

APPENDIX A – JESSIE WASTEWATER PUMPING STATION HISTORICAL RECORD DRAWINGS

- **DRAWINGS:**
 - Drawing 1 – 0149L – E0001 – 001
 - Drawing 1 – 0149L – P0001 – 001
 - Drawing 1 – 0149L – P0002 – 001
 - Drawing 163
 - Drawing 164
 - Drawing 286
 - Drawing 997
 - Drawing 998
 - Drawing 1060
 - Drawing D-8372
 - Drawing M-37
 - Drawing M-49
 - Drawing 1018

ARC FLASH VALUES CALCULATED ARE BASED ON THE PROTECTION SETTINGS SPECIFIED IN THIS DRAWING. ALL PHASE 1 REQUIRED WORK MUST BE COMPLETED PRIOR TO APPLYING ARC FLASH LABELS.

FROM FLOOD PUMP CSTE
(SEE DWG: 1-0149F-E0001)

NOTES:

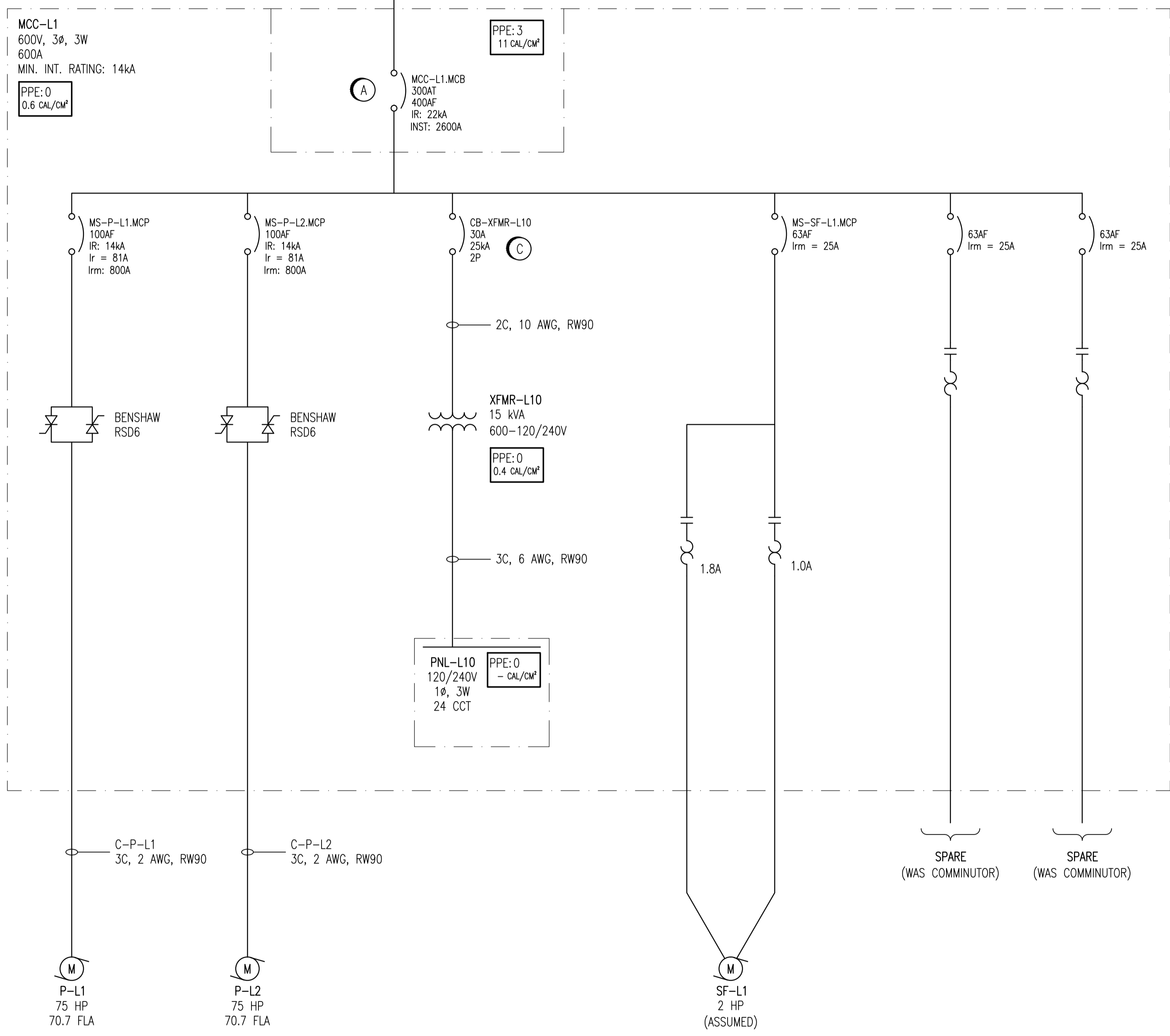
- THIS DRAWING SUPERCEDES KGS DRAWING (DOES NOT HAVE A NUMBER).
- THIS DRAWING CONTAINS UNVERIFIED INFORMATION FROM EXISTING DOCUMENTATION.
- THE ENGINEER'S RESPONSIBILITY IS LIMITED TO THE ARC FLASH STUDY AND RECOMMENDED MITIGATION.

LEGEND:

PPE: 4 → HAZARD/RISK CATEGORY
29 CAL/CM² → INCIDENT ENERGY

PHASE 1 REQUIRED WORK:

- (A) ADJUST THE INSTANTANEOUS SETTING OF MCC-L1.MCB TO 6.5 (2600A).
- (B) AFFIX NEW IDENTIFICATION LAMACOIDS TO:
MCC-L1
XFMR-L10
PNL-L10
- (C) REPLACE EXISTING MOTOR CIRCUIT PROTECTOR WITH A 30A THERMAL MAGNETIC BREAKER.



FOR REFERENCE ONLY



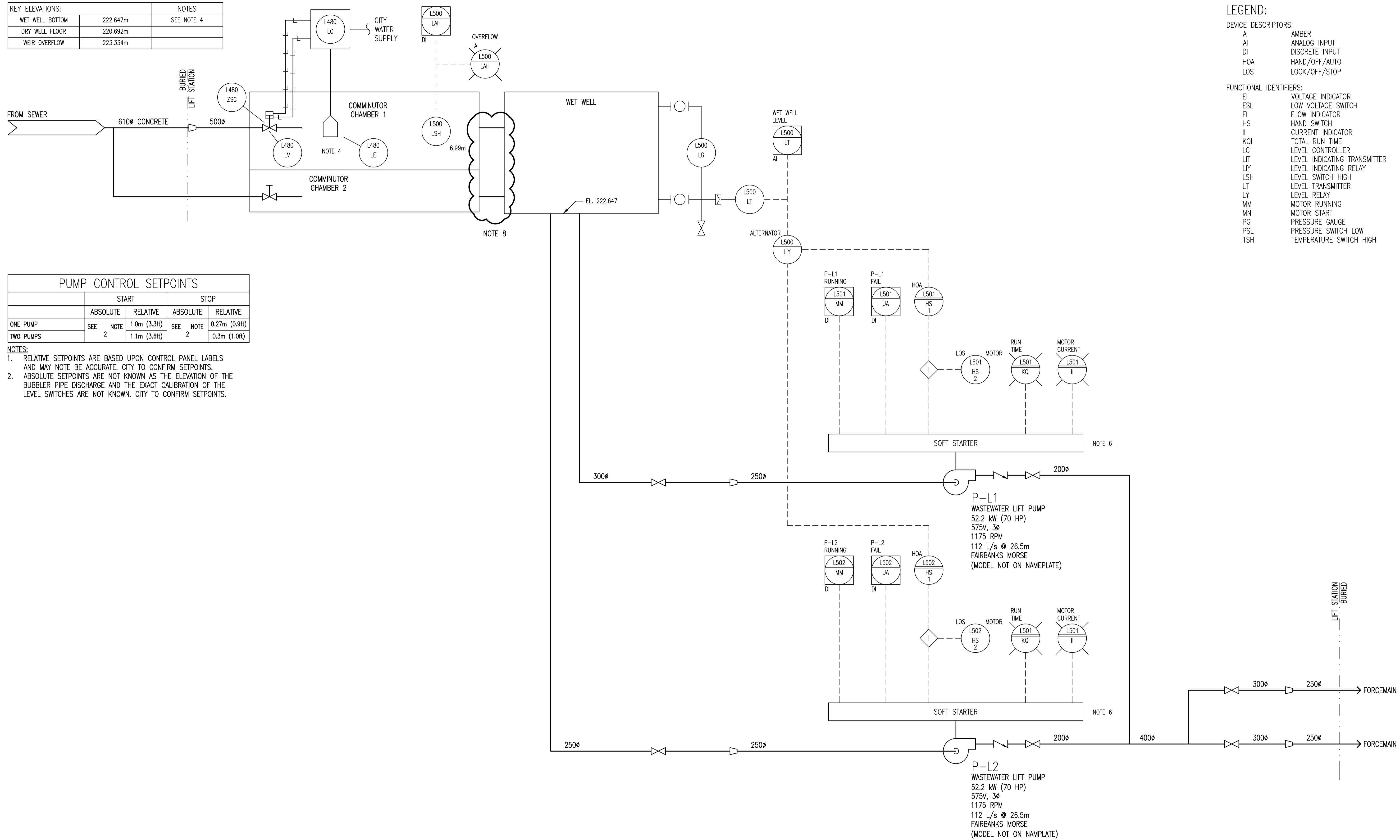
NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR CITY USE	2011/11/23	BC	CJR

 SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-796-8080	
DESIGNED BY: A. SMALLUCK/B. CLEVEN	CHECKED BY: C. REIMER
DRAWN BY: S. FUNK	APPROVED BY: C. REIMER
SCALE: NTS	RELEASED FOR CONSTRUCTION BY: DATE:
DATE: 2011/01/05	DATE:
CONSULTANT NO.:	

ENGINEER'S SEAL
ORIGINAL DRAWING
SEALED BY:
C. J. REIMER
SNC-LAVALIN INC.
MEMBER #21968
2011/12/01
REV. 00

 THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT			
JESSIE WASTEWATER LIFT STATION ARC FLASH STUDY SINGLE LINE DIAGRAM			
CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0149L-E0001	001	00	A1

KEY ELEVATIONS:		NOTES
WET WELL BOTTOM	222.647m	SEE NOTE 4
DRY WELL FLOOR	220.692m	
WEIR OVERFLOW	223.334m	



LEGEND:

DEVICE DESCRIPTORS:

A	AMBER
AI	ANALOG INPUT
DI	DISCRETE INPUT
HOA	HAND/OFF/AUTO
LOS	LOCK/OFF/STOP

FUNCTIONAL IDENTIFIERS:

EI	VOLTAGE INDICATOR
ESL	LOW VOLTAGE SWITCH
FI	FLOW INDICATOR
HS	HAND SWITCH
II	CURRENT INDICATOR
KQI	TOTAL RUN TIME
LC	LEVEL CONTROLLER
LIT	LEVEL INDICATING TRANSMITTER
LIY	LEVEL INDICATING RELAY
LSH	LEVEL SWITCH HIGH
LT	LEVEL TRANSMITTER
LY	LEVEL RELAY
MM	MOTOR RUNNING
MN	MOTOR START
PG	PRESSURE GAUGE
PSL	PRESSURE SWITCH LOW
TSH	TEMPERATURE SWITCH HIGH

PUMP CONTROL SETPOINTS

	START		STOP	
	ABSOLUTE	RELATIVE	ABSOLUTE	RELATIVE
ONE PUMP	SEE NOTE 2	1.0m (3.3ft)	SEE NOTE 2	0.27m (0.9ft)
TWO PUMPS	2	1.1m (3.6ft)	2	0.3m (1.0ft)

- NOTES:**
- RELATIVE SETPOINTS ARE BASED UPON CONTROL PANEL LABELS AND MAY NOT BE ACCURATE. CITY TO CONFIRM SETPOINTS.
 - ABSOLUTE SETPOINTS ARE NOT KNOWN AS THE ELEVATION OF THE BUBBLER PIPE DISCHARGE AND THE EXACT CALIBRATION OF THE LEVEL SWITCHES ARE NOT KNOWN. CITY TO CONFIRM SETPOINTS.

- NOTES:**
- ALL INSTRUMENT IDENTIFIERS HAVE AN OPTIONAL FACILITY PREFIX OF "JES-".
EXAMPLE: JES-L501-HS-1
 - INSTRUMENTS SHOWN IN AN AUXILIARY LOCATION ARE ON THE MCC SOFT STARTERS, UNLESS OTHERWISE INDICATED.
 - INLET GATE VALVE CONTROLLER IS DISCONNECTED DURING LOW FLOW CONDITIONS.
 - ELEVATION NOT CONFIRMED BY SURVEYOR.
 - PIPING MATERIALS AND GRADES ARE TO BE CONFIRMED.
 - PUMP MOTORS ARE LOCATED ON FLOOR ABOVE PUMPS.
 - THIS DRAWING IS BASED ON LIMITED AVAILABLE DOCUMENTATION AND VISUAL SITE INVESTIGATIONS. ELECTRICAL CONTROL SCHEMATICS WERE NOT AVAILABLE AND THUS SOME OF THE CONTROLS ARE ASSUMED.
 - THE CONNECTION BETWEEN THE COMMUNUTOR CHAMBERS AND THE WET WELL COULD NOT BE CONFIRMED BASED ON EXISTING DOCUMENTATION AND SITE VISITS.

