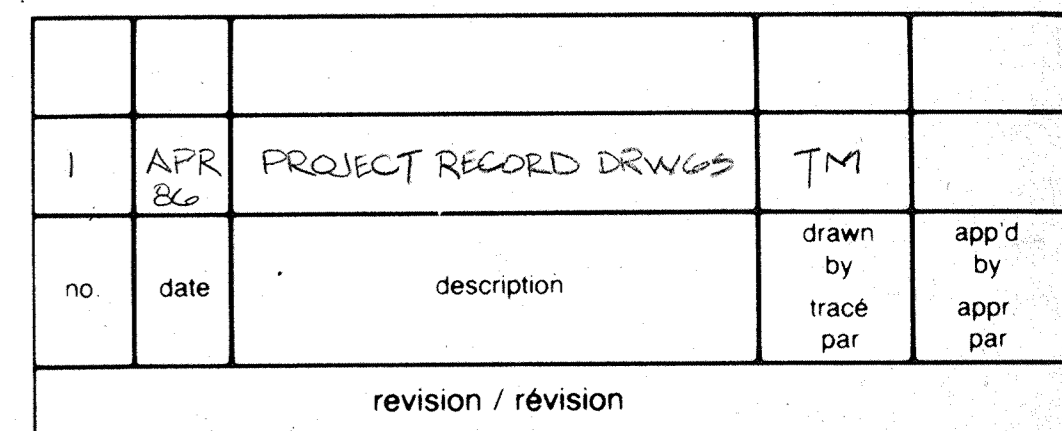
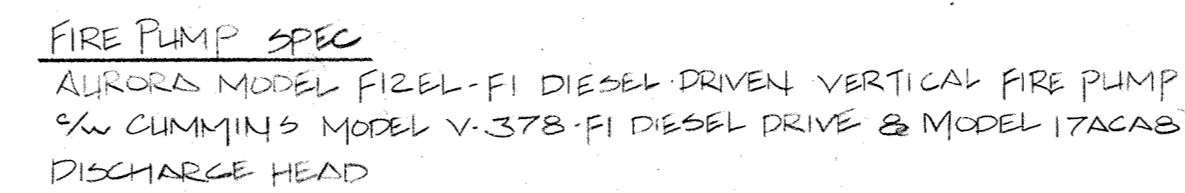


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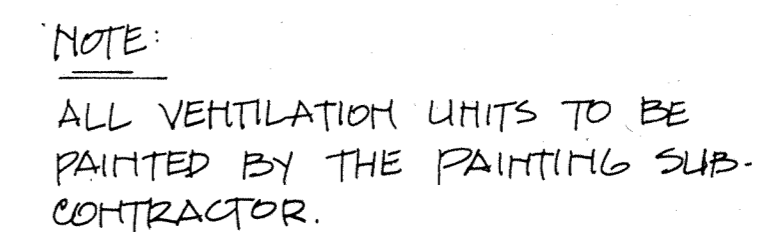


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IKOY FILE - 82-204

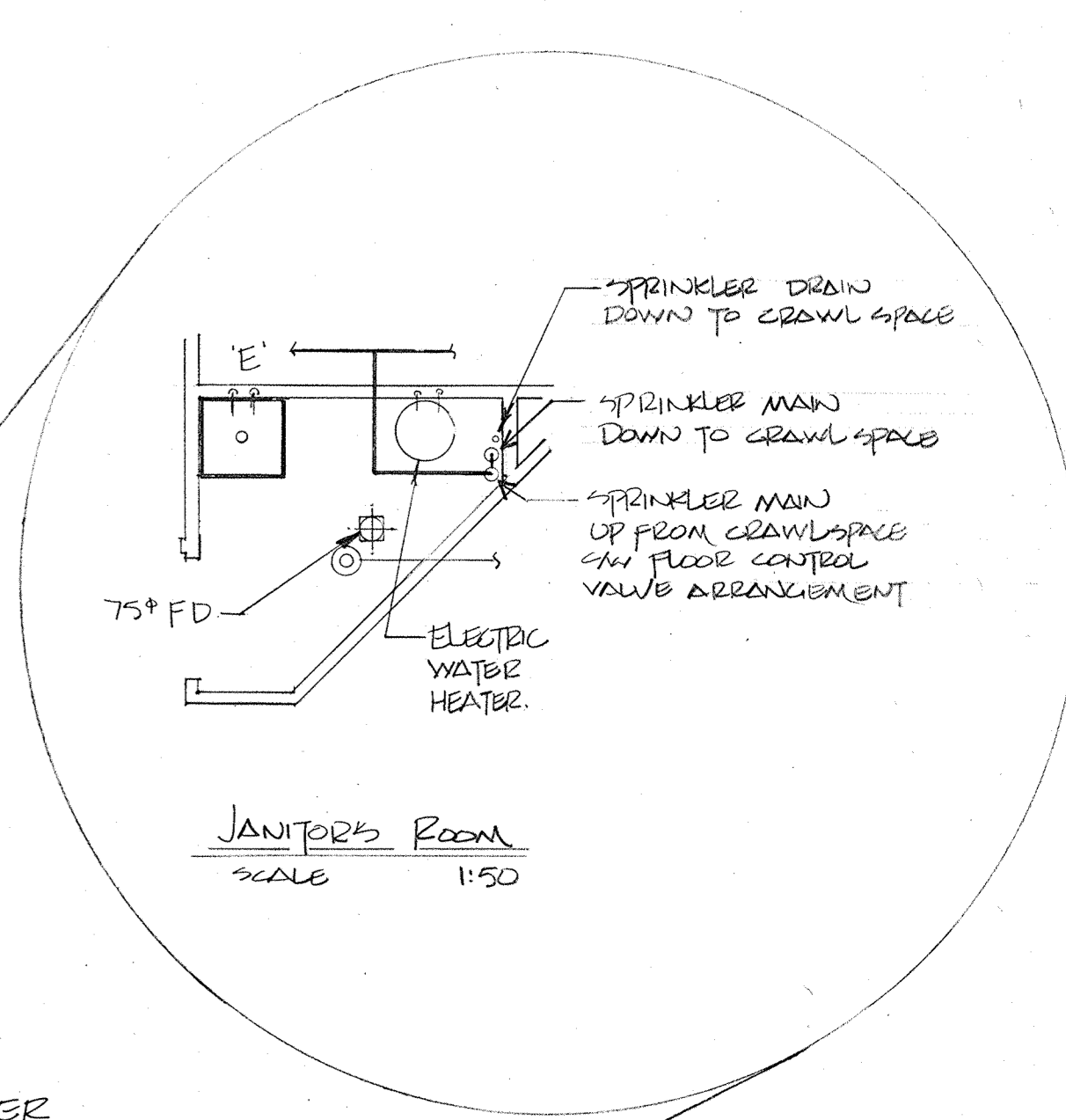
Yoneda & Associates Ltd.


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 REFERENCE NUMBER 83-905




40 SCALE

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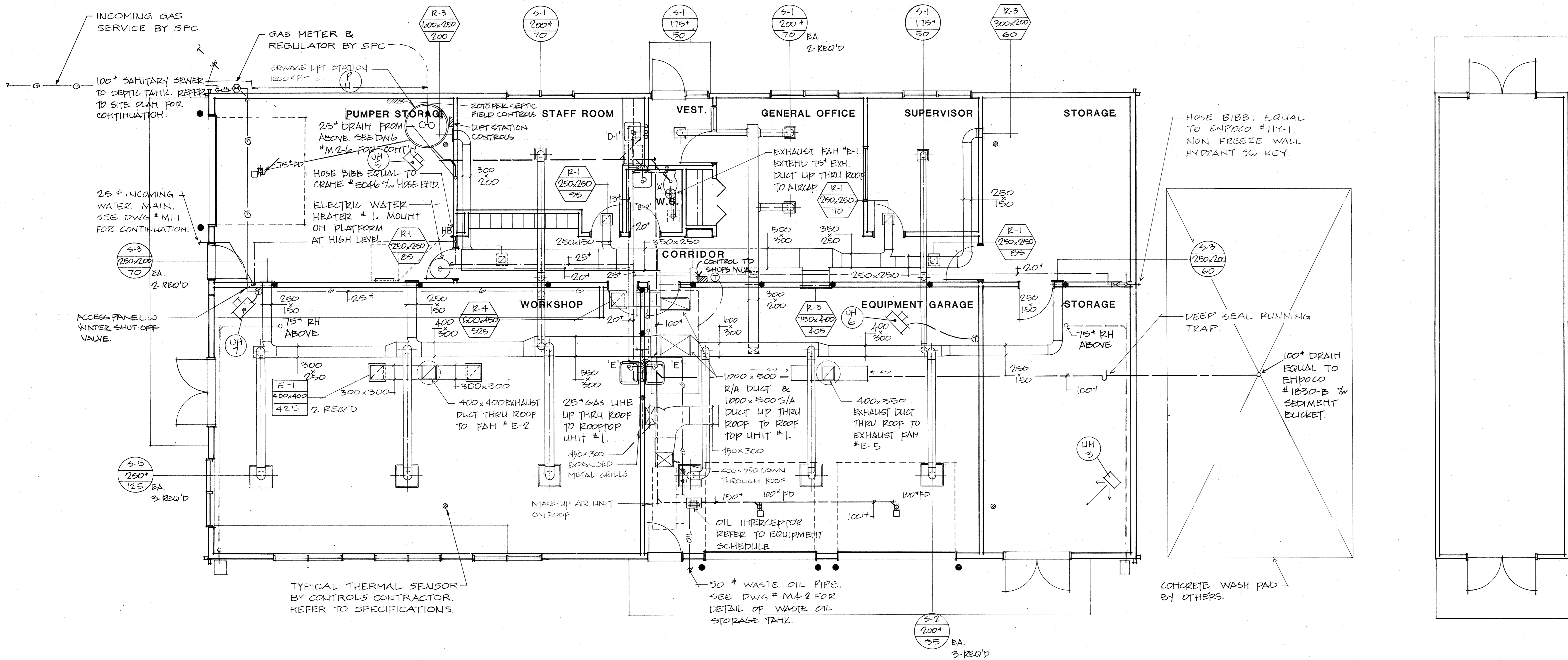
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 Parks Canada
Engineering and Architecture

 Parcs Canada
Génie et architecture

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drawn by / tracé par DG	date / date JUNE 11, 1984
checked by / vérifié par DA	scale / échelle 0 [redacted] 4M
project asset number / numéro du projet d'immobilisation	
reference / drawing number / numéro de référence / dessin HPBA 84/R4/E	sheet no. / feuille no. M2-4

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1	APR 86	PROJECT RECORD DRAWING	TM	
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revision / révision				

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CERTIFICATE OF AUTHORIZATION 6
REFERENCE NUMBER 83-905

Parks
CanadaParcs
CanadaEngineering
and Architecture

Génie et architecture

project title / titre du projet

CONTEMPORARY FACILITIES
BATOCHÉ NATIONAL HISTORIC SITE

BATOCHÉ SASKATCHEWAN

drawing title / titre du dessin

MAINTENANCE BUILDING
PLUMBING & VENTILATION

designed by / conception par

DA

drawn by / tracé par

BL

checked by/vérifié p

DA 0 [REDACTED]

project asset number / numéro du projet d'immobilisation

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HPBA 84/R4/E

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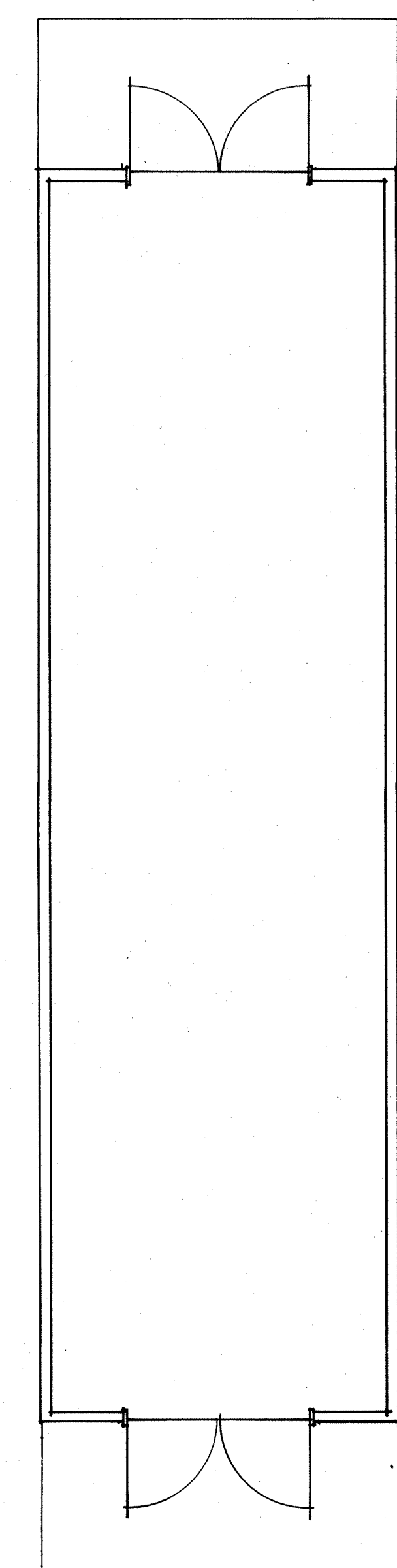
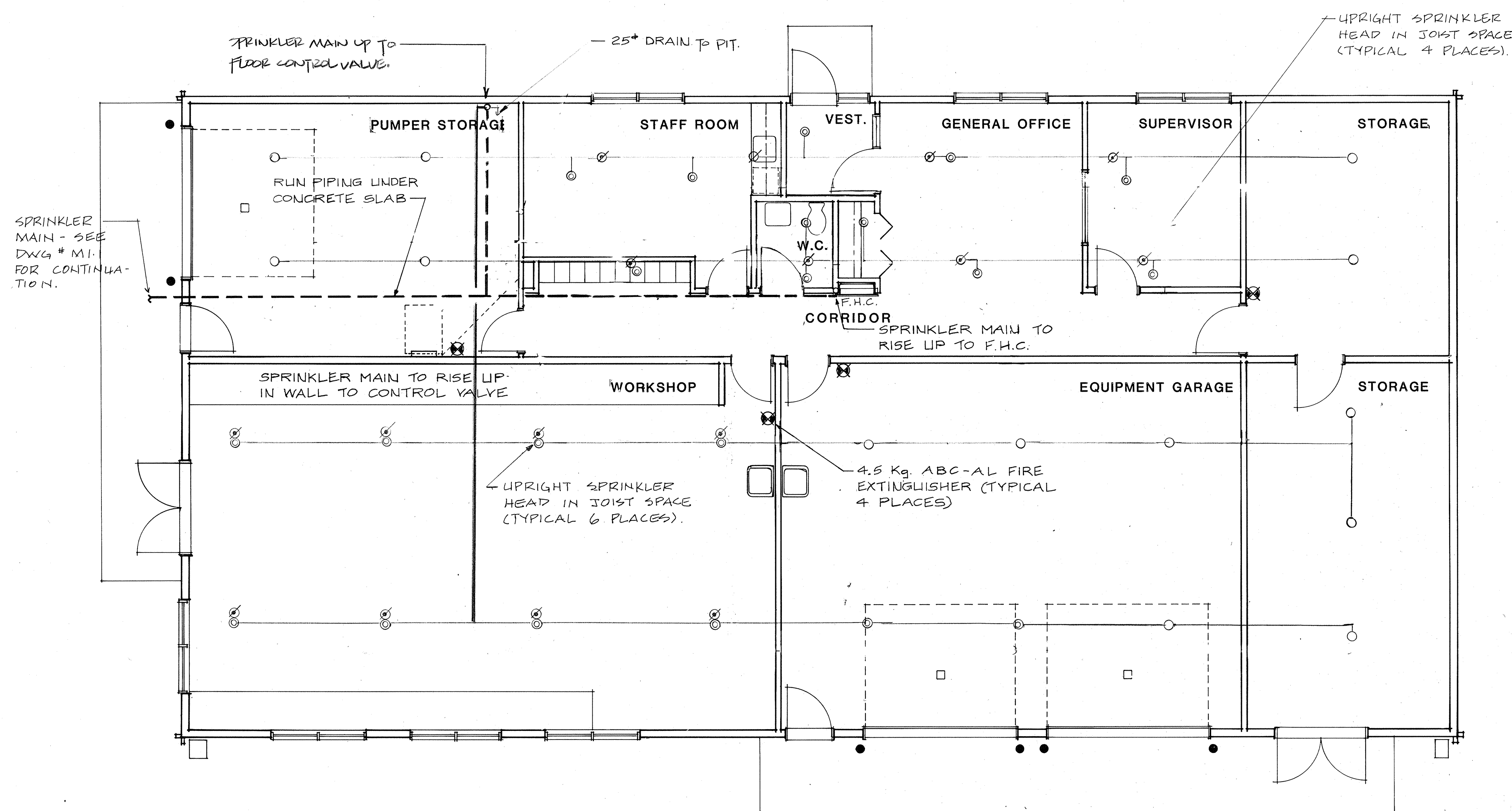
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M2.3

