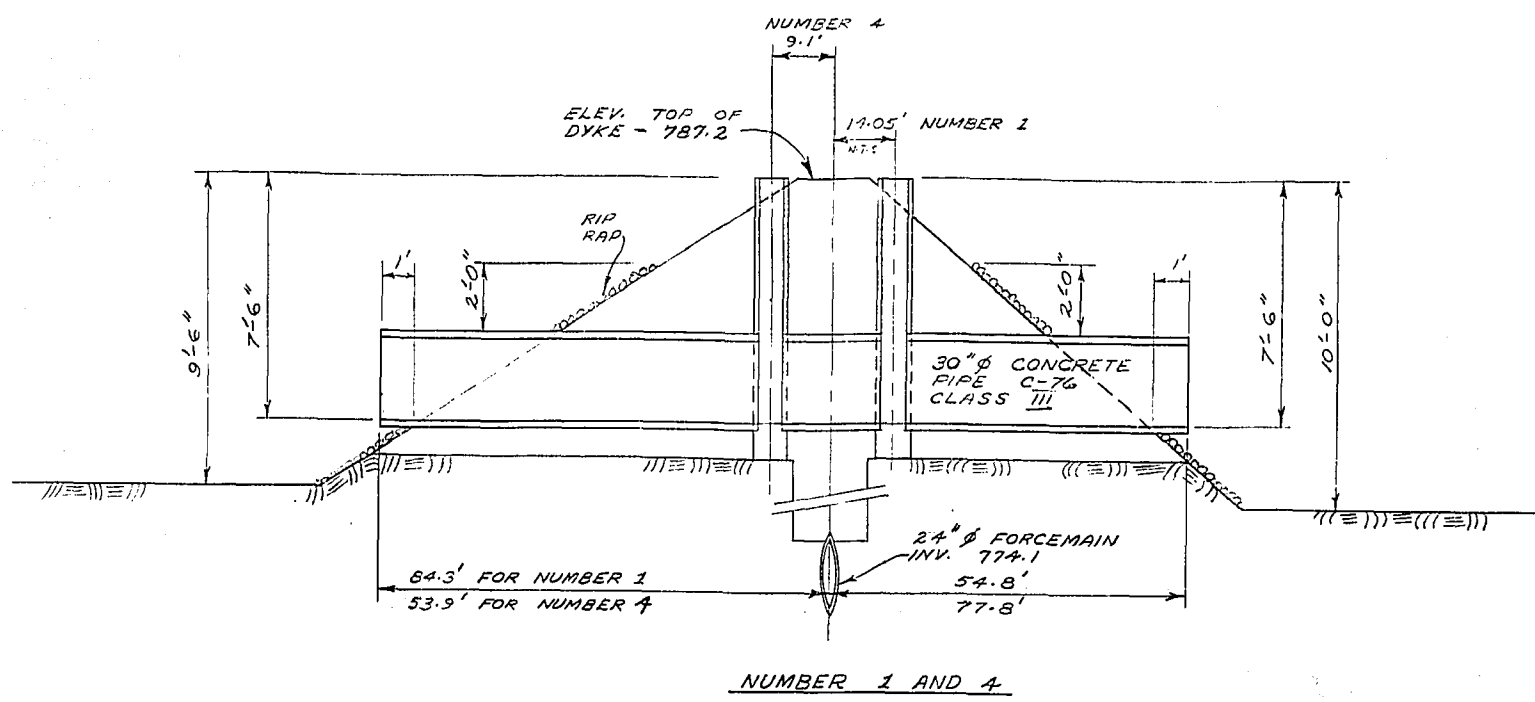
SITE PLAN  
SCALE 1" = 800'

- CELL DESCRIPTION**
- ① AIR AQUA
  - ② SURFACE AERATOR
  - ③ AIR GUN

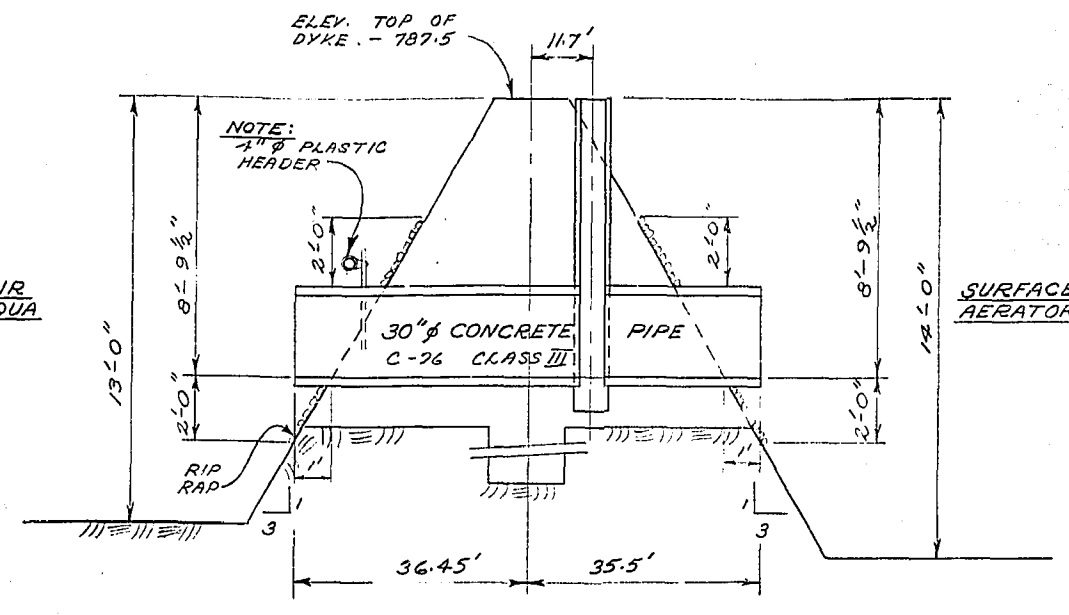
AS CONSTRUCTED AUG 15/68 V.D.  
*[Signature]*



