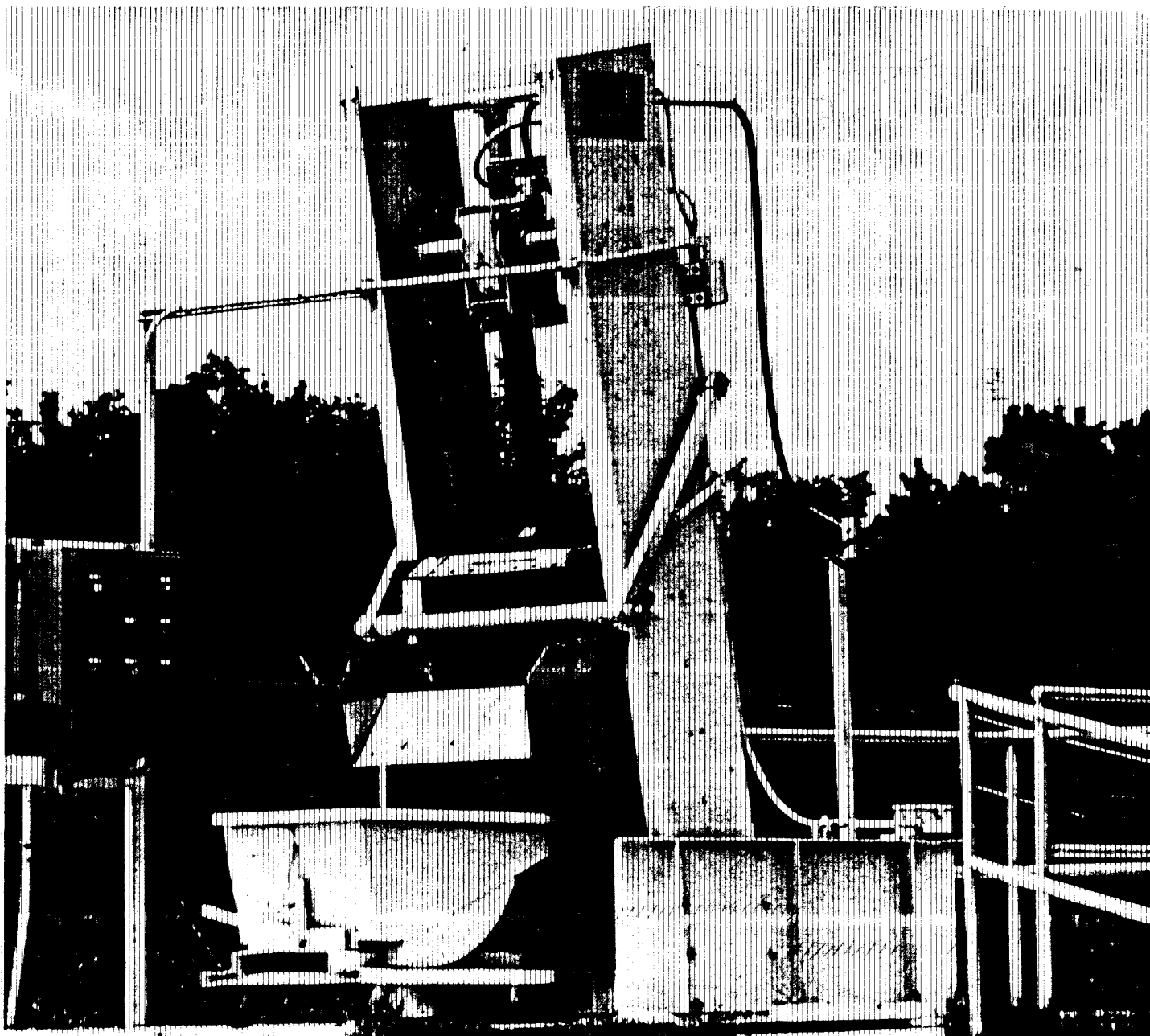


LOS DURANES WATER PUMP STATION MECHANICAL BAR SCREEN REPLACEMENT



EMC ENGINEERING INC.
730 SAN MATEO S.E.
ALBUQUERQUE, N.M. 87108



LIST OF DRAWINGS

- C1 TITLE SHEET
- C2 DEMOLITION PLAN & FLOOR PLAN AT ELEVATION 49.03
- C3 FLOOR PLAN AT ELEVATION 65.28
- C4 SECTION 'A' AND DETAILS
- C5 SECTION 'B' AND DETAILS
- E6 ONE LINE DIAGRAM AND P&ID
- E7 ELECTRICAL REMOVAL & FLOOR PLAN
- E8 INTERCONNECTION DIAGRAM AND DETAILS