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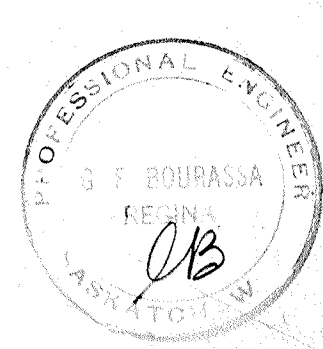
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1	APR 84	PROJECT RECORD REVISED	TM	
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ARCHITECTS
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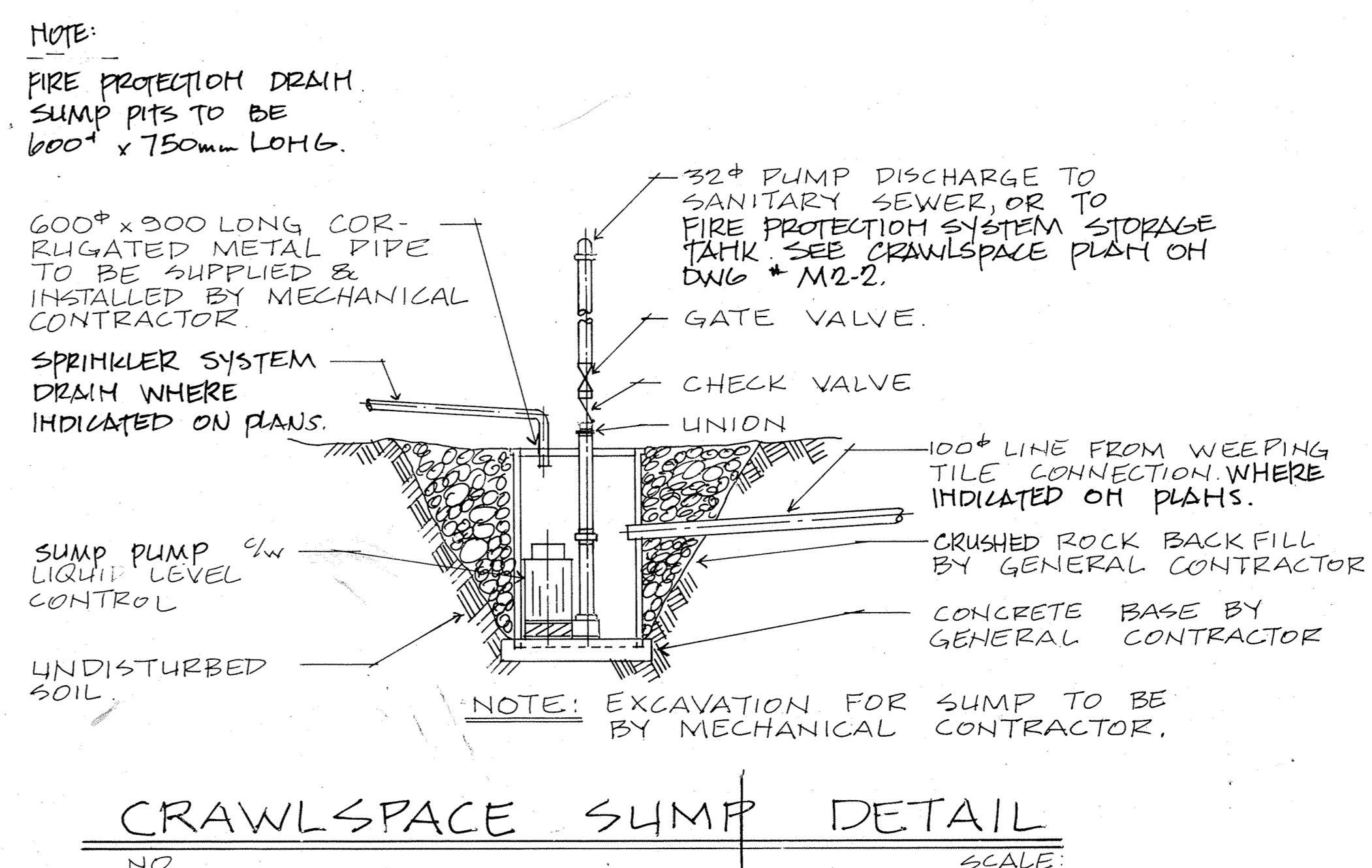
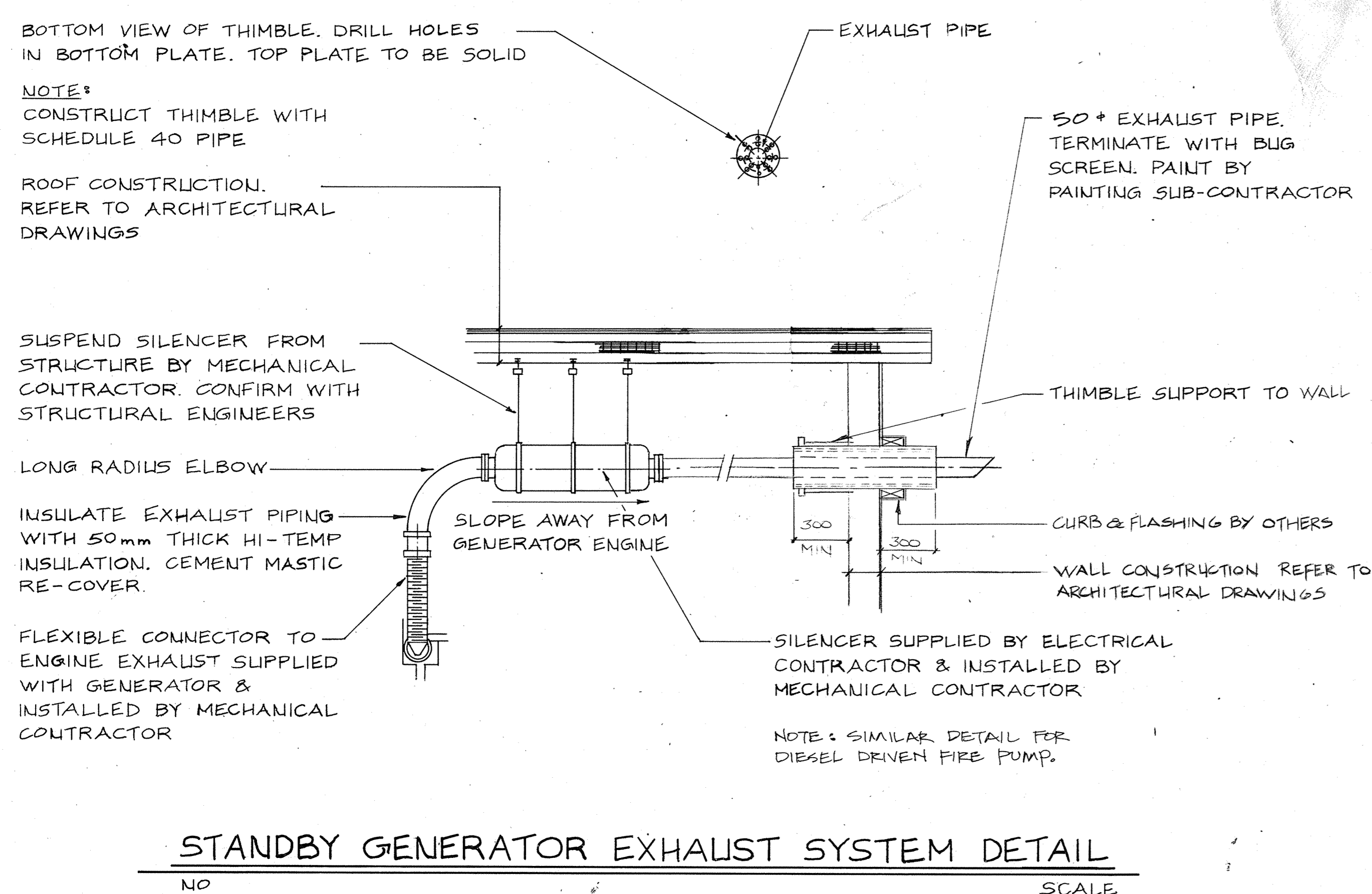
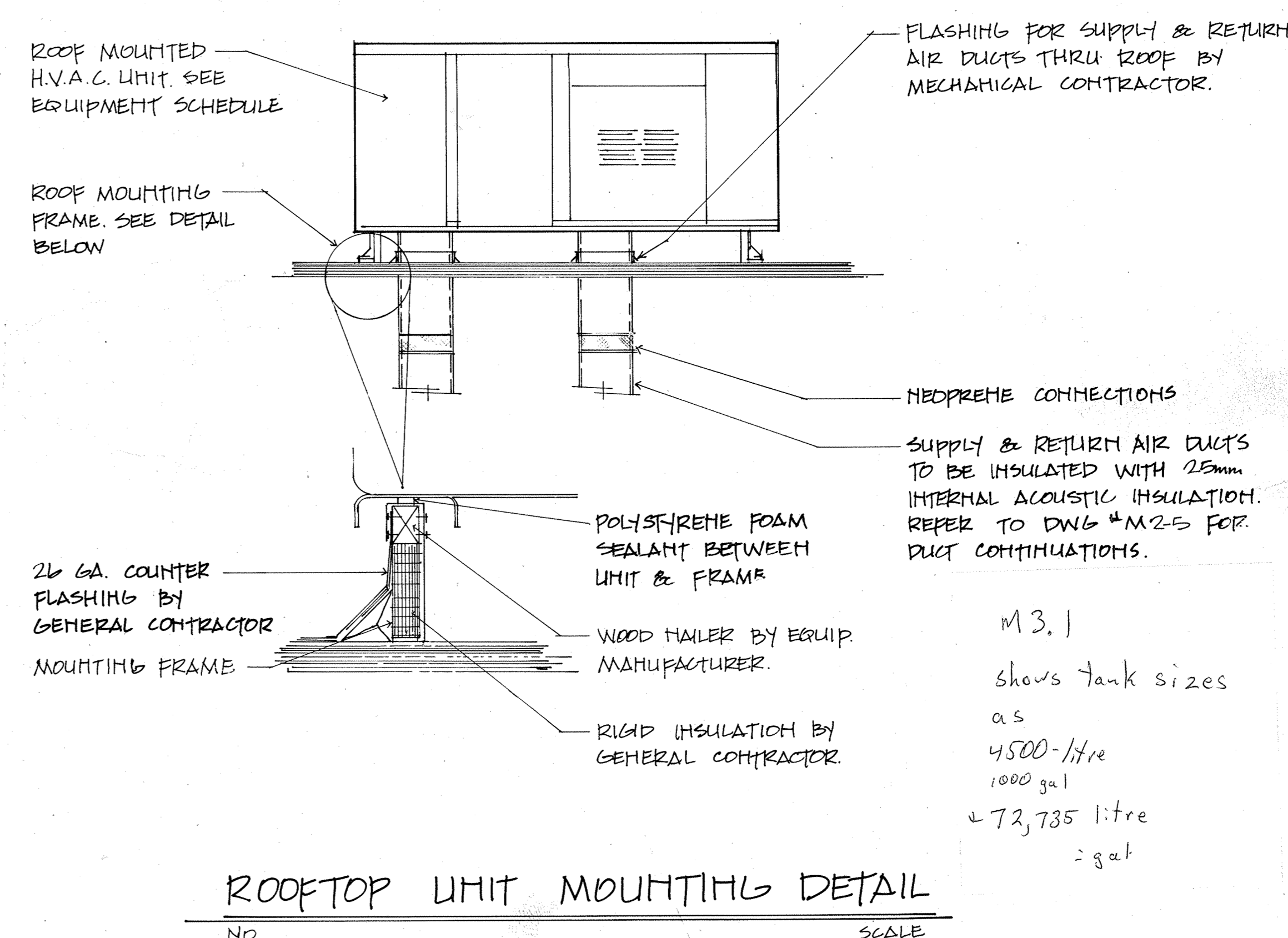
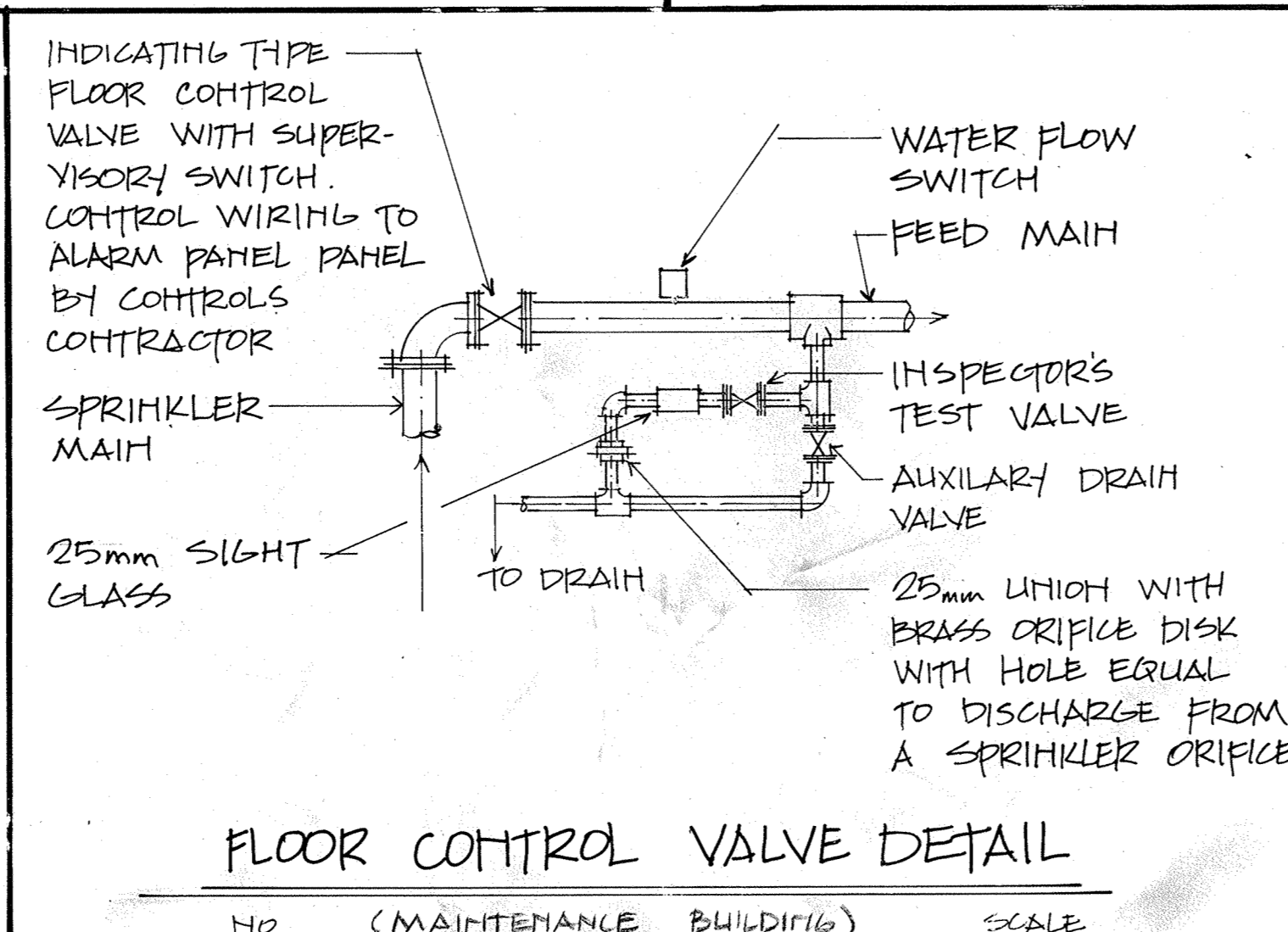
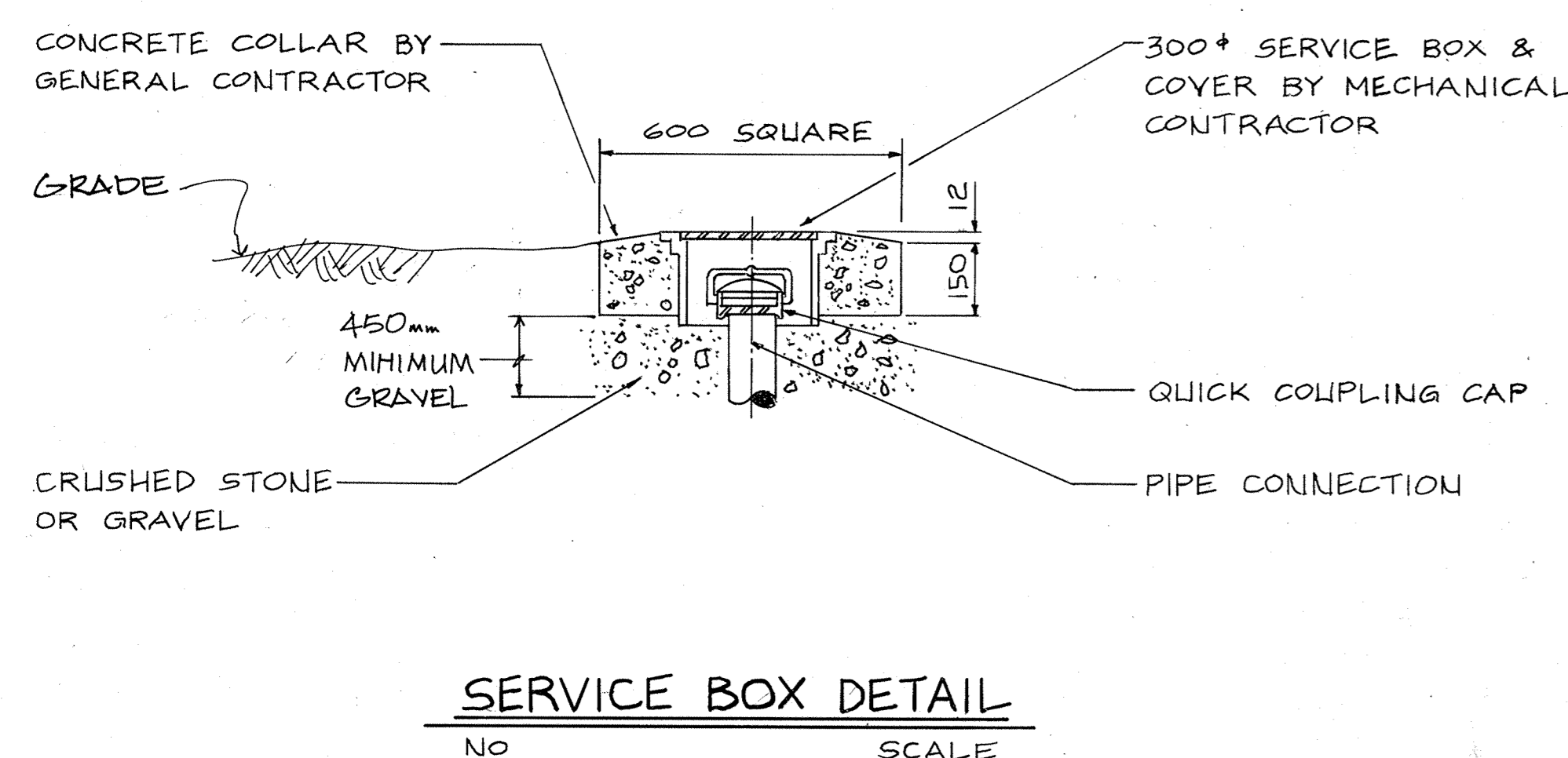
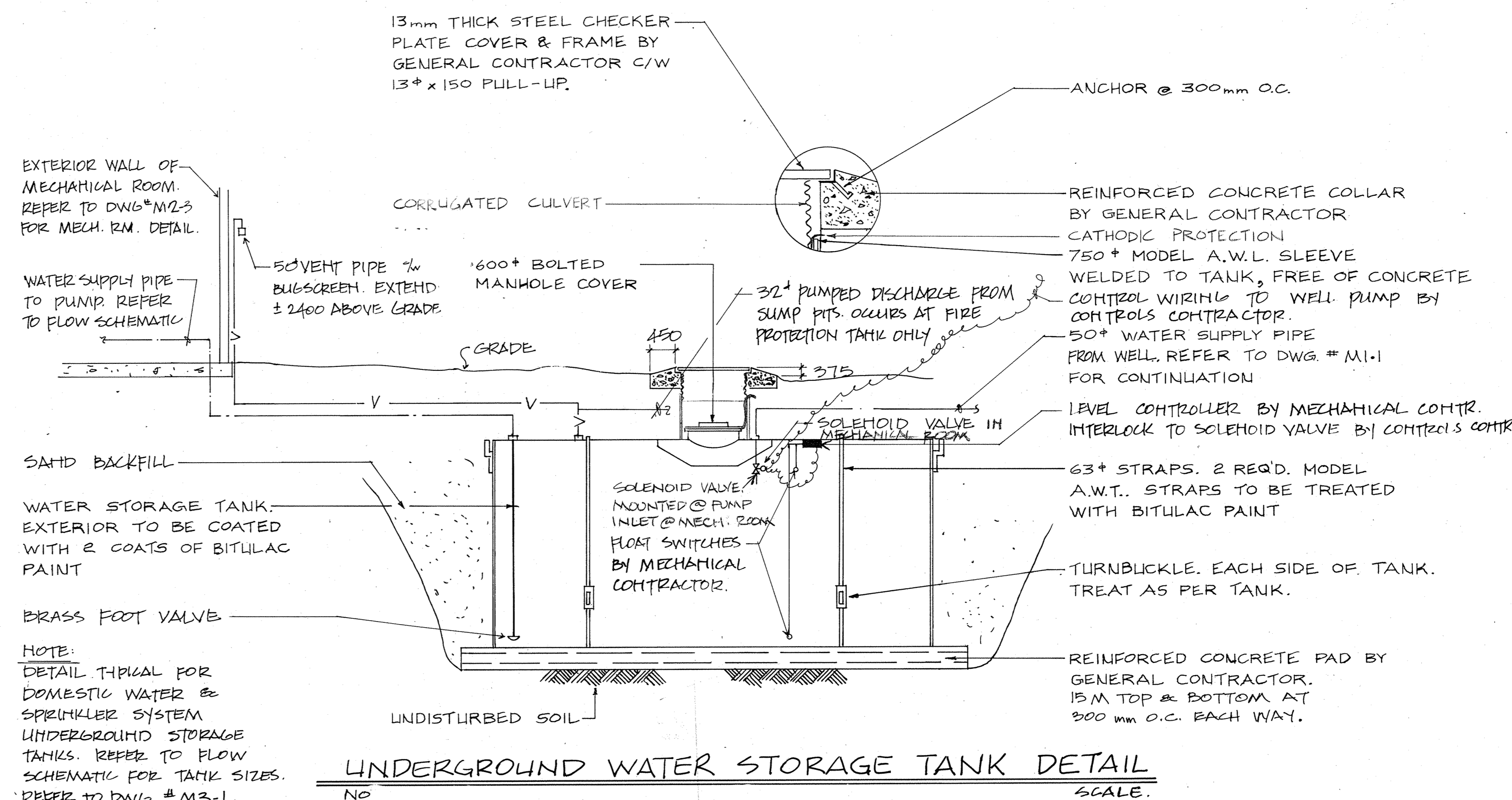
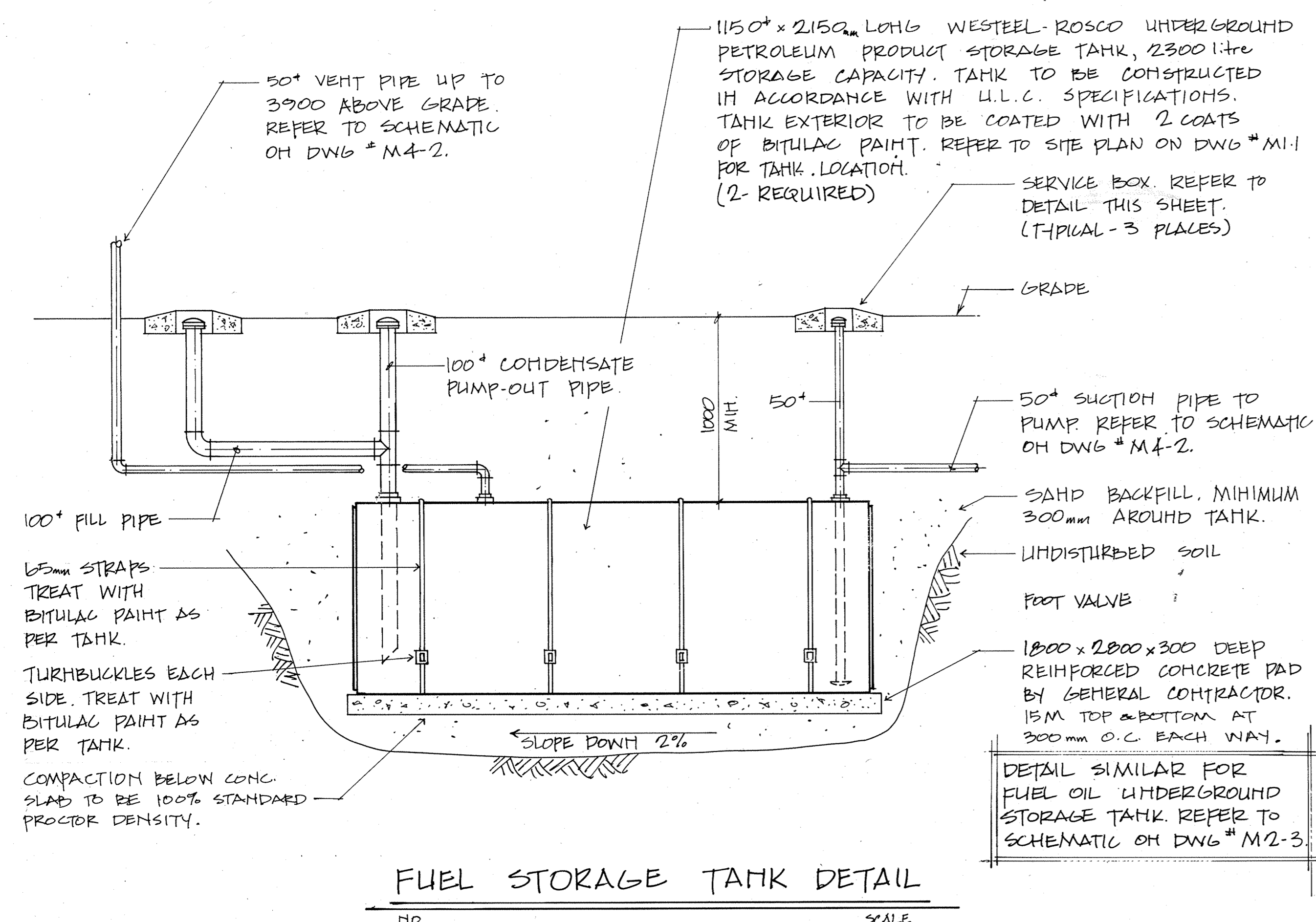