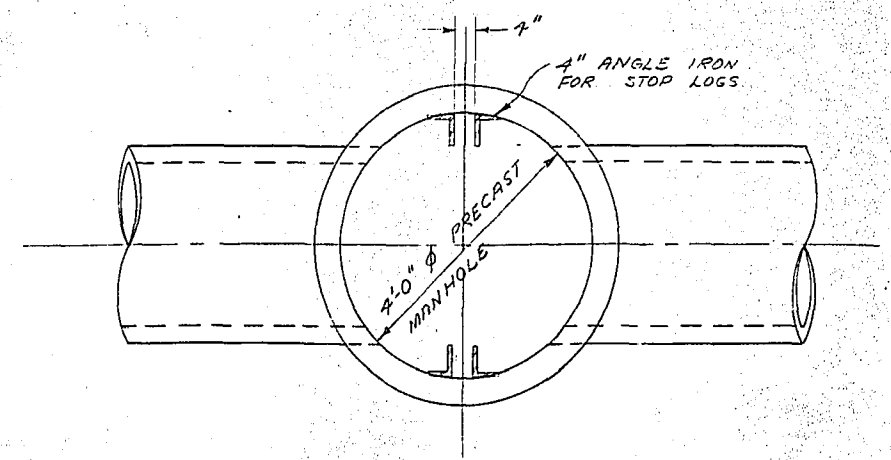
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG <b>WATERWORKS &amp; WASTE DISPOSAL DIVISION</b> A. PENMAN - DIRECTOR	SEWAGE DISPOSAL	DEPT.	DES. <i>[Signature]</i>	CHK'D. <i>[Signature]</i>	SCALED
	AERATED LAGOONS CHARLESWOOD		DRN. E.R.	DATE June 30/67	AS SHOWN
	SITE PLAN AND GENERAL ARRANGEMENT		ENG. DES. <i>[Signature]</i>		DRAWING NO.
			APP'D. <i>[Signature]</i>		CSL-27