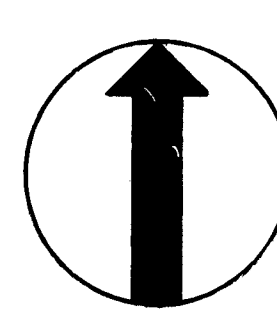
AREA LOCATION MAP

APPROVAL OF AS BUILT DRAWINGS
CHIEF CONSTRUCTION ENGINEER
Steve Baberg
DATE 5-16-88

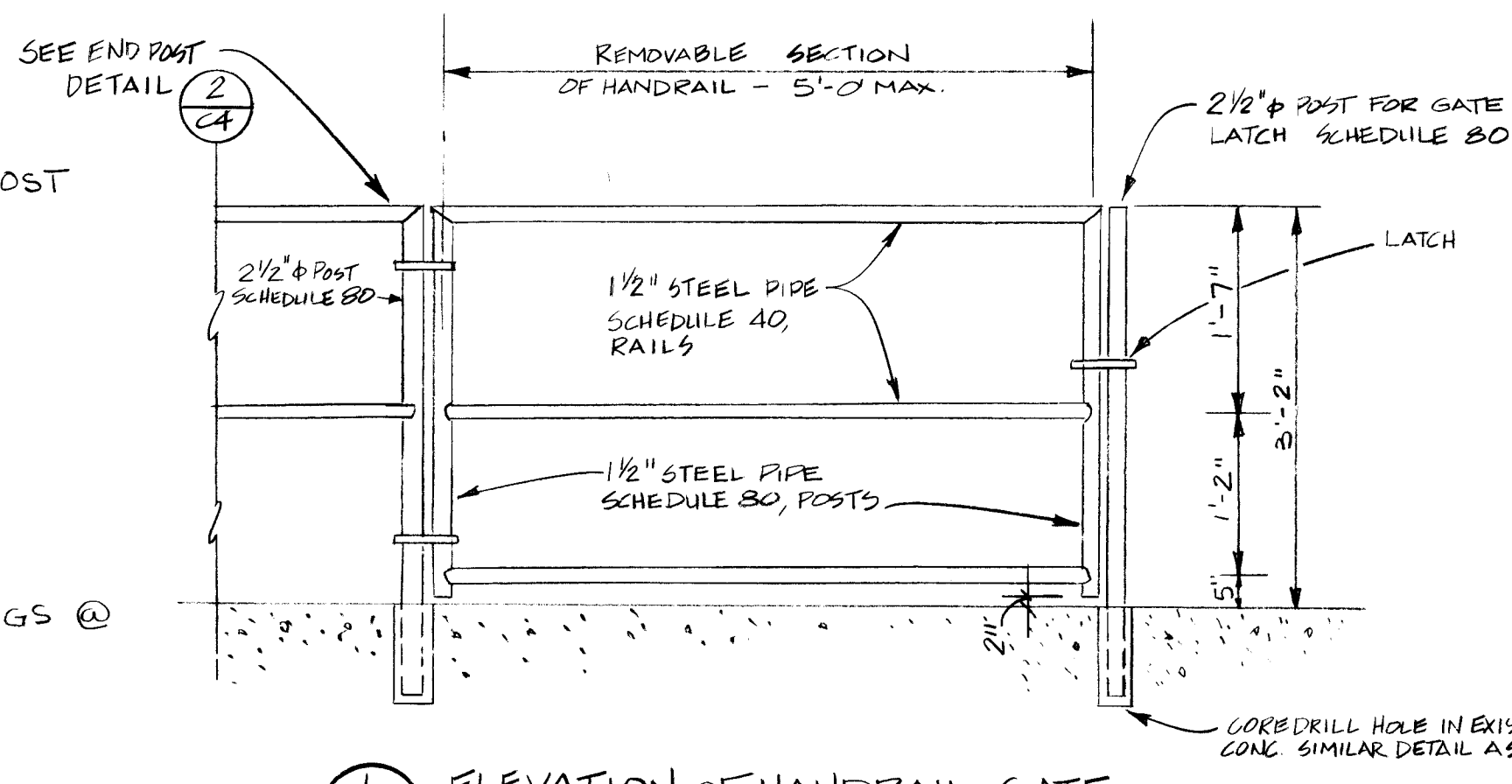
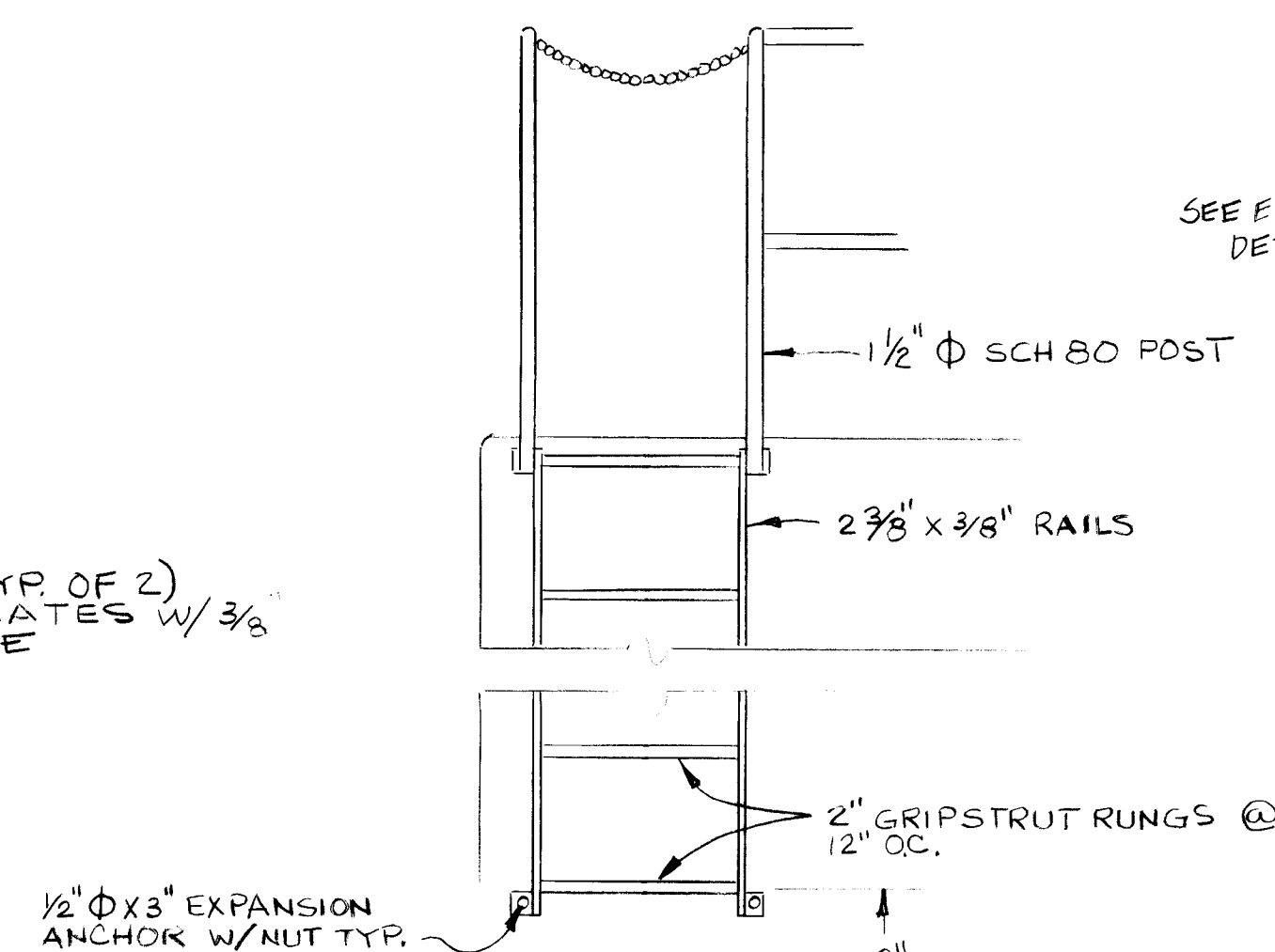
1 2 3 4 5 6 7 8 9 10 11 12
26 30810188