NOTE
 REFER TO DRAWING M.2.2
 FOR SPRINKLER LEGEND.

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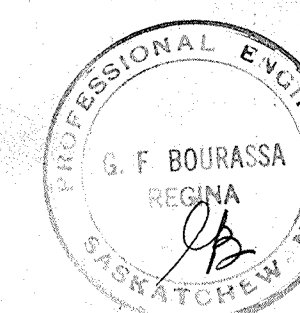
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project title / titre du projet CONTEMPORARY FACILITIES BATOCHÉ NATIONAL HISTORIC SITE BATOCHÉ SASKATCHEWAN		
drawing title / titre du dessin MAINTENANCE BUILDING SPRINKLERS		
designed by / conception par DA	approved by / approuvé par	
drawn by / tracé par DG	date / date JUNE 11, 1984	
checked by / vérifié par DA	scale / échelle 0 2M	
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reference / drawing number / numéro de référence / dessin HPBA 84/R4/E		M2 6

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1	APR 86	PROJECT RECORD DRWG'S	TM	
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REFERENCE NUMBER 83-905



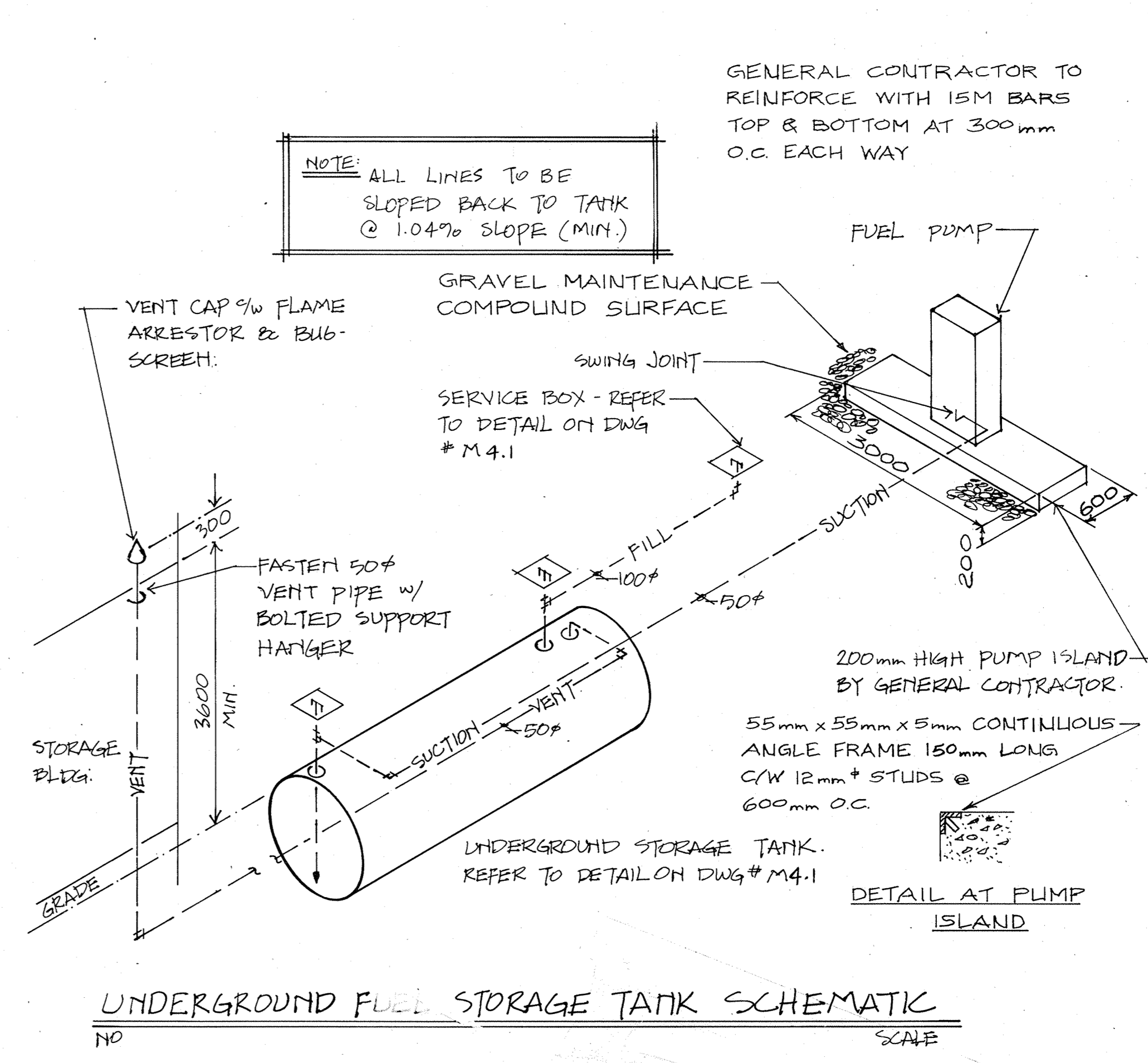
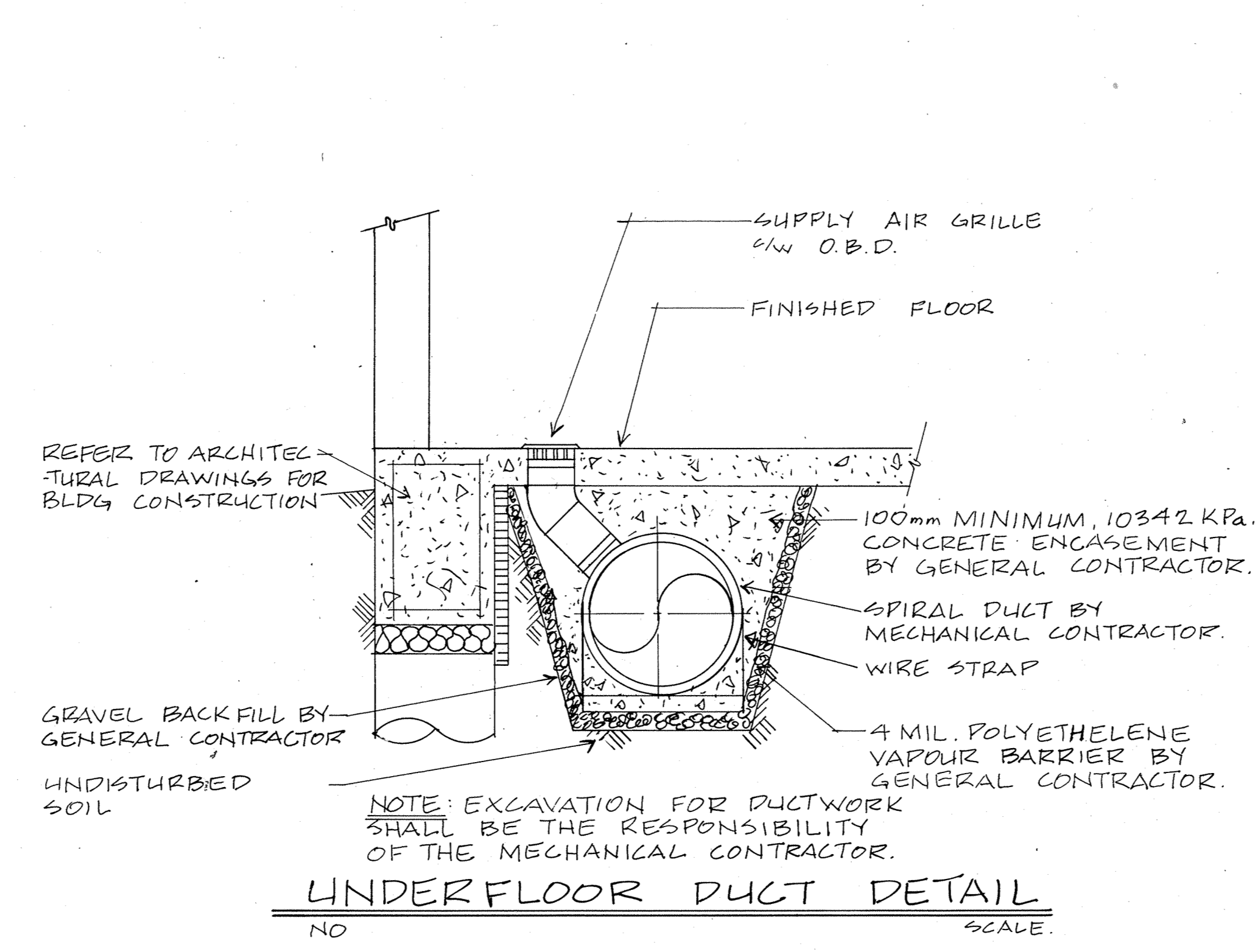
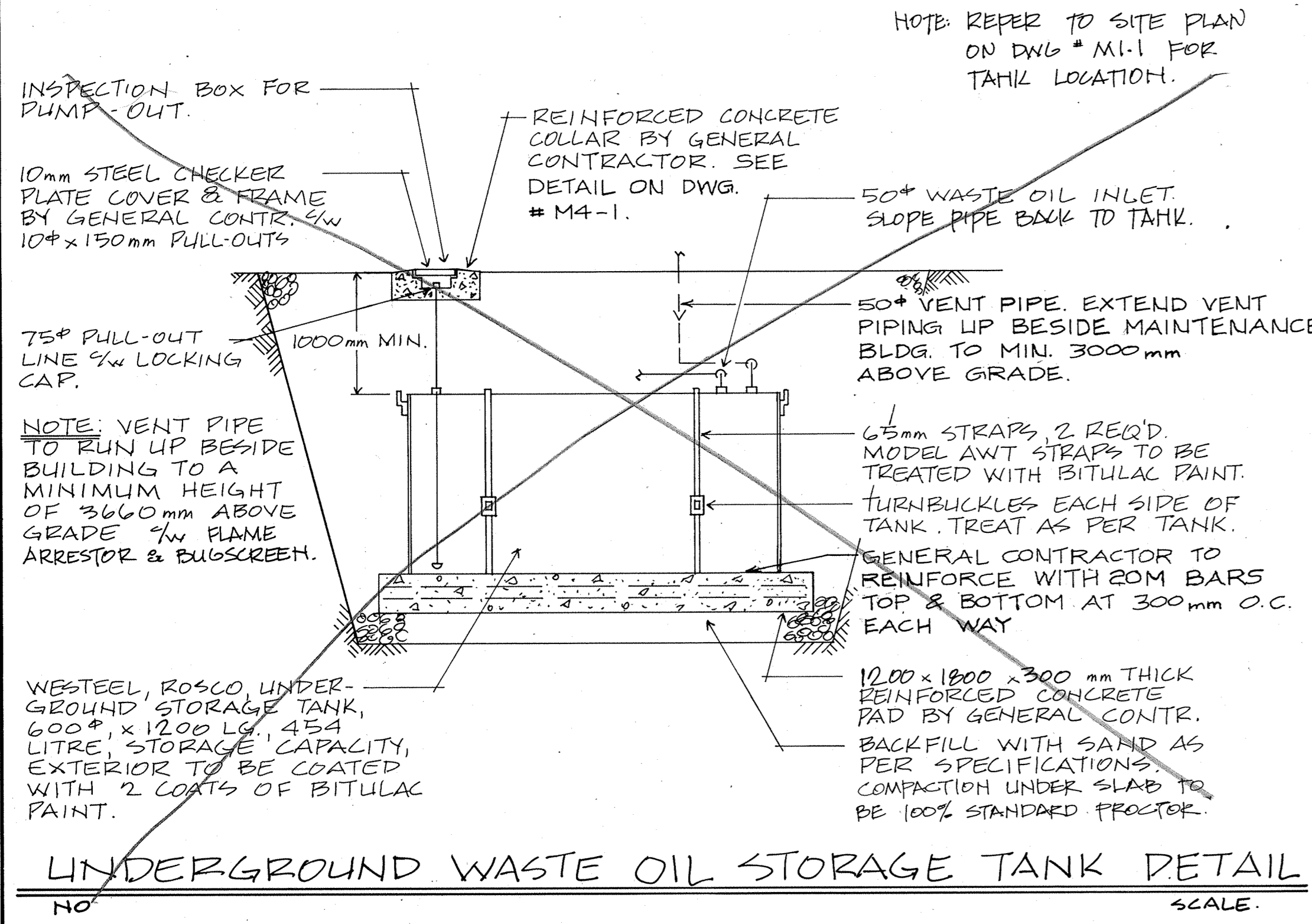
 Parks Canada
Engineering and Architecture