APECM
Certificate of Authorization
SNC-Lavalin Inc.
No. 4489

NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR CITY USE	2012/01/31	TMC	

SNC-LAVALIN INC.
148 Nature Park Way
Winnipeg, MB, Canada R3P 0X7
204-786-8080

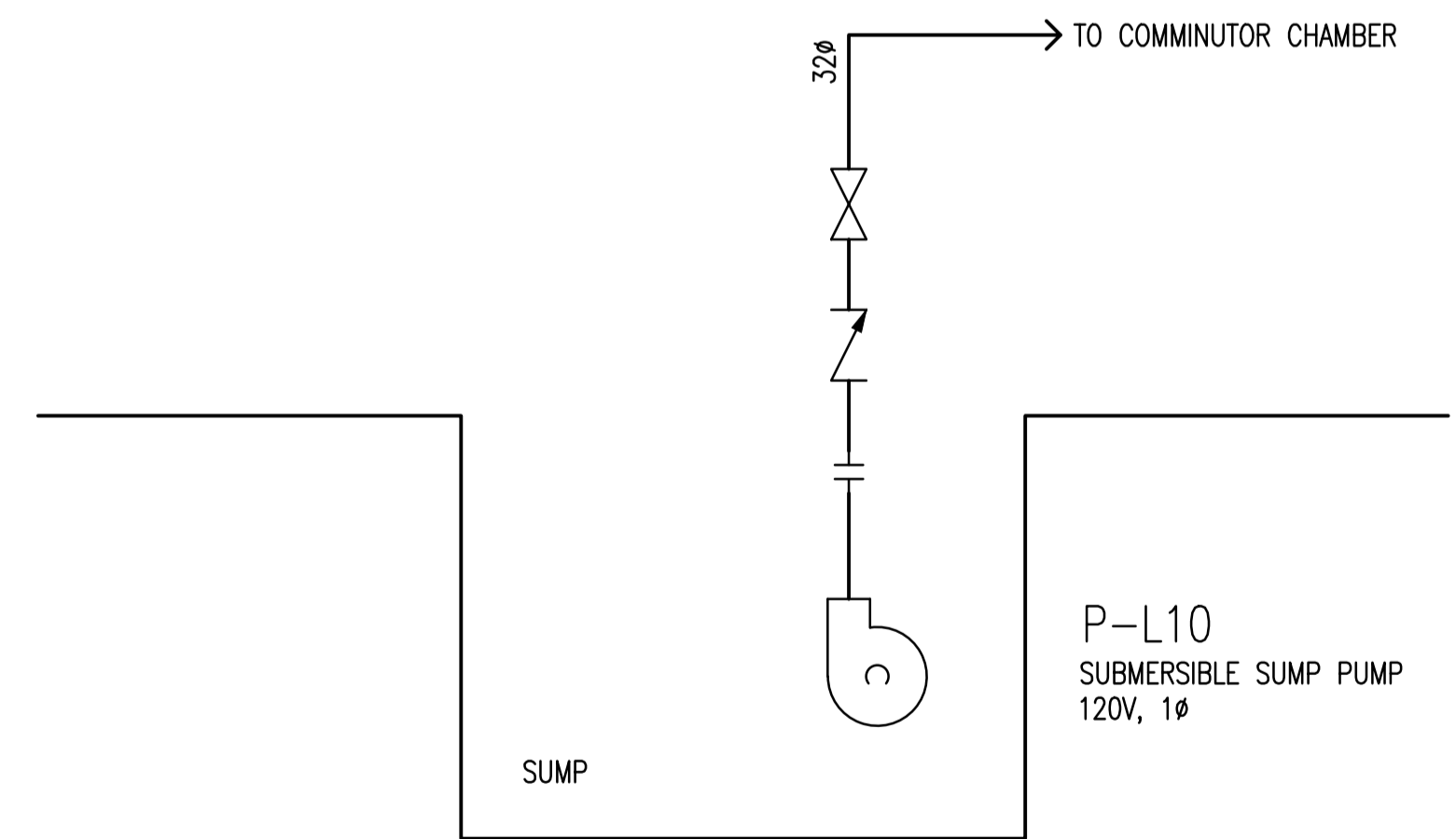
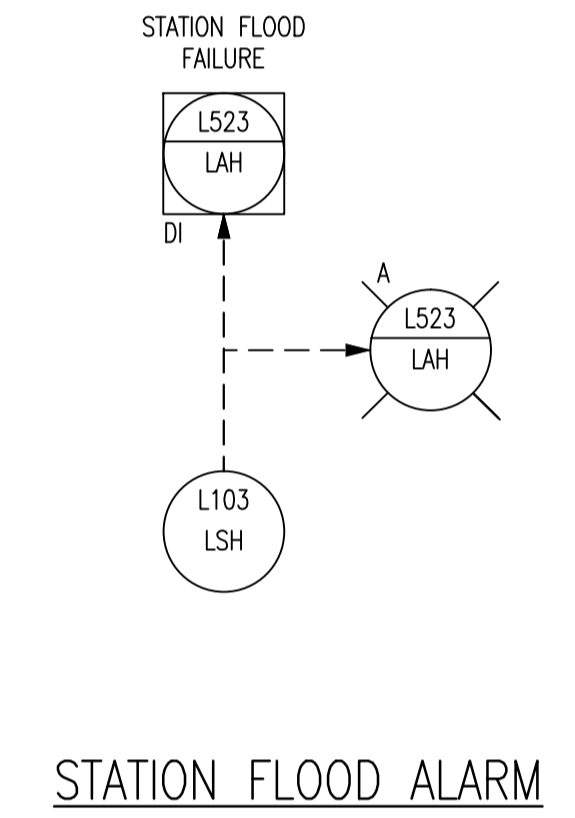
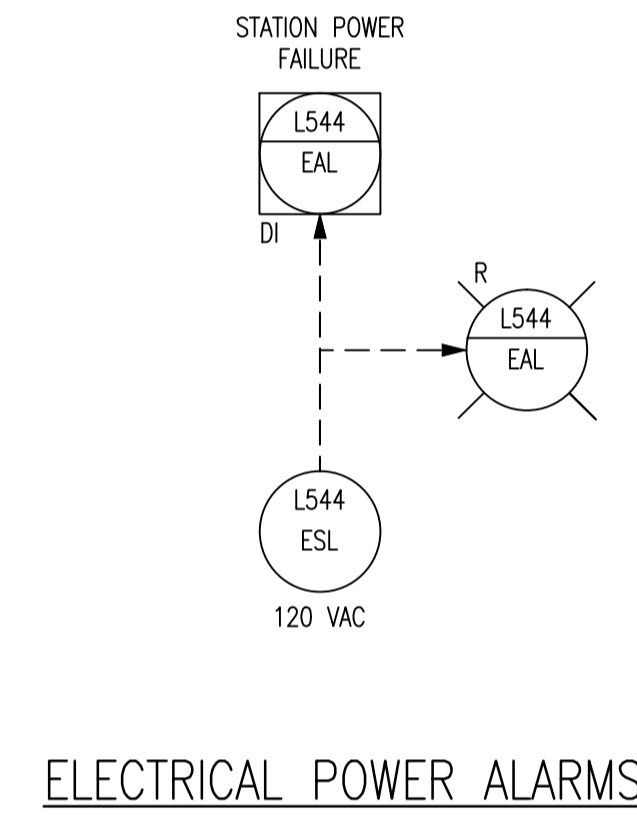
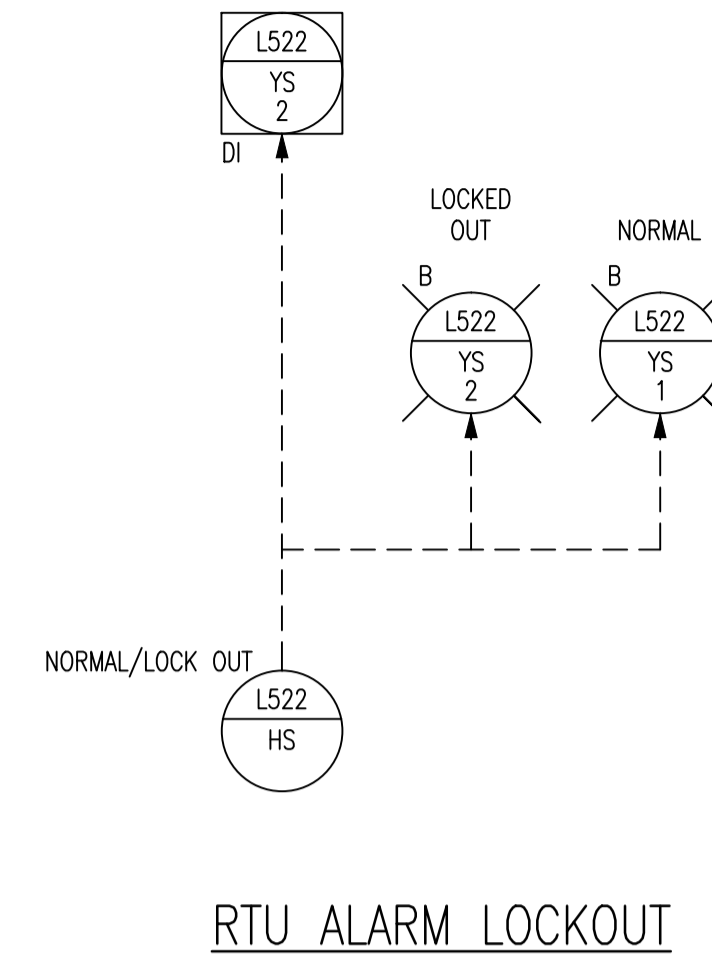
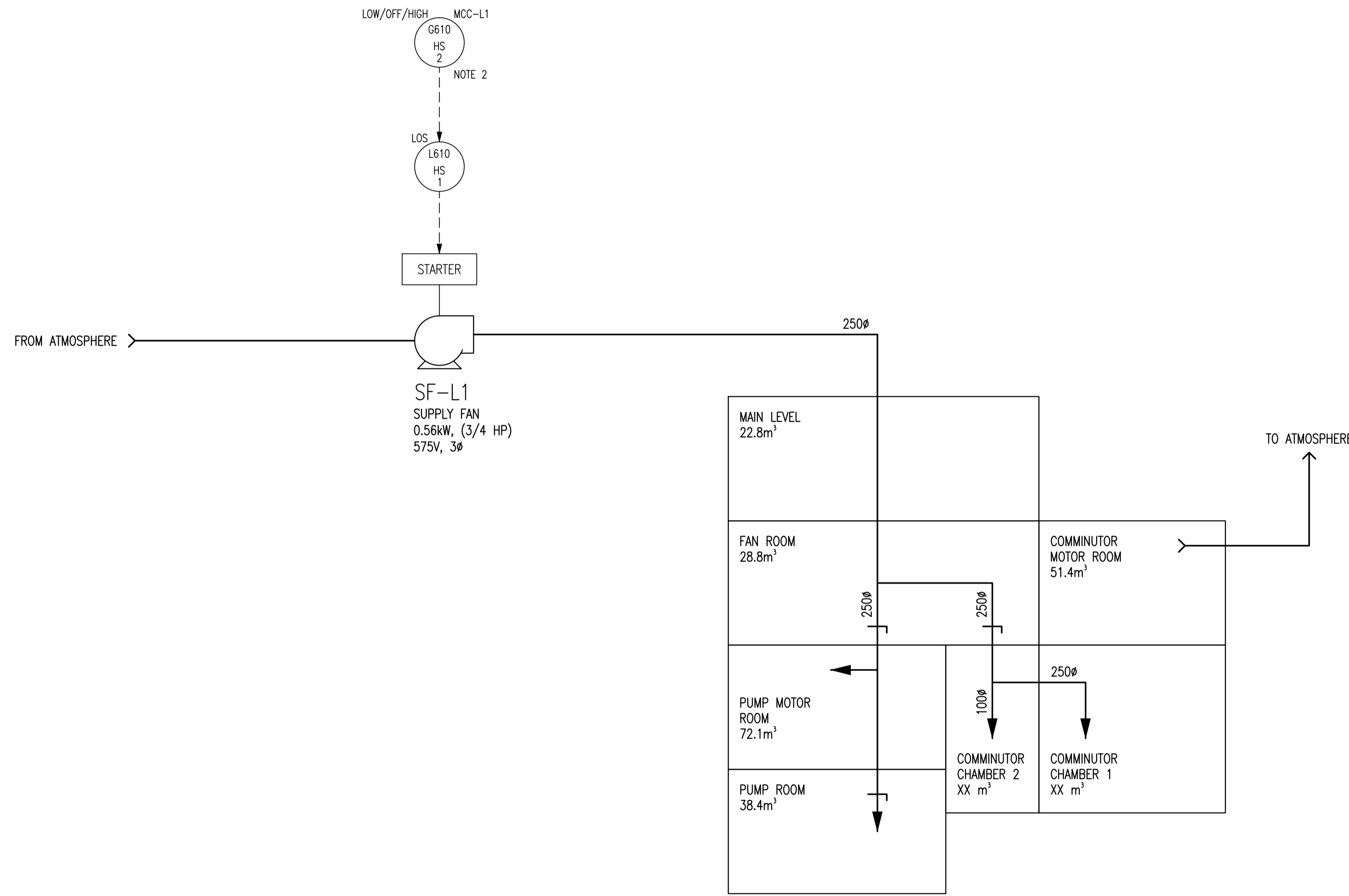
DESIGNED BY: EXISTING
DRAWN BY: S. FUNK
SCALE: NTS
DATE: 2011/02/14
CONSULTANT NO.:

CHECKED BY: T. CHURCH
APPROVED BY: C. REIMER
RELEASED FOR CONSTRUCTION BY:
DATE:

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

JESSIE WASTEWATER PUMPING STATION
PUMPING STATION CONDITION ASSESSMENT PHASE 1
PROCESS & INSTRUMENTATION DIAGRAM
WASTEWATER PUMPING

CITY DRAWING NUMBER: 1-0149L-P0001
SHEET: 001
REV: 00
SIZE: A1



LEGEND:

DEVICE DESCRIPTORS:

A	AMBER
B	BLUE
DI	DISCHARGE INPUT
R	RED
LOS	LOCK/OFF/STOP

FUNCTIONAL IDENTIFIERS:

EI	VOLTAGE INDICATOR
ESL	LOW VOLTAGE SWITCH
FI	FLOW INDICATOR
HS	HAND SWITCH
II	CURRENT INDICATOR
KQI	TOTAL RUN TIME
LC	LEVEL CONTROLLER
LIT	LEVEL INDICATING TRANSMITTER
LIY	LEVEL INDICATING RELAY
LSH	LEVEL SWITCH HIGH
LT	LEVEL TRANSMITTER
LY	LEVEL RELAY
MM	MOTOR RUNNING
MN	MOTOR START
PG	PRESSURE GAUGE
PSL	PRESSURE SWITCH LOW
TSH	TEMPERATURE SWITCH HIGH

NOTES:

1. ALL INSTRUMENT IDENTIFIERS HAVE AN OPTIONAL FACILITY PREFIX OF "JES-".
 EXAMPLE: JES-L501-HS-1
2. LOW/HIGH SWITCH HIGH POSITION CAUSES CIRCUIT BREAKER TO TRIP.



NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR CITY USE	2012/01/31	-	TMC

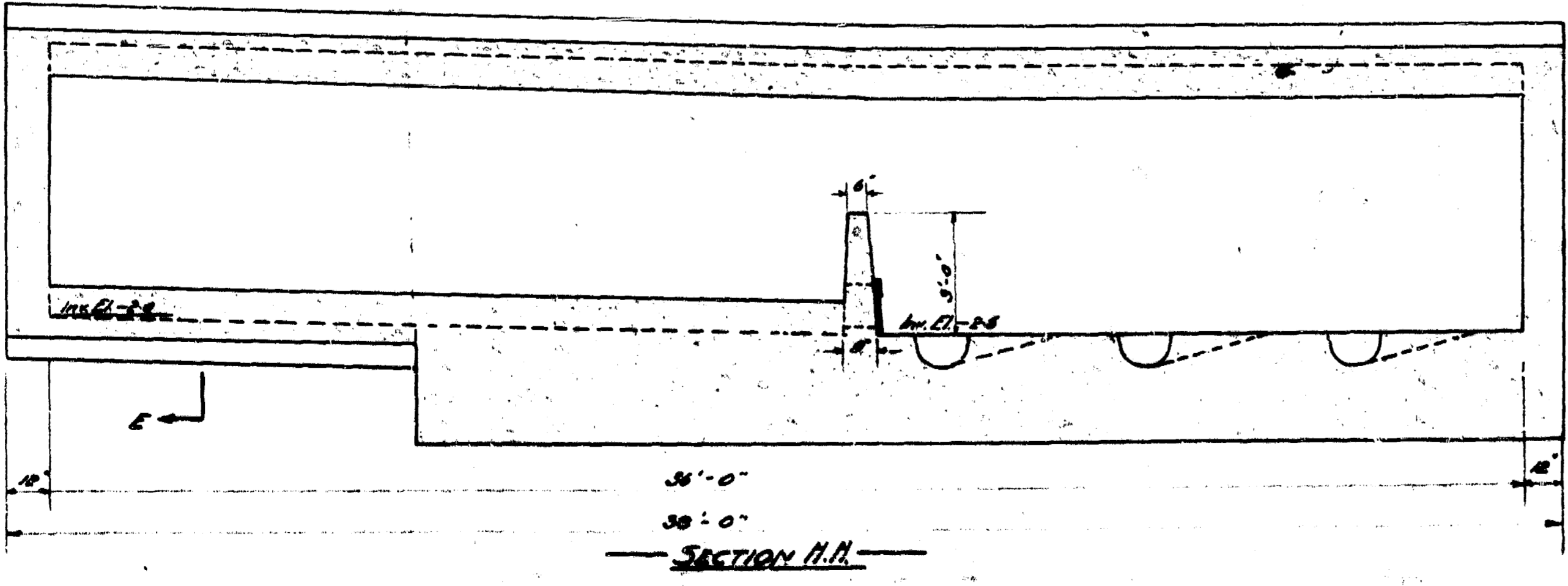
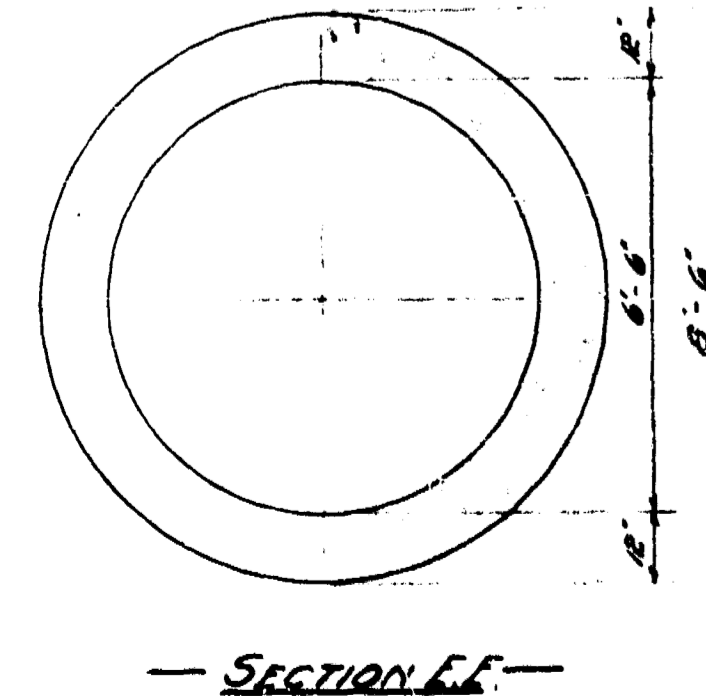
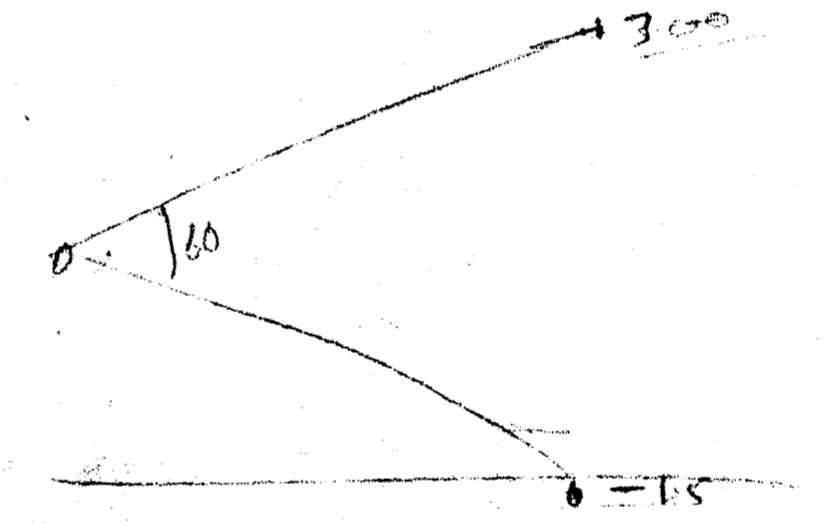
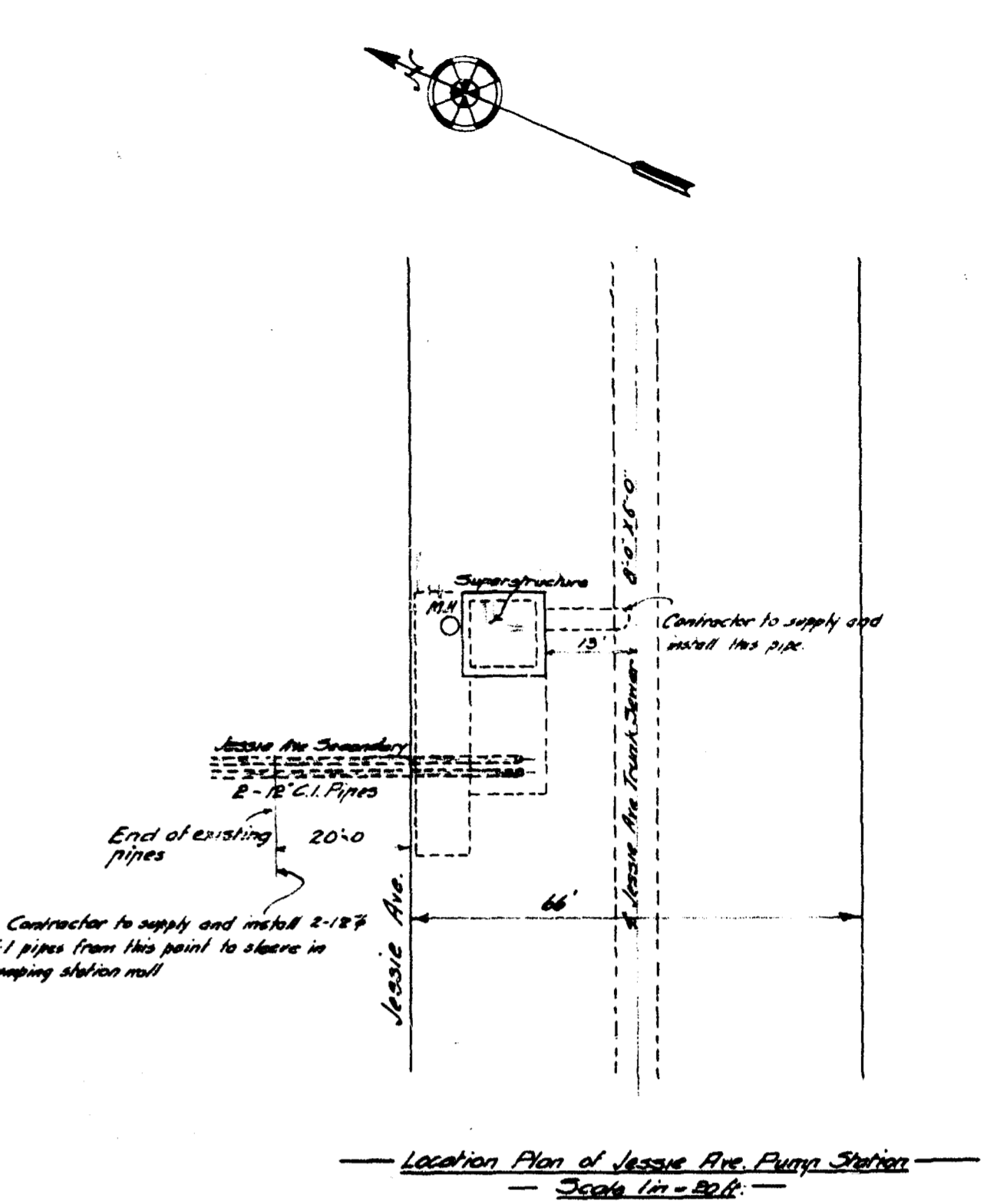
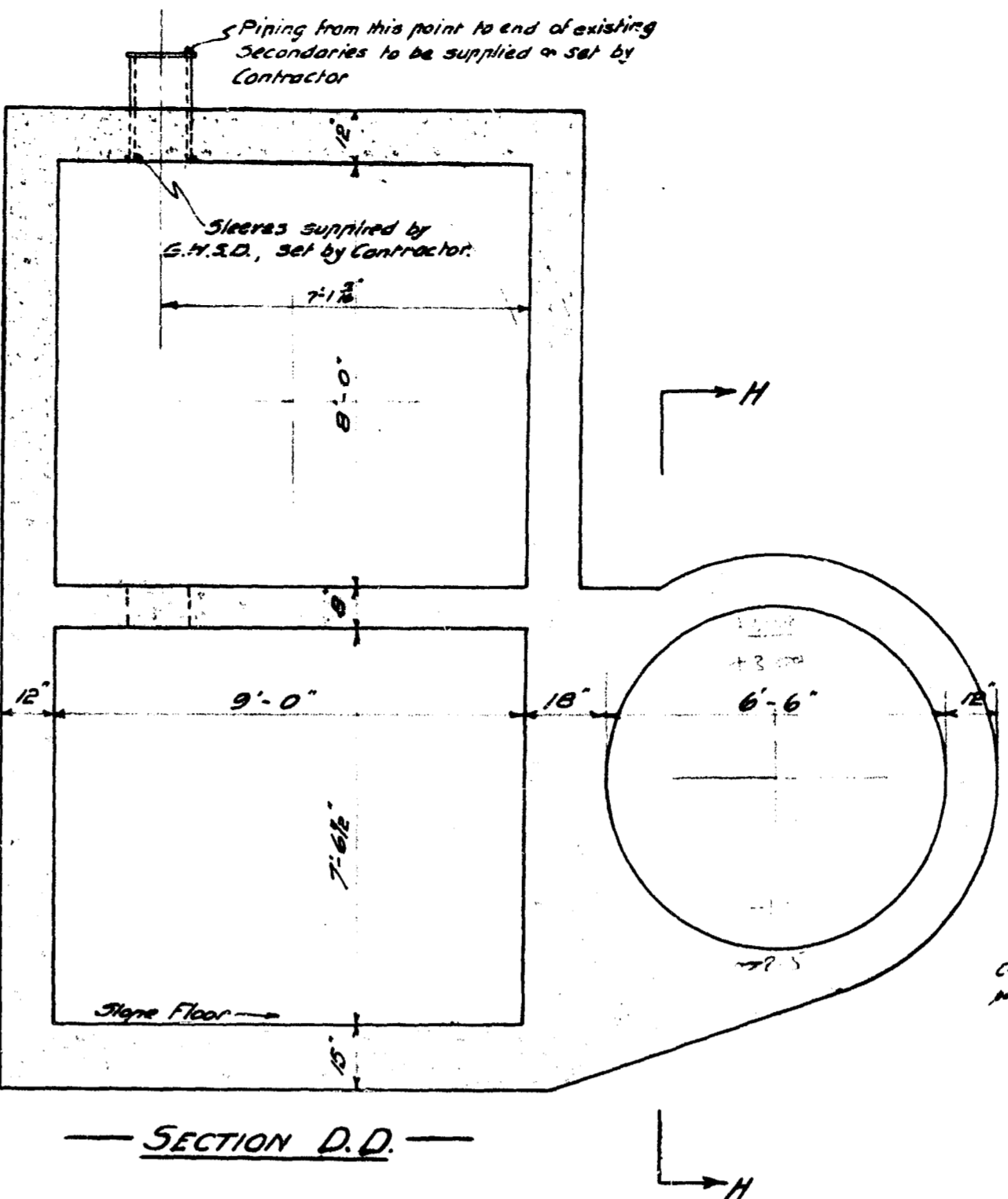
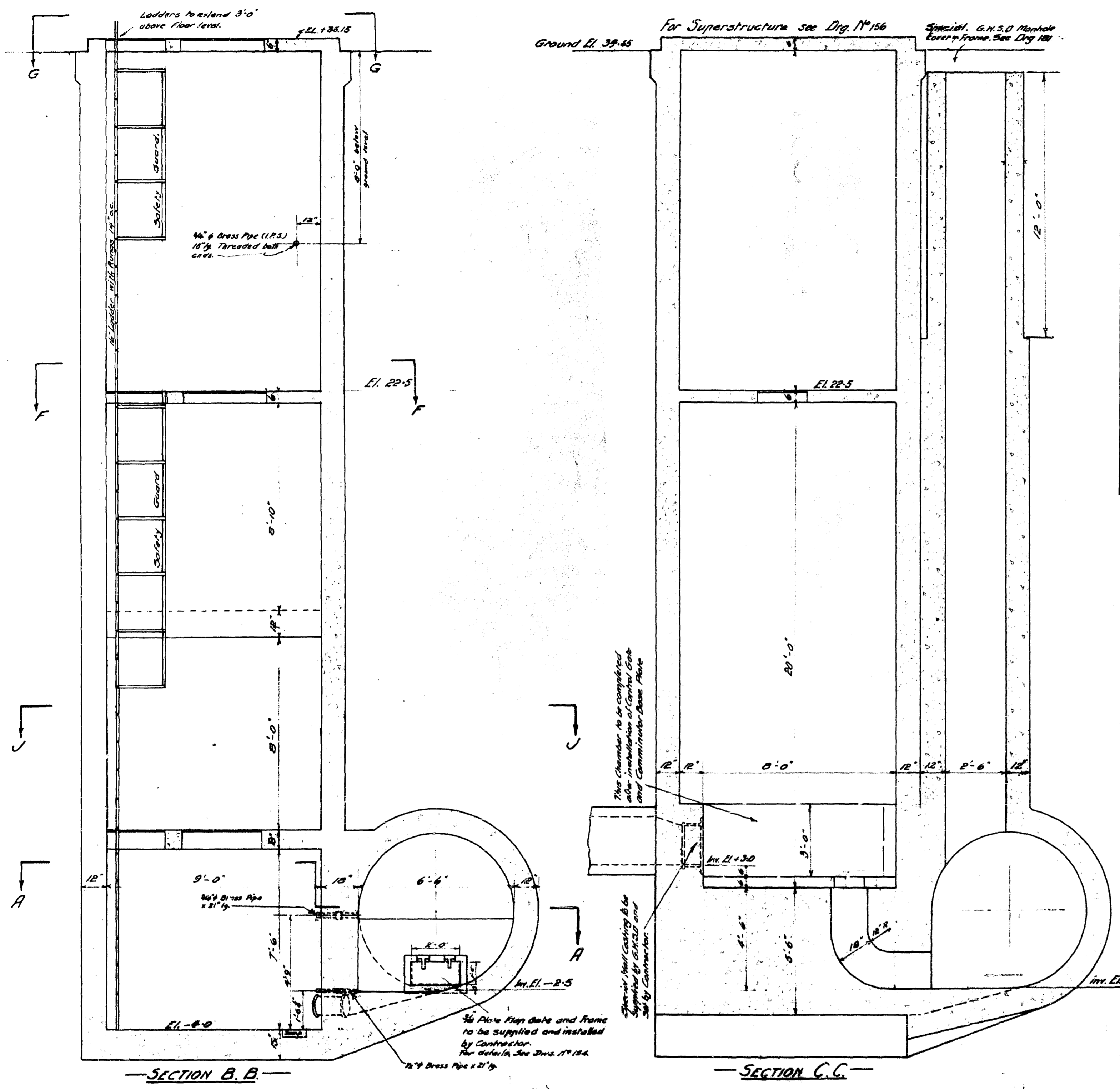
SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-798-8080	
DESIGNED BY: EXISTING	CHECKED BY: T. CHURCH
DRAWN BY: S. FUNK	APPROVED BY: C. REIMER
SCALE: NTS	RELEASED FOR CONSTRUCTION BY: DATE:
DATE: 2011/02/17	DATE:
CONSULTANT NO.:	