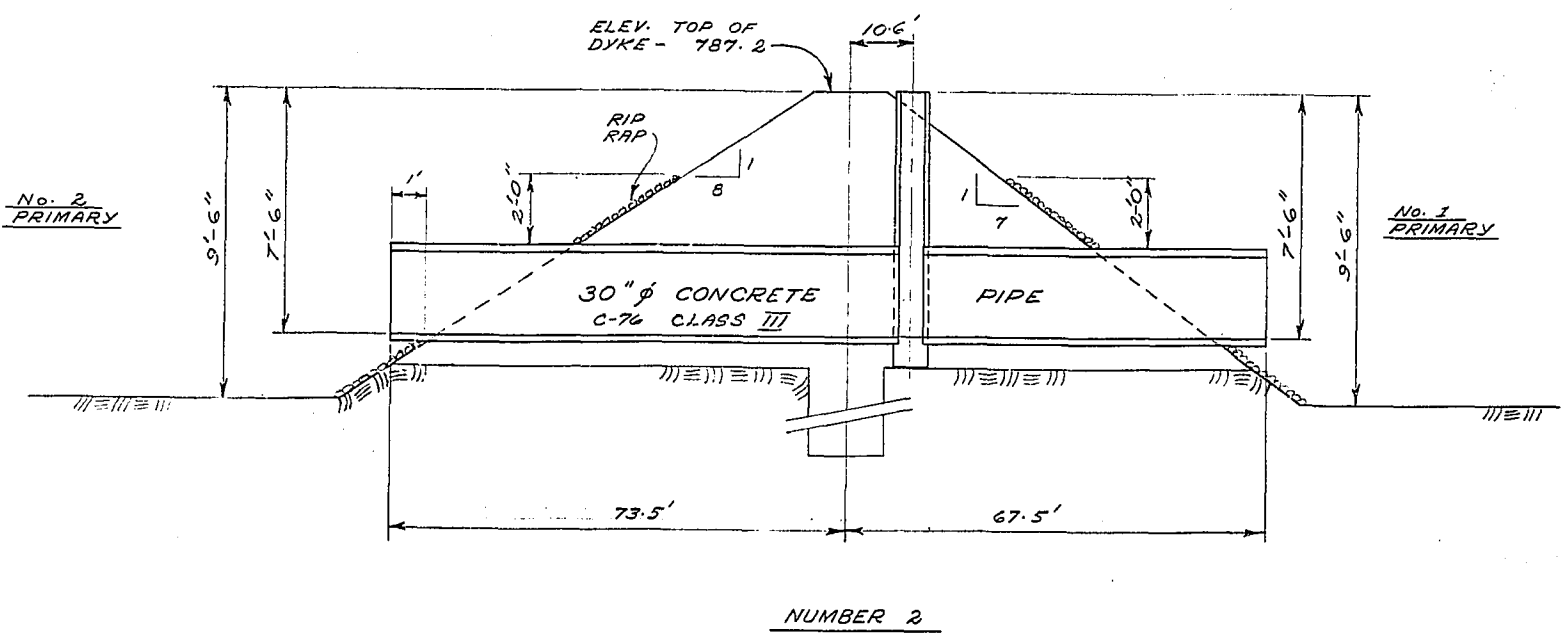
NUMBER 1 AND 4



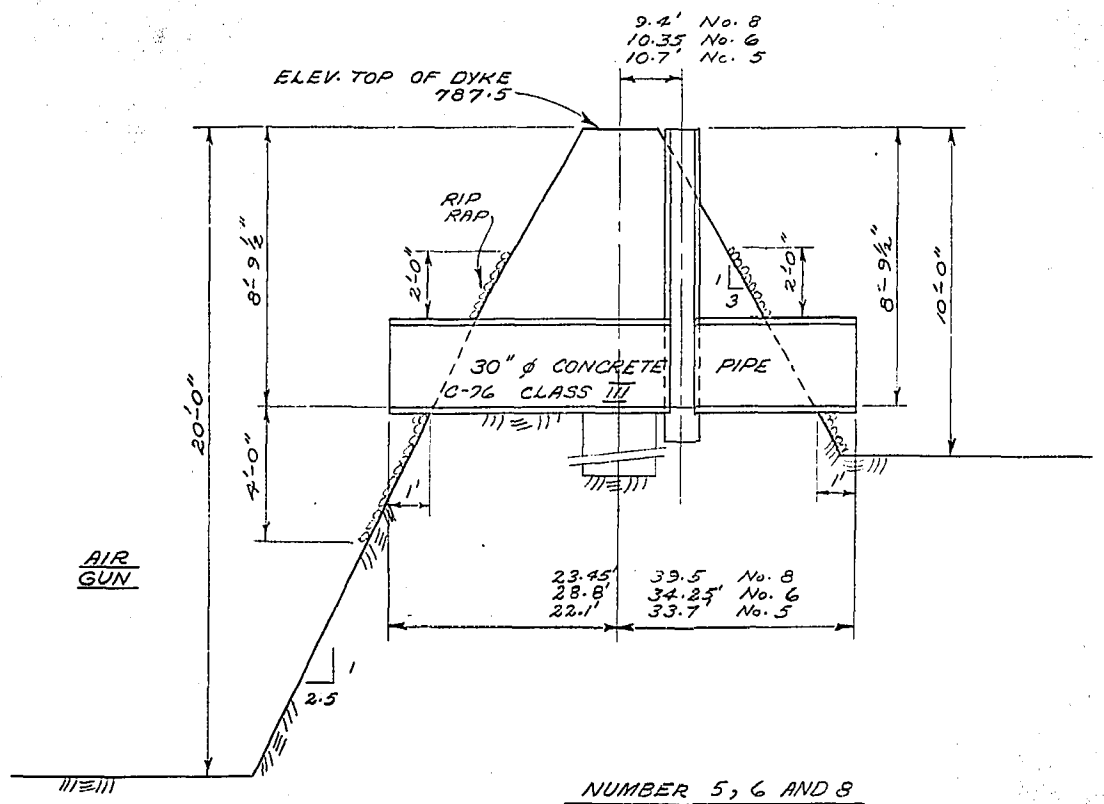
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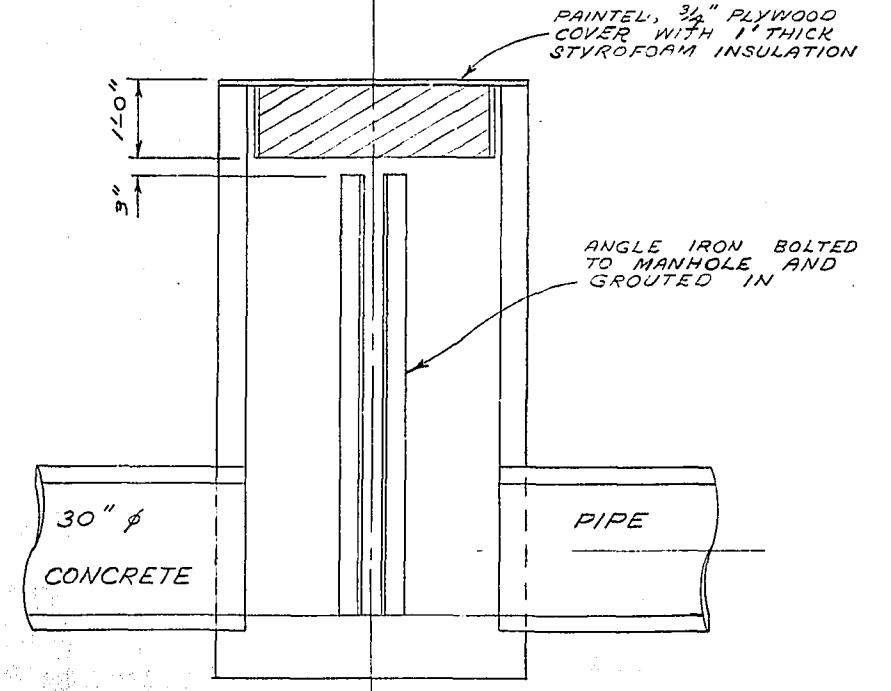
PLAN