REV	SHEETS	CITY ENGINEER	DATE	USER DEPT.	DATE	USER DEPT.	DATE
APPROVAL OF REVISIONS							

	APPROVED FOR CONSTRUCTION <i>[Signature]</i> 4/27/87 C.E.	
	PROJECT NUMBER 3081	SHEET C1 OF 8

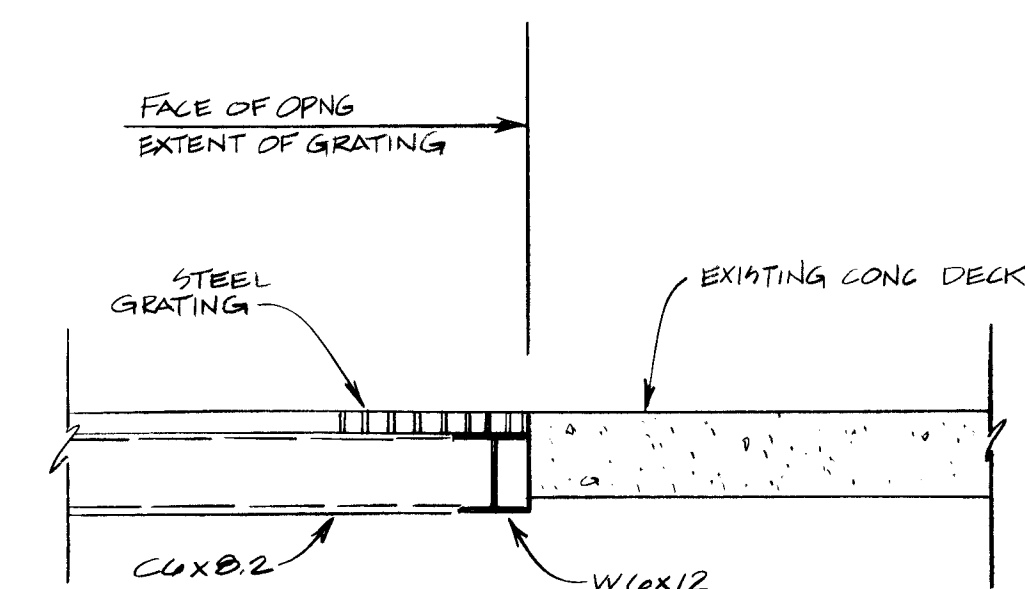
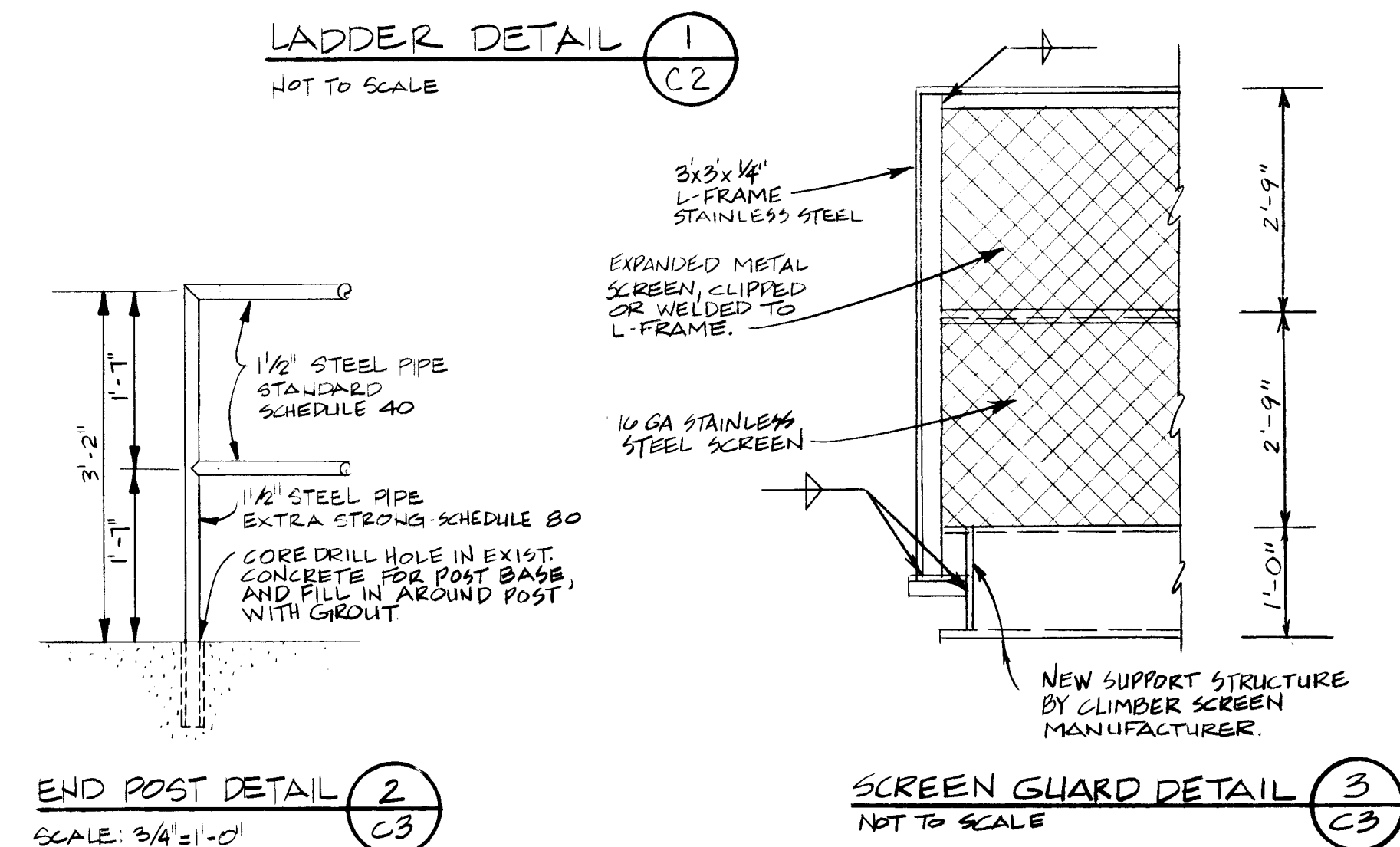
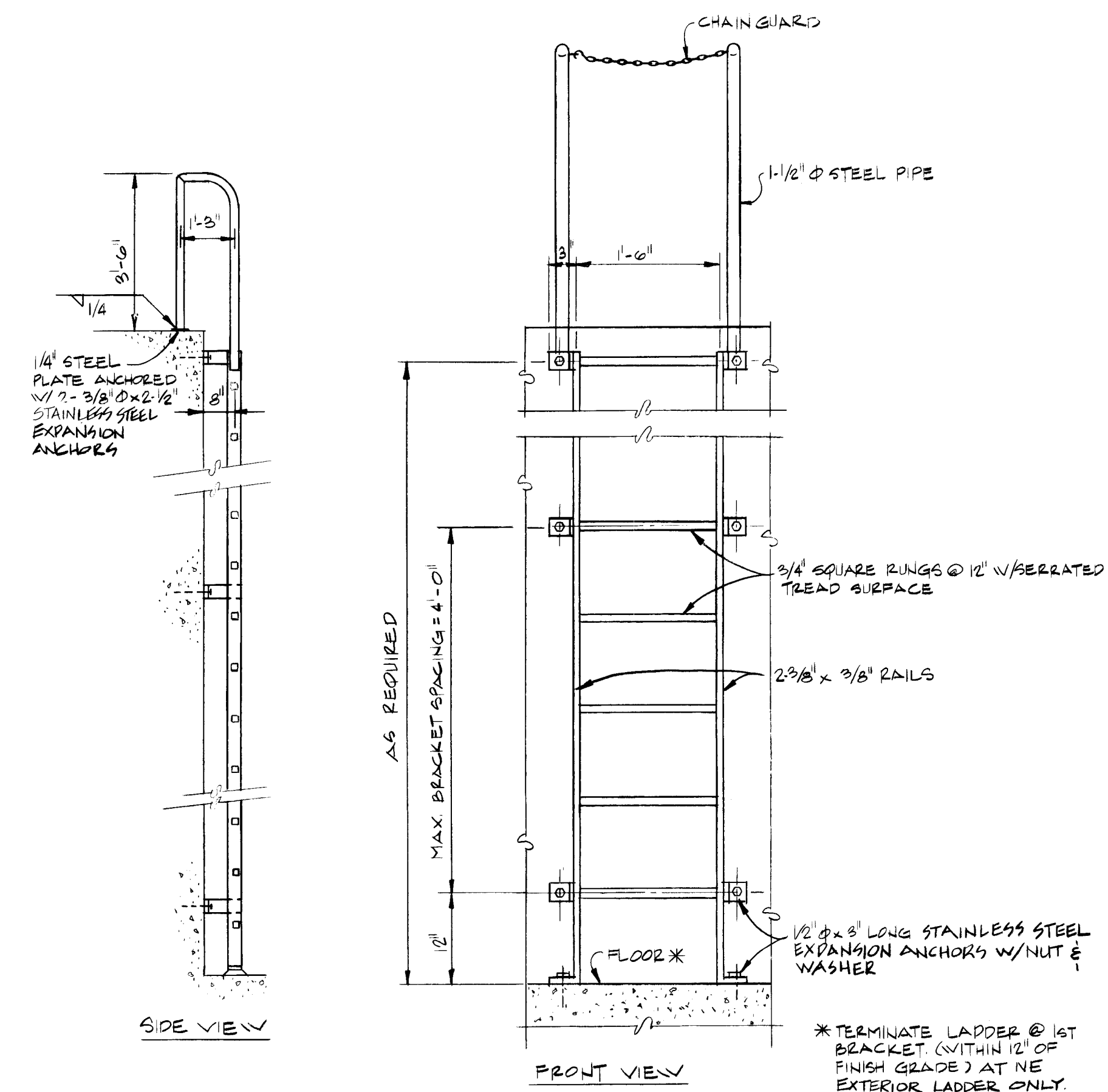
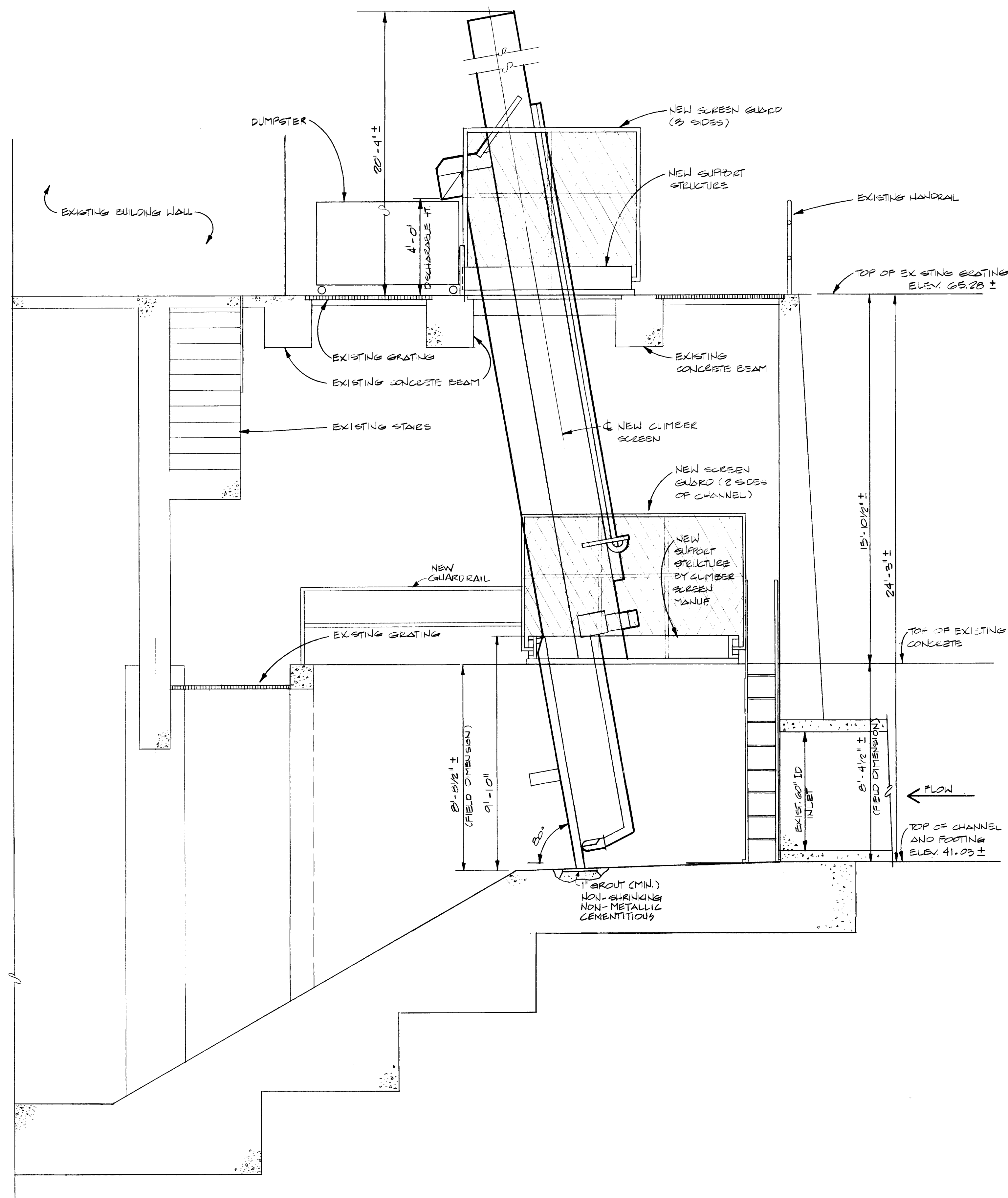


