

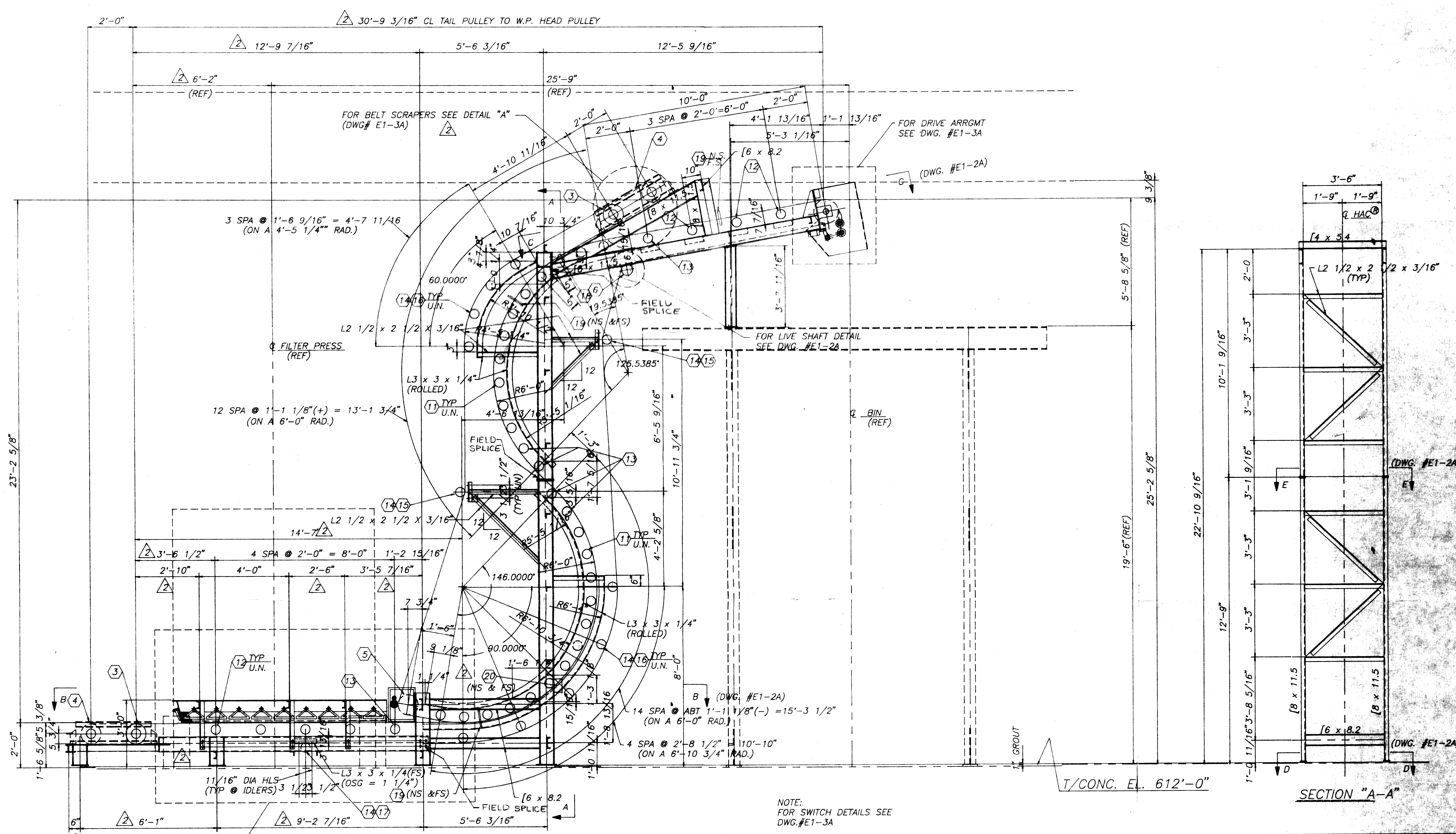
REVIEWED AND APPROVED BY THE
DIV. OF ENVIRONMENTAL PROTECTION,
DEPT. NATURAL RESOURCES,
IN ACCORDANCE WITH SEC. 144.04,
WIS. STATS. SUBJECT TO THE CON-
DITIONS SET FORTH IN THE LETTER
OF APPROVAL.
THOMAS G. FRANGOS
ADMINISTRATOR

APPROVAL NO.
72 355

DATE: FEB 4 '74

Notes: Continue reinforcing through contraction joints. Place 2x expansion joint a maximum of 40 feet o.c.

DNR JAN 3 1974



GENERAL ARRANGEMENT of 24" B.W. HAC TO HANDLE FILTER CAKE SEWAGE SLUDGE
MAT'L DENSITY: 40 PCF
MAT'L SIZE: 2" MINUS
CONV. RATE: 10 TPH
CONV. SPEED: 240 FPM
CONV. DRIVE: 10 HP(BOTT BELT ONLY)

FOR DETAILS THIS AREA SEE DWG. #E1-4A
 NOTE: FOR SWITCH DETAILS SEE DWG. #E1-3A
 T/CONC. EL. 612'-0"
 SECTION "A-A"

BY	DATE	REVISIONS	NO.
Morgan	7-14-92	APPROVAL CHANGES	
Morgan	6-18-92	APPROVAL CHANGES	

CONTINENTAL CONVEYOR & EQUIPMENT COMPANY, INC.
 A NESCO Company

post office box 400
 winfield, ia 33594
 (205)487-6492


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DRAWN BY: Morgan
 CHECKED BY: JK
 APPROVED BY: [Signature]
 SCALE: 1/2"=1'-0"
 DO NOT SCALE PRINT

GENERAL ARRANGEMENT for 24" B.W. HAC WASTE WATER TREATMENT PLANT SUPERIOR WISCONSIN
 W-10393
 DRAWING NUMBER: E1-1A
 REV: 2

EQUIPMENT LIST -24" B.W. HAC

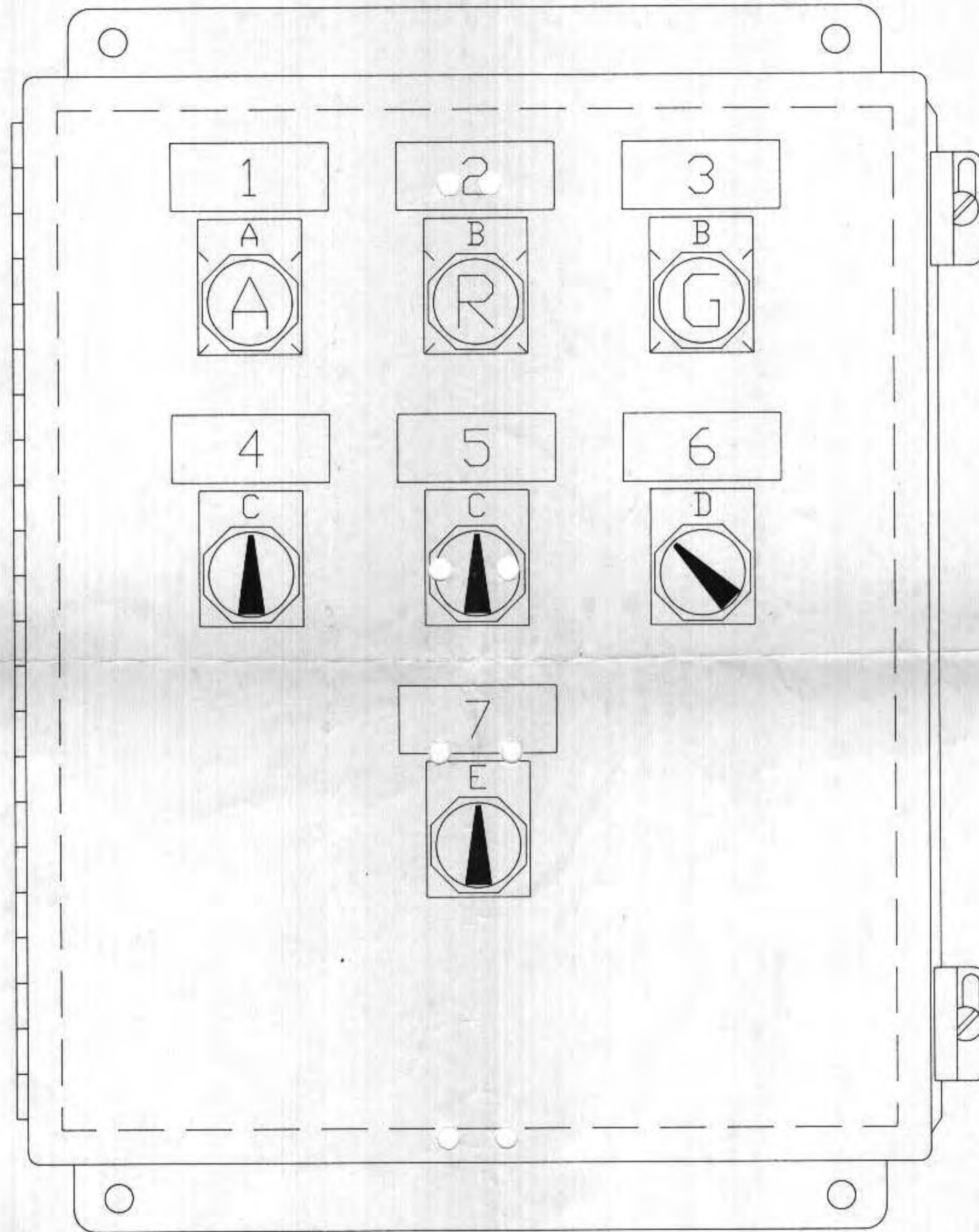
ASSEMBLY	ITEM NO.	QUANTITY	DESCRIPTION	ASSEMBLY	ITEM NO.	QUANTITY	DESCRIPTION		ITEM NO.	QUANTITY	DESCRIPTION
DRIVE	①	1	DODGE SHAFT-MOUNT REDUCER, QD-TYPE TAPERED BUSHED BORE, CAT. #TXT425, COMPLETE WITH TORQUE ARM ASS'Y AND HOLDBACK, CLASS II, 1.4 S.F., 2.4375 DIA. BORE. MOTOR MOUNT # TA-4M, 1 - 8" DIA. DRIVER SHEAVE (1.375 BORE), 1 - 8" DIA. DRIVEN SHEAVE (1.4375 BORE), 2 DYNA V-BELTS # 3VX-800 10 HP, HOSTILE ENVIRONMENT-RIGID BASE, 1750 RPM TYPE 0940M, NEMA FRAME #215T 3/80/460 VOLT NEMA "B" DESIGN	IDLERS (BY CCECO)	⑪	24	10 DEGREE 5" DIA. OFFSET STEEL ROLL H-PLUS TROUGHING IDLERS 24" B.W. PT# 78AK8283-24SW (B.W. + 15)	SPARE PARTS		1	DODGE FASF-XT22520 3.4375" DIA. BORE PILLOW BLOCK
					⑫	7	20 DEGREE 5" DIA. OFFSET STEEL ROLL H-PLUS TROUGHING IDLERS 24" B.W. PT# 78AK8286-24SW (B.W. + 15)		1	DODGE FASF-XT 2.4375" DIA. BORE PILLOW BLOCK	
					⑬	6	5 - 20 DEGREE 5" DIA. OFFSET STEEL ROLL H-PLUS TROUGHING IDLERS 24" B.W. PT# 78AK6989 (B.W. + 15)		1	PILLOW BLOCK SKF-SYR115-3 1.9375" DIA. BORE	
⑭	13	6" DIA. FLAT RETURN IDLERS PT# 78AK7920-3300 (B.W. + 15)	1	10 DEGREE 5" DIA. OFFSET STEEL ROLL H-PLUS TROUGHING IDLERS 24" B.W. PT#78AK8283-24SW (B.W. + 15)							
⑮	8	4 1/4" DROP BRACKET PT#72A3602	1	20 DEGREE 5" DIA. OFFSET STEEL ROLL H-PLUS TROUGHING IDLERS 24" B.W. PT#78AK8286-24SW (B.W. + 15)							
⑯	28	4 1/4" RISE BRACKET PT#72A4622	1	5 - 20 DEGREE 5" DIA. OFFSET STEEL ROLL H-PLUS TROUGHING IDLERS 24" B.W. PT##78AK6989 (B.W. + 15)							
⑰	2	2 1/8" DROP BRACKET PT#72A3606 (ALL IDLER BRACKETS PAINTED STEEL) (ALL IDLERS LAGGED WITH 1/8" THK URETHANE)	1	6" DIA. FLAT RETURN IDLERS PT#78AK7920-3300 (B.W. + 15)							
DRIVE SHAFT (BY CCECO)	②	1	C1045 SHAFT 3.4375" DIA. x APPROX. 60" LONG, NECKED TO 2.4375" DIA. FOR DRIVE WITH 3 KEYWAYS 12" DIA. x 30" STRAIGHT FACE PULLEY W/ BROWNING XT-35 HUBS & HERRINGBONE RUBBER LAGGING MACHINED TO 13,000 DIA. ASSEMBLED WITH DODGE FASF-XT22520 3.4375" DIA. BORE PILLOW BLOCKS	ELECTRICAL	⑱	1	ZERO-SPEED SWITCH. CONVEYOR COMPONENTS #MS STUB SHAFT # MS-3, FLEXIBLE COUPLING # MS-4, & COUPLING GUARD # MS-5		NOTE: 1. ENTIRE FRAME AND SUPPORT ASSEMBLY HOT DIPPED GALVANIZED. 2. ALL FASTENERS ON HAC STAINLESS STEEL.		
TAKE-UP SHAFT	③	2	C1045 SHAFT 2.9375" DIA. X 47" LONG, NECKED TO 2.4375" DIA. 10" DIA. X 30" STRAIGHT FACE PULLEY W/ BROWNING XT-30 HUB & .375" PLAIN RUBBER LAGGING		⑲	6	BELT MIS-ALIGNMENT SWITCH. SQUARE-D SERIES 9007 MODEL C54J				
TAKE-UP ASS'Y (BY CCECO)	④	4	SCREW TAKE-UP ASS'Y #TX207-24 W/2.4375" DIA. BORE BEARING WITH 24" TAKE-UP TRAVEL		⑳	2	EMERGENCY PULL CHORD SWITCH CONVEYOR COMPONENTS #RS-1				
BEND PULLEY (BY CCECO)	⑤	1	C1045 SHAFT 2.9375" DIA. x APPROX. 48" LONG, NECKED TO 2.4375" DIA. 10" DIA. x 30" S.F. CONV. PULLEY W/ XT-30 HUBS & .375 PLAIN RUBBER LAGGING. PILLOW BLOCKS DODGE FASF-XT 2.4375 DIA. BORE		㉑		ITEM OF SAFETY PULL CHORD, NO. 6, 3/32" DIA. (7 X 7) PREFORMED GALV. AIRCRAFT CABLE COATED W/ RED NYLON TO 3/16" DIA.				
LIVE SHAFT (BY CCECO)	⑥	1	C1045 SHAFT 1.9375" DIA. X 43" LONG. (DRILLED & TAPPED ONE END FOR .625" STUB SHAFT) 6" DIA. x 30" S.F. CONV. PULLEY W/ XT-20 HUBS & .25 PLAIN RUBBER LAGGING. PILLOW BLOCKS SKF - SYR115-3 1.9375 DIA. BORE (SHIPPED LOOSE)		㉒		LOT OF EYEBOLTS, 1/2" X 1 X 3 1/4" LG. (PLATED)				
CONV. BELT	⑦	APPROX. 180 LINEAR FEET	24" WIDE BELT, 2 PLY MP150 PIW, WITH 1/8" x 1/32" OMEGA COVERS, GOODYEAR OR EQUAL W/TWO (2) VULCANIZED BELT SPLICE KITS FOR FIELD VULCANIZING OF BELT		㉓		ITEM OF WIRE CLIPS, 3/16" DIA. (GALV.)				
					㉔		ITEM OF WIRE THIMBLES 3/16" DIA. (GALV.)				
BELT CLEANERS	⑧	1	24" B.W. GORDON PRECLEANER	SKIRT BOARD	㉕		MARTIN "DURT SEAL" SKIRT SYSTEM COMPLETE WITH 19 CLAMPS AND 1 ROLL SPECIAL SKIRT RUBBER				
	⑨	1	24" B.W. GORDON URETHANE SECONDARY CLEANER								
	⑩	1	24" B.W. STAINLESS STEEL BLADE CLEANER								

ddc	7/20/92	Approval Changes	1
BY	DATE	REVISIONS	NO.
CONTINENTAL CONVEYOR & EQUIPMENT COMPANY, INC. A NESCO Company			
post office box 400 winfield, ill 35594 (205)487-6492			JOB NUMBER W-10393
EQUIPMENT LIST for 24" B.W. HAC WASTE WATER TREATMENT PLANT SUPERIOR, WISCONSIN			DRAWING NUMBER E-2A

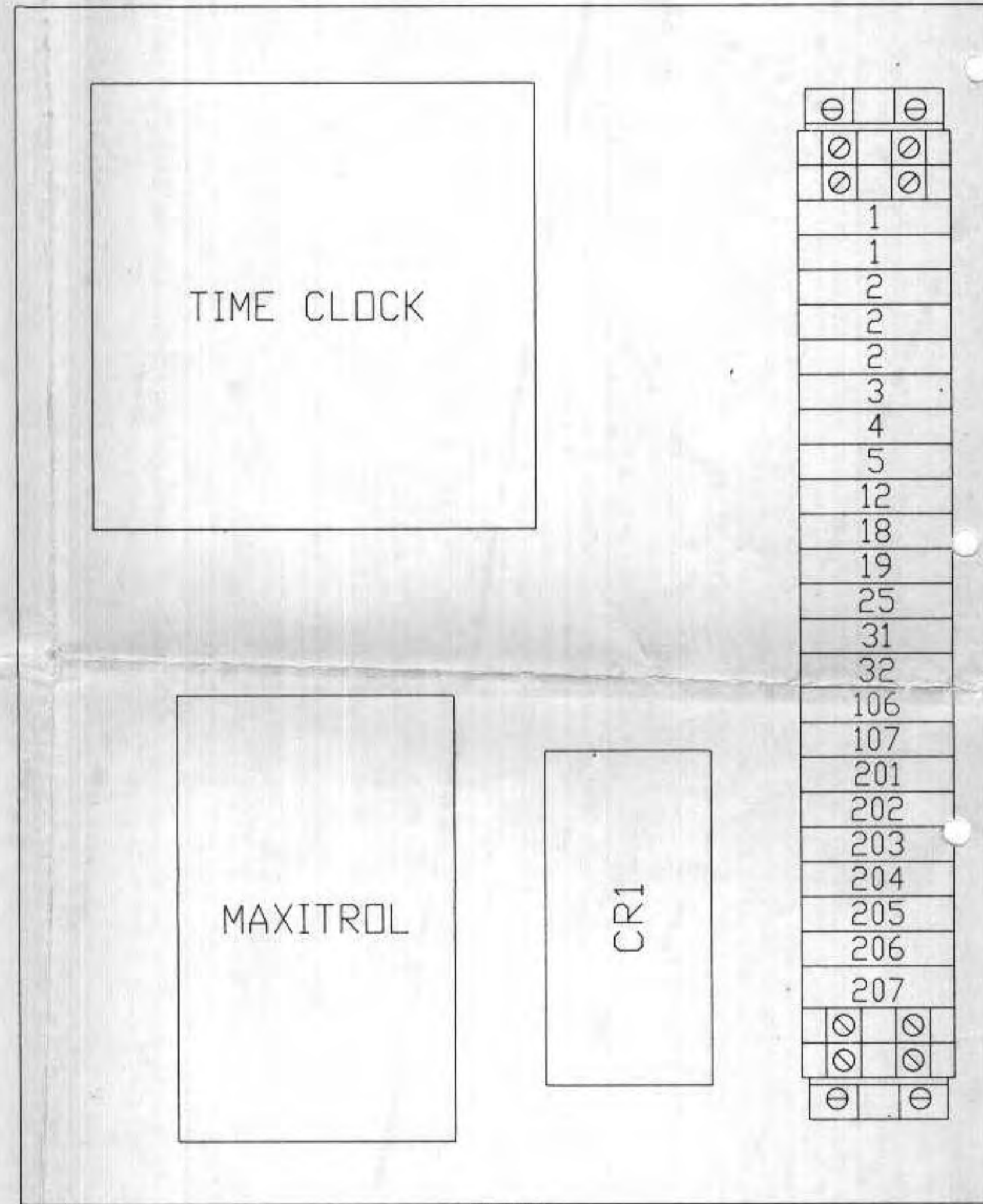
TOLERANCES NOT OTHERWISE SPECIFIED
 STEEL WORK "AISI"
 FRACTIONAL ± 1/32
 DECIMAL ± 1/64
 ANGULAR DO NOT SCALE PRINT