NUMBER 2

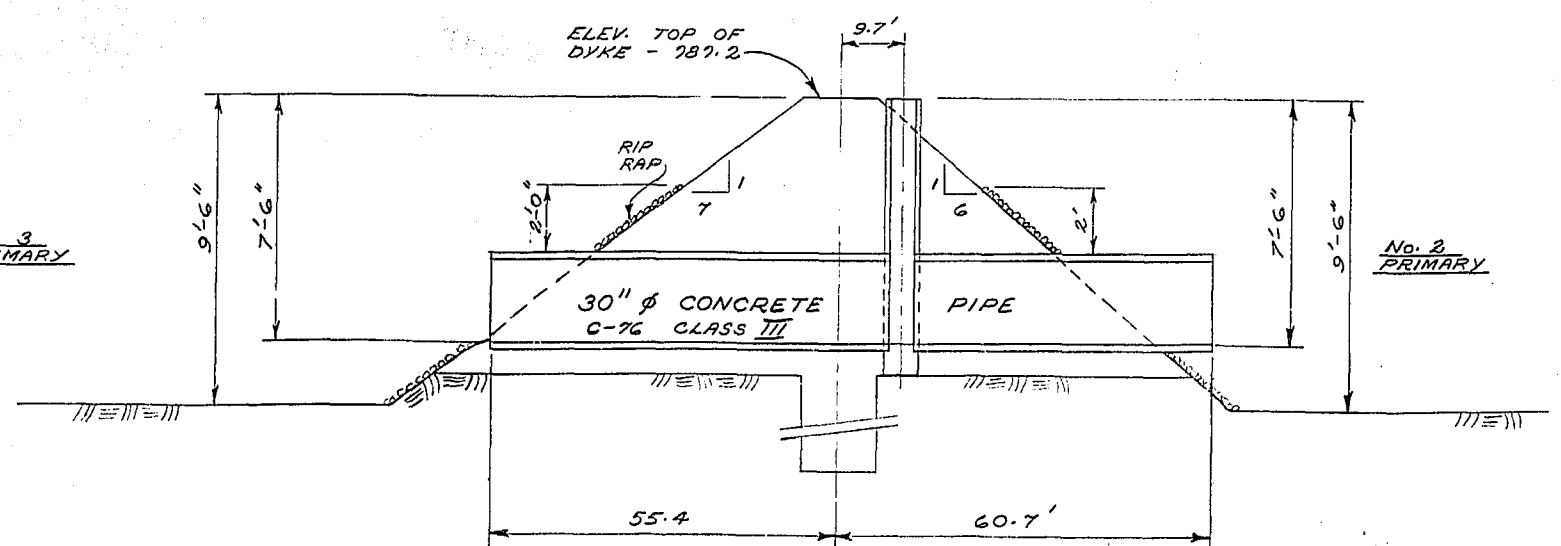


NUMBER 5, 6 AND 8

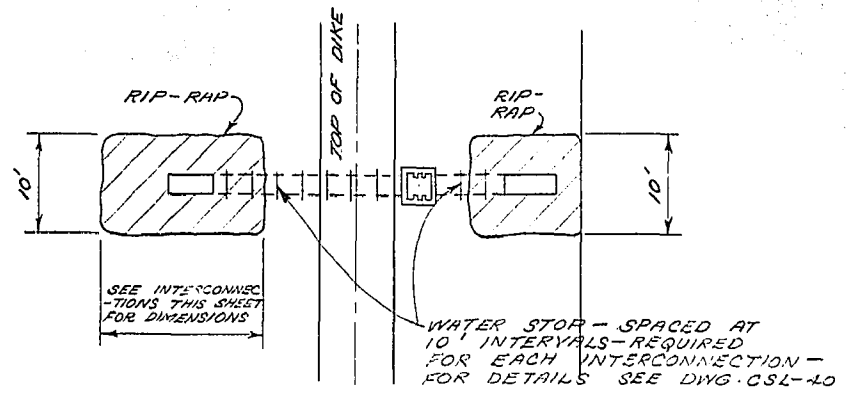


SECTION  
MANHOLE DETAIL

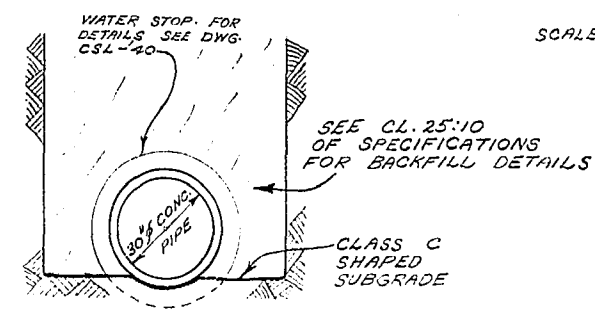
8 REQUIRED  
SCALE: 1/2" = 1'-0"



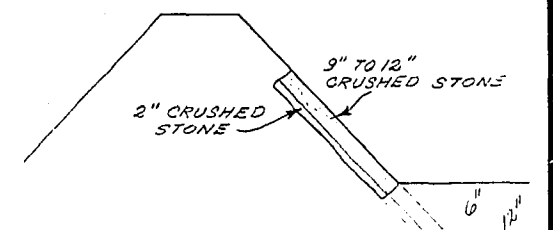
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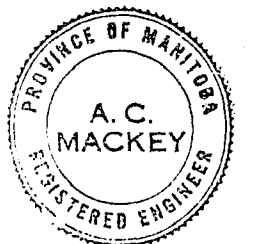
TYPICAL PLAN VIEW



TRENCH BEDDING DETAIL



RIP-RAP DETAIL



INTERCONNECTION DETAILS

SCALE: HOR. - 1" = 20'  
VERT. - 1" = 4'

SURVEYED & PLAN CHECKED  
BY: [Signature]  
APPROVED AS SHOWN  
MAY 72

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

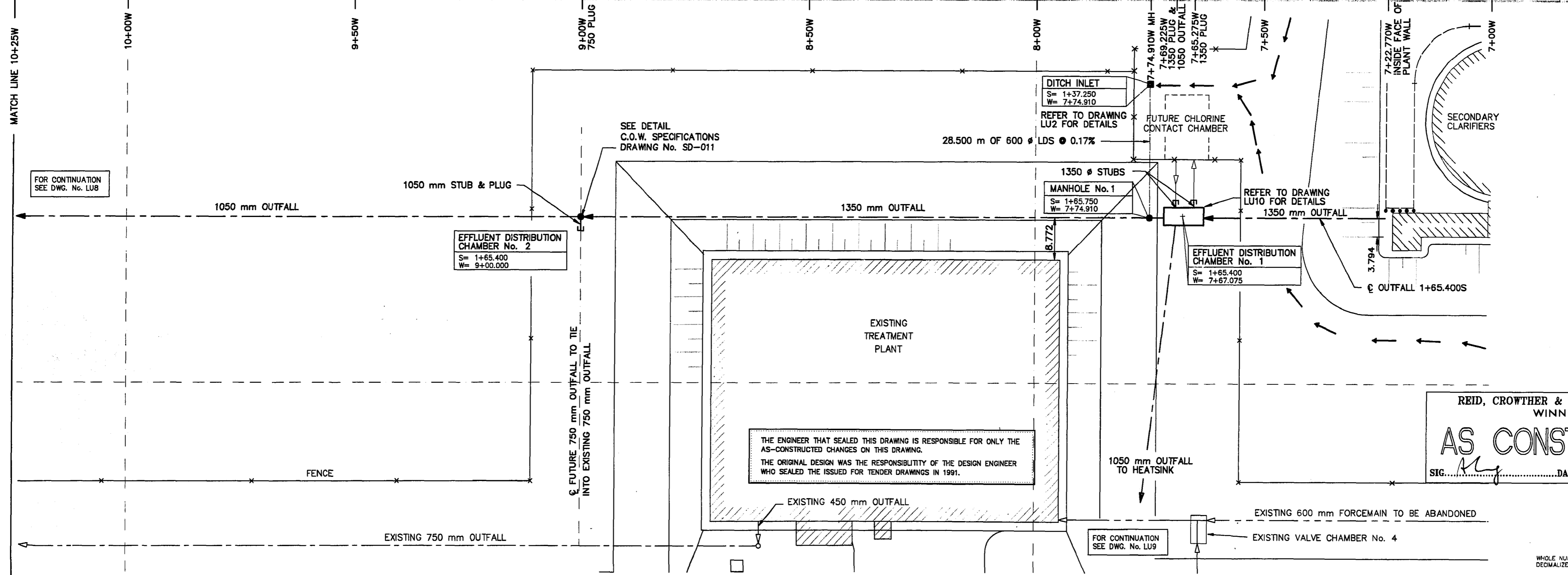
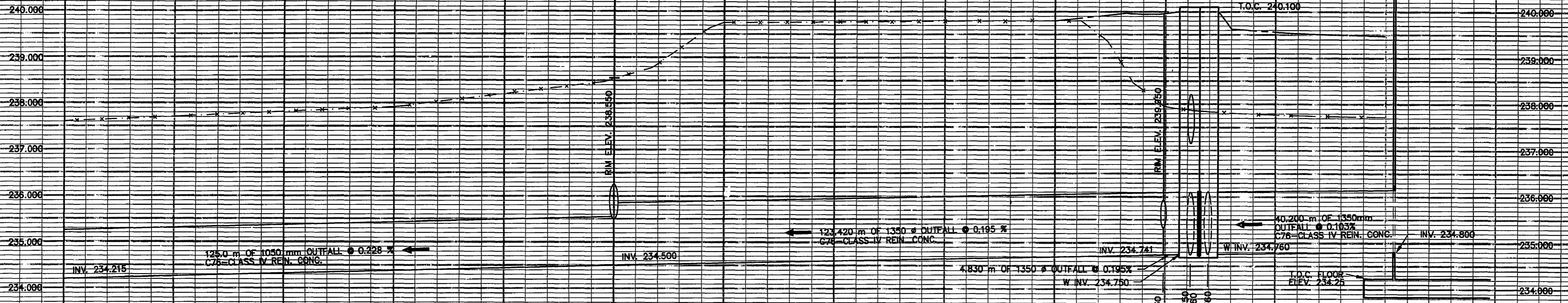
SEWAGE DISPOSAL  
CHARLESWOOD  
SEWAGE LAGOONS  
INTERCONNECTION  
DETAILS