SCALE: $3/8" = 1'-0"$



THE NEW CLIMBER TYPE MECHANICAL BAR SCREEN ASSEMBLY MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED TOLERANCES. CAREFULLY ATTENTION TO THE ALIGNMENT OF THE FRAME, BACK PLATE AND BAR SCREEN BOTH IN FABRICATION AND INSTALLATION IS THEREFORE REQUIRED

CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
TITLE: FLOOR PLAN AT ELEVATION 65.28					
PUMP STATION RENOVATION LOS DURANES PUMP STATION					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E. Design			Traffic		
A.C. E.-Hydrology			Water		
DRAWING NO. 86110		MAP NO. H-12		SHEET C3 OF 8	



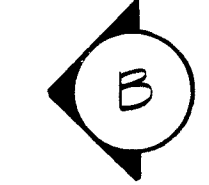
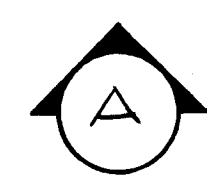
GRATING DETAILS AT EDGE OF CONC. OPENING 4
NOT TO SCALE C3

SECTION (A)
SCALE: 3/8" = 1'-0"

[illegible]

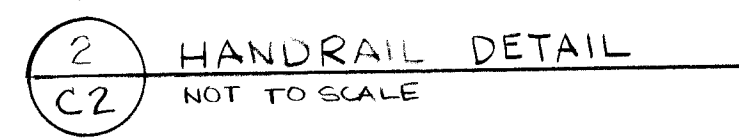
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26			308		104		88				

CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
TITLE: SECTION A AND DETAILS					
PUMP STATION RENOVATION LOS DURANES PUMP STATION					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E. Design			Traffic		
A.C. E.-Hydrology			Water		
DRAWING NO. 86110		MAP NO. H - 12		SHEET C4 OF 8	

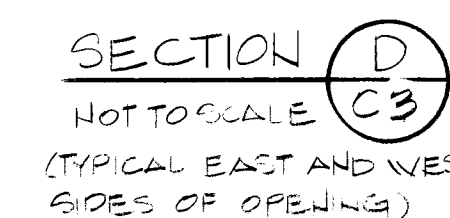
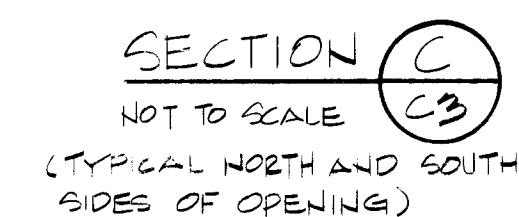
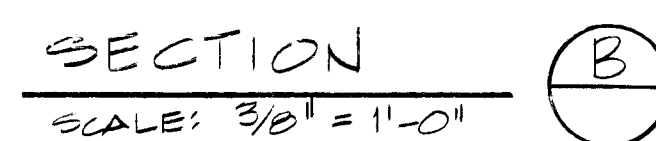