project title / titre du projet

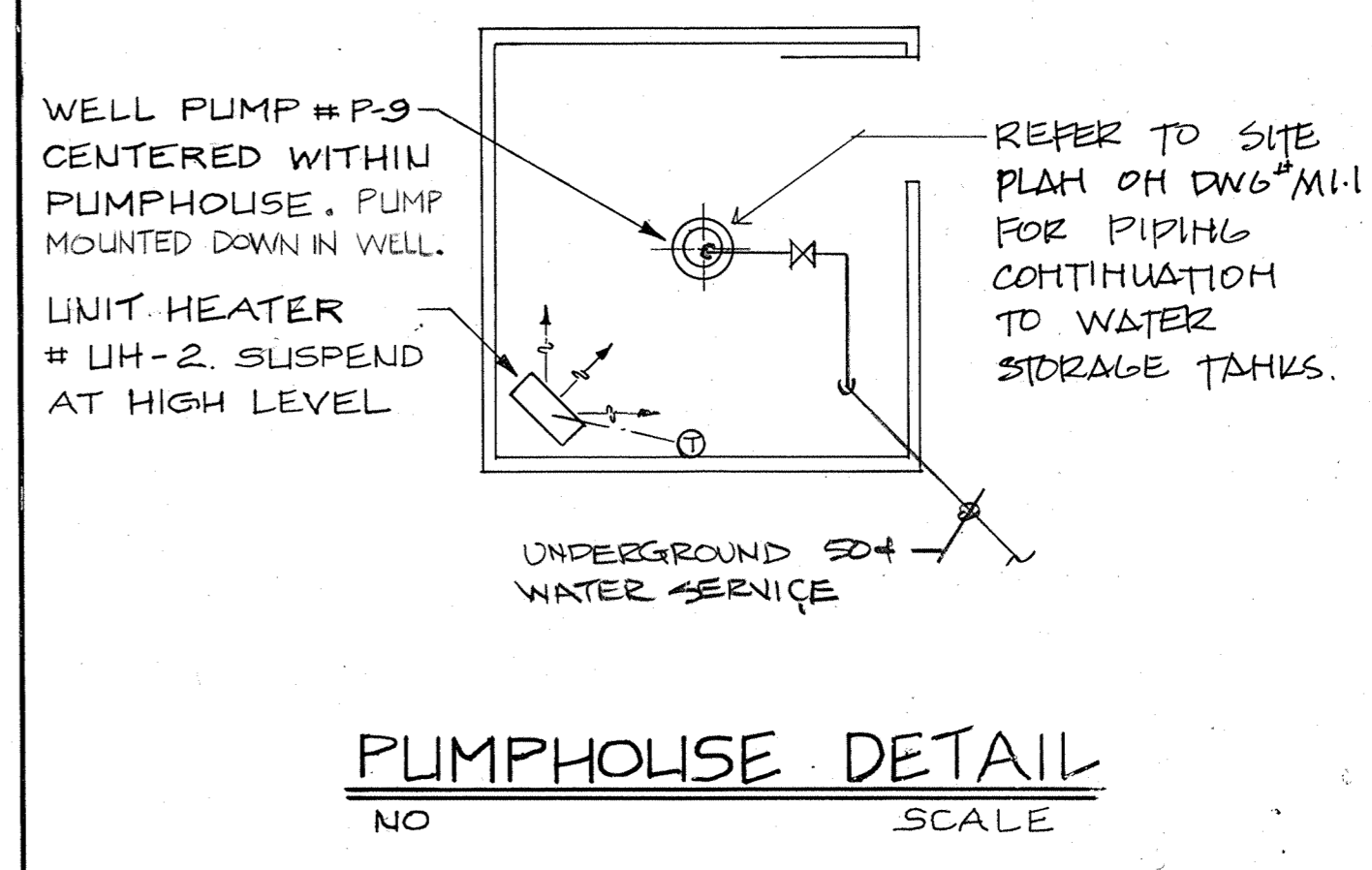
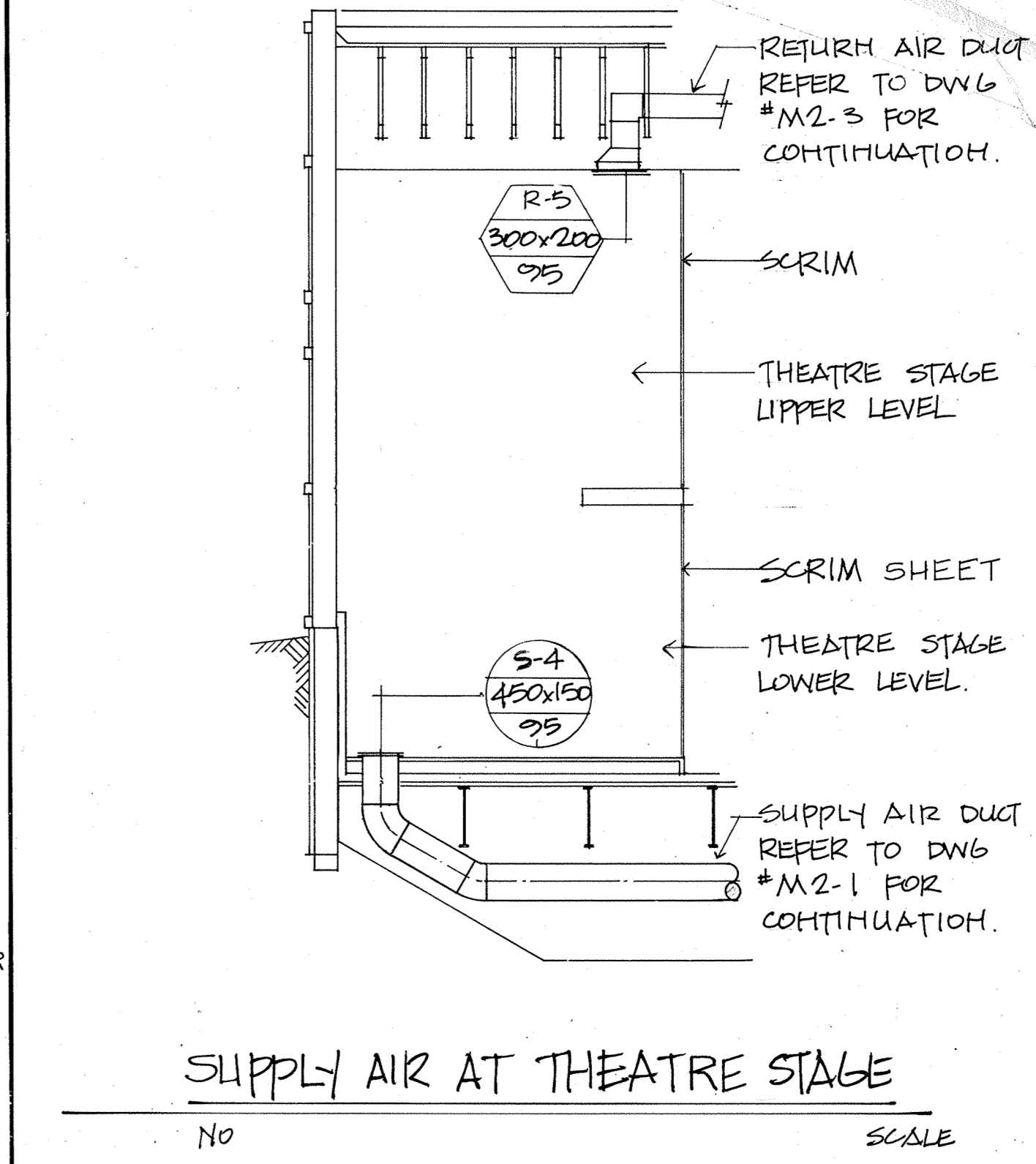
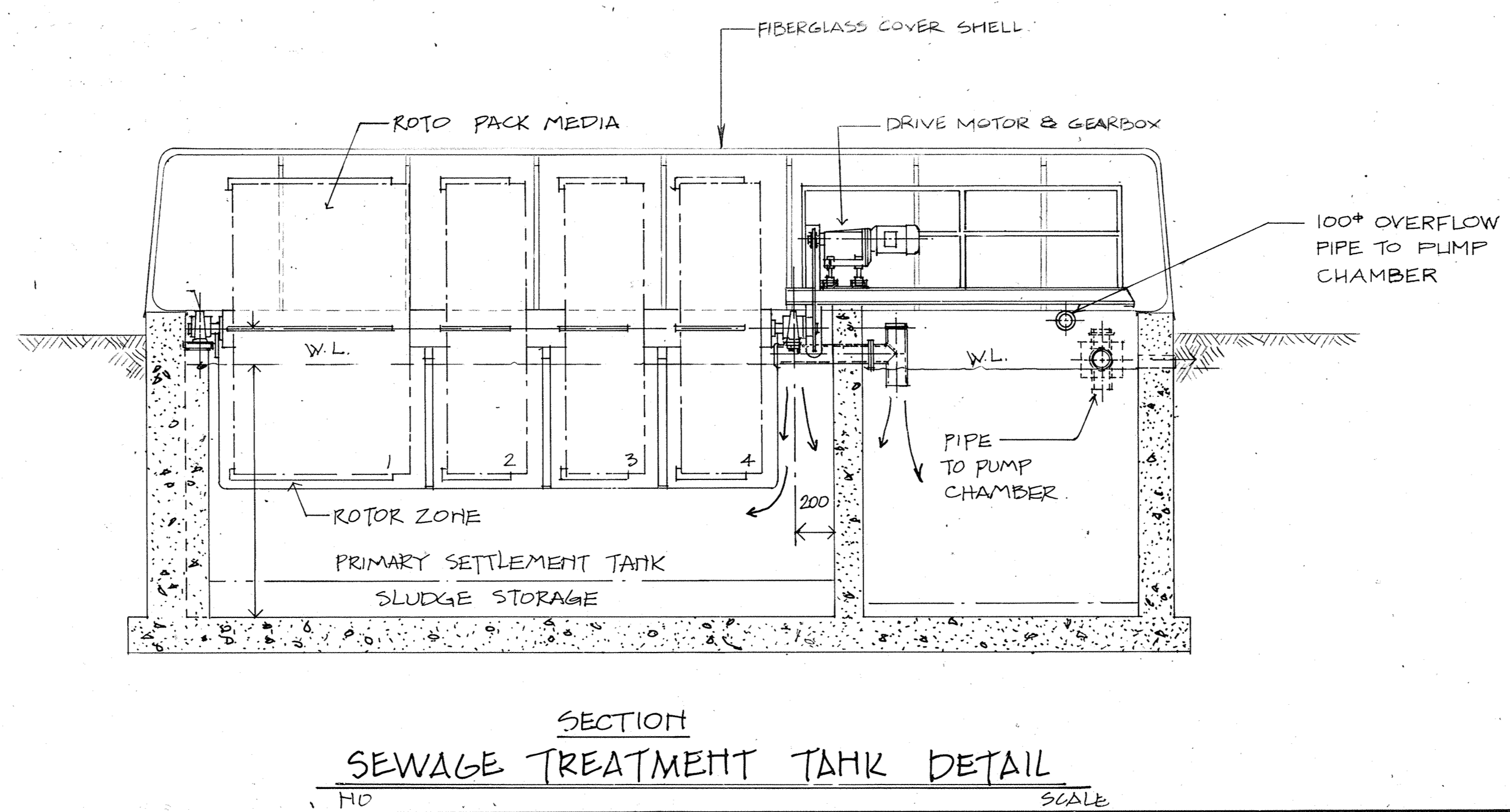
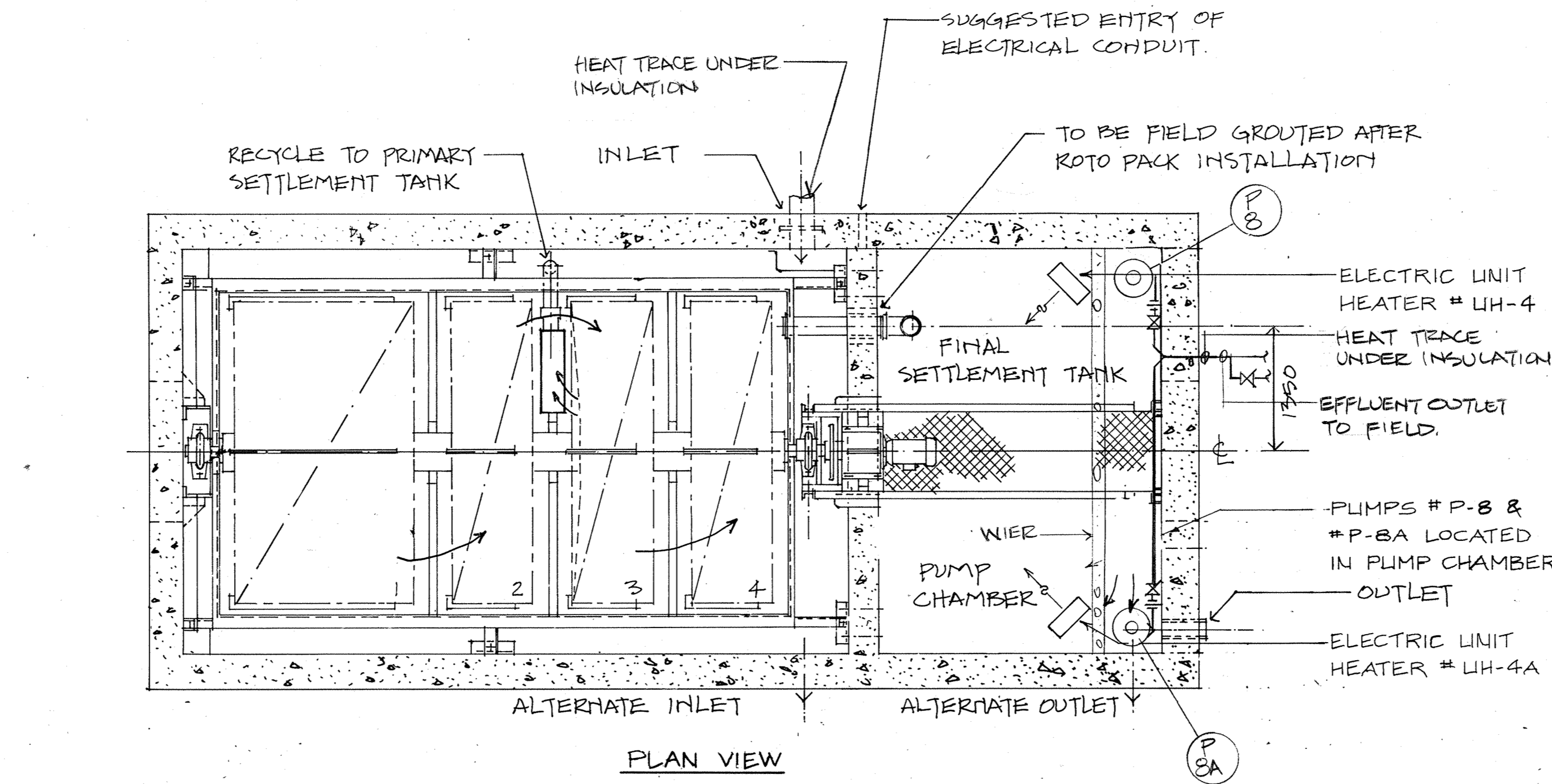
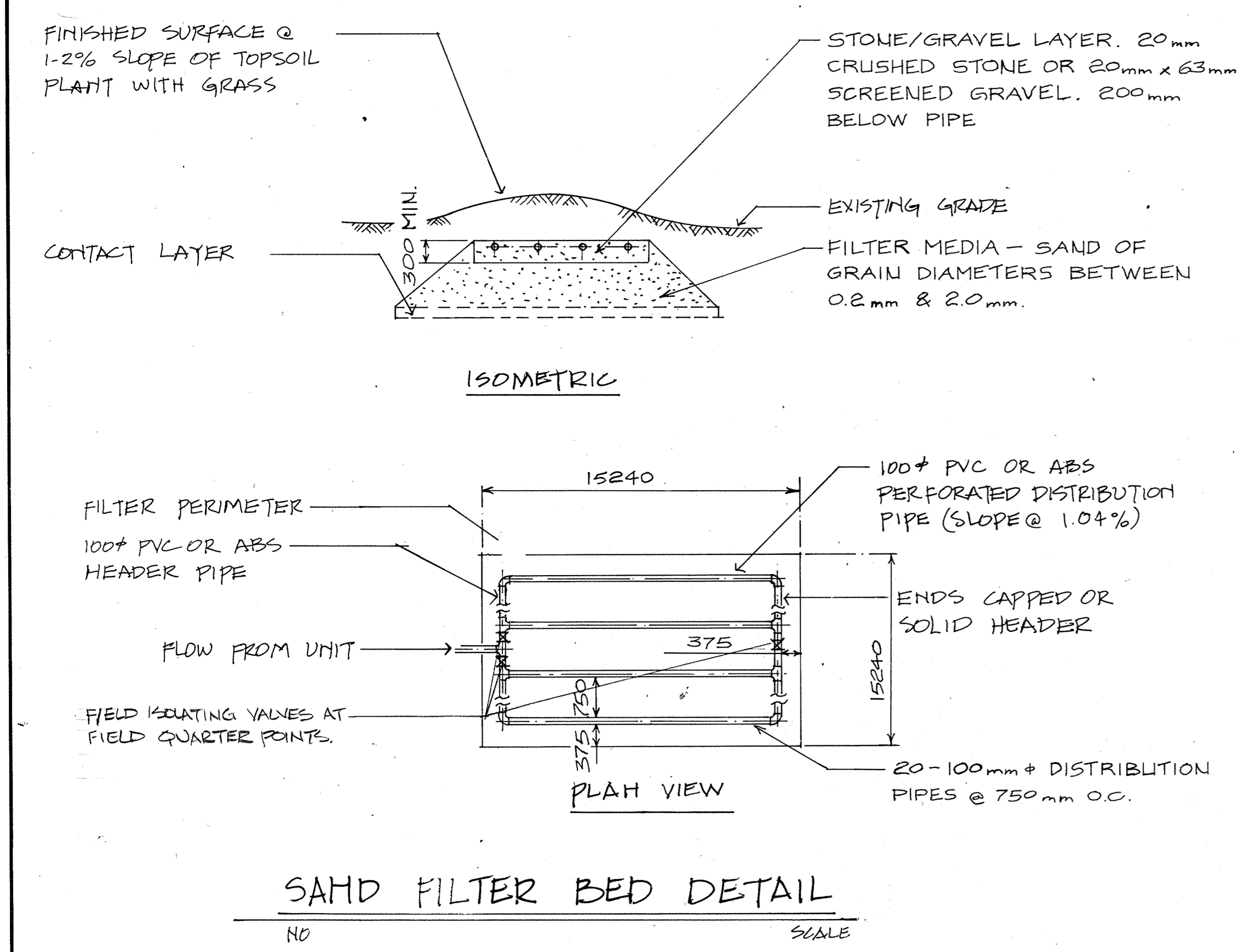
**CONTEMPORARY FACILITIES
BATOCHÉ NATIONAL HISTORIC SITE
BATOCHÉ SASKATCHEWAN**

drawing title / titre du dessin
DETAILS

designed by / conception par DA	approved by / approuvé par
drawn by / tracé par DB, BL	date / date JUNE 11, 1984
checked by / vérifié par DA	scale / échelle NOTED
project asset number / numéro du projet d'immobilisation	
reference / drawing number / numéro de référence / dessin HPBA 84/R4/E	
sheet no. / feuille M4-1	



1. HYDRAULIC CAPACITY	18.2 M ³ /DAY
2. BIO SUPPORT MEDIA AREA	448 SQ.M.
3. BIO SUPPORT MEDIA DIAMETER	1.85 M.
4. SLUDGE STORAGE CAPACITY - FINAL	1.0 M ³
5. SLUDGE STORAGE CAPACITY - PRIMARY	9.1 M ³
6. FINAL SETTLING TANK CAPACITY	4.8 M ³
7. PRIMARY SETTLING TANK CAPACITY	14.7 M ³
8. PUMP CHAMBER CAPACITY	3378 L.



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1	APR 88	PROJECT RECORD DRAWING	TM	

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ARCHITECTS
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Consulting Professional Engineers
CERTIFICATE OF AUTHORIZATION #6
REFERENCE NUMBER 83-905

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Engineering and Architecture

Parcs Canada
Génie et architecture

project title / titre du projet
**CONTEMPORARY FACILITIES
BATOCHE NATIONAL HISTORIC SITE
BATOCHE SASKATCHEWAN**

drawing title / titre du dessin
DETAILS

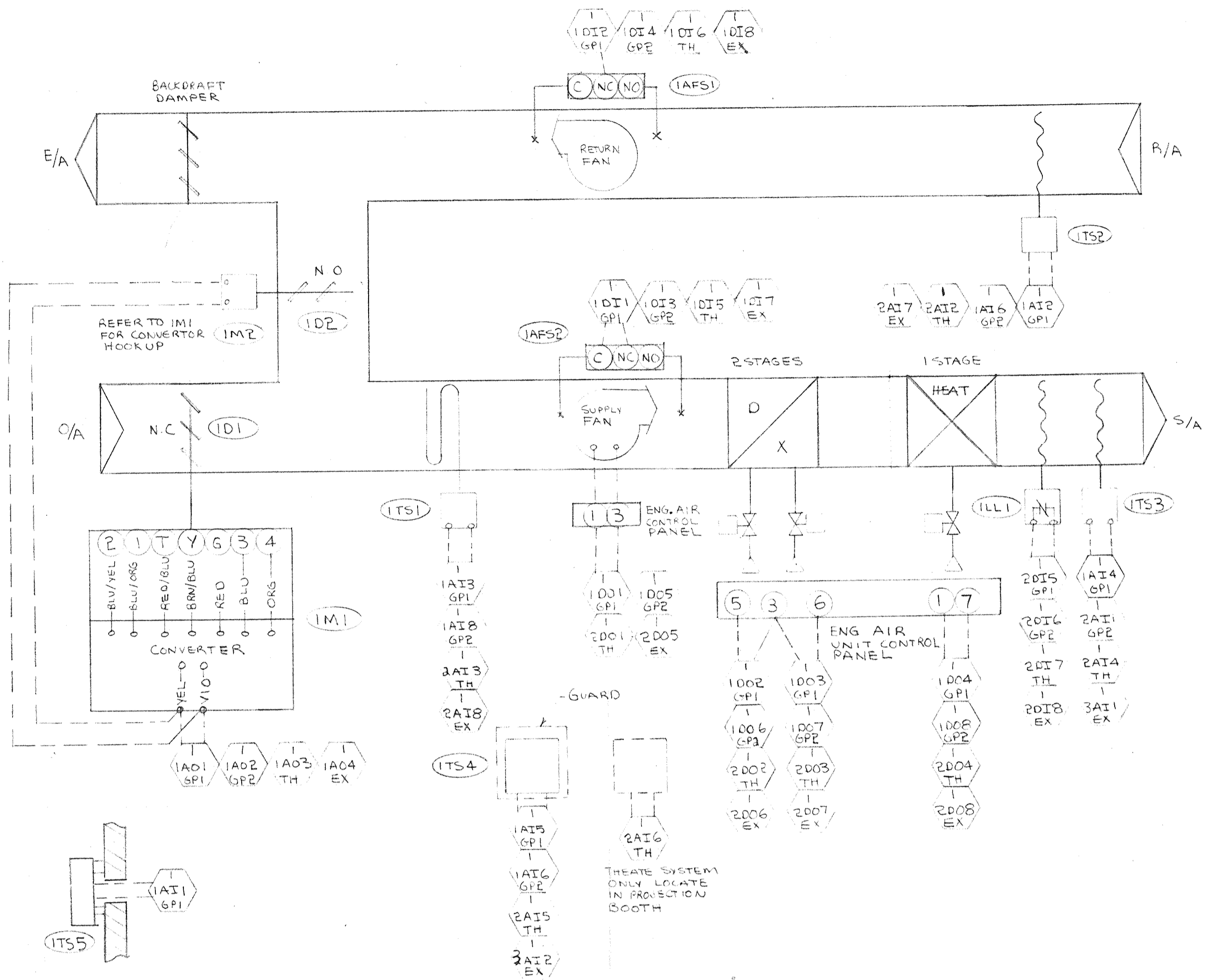
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sheet no. / feuille no.
M4 2