DES. [Signature] CH'KD. [Signature]  
DATE: JUNE 12/72  
ENG. DES. [Signature]  
APPROVED [Signature]

SCALE: AS SHOWN  
DRAWING NO. CSL-39

REPRODUCTION APR 12 1979





THE ENGINEER THAT SEALED THIS DRAWING IS RESPONSIBLE FOR ONLY THE AS-CONSTRUCTED CHANGES ON THIS DRAWING.  
 THE ORIGINAL DESIGN WAS THE RESPONSIBILITY OF THE DESIGN ENGINEER WHO SEALED THE ISSUED FOR TENDER DRAWINGS IN 1991.

REID, CROWTHER & PARTNERS LIMITED  
 WINNIPEG  
**AS CONSTRUCTED**  
 SIG. *[Signature]* DATE: Nov. 29, 1994

MEWPC-A1  
 PUT-LP3  
 94-10-31

EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PROFILE	PROPOSED
150 mm W.M.	WATERMAIN	150 mm W.M.	HYDRO	150 mm W.M.	WATERMAIN	300mm L.D.S.	LAND DRAINAGE SEWER	300mm L.D.S.
300mm L.D.S.	LAND DRAINAGE SEWER	300mm L.D.S.	CONCRETE	300mm L.D.S.	LAND DRAINAGE SEWER	250mm W.W.S.	WASTE WATER SEWER	250mm W.W.S.
250mm W.W.S.	WASTE WATER SEWER	250mm W.W.S.	ASPHALT	250mm W.W.S.	PROPERTY LINE	800 mm FM	FORCEMAIN	800 mm FM
MANHOLE	MANHOLE	MANHOLE	SURVEY BAR	MANHOLE	FORCEMAIN	1050 mm OF	OUTFALL	1050 mm OF
CATCH BASIN	CATCH BASIN	CATCH BASIN	ELEVATION	CATCH BASIN	OUTFALL			
CURB INLET	CURB INLET	CURB INLET	(32.750)	CURB INLET				
JUNCTIONS	JUNCTIONS	JUNCTIONS	TREE	JUNCTIONS				
CULVERT	CULVERT	CULVERT	FORCEMAIN	CULVERT				
GAS	GAS	GAS	OUTFALL	GAS				
			FENCE					

B.M.	69-006		
ELEV.	237.636 m		
NO.	REVISIONS	DATE	BY
1	AS CONSTRUCTED	94.09.28	DJT
0	ISSUED FOR TENDER	91.06.17	PAL

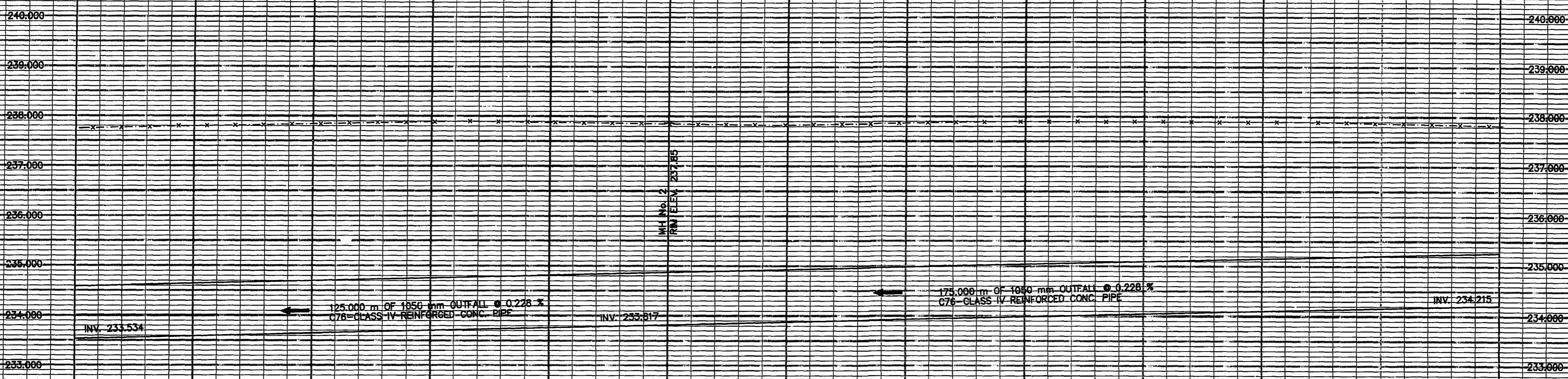
<b>Reid Crowther</b>		DESIGNED BY	WMM	CHECKED BY	
		DRAWN BY	SC	APPROVED BY	
		HOR. SCALE:	1:500	RELEASED FOR CONSTRUCTION:	
		VERTICAL:	1:50	DATE	