SCALE: $3/8" = 1' - 0"$

SCALE: $\frac{3}{8}'' = 1'-0''$

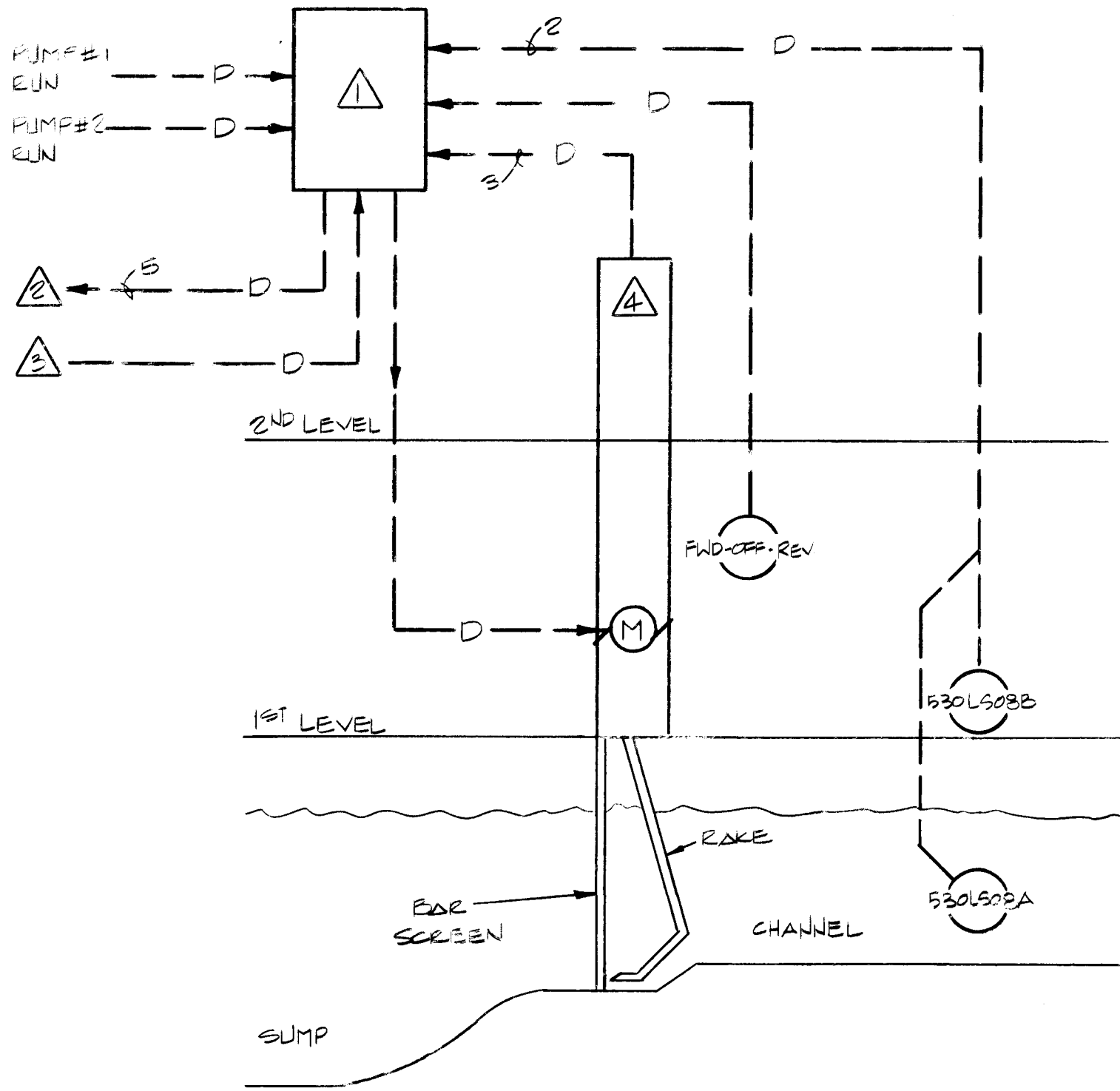


DRAWING NO.	86110	MAP NO.	H-12	SHEET	C2	OF	8
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26	3	0	8	1	0	5	8	8			

DRAWING NO.	86110	MAP NO.	H-12	SHEET	OF	C5	8
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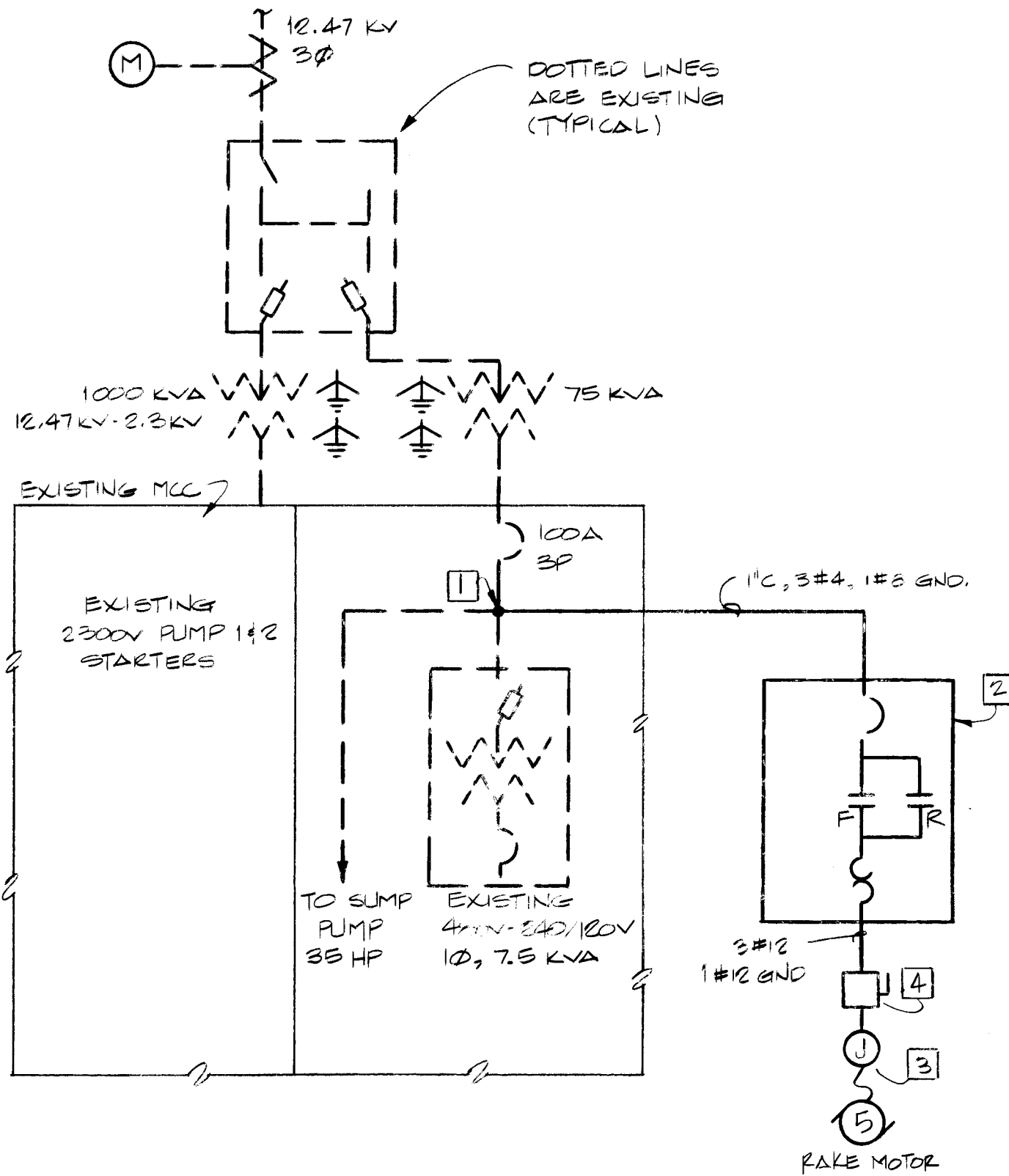
CLIMBER SCREEN P&ID
NOT TO SCALE

1. CLIMBER SCREEN CONTROLS SHALL OPERATE AS FOLLOW:
- IN AUTO, THE CLIMBER SCREEN SHALL OPERATE CONTINUOUSLY UNDER THE FOLLOWING CONDITIONS:
 - PUMP #1 OR #2 IS RUNNING;
 - CHANNEL HIGH LEVEL (530LS08A).
 - CLIMBER SCREEN SHALL STOP UNDER THE FOLLOWING CONDITIONS:
 - PUMP #1 AND #2 STOP AND 530LS08A BELOW HIGH LEVEL.
 - CHANNEL FLOOD LEVEL TO STOP SCREEN IN EITHER HAND OR AUTO MODE (530LS08B).
 - THE CLIMBER SCREEN SHALL OPERATE ONCE A DAY, EACH OPERATION SHALL BE ADJUSTABLE BETWEEN 0 TO 4 PASS CYCLES PER DAY.
 - THE HAND-OFF-AUTO SWITCH (530HS08) SHALL PROVIDE LOCAL CONTROL OF THE CLIMBER SCREEN THROUGH A REVERSE-OFF-FORWARD SWITCH.