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DRAWN BY *Morgan*
 CHECKED BY
 APPROVED
 SCALE NONE
 DO NOT SCALE PRINT



ENCLOSURE: 12"H x 10"W x 8.0"D
 JIC CONSTRUCTION
 W/ONE 10.75"H x 8.88"W SUBPANEL



SUBPANEL

RINGTAG SPECIFICATIONS :
 TYPE : CR080PXN2
 LETTER SIZE : 0.125
 CUTTER : 0.020
 DEPTH : 0.008

RINGTAG SCHEDULE	
RTG	DESCRIPTION
A	RUN
B	DN
C	HAND - OFF - AUTO
D	OFF - AUTO
E	SUMMER - OFF - WINTER

NAMEPLATE SPECIFICATIONS :
 MATERIAL : GRAVOPLY II, WHT W/BLK LETTERS
 LETTER SIZE : .156
 CUTTER : .020
 DEPTH : 5

NAMEPLATE SCHEDULE		
NP#	SIZE	DESCRIPTION
1	A	BLOWER
2	A	BURNER ALARM
3	A	MAIN FLAME
4	A	EXHAUST FAN #1
5	A	EXHAUST FAN #2
6	A	EXHAUST FAN #3
7	A	MUA CONTROL

APPROVED
 DATE 7/20/92
 BY JSL/A

PANEL SHALL BE CONSTRUCTED PER
 UL 508 REQ. AND COMPLETE ASSEMBLY
 SHALL BEAR A SERIALIZED UL LABEL

CITY OF SUPERIOR - WWTP
 MAIN PLANT BENT FILTER PRESS BARS

07/09/92 13:00 C5077A01

No.	DATE	BY	DESCRIPTION
A	7/9/92	RJB	REVISED PER CUSTOMER

SCALE 1=1 APPR
 DR RJB DATE 5/26/92
 CK DATE
 SHOP ISSUE DATE

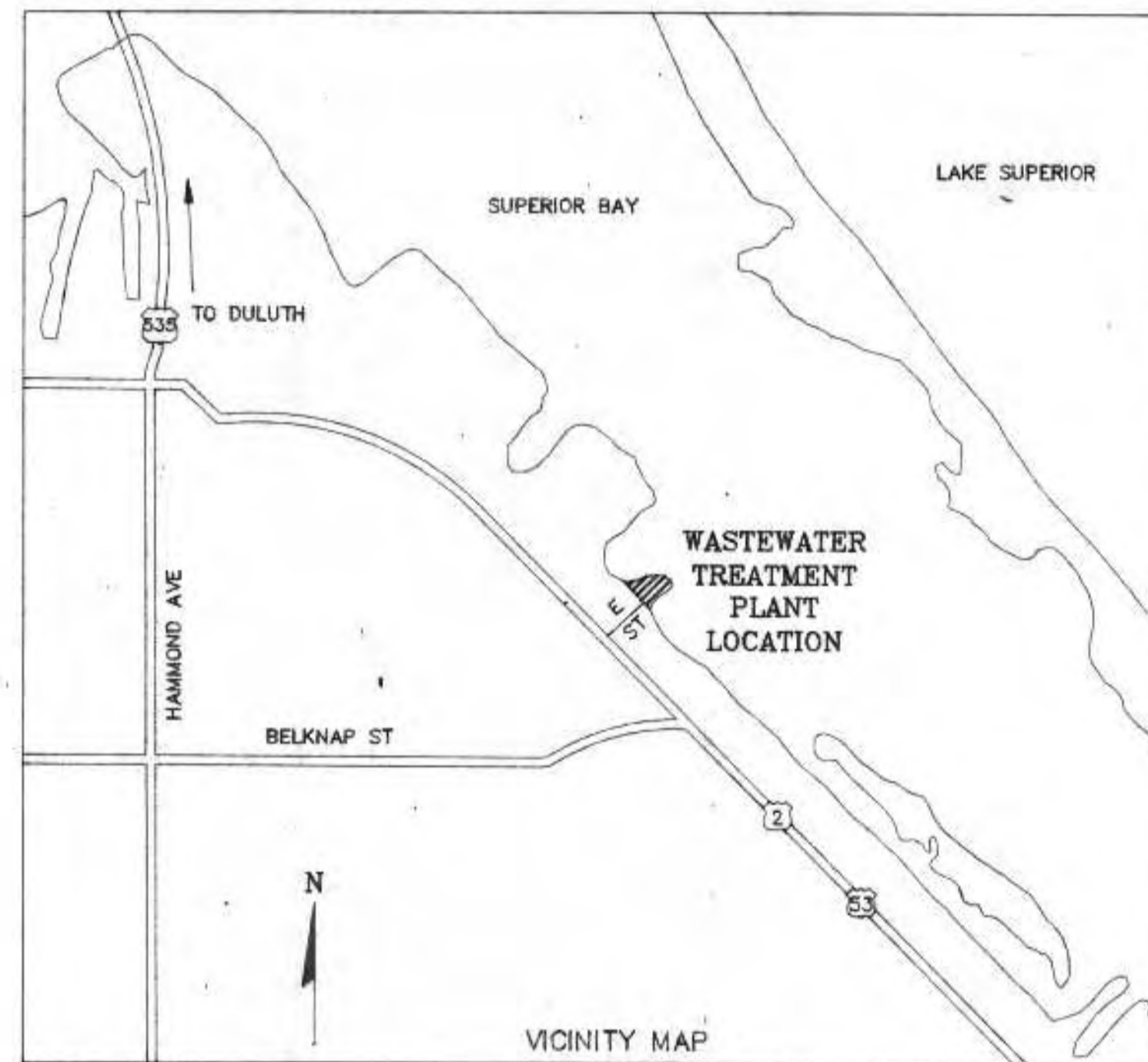
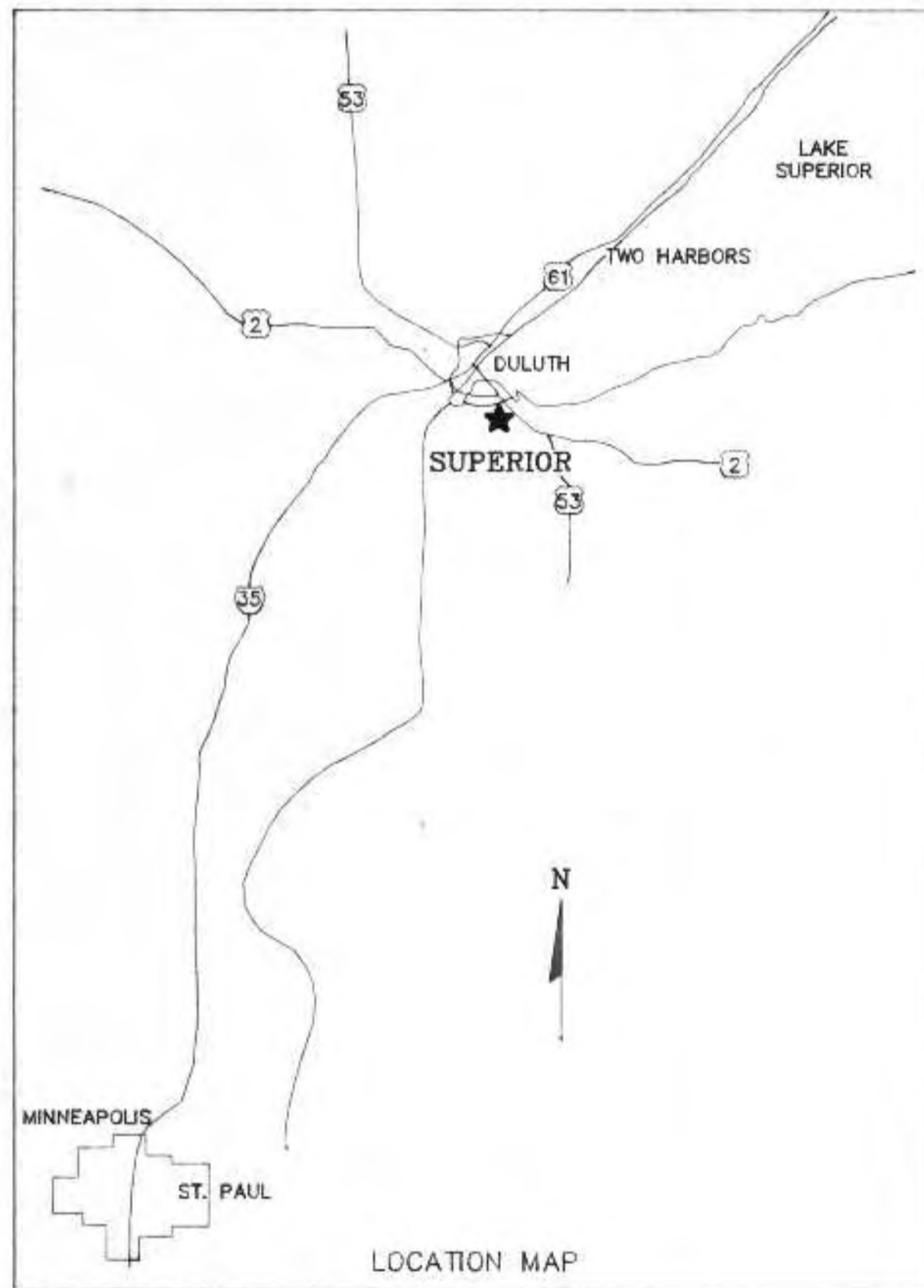
Control Assemblies Co.
 Factory Automation Specialists
 Minneapolis, Minnesota

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DESCRIPTION:
 REMOTE BURNER
 CONTROL PANEL
 PANEL LAYOUT

FOR: L.E. RIBAR CO.
 DRAWING NO. C5077
 SHEET 1 OF 2

PLANS FOR CONSTRUCTION OF
 SLUDGE DEWATERING/HANDLING FACILITIES
 SUPERIOR WASTE WATER
 TREATMENT PLANT
 CITY OF
 SUPERIOR, WISCONSIN



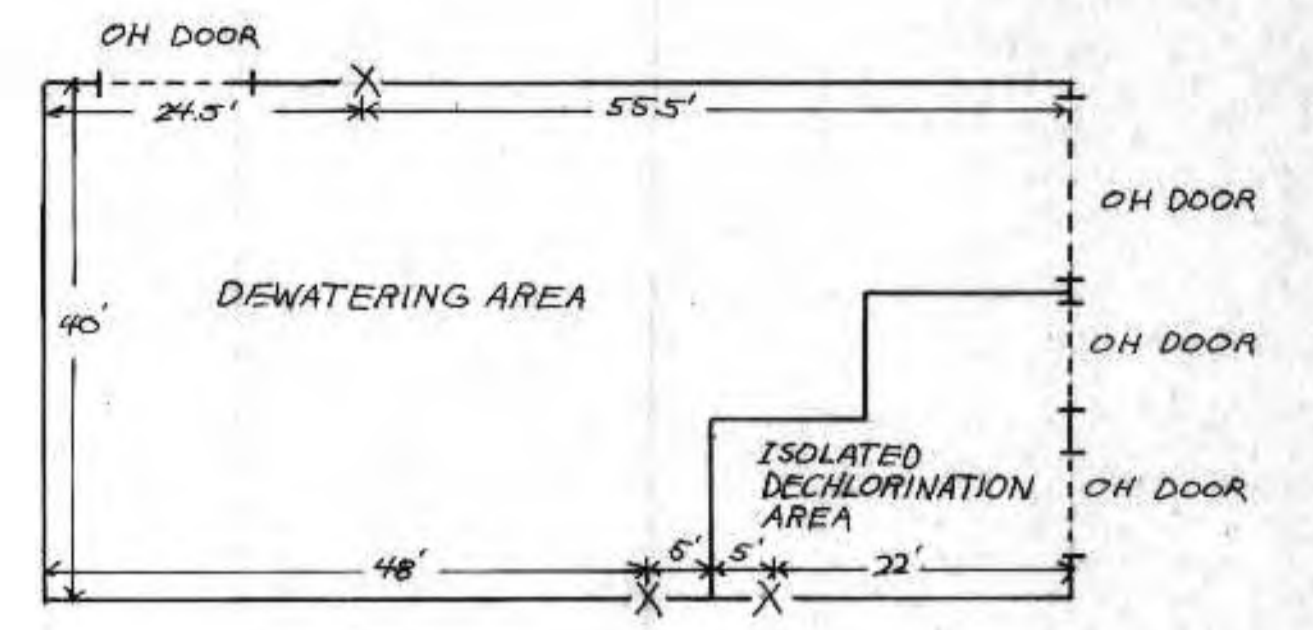
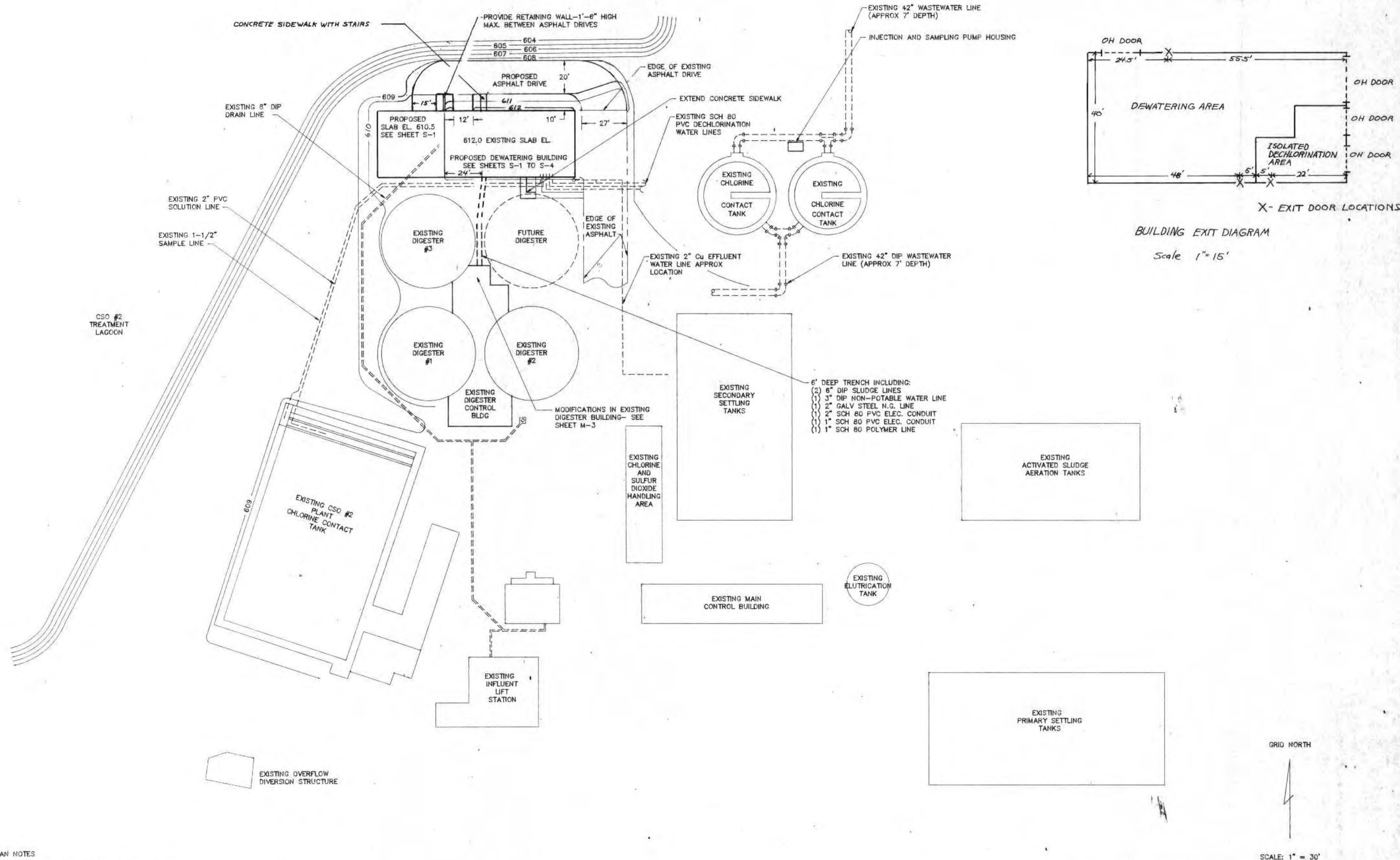
INDEX TO PLANS

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<i>DEWATERING BUILDING ELEVATIONS</i>	<i>S-3</i>
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REVISED 8/22/91
 5/15/92
 9/21/92

ENGINEER
 RMA ENGINEERING CO.
 DULUTH, MN

SLUDGE DEWATERING
 HANDLING FACILITY
 1991-92

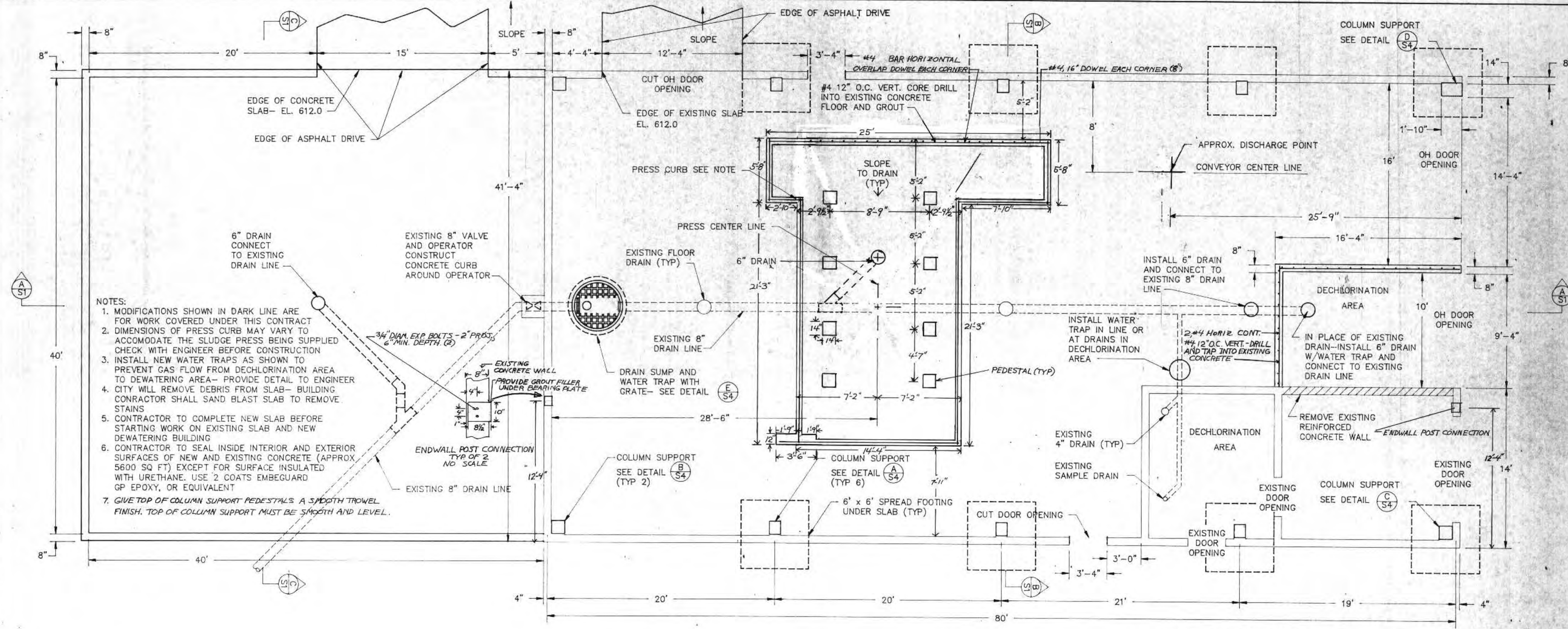


- SITE PLAN NOTES**
- BUILDING CONTRACTOR RESPONSIBLE FOR CONCRETE WORK, DEWATERING BUILDING, ASPHALT DRIVE EXTENSION, SIDEWALK EXTENSION, NECESSARY RESEEDING AND ASPHALT PATCH AND NECESSARY GRADING WORK.
 - MECHANICAL CONTRACTOR RESPONSIBLE FOR PIPE TRENCH AND YARD PIPING.
 - ELECTRICAL SUB-CONTRACTOR (UNDER MECHANICAL) RESPONSIBLE FOR OUTSIDE ELECTRICAL DISTRIBUTION- SEE SHEET E-1.
 - WORK UNDER THIS CONTRACT SHOWN IN DARK LINE
 - ASPHALT DRIVE TO INCLUDE 6" GRAVEL SUBBASE (AS REQUIRED), 3" ASPHALT BASE COURSE, AND 1" ASPHALT SURFACE COURSE.