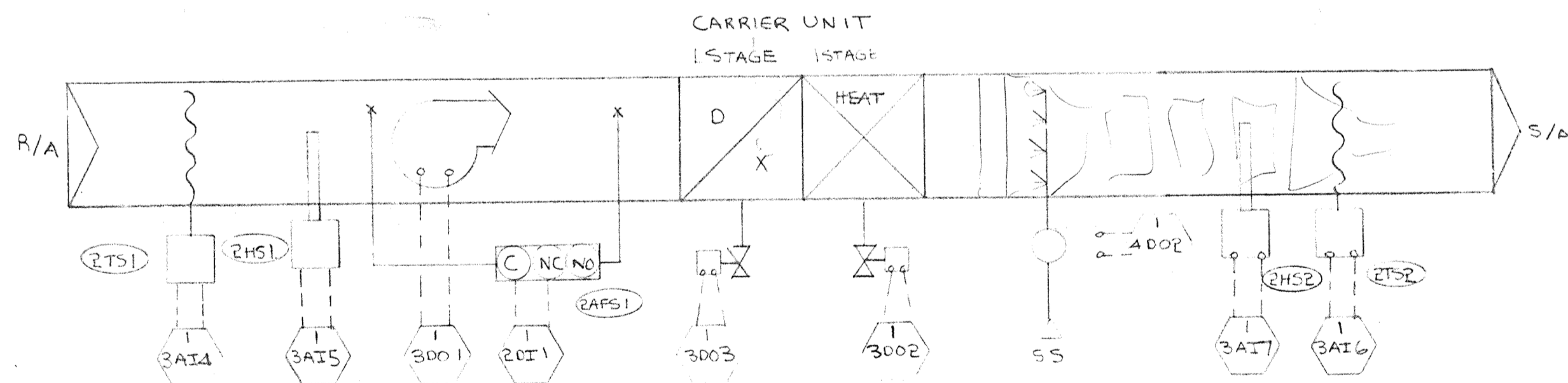
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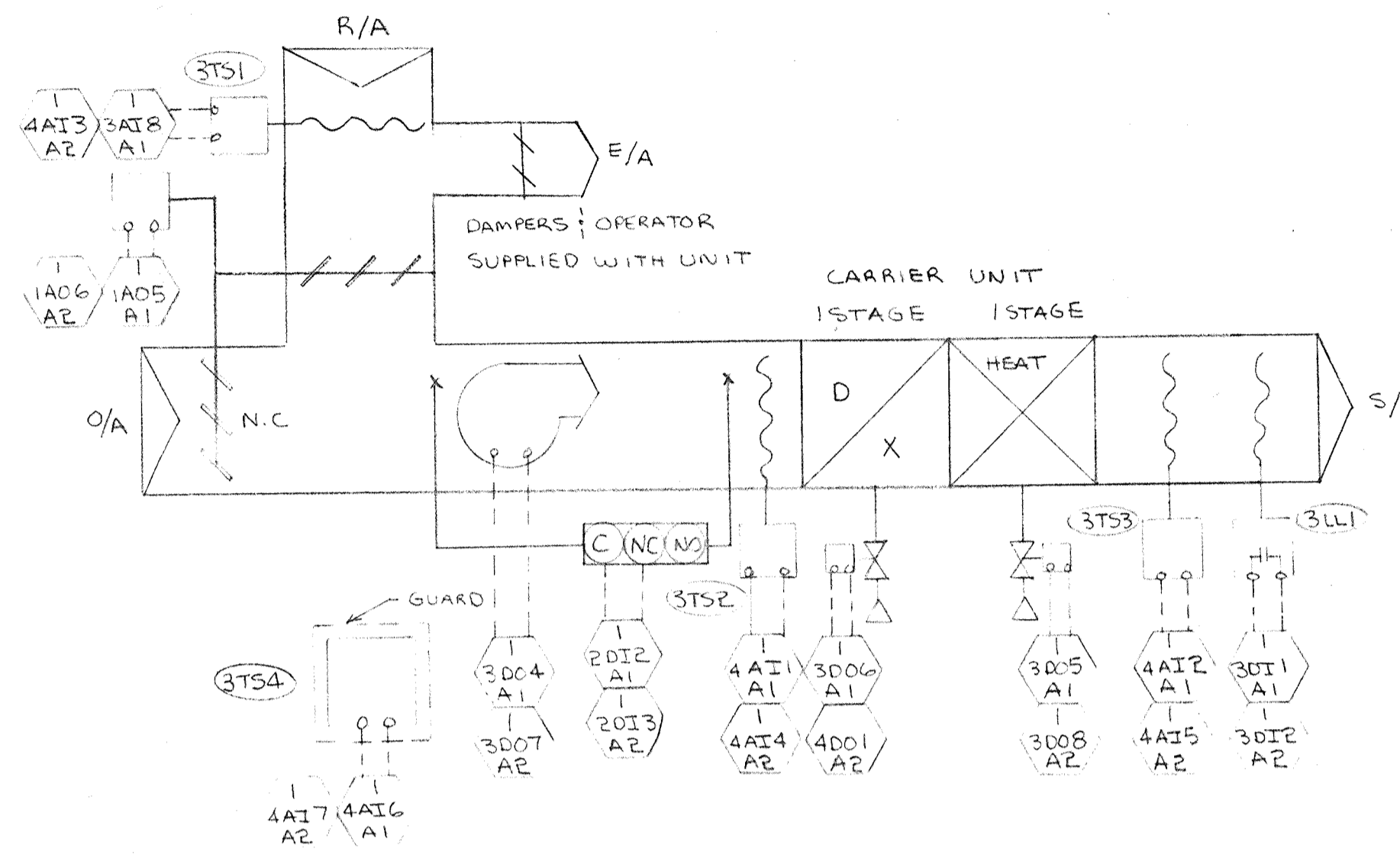
SYSTEM NO 1 GRAND PASSAGE (2 UNITS), THEATRE & EXHIBIT HALL CONTROL



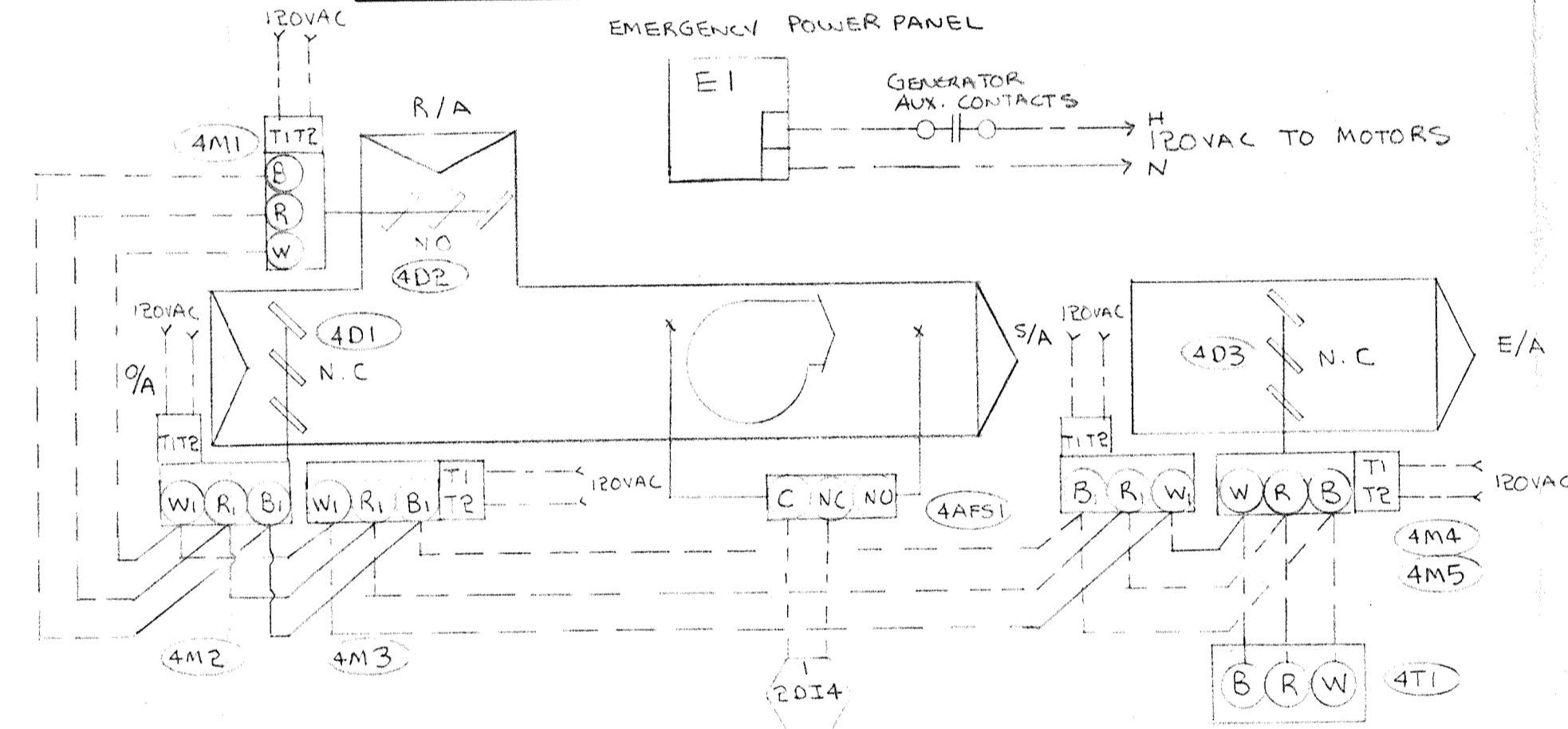
SYSTEM NO 2 DISPLAY CASE CONTROL



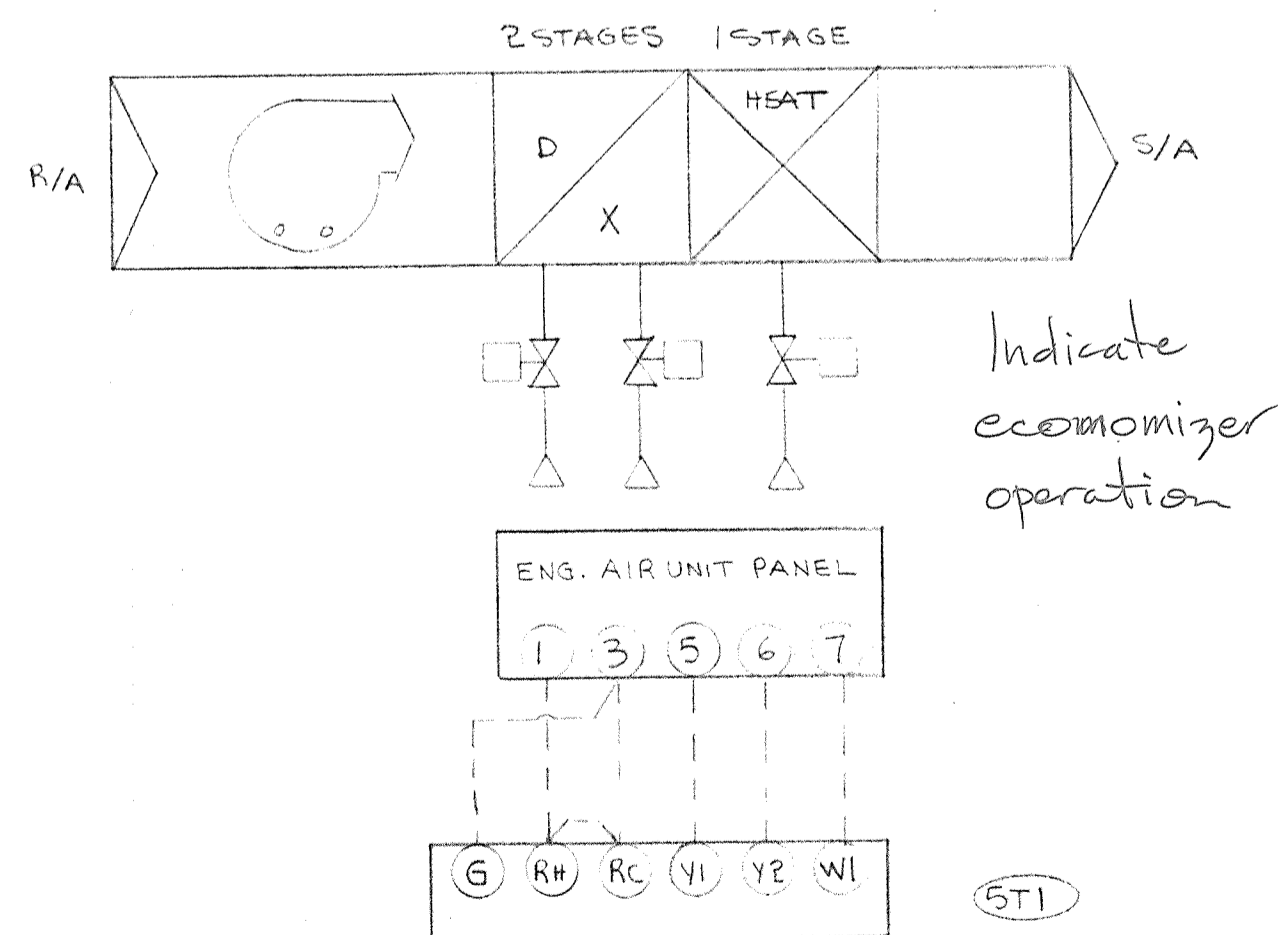
SYSTEM NO 3 ADMINISTRATION MODULE CONTROL (2 UNITS)



SYSTEM NO 4 GENERATOR ROOM CONTROL



SYSTEM NO 5 MAINTENANCE BUILDING CONTROL



SYSTEM NO. 1: GRAND PASSAGE (2 UNITS), THEATRE & EXHIBIT HALL CONTROL

GRAND PASSAGE UNITS			
1D1	- 2	D642	78" x 26" R/A DAMPERS
1D2	- 2	D642	78" x 28" O/A DAMPERS
THEATRE			
1D1	- 1	D642	52" x 22" R/A DAMPER
1D2	- 1	D642	52" x 22" O/A DAMPER
EXHIBIT HALL			
1D1	- 1	D642	40" x 22" R/A DAMPER
1D2	- 1	D642	40" x 12" O/A DAMPER
EQUIPMENT SCHEDULE (COMMON TO ALL UNITS)			
1TS1	- 4	L7022A1002	27' AVERAGING SENSOR -35 to 225 F
1TS2, 1TS3	- 8	L7033A1173	18" DUCT SENSOR -30 to 250 F
1TS4	- 5	T7506B1005	15 - 30 C SPACE SENSOR
1TS5	- 1	T7001A1007	OUTSIDE AIR TEMPERATURE SENSOR
1LL1	- 1	T675B1002	30 - 50 F LOW LIMIT
1AFS1, 1AFS2	- 8	AFS-222	AIR FLOW SWITCH
1M1	- 8	M945B1057	ELECTRONIC MODULATING MOTOR
	- 8	R7503A1020	CONVERTOR
	- 8	O605A1062	DAMPER LINKAGES
	- 8	7460PK	120/24 VAC TRANSFORMERS

GRAND PASSAGE AND EXHIBIT HALL UNITS
DURING THE WINTER MONTHS THESE SYSTEMS SHALL OPERATE ON A OPTIMUM START/STOP PROGRAM. DURING THE SUMMER MONTHS THE FANS SHALL RUN CONTINUOUSLY. THE UNITS SHALL CONTROL AT A REDUCED SPACE TEMPERATURE AND A NIGHT PURGE PROGRAM SHALL PRECOOL THE ZONES. WITH THE SUPPLY AND RETURN FANS OPERATING AS PROVEN BY AIR FLOW SWITCHES THE DDC SHALL OPERATE AS FOLLOWS. WHEN THE OUTSIDE AIR TEMP IS BELOW 21 C THE MIXED AIR DAMPERS SHALL MODULATE TO MAINTAIN A MIXED AIR TEMP OF 13 C OTHERWISE THEY SHALL REVERT TO A MINIMUM POSITION. THE SPACE SENSOR SHALL INPUT TO THE DDC SYSTEM TO CONTROL THE HEATING AND COOLING STAGES TO MAINTAIN SPACE TEMP. A TIME DELAY SHALL BE PROVIDED WITH THE UNIT TO PREVENT RAPID CYCLING BETWEEN STAGES. AT A SUPPLY AIR TEMP BELOW 2 C THE FANS SHALL SHUT DOWN AND THE DAMPERS SHALL GO TO THE MINIMUM POSITION.

THEATRE UNIT
THE THEATRE UNIT SHALL OPERATE ON THE SAME SEQUENCE AS THE GRAND PASSAGE UNIT WITH THE FOLLOWING ADDITION: AN ADDITIONAL SPACE SENSOR LOCATED IN THE PROJECTION BOOTH SHALL OVERRIDE THE MAIN SPACE SENSOR WHEN THE PROJECTION BOOTH TEMP. RISES ABOVE 24 C. FOR THIS SITUATION THE SUPPLY AIR TEMPERATURE SHALL BE LOWERED UNTIL THE PROJECTION BOOTH TEMP. IS BELOW 24 C.