ENGINEER'S SEAL

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

JESSIE WASTEWATER PUMPING STATION
 PUMPING STATION CONDITION ASSESSMENT PHASE 1
 PROCESS & INSTRUMENTATION DIAGRAM
 HVAC & MISC

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0149L-P0002	001	00	A1



Note: Material to be supplied and installed by Contractor where shown or located as directed by Engineer.
 Ladders - Sides 2 1/2" x 12" x 18" apart. Rungs 3/4" x 4" x 12"
 Safety Guard - 1 1/2" x 3/4" - See Dry. No. 154 for detail.
 Grating to support 200 lbs per sq ft live load.
 Eye-balls (2) - 3/4" galvanized with 1/2" washers.
 Control Valve connections - 3-1/2" (1/2") 21" long brass pipe. See Dry. No. 154
 Water Pipe connection - 1/2" 3/4" (1/2") 18" long brass pipe, threaded 2 ends.
 Reinforcing steel - Sizes & spacing to be given later by Engineer.
 All 12" sections not on this sheet to Dry. No. 154
 For details of Superstructure to Dry. No. 156
 For details of Special S.C. 117 Frame to Dry. No. 151
 Tronel finish all floors.
 Holes for electric conduits to be made by the contractor as directed by Engineer.

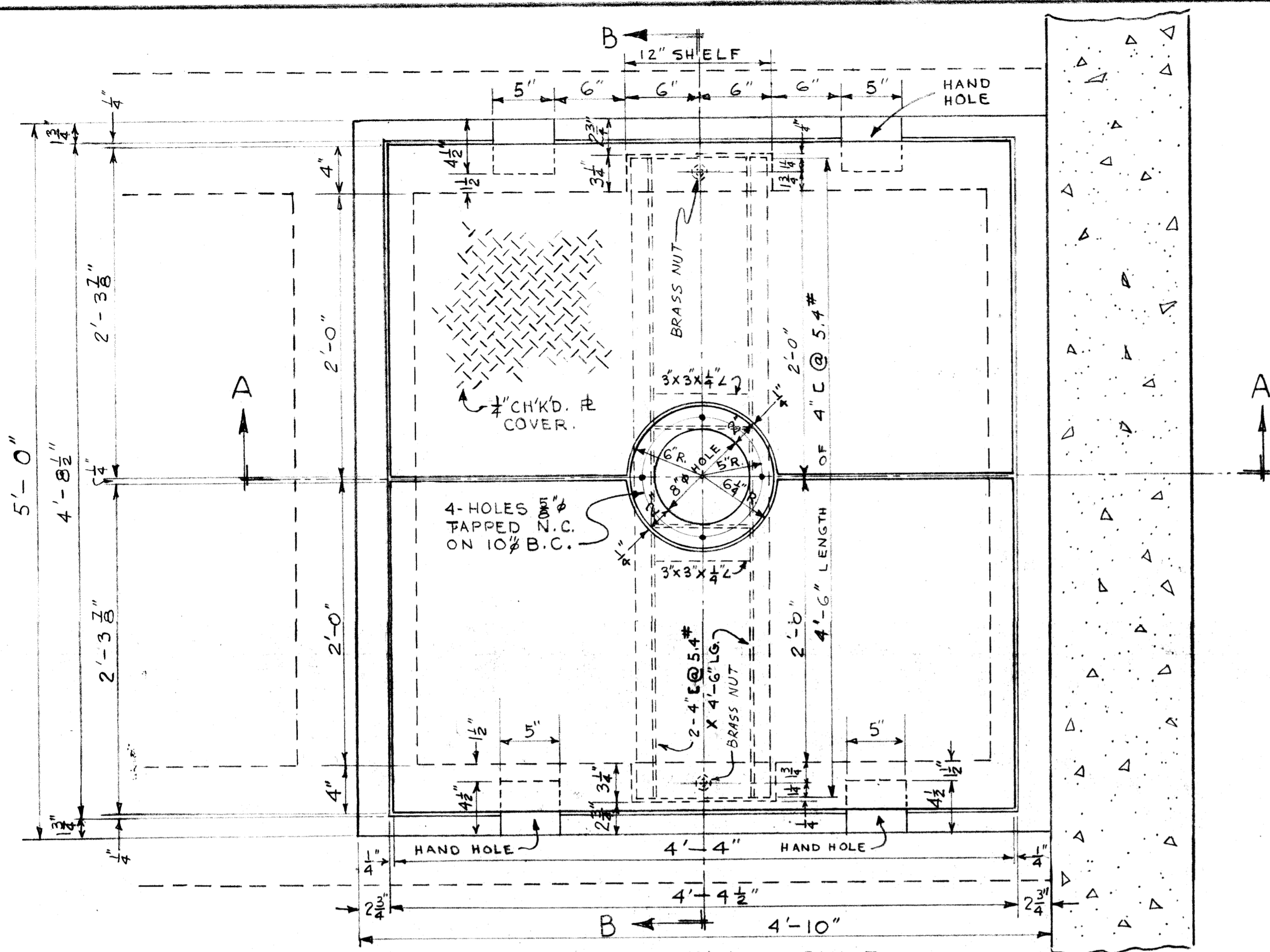
APPROVED		TITLE: JESSIE AVE. PUMP STATION	
DATE: 7/23/1917	SCALE: 1/4" = 20'-0"	DESIGNED BY: [Signature]	CHECKED BY: [Signature]
APPROVED BY: [Signature]	DATE: 7/23/1917	PROJECT NO. 164	DATE: 7/23/1917

file # FM 10084

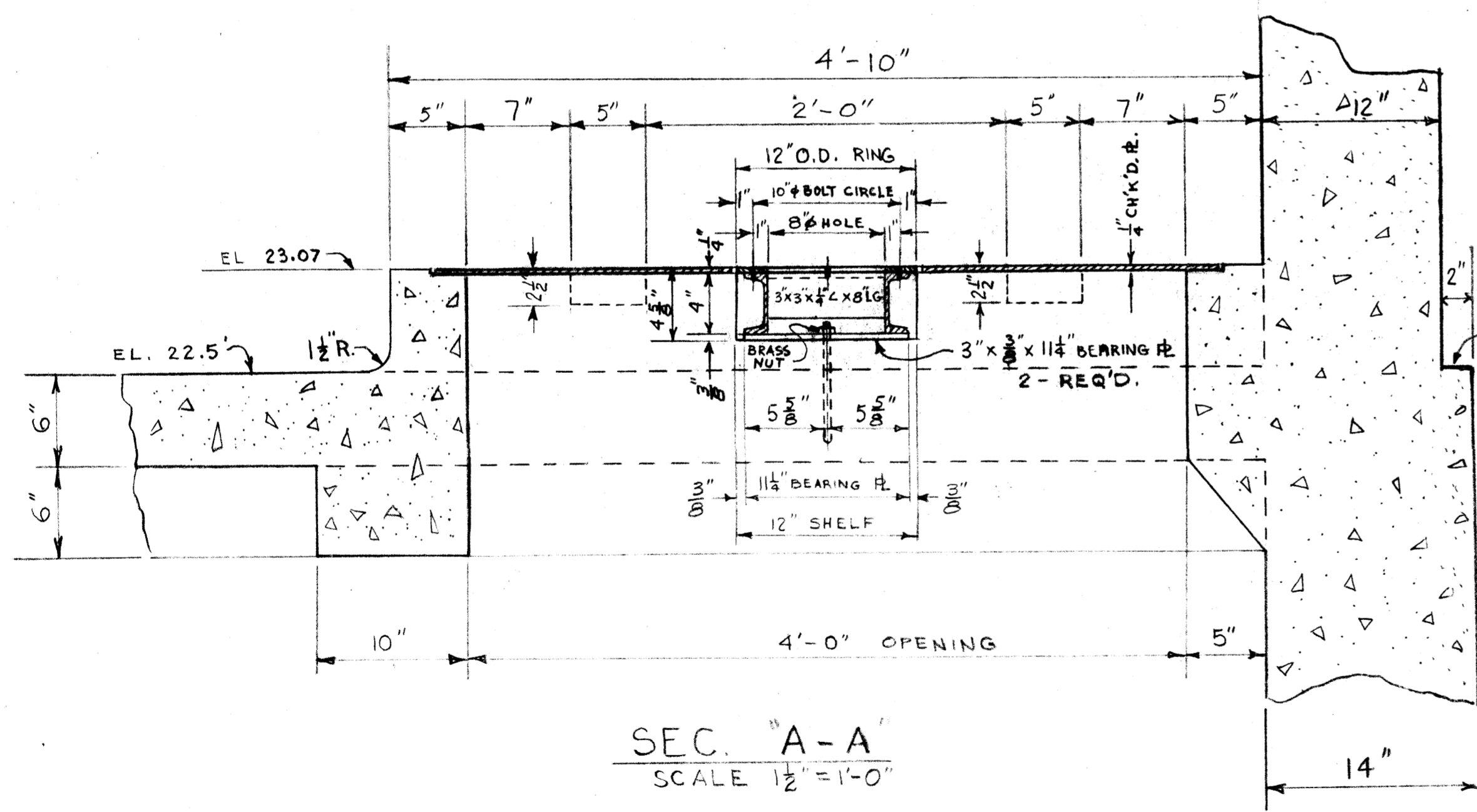
286

REF. or DRAWING No.