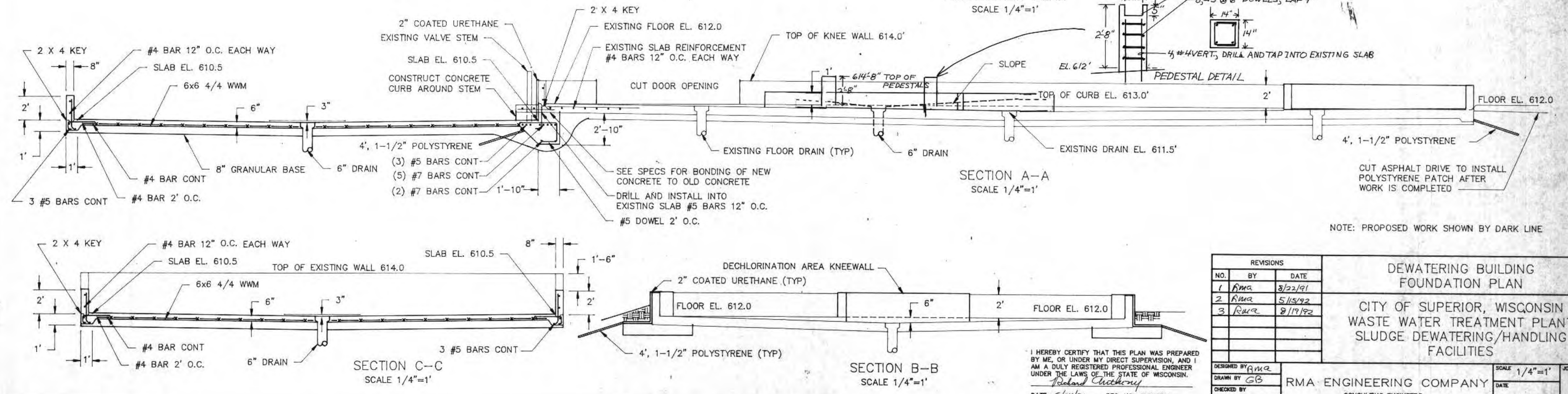
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME, OR UNDER MY DIRECT SUPERVISION, AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.
Richard Anthony
 DATE: 6/24/91 REG. NO. 25488

REVISIONS			SITE PLAN	
NO.	BY	DATE		
1	RMA	8/22/91		

DESIGNED BY <i>RMA</i>		SCALE 1"=30'	JOB NO.
DRAWN BY <i>GB</i>		RMA ENGINEERING COMPANY	
CHECKED BY		CONSULTING ENGINEERS	
APPROVED BY		SHEET C-1	



- NOTES:**
1. MODIFICATIONS SHOWN IN DARK LINE ARE FOR WORK COVERED UNDER THIS CONTRACT
 2. DIMENSIONS OF PRESS CURB MAY VARY TO ACCOMMODATE THE SLUDGE PRESS BEING SUPPLIED CHECK WITH ENGINEER BEFORE CONSTRUCTION
 3. INSTALL NEW WATER TRAPS AS SHOWN TO PREVENT GAS FLOW FROM DECHLORINATION AREA TO DEWATERING AREA - PROVIDE DETAIL TO ENGINEER
 4. CITY WILL REMOVE DEBRIS FROM SLAB - BUILDING CONTRACTOR SHALL SAND BLAST SLAB TO REMOVE STAINS
 5. CONTRACTOR TO COMPLETE NEW SLAB BEFORE STARTING WORK ON EXISTING SLAB AND NEW DEWATERING BUILDING
 6. CONTRACTOR TO SEAL INSIDE INTERIOR AND EXTERIOR SURFACES OF NEW AND EXISTING CONCRETE (APPROX 5600 SQ FT) EXCEPT FOR SURFACE INSULATED WITH URETHANE. USE 2 COATS EMBEGUARD GP EPOXY, OR EQUIVALENT
 7. GIVE TOP OF COLUMN SUPPORT PEDESTALS A SMOOTH TROWEL FINISH. TOP OF COLUMN SUPPORT MUST BE SMOOTH AND LEVEL.



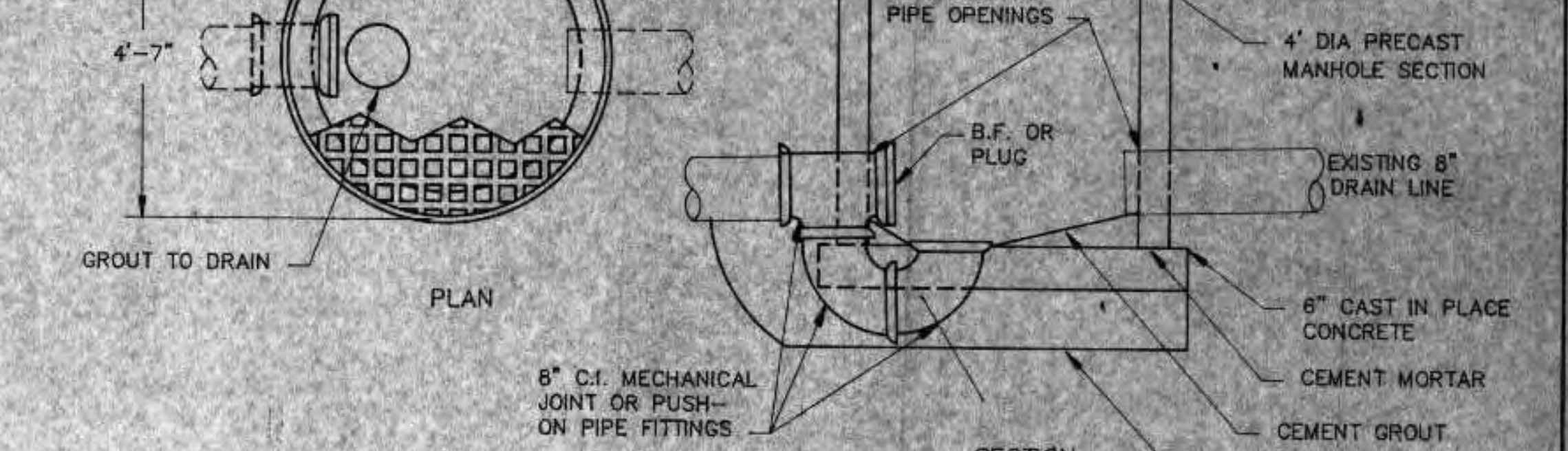
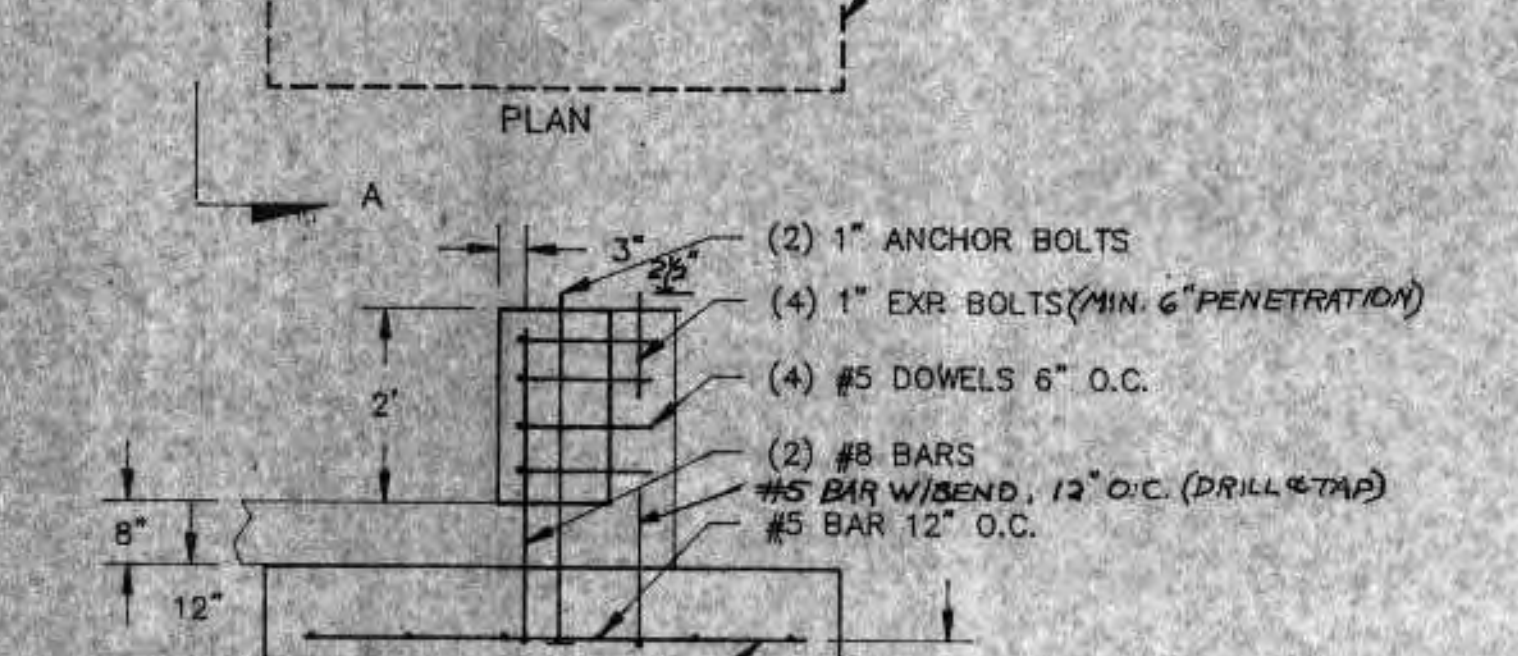
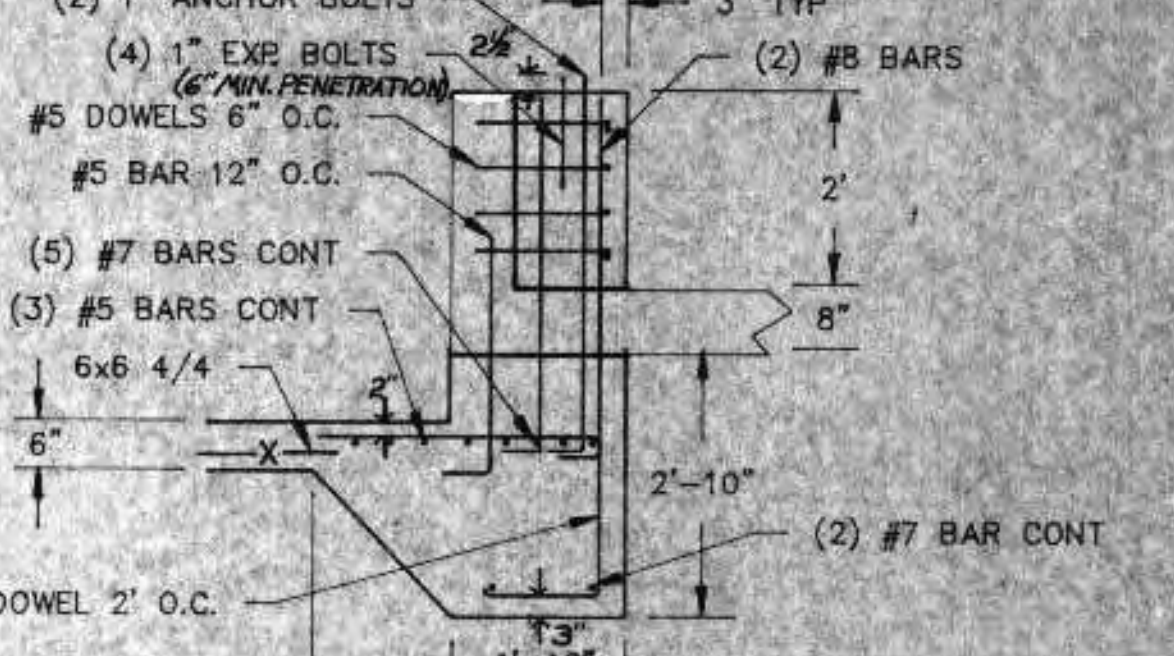
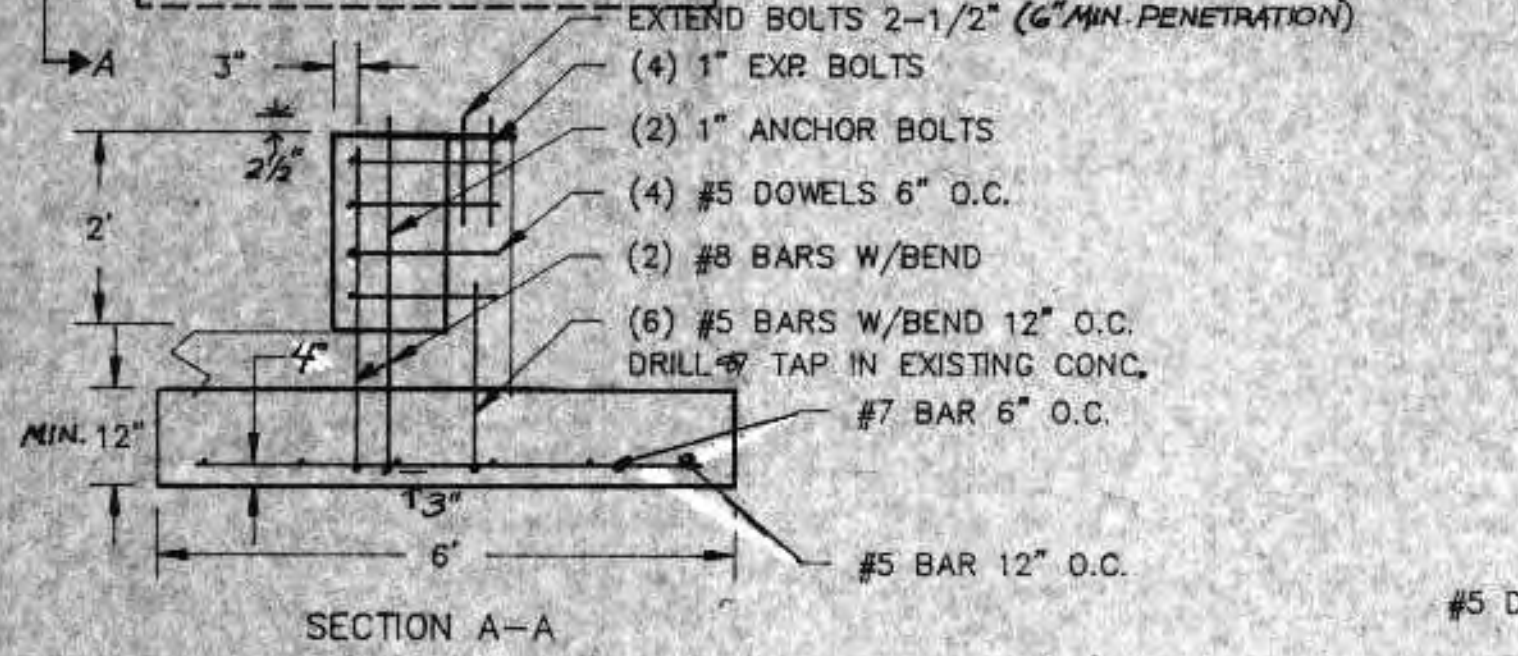
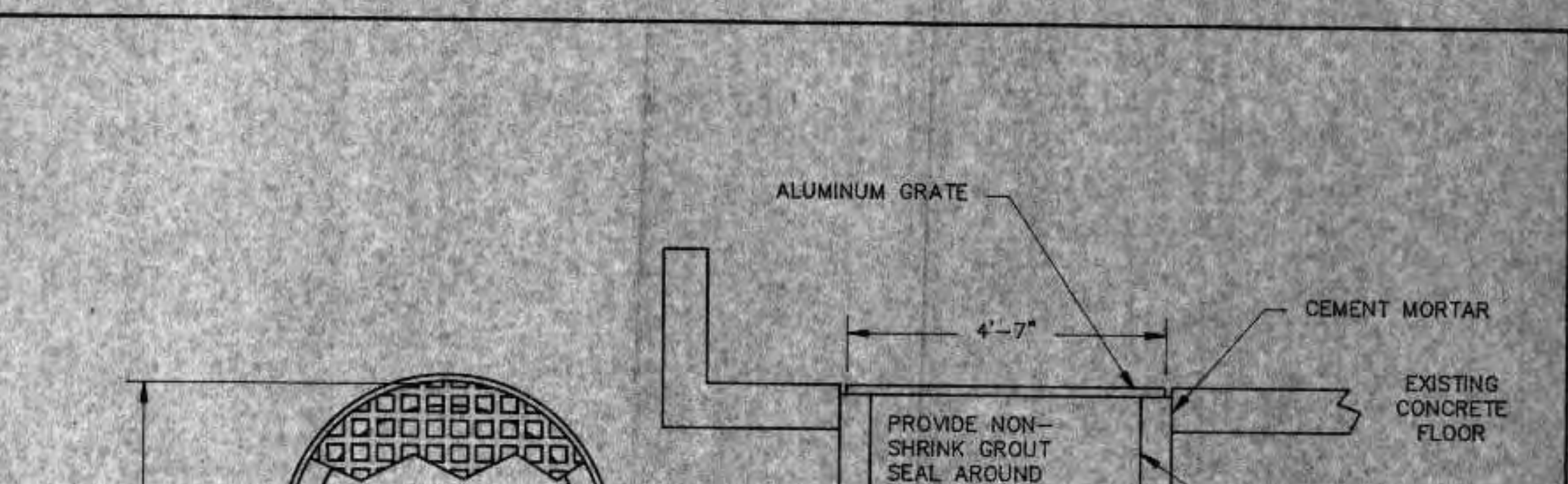
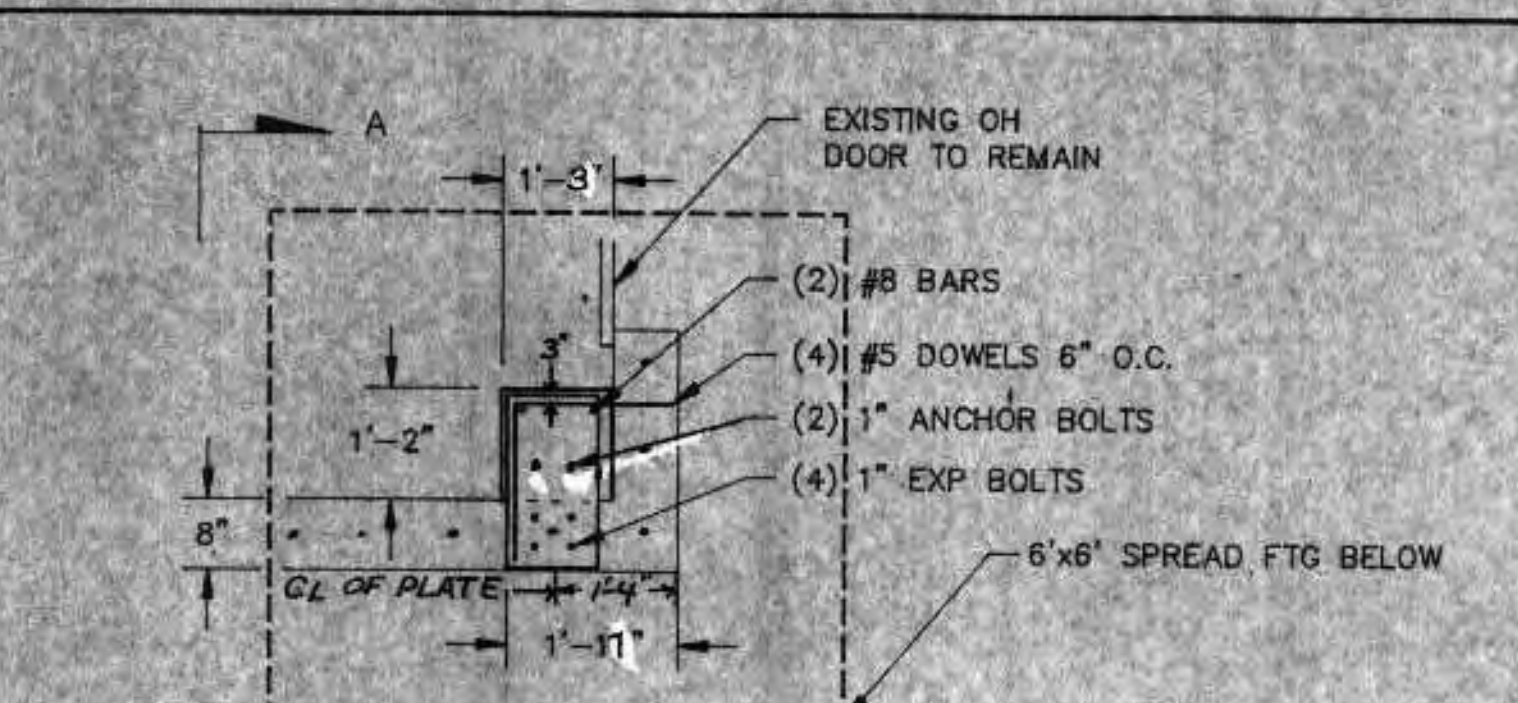
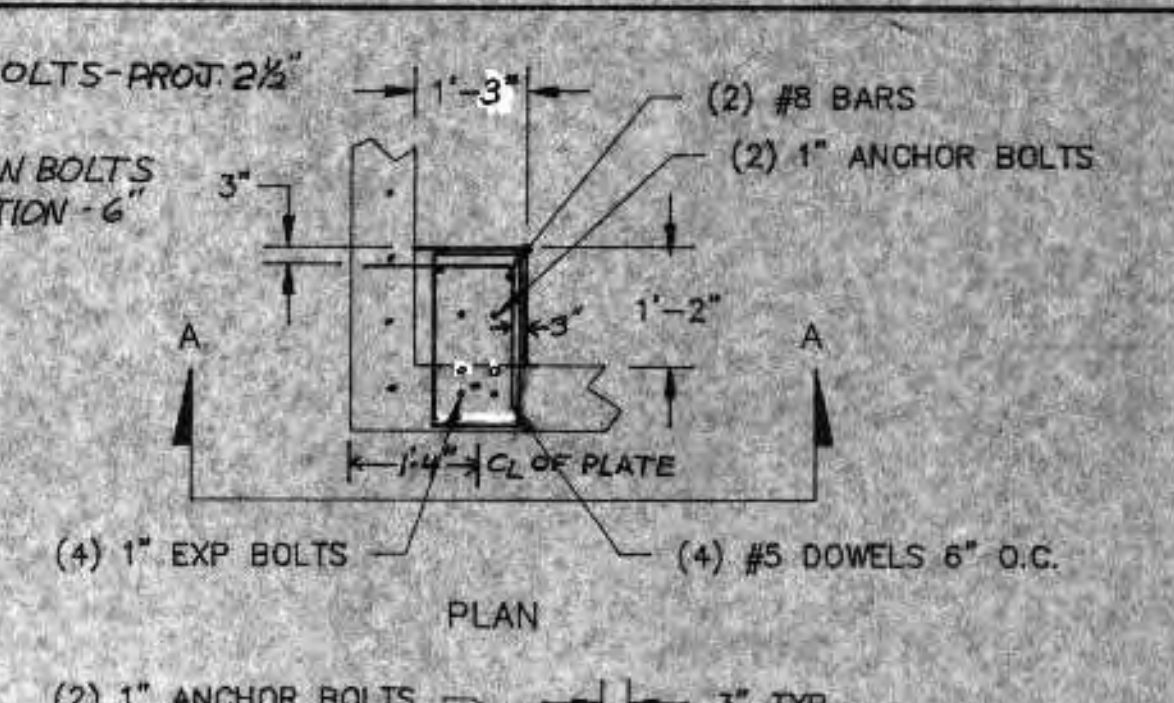
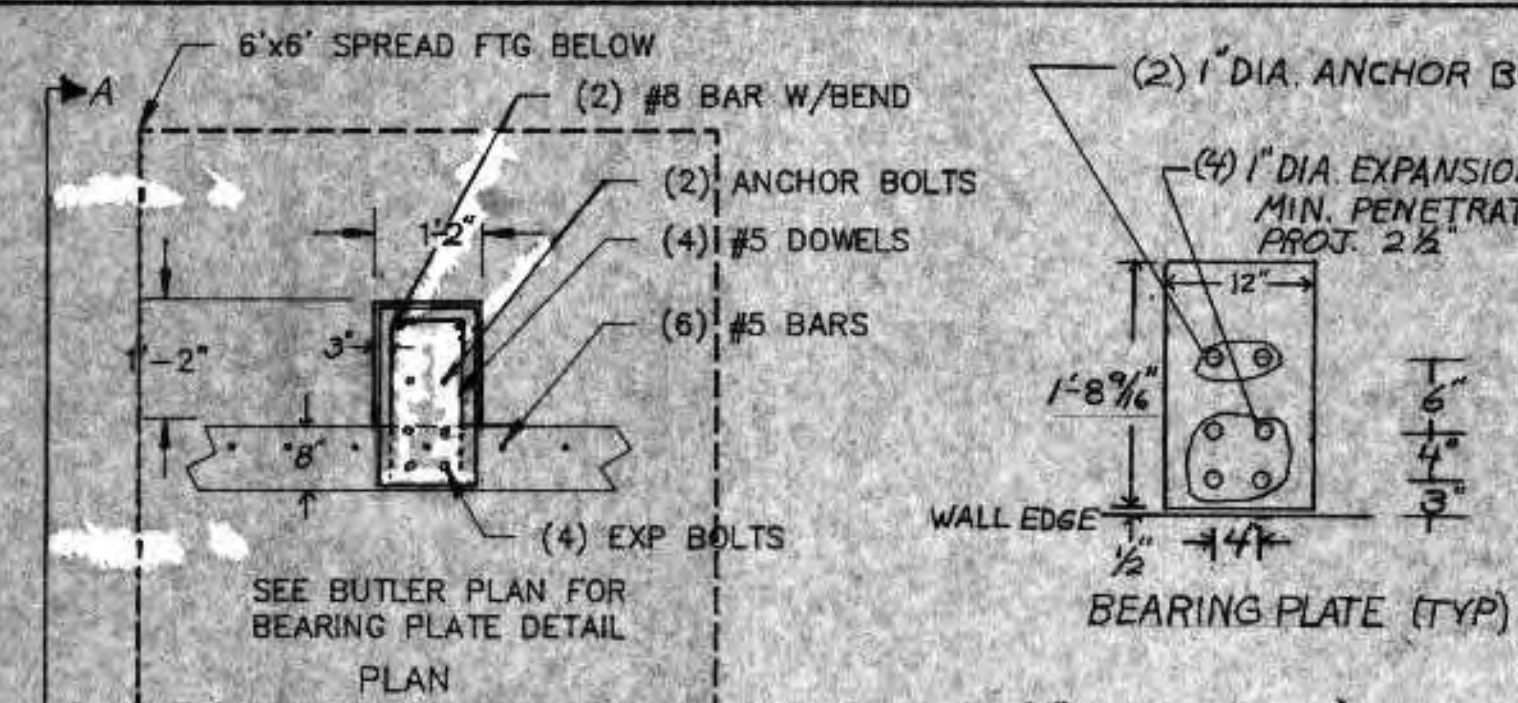
NOTE: PROPOSED WORK SHOWN BY DARK LINE