SYSTEM NO. 2: DISPLAY CASE CONTROL			
2TS1, 2TS2	- 2	L7033A1173	18" DUCT SENSOR
2HS1, 2HS2	- 2	H7506A1002	HUMIDITY SENSOR
	- 2	14002362-001	DUCT SAMPLING CHAMBER
2AFS1	- 1	AFS-222	AIR FLOW SWITCH

OPERATION: THE SUPPLY FAN IN THIS SYSTEM RUNS CONTINUOUSLY AS PROVEN BY A AIR FLOW SWITCH. THE R/A TEMP. IS TO BE CONTROLLED BY SEQUENCING 1 STAGE OF HEATING AND 1 STAGE OF COOLING AS DETERMINED BY THE SENSOR 2TS1 LOCATED IN THE RETURN AIR DUCT. THE HUMIDITY SENSOR 2HS1 SHALL ENERGIZE THE ELECTRONIC HUMIDIFIER CONTROL CIRCUIT ON A DROP BELOW SET POINT. A HIGH LIMIT LOCATED IN THE SUPPLY AIR SHALL SHUT THE HUMIDIFIER DOWN IF HIGH LIMIT IS EXCEEDED. IF THE RETURN AIR SHOULD RISE ABOVE 40F RH THE DDC SYSTEM SHALL OVERRIDE THE RETURN AIR TEMPERATURE LOOP. START THE COOLING COIL AND DEHUMIDIFY UNTIL THE R/A HUMIDITY FALLS TO 35% RH. DURING THE OVERRIDE CONDITION THE DDC SHALL CONTROL THE SUPPLY AIR TEMPERATURE AS DETERMINED BY THE S/A SENSOR 2TS2.

SYSTEM NO. 3: ADMINISTRATION MODULE CONTROL			
3TS1, 3TS3	- 4	L7033A1173	27' AVERAGING SENSOR -35 to 225 F
3TS2	- 2	L7022A1002	18" DUCT SENSOR -30 to 250 F
3TS4	- 2	T7506B1005	15 - 30 C SPACE SENSOR
1LL1	- 2	T675B1002	30-50F LOW LIMIT
1AFS1	- 2	AFS-222	AIR FLOW SWITCH

OPERATION: THE SEQUENCE OF OPERATION FOR THIS SYSTEM IS IDENTICAL TO SYSTEM NO. 1.

SYSTEM NO. 4: GENERATOR ROOM CONTROL			
4D1, 4D3	- 2	D642	32" x 72" DAMPER
4D2	- 1	D642	32" x 20" DAMPER
4M1, 4M5	- 5	M945A4003	24 VAC MODULATING MOTOR
	- 5	O605A1062	DAMPER LINKAGE
	- 5	7460PN	INTERNAL TRANSFORMERS
4T1	- 1	T921A1514	10 to 30 C THERMOSTAT

OPERATION: THIS CONTROL SYSTEM SHALL BE ENERGIZED ON EMERGENCY GENERATOR STARTUP. THE THERMOSTAT 4T1 SHALL MODULATE THE DAMPERS TO MAINTAIN SET POINT TEMPERATURE.

SYSTEM NO. 5: MAINTENANCE BUILDING CONTROL			
5T1	- 1	TS74B1043	8 - 28 C LOW VOLTAGE THERMOSTAT
	- 1	O674C1009	CURBASE

OPERATION: THE THERMOSTAT 5T1 SHALL CONTROL 2 STAGES OF COOLING AND 1 STAGE OF HEATING TO MAINTAIN SPACE SET POINT TEMP.

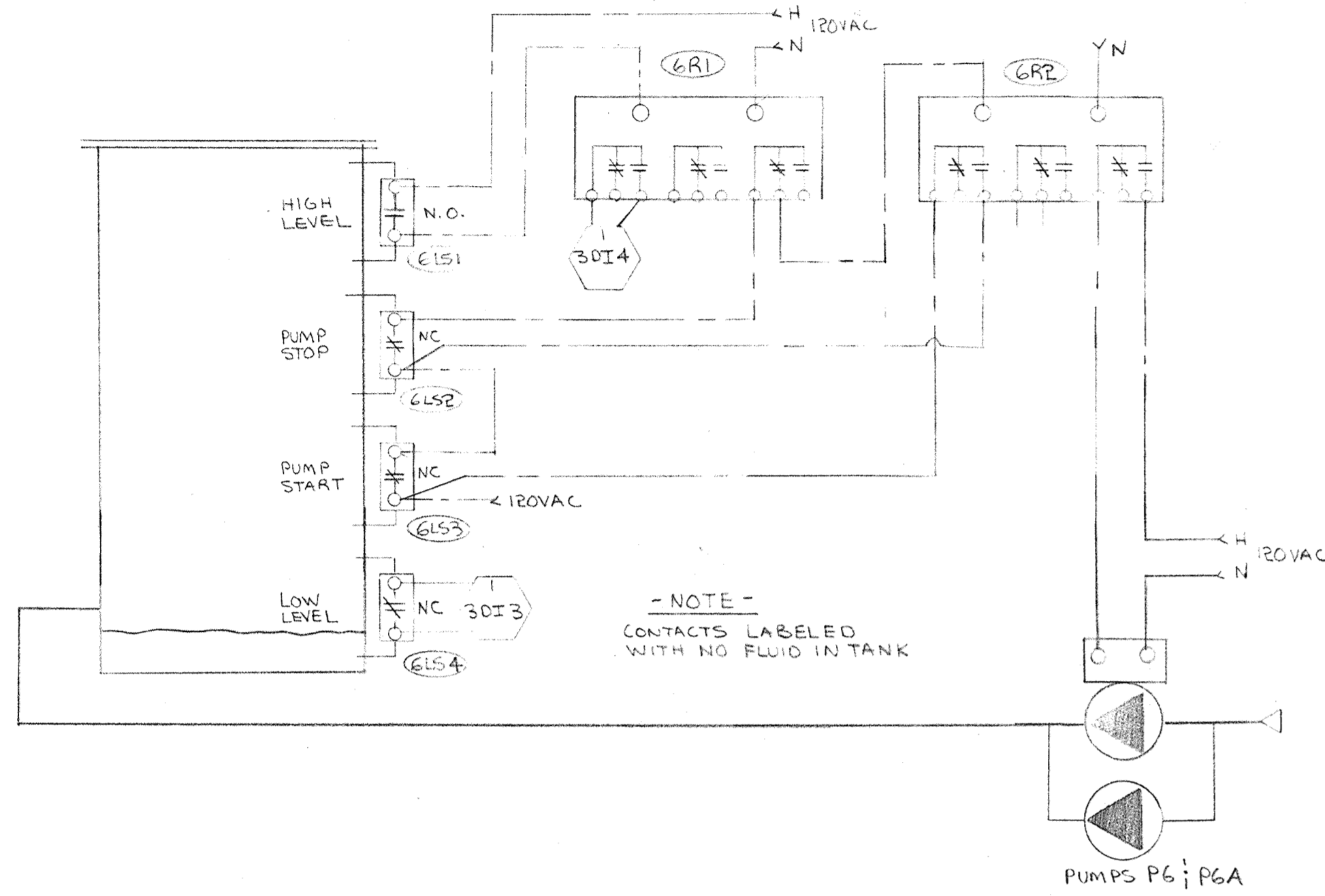
SYMBOLS			
---	120 VAC WIRING		
---	24 VAC WIRING		
---	HONEYWELL SUPPLIED EQUIPMENT		
#	CPU #	AI	ANALOG INPUT
#	I/O BOARD NUMBER	AO	ANALOG OUTPUT
#		DI	DIGITAL INPUT
#		DO	DIGITAL OUTPUT

ARCHITECTS: IKOY ARCHITECTS
MECH. ENG.: YONEDA & ASSOCIATES

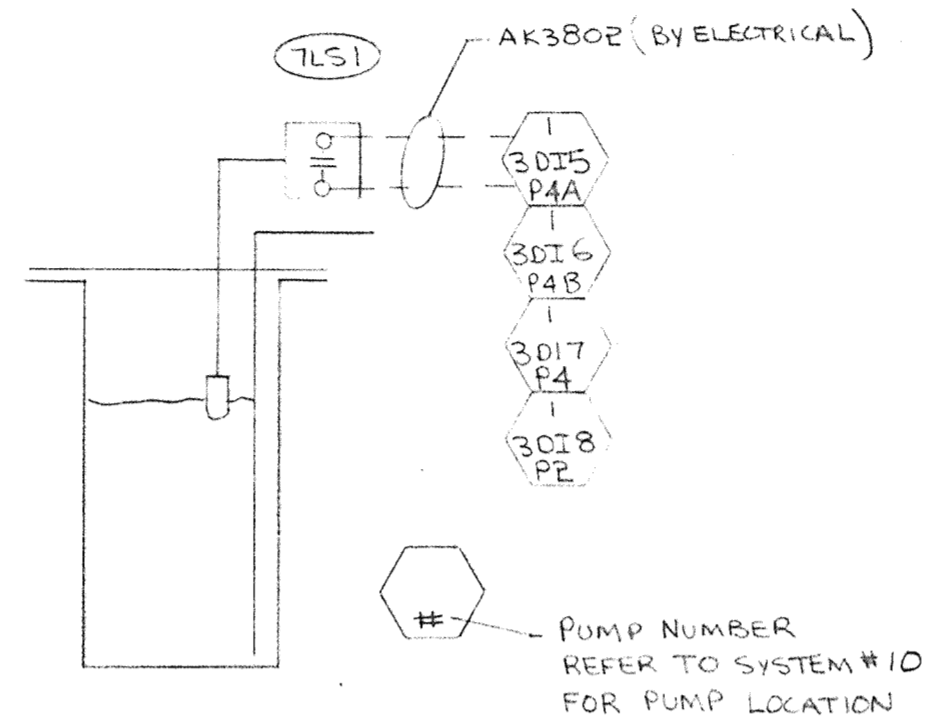
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<input checked="" type="checkbox"/> Review Completed	<input type="checkbox"/> Resubmit	<input type="checkbox"/> Make corrections	<input type="checkbox"/> Make corrections						
Contractor is solely responsible for all dimensions and quantities and coordination. This review does not in any way relieve contractor from these responsibilities.									
Per: <i>Y. Yoneda</i> Date: <i>11/19/85</i> File No: <i>85-505</i> Request Mechanical									
Yoneda & Associates Ltd. <i>Regina</i>									
Consulting Professional Engineers									

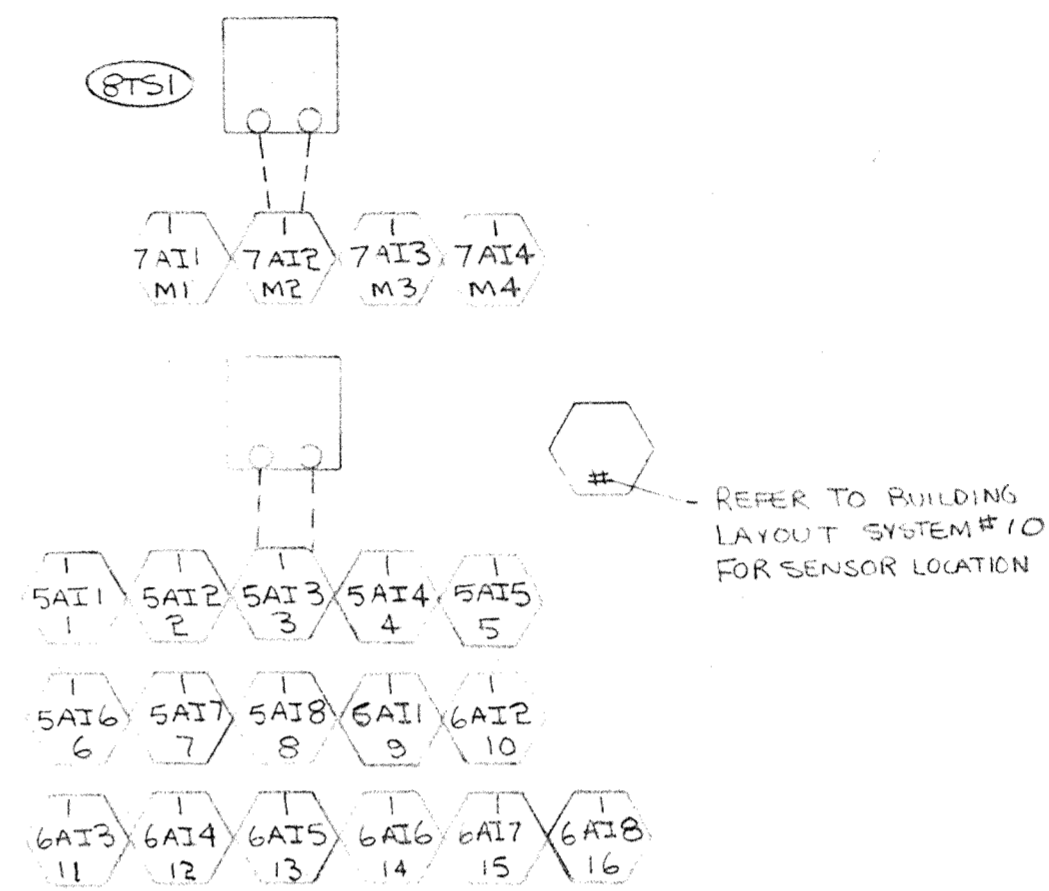
SYSTEM NO 6 FUEL OIL STORAGE TANK CONTROL



SYSTEM NO 7 SUMP ALARM



SYSTEM NO 8 CEILING TEMP. ALARM



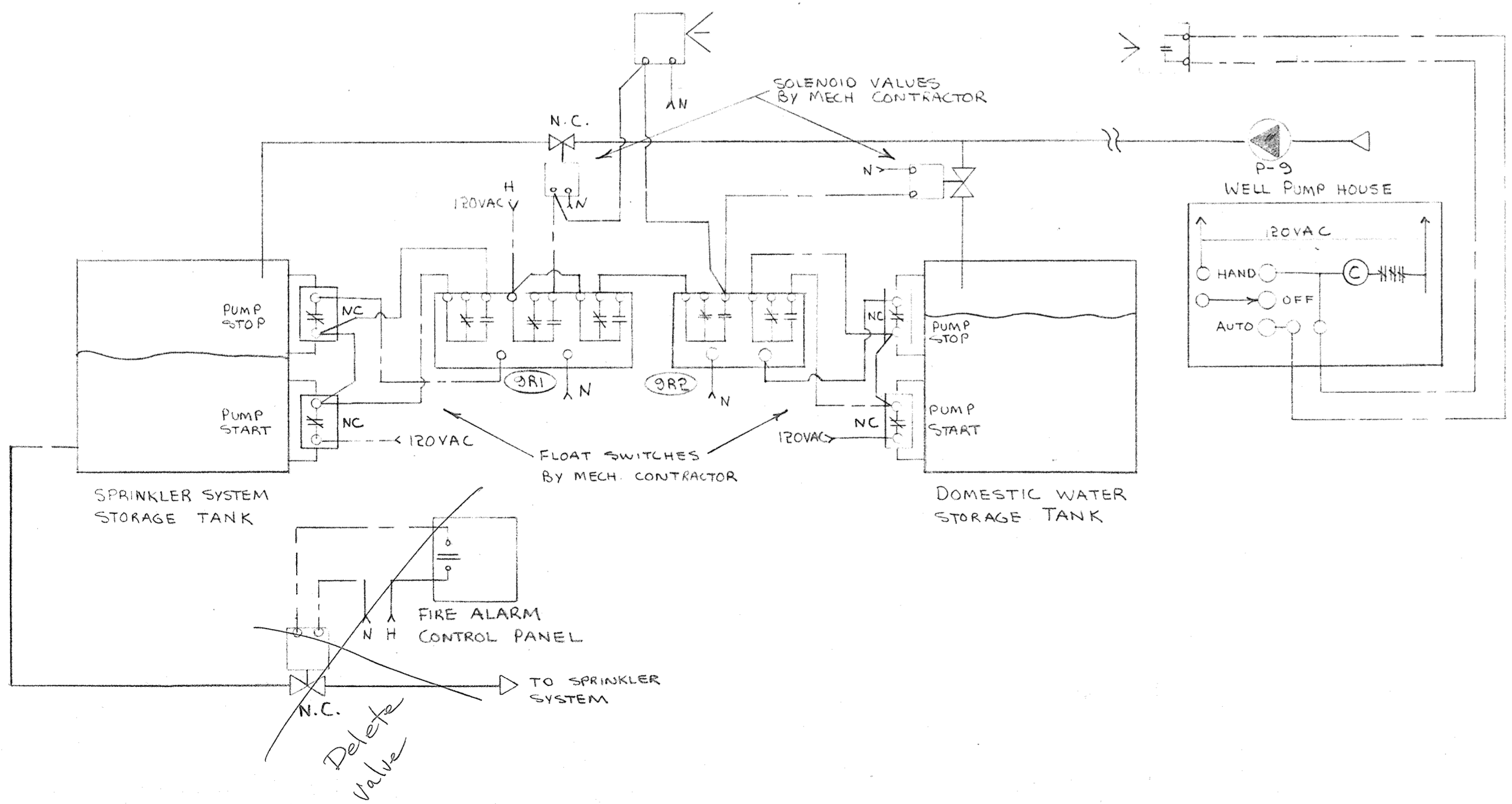
SYSTEM NO. 6: FUEL OIL STORAGE TANK CONTROL
6LS1, 6LS4 4 MM80 MCDONNELL MILLAR LEVEL SWITCHES
6R1 1 LY3F-US-AC120 120VAC RELAY
6R2 1 RA220 1015 120VAC RELAY
OPERATION: THE PUMP START AND PUMP STOP LEVEL SWITCHES SHALL CONTROL THE FUEL OIL STORAGE TANK PUMPS THROUGH RELAYS 6R1 & 6R2. THE PUMP STOP AND HIGH LIMIT LEVEL SWITCH SHALL BE WIRED IN SERIES TO STOP THE PUMPS. LEVEL SWITCHES 6LS1 & 6LS4 SHALL INPUT TO THE DDC HIGH AND LOW LEVEL ALARMS.