2. THE CLIMBER SCREEN CONTROLS SHALL BE PROVIDED WITH A N.O. DRY CONTACT OUTPUT FOR THE FOLLOWING:
- CLIMBER SCREEN IN AUTOMATIC (530HS08);
 - CLIMBER SCREEN OFF/RUNNING (530MI08);
 - CLIMBER SCREEN NORMAL/ALARM (530AS08);
 - CHANNEL HIGH LEVEL (530LS08A);
 - CHANNEL FLOOD LEVEL (530LS08B).

3. THE CLIMBER SCREEN CONTROLS SHALL BE PROVIDED WITH THE FOLLOWING:
- A REMOTE PULSE START (530MS08), IN AUTO ONLY.

4. THE CLIMBER SCREEN SHALL ALSO INCLUDE THE FOLLOWING:
- END OF TRAVEL LIMIT SWITCH TO STOP THE RAKE MOTOR AT THE HIGHEST POINT.
 - TORQUE OVERLOAD SWITCH TO ENABLE THE RAKE TO STOP IN CASE OF A BAR SCREEN JAM.
 - REVERSE LIMIT SWITCH TO PREVENT THE RAKE REVERSE TRAVEL AFTER PASSING THE WIPER. REVERSE TRAVEL WILL BE ALLOWED WHEN THE RAKE HAS PASSED THE END OF TRAVEL LIMIT SWITCH.



ONE LINE DIAGRAM
NOT TO SCALE

NOTES

- CONNECT CLIMBER SCREEN FEEDER AS SHOWN.
- CLIMBER SCREEN COMBINATION REVERSING FULL VOLTAGE MAGNETIC STARTER, NEMA SIZE 1, INCLUDED IN CONTROL PANEL SUPPLIED BY CLIMBER SCREEN MANUFACTURER.
- JUNCTION BOX BY CLIMBER SCREEN SUPPLIER, MOUNTED ON SCREEN.
- NEMA 4X STAINLESS STEEL NON-FUSIBLE SAFETY SWITCH SQUARE D CAT. NO. HU361DS.

LEGEND

- ONE LINE DIAGRAM:
- EXISTING UNLESS OTHERWISE SPECIFIED
- CIRCUIT BREAKER
- FULL VOLTAGE MAGNETIC REVERSING STARTER
- OVERLOAD RELAY
- JUNCTION BOX
- ELECTRIC MOTOR HP AS DESIGNATED

LEGEND

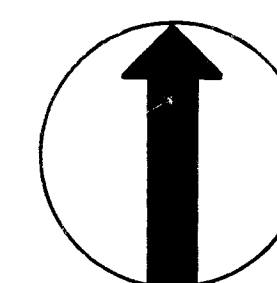
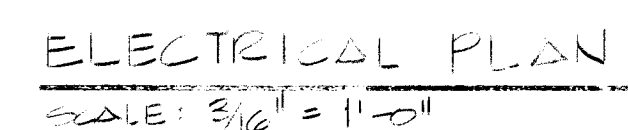
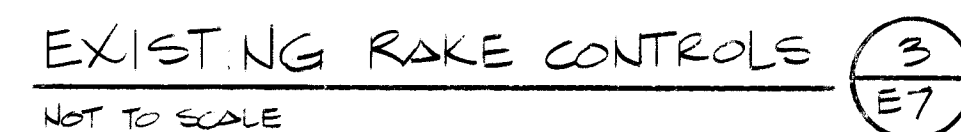
- P&ID
- ON/OFF DISCRETE SIGNAL, QUANTITY SHOWN
- REMOTE MOUNTED DEVICES
- ELECTRIC MOTOR BY CLIMBER SCREEN MANUF.

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		DESIGN	
CONTRACTOR	DATE	NO.	BY	NO.	BY	NO.	DATE	NO.	DATE	NO.	DATE
WORK BY	DATE										
INSPECTOR'S	DATE										
ACCEPTANCE BY	DATE										
FIELD VERIFICATION BY	DATE										
DESIGN BY	DATE										
REVISIONS	DATE										
RECORDED BY	DATE										
NO.											



1 2 3 4 5 6 7 8 9 10 11
26 30810688

CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
TITLE: ONE LINE DIAGRAM AND P&ID					
PUMP STATION RENOVATION LOS DURANES PUMP STATION					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E. - Design			Traffic		
A.C.E. - Hydrology			Water		
DRAWING NO.	86110	MAP NO.	H-12	SHEET	OF 8



- [illegible]