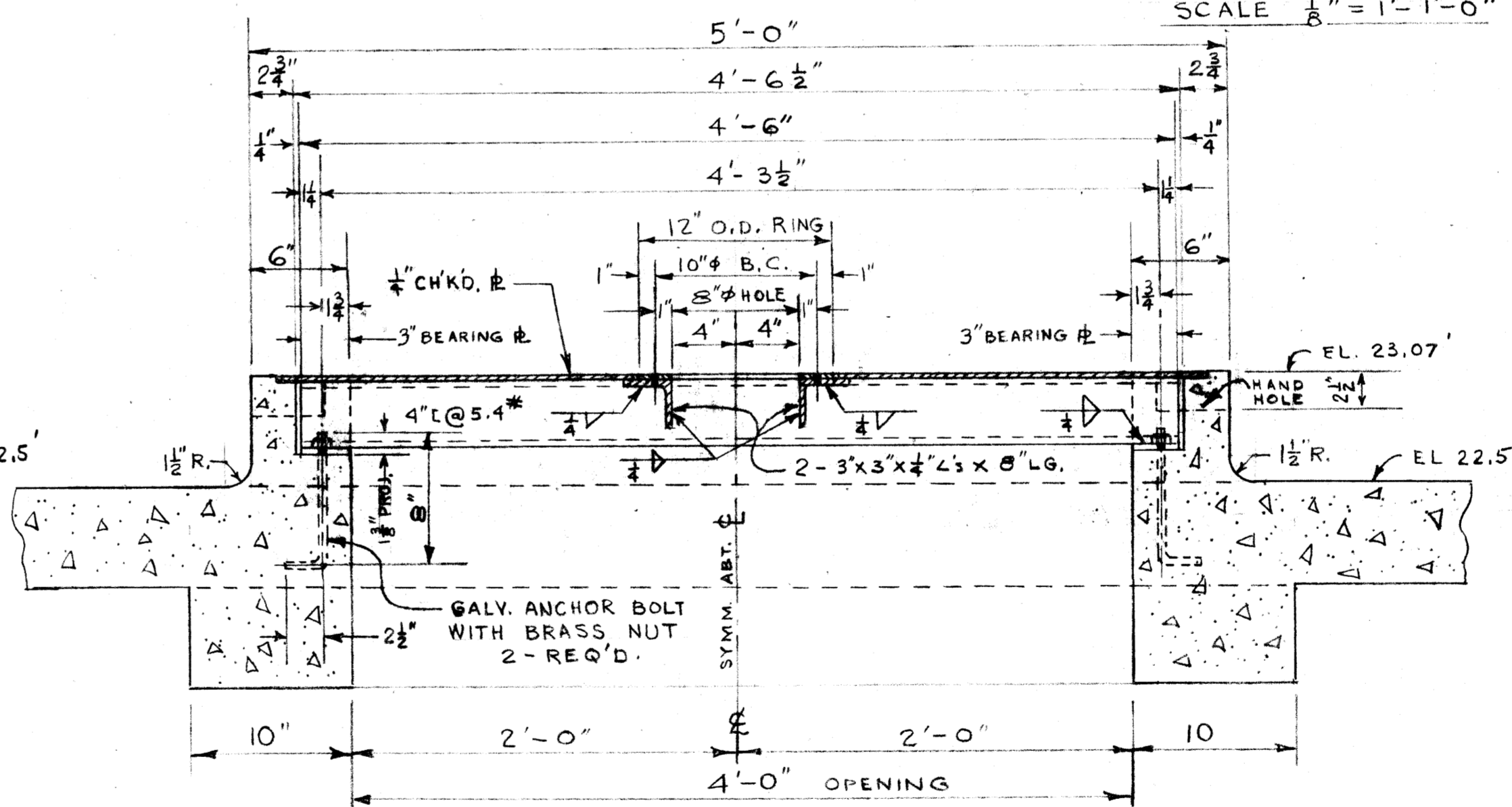
DETAILS



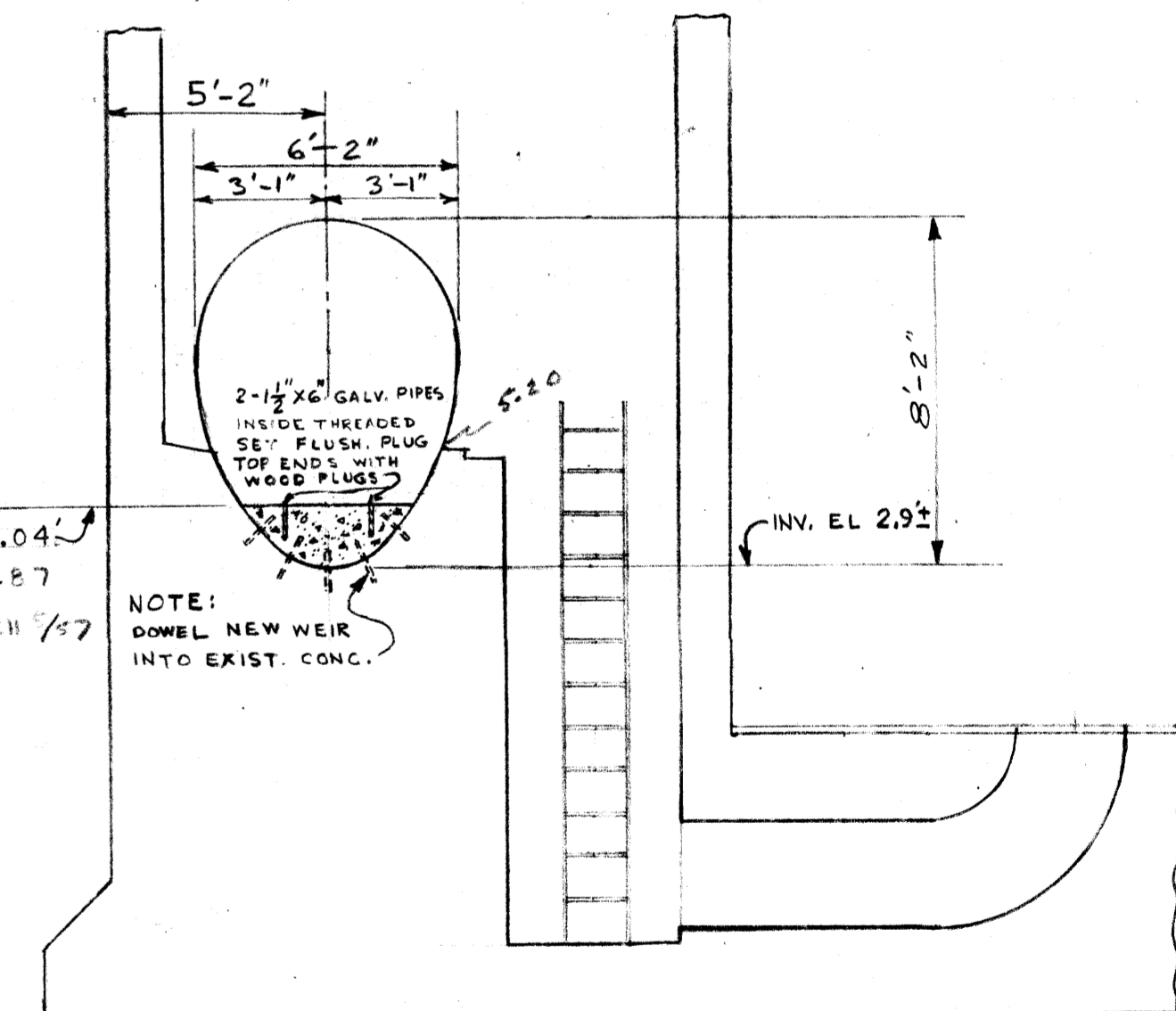
PLAN OF WELL COVER.
SCALE 1/2" = 1'-0"



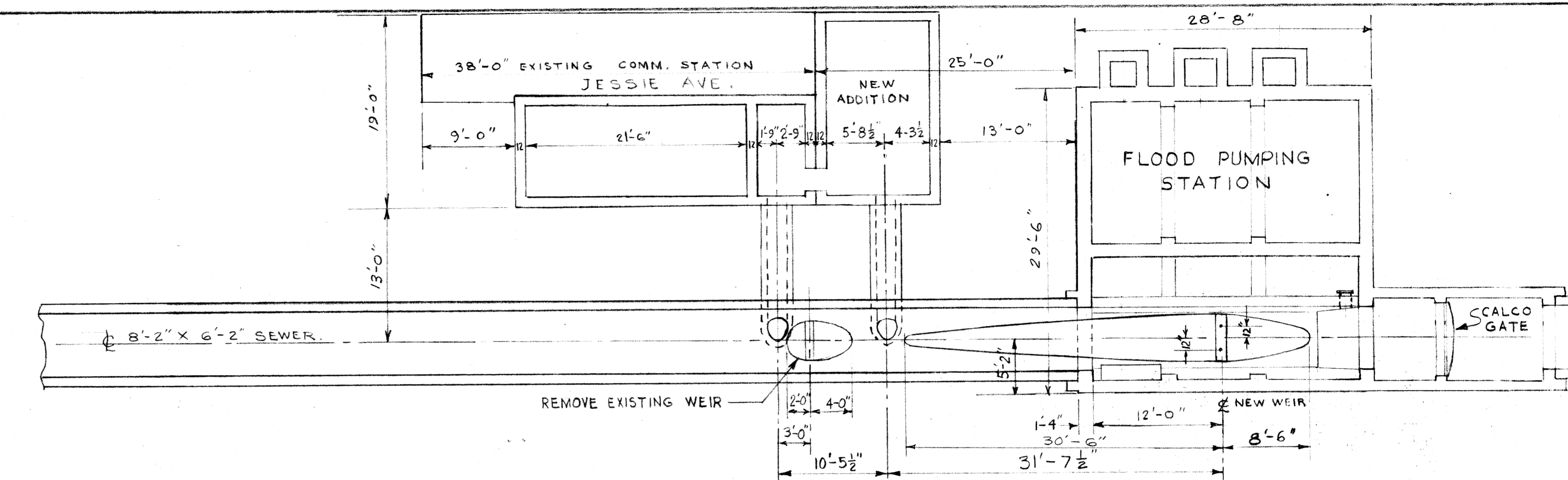
SEC. "A-A"
SCALE 1/2" = 1'-0"



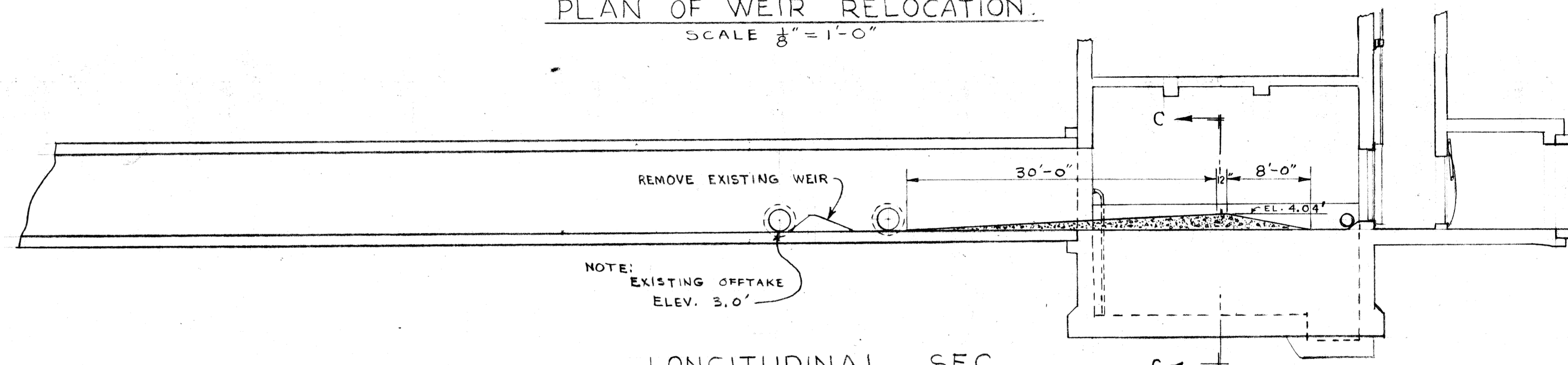
SEC. "B-B"
SCALE 1/2" = 1'-0"



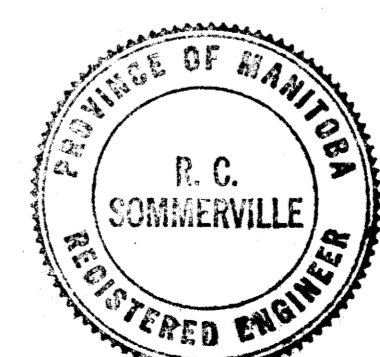
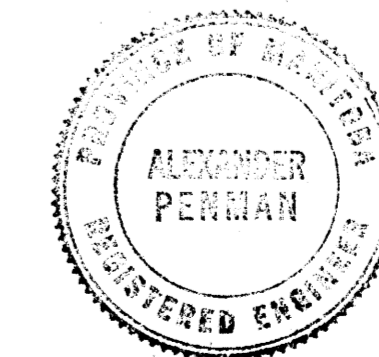
SEC. "C-C"
SCALE 1/4" = 1'-0"



PLAN OF WEIR RELOCATION.
SCALE 1/8" = 1'-0"