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME, OR UNDER MY DIRECT SUPERVISION, AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.
Richard Anthony
DATE: 5/24/91 REG. NO.: 25488

REVISIONS		
NO.	BY	DATE
1	RMA	3/22/91
2	RMA	5/15/92
3	RMA	8/17/92

DEWATERING BUILDING FOUNDATION PLAN
CITY OF SUPERIOR, WISCONSIN
WASTE WATER TREATMENT PLANT,
SLUDGE DEWATERING/HANDLING FACILITIES

DESIGNED BY RMA
DRAWN BY GB
CHECKED BY
APPROVED BY
RMA ENGINEERING COMPANY
CONSULTING ENGINEERS
SCALE 1/4"=1'
JOB NO.
DATE
SHEET S-1

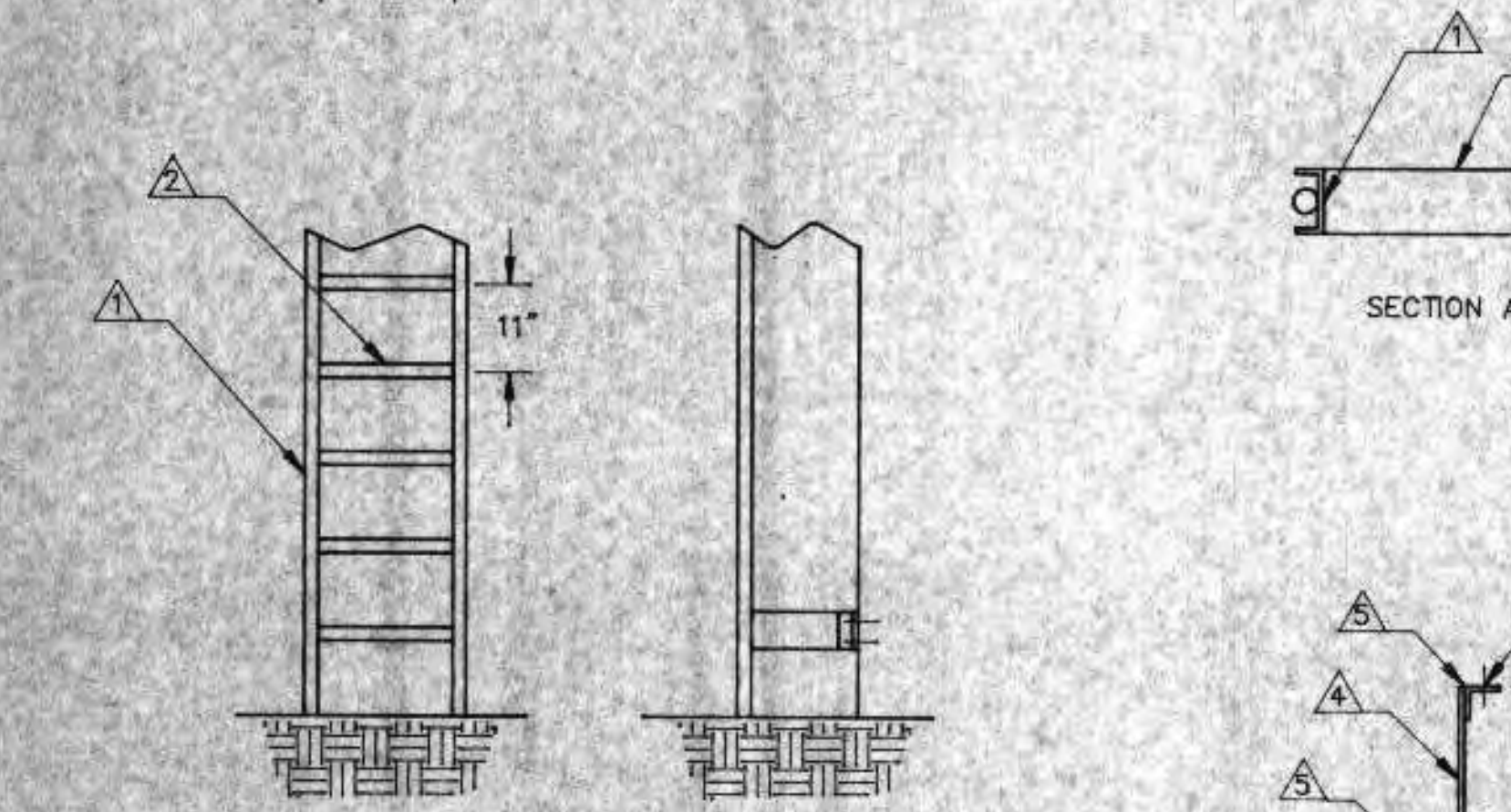
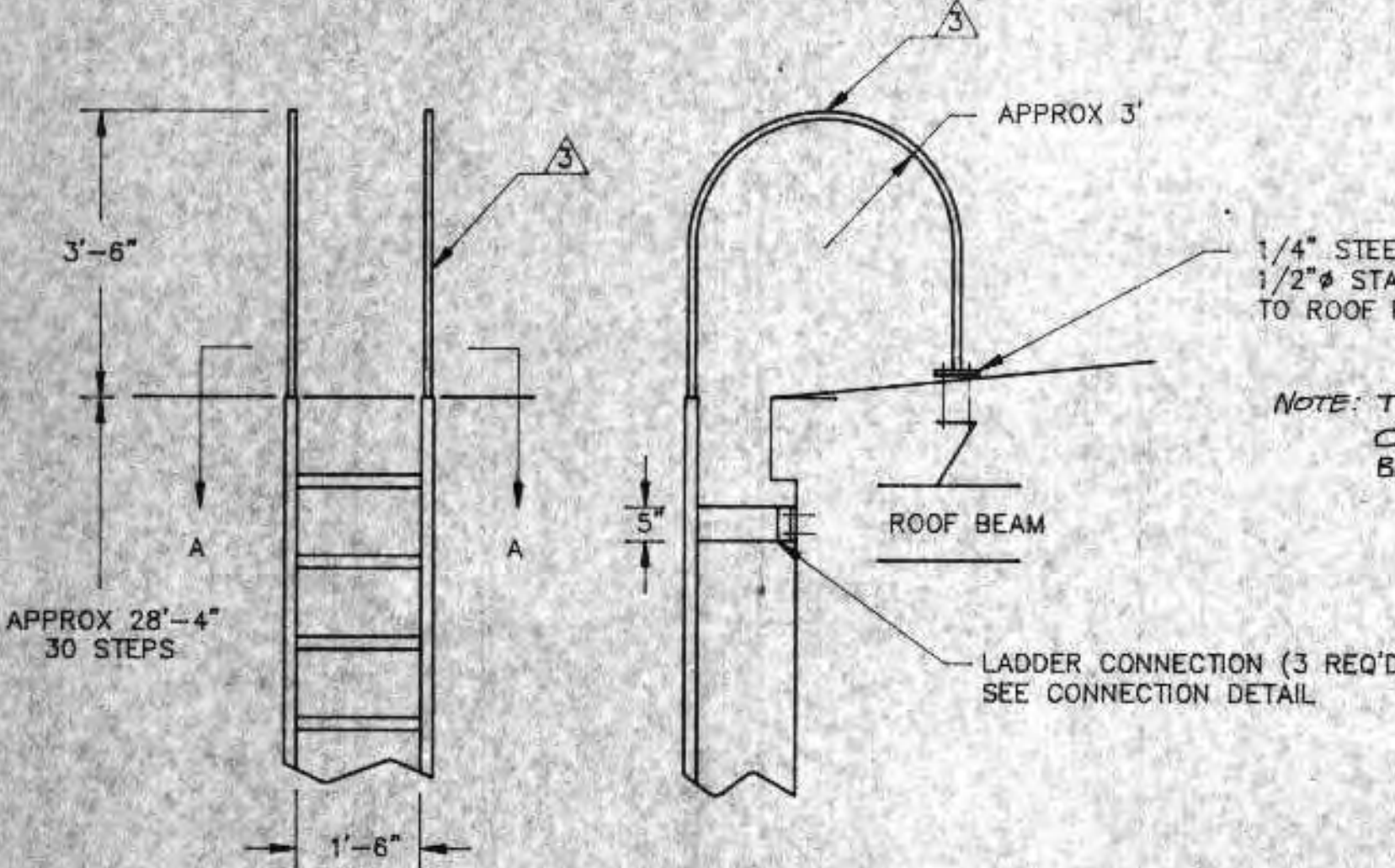


DETAIL A
S4
NOT TO SCALE
SEE NOTES 1 AND 2

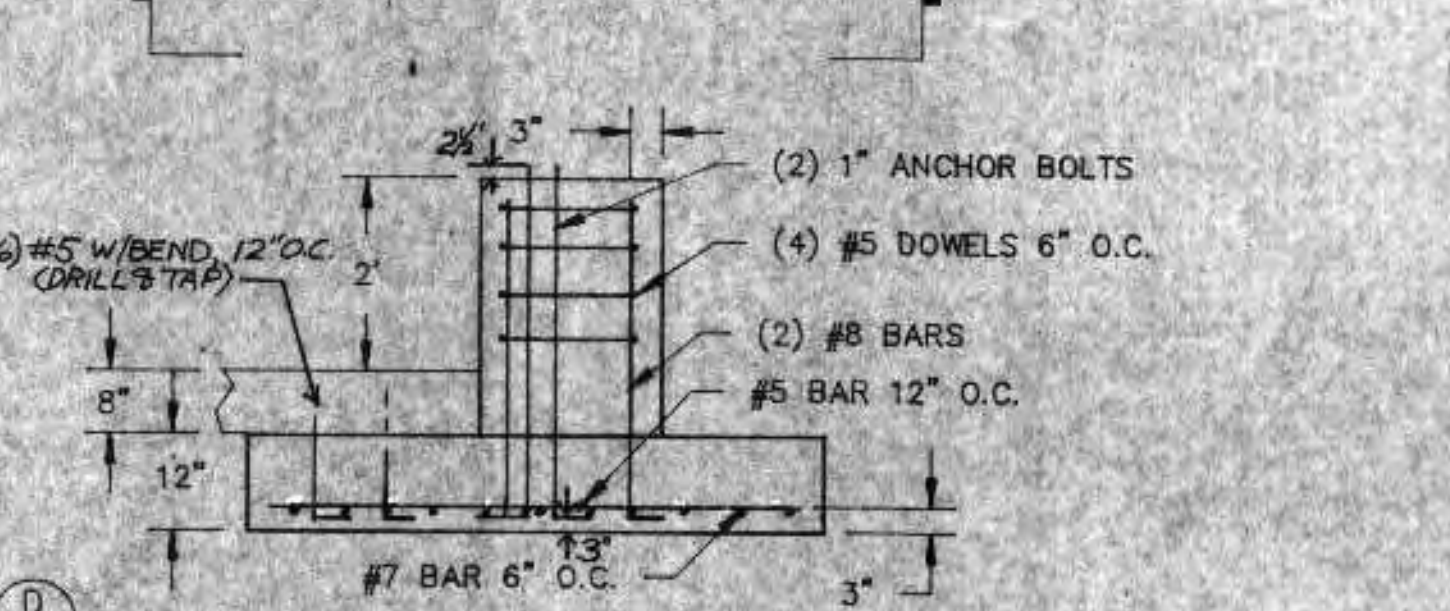
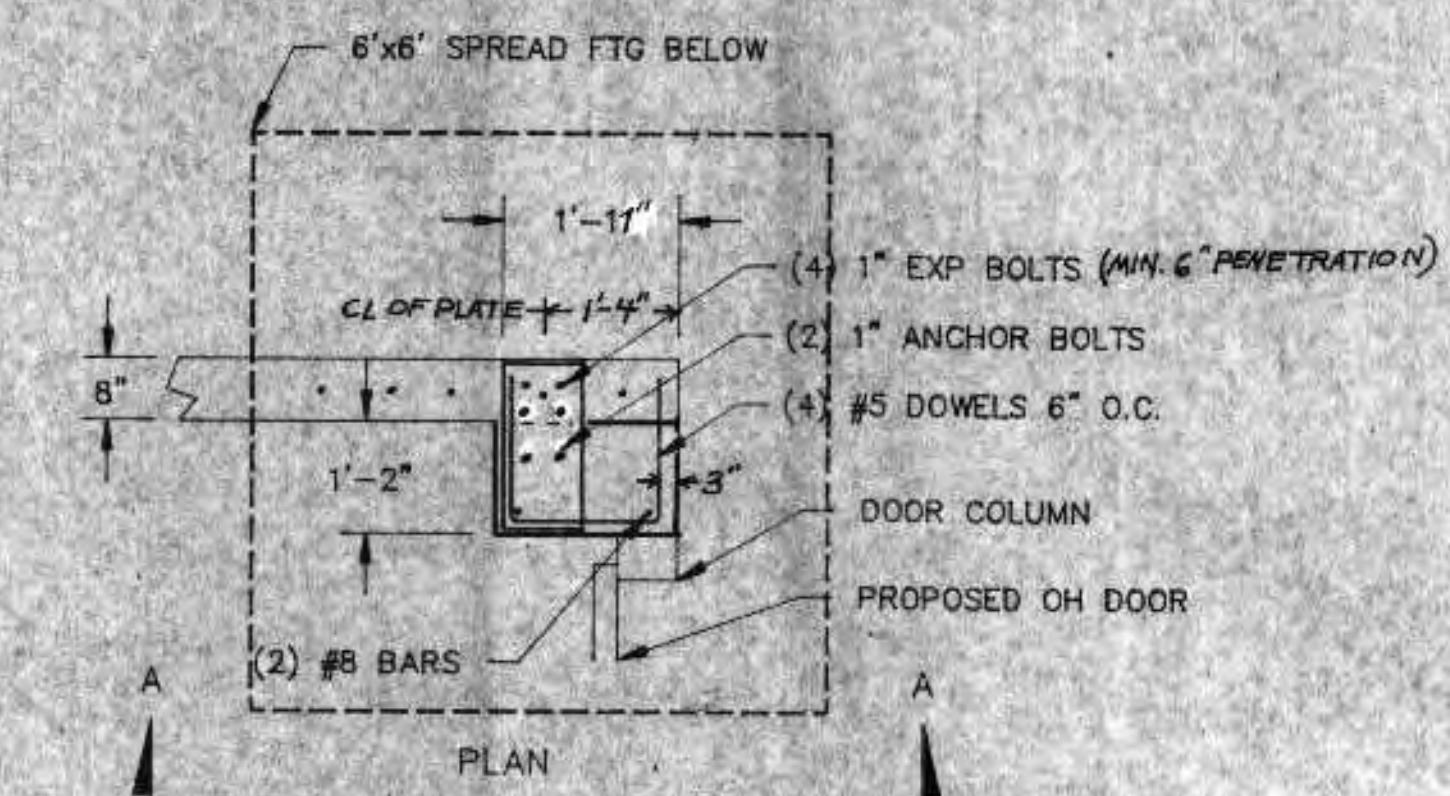
SECTION DETAIL B
S4
NOT TO SCALE
SEE NOTES 1 AND 2