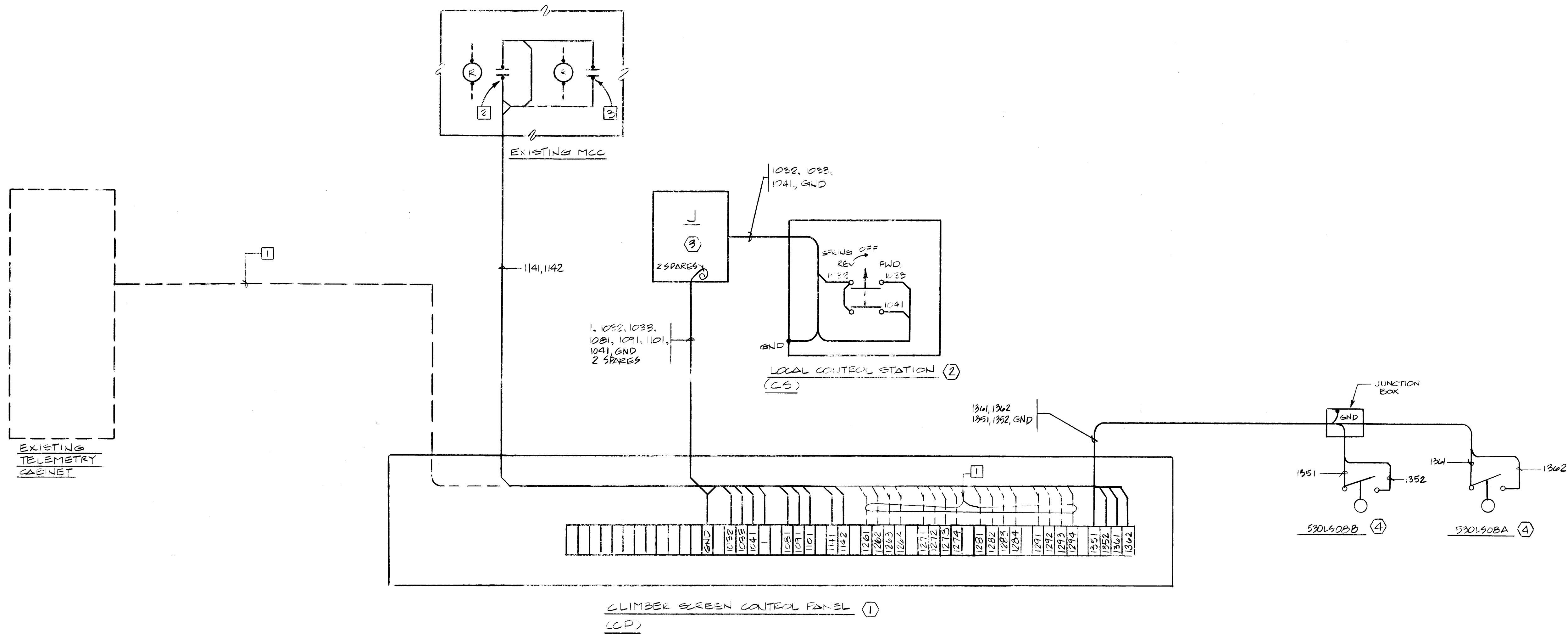
26 30810788

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

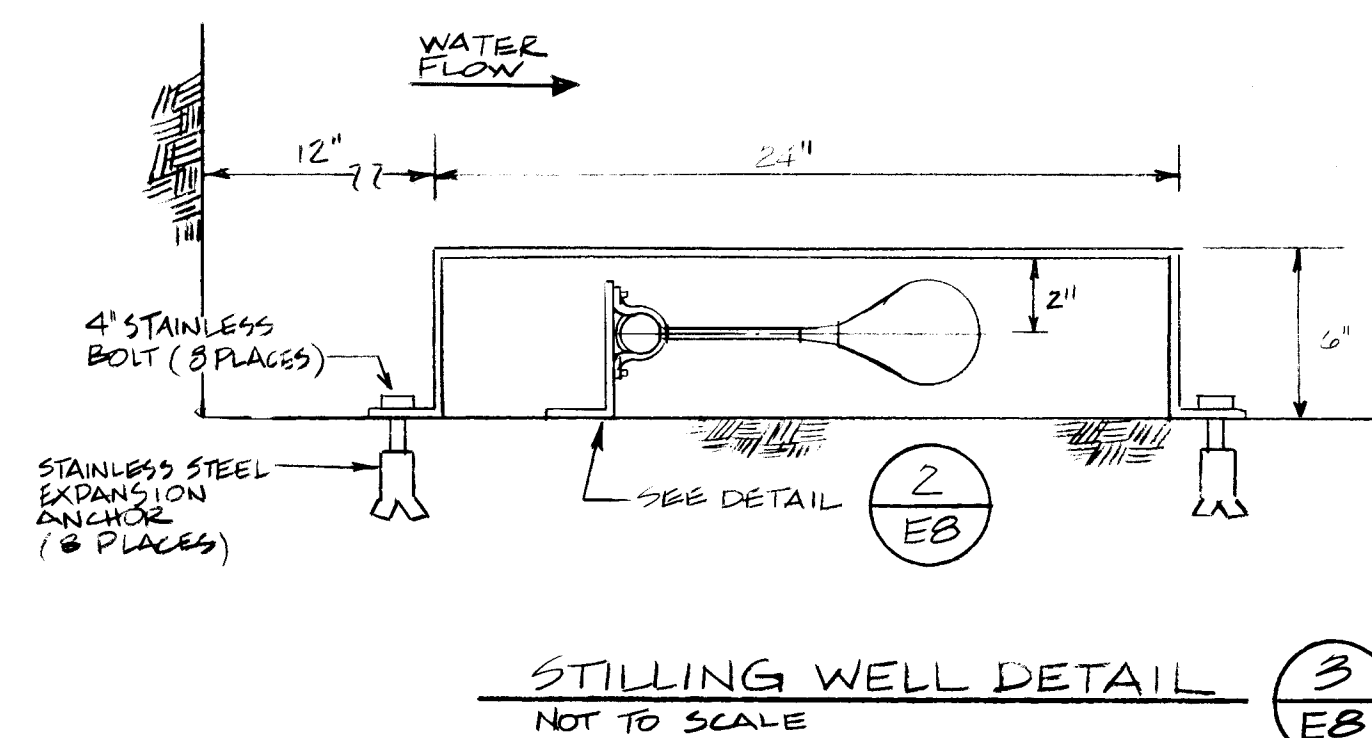
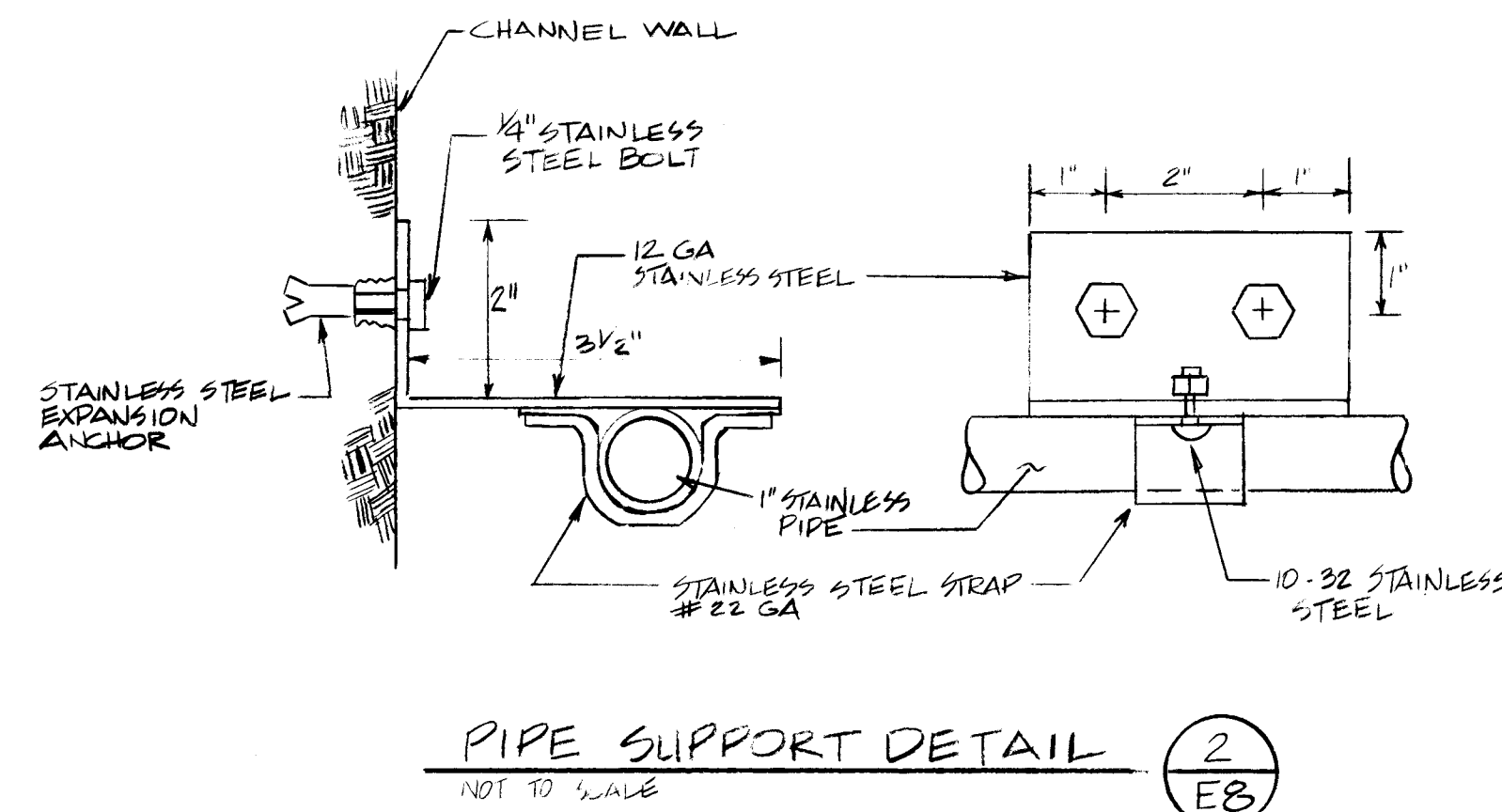
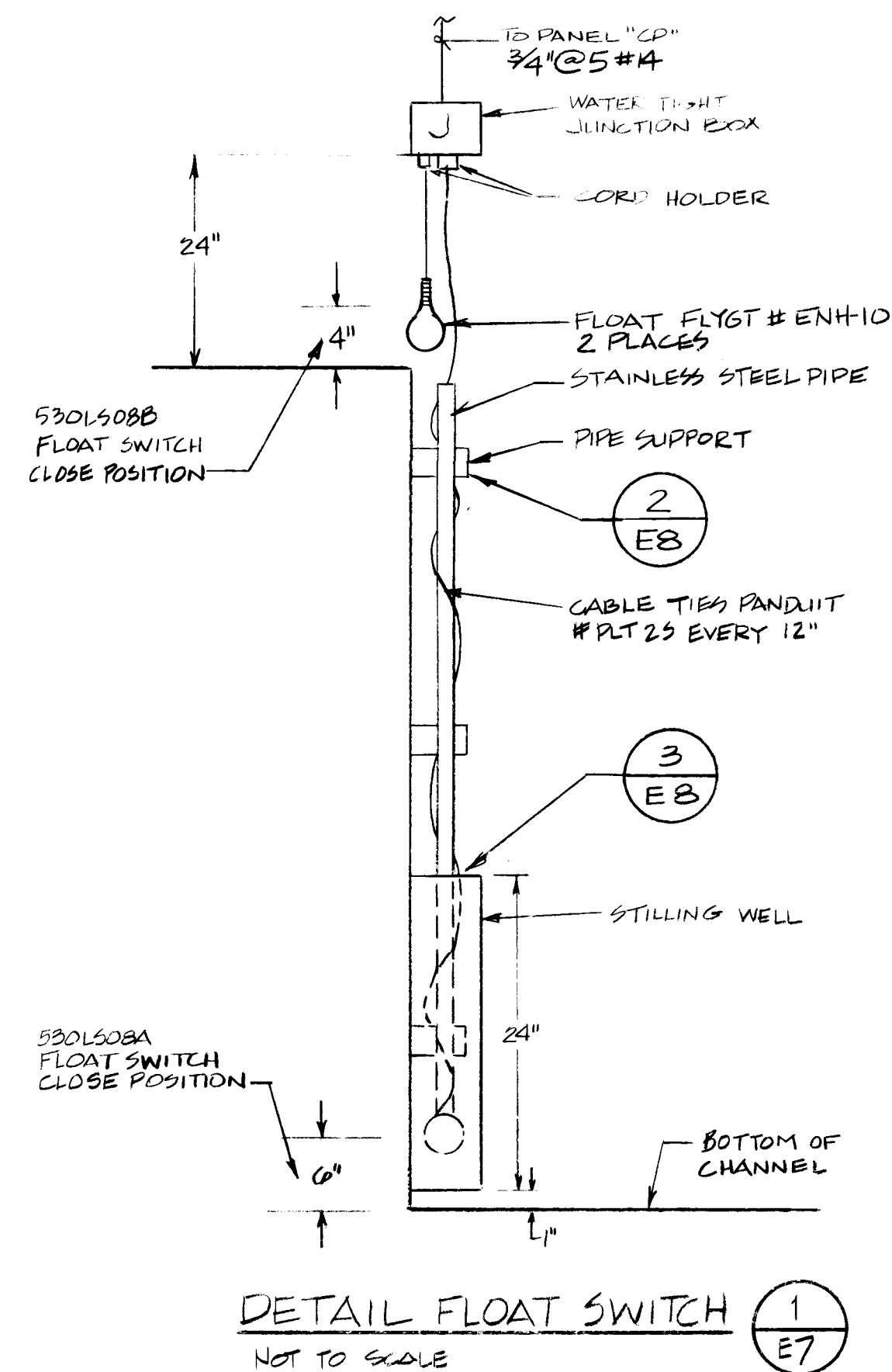
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PUMP STATION RENOVATION LOS DURANES PUMP STATION