SYSTEM NO. 7: SUMP ALARM
7LS1 4 ENH-10 FLYGHT BAG LEVEL SWITCHES
THE SUMP SWITCHES SHALL INPUT TO THE DDC A HIGH LEVEL ALARM.

SYSTEM NO. 8: CEILING TEMP. ALARM
OPERATION: SHOULD THE CEILING SPACE TEMPERATURE DROP BELOW 5 °C AALARM SHALL BE INITIATED AT THE OPERATORS TERMINAL.

SYSTEM NO. 9: SPRINKLER SYSTEM & DOMESTIC WATER TANK CONTROL
9R1, 9R2 2 LY3F-US-120AC 120 VAC RELAYS
OPERATION: THE PUMP START AND PUMP STOP SHALL CONTROL THE WELL WATER SUPPLY PUMP THROUGH A TRANSMITTER AND OPERATE A SOLENOID VALVE ON THE SUPPLY LINE TO THE TANK. THE SPRINKLER TANK SHALL TAKE PRECEDENCE TO THE DOMESTIC WATER TANK.

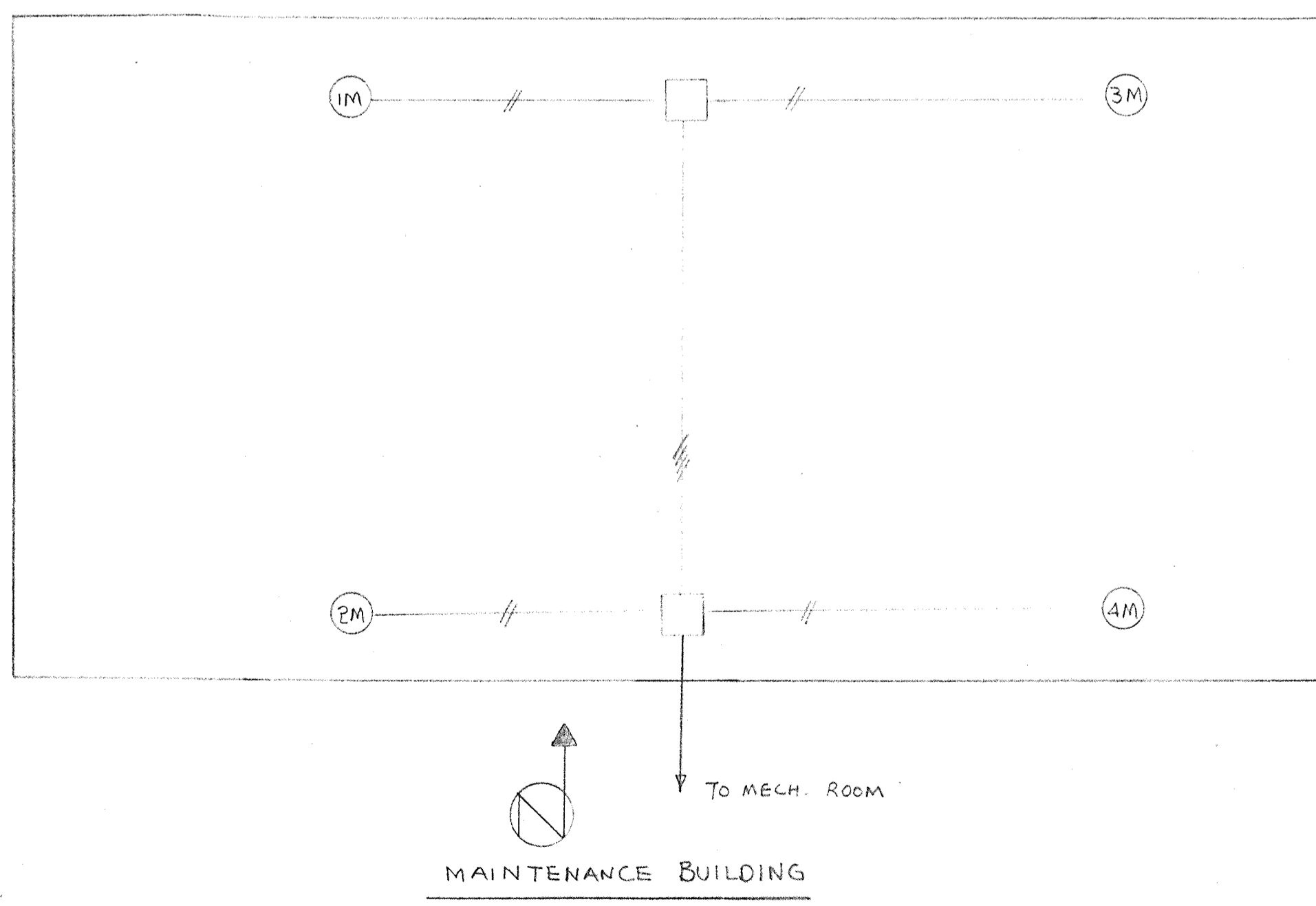
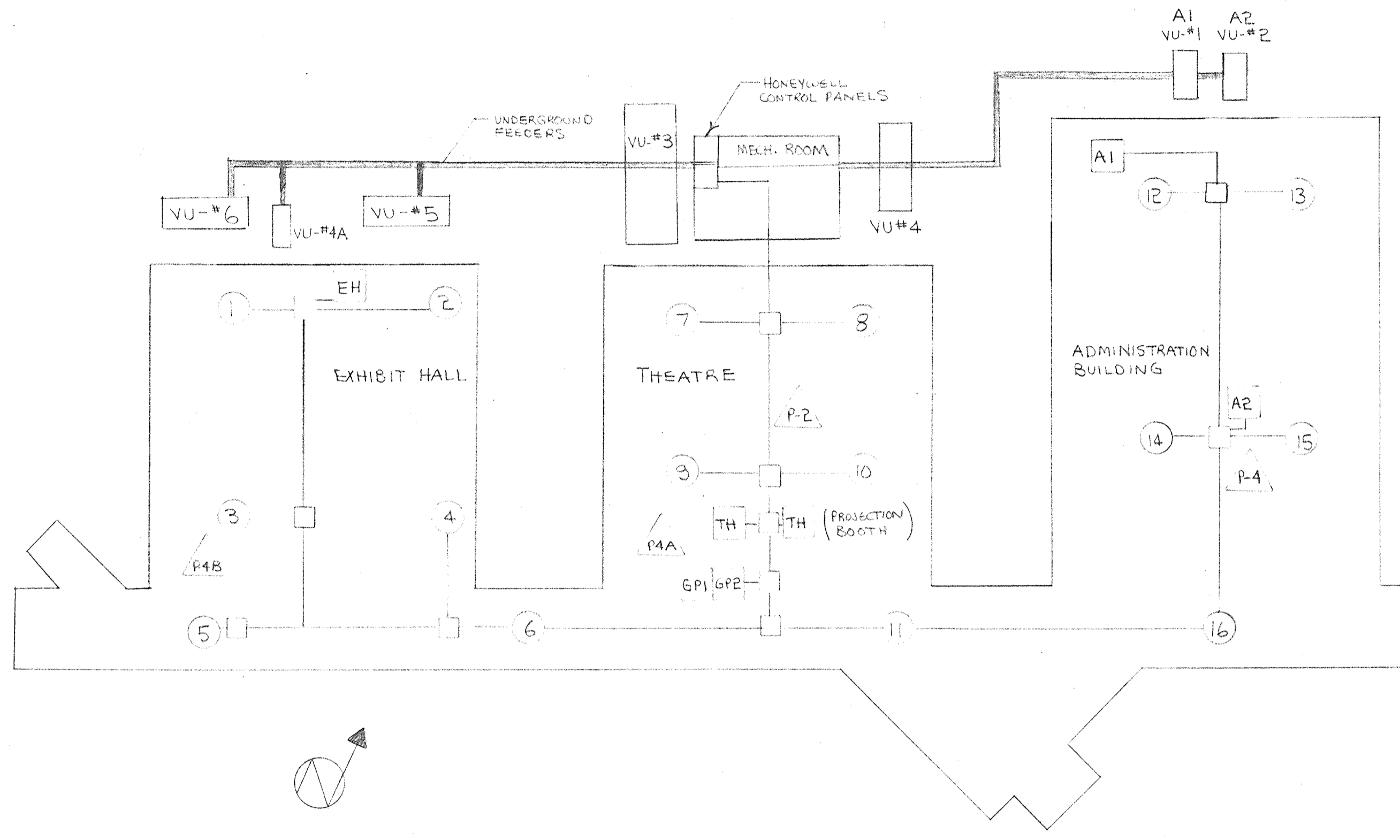
SYSTEM NO 9 SPRINKLER SYSTEM & DOMESTIC WATER TANK CONTROL



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☒ Review Completed ☐ Rejected
☐ Resubmit ☒ Make corrections Noted
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Per: *B.L.* Date: *Apr 11* File No: *63-205*
Yoneda & Associates Ltd.
Consulting Professional Engineers — Regina

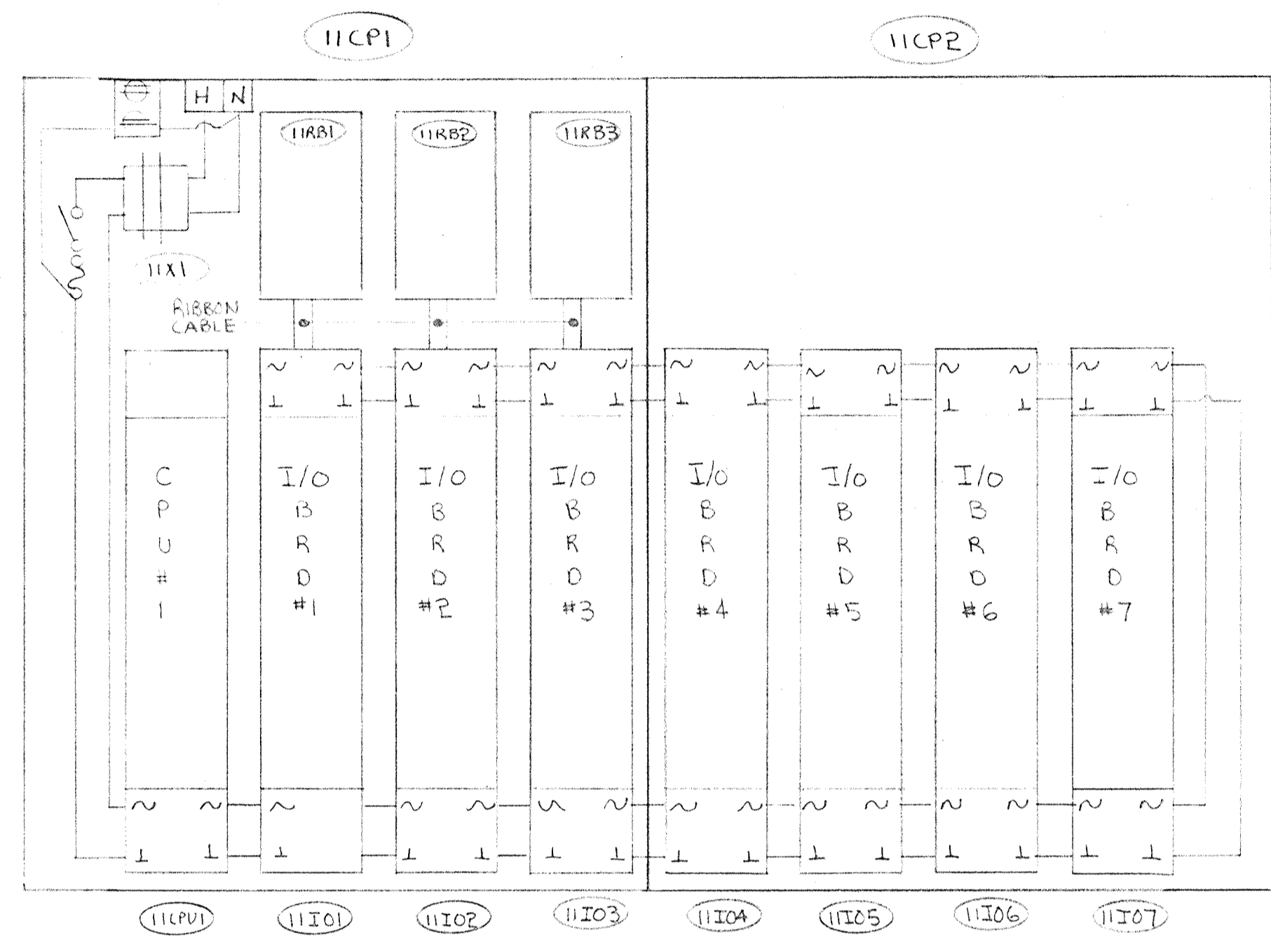
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TITLE CONTEMPORARY FACILITIES BATOCHÉ NATIONAL HISTORIC SITE BATOCHÉ, SASKATCHEWAN				
JOB NAME INTEREST MECHANICAL				
DATE	03/07/85	REF.		
DRWN	CHECKED	APP'D.	DWG. NO.	REV.
MLJG			330663	2/3

SYSTEM NO 10 FAN SYSTEM & SENSOR LAYOUT



- LEGEND
- CEILING TEMP SENSORS REFER TO SYSTEM NO 8 FOR EXCEL CONNECTION
 - △ SUMP PUMP # REFER TO SYSTEM NO 7 FOR EXCEL CONNECTIONS
 - SPACE SENSOR REFER TO SYSTEM NO'S VENTILATION UNIT
 - JUNCTION BOX

SYSTEM NO 11 CONTROL PANEL LAYOUT



SYSTEM NO. 10: FAN SYSTEM & SENSOR LOCATION

ALL SPACE SENSORS, CEILING ALARM SENSORS AND SUMP PUMP ALARMS ARE TO BE WIRED TO THE HONEYWELL CONTROL PANEL LOCATED IN MECHANICAL ROOM. THE SUMP HIGH LEVEL ALARMS ARE TO BE WIRED BY THE ELECTRICAL CONTRACTOR.

SYSTEM NO. 11: CONTROL PANEL LAYOUT

11CP1	1	RP7410B1003	8K CONTROLLER
	1	43190029-001	CPU MOTHER BOARD
11I01,11I07	7	RP7511A1004	I/O BOARDS
	7	43190030-001	I/O MOTHER BOARDS
11RB1,11RB3	3	43190048-001	RELAY BOARDS
	3	43191152-001	RIBBON CABLES
11X1	1	AT92A1007	120/24 VAC TRANSFORMER
11CP1,11CP2	2	40889096-001	FULL PANEL
	2	40889089-001	FULL PAD

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Per *BL* Date *Apr 21/85* File No. *8.3.205*

Yoneda & Associates Ltd.

Consulting Professional Engineers — Regina

NO.	REVISION	DATE	DRW.	APP.
Honeywell				
TITLE CONTEMPORARY FACILITIES BATOCHE NATIONAL HISTORIC SITE BATOCHE, SASKATCHEWAN				
JOB NAME INTEREST MECHANICAL				
DATE	03/07/85	REF.		
DRAWN	CHECKED	APP'D.	DWG. NO.	REV.
MJC			0663	3/3