SECTION A-A
DETAIL C
S4
NOT TO SCALE
SEE NOTES 1 AND 2

DETAIL E
S4
NOT TO SCALE
SEE NOTE 1



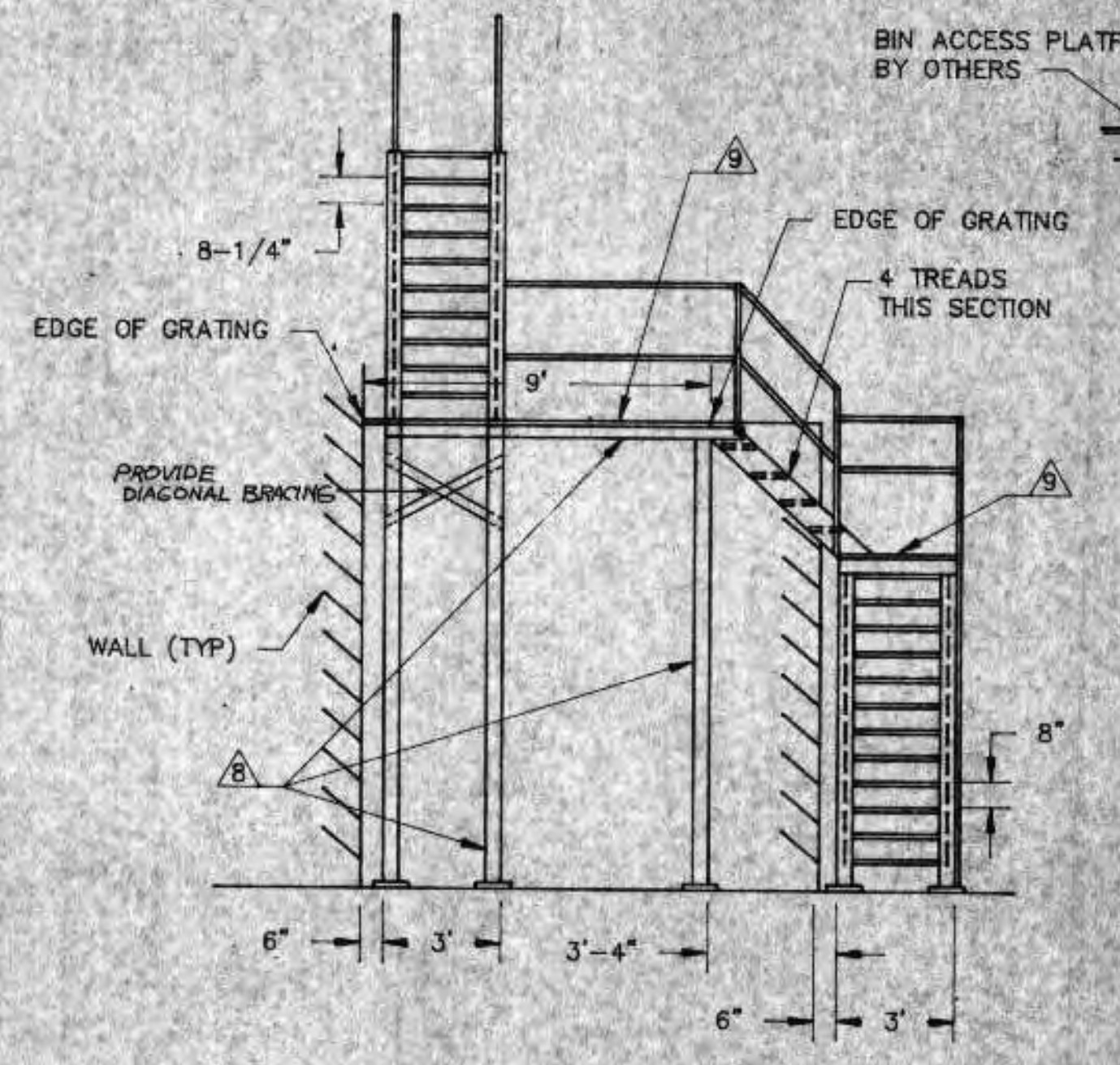
DETAIL F
S4
DEWATERING BUILDING ROOF LADDER
NO SCALE



DETAIL D
S4
NOT TO SCALE
SEE NOTES 1 AND 2

- LADDER AND STAIRWAY SCHEDULE
- ▲ 4" STEEL OR ALUMINUM C CHANNEL RISER
 - ▲ 4" STEEL OR ALUMINUM C CHANNEL STEPS WELD TO RISER
 - ▲ 1" # STEEL OR 1-1/2" # ALUMINUM RAILS
 - ▲ 5" x 12" x 3/8" STEEL OR ALUMINUM PLATE WELD TO RISER
 - ▲ 5" LONG, 3" STEEL OR ALUMINUM ANGLE WELD TO PLATE
 - ▲ STEEL OR ALUMINUM CHANNEL STAIR TREAD SUPPORTS AS REQUIRED
 - ▲ STEEL OR ALUMINUM STAIR TREAD WELDED WITH NOSE PLATE- 300 LB DESIGN LOAD 9-3/4" TREAD WIDTH
 - ▲ 4" STEEL OR ALUMINUM CHANNEL STRUCTURAL SUPPORTS
 - ▲ STEEL OR ALUMINUM GRATING- 36" SPAN 200 LBS PER SQUARE FOOT

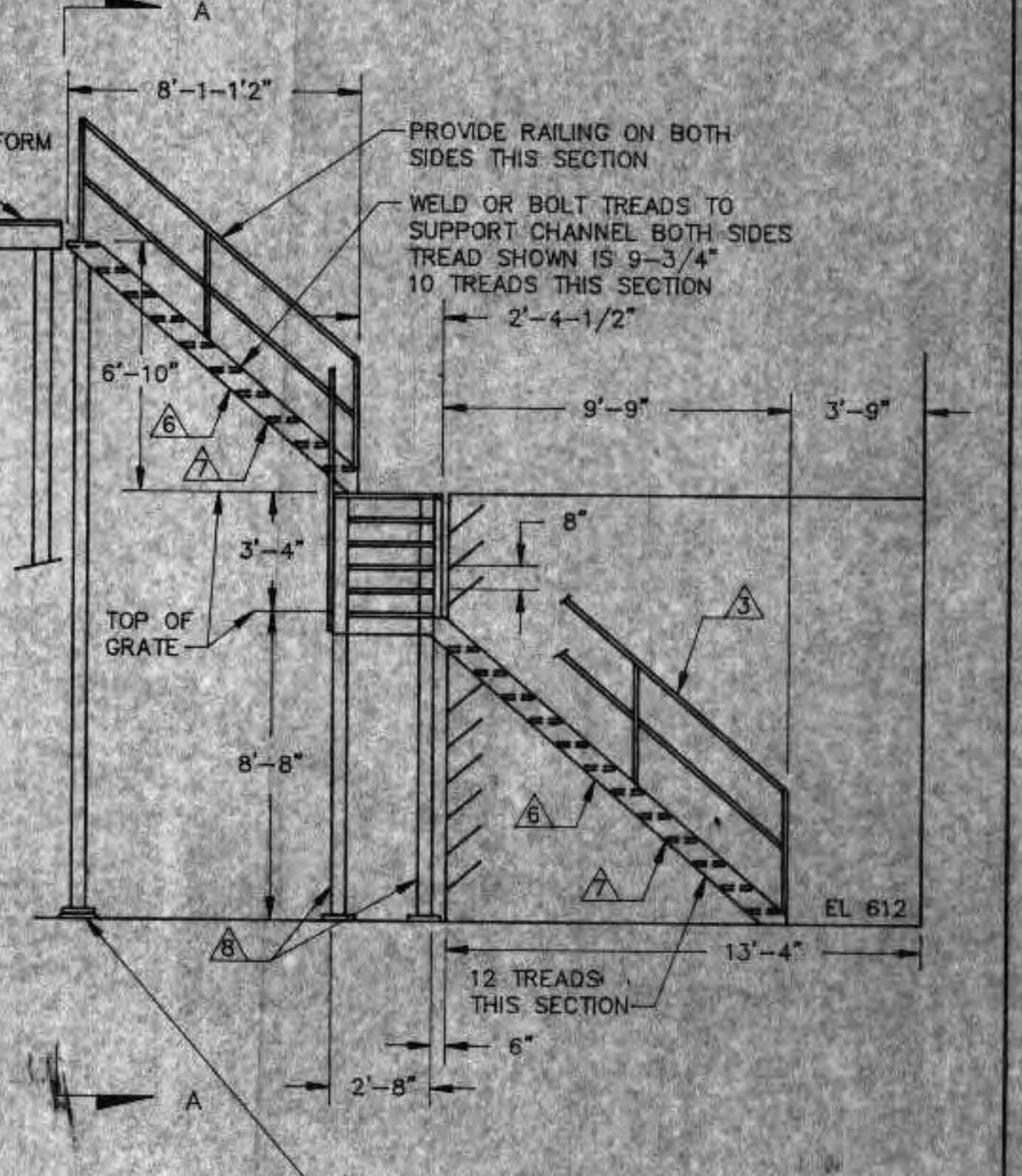
COATINGS
ALUMINUM-NOT REQUIRED
ALL STEEL- HOT DIP GALVANIZED



SECTION A-A

- NOTES:
- DRILL AND GROUT REBAR INTO EXISTING CONCRETE. SANDBLAST AND CLEAN EXISTING CONCRETE TO BE IN CONTACT WITH NEW CONCRETE. BEFORE NEW CONCRETE IS DEPOSITED THE SURFACE SHOULD BE COATED WITH 1/2" OF MORTAR.
 - CORE DRILL REBAR AS SHOWN INTO EXISTING CONCRETE FLOOR AND KNEEWALL AND GROUT
 - PROVIDE STAINLESS STEEL CONNECTIONS FOR ALL STAIRWAYS AND GRATINGS
 - EXISTING CONCRETE KNEEWALL MAY VARY SLIGHTLY IN TOP ELEVATION. CONSTRUCT CONCRETE SUPPORTS FOR BUILDING COLUMNS TO HAVE IDENTICAL TOP ELEVATION
 - BUILDING COLUMN ANCHOR PLATE DETAILS ARE SHOWN IN BUTLER BUILDING DRAWINGS

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.
Richard Anthony
DATE: 6/24/91 REG. NO.: 23488



DETAIL G
S4
STAIRWAY
SCALE: 1/4"=1'

REVISIONS		
NO.	BY	DATE
1	RMG	5/22/91
2	RMG	6/15/92

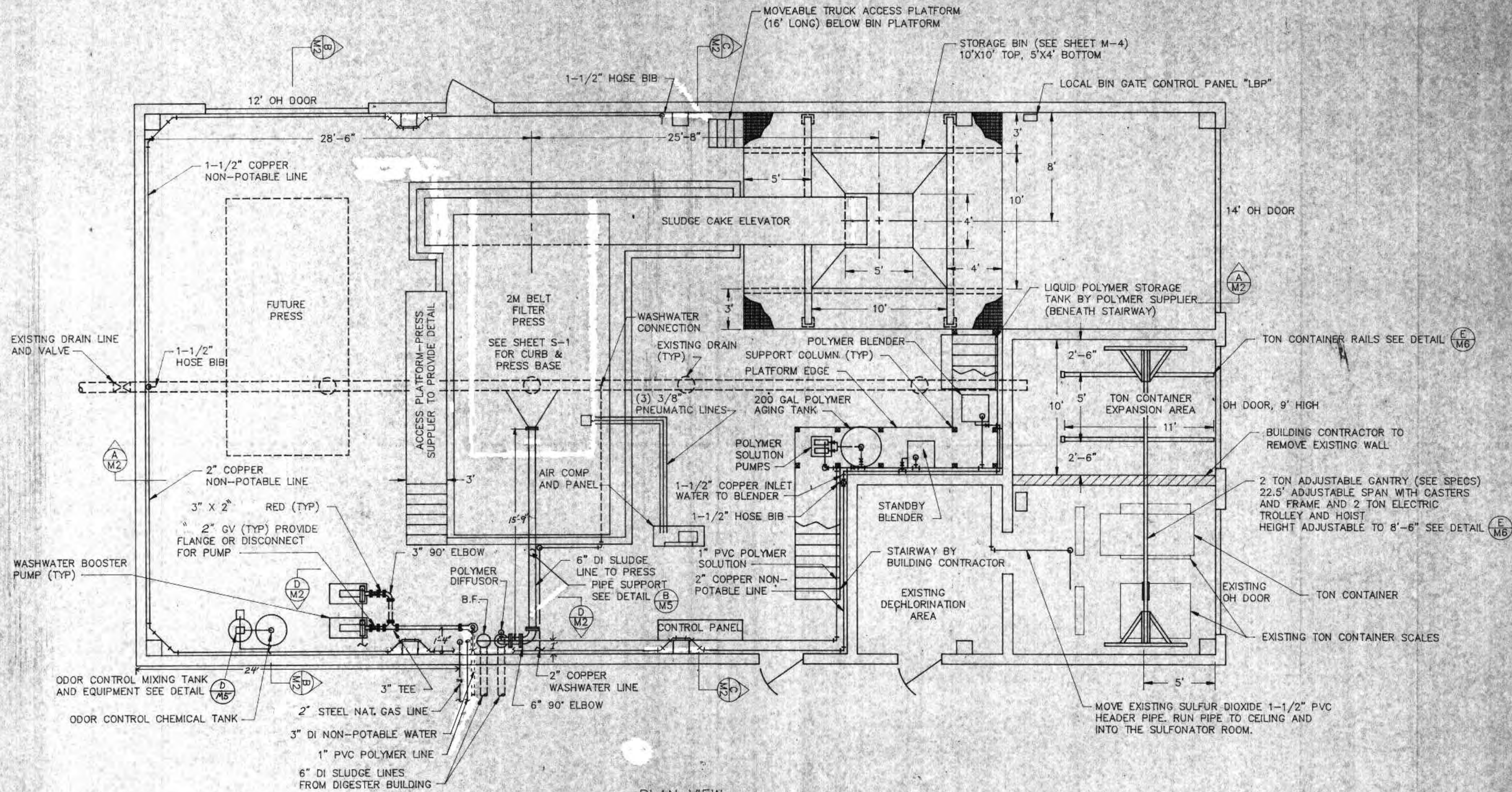
DESIGNED BY RMG
DRAWN BY GB
CHECKED BY
APPROVED BY

DEWATERING BUILDING
STRUCTURAL DETAILS

CITY OF SUPERIOR, WISCONSIN
WASTE WATER TREATMENT PLANT
SLUDGE DEWATERING/HANDLING
FACILITIES

RMA ENGINEERING COMPANY
CONSULTING ENGINEERS

SCALE: JOB NO.
DATE: SHEET S-4



PLAN VIEW
 SLUDGE DEWATERING BUILDING
 SCALE 1/4"=1'

- NOTES:
1. FOR POLYMER SYSTEM INCLUDING VALVES SEE DETAIL (A M5)
 2. SEE SHEET M-4 FOR CAKE BIN AND ACCESS PLATFORM

REVISIONS		
NO.	BY	DATE
1	RWA	8/22/91
2	RWA	7/6/92

DEWATERING BUILDING
 MECHANICAL PLAN

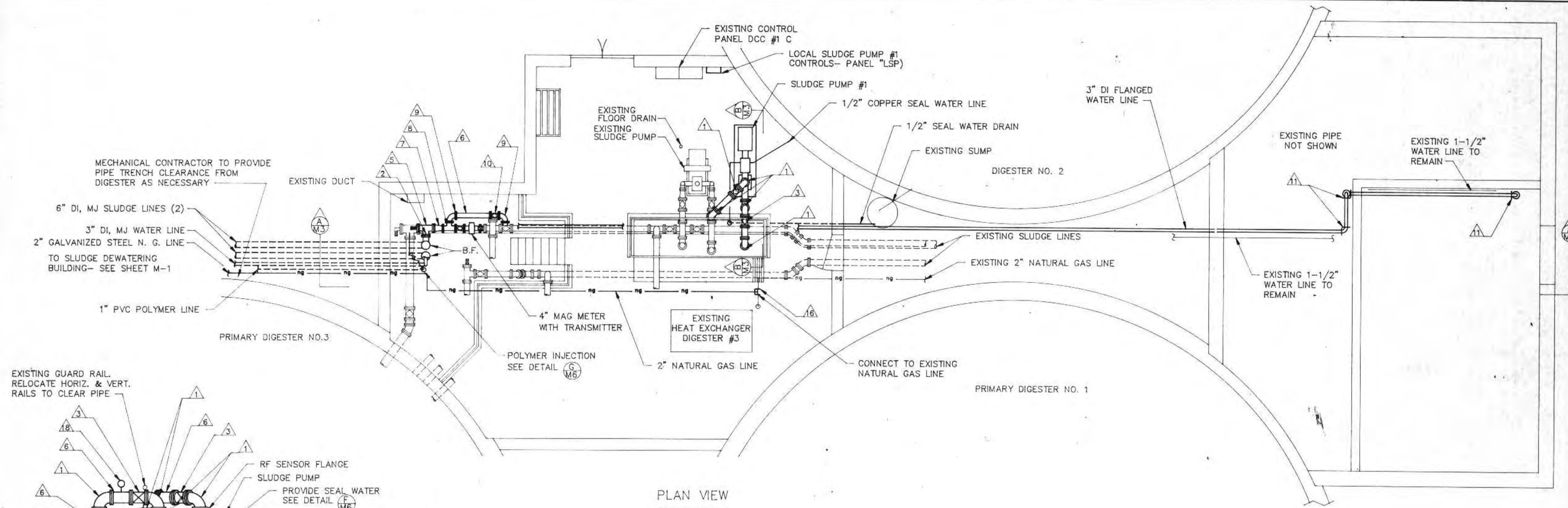
CITY OF SUPERIOR, WISCONSIN
 WASTE WATER TREATMENT PLANT
 SLUDGE DEWATERING/HANDLING
 FACILITIES

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME, OR UNDER MY DIRECT SUPERVISION, AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.