ENGINEER'S SEAL  
  
 CONSULTANT DRAWING NO. 60910-LU7

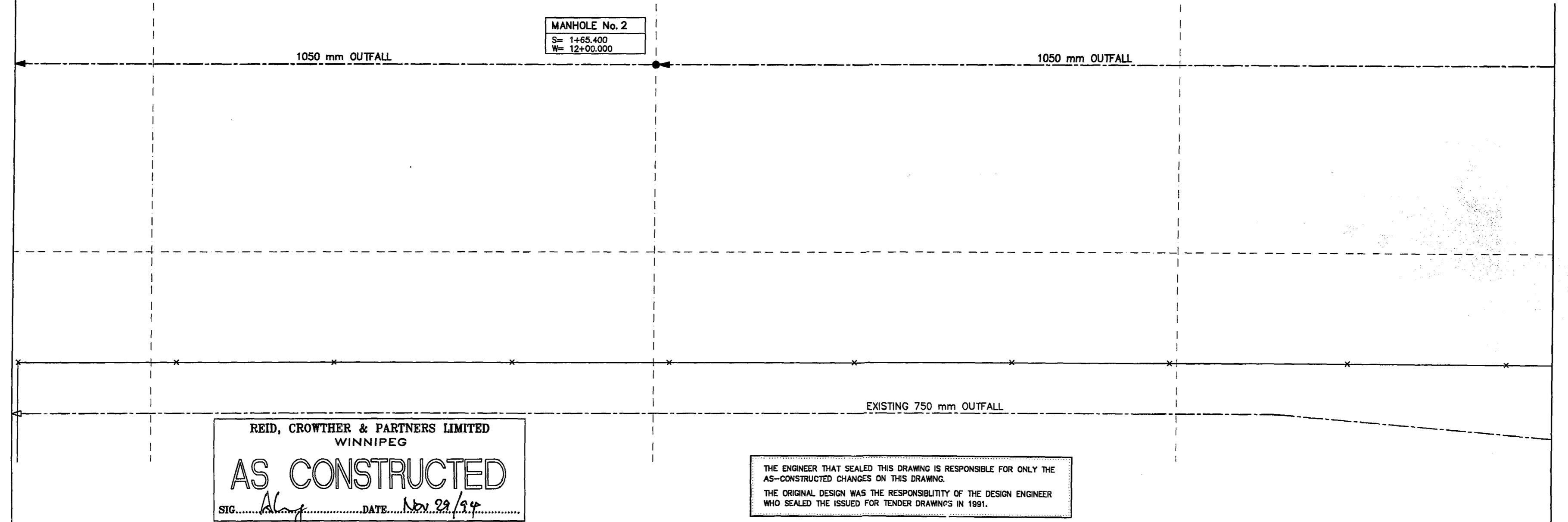
**THE CITY OF WINNIPEG**  
 WORKS AND OPERATIONS DIVISION  
 WATERWORKS WASTE AND DISPOSAL DEPT.  
 WEST END WATER POLLUTION CONTROL CENTRE  
 AREA L - GENERAL AND SITWORKS  
 CITY DRAWING NUMBER SHEET OF  
 OUTFALL - PLAN PROFILE  
 SHEET No. 1  
 WEP-46

File # WS10094





MATCH LINE 13+25W      13+00W      12+50W      12+00W MH No. 2      11+50W      11+00W      10+50W      MATCH LINE 10+25W



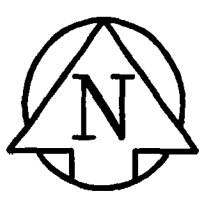
FOR CONTINUATION  
SEE DRAWING No. LU9

FOR CONTINUATION  
SEE DRAWING No. LU7

MANHOLE No. 2  
S= 1+65.400  
W= 12+00.000

REID, CROWTHER & PARTNERS LIMITED  
WINNIPEG  
**AS CONSTRUCTED**  
SIG. *Along* DATE *Nov. 29, 1994*

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METRIC-A1  
PUT-LS  
94-10-31

METRIC  
WHOLE NUMBERS INDICATE MILLIMETERS  
DECIMALIZED NUMBERS INDICATE METERS

EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PROFILE	PROPOSED
	WATERMAIN			HYDRO			WATERMAIN	
	LAND DRAINAGE SEWER			CONCRETE			LAND DRAINAGE SEWER	
	WASTEWATER SEWER			ASPHALT			WASTE WATER SEWER	
	MANHOLE			PROPERTY LINE			FORCEMAIN	
	CATCH BASIN			SURVEY BAR			OUTFALL	
	CURB INLET			ELEVATION			Q. PROFILE	
	JUNCTIONS			TREE				
	CULVERT			FORCEMAIN				
	GAS			OUTFALL				
	FENCE							

B.M. 69-006 ELEV. 237.636 m			
DESIGNED BY	WMM	CHECKED BY	
DRAWN BY	SC	APPROVED BY	
HOR. SCALE:	1:500	RELEASED FOR CONSTRUCTION:	
VERTICAL:	1:50	DATE	
1 AS CONSTRUCTED	94.09.28	DJT	
0 ISSUED FOR TENDER	91.06.17	PAL	
NO. REVISIONS	DATE	BY	

<b>Reid Crowther</b>	
DESIGNED BY	WMM
DRAWN BY	SC
HOR. SCALE:	1:500
VERTICAL:	1:50
DATE	94-10-22

ENGINEER'S SEAL

CONSULTANT DRAWING NO. 60910-LUB

**THE CITY OF WINNIPEG**  
WORKS AND OPERATIONS DIVISION  
WATERWORKS WASTE AND DISPOSAL DEPT.

WEST END WATER POLLUTION CONTROL CENTRE  
AREA L - GENERAL AND SITEWORKS

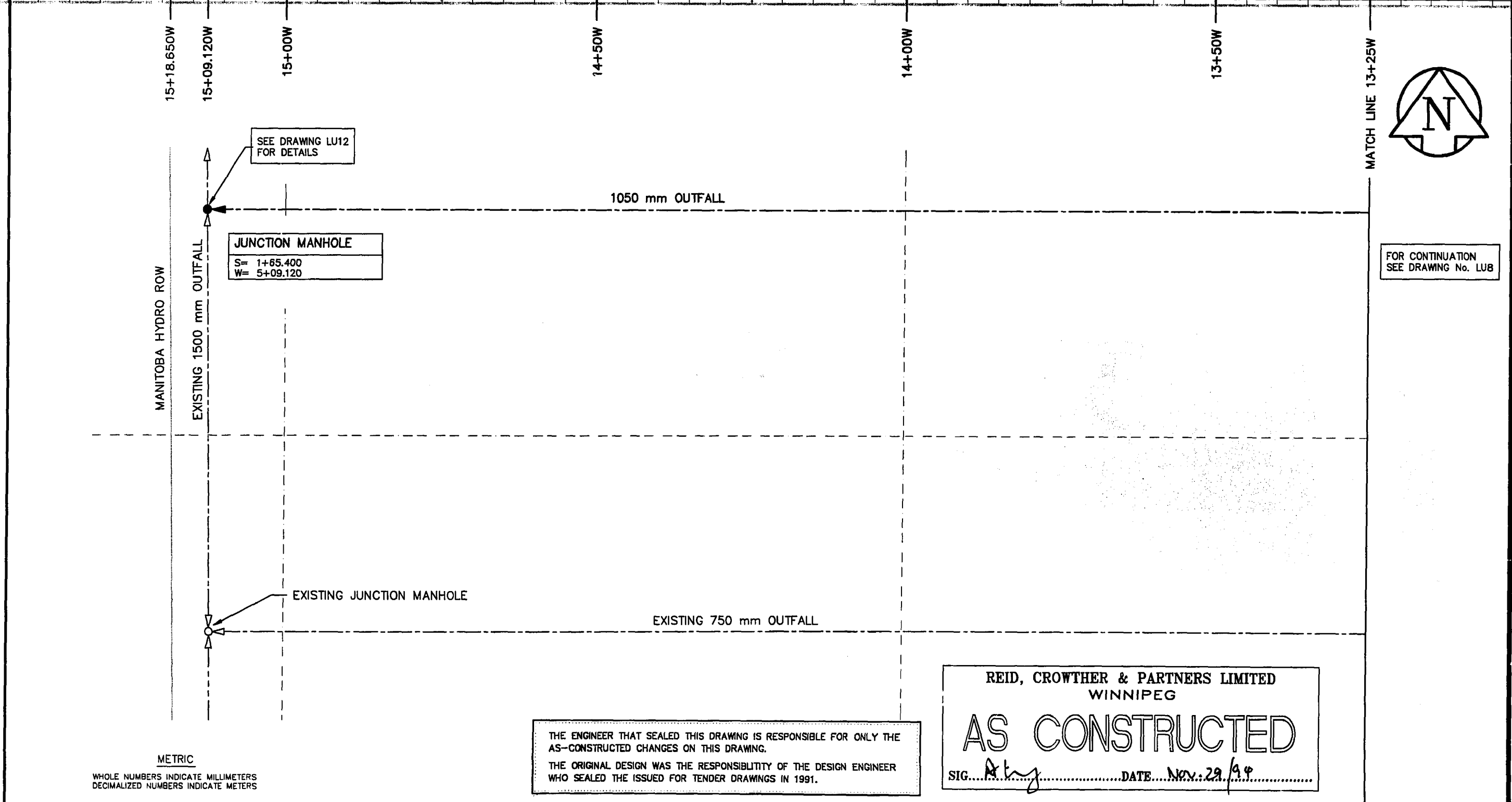
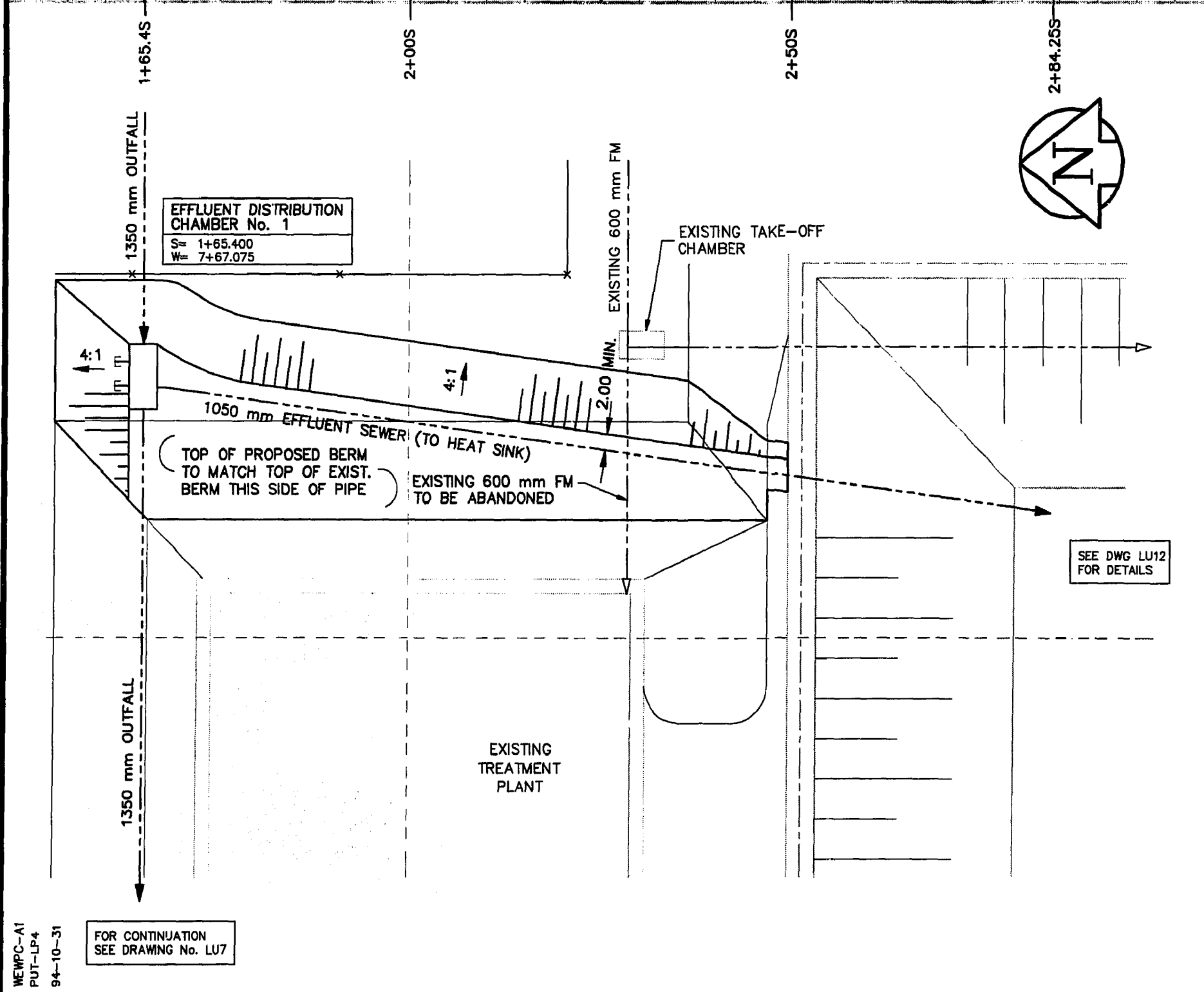
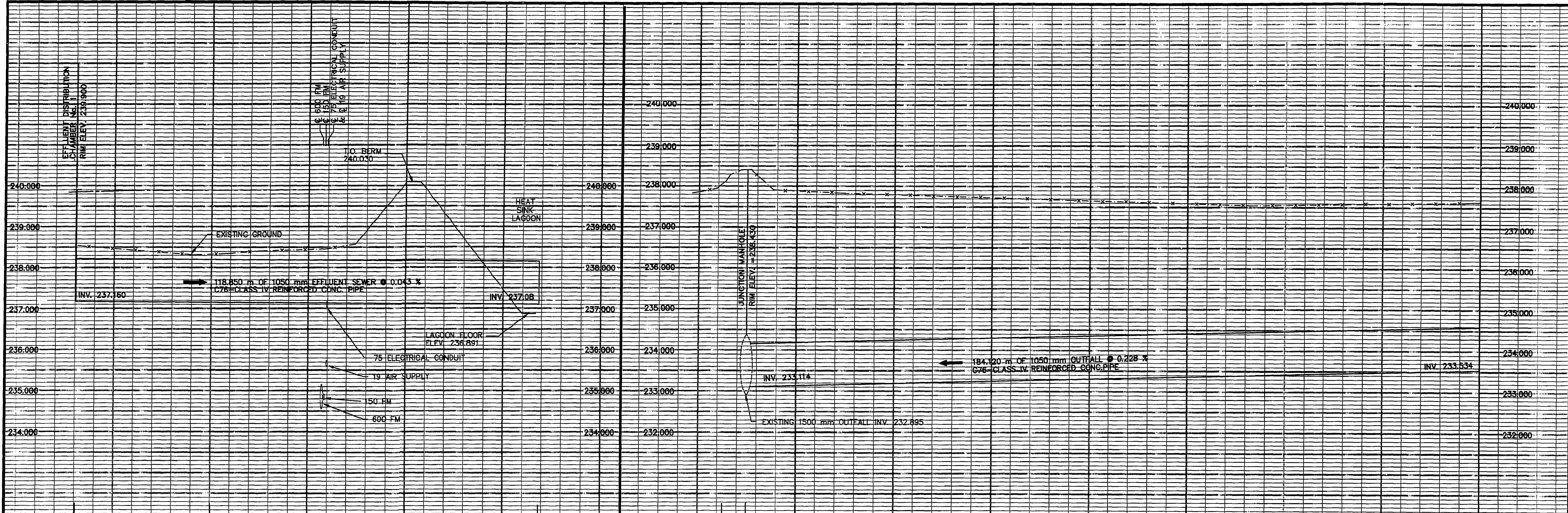
CITY DRAWING NUMBER SHEET OF