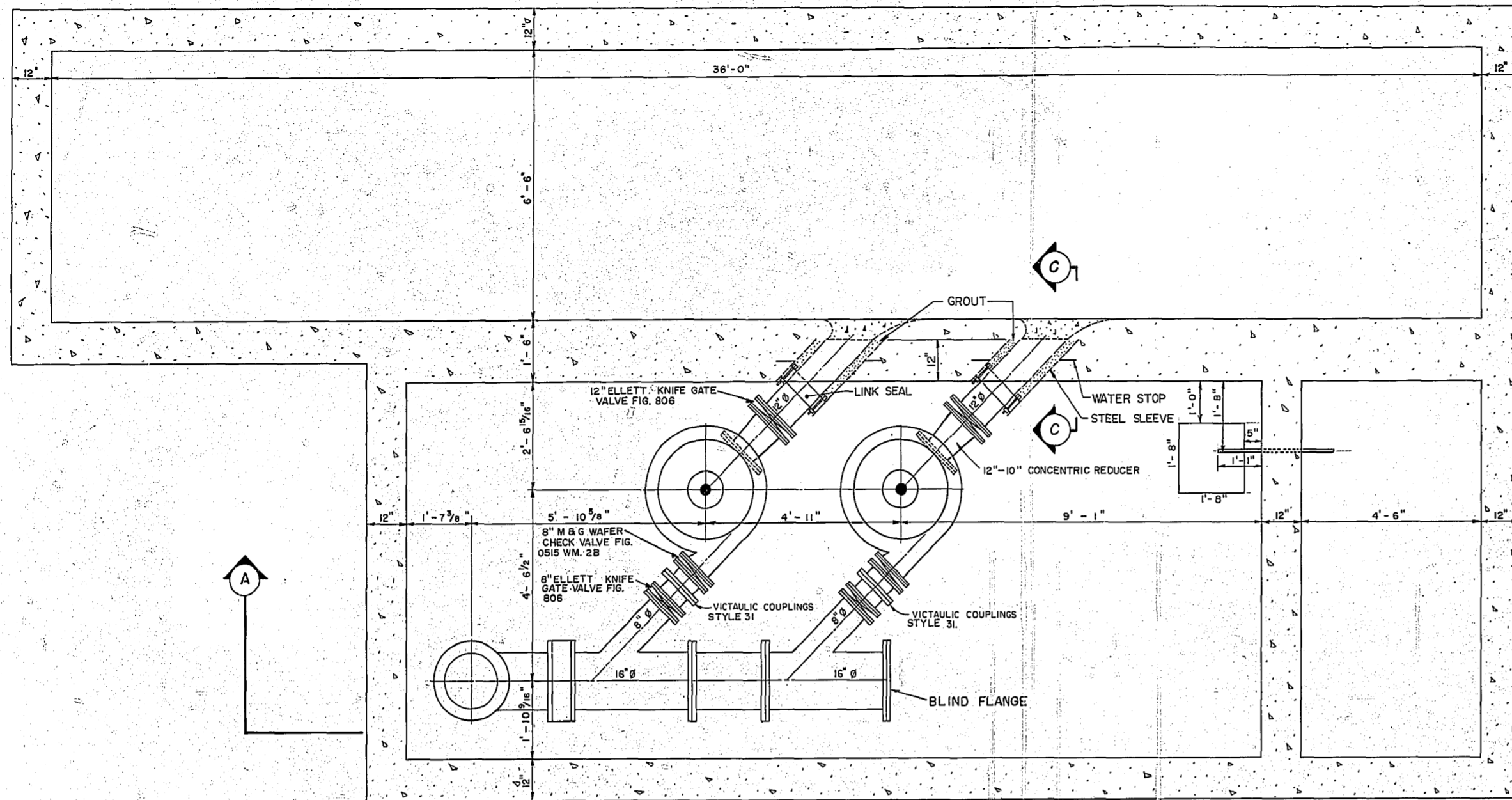


LONGITUDINAL SEC.
SCALE 1/8" = 1'-1'-0"

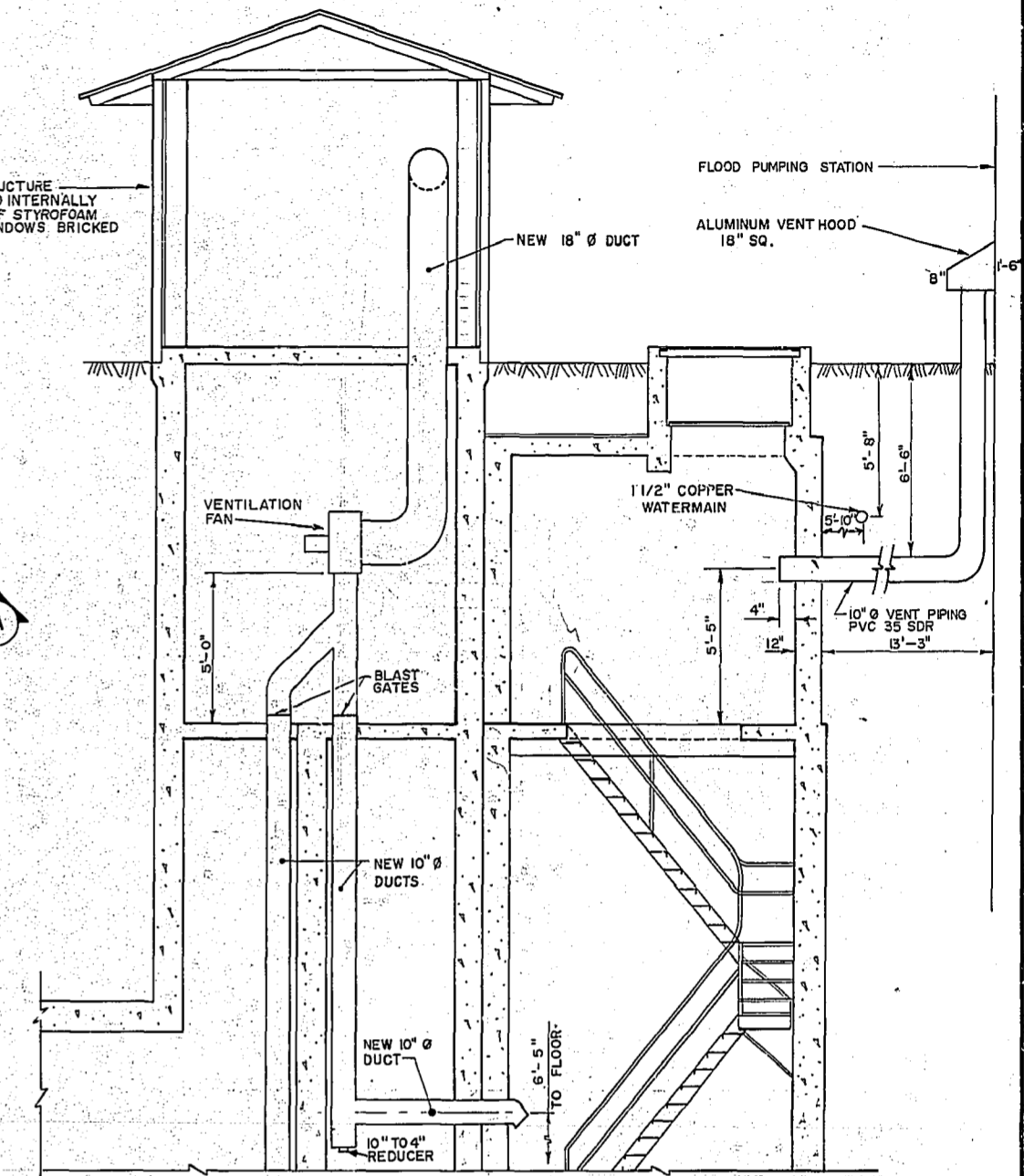


GREATER WINNIPEG SANITARY DISTRICT			
DRAWN HS	DATE 1 DEC 55	TITLE:	JESSIE AVE. COMMUNOTOR STA.
TRACED	CHECKED RGS		DETAILS OF COMM. WELL
APPROVED			COVER & NEW WEIR IN
			FLOOD PUMPING STATION
		SCALE	AS NOTED
			286

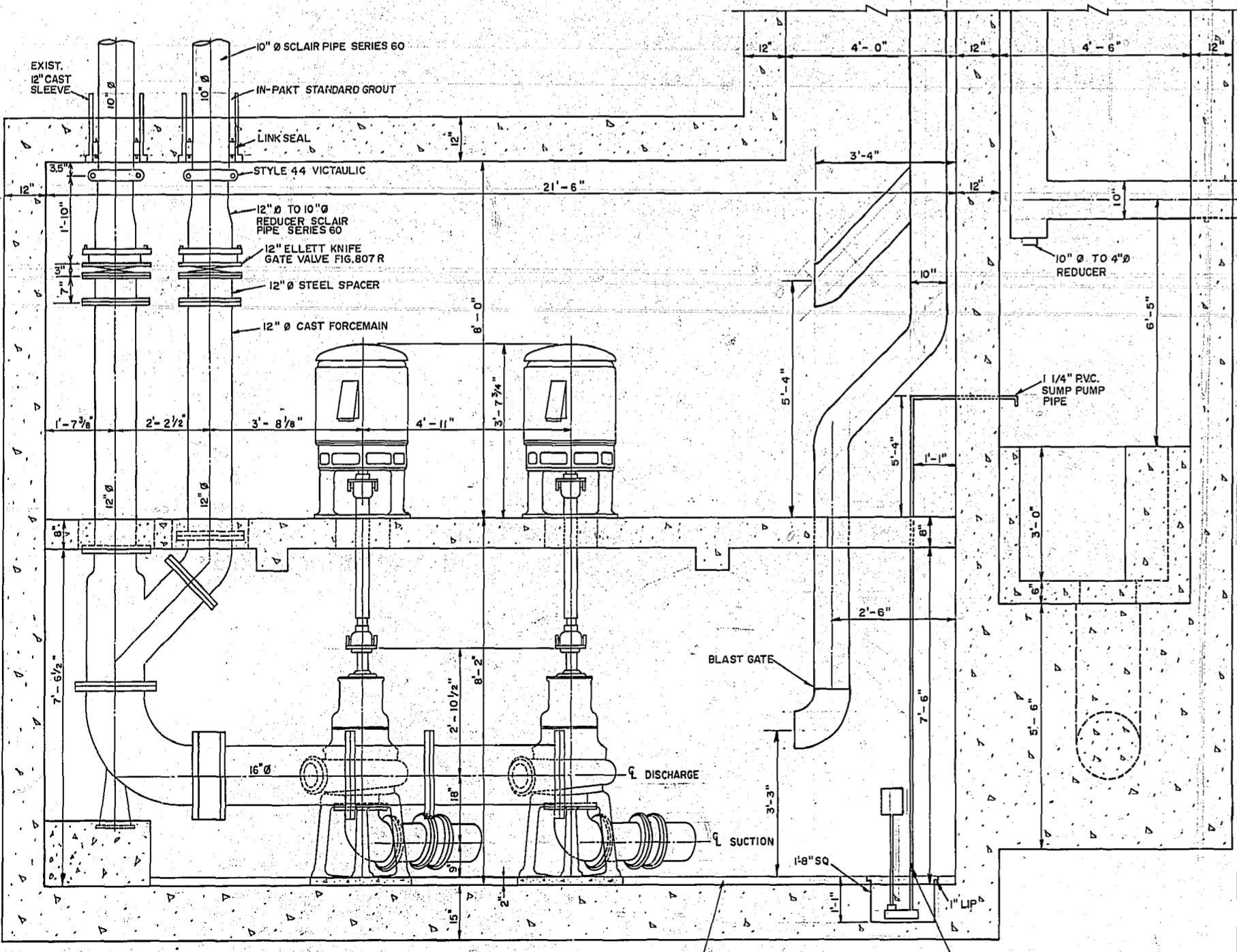
Micro-Filmed 1965



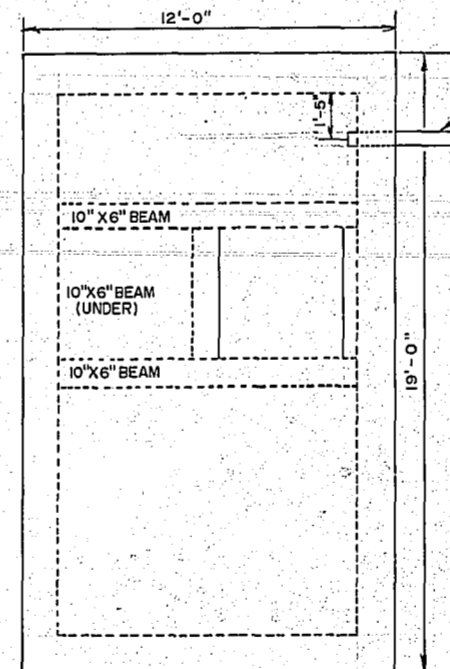
PUMP CHAMBER FLOOR
SCALE: 1/2" = 1'-0"



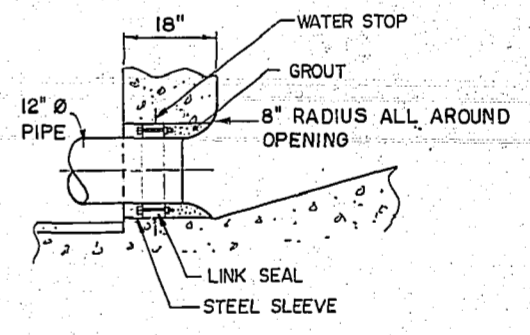
SUPERSTRUCTURE
SCALE: 1/4" = 1'-0"



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



TOP VIEW COMMINUTOR CHAMBER
SCALE: 1/4" = 1'-0"



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

AS BUILT
D. S. S. *e.A. Sordowski* *M.A. 3/86*
SURVEY ENGINEERING DATE

- NOTES**
- ALL VALVES WITH FLANGES ARE ASA. 125 LB. STD.
 - ALL CI. PIPES WITH FLANGES ARE ASA. 125 LB. STD.
 - FOR INFORMATION ON PUMPS, MOTORS & FANS SEE LIBRARY FILE P-41
 - ALL DUCT WORK GALVANIZED STEEL 26 GA.