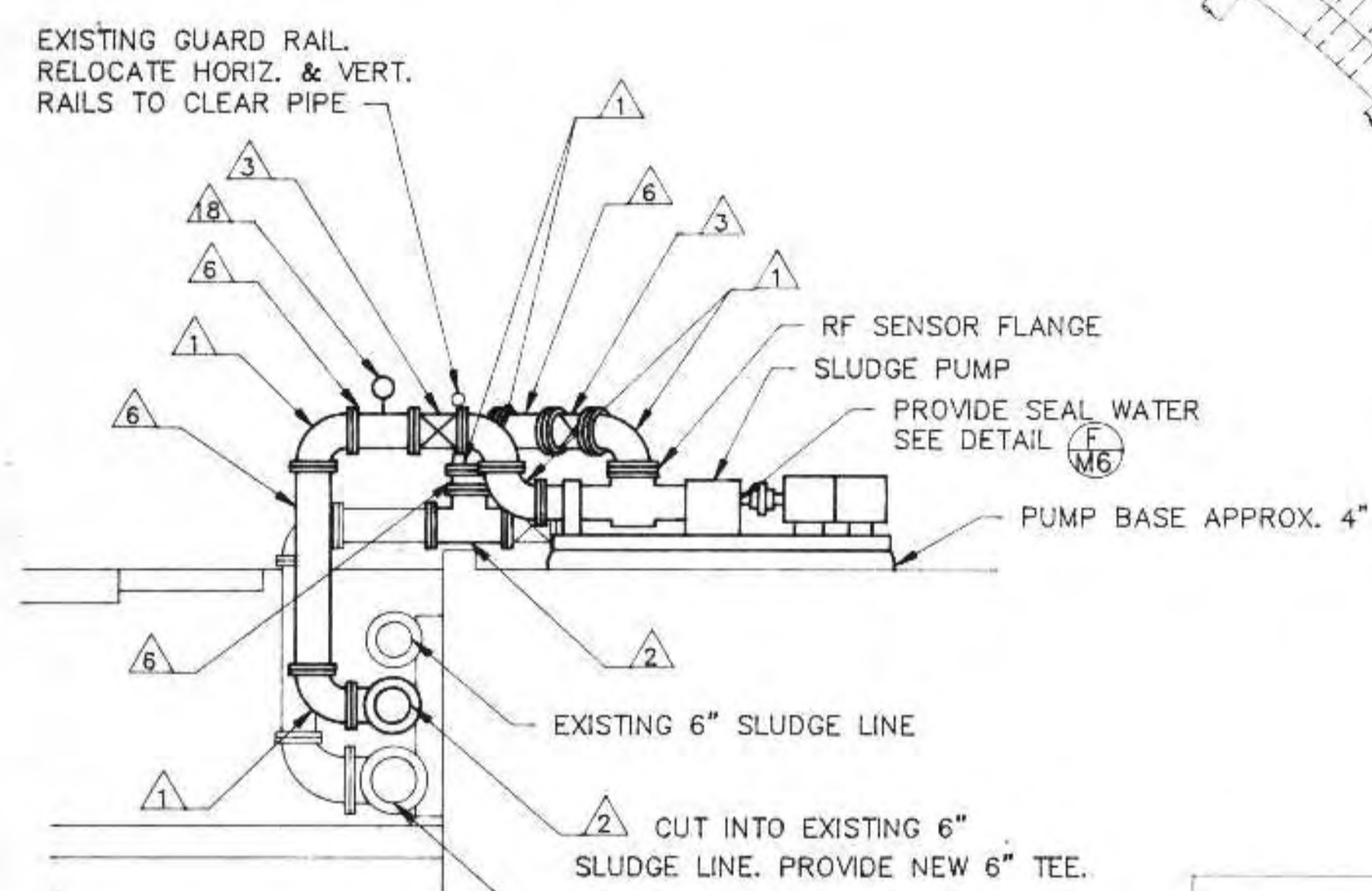
Richard Auckony

DATE: 6/24/91 REG. NO.: 25488

DESIGNED BY RWA	RMA ENGINEERING COMPANY CONSULTING ENGINEERS	SCALE 1/4"=1'	JOB NO.
DRAWN BY GB		DATE	
CHECKED BY			
APPROVED BY		SHEET M-1	



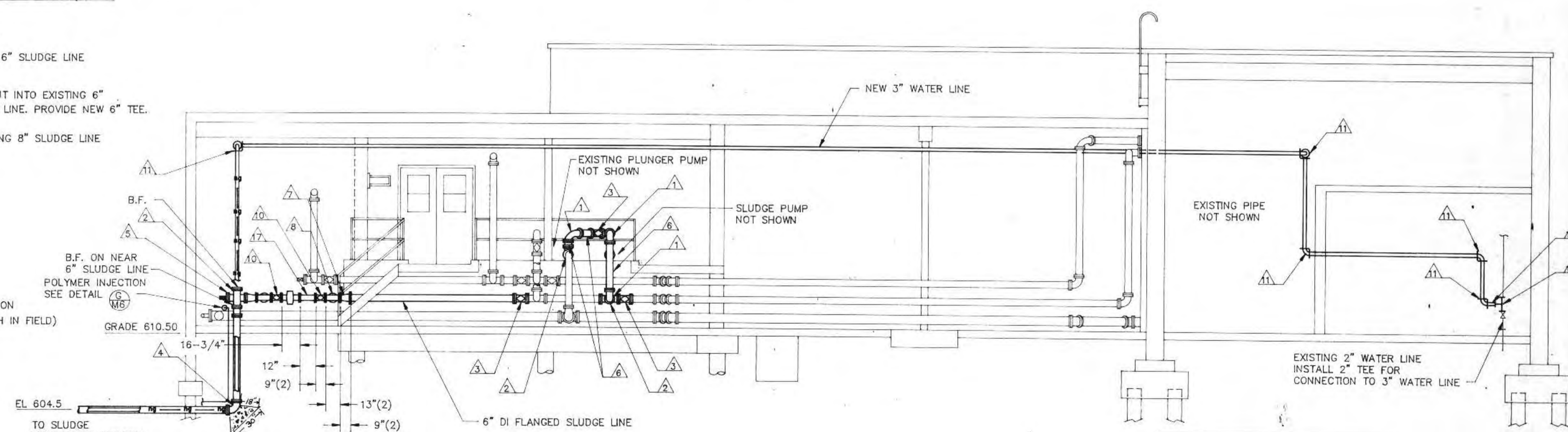
PLAN VIEW
SCALE: 1/4"=1'



SECTION (B/M5)
SCALE: 3/8"=1'

VALVE AND FITTING SCHEDULE

- 1 6" 90° FLANGED ELBOW
- 2 6" FLANGED TEE
- 3 6" FLANGED PLUG VALVE
- 4 6" 90° MJ ELBOW
- 5 6" FLANGED TEE WITH FLUSHING CONNECTION
- 6 6" FLANGED SPOOL PIECE (CUT TO LENGTH IN FIELD)
- 7 6" X 4" FLANGED REDUCER
- 8 4" FLANGED TEE
- 9 4" FLANGED 90° ELBOW
- 10 4" FLANGED PLUG VALVE
- 11 3" FLANGED 90° ELBOW
- 12 3" X 2" REDUCER
- 13 2" TEE
- 14 1" PVC BALL VALVE
- 15 1" PVC CHECK VALVE
- 16 2" GALVANIZED STEEL TEE
- 17 4" FLANGED SPOOL PIECE
- 18 PRESSURE GAUGE

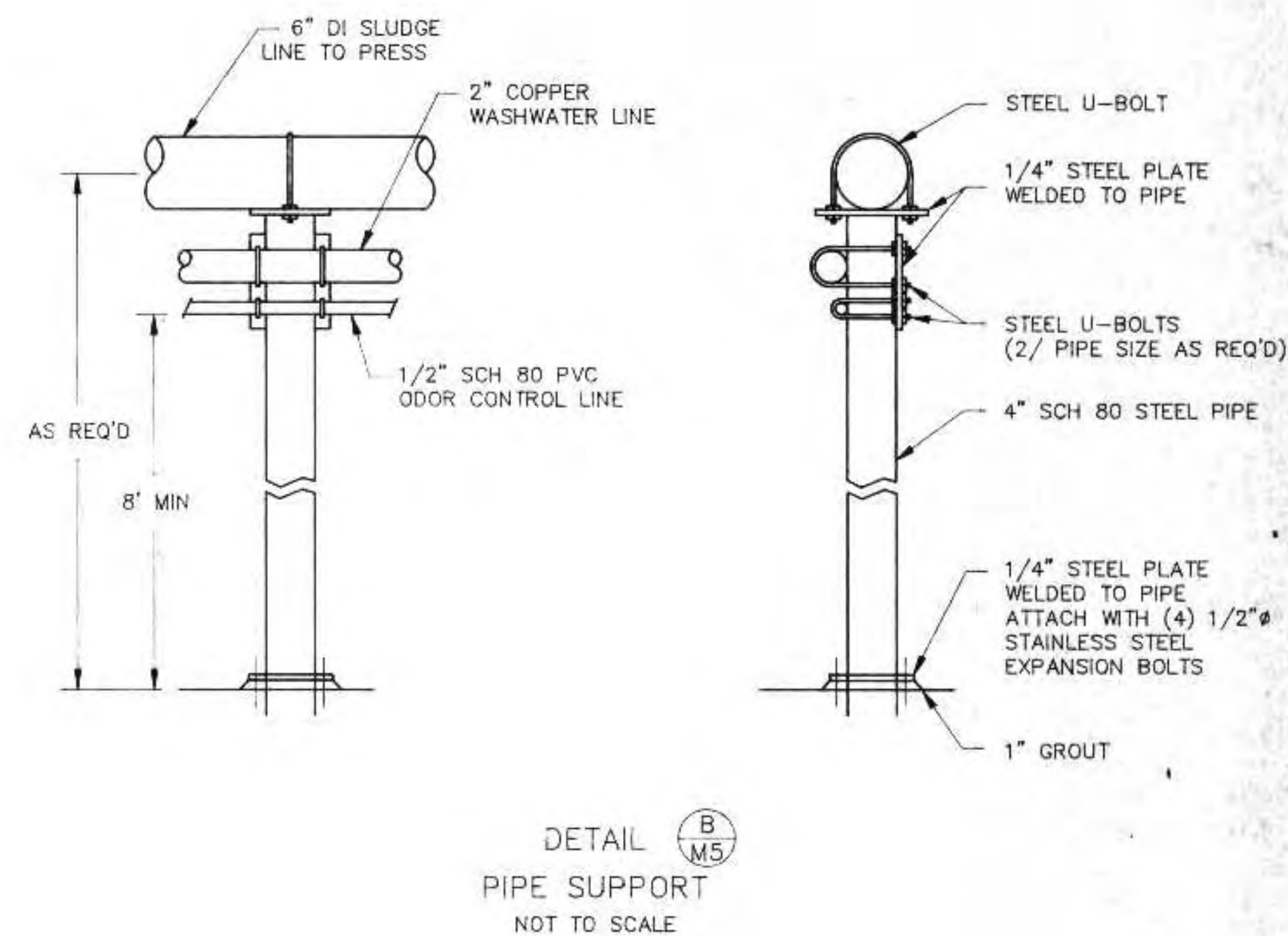
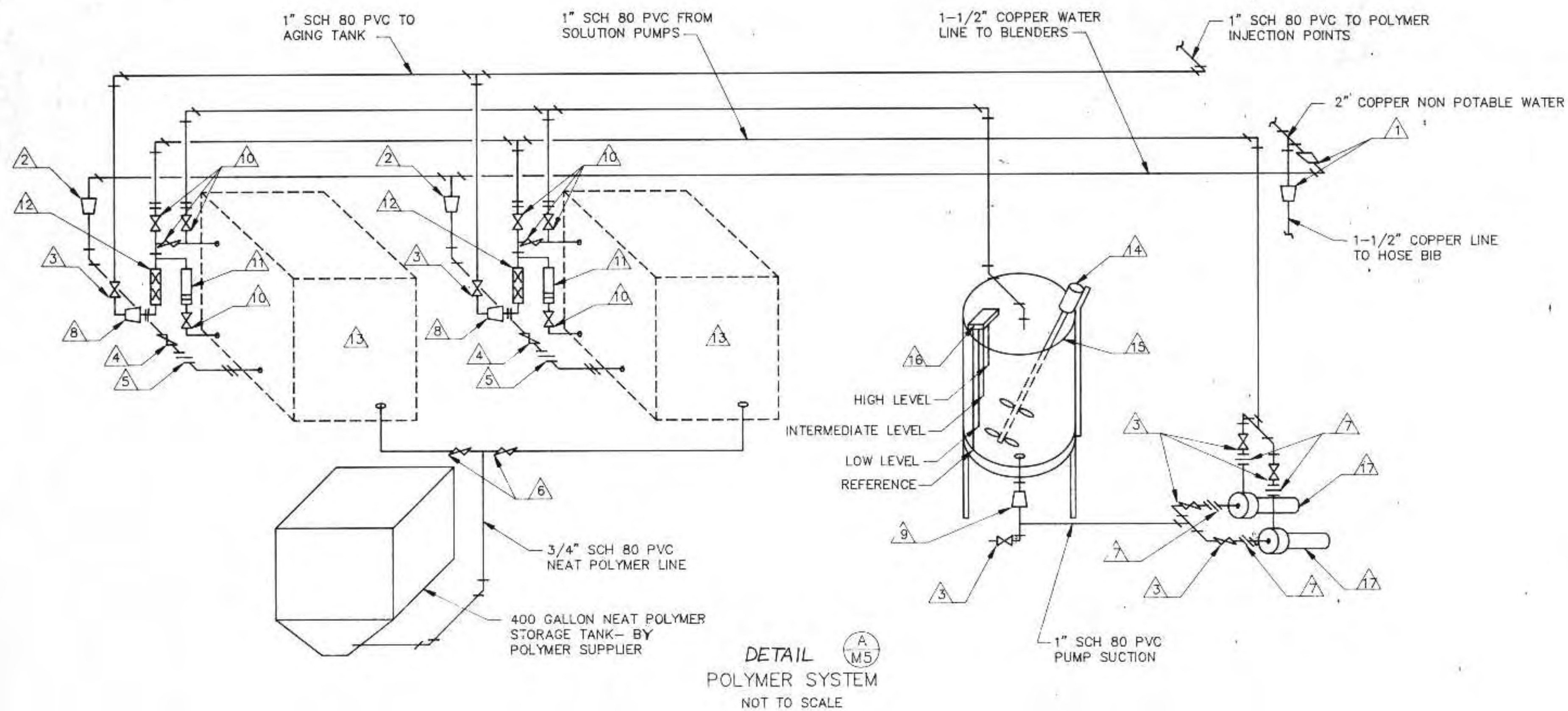


SECTION (A/M3)
SCALE: 1/4"=1'

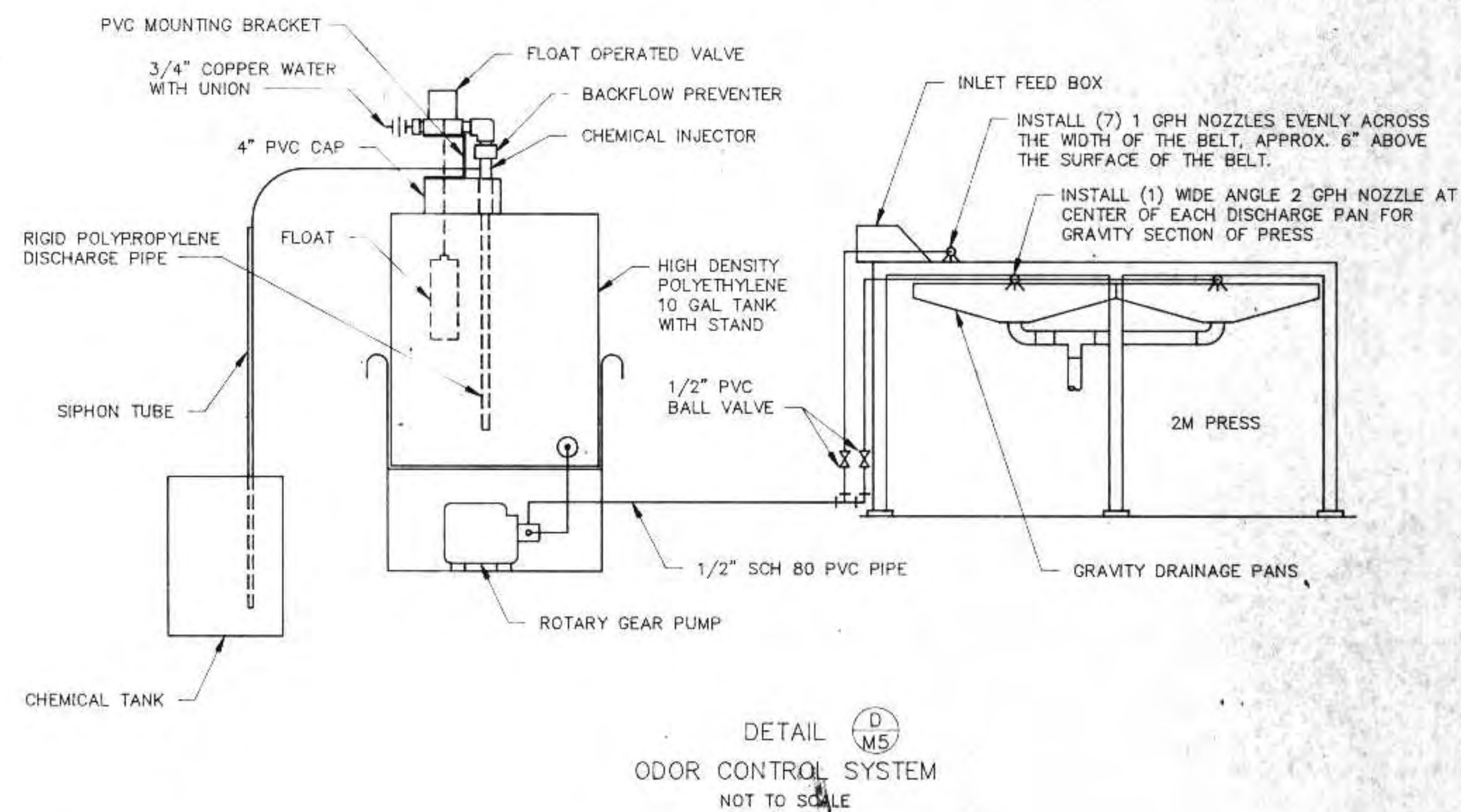
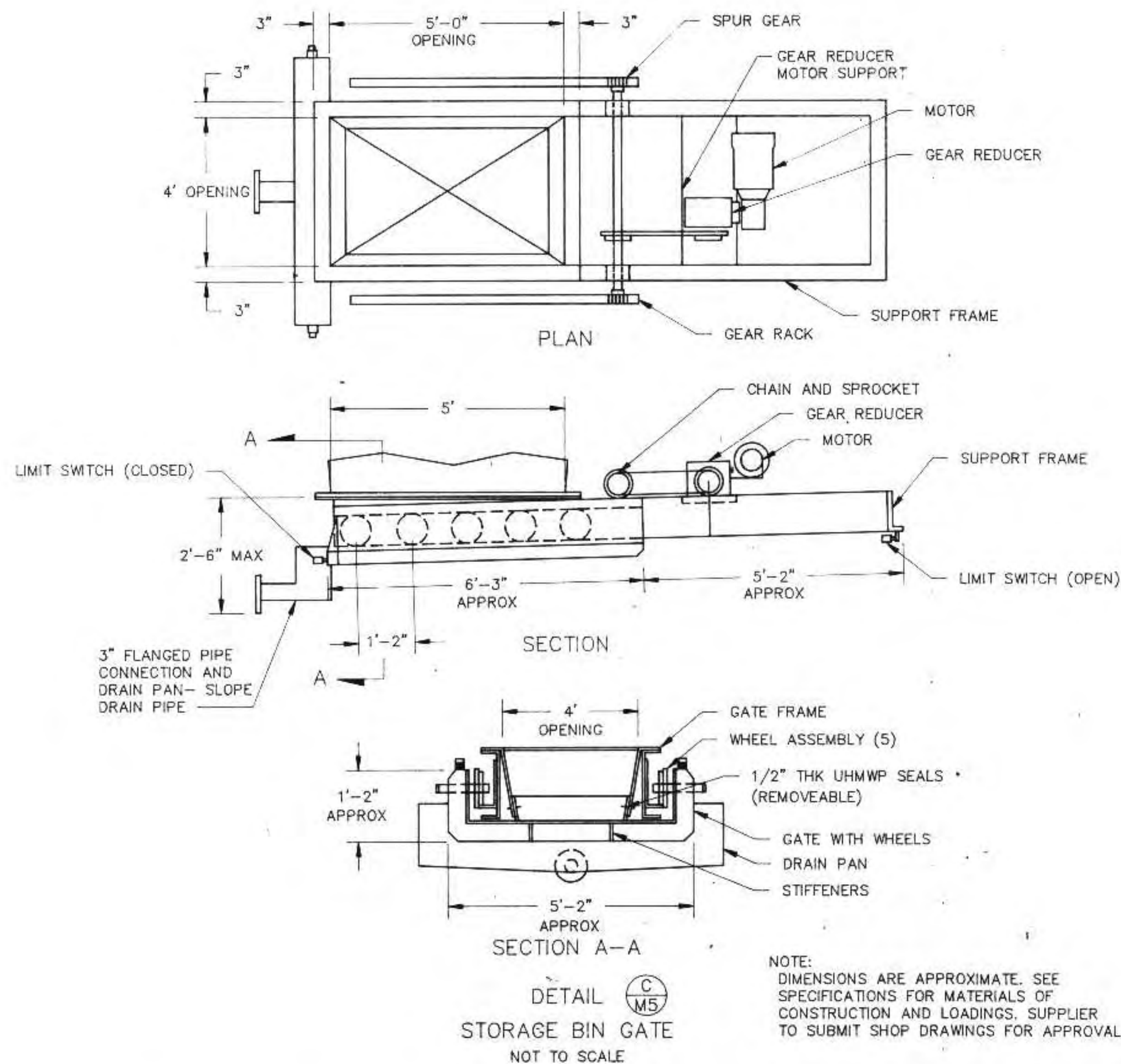
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME, OR UNDER MY DIRECT SUPERVISION, AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.
Richard Anthony
DATE: 6/24/91 REG. NO.: 25488