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A C E - Design			Traffic		
A C E -Hydrology			Water		

DRAWING NO.	86110	MAP NO. H - 12	SHEET E7	OF 8
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ELECTRICAL CONTROL INTERCONNECTION DIAGRAM (4)
NOT TO SCALE



ELECTRICAL EQUIPMENT LIST	
(1)	CLIMBER SCREEN CONTROL PANEL BY CLIMBER SCREEN SUPPLIER.
(2)	CONTROL STATION REVERSE-OFF-FORWARD SELECTOR SWITCH IN NEMA 4 ENCLOSURE BY CLIMBER SCREEN SUPPLIER.
(3)	J-BOX, BY CLIMBER SCREEN SUPPLIER.
(4)	FLOAT SWITCH.

- NOTES
- TIE-IN WITH TELEMETRY SYSTEM BY CITY.
 - EXISTING PUMP #1 RUN RELAY, USE SPARE CONTACTS, IF SPARES ARE NOT AVAILABLE OR CANNOT BE USED, INSTALL A RELAY THAT WILL PROVIDE A CONTACT CLOSURE WHEN PUMP #1 IS RUNNING.
 - PUMP #2 RUN RELAY, USE SPARE CONTACTS, IF SPARES ARE NOT AVAILABLE OR CANNOT BE USED, INSTALL A RELAY THAT WILL PROVIDE A CONTACT CLOSURE WHEN PUMP #2 IS RUNNING.
 - THIS DIAGRAM CAN BE USED AS A GUIDE FOR PRICING PURPOSES, A REVISION WILL BE ISSUED AFTER RECEIPT OF FINAL APPROVED CLIMBER SCREEN SHOP DRAWINGS, AFTER WHICH THIS DIAGRAM MAY THEN BE USED FOR CONSTRUCTION. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL WIRING REQUIRED TO MAKE THE CLIMBER SCREEN OPERATE AS DESCRIBED IN THE P & ID ON SHEET NO E1.

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL										
CONTRACTOR	DATE	NO.	DATE	NO.	DATE		REVISIONS <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>REMARKS</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DATE	REMARKS						
NO.	DATE	REMARKS														
WORK BY	DATE	BY	DATE	BY	DATE											
INSPECTOR'S	DATE	NO.	DATE	NO.	DATE											
ACCEPTANCE BY	DATE	NO.	DATE	NO.	DATE	DESIGNED BY EVH	DATE 2/13/87									
FIELD LOCATION BY	DATE	NO.	DATE	NO.	DATE	DRAWN BY CC	DATE 2/13/87									
DRAWINGS	DATE	NO.	DATE	NO.	DATE	CHECKED BY EVH	DATE 2/13/87									
CORRECTED BY	DATE	NO.	DATE	NO.	DATE											
RECORDED BY	DATE	NO.	DATE	NO.	DATE											

26 30810888

CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
TITLE: INTERCONNECTION DIAGRAM AND DETAILS					
PUMP STATION RENOVATION LOS DURANES PUMP STATION					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A C E - Design			Traffic		
A C E - Hydrology			Water		
DRAWING NO. 86110		MAP NO. H-12		SHEET OF 8	