For Electrical see drawing no. 41-FS-1-1

NO.	REVISIONS	DATE	APP.
1	REVISED TO AS BUILT	FEB 84	MD



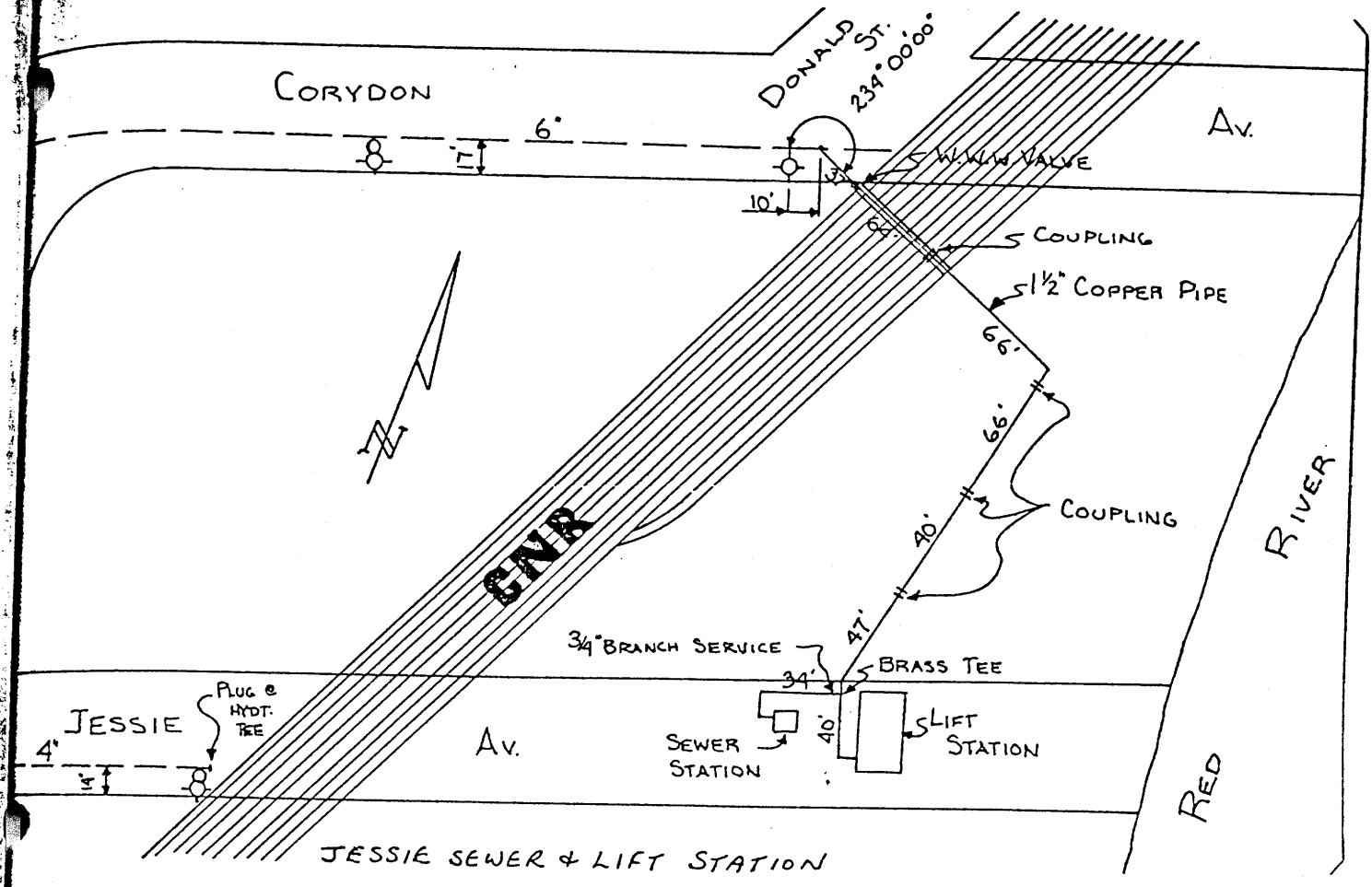
WORKS & OPERATIONS DIVISION
WATERWORKS, WASTE & DISPOSAL DEPARTMENT

DESIGNED BY: J.E. T.M.
CHECKED BY: R.A.S.
APPROVED BY: *R.M. Kelly* DATE: Aug 25/82



JESSIE AVENUE PUMPING STATION
INSTALLATION OF NEW PUMPS & PIPING

RELEASED FOR CONSTRUCTION DATE: *Aug 27/82*
SCALE: AS SHOWN DRAWING NO: 1060



PROPERTY
 OF THE
 Watermain, Water & Sewer Department
 PUBLIC WORKS
 ENGINEERING DIVISION

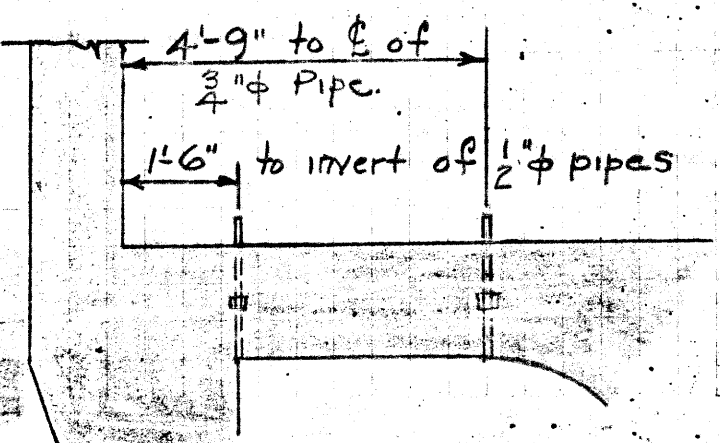
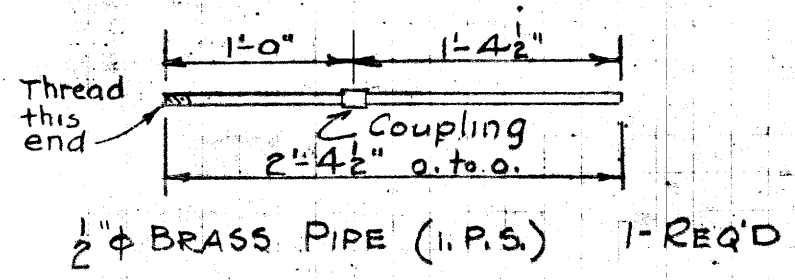
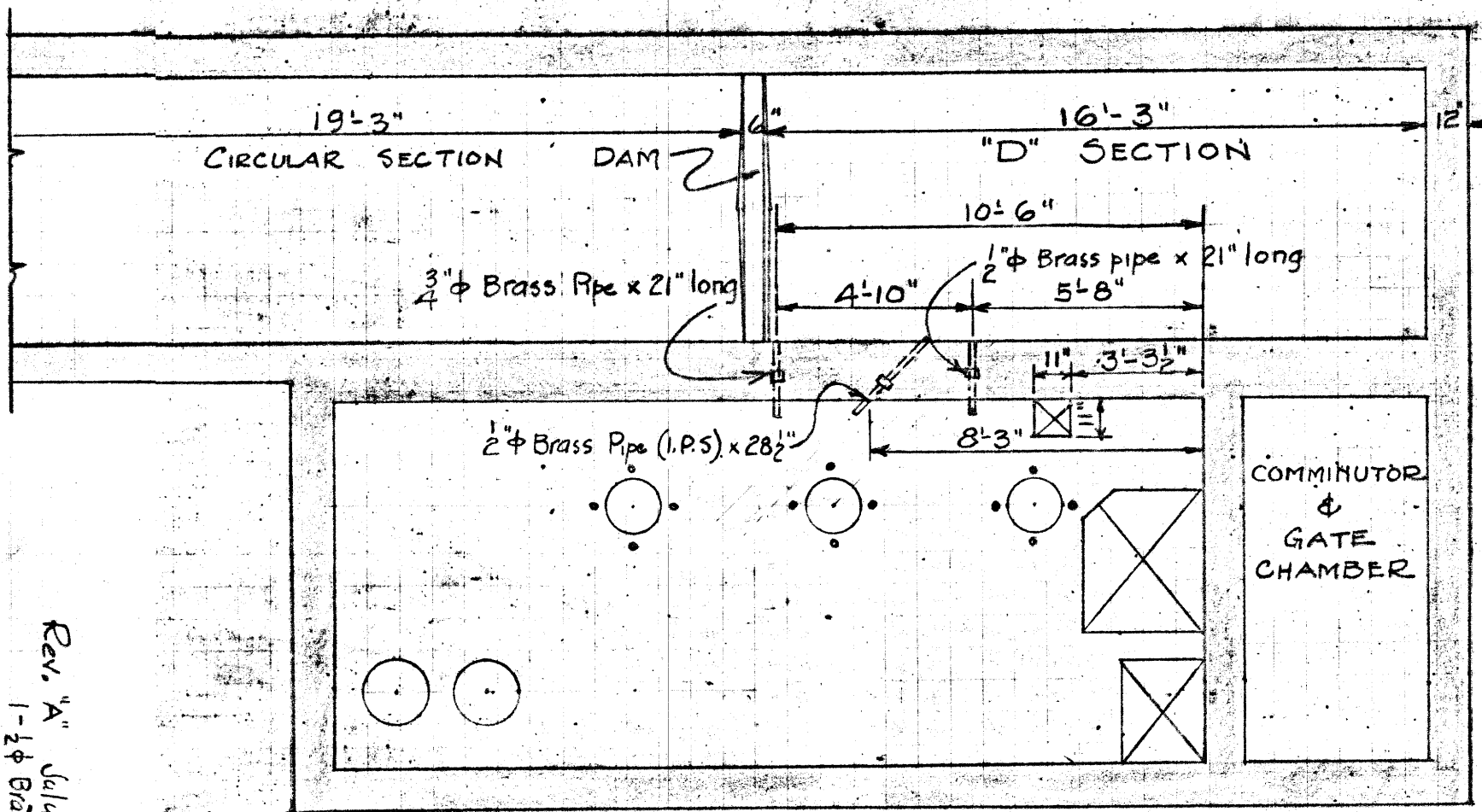
Jessie Pumping Station
 watermain SERVICE

D-8372

COMPUTED BY W.P.

CHECKED BY

MADE IN CONNECTION WITH Location of 11" x 11" hole, 2" φ & 3" φ pipe, & "D" Section.



Rev. "A" July 21, 1936
1-2" φ Brass pipe 28 1/2" Long added.

SUBJECT JESSIE AVE PUMPING STA No 4

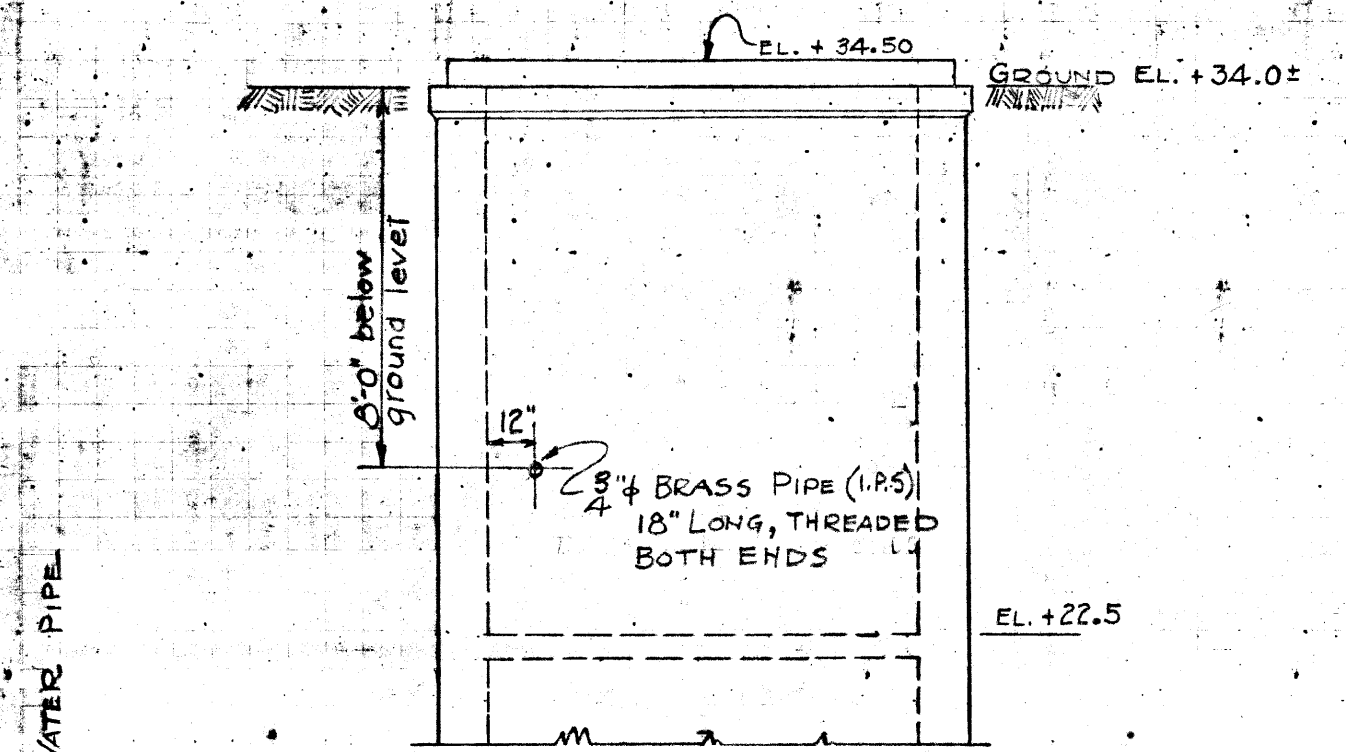
DATE JULY 29 1936

SHEETS No. M-49

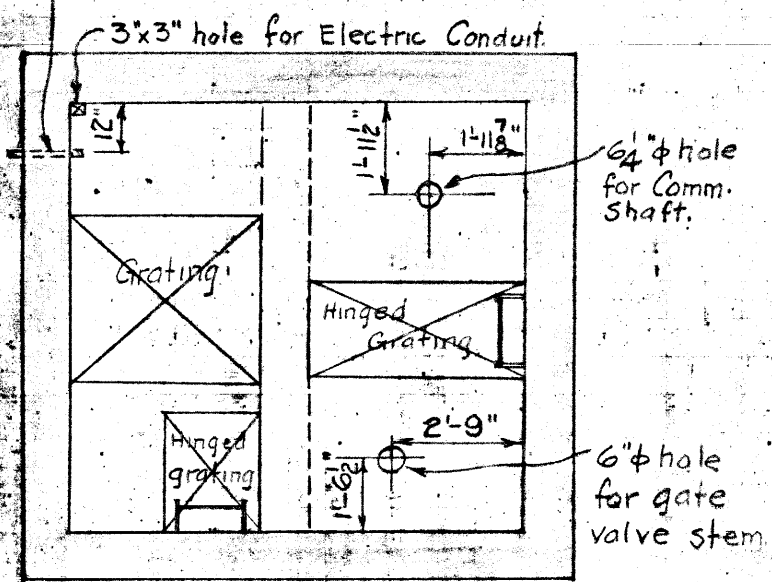
COMPUTED BY F.L.A.