REVISIONS			DIGESTER CONTROL BUILDING MODIFICATIONS	
NO.	BY	DATE		
1	Rma	8/22/91		
2	Rma	7/6/92		

DESIGNED BY	Rma	SCALE	1/4"=1'	JOB NO.
DRAWN BY	GB	DATE		
CHECKED BY		RMA ENGINEERING COMPANY		
APPROVED BY		CONSULTING ENGINEERS		
				SHEET
				M-3



POLYMER SYSTEM SCHEDULE		
ITEM	DESCRIPTION	FURNISHED BY
1	2" X 1-1/2" COPPER REDUCER	CONTRACTOR
2	1-1/2" X 1" COPPER REDUCER	CONTRACTOR
3	1" PVC BALL VALVE	CONTRACTOR
4	1" BRONZE GLOBE VALVE	CONTRACTOR
5	1" UNION	CONTRACTOR
6	3/4" PVC BALL VALVE	CONTRACTOR
7	1" DISCONNECT	CONTRACTOR
8	1-1/4" X 1" PVC REDUCER	CONTRACTOR
9	1" X 3/4" PVC REDUCER	CONTRACTOR
10	PVC VALVES	SYSTEM SUPPLIER
11	DILUTION WATER ROTOMETER	SYSTEM SUPPLIER
12	STATIC MIXER	SYSTEM SUPPLIER
13	BLENDER UNIT	SYSTEM SUPPLIER
14	SOLUTION TANK MIXER	SYSTEM SUPPLIER
15	200 GALLON TANK AND STAND	SYSTEM SUPPLIER
16	4-PROBE TANK LEVEL CONTROL	SYSTEM SUPPLIER
17	POLYMER SOLUTION PUMP	SYSTEM SUPPLIER



- NOTES:
- ITEM 13 INCLUDES PRESSURE GAUGES, MIXING WATER ROTOMETER, NEAT POLYMER PUMP, SOLENOID SWITCH AND MIXING TANK.
 - || DESIGNATES CONNECTIONS BETWEEN PIPING BY CONTRACTOR AND BLENDING EQUIPMENT BY SYSTEM SUPPLIER
 - MOUNTING PLATFORM BY SYSTEM SUPPLIER - TO BE BOLTED TO WALL.

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Richard Anthony

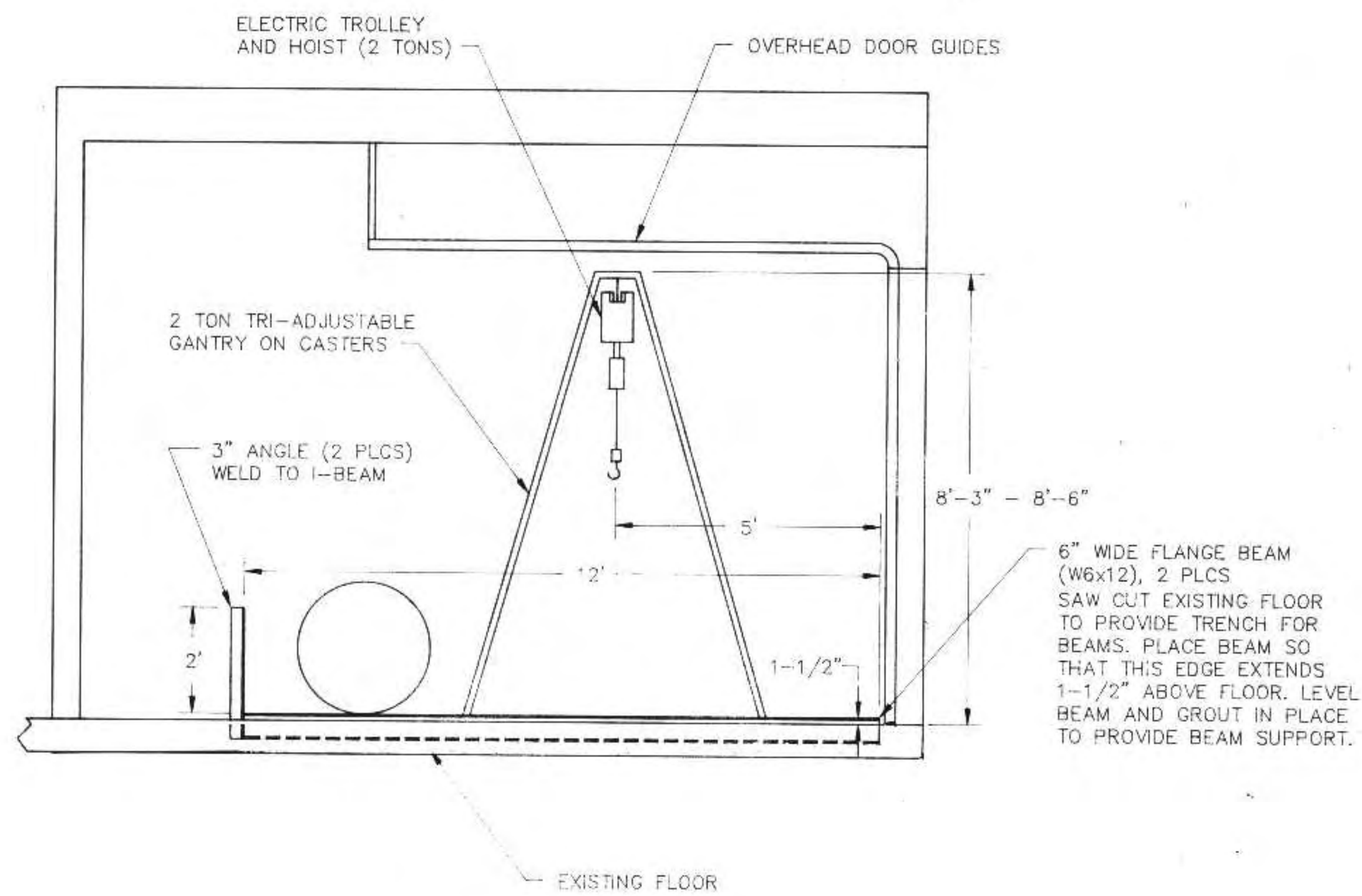
DATE: 6/24/91 REG. NO.: 25488

REVISIONS		
NO.	BY	DATE
1	Rua	8/22/91
2	Rua	7/21/92

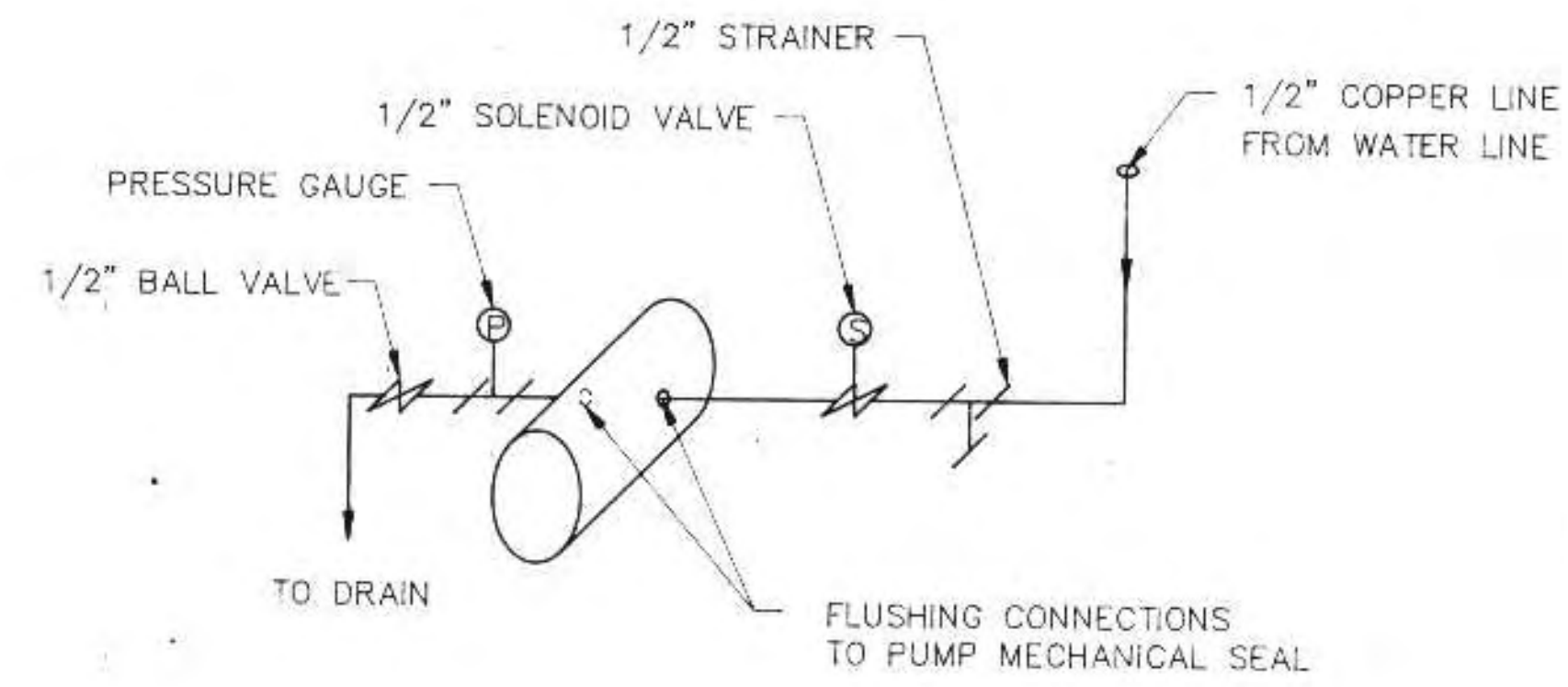
MECHANICAL DETAILS

CITY OF SUPERIOR, WISCONSIN
WASTE WATER TREATMENT PLANT
SLUDGE DEWATERING/HANDLING
FACILITIES

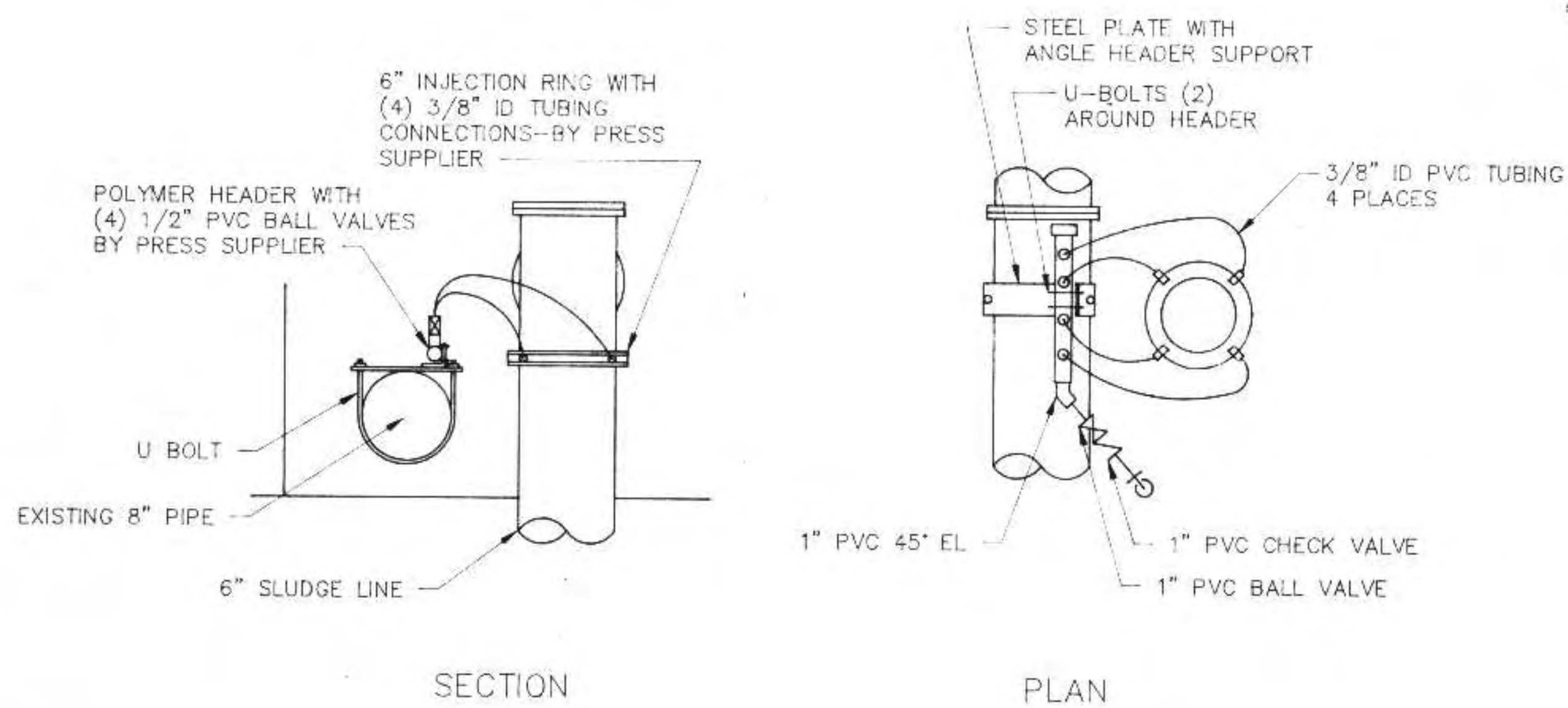
DESIGNED BY	Rua	SCALE	NTS	JOB NO.
DRAWN BY	GB	RMA ENGINEERING COMPANY		DATE
CHECKED BY		CONSULTING ENGINEERS		
APPROVED BY				SHEET M-5



DETAIL (E)
TON CONTAINERS RAILS AND HOIST
SCALE: 1/2"=1'



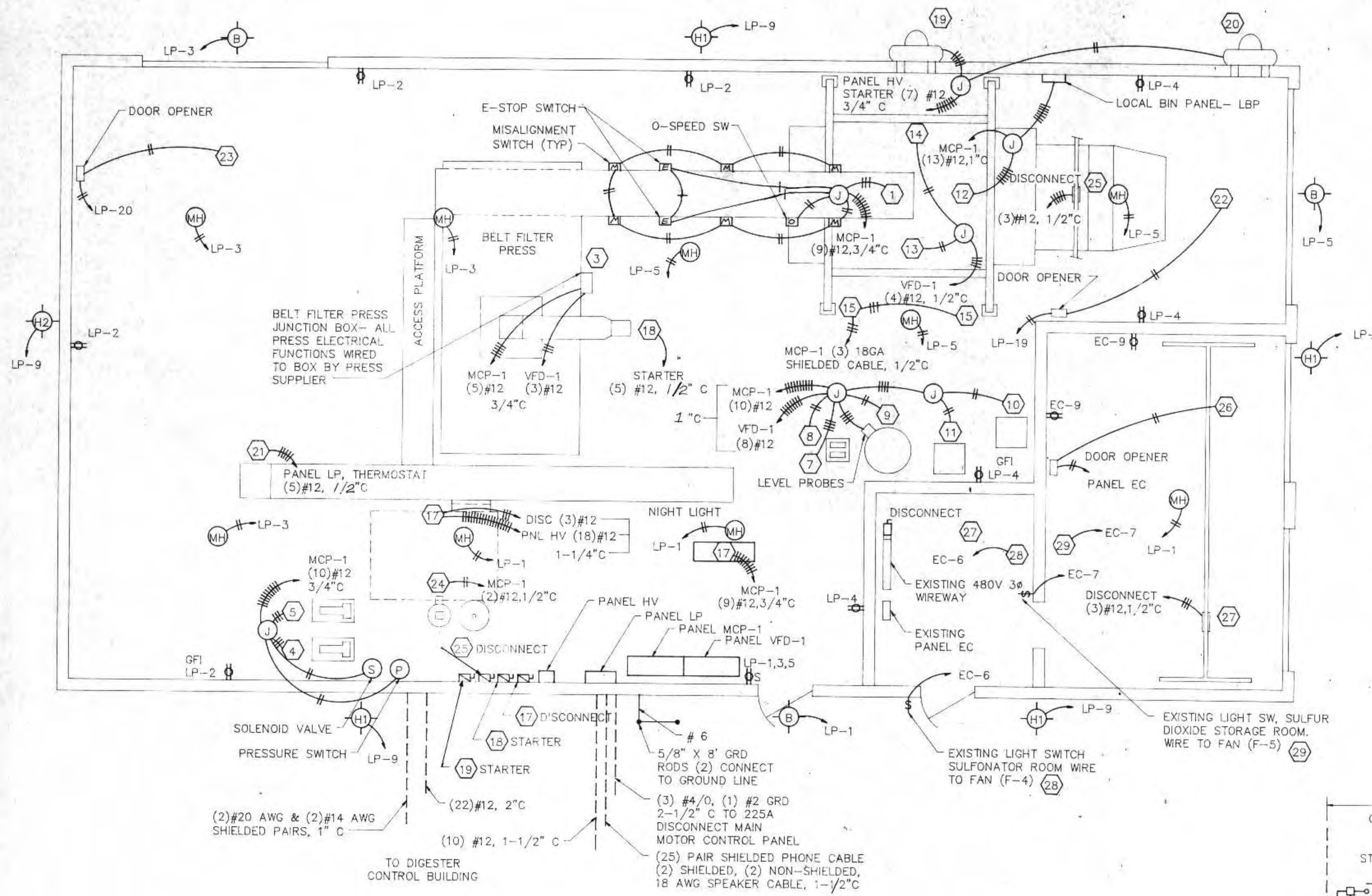
DETAIL (F)
SLUDGE PUMP FLUSHING
WATER CONNECTION



DETAIL (G)
POLYMER INJECTION IN
DIGESTER CONTROL BUILDING

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Richard Anthony
DATE: 6/24/91 REG. NO.: 25488

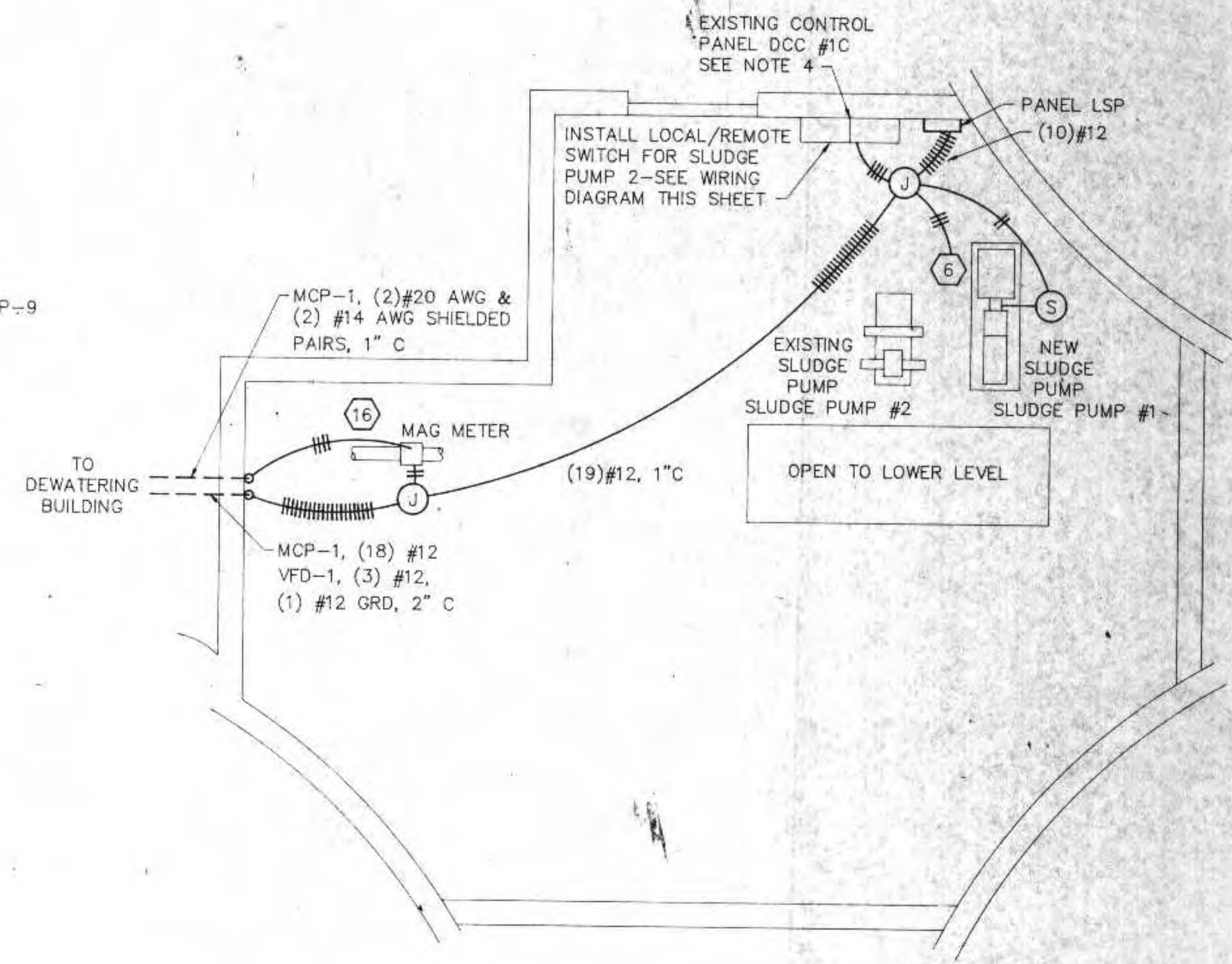
REVISIONS			MECHANICAL DETAILS	
NO.	BY	DATE		
1	RMC	8/22/91	CITY OF SUPERIOR, WISCONSIN WASTE WATER TREATMENT PLANT SLUDGE DEWATERING/HANDLING FACILITIES	
2	RMC	9/18/92		
DESIGNED BY	RMC		RMA ENGINEERING COMPANY CONSULTING ENGINEERS	
DRAWN BY	GB			
CHECKED BY				
APPROVED BY				
			SCALE: NTS	JOB NO.
			SHEET	M-6



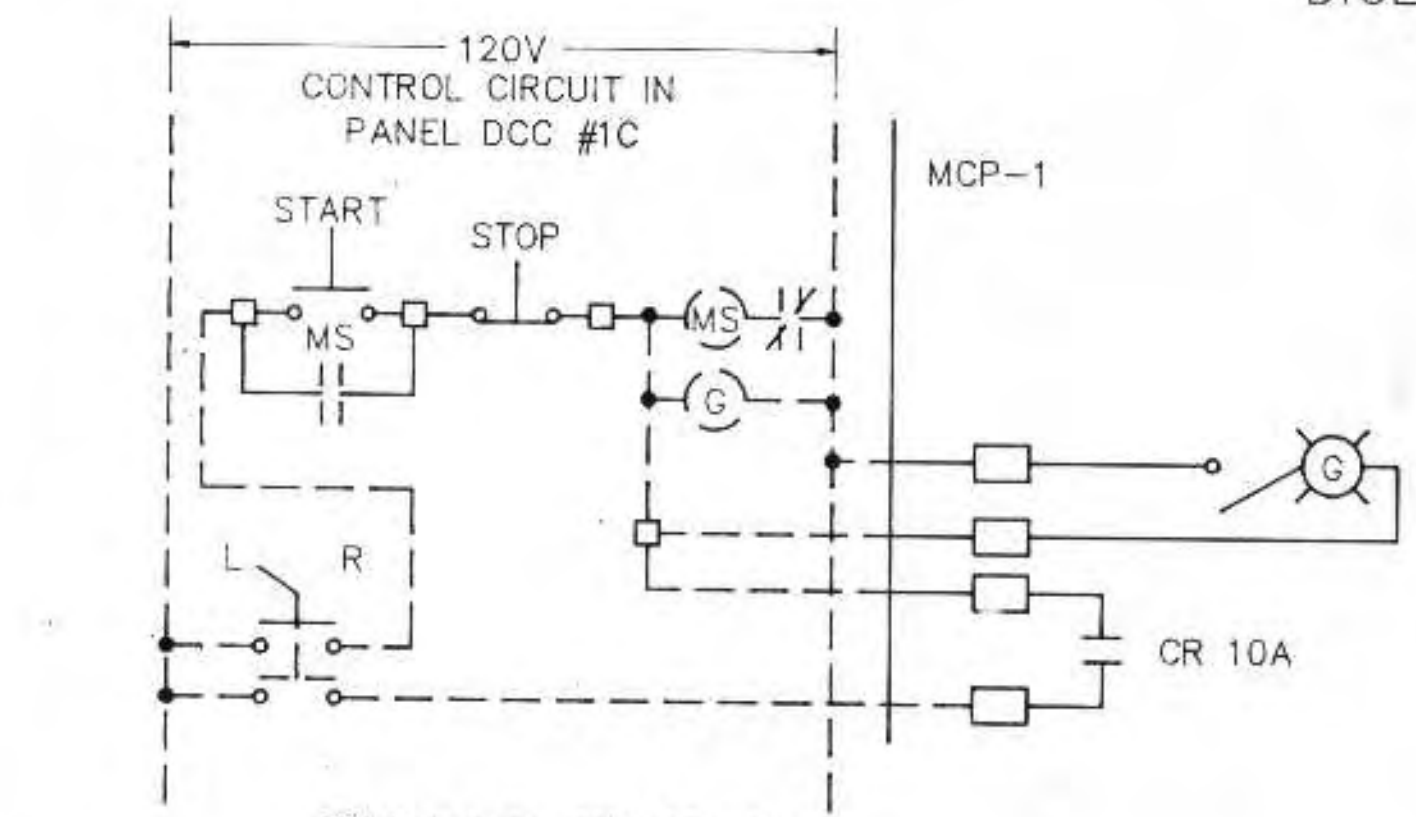
DEWATERING BUILDING ELECTRICAL PLAN
SCALE: 1/4"=1'

- ELECTRICAL NOTES**
1. USE SCHEDULE 80 PVC CONDUIT FOR BURIED CABLES USE GALVANIZED METAL RIGID CONDUIT INSIDE BUILDING
 2. SEE SHEET E-3 FOR ELECTRICAL EQUIPMENT SCHEDULE
 3. SEE SHEET E-3 FOR PROPOSED LAYOUT FOR MCP-1
 4. EXISTING SLUDGE PUMP RELAY IN PANEL DCC #1C TO BE OPERATED FROM RELAY DRY CONTACT IN MCP-1
 5. PANEL LSP TO PROVIDE LOCAL CONTROL OF NEW SLUDGE PUMP. PANEL TO CONTAIN START PUSH BUTTONS, HOA SWITCH, GREEN RUNNING LIGHT. SEE SPECIFICATIONS FOR TIE INTO MCP-1
 6. PROVIDE ONE GFI DUPLEX RECEPTACLE ON CIRCUITS LP-2 AND LP-4

LIGHTING SCHEDULE						
TYPE	MOUNTING	LAMPS	DIFFUSER	MANUFACTURERS CATALOG NO.	REMARKS	NUMBER
MH	ROOF SUPPORT	1-400W	—	HUBBELL HBS-400H8-OU	QUAD VOLTAGE METAL HALIDE	9
B	WALL	70W HPS	LEXAN	NORTH STAR WMW 059LS-12N-PE	120V OUTDOOR BRACKET WITH PHOTOCELL	3
H1	WALL	1-400W	—	HUBBELL PRP-400S-118	QUAD VOLTAGE HIGH PRESS SODIUM	4
H2	WALL	1-250W	—	HUBBELL PRP-250S-118	QUAD VOLTAGE HIGH PRESS SODIUM	1



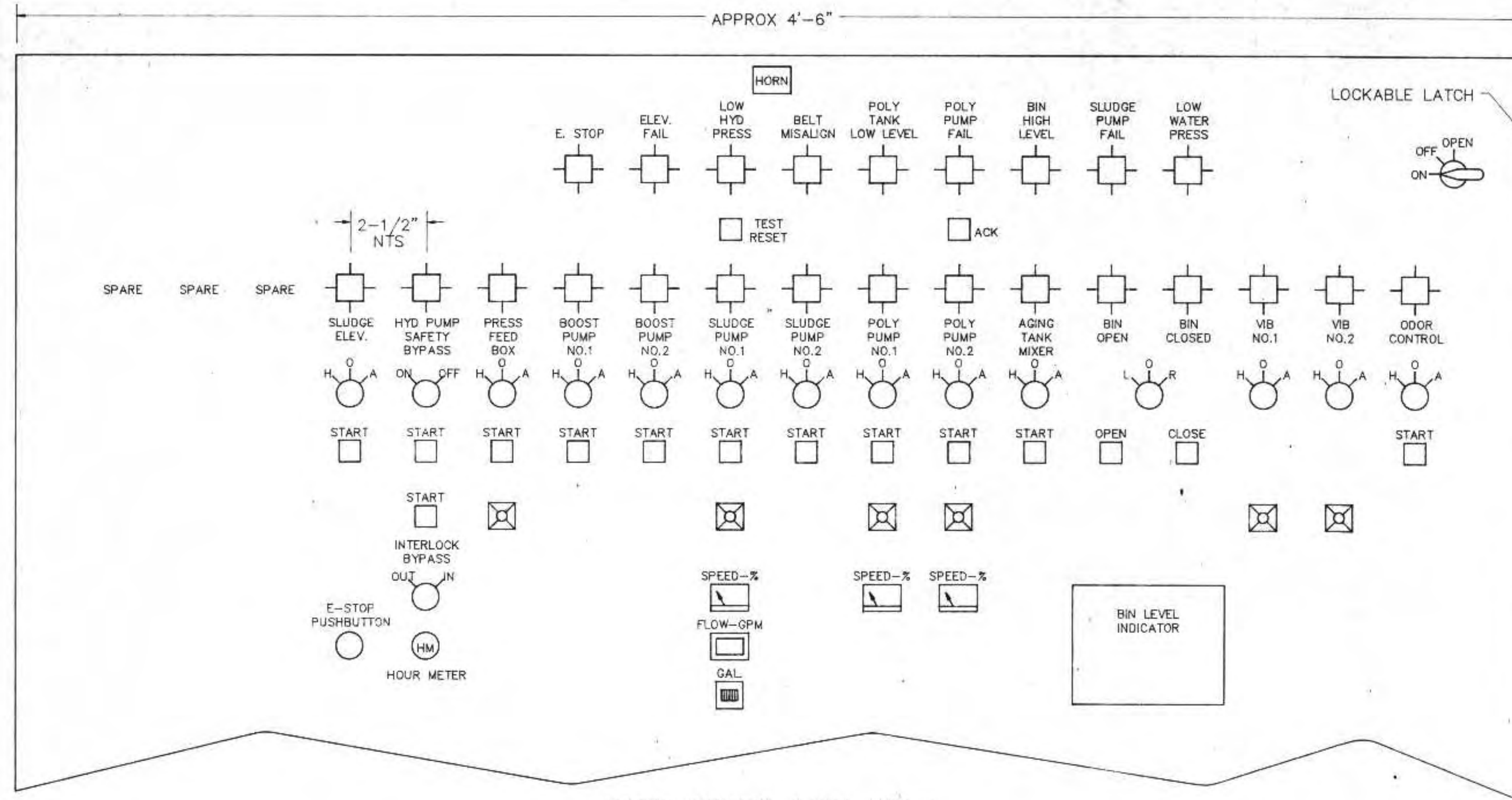
DIGESTER CONTROL BUILDING ELECTRICAL PLAN
SCALE: 1/4"=1'



NOTE:
START AND STOP SWITCHES ARE LOCATED AT SLUDGE PUMP #2

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Richard Anthony
DATE: 6/24/91 REG. NO.: 25488

REVISIONS			ELECTRICAL PLAN		
NO.	BY	DATE			
1	Pma	8/22/91			
2	Rua	9/21/92			
			CITY OF SUPERIOR, WISCONSIN WASTE WATER TREATMENT PLANT SLUDGE DEWATERING/HANDLING FACILITIES.		
DESIGNED BY	Rua		RMA ENGINEERING COMPANY CONSULTING ENGINEERS	SCALE: 1/4"=1'	
DRAWN BY	GB			DATE	JOB NO.
CHECKED BY					
APPROVED BY					



NOTE: SEE MCP-1 SHOP DRAWINGS FOR PANEL LAYOUT

ELECTRICAL EQUIPMENT SCHEDULE																
NO.	DESCRIPTION	LOCATION	HP/KW	VOLT	PH	TYPE	SIZE	FURNISHED	STARTER		CONTROL PANEL		POWER PANEL		REMARKS	
									PANEL	PANEL	SWITCH	FURNISHED	PANEL	FURNISHED		WIRE
1	SLUDGE ELEVATOR DR #1	DEWATERING BLDG	10 HP	480	3	MAG	1	ELECT	MCP-1	MCP-1	HOA	ELECT	MCP-1	ELECT	12	
2	AIR COMPRESSOR	DEWATERING BLDG	1.5 HP	480	3	MAG	0	PRESS	MCP-1	MCP-1	HOA	ELECT	AIR	PRESS	12	
3	PRESS DRIVE	DEWATERING BLDG	5 HP	480	3	VFD	-	PRESS	VFD-1	MCP-1	HOA	ELECT	VFD-1	ELECT	12	
4	WASHWATER PUMP #1	DEWATERING BLDG	10 HP	480	3	MAG	1	ELECT	MCP-1	MCP-1	HOA	ELECT	MCP-1	ELECT	12	
5	WASHWATER PUMP #2	DEWATERING BLDG	10 HP	480	3	MAG	1	ELECT	MCP-1	MCP-1	HOA	ELECT	MCP-1	ELECT	12	
6	SLUDGE PUMP	DEWATERING BLDG	10 HP	480	3	VFD	-	ELECT	VFD-1	MCP-1	HOA	ELECT	VFD-1	ELECT	12	
7	POLYMER SOLUTION PUMP #1	DEWATERING BLDG	1-1/2 HP	230	1	SCR	-	PRESS	VFD-1	MCP-1	HOA	ELECT	VFD-1	ELECT	12	
8	POLYMER SOLUTION PUMP #2	DEWATERING BLDG	1-1/2 HP	230	1	SCR	-	PRESS	VFD-1	MCP-1	HOA	ELECT	VFD-1	ELECT	12	
9	AGING TANK MIXER	DEWATERING BLDG	1/3 HP	120	1	MAN	-	UNIT	UNIT	UNIT	HOA	ELECT	LP-6	ELECT	12	
10	POLYMER BLENDER #1	DEWATERING BLDG	---	120	1	MAN	-	UNIT	UNIT	UNIT	PRESS	LP-7	ELECT	12		
11	POLYMER BLENDER #2	DEWATERING BLDG	---	120	1	MAN	-	UNIT	UNIT	UNIT	PRESS	LP-8	ELECT	12		
12	STORAGE BIN GATE	DEWATERING BLDG	2 HP	480	3	MAG	0	ELECT	MCP-1	MCP-1	PB	ELECT	MCP-1	ELECT	12	
13	STORAGE BIN VIBRATOR #1	DEWATERING BLDG	---	480	-	SCR	-	ELEVATOR	VFD-1	MCP-1	HOA	ELECT	MCP-1	ELECT	12	
14	STORAGE BIN VIBRATOR #2	DEWATERING BLDG	---	480	-	SCR	-	ELEVATOR	VFD-1	MCP-1	HOA	ELECT	MCP-1	ELECT	12	
15	STORAGE BIN LEVEL SENSOR	DEWATERING BLDG	---	120	-	---	-	UNIT	UNIT	CONVEYOR	MCP-1	ELECT	MCP-1	ELECT	12	
16	MAG METER	DIGESTER BLDG	---	120	-	---	-	UNIT	UNIT	MECH	LP-10	ELECT	12			
17	MAKE-UP AIR HEATER	DEWATERING BLDG	7.5 HP	480	3	COMB	1	BUILDING	UNIT	HV	UNIT	BUILDING	UNIT	BUILDING	12	DISCONNECT BY ELECT.
18	EXHAUST FAN #1	DEWATERING BLDG	3/4 HP	480	3	COMB	0	ELECT	UNIT	HV	HOA	BUILDING	COMB	ELECT	12	
19	EXHAUST FAN #2	DEWATERING BLDG	1 HP	480	3	COMB	0	ELECT	COMB	HV	HOA	BUILDING	COMB	ELECT	12	
20	EXHAUST FAN #3	DEWATERING BLDG	1/3 HP	120	1	MAN	-	BUILDING	HV	O-A	BUILDING	LP-17	ELECT	12		
21	IR BURNER	DEWATERING BLDG	---	120	1	---	-	UNIT	UNIT	UNIT	BUILDING	LP-18	ELECT	12		
22	14' DOOR OPENER	DEWATERING BLDG	1/2 HP	120	1	MAN	-	UNIT	UNIT	UNIT	BUILDING	LP-19	ELECT	12		
23	12' DOOR OPENER	DEWATERING BLDG	1/2 HP	120	1	MAN	-	UNIT	UNIT	UNIT	BUILDING	LP-20	ELECT	12		
24	ODOR CONTROL SYSTEM	DEWATERING BLDG	---	120	1	---	-	UNIT	MCP-1	MCP-1	MECH	LP-21	ELECT	12		
25	HOIST AND TROLLEY	DEWATERING BLDG	2 HP	480	3	MAG	0	BUILDING	UNIT	UNIT	UNIT	BUILDING	---	---	12	DISCONNECT BY ELECT
26	9' DOOR OPENER	SULFUR DIOXIDE RM	1/3 HP	120	1	MAN	-	UNIT	UNIT	UNIT	BUILDING	EC-13	EXISTING	12		
27	HOIST AND TROLLEY	SULFUR DIOXIDE RM	2 HP	480	3	MAG	0	BUILDING	UNIT	UNIT	UNIT	BUILDING	---	---	12	DISCONNECT BY ELECT
28	EXHAUST FAN #4	SULFONATOR ROOM	1/6 HP	120	1	MAN	-	BUILDING	UNIT	UNIT	UNIT	BUILDING	EC-6	EXISTING	12	WIRE TO LIGHT SWITCH
29	EXHAUST FAN #5	SULFUR DIOXIDE RM	1/3 HP	120	1	MAN	-	BUILDING	UNIT	UNIT	UNIT	BUILDING	EC-7	EXISTING	12	WIRE TO LIGHT SWITCH

- NOTES:
- RESPONSIBLE PARTIES:
 BID ITEM #1- BUILDING CONTRACTOR (BUILDING)
 * HEATING/VENTILATION SYSTEM SUPPLIER
 BID ITEM #2- BELT FILTER PRESS SUPPLIER (PRESS)
 * POLYMER SYSTEM SUPPLIER
 BID ITEM #3- SLUDGE ELEVATOR AND BIN SUPPLIER (ELEVATOR)
 BID ITEM #4- INSTALLATION/MECHANICAL CONTRACTOR (MECH)
 * ELECTRICAL SUBCONTRACTOR (ELECT)

* SUBCONTRACTOR OR SUBSUPPLIER

2. MCP-1 BELT FILTER PRESS CONTROLS MAY BE ALTERED DEPENDING ON PRESS SUPPLIED

REVISIONS			ELECTRICAL PANELS AND SCHEDULE	
NO.	BY	DATE		
1	Rwa	8/22/91		
2	Rwa	7/21/92		
			CITY OF SUPERIOR, WISCONSIN WASTE WATER TREATMENT PLANT SLUDGE DEWATERING/HANDLING FACILITIES	
DESIGNED BY	Rwa	SCALE	JOB NO.	
DRAWN BY	GB	DATE	RMA ENGINEERING COMPANY	
CHECKED BY			CONSULTING ENGINEERS	
APPROVED BY		SHEET	E-3	

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME, OR UNDER MY DIRECT SUPERVISION, AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.
 Richard Cuthbert
 DATE: 6/24/91 REG. NO.: 25488