OUTFALL - PLAN PROFILE  
SHEET No. 2

WEP-47

*File # WS10095*





EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PROFILE	PROPOSED
150 mm W.M.	WATERMAIN	150 mm W.M.	HYDRO	HYDRO	150 mm W.M.	WATERMAIN	HYDRO	HYDRO
300mm L.D.S.	LAND DRAINAGE SEWER	300mm L.D.S.	CONCRETE	CONCRETE	300mm L.D.S.	LAND DRAINAGE SEWER	CONCRETE	CONCRETE
250mm W.W.S.	WASTEWATER SEWER	250mm W.W.S.	PROPERTY LINE	PROPERTY LINE	250mm W.W.S.	WASTE WATER SEWER	PROPERTY LINE	PROPERTY LINE
MANHOLE	MANHOLE	MANHOLE	SURVEY BAR	SURVEY BAR	MANHOLE	MANHOLE	SURVEY BAR	SURVEY BAR
CATCH BASIN	CATCH BASIN	CATCH BASIN	ELEVATION	ELEVATION	CATCH BASIN	CATCH BASIN	ELEVATION	ELEVATION
CURB INLET	CURB INLET	CURB INLET	TREE	TREE	CURB INLET	CURB INLET	TREE	TREE
JUNCTIONS	JUNCTIONS	JUNCTIONS	FORCEMAIN	FORCEMAIN	JUNCTIONS	JUNCTIONS	FORCEMAIN	FORCEMAIN
CULVERT	CULVERT	CULVERT	OUTFALL	OUTFALL	CULVERT	CULVERT	OUTFALL	OUTFALL
GAS	GAS	GAS	FENCE	FENCE	GAS	GAS	FENCE	FENCE

**LOCATION APPROVED UNDERGROUND STRUCTURES**

SUPV. U/G STRUCTURES COMMITTEE DATE

**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.

B.M. ELEV.	69-006	237.636 m
NO.	REVISIONS	DATE BY
1	AS CONSTRUCTED	94,09,26 DJT
0	ISSUED FOR TENDER	91,06,17 PAL

**Reid Crowther**

DESIGNED BY: WMM  
DRAWN BY: SC

CHECKED BY:  
APPROVED BY:

HOR. SCALE: 1:500  
VERTICAL: 1:50

RELEASED FOR CONSTRUCTION: DATE

ENGINEER'S SEAL

**Mr. G. LEONG**  
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT DRAWING NO. 60910-LU9

**THE CITY OF WINNIPEG**  
WORKS AND OPERATIONS DIVISION  
WATERWORKS WASTE AND DISPOSAL DEPT.

WEST END WATER POLLUTION CONTROL CENTRE  
AREA L - GENERAL AND SITEWORKS

CITY DRAWING NUMBER SHEET OF

OUTFALL - PLAN PROFILE  
SHEET No. 3

WEP-48

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REID, CROWTHER & PARTNERS LIMITED  
WINNIPEG

**AS CONSTRUCTED**

SIG. *Atty* DATE Nov. 29 94

*File # WS 10096*