CHECKED BY Micro-Filmed 1965

MADE IN CONNECTION WITH LOCATION OF 3/4" WATER CONNECTION: SIZE HOLES FOR COMMINUTOR & GATE VALVE SHAFT & STEM.

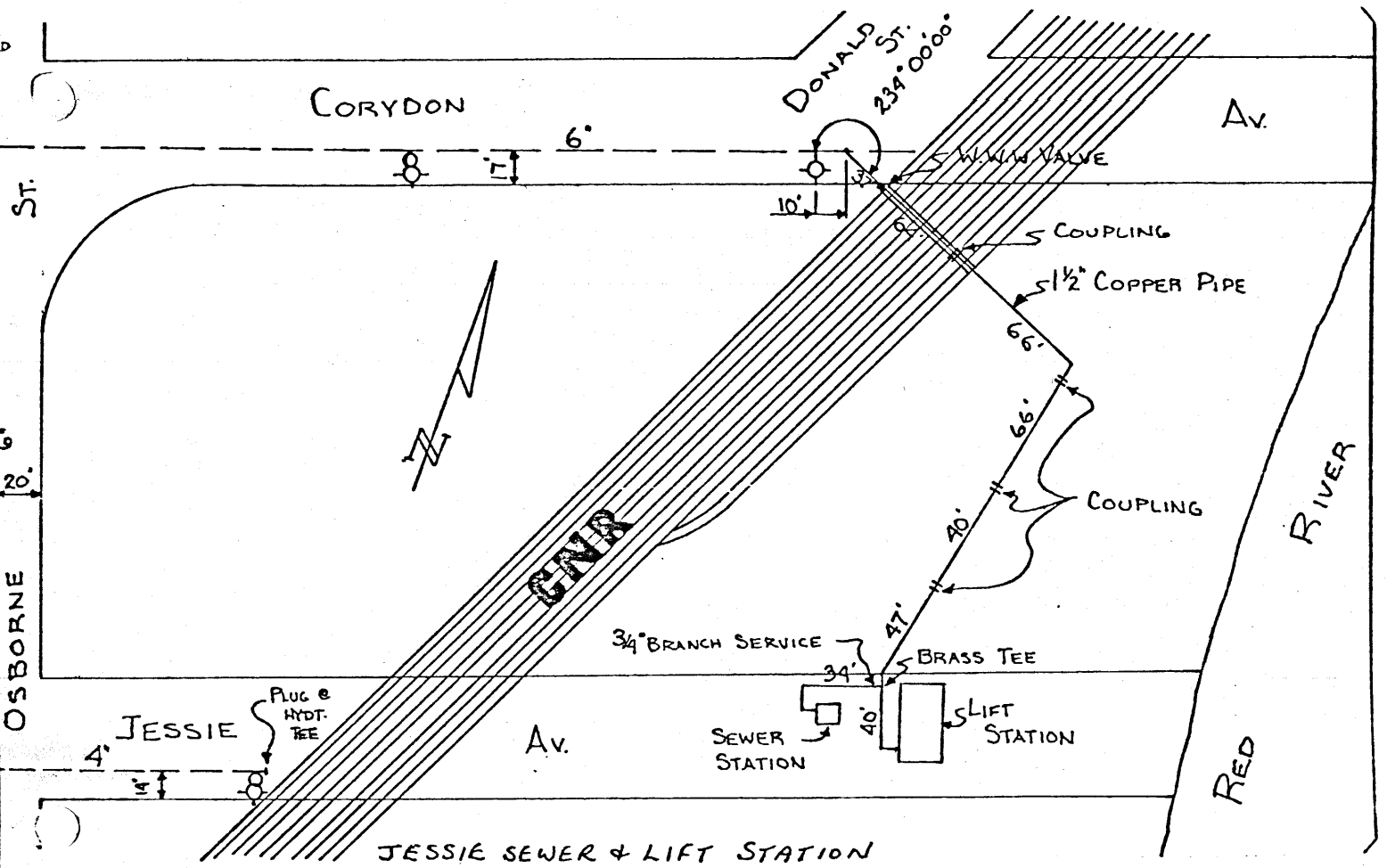


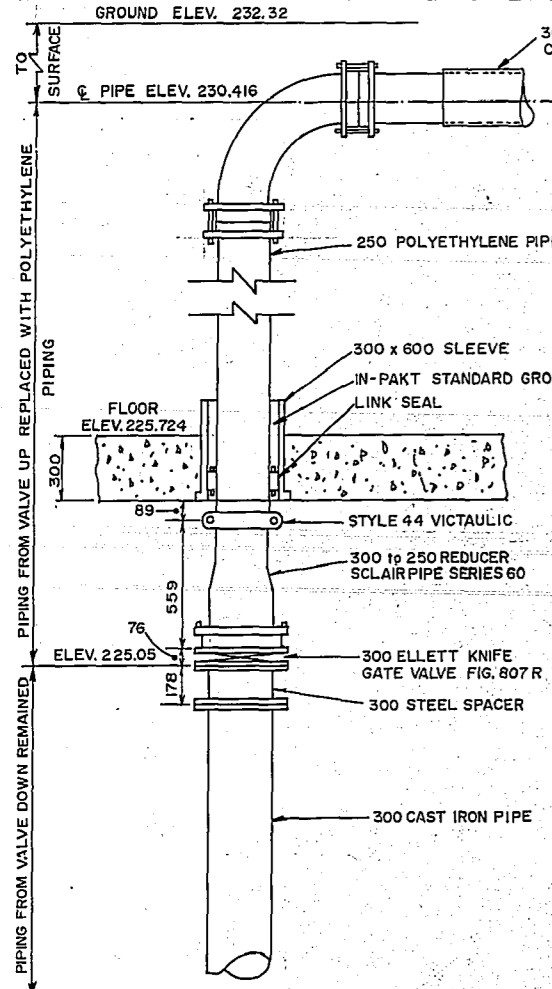
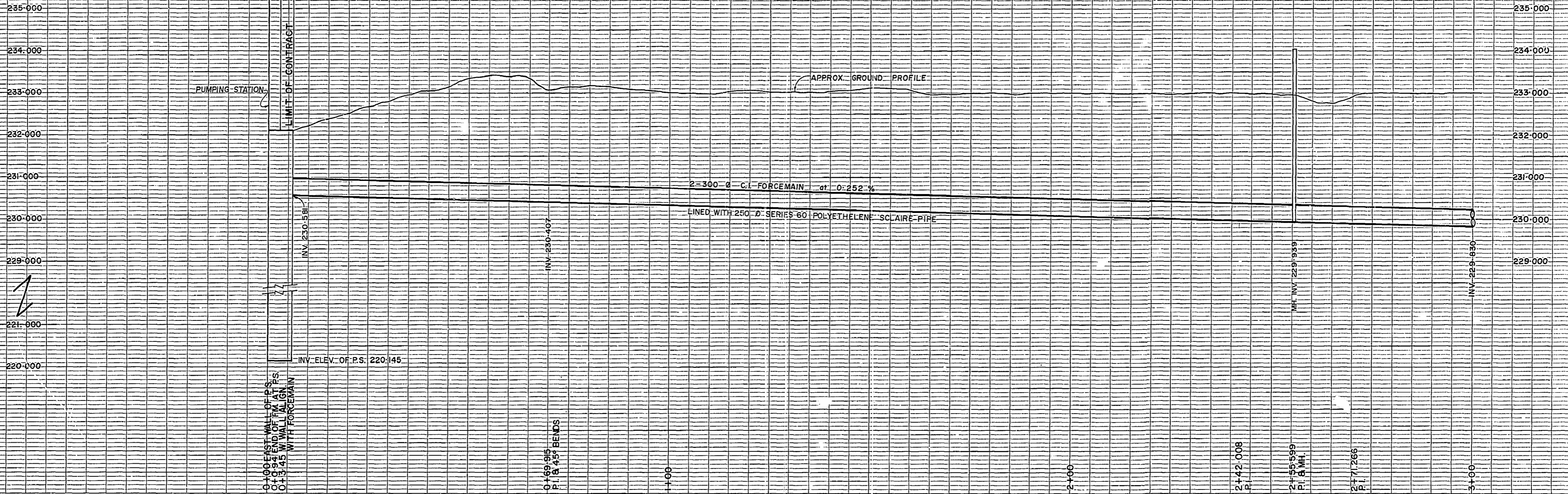
WEST WALL OF PUMP CHAMBER SHAFT
SHOWING LOCATION OF WATER SERVICE CONNECTION



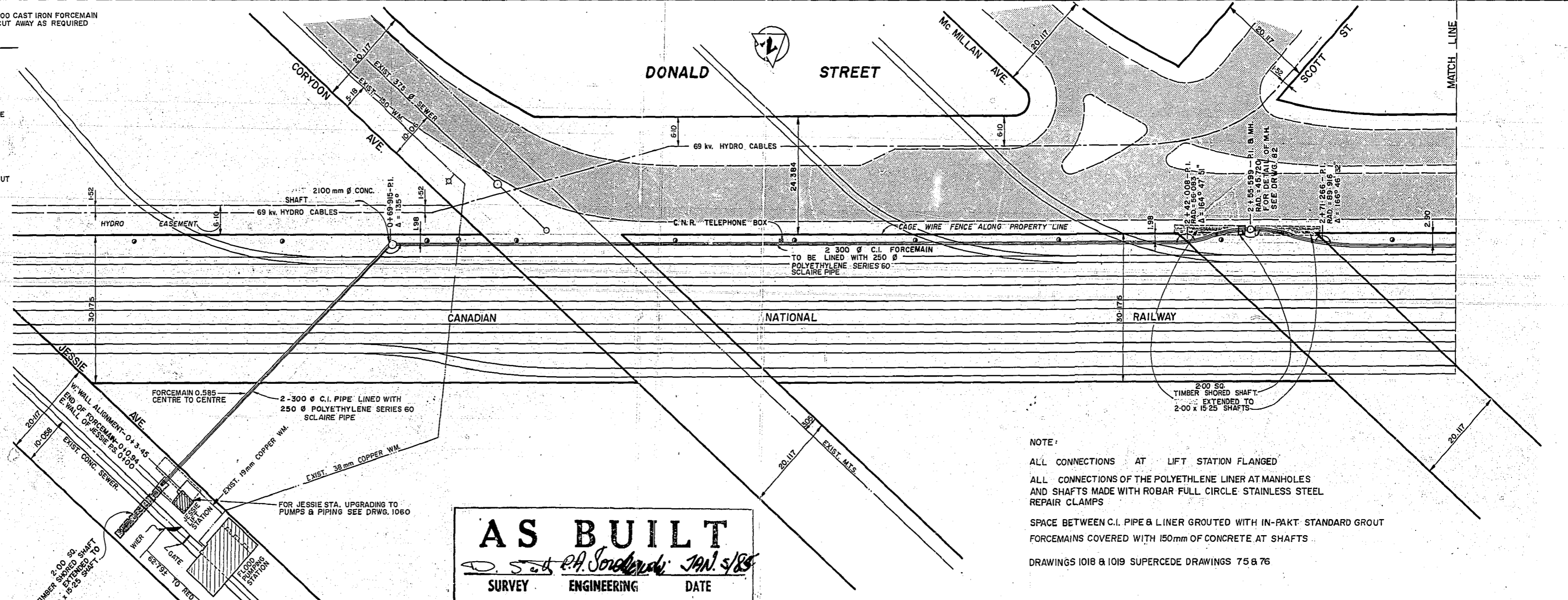
NOTE:
Leave 3"x3" hole in ground floor slab directly above corresponding hole in Platform at EL. +22.5, for Electric Conduit.

PLAN OF PLATFORM AT ELEV. +22.5



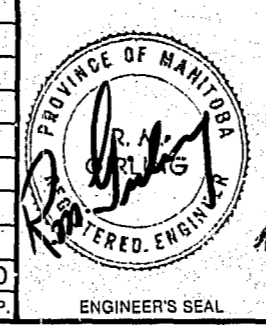


DETAILS OF PIPING AT LIFT STATION
(TYPICAL FOR BOTH FORCEMAINS)
SCALE: N.T.S.



NOTE:
ALL CONNECTIONS AT LIFT STATION FLANGED
ALL CONNECTIONS OF THE POLYETHYLENE LINER AT MANHOLES AND SHAFTS MADE WITH ROBAR FULL CIRCLE STAINLESS STEEL REPAIR CLAMPS
SPACE BETWEEN C.I. PIPE & LINER GROUTED WITH IN-PAKT STANDARD GROUT
FORCEMAINS COVERED WITH 150mm OF CONCRETE AT SHAFTS
DRAWINGS 1018 & 1019 SUPERCEDE DRAWINGS 75 & 76

AS BUILT
D. S. SOROKOWSKI Jan. 5/85
SURVEY ENGINEERING DATE



NO.	REVISIONS	DATE	APP.
1	REVISED TO AS BUILT	05/84	MD

DESIGNED BY: JE	DRAWN BY:
CHECKED BY: <i>R.A. Sorbaugh</i>	DATE: <i>Aug. 25/82</i>
APPROVED: <i>R.M. Gully</i>	DATE: <i>Aug. 25/82</i>

THE CITY OF WINNIPEG
WORKS & OPERATIONS DIVISION
WATERWORKS WASTE & DISPOSAL DEPARTMENT

JESSIE SECONDARY FORCEMAIN
STA. 0+00 - STA. 3+00
RELEASED FOR CONSTRUCTION: *[Signature]* DATE: *Aug 25/82*
SCALE: HORIZ. 1" = 500'
VERT. 1" = 50'
DRAWING NO.: 1018

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES