

GW - 32

REPORTS

YEAR(S):

UNDER GROUND LINES

2005

GIANT

REFINING COMPANY

CERTIFIED MAIL 7003 3110 0004 1983 3698

June 21, 2005

Mr. Wayne Price
New Mexico Oil Conservation Division
1220 South Street Francis Drive
Santa Fe, NM 87505

Re: Discharge Permit GW-032 Approval Conditions

Enclosed are spreadsheets that meet the requirements of the Giant Ciniza Refinery Discharge Permit GW-032, Discharge Permit Approval Conditions 9. and 8.c. Enclosed as Attachment 1, Giant has developed a spreadsheet that contains all underground process and wastewater lines as required by Condition 9. Each line has an identification number, drawing reference, date installed, test dates, test method, pass/fail/repair information, inspector and investigation results. The alkylation unit which had several lines fail last fall is scheduled for repair/replacement by Rin-chem beginning on June 27. Please see Attachment 2 for the alkylation unit schedule.

Giant plans to complete testing on the crude unit and test the DHT, Isom, SRU, Sats, RR loading, and part of the tank farm in 2005. The remaining units to be tested in 2006 include completion of the tank farm and the boiler unit. This will complete the 5 year cycle for testing all of the units.

Enclosed as Attachment 3, Giant has developed a spreadsheet that contains all single lined underground tanks/sumps/pits as required by Condition 8.c. Each device or system has an identification number, drawing reference, date installed, test dates, test method, pass/fail/repair information, inspector and investigation results. These systems will be tested by the end of July.

If you have any questions regarding this report please contact me at (505) 722-0217.

Sincerely,



Ed Riege
Environmental Superintendent

C: Ed Rios w/o report
Joel Quinones
Hope Monzeglio, NMED Hazardous Waste Bureau

ROUTE 3 BOX 7
GALLUP
NEW MEXICO 87301

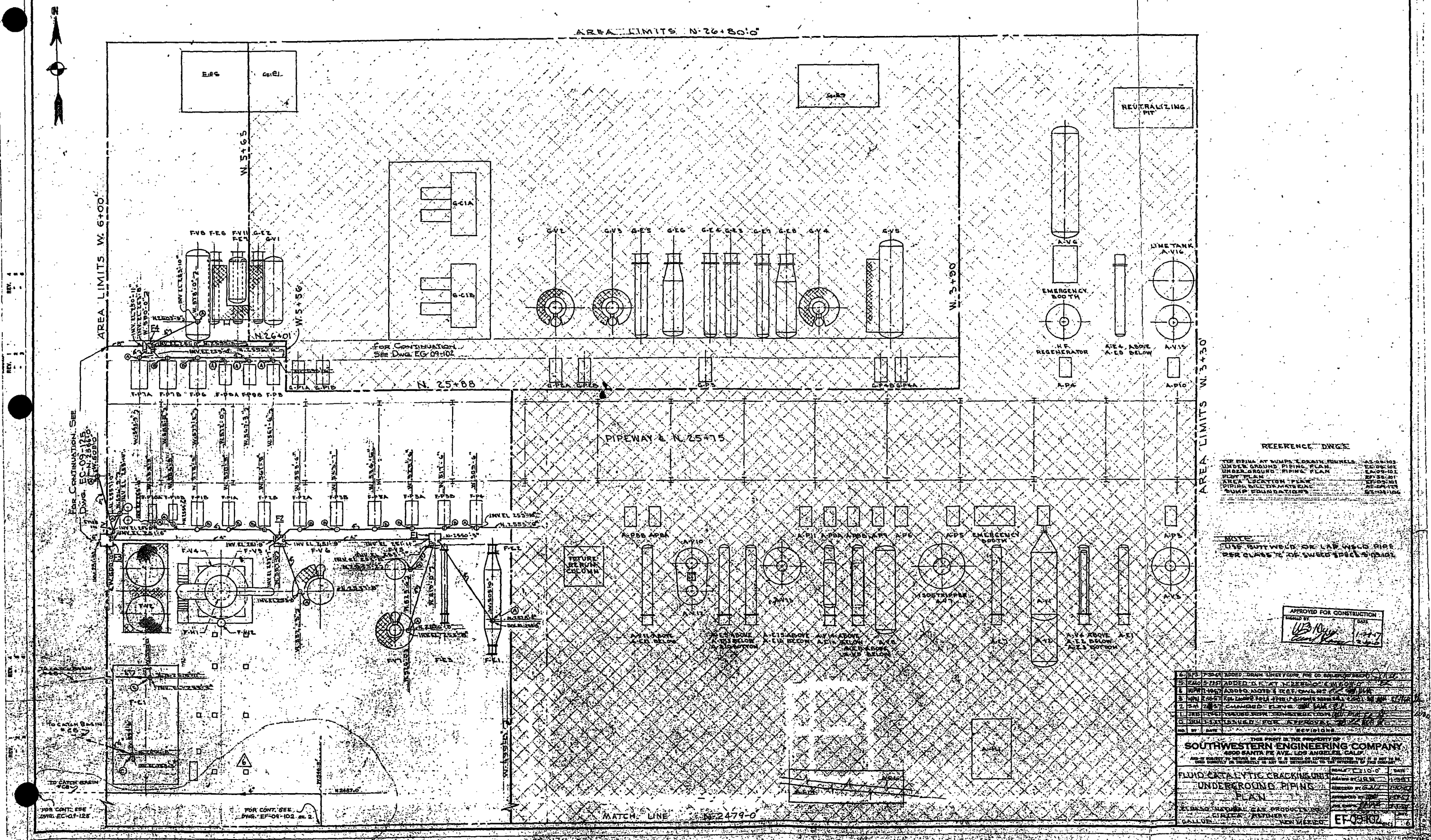
PHONE
505-722-3833
INTERNET
WWW.GIANT.COM

**FLUID CATALYTIC CRACKING UNIT
UNDERGROUND PIPING PLAN**

UNDERGROUND PROCESS AND WASTEWATER LINES

FLUID CATALYTIC CRACKING UNIT UNDERGROUND PIPING PLAN

ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/ Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results
F1	F-E1 To F1	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos	
	F-V7 To F1	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos	
	F-V5 To F1	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos	
F2	F1 Flows W. To F2	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos	
	F-P4 To F-P5B To F-P5A To F-P3A To F-P3B To F-P2A To F2	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos	
	F-P10A To F-P10B To F- P1B To F-P1A To F-P2B To F2	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos	
F3	F-V6 To F2	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos	
	F2 Flows W. To F3	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos	
	Drain Coordinate N. 2557'-0", W. 596'-0" To F3	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos	
	Drain Coordinate N. 2566'-0", W. 603'-0" To F3	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos	
F4	G4 to F4	1957	EF-09-102 SH.1 & EG-09-102EP	01/11/02	Pass	7	25	B. Loos	
	G-P1B To G-P1A To F-P8 To F-P9B To F-P9A To F-P6 To F-P7B To F4	1957	EF-09-102 SH.1	01/11/02	Pass	7	25	B. Loos	
	F-P7A To F4	1957	EF-09-102 SH.1	01/11/02	Pass	7	25	B. Loos	
	F-V8 To F4	1957	EF-09-102 SH.1	01/11/02	Pass	7	25	B. Loos	
FCC Box N2461.57' W546.5'	F-B1 & Drain N2447.07' W542.0' To F-V20 To Sewer Box N2461.57' W546.5'	1969	EF-09-102 SH.2	07/31/02	Pass	4	25	B. Loos	
	F-B1-F To Sewer Box N2461.57' W546.5'	1969	EF-09-102 SH.2	07/31/02	Pass	4	25	B. Loos	



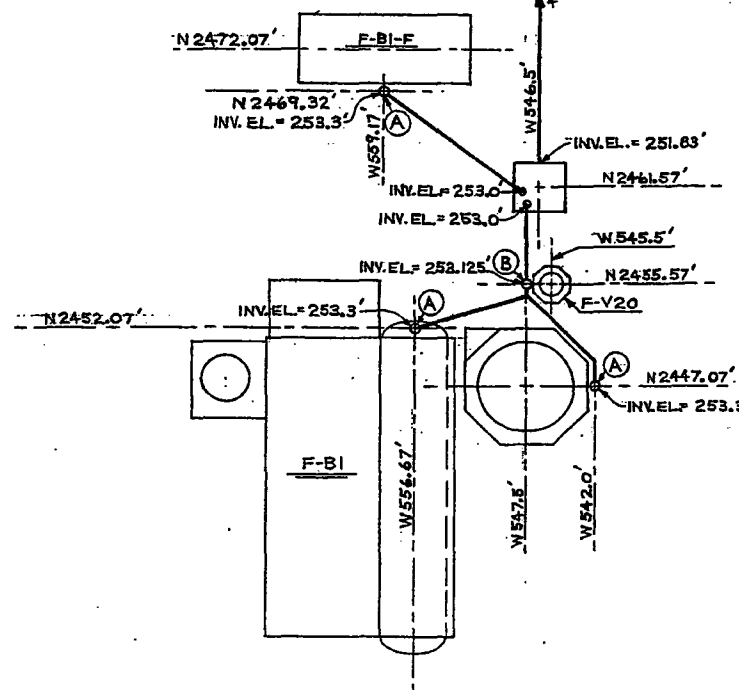
TO CATCH BASIN
#C8
FOR CONT. SEE
DWG. EC-09-125

FOR CONT. SEE
DWG. EF-09-102 SH.1

N 2479.0'

REFERENCE DRAWINGS	
DWG. NO.	DESCRIPTION
EF-09-102 SH.1	FCC UNIT UNDERGROUND PIPING
EC-09-125	CRUDE UNIT UNDERGROUND PIPING
AZ-09-108	TYPICAL PIPING AT SUMPS & FUNNELS

AREA LIMITS W 600.0'

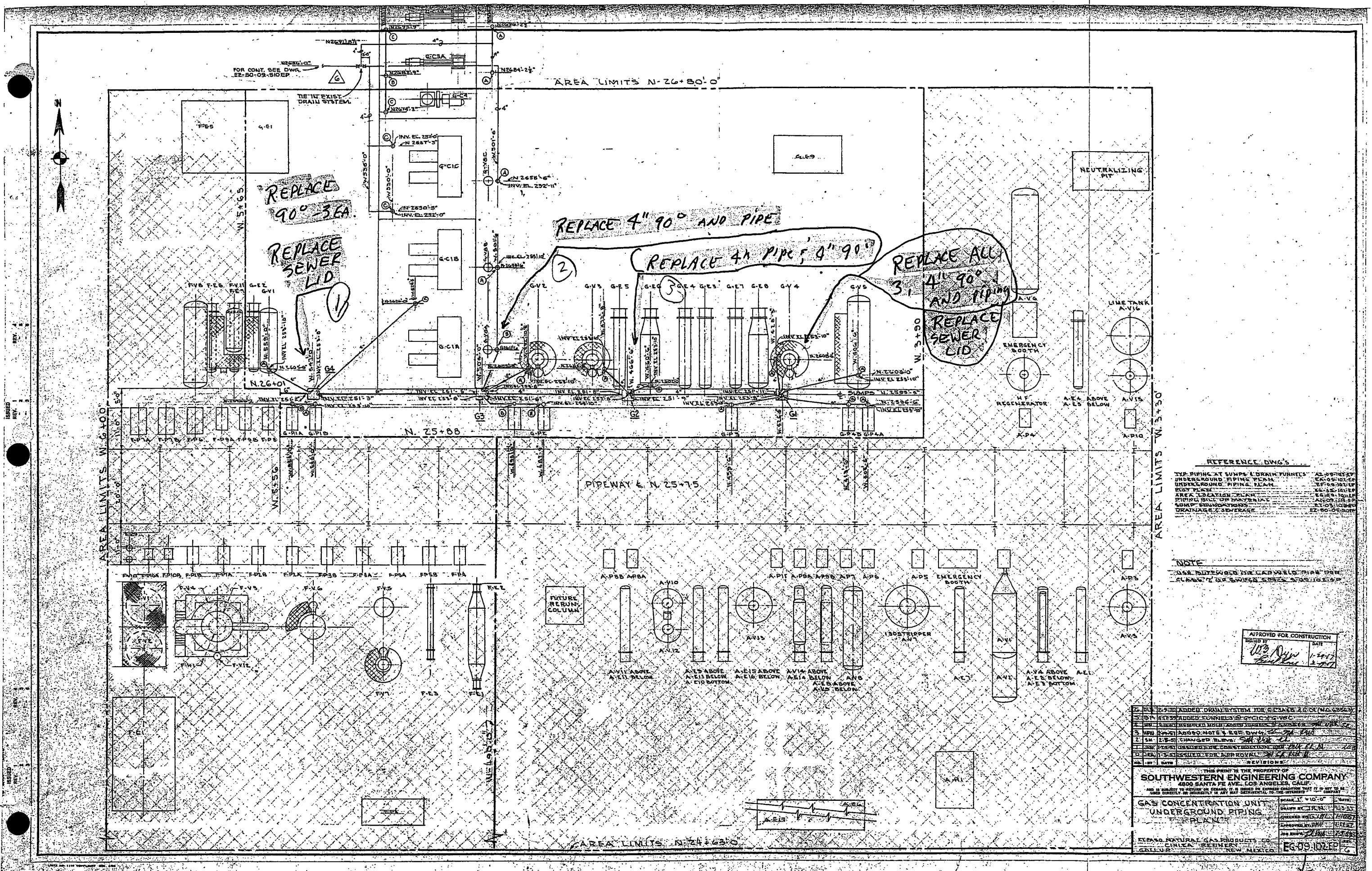


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ING UPON REQUEST.

MARK	DATE	DESCRIPTION	BY	APRVD
REVISIONS				
SHELL OIL COMPANY				
CINIZA REFINERY			GALLUP, N. M.	
FLUID CATALYTIC CRACKING UNIT				
UNDERGROUND PIPING				
PLAN				
SCALE 1"=10'			APRVD	J. M. O.
DATE 8-1-69			APRVD	
DRWN EFS				

W O NO 28599

EF 09 102 SH 2



REFERENCE DWG'S

TYP. PIPING AT SUMPS & DRAIN TUNNELS	22-05-0000
UNDERGROUND PIPING PLAN	22-05-0001
UNDERGROUND PIPING PLAN	22-05-0002
PIPE TIE IN	22-05-0003
AREA LOCATION PLAN	22-05-0004
PIPING BILL OF MATERIAL	22-05-0005
ADAPT. TRANSDUCERS	22-05-0006
DRAINAGE & SEWERAGE	22-05-0007

NOTE
USE INTERIOR OF LADYBIRD PIPES FOR
CURRENT & FUTURE SEWER STANDSTILLS

APPROVED FOR CONSTRUCTION
SIGNED BY: [Signature]
DATE: 1-24-77

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HAVE Lg Map

CRUDE UNIT

UNDERGROUND PROCESS AND WASTEWATER LINES

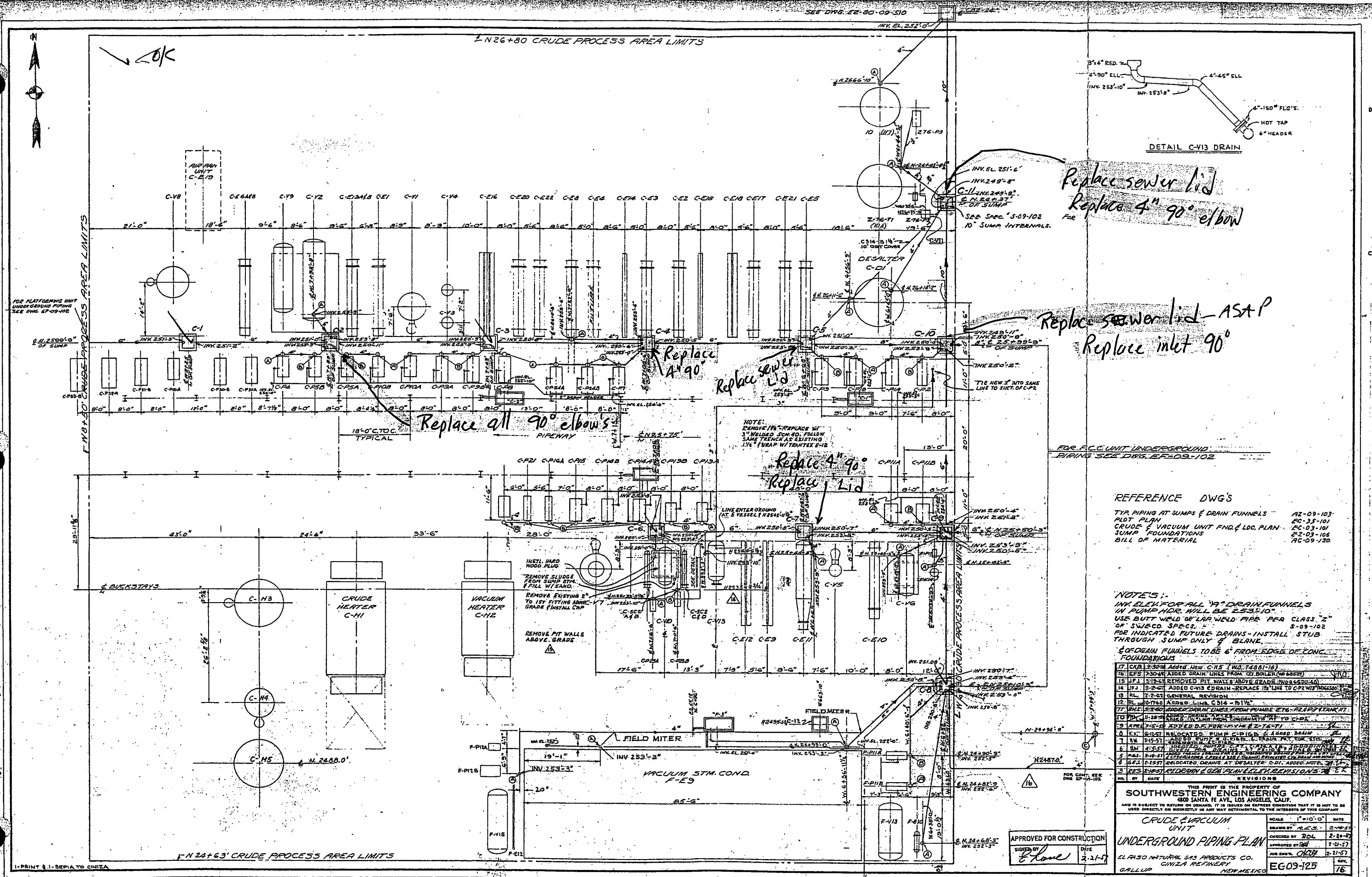
CRUDE UNIT

ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results
C-1	P-2 (From Plat Unit) to C-1	1957	EC-09-125 & EP-09-102	10/31/02	Pass	4	30	B. Loos	
C-2	C-1 to C-2	1957	EC-09-125	10/31/02	Pass	4	30	B. Loos	
	C-V2 to C-2	1957	EC-09-125	10/31/02	Pass	4	30	B. Loos	
	C-P4 to C-P5B to C-2	1957	EC-09-125	10/31/02	Pass	4	30	B. Loos	
	C-P10B to C-P5A to C-2	1957	EC-09-125	10/31/02	Pass	4	30	B. Loos	
C-3	C-2 to C-3	1957	EC-09-125	10/31/02	Pass	4	30	B. Loos	
	C-P10A to C-P9A to C-P9B to C-3	1957	EC-09-125	10/31/02	Pass	4	30	B. Loos	
C-4	C-P8 to C-3	1957	EC-09-125	10/31/02	Pass	4	30	B. Loos	
	to C-4	1957	EC-09-125	10/31/02	Pass	4	30	B. Loos	
	C-E8 to C-4	1957	EC-09-125	10/31/02	Pass	4	30	B. Loos	
	C-24A to C-24B to C-P7 to C-4	1957	EC-09-125	10/31/02	Pass	4	30	B. Loos	
C-5	C-4 to C-5	1957	EC-09-125	10/31/02	Pass	4	30	B. Loos	
	C-P1B to C-P3 to C-5	1957	EC-09-125	10/31/02	Pass	4	30	B. Loos	
	N 26+11'-6" W 6+56'-9" (C-PV109) to C-5	1957	EC-09-125	10/31/02	Cup Fail	0	0	B. Loos	WO481143 Cup Repaired 11/18/02
C-6	C-P23A To C-P23B To C-6	1957	EC-09-125						
	C-V10 To C-6	1957	EC-09-125						
	A To C-P21 To C-P16A To C-P15 To C-P14B To C-P14A To C-6	1957	EC-09-125						
	C-V13 Drain to Pipe Between C-6 & C-7	1967	EC-09-125						
C-7	C-P13A To C-P13B To C-6	1957	EC-09-125						
	C-6 to C-7	1957	EC-09-125						
	C-E11 To C-7	1957	EC-09-125						
C-8	FCC Sewer Box N2461.57' W546.5' To C-8	1969	EC-09-125 & EF-09-102 SH.2	07/31/02	Pass	4	25	B. Loos	
	F-E10 To C-8	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos	
	F-11B To F-11A To C-8	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos	
	F-C1 N2515'11" W590'0" To C-8	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos	
	F-C1 N2496'8" W594'3" To C-8	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos	
	F-P12B To FIELD MITER To C-8	1957	EC-09-125	07/13/02				B. Loos	Red Line ?????
	FE-9 To N24+93'-0" W6+56'11" To C-8	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos	
C-9	to C-8	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos	
	C-7 to C-9	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos	
	C-8 to C-9	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos	
	F-3 to C-9	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos	
	F-V14 To C-9	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos	
	C-V6 To C-9	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos	

UNDERGROUND PROCESS AND WASTEWATER LINES

CRUDE UNIT

	C-P11A To C-P11B To C-9	1957	EC-09-125	07/31/02	C-P11 Cup Fail		B. Loos	WO46749 Cup Repaired 10/23/02 Did not fill C-10 during this test
C-10	C-10	1957	EC-09-125	10/31/02			B. Loos	
	F4 W. to C-10	1957	EC-09-125 & EF-09-102 SH.2					
	C-9 N. to C-10	1957	EC-09-125					
	C-5 E. to C-10	1957	EC-09-125	10/31/02	Pass	4	B. Loos	
	C-P1A to C-P2 to C-10	1957	EC-09-125	10/31/02	Cup Fail	4	B. Loos	WO481143 Cup Repaired 11/18/02
	C-10 N. to C-11	1957	EC-09-125					
	N.26+14'-2" W.6+45'-0" to C-11	1957	EC-09-125					
	N.26+45'-8" W.6+44'-3.5" to C11	1957	EC-09-125					
	From Sats Unit Catch Basin by S-C1 flows S then "T" from drain just S. "T" flows W to C-11	1995	95103-CC-105, Z-35-104 & EC-09-125					
C-11 flows N. to CBZ-24			EC-09-125 & EZ-80-09-510					DHT Unit
CBZ-24 2687N 632W	C-11 N to CBZ-24	1957	EZ-80-09-510EP					DHT Unit
CBZ-23 2729.63N 632W	CBZ-25 W to CBZ-24 CBZ-24 N to CBZ-23	1957 1957	EZ-80-09-510EP EZ-80-09-510EP					DHT Unit DHT Unit
	Q-1 (Treaters) W to CBZ-23	1957	EQ-09-101 SH.1 EZ-80-09-EP					Treaters
	Drain Hub (Treaters) 2785.42N 524.00W to CBZ-23	1957	EZ-80-09-510EP					Treaters
CBZ-22 2900N 632W	CBZ-23 N to CBZ-22	1957	EZ-80-09-510EP					SRU
	Drain 2872.50N 574.17W to CBZ-22	1957	EZ-80-09-510EP					SRU
CBZ--21 2980N 632W	CBZ-22 flows N to CBZ-21	1957	EZ-80-09-510EP EZ-80-09-509EP					
	Cooling Tower Drain 2900N 582.92W to EZ-80-09-509EP	1957	EZ-80-09-510EP EZ-80-09-509EP					
CBZ-20 3073N 632W	CBZ-21 flows N under road to start of tank farm to CBZ-20	1957	EZ-80-509-EP					



Replace sewer lid
Replace 4" 90° elbow

Replace sewer lid - ASA P
Replace inlet 90°

REFERENCE DWG'S

- | | |
|--------------------------------------|-----------|
| TYR PIPING AT SUMPS & DRAIN FUNNELS | 92-09-103 |
| PLOT PLAN | 92-35-101 |
| CRUDE & VACUUM UNIT FND. & LOC. PLAN | 92-03-101 |
| SUMP FOUNDATIONS | 92-03-106 |
| BILL OF MATERIAL | 92-09-130 |

NOTES:

1. INK ELEV. FOR ALL 1/2" DRAIN FUNNELS IN PUMP HEAD SHALL BE 2.5' TO 3.0'.
2. USE BUTT WELD OR LAP WELD PIPE PER CLASS 2 OF SWISCO SPEC. 5-89-102.
3. FOR INDICATED FUTURE DRAINS - INSTALL STUB THROUGH SUMP ONLY & BLANK.
4. DRAIN FUNNELS TO BE 6" FROM EDGE OF CONC. FOUNDATIONS.

NO.	BY	DATE	REVISIONS
1	W.S.	10-1-81	RELOCATED PUMP C-11 & 1" DRAIN
2	W.S.	10-1-81	RELOCATED PUMP C-12 & 1" DRAIN
3	W.S.	10-1-81	RELOCATED PUMP C-13 & 1" DRAIN
4	W.S.	10-1-81	RELOCATED PUMP C-14 & 1" DRAIN
5	W.S.	10-1-81	RELOCATED PUMP C-15 & 1" DRAIN
6	W.S.	10-1-81	RELOCATED PUMP C-16 & 1" DRAIN
7	W.S.	10-1-81	RELOCATED PUMP C-17 & 1" DRAIN
8	W.S.	10-1-81	RELOCATED PUMP C-18 & 1" DRAIN
9	W.S.	10-1-81	RELOCATED PUMP C-19 & 1" DRAIN
10	W.S.	10-1-81	RELOCATED PUMP C-20 & 1" DRAIN
11	W.S.	10-1-81	RELOCATED PUMP C-21 & 1" DRAIN
12	W.S.	10-1-81	RELOCATED PUMP C-22 & 1" DRAIN
13	W.S.	10-1-81	RELOCATED PUMP C-23 & 1" DRAIN
14	W.S.	10-1-81	RELOCATED PUMP C-24 & 1" DRAIN
15	W.S.	10-1-81	RELOCATED PUMP C-25 & 1" DRAIN
16	W.S.	10-1-81	RELOCATED PUMP C-26 & 1" DRAIN
17	W.S.	10-1-81	RELOCATED PUMP C-27 & 1" DRAIN
18	W.S.	10-1-81	RELOCATED PUMP C-28 & 1" DRAIN
19	W.S.	10-1-81	RELOCATED PUMP C-29 & 1" DRAIN
20	W.S.	10-1-81	RELOCATED PUMP C-30 & 1" DRAIN
21	W.S.	10-1-81	RELOCATED PUMP C-31 & 1" DRAIN
22	W.S.	10-1-81	RELOCATED PUMP C-32 & 1" DRAIN
23	W.S.	10-1-81	RELOCATED PUMP C-33 & 1" DRAIN
24	W.S.	10-1-81	RELOCATED PUMP C-34 & 1" DRAIN
25	W.S.	10-1-81	RELOCATED PUMP C-35 & 1" DRAIN
26	W.S.	10-1-81	RELOCATED PUMP C-36 & 1" DRAIN
27	W.S.	10-1-81	RELOCATED PUMP C-37 & 1" DRAIN
28	W.S.	10-1-81	RELOCATED PUMP C-38 & 1" DRAIN
29	W.S.	10-1-81	RELOCATED PUMP C-39 & 1" DRAIN
30	W.S.	10-1-81	RELOCATED PUMP C-40 & 1" DRAIN
31	W.S.	10-1-81	RELOCATED PUMP C-41 & 1" DRAIN
32	W.S.	10-1-81	RELOCATED PUMP C-42 & 1" DRAIN
33	W.S.	10-1-81	RELOCATED PUMP C-43 & 1" DRAIN
34	W.S.	10-1-81	RELOCATED PUMP C-44 & 1" DRAIN
35	W.S.	10-1-81	RELOCATED PUMP C-45 & 1" DRAIN
36	W.S.	10-1-81	RELOCATED PUMP C-46 & 1" DRAIN
37	W.S.	10-1-81	RELOCATED PUMP C-47 & 1" DRAIN
38	W.S.	10-1-81	RELOCATED PUMP C-48 & 1" DRAIN
39	W.S.	10-1-81	RELOCATED PUMP C-49 & 1" DRAIN
40	W.S.	10-1-81	RELOCATED PUMP C-50 & 1" DRAIN
41	W.S.	10-1-81	RELOCATED PUMP C-51 & 1" DRAIN
42	W.S.	10-1-81	RELOCATED PUMP C-52 & 1" DRAIN
43	W.S.	10-1-81	RELOCATED PUMP C-53 & 1" DRAIN
44	W.S.	10-1-81	RELOCATED PUMP C-54 & 1" DRAIN
45	W.S.	10-1-81	RELOCATED PUMP C-55 & 1" DRAIN
46	W.S.	10-1-81	RELOCATED PUMP C-56 & 1" DRAIN
47	W.S.	10-1-81	RELOCATED PUMP C-57 & 1" DRAIN
48	W.S.	10-1-81	RELOCATED PUMP C-58 & 1" DRAIN
49	W.S.	10-1-81	RELOCATED PUMP C-59 & 1" DRAIN
50	W.S.	10-1-81	RELOCATED PUMP C-60 & 1" DRAIN
51	W.S.	10-1-81	RELOCATED PUMP C-61 & 1" DRAIN
52	W.S.	10-1-81	RELOCATED PUMP C-62 & 1" DRAIN
53	W.S.	10-1-81	RELOCATED PUMP C-63 & 1" DRAIN
54	W.S.	10-1-81	RELOCATED PUMP C-64 & 1" DRAIN
55	W.S.	10-1-81	RELOCATED PUMP C-65 & 1" DRAIN
56	W.S.	10-1-81	RELOCATED PUMP C-66 & 1" DRAIN
57	W.S.	10-1-81	RELOCATED PUMP C-67 & 1" DRAIN
58	W.S.	10-1-81	RELOCATED PUMP C-68 & 1" DRAIN
59	W.S.	10-1-81	RELOCATED PUMP C-69 & 1" DRAIN
60	W.S.	10-1-81	RELOCATED PUMP C-70 & 1" DRAIN
61	W.S.	10-1-81	RELOCATED PUMP C-71 & 1" DRAIN
62	W.S.	10-1-81	RELOCATED PUMP C-72 & 1" DRAIN
63	W.S.	10-1-81	RELOCATED PUMP C-73 & 1" DRAIN
64	W.S.	10-1-81	RELOCATED PUMP C-74 & 1" DRAIN
65	W.S.	10-1-81	RELOCATED PUMP C-75 & 1" DRAIN
66	W.S.	10-1-81	RELOCATED PUMP C-76 & 1" DRAIN
67	W.S.	10-1-81	RELOCATED PUMP C-77 & 1" DRAIN
68	W.S.	10-1-81	RELOCATED PUMP C-78 & 1" DRAIN
69	W.S.	10-1-81	RELOCATED PUMP C-79 & 1" DRAIN
70	W.S.	10-1-81	RELOCATED PUMP C-80 & 1" DRAIN
71	W.S.	10-1-81	RELOCATED PUMP C-81 & 1" DRAIN
72	W.S.	10-1-81	RELOCATED PUMP C-82 & 1" DRAIN
73	W.S.	10-1-81	RELOCATED PUMP C-83 & 1" DRAIN
74	W.S.	10-1-81	RELOCATED PUMP C-84 & 1" DRAIN
75	W.S.	10-1-81	RELOCATED PUMP C-85 & 1" DRAIN
76	W.S.	10-1-81	RELOCATED PUMP C-86 & 1" DRAIN
77	W.S.	10-1-81	RELOCATED PUMP C-87 & 1" DRAIN
78	W.S.	10-1-81	RELOCATED PUMP C-88 & 1" DRAIN
79	W.S.	10-1-81	RELOCATED PUMP C-89 & 1" DRAIN
80	W.S.	10-1-81	RELOCATED PUMP C-90 & 1" DRAIN
81	W.S.	10-1-81	RELOCATED PUMP C-91 & 1" DRAIN
82	W.S.	10-1-81	RELOCATED PUMP C-92 & 1" DRAIN
83	W.S.	10-1-81	RELOCATED PUMP C-93 & 1" DRAIN
84	W.S.	10-1-81	RELOCATED PUMP C-94 & 1" DRAIN
85	W.S.	10-1-81	RELOCATED PUMP C-95 & 1" DRAIN
86	W.S.	10-1-81	RELOCATED PUMP C-96 & 1" DRAIN
87	W.S.	10-1-81	RELOCATED PUMP C-97 & 1" DRAIN
88	W.S.	10-1-81	RELOCATED PUMP C-98 & 1" DRAIN
89	W.S.	10-1-81	RELOCATED PUMP C-99 & 1" DRAIN
90	W.S.	10-1-81	RELOCATED PUMP C-100 & 1" DRAIN

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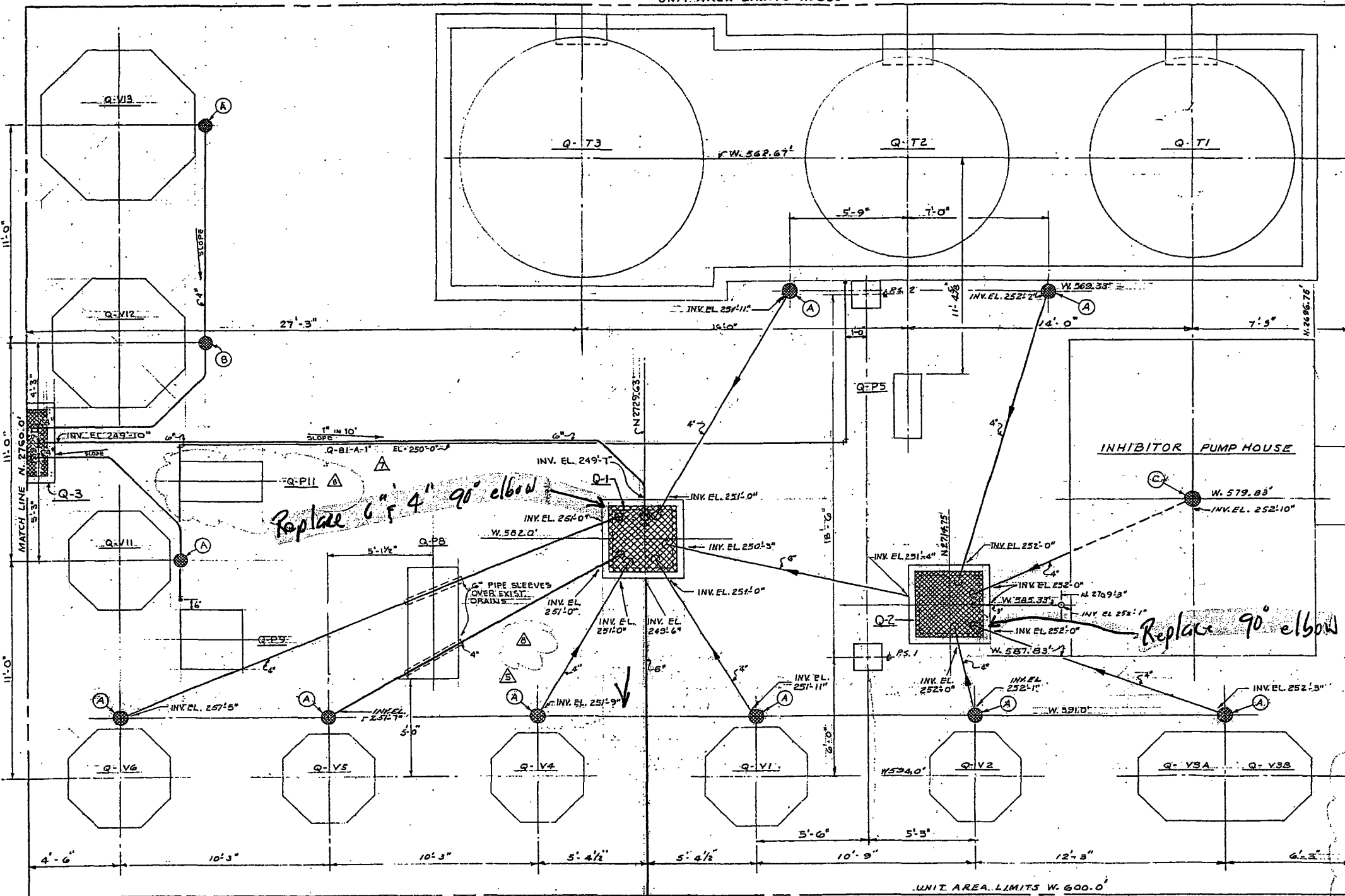
CRUDE & VACUUM UNIT
UNDERGROUND PIPING PLAN

SCALE: 1"=10'-0" DATE: 2-2-87
DRAWN BY: R.S. CHECKED BY: R.S. APPROVED BY: R.S.
EL PASO NATURAL GAS PRODUCTS CO. CHINIZO REFINERY
GALLUP, NEW MEXICO

EG09-125

HAVE Lg Map

UNIT AREA LIMITS W. 555.0'



GENERAL NOTES

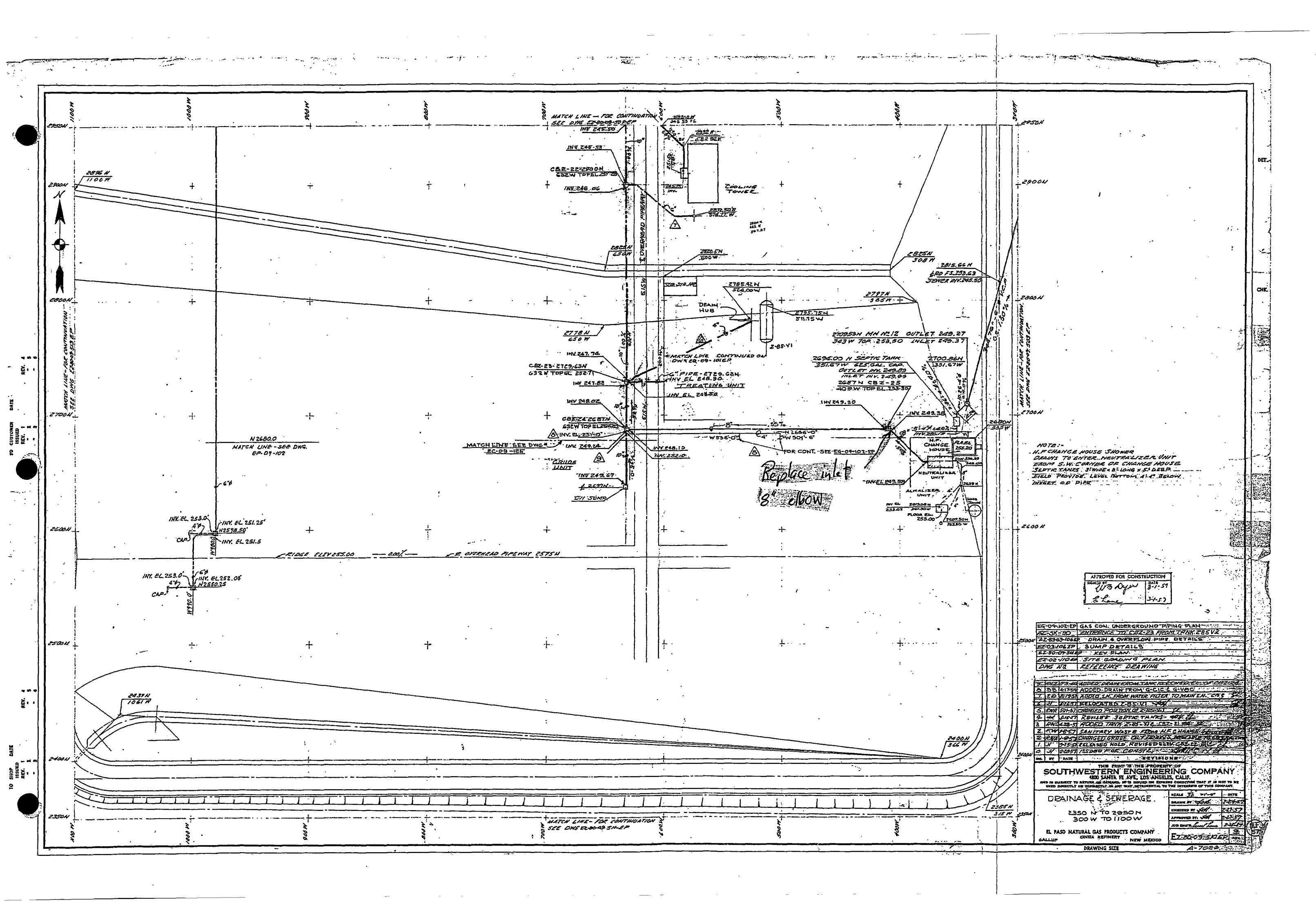
1. BASE LINE EL. 0.0' IS EQUIVALENT TO DATUM EL. 256.00'
2. USE BW OR LW PIPE PER CLASS 2" OF SWECCO SPECS. 509-102

REFERENCE DRAWINGS

- EQ-09-102 PIPING PLAN BELOW EL. 11.0'
- EQ-03-101 FOUNDATION LOCATION PLAN
- EZ-35-101 PLOT PLAN
- EZ-09-114 PIPING FIRE PROTECTION AREA J
- AQ-09-111 UNDERGROUND PIPING
- EZ-03-106 BILL OF MATERIAL LIST (UNDERGROUND PIPING)
- AZ-09-103 SUMP STRUCTURAL DETAILS
- AZ-09-103 TYPICAL PIPING AT DRAIN SUMPS & FUNNELS

REVISIONS	
NO.	DATE
1	11/15/55
2	11/15/55
3	11/15/55
4	11/15/55
5	11/15/55
6	11/15/55
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8	11/15/55
9	11/15/55
10	11/15/55
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TREATING UNIT	
PLAN	
UNDERGROUND PIPING	
AREA "GA"	
EL PASO NATURAL GAS PRODUCTS CO. CINIZA REFINERY GALLUP, NEW MEXICO	
EQ-09-101 SK.1	

APPROVED FOR CONSTRUCTION
SIGNED BY: [Signature]
DATE: 11/15/55



NOTE: -
H.F. CHANGE HOUSE SHOWER
DRAINS TO ENTER NEUTRALIZER UNIT
FROM S.W. CORNER OF CHANGE HOUSE
SEPTIC TANK, 3' WIDE X 8' LONG X 5' DEEP
FIELD PROVIDE LEVEL BOTTOM 41" BELOW
THREET. OF PIPE

APPROVED FOR CONSTRUCTION
[Signature]
[Signature]

EG-09-102-EP	GAS CON. UNDERGROUND PIPING PLAN
EG-09-102-EP	ENTERING TO COLLECTOR FROM TANK 285V2
EG-09-102-EP	DRAIN & OVERFLOW PIPE DETAILS
EG-09-102-EP	SUMP DETAILS
EG-09-102-EP	KEY PLAN
EG-09-102-EP	SITE GRADING PLAN
EG-09-102-EP	REFERENCE DRAWING

1	ADDED DRAIN FROM TANK TO COLLECTOR
2	ADDED DRAIN FROM TANK TO COLLECTOR
3	ADDED DRAIN FROM TANK TO COLLECTOR
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10	ADDED DRAIN FROM TANK TO COLLECTOR

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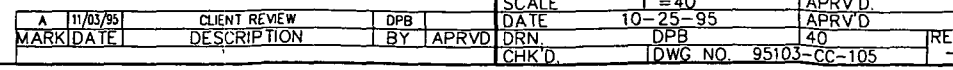
DRAINAGE & SEWERAGE

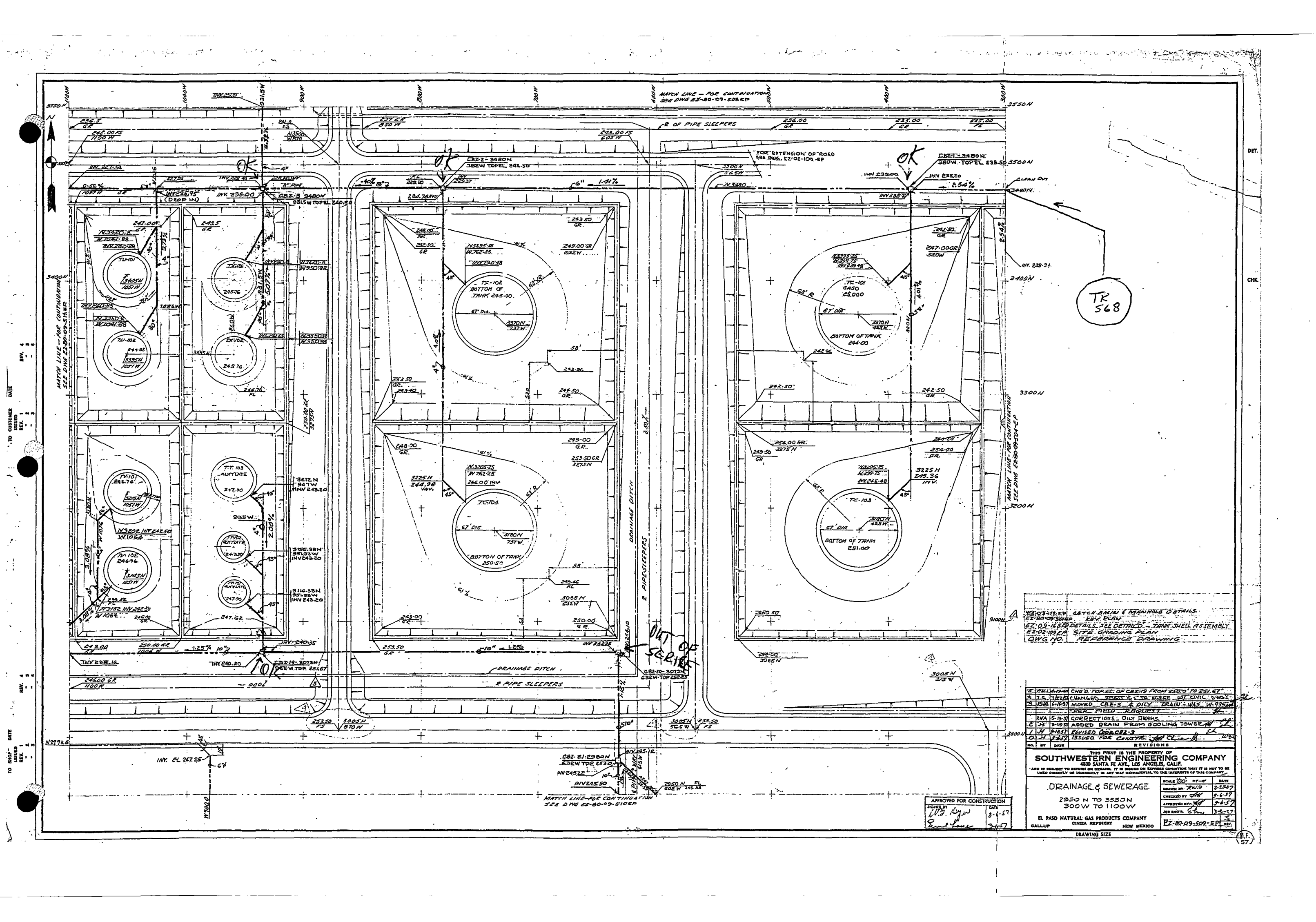
2350 N TO 2950 N
3400 W TO 4000 W

EL PASO NATURAL GAS PRODUCTS COMPANY
GALLUP, NEW MEXICO

DRAWING SIZE: A-7052

SCALE: 1/2" = 1'	DATE: 12-1-57
DRAWN BY: [Signature]	CHECKED BY: [Signature]
APPROVED BY: [Signature]	DATE: 12-1-57





TO CUSTOMER DATE
REV. 1
REV. 2
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REV. 100

REVISIONS

NO.	BY	DATE	REVISIONS
1	W.D.	1-15-57	REVISIONS
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95	W.D.	1-15-57	REVISIONS
96	W.D.	1-15-57	REVISIONS
97	W.D.	1-15-57	REVISIONS
98	W.D.	1-15-57	REVISIONS
99	W.D.	1-15-57	REVISIONS
100	W.D.	1-15-57	REVISIONS

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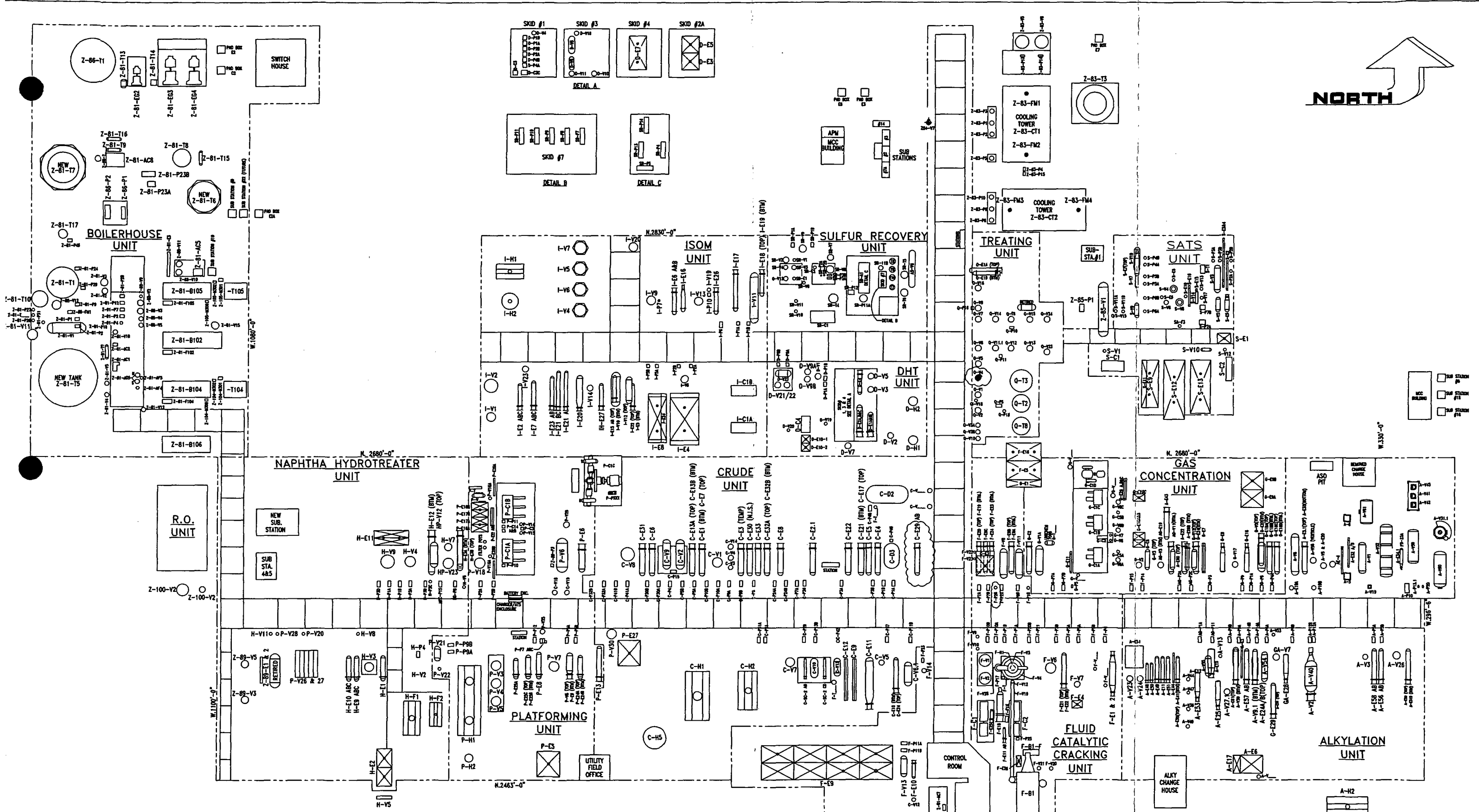
DRAINAGE & SEWERAGE

29.50 N TO 35.50 N
300 W TO 1100 W

EL PASO NATURAL GAS PRODUCTS COMPANY
GALLUP, NEW MEXICO

APPROVED FOR CONSTRUCTION
SIGNED BY: [Signature]
DATE: 3-1-57

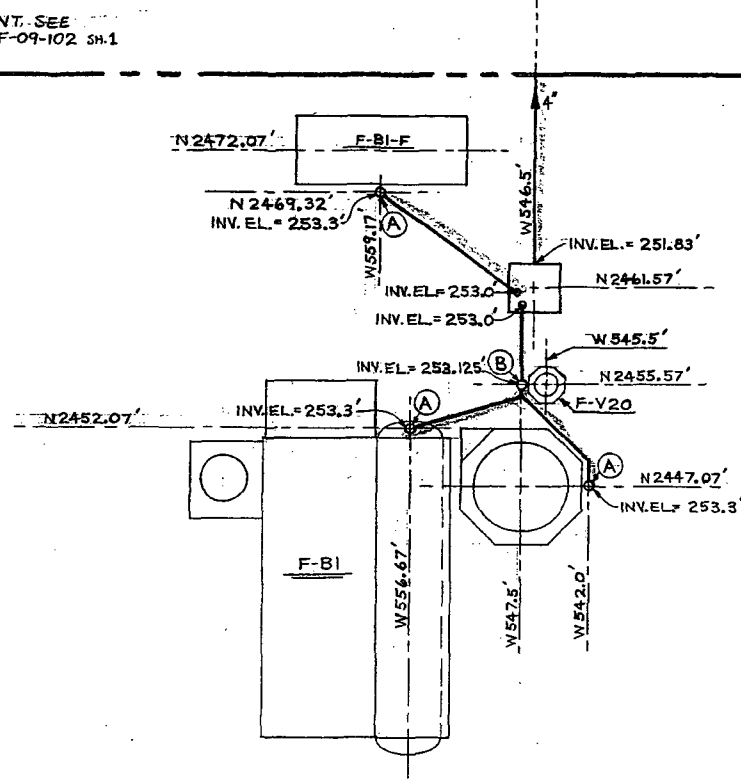
DRAWING SIZE
57



TO CATCH BASIN
#C8
FOR CONT. SEE
DWG. EC-09-125

FOR CONT. SEE
DWG. EF-09-102 SH.1

AREA LIMITS W600.0'



N2479.0'

REFERENCE DRAWINGS	
DWG. NO.	DESCRIPTION
EF-09-102 SH.1	FCC UNIT UNDERGROUND PIPING
EC-09-125	CRUDE UNIT UNDERGROUND PIPING
AZ-09-103	TYPICAL PIPING AT SUMPS & FUNNELS

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THE BORROWER, IN CONSIDERATION OF SUCH LOAN, AGREES
TO THE FOREGOING CONDITIONS AND TO RETURN THIS DRAW-
ING UPON REQUEST.

W. O. NO. 68539

MARK	DATE	DESCRIPTION	BY	APRVD
REVISIONS				
SHELL OIL COMPANY				
CINIZA REFINERY			GALLUP, N. M.	
FLUID CATALYTIC CRACKING UNIT				
UNDERGROUND PIPING				
PLAN				
SCALE	1" = 10'	APRVD	J. M. Q.	
DATE	8-1-69	APRVD		
DRWN	EFB			
CHKD				
		EF-09-102 SH. 2		

AREA LIMITS N. 26+80

EQUIPMENT LIST

VESSLS

- P-V1 OXYGEN STRIPPER
- P-V2 UNFINING STRIPPER RECEIVER
- P-V3 PLATFORMING REACTOR #1
- P-V4 PLATFORMING REACTOR #2
- P-V5 PLATFORMING REACTOR #3
- P-V6 PLATFORMING REACTOR PRODUCTS SEPARATOR
- P-V7 STABILIZER
- P-V8 STABILIZER RECEIVER
- P-V9 CHEMICAL CONDENSATE GAUGING TANK
- P-V10 UNFINING REACTOR
- P-V11 UNFINING REACTOR PRODUCTS SEPARATOR
- P-V12 FLASH DRUM
- P-V13 UNFINING WATER INJECTION SECTION TANK
- P-V14 STARTING AIR RECEIVER (IN COMPRESSOR HOUSE)
- P-V15 STARTING AIR RECEIVER (IN COMPRESSOR HOUSE)
- P-V16 COMPRESSOR COOLING WATER MAKE-UP TANK
- P-V17 PLATFORMING UNIT SURGE DRUM
- P-V18 FUEL GAS BALANCE DRUM
- P-V21 STEAM/WATER SEPARATOR
- P-V22 BLOW DOWN DRUM

HEATERS

- P-H1 PLATFORMING CHARGE HEATER
- P-H2 UNFINING HEATER

HEAT EXCHANGERS

- P-E1 UNFINING STRIPPER FEED EXCHANGER
- P-E2 UNFINING STRIPPER CONDENSER
- P-E3 PLATFORMING COLD COMBINED FEED EXCH.
- P-E4 PLATFORMING HOT COMBINED FEED EXCH.
- P-E5 PLATFORMING REACTOR PRODUCTS CONDENSER
- P-E6 PLATFORMING REACTOR PRODUCTS COOLER
- P-E7 STABILIZER FEED EXCHANGER
- P-E8 STABILIZER REBOILER
- P-E9 STABILIZER CONDENSER
- P-E11 STABILIZER BOTTOMS FINAL COOLER
- P-E12 UNFINING NAPHTHA FEED EXCH.
- P-E13 UNFINING GAS PREHEATER
- P-E14 UNFINING REACTOR PRODUCTS CONDENSER
- P-E15 UNFINING REACTOR PRODUCTS COOLER
- P-E16 RECYCLE GAS COMPRESSOR JACKET WATER COOLER
- P-E17 RECYCLE GAS COMPRESSOR LUBE OIL COOLER
- P-E24A18 STABILIZER FEED 1 BOTTOMS

COMPRESSORS

- P-C18 RECYCLE GAS COMPRESSOR

Replace 2 ea 4" 90° elbow

PUMPS

- P-P1 PLATFORMING REACTOR CHARGE PUMP
- P-P1A18 UNFINING STRIPPER REFLUX PUMPS
- P-P1A18 UNFINING STRIPPER REBOILER PUMPS
- P-P1A18 STABILIZER REFLUX PUMPS
- P-P2 CHEMICAL CONDENSATE INJECTION PUMP
- P-P3 UNFINING REACTOR CHARGE PUMP
- P-P4 UNFINING WATER INJECTION PUMP (NOT SHOWN)
- P-P5A STEAM/CONDENSATE P-V1 CIRC.
- P-P5B

MISCELLANEOUS

- P-W1 EXHAUSTER (NOT SHOWN)

REFERENCE DRAWINGS

- PLOT PLAN EP-35-101
- SUMP DETAILS EE-03-100
- TYPICAL PIPING AT DRAIN SUMPS (RANES) EE-03-103
- BILL OF MATERIAL AP-04-131

NOTES

- 1. FUTURE UNFINING EQUIPMENT IS SHOWN
- 2. INVERT ELEVATION FOR ALL "A" DRAIN FUNNELS IN PUMP DRAIN HEADER WILL BE 253'-10"

9	REVISION	REVISED DRAIN FUNNEL LOC.
8	REVISION	ADDED DRAIN SUMP P-24A18 DRAIN
7	REVISION	ADDED DRAIN SUMP P-24A18 DRAIN
6	REVISION	ADDED DRAIN SUMP P-24A18 DRAIN
5	REVISION	ADDED DRAIN SUMP P-24A18 DRAIN
4	REVISION	ADDED DRAIN SUMP P-24A18 DRAIN
3	REVISION	ADDED DRAIN SUMP P-24A18 DRAIN
2	REVISION	ADDED DRAIN SUMP P-24A18 DRAIN
1	REVISION	ADDED DRAIN SUMP P-24A18 DRAIN
0	REVISION	ADDED DRAIN SUMP P-24A18 DRAIN

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CONSENT OF THE COMPANY.

UNFINING PLATFORMING UNIT
UNDERGROUND PIPING PLAN

EL PASO NATURAL GAS PRODUCTS COMPANY
CINEMA REFINING UNIT

SCALE: 1" = 10'-0"
DATE: 3-22-57
CHECKED BY: ROCK
APPROVED BY: [Signature]
DESIGNED BY: [Signature]
GALLUP

EP09-102

Replace 5 ea
90° elbow
and piping

Replace 3
4" 90° elbow
PIPEWAY N. 25+75

Replace
sewer
1.0

Replace 3, 90°
elbow's

Replace 90° elbow

APPROVED FOR CONSTRUCTION
SIGNED BY: [Signature]
DATE: 3-22-57

UNFINING PLATFORMING UNIT
CONTROL HOUSE

SRU UNIT

UNDERGROUND PROCESS AND WASTEWATER LINES

SRU UNIT

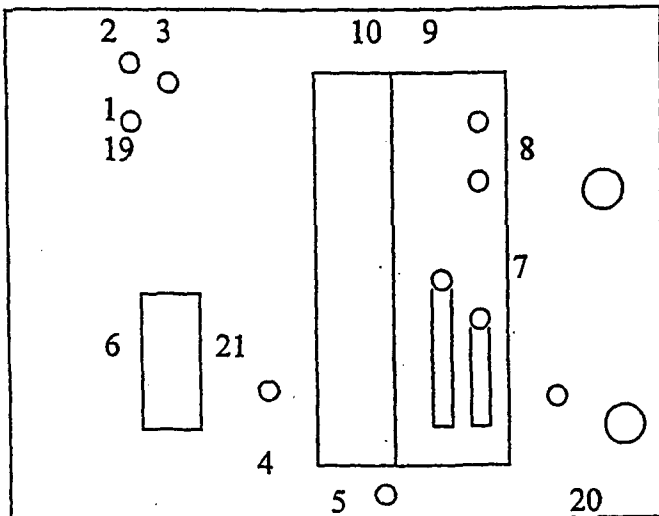
ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results
Sump at N2836.0	Start Drain SR-P1A @ N2836.0 W.728.0 to 1st "T" @ W713.0. Start from 14" Area Drain @ N.2815.0 to 1st "T" @ W.713.0. From 1st "T" @ W.713.0 to 1st "Y" @ W.704'-3". Start Drain @ N.2770'-3" W.717'-3" to "Y" @ N.2773'-9". Start Drain near SR-C1 to "Y" @ N.2773'-9". From "Y" @ N.2773'-9" to other "Y". From 2" pipe drain on S. side of SRU Bldg. to other "Y". From other "Y" to "Y" @ N.2780'-9". From Drain N.2779'-3" W.709'-0" to "Y" @ N.2780'-9". From "Y" @ N.2780'-9" to "Y" @ N.2836-0" W.704'-3" From "Y" @ N2836-0" W.704'-3" flows W. to "T" @ N.2836-0" W.668'-0"	Aug-93	PRO-QUIP D-3146-671						
	From "T" @ N.2836-0" W.668'-0"		PRO-QUIP D-3146-527						
	From Drains Inside SRU Bldg.		PRO-QUIP D-3146-527						
	Start Drain N.2781'-3" W.660'-0" to 1st "Y". From Clean Out (CO) to 1st "Y". From 1st "Y" flows N. to 2nd "Y". From Drain N.2791'-0" to 2nd "Y". From 2nd "Y" flows N. to 3rd "Y". From Drain N.2806'-0" to 3rd "Y". From 3rd "Y" N. to 4th "Y". Start from Drain N.2786'-3" W.684'-0" to a "Y", also a CO to same "Y". Drain N.2800'-0" W.680'-0" to other "Y" and flows NW to join 4th "Y". 4th "Y" flows N. out under SRU Bldg. to join "T" @ N.2836-0" W.668'-0" (DWG D-3146-671)	Aug-93	PRO-QUIP D-3146-527						
Sump at N.2836.0	"T" @ N.2836-0" W.668'-0" flows W. to last "Y". Drain N.2808-0" W.650'-1" flows N. to last "Y". From last "Y" flows W. to sump N2836-0"	Aug-93	PRO-QUIP D-3146-671						
NOTE TO SHEET: SRU DRAINS ARE ALSO KNOWN AS FOLLOWING FROM DHT/SRU WEEKLY DRAIN SEAL INSPECTION SHEETS:									
11	NEAR SR-C1								
12	NEAR SR-T4								
13	NEAR SR-V7, SR-V8, & SR-V9								
14	NEAR SR-T5								
15	IN SRU BLDG NEAR SR-T7								
16	IN SRU BLDG NEAR SR-T8								
17	IN SRU BLDG NEAR SR-A1								
18	IN SRU BLDG NEAR SR-P11A								
22	IN SRU STORAGE ROOM								

GIANT REFINING COMPANY
CINIZA ENVIRONMENTAL
40 CFR 61 SUBPART QQQ

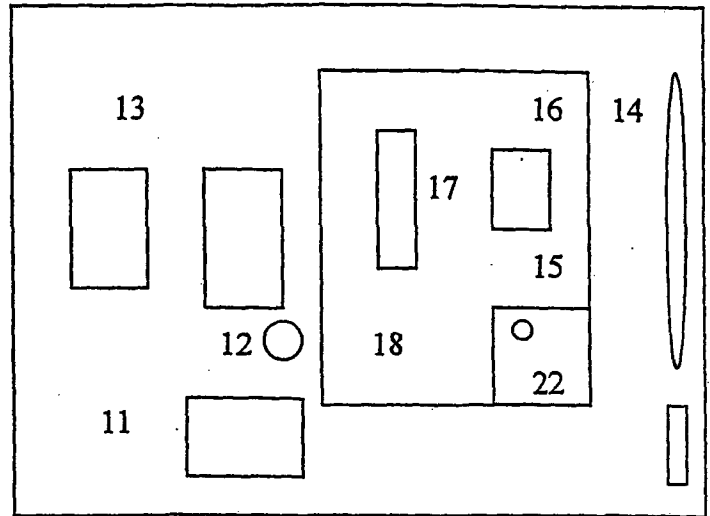
DHT / SRU WEEKLY DRAIN SEAL INSPECTION

INSPECTION DATE: _____

INSPECTION BY: _____



DHT UNIT



SRU UNIT

DRAIN #	LOCATION	SEALED?	COMMENTS
1	NEAR D-V9B		DHT
2	NEAR D-V9A		
3	NEAR D-V1		
4	NEAR D-V19 (STEAM)		
5	NEAR D-V7		
6	NEAR D-C4		
7	NEAR D-V3		
8	NEAR D-V5		
9	NEAR D-V4		
10	NEAR D-V4 (SLOP)		
11	NEAR SR-C1		SRU
12	NEAR SR-T4		
13	NEAR SR-V7, SR-V8, & SR-V9		
14	NEAR SR-T5		
15	IN SRU BLDG NEAR SR-T7		
16	IN SRU BLDG NEAR SR-T8		
17	IN SRU BLDG NEAR SR-A1		
18	IN SRU BLDG NEAR SR-P111A		
19	NEAR V-V9A & D-V9B		DHT
20	SEWER JUNCTION BOX		
21	NEAR D-C4		
22	IN SRU STORAGE ROOM		SRU

MAJOR FLOW LINE

MINOR FLOW LINE

SKID OUTLINE

FUTURE

BY OTHERS

ELECTRIC HEAT TRACING

STEAM HEAT TRACING

ELECTRICAL SIGNAL

PNEUMATIC TRANSMISSION LINE

CAPILLARY TUBING

SOFTWARE DIGITAL LINK

FLANGED VALVE

WELD END VALVE

SCREWED OR SOCKET WELD VALVE

GATE VALVE

BALL VALVE

GLOBE VALVE

PLUG VALVE

BUTTERFLY VALVE

CHECK VALVE

PISTON CHECK VALVE

PLUG/CHECK VALVE

RELIEF VALVE

VACUUM BREAKER

ANGLE VALVE

3-WAY VALVE

GAGE VALVE

STEAM JACKETED VALVE

CONTROL VALVE

CONTROL VALVE W/POSITIONER

DOUBLE ACTING DIAPHRAGM ACTUATED VALVE

PISTON OPERATED VALVE

ELECTRIC MOTOR VALVE

DIAPHRAGM VALVE

SOLENOID OPERATED VALVE

3-WAY SOLENOID VALVE

4-WAY SOLENOID VALVE

4-WAY SPool VALVE

DIAPHRAGM SEALED PI

FLOW ELEMENT (ORIFICE)

FLOW ELEMENT (CHAMBER TYPE ORIFICE)

PITOT TUBE

WEDGE TYPE FLOW ELEMENT

POSITIVE DISPLACEMENT METER

FLOW INDICATOR-ROTAMETER TYPE

SIGHT FLOW INDICATOR

STRAINER 'Y' TYPE

STRAINER CONE OR FLAT TYPE

SPECTACLE BLIND

TIE-IN

FLARE SYSTEM

COMPRESSOR FLARE

OILY WATER SEWER

FLARE KNOCKOUT SYSTEM

STEAM CONDENSATE

LINE RATING CHANGE

MANUAL RESET (PUSHBUTTON)

RUPTURE DISC (PRESSURE)

STEAM TRAP

INSTRUMENT TYPE

TYPE OF TRACING

C = ELECTRICAL

S = STEAM

LOCAL PANEL

A = HP COMPRESSOR

B = HEATER

F = FILTER

W = AIR COMPRESSOR

INSTRUMENT NUMBER

12

202

13

2

SPECIALTY FUNCTION MODIFIERS

MULTIPLE INSTRUMENT TYPES WITH A LOOP

BENOTES MULTI-POINT OR OTHER TYPE OF MODIFIERS

FURNISHED BY OTHERS

LOCAL MOUNTED INSTRUMENT

PANEL MOUNTED INSTRUMENT

DCS CONTROL

MOUNTED BEHIND THE PANEL

LOCAL PANEL MOUNTED INSTRUMENT

MOUNTED BEHIND THE LOCAL PANEL

PILOT LIGHT

OR - OUTPUT EXISTS IF ONE OR MORE INPUTS EXIST

AND - OUTPUT EXISTS ONLY IF ALL INPUTS EXIST

INTERLOCK (DEFINED ELSEWHERE)

STREAM CONTINUATION

INSTRUMENTATION CONTINUATION

ELECTRICAL CONTINUATION

ABBREVIATIONS

CSD CAR SEAL OPEN

CSC CAR SEAL CLOSED

FC FAIL CLOSED

FO FAIL OPEN

LC LOCK CLOSED

LO LOCK OPEN

NC NORMALLY CLOSED

NO NORMALLY OPEN

RD RESTRICTION ORIFICE

SI SIGHT FLOW INDICATOR

SC SAMPLE CONNECTION

CC CORROSION COUPON

VB VACUUM BREAKER

FAR FLAME ARRESTOR

SP SPECIALTY ITEM

TP TRANSITION PIECE

XFV EXCESS FLOW VALVE

PIV POST INDICATOR VALVE

LEVEL GAGE DESIGNATION	
R	REFLEX
TRB	TRANSPARENT BACK LIT
TR	TRANSPARENT
TU	TUBULAR
B	BULLS EYE
WP	WELD PAD
(2)	NUMBER ON BRIDLE
BC	BIG GAGE

LEVEL TRANSMITTER DESIGNATION	
DIF	DIFFERENTIAL PRESSURE
DSP	DISPLACER
BBL	BUBBLER
FLT	FLOAT

MEANINGS OF IDENTIFICATION LETTERS				
FIRST LETTER		SUCCEEDING LETTERS		
MEASURED OR INITIATING VARIABLE	MODIFIER	REASOIN OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS	ALARM		
B	BURNER FLAME	USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C	CONDUCTIVITY (ELECTRICAL)		CONTROL	
D	DENSITY (MASS) OR SPECIFIC GRAVITY	DIFFERENTIAL		
E	VOLTAGE (EMP)		PRIMARY ELEMENT	
F	FLOW RATE	RATIO (FRACTION)		
G	GAGING (DIMENSIONAL)		GLASS	
H	HAND (MANUALLY INITIATED)			HIGH
I	CURRENT (ELECTRICAL)		INDICATE	
J	POWER	SCAN		
K	TIME OR TIME-SCHEDULE		CONTROL STATION	
L	LEVEL		LIGHT (PILOT)	LOW
M	MOISTURE OR HUMIDITY			MIDDLE OR INTERMEDIATE
N	SHUTDOWN	USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
O	USER'S CHOICE		DRIFTE (RESTRICTION)	
P	PRESSURE OR VACUUM		POINT (TEST CONNECTION)	
Q	QUANTITY OR EVENT	INTEGRATE OR TOTALIZE		
R	RADIOACTIVITY		RECORD OR PRINT	
S	SPEED OR FREQUENCY	SAFETY		SWITCH
T	TEMPERATURE		TRANSMIT	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION
V	VISCOSITY		VALVE OR LOUVER	
W	WEIGHT OR FORCE (VIBRATION)	USER CHOICE	USER CHOICE	USER CHOICE
X	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y	USER'S CHOICE		RELAY OR COMPUTE	
Z	POSITION		DRIVE, ACTUATE OR UNCLASSIFIED FINAL CONTROL ELEMENT	

EQUIPMENT LIST	
A	AUXILIARY OR - MISCELLANEOUS EQUIPMENT
B	BOILER
C	COMPRESSOR
D	DRIVERS
E	AIR COOLED EXCHANGER
E	HEAT EXCHANGER
H	HEATER
G	HEATING ELEMENT OR BURNER
J	JET APPARATUS
M	MIXER
P	PUMP
Q	MOBILE EQUIPMENT
S	STRAINERS
T	TANK
V	VESSELS, COLUMNS, REACTORS & FILTERS
W	COOLING WATER TOWER

LINE IDENTIFICATION

LINE SIZE

LINE SPECIFICATION (EGS 3RP-1)

PROCESS ABBREVIATION

LINE NUMBER

INSULATION TYPE & THICKNESS

H - HEAT CONSERVATION

P - PERSONNEL PROTECTION

3"-200-P-34-H3-ET

TYPE OF TRACING

SERVICE DESIGNATION	PIPING SPECIFICATION INDEX
BFV BOILER FEED WATER	
CF CHEMICAL FEED	
CON CONDENSATE	
CS CHEMICAL SEWER	
CVR COOLING WATER RETURN	
CVS COOLING WATER SUPPLY	
DR DRAIN	
DV DOMESTIC WATER	
EDH EQUIPMENT DRAIN HEADER	
F FLARE	
FG FUEL GAS	
FW FIREWATER	
FN FLARE KNOCKOUT	
HY HYDROCARBON VENT	
HD HYDROCARBON DRAIN	
IA INSTRUMENT AIR	
NG NATURAL GAS	
NH HIGH PRESSURE NITROGEN	
NL LOW PRESSURE NITROGEN	
DVS DILY WATER SEWER	
P OTHER PROCESS STREAMS	
PH PROCESS HYDROCARBON	
PA PROCESS AIR	
PS PROCESS SLURRY	
RC REACTOR COOLANT	
RFP REACTOR FEED OR PRODUCT	
RS RICH SOLVENT	
S SOLVENT SULFUR	
SV SULFUR VAPOR	
SH 225 PSIG STEAM	
SV SDR WATER	
UA UTILITY AIR	
UV UTILITY WATER	
VV WELL WATER	

INSULATION	
C	COLD
H	HOT
PP	PERSONNEL PROTECTION

OPTIONS	
ST	HEAT TRACE (STEAM)
SR	STRESS RELIEVE
N	NACE MR-01-75
ET	ELECTRICAL TRACE

REV.	ISSUE	BY	DATE	PROC.	PROJ.	APPR.	DATE	PRELIM.	CONST.
4	ISSUED FOR CONSTRUCTION	BB	4-10-92	DL		NGS	3-20-92		REV. 4
5	ISSUED FOR CONSTRUCTION	CM	5-19-92			NGS	5-19-92		REV. 5
6	ISSUED FOR CONSTRUCTION	BB	6-04-92	DL	SAM	NGS	6-01-92		REV. 6
7	ISSUED FOR CONSTRUCTION	SUE	6-30-92		SAM	NGS	7-07-92		REV. 7
8	ISSUED FOR CONSTRUCTION	CM	8-06-92						REV. 8
9	GIANT AS-BUILT/MODIFIED	SPS	4-17-95						

PROQUIP

THE PROQUIP CORPORATION

OKLAHOMA

GIANT REFINING CO.

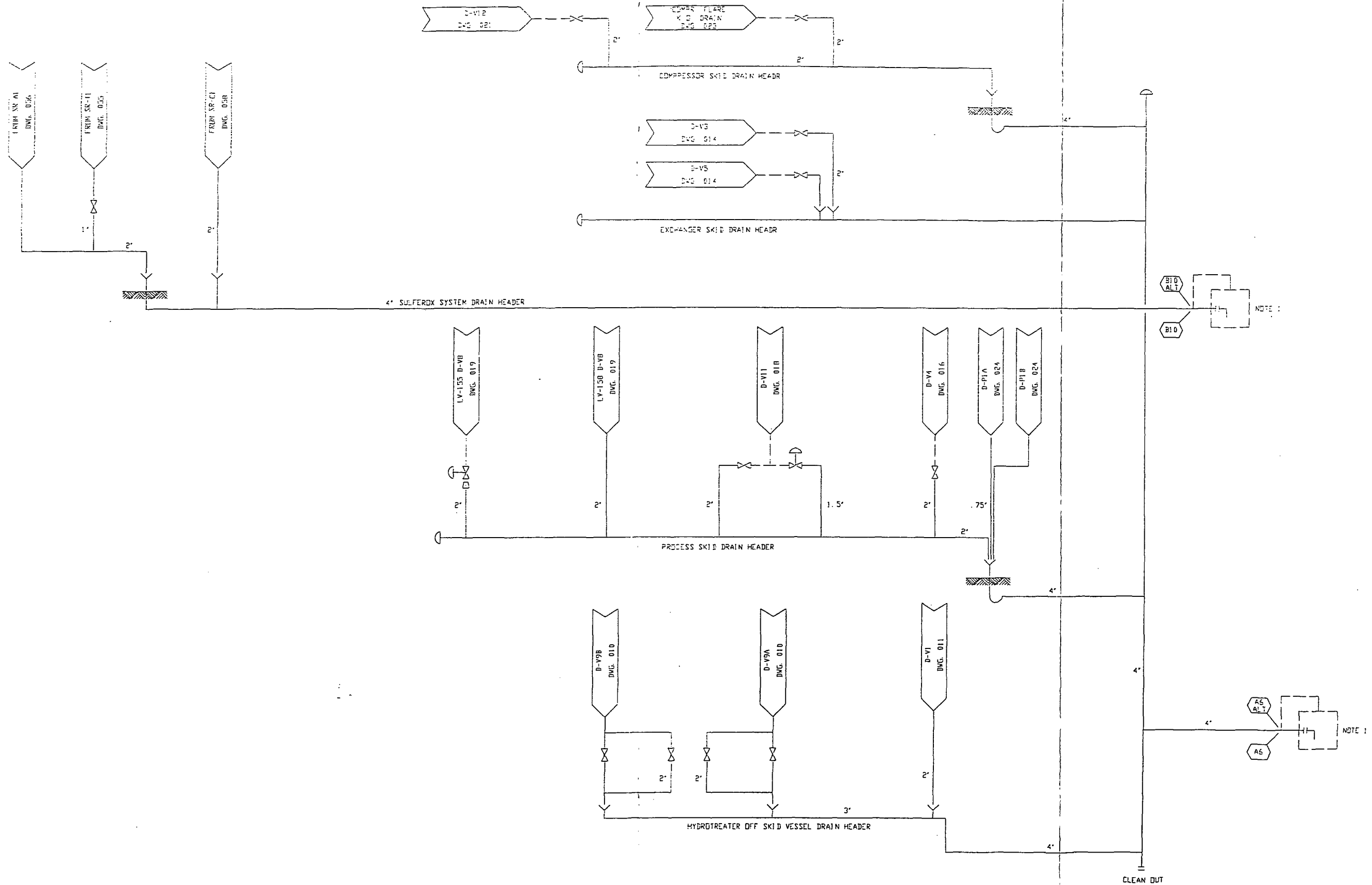
DRAWN	MARY	DATE	11-05-91	PROJECT NUMBER	91-3146
CHECKED		DATE		GALLUP	
APPROVED		DATE		SCALE	DWG D-34-000

DHT UNIT

SYMBOL LEGEND

NEW MEXICO

REV.	9
------	---



REV.	ISSUE	BY	DATE	PRDC.	PROJ.	APPR.	DATE	PRELIM.	CONST.
4	ISSUED FOR CONSTRUCTION	CM	8-06-92		SAM	NGS	8-11-92		REV. 4
5	ISSUED FOR CONSTRUCTION	CM	9-09-92		SAM	NGS	9-18-92		REV. 5
6	ISSUED FOR CONSTRUCTION	BB	11-11-92		SAM	NGS	12-3-92		REV. 6
7	ISSUED FOR CONSTRUCTION	CM	3-19-93			NGS	3-24-93		REV. 7
8	AS BUILT	CM	7-09-93						REV. 8
9	GIANT AS-BUILT/MODIFICATIONS	SPS	4-18-95						

TULSA				THE PRO-QUIP CORPORATION				OKLAHOMA			
GIANT REFINING CO.											
DRAWN		SUC		DATE		2-19-92		PROJECT NUMBER 91-3146			
CHECKED				DATE							
APPROVED		NGS		DATE		7-7-92					

MECHANICAL FLOW DIAGRAM
DRAIN SYSTEM

GALLUP
SCALE
NEW MEXICO
REV. 9

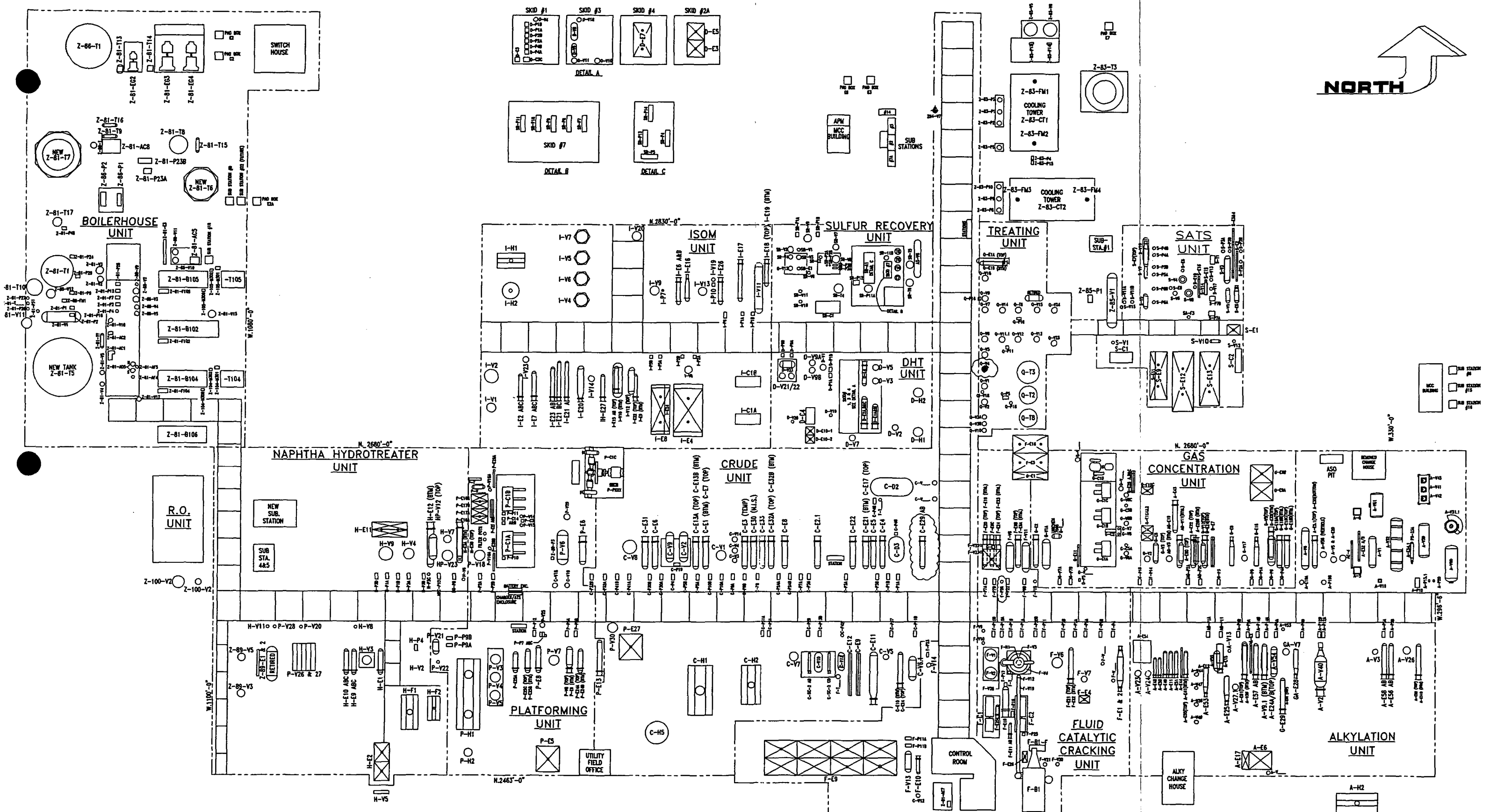
TIE-IN AT EXISTING DRAIN PIT.

SATS UNIT

UNDERGROUND PROCESS AND WASTEWATER LINES

SATS UNIT

<u>ID Number (Sewer Box or Catch Basin)</u>	<u>Lateral Drains and/or Headers</u>	<u>Date Installed</u>	<u>Drawing Reference</u>	<u>Test Date</u>	<u>Pass/Fail/Repair Information</u>	<u>Test Water Column (Feet)</u>	<u>Test Duration (Minutes)</u>	<u>Signature</u>	<u>Investigation Results</u>
Catch Basin by S-C1	Drain near S-V9 flows S then W to Catch Basin by S-C1	1995	95103-CC-105, Z-35-104 & EC-09-125						
Catch Basin just SW of S-V2	Drain by S-P2B, drain by S-E4, drain by S-E5, 2 drains by S-V3, & drain by S-V2	1995?	No Drawing, Based on Visual Sight						
Catch Basin just W of Catch Basin just SW of S-V2	Drains on either side of SV-13, 3 drains by S-V4, & other drain	1995?	No Drawing, Based on Visual Sight						
Catch Basin & drain by S-11B	2 drains by S-E10, other drain, & drain by Z-85-P1	1995?	No Drawing, Based on Visual Sight						



MASTER EQUIPMENT PLOT PLAN

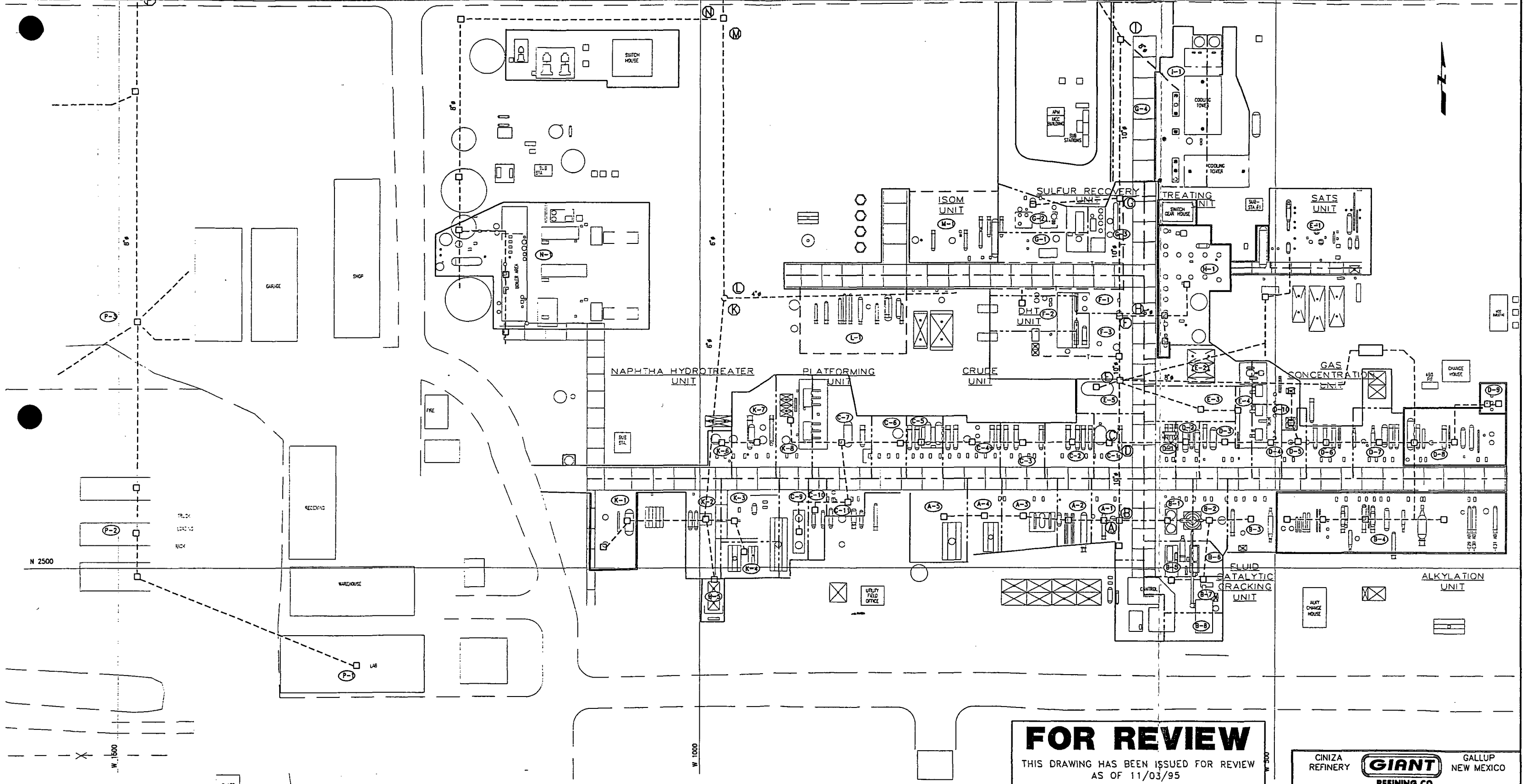
13	11/03	UPDATED	CLM	SCALE:	1" = 30'-0"	APRV D.:
MARK	DATE	DESCRIPTION	BY	APRVD	DATE:	28SEP00
					DRAWN BY:	C.L.M.
					CHK'D:	DWG NO. Z-35-104
						REV. 13

N 3000

N 2500

W 1600

W 1000



- LEGEND**
- EDGE OF CONCRETE
 - EXIST. CONCRETE CURB
 - APPROX. RIDGE LINE (HP)
 - EXIST. PROCESS DRAINS
 - EXIST. TRENCH DRAINS
 - PROPOSED CONCRETE AREA
 - (2-1) DRAINAGE AREA
 - (K) STUDY POINT

NOTES

1. UNLESS NOTED ALL EXISTING PROCESS DRAINS ARE 4".
PIPE DIAMETER BASED ON INFORMATION PROVIDED BY GIANT REFINERY.

FOR REVIEW

THIS DRAWING HAS BEEN ISSUED FOR REVIEW
AS OF 11/03/95

RAPLEY ENGINEERING SERVICES, INC.

CINIZA REFINERY

GIANT

REFINING CO.

A DIVISION OF GIANT INDUSTRIES

GALLUP NEW MEXICO

PROCESS AREA
PROCESS DRAINAGE
STUDY PLAN

SCALE	1"=40'	APRVD.
DATE	10-25-95	APRVD.
DRN.	DPB	40
CHK'D.	DPB	40
MARK/DAT	11/03/95	REV.

CLIENT REVIEW	DPB	APRVD.
DESCRIPTION	BY	APRVD.

10WG NO. 95103-CC-105

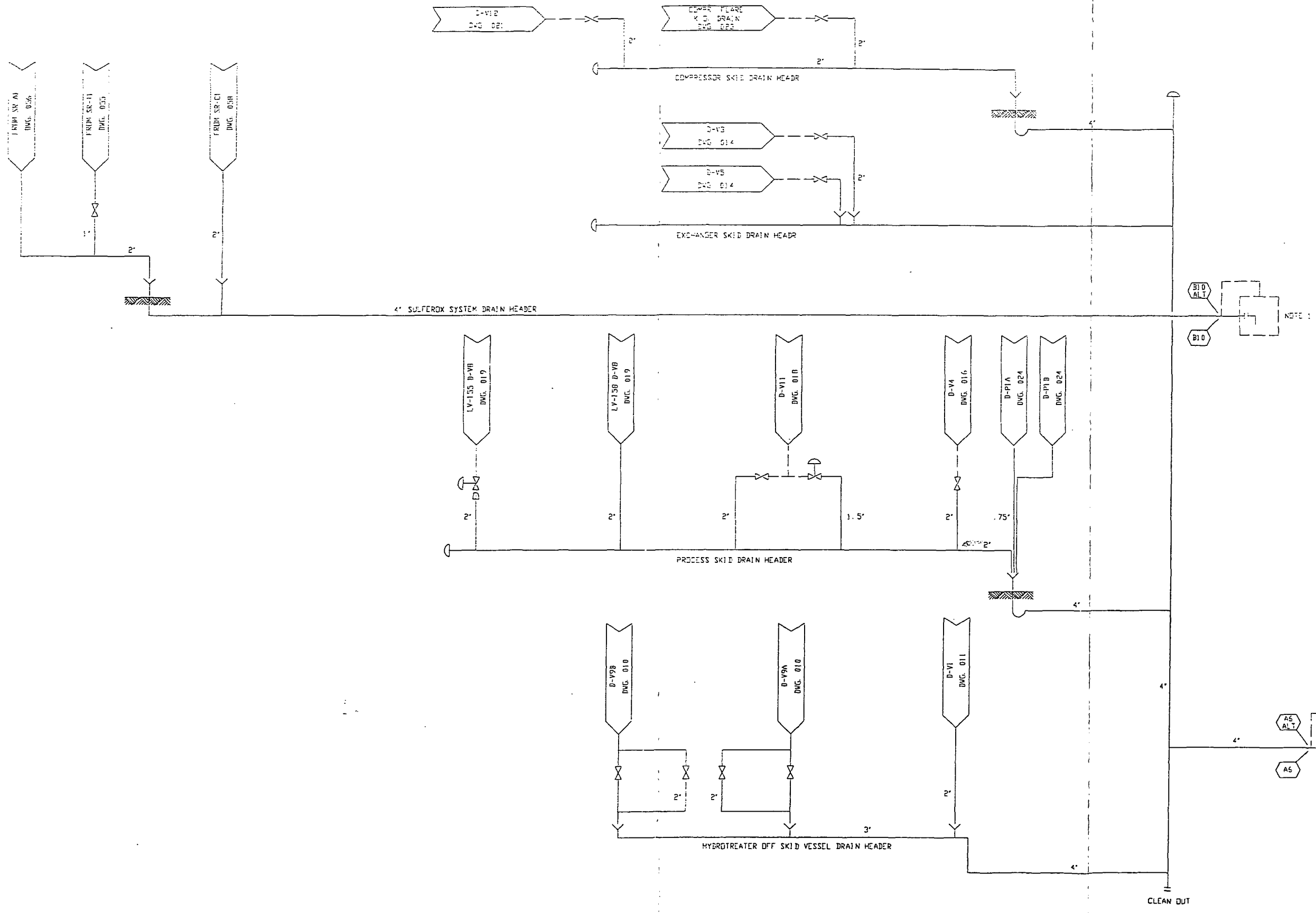
11/03/95 14:11 JOB AT REP. 1 - 100% - 100% SUBMITTAL

DHT UNIT

UNDERGROUND PROCESS AND WASTEWATER LINES

DHT UNIT

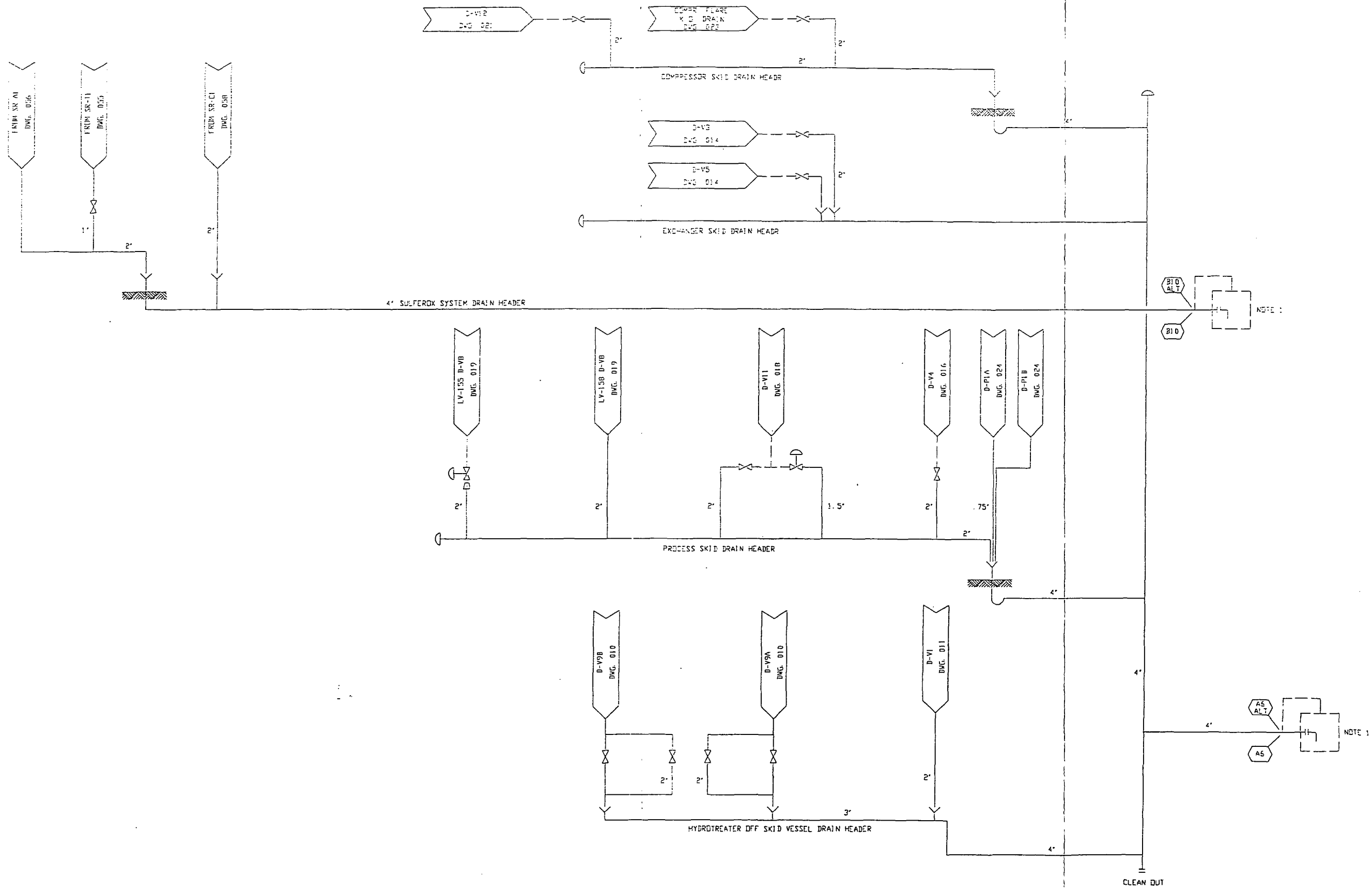
ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results
CBZ-23 2729.63N 632W	Start Drain D-V9B to D-V9A to D-V1 to 1st "T" to CBZ-23. Start Drain LV 155 DV-8 to LV-158 DV-8 to D-V1 to D-V4 with D-P1A with D-P1B to 2nd "T" to 1st "T" to CBZ-23. Start D-V5 to D-V3 to 3rd "T" to 2nd "T" to 1st "T" to CBZ-23. Start D-V12 to Comp. Flare K.O. Drain to 4th "T" to 3rd "T" to 2nd "T" to 1st "T" to CBZ-23.	Jul-93	EZ-80-09-510EP, PROQUIP D-34-000 & D-34-80-100						
NOTE TO SHEET; DHT DRAINS ARE ALSO KNOWN AS FOLLOWING FROM DHT/SRU WEEKLY DRAIN SEAL INSPECTION SHEETS:									
1	NEAR D-V9B								
2	NEAR D-V9A								
3	NEAR D-V1								
4	NEAR D-V19 (STEAM)								
5	NEAR D-V7								
6	NEAR D-C4								
7	NEAR D-V3								
8	NEAR D-V5								
9	NEAR D-V4								
10	NEAR D-V4 (SLOP)								
19	NEAR V-V9A & D-V9B								
20	SEWER JUNCTION BOX								
21	NEAR D-C4								



TIE-IN AT EXISTING DRAIN PIT.

REV.	ISSUE	BY	DATE	PRDC.	PROJ.	APPR.	DATE	PRELIM.	CONST.	PRO-QUIP THE PRO-QUIP CORPORATION OKLAHOMA				MECHANICAL FLOW DIAGRAM DRAIN SYSTEM	
4	ISSUED FOR CONSTRUCTION	CM	8-06-92		SAM	NGS	8-11-92		REV. 4	GIANT REFINING CO.				GALLUP NEW MEXICO	
5	ISSUED FOR CONSTRUCTION	CM	9-09-92		SAM	NGS	9-18-92		REV. 5						
6	ISSUED FOR CONSTRUCTION	BB	11-11-92		SAM	NGS	12-3-92		REV. 6	PROJECT NUMBER 91-3146				SCALE DWC D-34-80-100	
7	ISSUED FOR CONSTRUCTION	CM	3-19-93		NGS	NGS	3-24-93		REV. 7						
8	AS BUILT	CM	7-05-93						REV. 8	DATE 7-7-92				REV. 9	
9	GIANT AS-BUILT/MODIFICATIONS	SPS	4-18-95												

CBZ-23



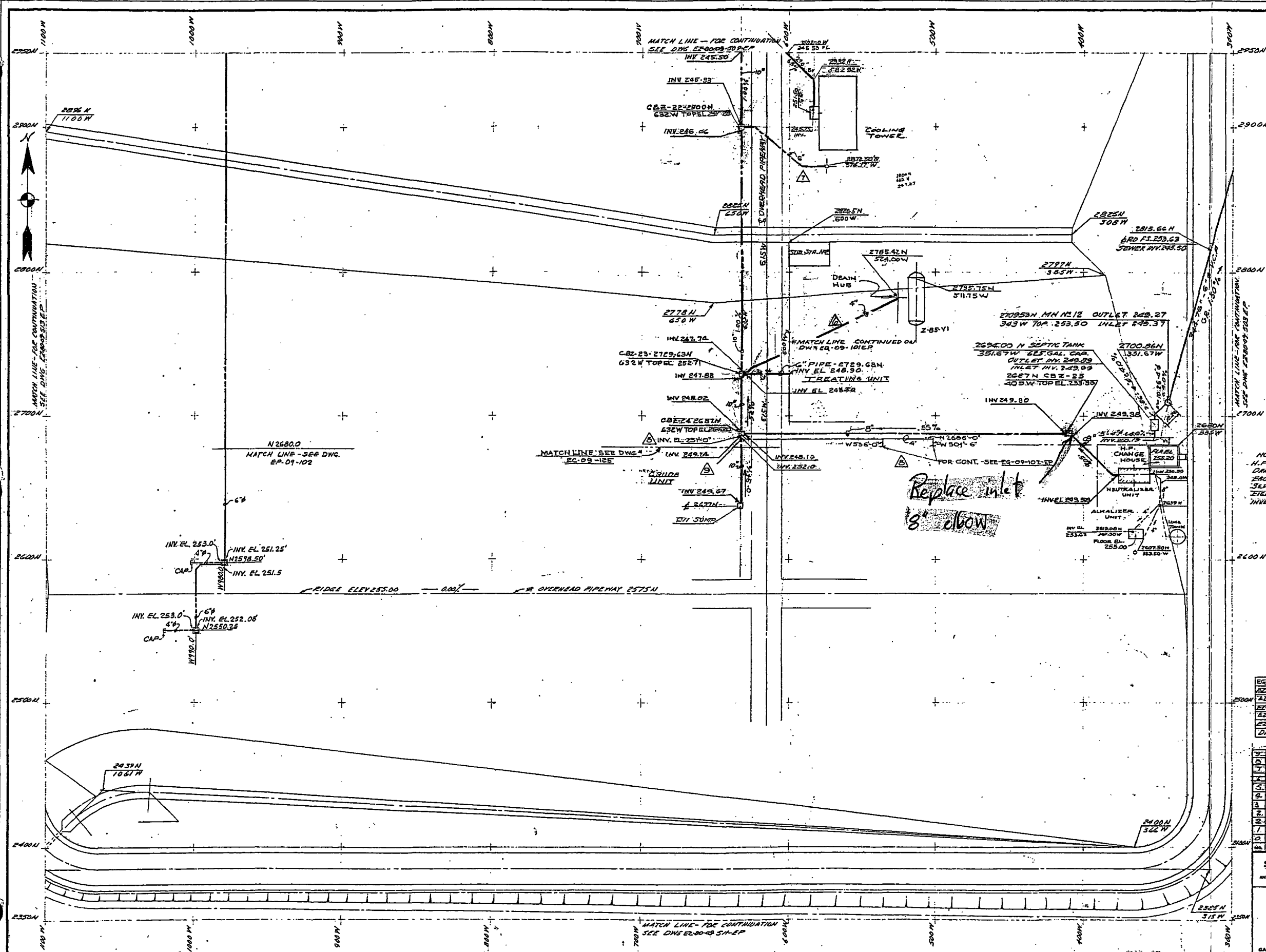
TIE-IN AT EXISTING DRAIN PIT.

REV.	ISSUE	BY	DATE	PRDC.	PROJ.	APPR.	DATE	PRELIM.	CONST.	PRO-QUIP				MECHANICAL FLOW DIAGRAM			
4	ISSUED FOR CONSTRUCTION	CM	8-06-92		SAM	NGS	8-11-92		REV. 4	THE PRO-QUIP CORPORATION				DRAIN SYSTEM			
5	ISSUED FOR CONSTRUCTION	CM	9-09-92		SAM	NGS	9-18-92		REV. 5	GIANT REFINING CO.							
6	ISSUED FOR CONSTRUCTION	BB	11-11-92		SAM	NGS	12-3-92		REV. 6								
7	ISSUED FOR CONSTRUCTION	CM	3-19-93			NGS	3-24-93		REV. 7								
8	AS BUILT	CM	7-09-93						REV. 8								
9	GIANT AS-BUILT/MODIFICATIONS	SPS	4-18-95														

DRAWN	SUC	DATE	2-19-92	PROJECT NUMBER	91-3146	GALLUP	NEW MEXICO
CHECKED	DATE	7-7-92				SCALE	
APPROVED	NGS	DATE				DWG	D-34-80-100
						REV.	9

TO CUSTOMER DATE
ISSUED
REV. 1
REV. 2
REV. 3
REV. 4

TO SHOP DATE
ISSUED
REV. 1
REV. 2
REV. 3
REV. 4



NOTE:-
H.F. CHANGE HOUSE SHOWER
DRAINS TO ENTER NEUTRALIZER UNIT
FROM S.W. CORNER OF CHANGE HOUSE
SEPTIC TANKS 3' DIA. 8' LONG X 5' DEEP
FIELD PUMPING LEVEL BOTTOM 4.0' BELOW
INLET OF PIPE

APPROVED FOR CONSTRUCTION
DATE 3-7-57
BY [Signature]

EG-09-102-EP	GAS CON. UNDERGROUND TYPING PLAN
EG-09-102-EP	ENTRANCE TO CHZ-23 FROM TANK 285V2
AZ-03-102-EP	DRAIN & OVERFLOW PIPE DETAILS
EG-03-102-EP	SUMP DETAILS
EG-03-102-EP	KEY PLAN
EG-02-102-EP	SITE GRADING PLAN
DWG NO.	REFERENCE DRAWING

1	ADDED DRAIN FROM TANK 285V2 TO CHZ-23
2	ADDED DRAIN FROM CHZ-23 TO TANK 285V2
3	ADDED 1/2" FROM WATER FILTER TO MAIN LN. CHZ-23
4	RELOCATED 2" 85-VI SAN.
5	CHANGED POSITION OF CHZ-23
6	RELOCATED 2" 85-VI SAN.
7	RELOCATED 2" 85-VI SAN.
8	RELOCATED 2" 85-VI SAN.
9	RELOCATED 2" 85-VI SAN.
10	RELOCATED 2" 85-VI SAN.
11	RELOCATED 2" 85-VI SAN.
12	RELOCATED 2" 85-VI SAN.
13	RELOCATED 2" 85-VI SAN.
14	RELOCATED 2" 85-VI SAN.
15	RELOCATED 2" 85-VI SAN.
16	RELOCATED 2" 85-VI SAN.
17	RELOCATED 2" 85-VI SAN.
18	RELOCATED 2" 85-VI SAN.
19	RELOCATED 2" 85-VI SAN.
20	RELOCATED 2" 85-VI SAN.

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DRAINAGE & SEWERAGE
2350 N TO 2900 N
300 W TO 1100 W

EL PASO NATURAL GAS PRODUCTS COMPANY
GALLUP NEW MEXICO

DRAWING SIZE **A-702B**

SCALE 3/4" = 1'-0"	DATE 3-7-57
DRAWN BY [Signature]	CHECKED BY [Signature]
APPROVED BY [Signature]	DATE 3-7-57
BY [Signature]	DATE 3-7-57

MAJOR FLOW LINE

MINOR FLOW LINE

SKID OUTLINE

FUTURE

BY OTHERS

ELECTRIC HEAT TRACING

STEAM HEAT TRACING

ELECTRICAL SIGNAL

PNEUMATIC TRANSMISSION LINE

CAPILLARY TUBING

SOFTWARE DIGITAL LINK

FLANGED VALVE

WELD END VALVE

SCREWED OR SOCKET WELD VALVE

GATE VALVE

BALL VALVE

GLOBE VALVE

PLUG VALVE

BUTTERFLY VALVE

CHECK VALVE

PISTON CHECK VALVE

PLUG/CHECK VALVE

RELIEF VALVE

VACUUM BREAKER

ANGLE VALVE

3-WAY VALVE

GAGE VALVE

STEAM JACKETED VALVE

CONTROL VALVE

CONTROL VALVE W/POSITIONER

DOUBLE ACTING DIAPHRAGM ACTUATED VALVE

PISTON OPERATED VALVE

ELECTRIC MOTOR VALVE

DIAPHRAGM VALVE

SOLENOID OPERATED VALVE

3-WAY SOLENOID VALVE

4-WAY SOLENOID VALVE

4-WAY SPool VALVE

DIAPHRAGM SEALED PI

FLOW ELEMENT (ORIFICE)

FLOW ELEMENT (CHAMBER TYPE ORIFICE)

PILOT TUBE

WEDGE TYPE FLOW ELEMENT

POSITIVE DISPLACEMENT METER

FLOW INDICATOR-ROTAMETER TYPE

SIGHT FLOW INDICATOR

STRAINER 'Y' TYPE

STRAINER CONE OR FLAT TYPE

SPECTACLE BLIND

TIE-IN

FLARE SYSTEM

COMPRESSOR FLARE

OILY WATER SEWER

FLARE KNOCKOUT SYSTEM

STEAM CONDENSATE

LINE RATING CHANGE

MANUAL RESET (PUSHBUTTON)

RUPTURE DISC (PRESSURE)

STEAM TRAP

INSTRUMENT TYPE

TYPE OF TRACING

LOCAL PANEL

HE COMPRESSOR

HEATER

FILTER

AIR COMPRESSOR

SPECIALTY FUNCTION MODIFIERS

MULTIPLE INSTRUMENT TYPES WITH A LOOP

BENDS MULTI-POINT OR OTHER TYPE OF MODIFIERS

FURNISHED BY OTHERS

INSTRUMENT NUMBER

LOCAL MOUNTED INSTRUMENT

PANEL MOUNTED INSTRUMENT

BOS CONTROL

MOUNTED BEHIND THE PANEL

LOCAL PANEL MOUNTED INSTRUMENT

BUNTED BEHIND THE LOCAL PANEL

PILOT LIGHT

OR - OUTPUT EXISTS IF ONE OR MORE INPUTS EXIST

AND - OUTPUT EXISTS ONLY IF ALL INPUTS EXIST

INTERLOCK (DEFINED ELSEWHERE)

STREAM CONTINUATION

INSTRUMENTATION CONTINUATION

ELECTRICAL CONTINUATION

ABBREVIATIONS

CSD CAR SEAL OPEN

CSC CAR SEAL CLOSED

FC FAIL CLOSED

FD FAIL OPEN

LC LOCK CLOSED

LD LOCK OPEN

NC NORMALLY CLOSED

NO NORMALLY OPEN

RD RESTRICTION ORIFICE

SI SIGHT FLOW INDICATOR

SC SAMPLE CONNECTION

CC CORROSION COUPON

VB VACUUM BREAKER

FAR FLAME ARRESTOR

SP SPECIALTY ITEM

TP TRANSITION PIECE

XFV EXCESS FLOW VALVE

PIV POST INDICATOR VALVE

LEVEL GAGE DESIGNATION	
R	REFLEX
TRE	TRANSPARENT BACK LIT
TR	TRANSPARENT
TU	TUBULAR
B	BULLS EYE
WP	WELD PAD
(2)	NUMBER ON BRIDLE
BC	BIG GAGE

LEVEL TRANSMITTER DESIGNATION	
DIF	DIFFERENTIAL PRESSURE
DSP	DISPLACER
BBL	BUBBLER
FLT	FLOAT

MEANINGS OF IDENTIFICATION LETTERS				
FIRST LETTER		SUCCEEDING LETTERS		
MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A ANALYSIS		ALARM		
B BURNER FLAME		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C CONDUCTIVITY (ELECTRICAL)			CONTROL	
D DENSITY (MASS) OR SPECIFIC GRAVITY	DIFFERENTIAL			
E VOLTAGE (EMF)		PRIMARY ELEMENT		
F FLOW RATE	RATIO (FRACTIONS)			
G GAGING (DIMENSIONAL)		CLASS		
H HAND (MANUALLY INITIATED)				HIGH
I CURRENT (ELECTRICAL)		INDICATE		
J POWER	SCAN			
K TIME OR TIME-SCHEDULE			CONTROL STATION	
L LEVEL		LIGHT (PILOT)		LOW
M MOISTURE OR HUMIDITY				MIDDLE OR INTERMEDIATE
N SHUTDOWN		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
O USER'S CHOICE		ORIFICE (RESTRICTION)		
P PRESSURE OR VACUUM		POINT (TEST CONNECTION)		
Q QUANTITY OR EVENT	INTEGRATE OR TOTALIZE			
R RADIOACTIVITY		RECORD OR PRINT		
S SPEED OR FREQUENCY	SAFETY			
T TEMPERATURE			SWITCH	
U MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V VISCOSITY			VALVE OR LOUVER	
W WEIGHT OR FORCE (VIBRATION)		USER CHOICE	USER CHOICE	USER CHOICE
X UNCLASSIFIED		UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y USER'S CHOICE			RELAY OR COMPUTE	
Z POSITION			DRIVE, ACTUATE OR UNCLASSIFIED FINAL CONTROL ELEMENT	

EQUIPMENT LIST	
A	AUXILIARY OR MISCELLANEOUS EQUIPMENT
B	BOILER
C	COMPRESSOR
D	DRIVERS
E	AIR COOLED EXCHANGER
E	HEAT EXCHANGER
H	HEATER
G	HEATING ELEMENT OR BURNER
J	JET APPARATUS
M	MIXER
P	PUMP
O	MOBILE EQUIPMENT
S	STRAINERS
T	TANK
V	VESSELS, COLUMNS, REACTORS & FILTERS
W	COOLING WATER TOWER

LINE IDENTIFICATION

LINE SIZE

LINE SPECIFICATION (EGS 3RP-1)

PROCESS ABBREVIATION

LINE NUMBER

INSULATION TYPE & THICKNESS

H - HEAT CONSERVATION

P - PERSONNEL PROTECTION

3'-200-P-34-H3-ET

TYPE OF TRACING

SERVICE DESIGNATION	PIPING SPECIFICATION INDEX
BFW BOILER FEED WATER	
CF CHEMICAL FEED	
CDN CONDENSATE	
CS CHEMICAL SEWER	
CWR COOLING WATER RETURN	
CWS COOLING WATER SUPPLY	
DR DRAIN	
DW DOMESTIC WATER	
EDH EQUIPMENT DRAIN HEADER	
F FLARE	
FG FUEL GAS	
FW FIREWATER	
FN FLARE KNOCKOUT	
HV HYDROCARBON VENT	
HD HYDROCARBON DRAIN	
IA INSTRUMENT AIR	
NG NATURAL GAS	
NH HIGH PRESSURE NITROGEN	
NL LOW PRESSURE NITROGEN	
DWS OILY WATER SEWER	
P OTHER PROCESS STREAMS	
PH PROCESS HYDROCARBON	
PA PROCESS AIR	
PS PROCESS SLURRY	
RC REACTOR COOLANT	
RFP REACTOR FEED OR PRODUCT	
RS RICH SOLVENT	
S MOLTEN SULFUR	
SV SULFUR VAPOR	
SH 225 PSIG STEAM	
SW SODIUM WATER	
UA UTILITY AIR	
UN UTILITY WATER	
VW WELL WATER	

INSULATION	
C	COLD
H	HOT
PP	PERSONNEL PROTECTION

OPTIONS	
ST	HEAT TRACE (STEAM)
SR	STRESS RELIEVE
N	NACE MR-01-75
ET	ELECTRICAL TRACE

REV.	ISSUE	BY	DATE	PROC.	PROJ.	APPR.	DATE	PRELIM.	CONST.
4	ISSUED FOR CONSTRUCTION	BB	4-10-92	DL		NGS	3-20-92		REV. 4
5	ISSUED FOR CONSTRUCTION	CM	5-19-92			NGS	5-19-92		REV. 5
6	ISSUED FOR CONSTRUCTION	BB	6-04-92	DL	SAM	NGS	6-01-92		REV. 6
7	ISSUED FOR CONSTRUCTION	SUE	6-30-92		SAM	NGS	7-07-92		REV. 7
8	ISSUED FOR CONSTRUCTION	CM	8-06-92						REV. 8
9	GIANT AS-BUILT/MODIFIED	SPS	4-17-95						

PROQUIP

THE PROQUIP CORPORATION

OKLAHOMA

GIANT REFINING CO.

DRAWN	MARY	DATE	11-05-91	PROJECT NUMBER	91-3146	GALLUP	SCALE	DWG	D-34-000	REV.	9
CHECKED		DATE									
APPROVED		DATE									

DHT UNIT

SYMBOL LEGEND

NEW MEXICO

PLATFORMER UNIT AND NHT UNIT

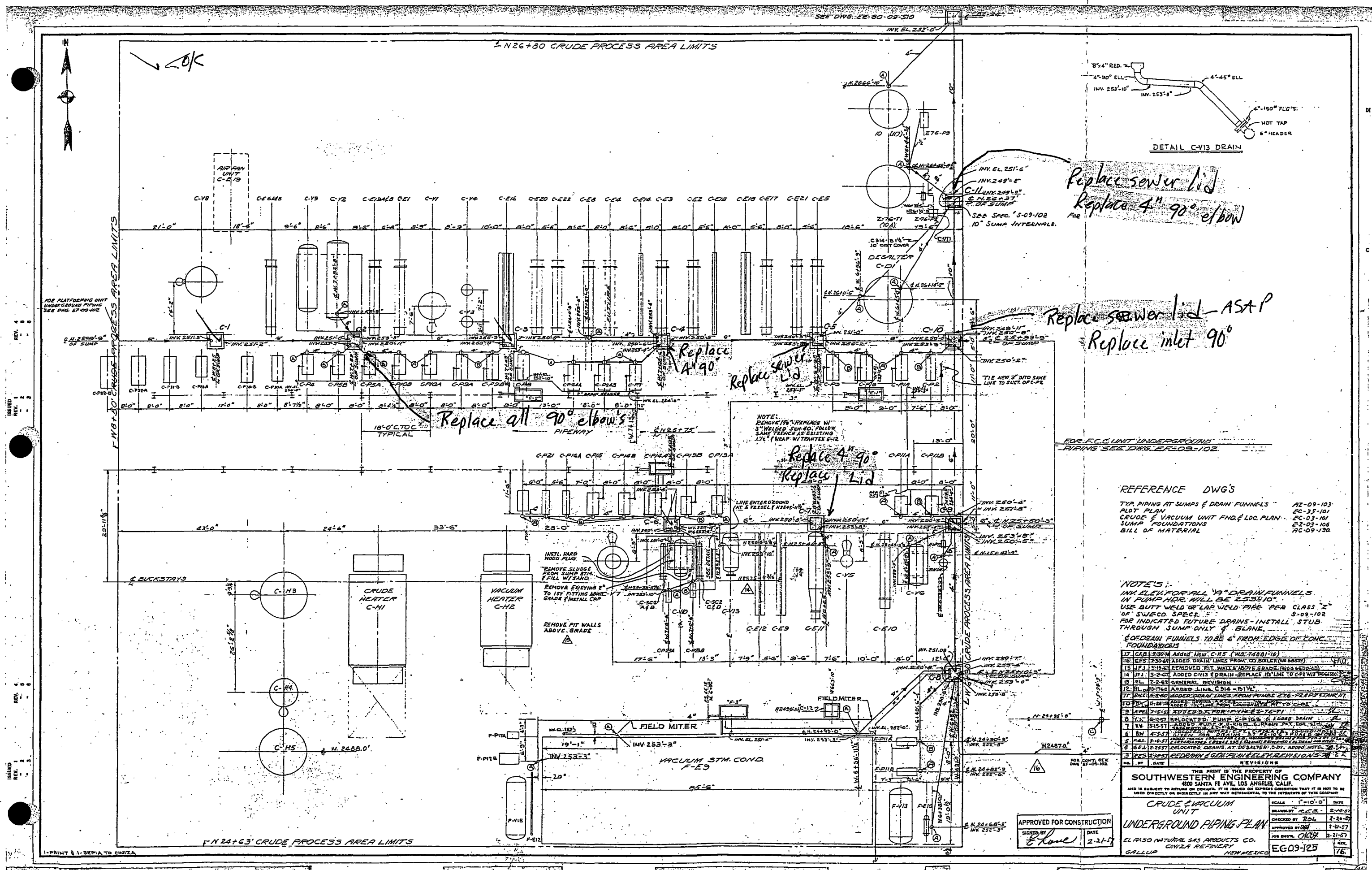
UNDERGROUND PROCESS AND WASTEWATER LINES

PLATFORMER UNIT AND NHT UNIT

ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results	Notes
P-1	P-E8 to P-1	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		
	P-V8/P-E9 to P1	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		
	P-P6 to P-P5A to P-1	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		
	P-P5B to P-1	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		
P-2	P-2 (From Plat Unit) flows to C-1 (Crude Unit)	1957	EC-09-125 & EP-09-102	10/31/02	Pass	3	30	B. Loos		
	P-V9 to P-2	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		
	P-V6 to P-2	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		
	P-C1B to P-2	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		
	P-C1A to P-2	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		
	P-3 to P-2	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		
P-3	P-V18 to P-3	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		
	P-P2 to P-3	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		
	P-4 to P-3	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		
P-4	P-V23 to P-4	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		NHT
	P-V24 to P-4	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		NHT
	DC-P15 to P-P10 to P-4	1957	EP-09-102	10/31/02	Pass	3	30	B. Loos		NHT
P-7	Z-89-V3 @ N2509'-9" to P-7	1957	EP-09-102	01/23/03	Pass	3	25	B. Loos		NHT End Drain
N2509'-9" W1074'-0"										
P-8	P-7 to P-8	1957	EP-09-102	01/23/03	Pass	3	25	B. Loos		NHT
N2550'-3" W1048'-6"										
	Z89-V1 to P-8	1957	EP-09-102	01/23/03	Pass	3	25	B. Loos		NHT
P-6	P-8 to P-6	1957	EP-09-102	01/23/03	Pass	3	25	B. Loos		NHT
N2550'-3" W990'-0"										
	H-F1/H-F2 to Line HE-2 to P-6	1957	EP-09-102	01/23/03	Pass	3	25	B. Loos		NHT
	HE-2 to P-6	1957	EP-09-102	01/23/03	Pass	3	25	B. Loos		NHT
	H-P2 to P-6	1957	EP-09-102	01/23/03	Pass	3	25	B. Loos		NHT
	H-V2 to H-P2 to P-6	1957	EP-09-102	01/23/03	Fail/cup by P-V3	0	0	B. Loos	Repaired 2/6/03 & Tested/Passed	NHT
P-5	P-6 To P-5	1957	EP-09-102	01/23/03	Pass	3	25	B. Loos		NHT
N2598'-6" W980'-0"										
	H-P3B to H-P3A to P-5	1957	EP-09-102	01/23/03	Pass	3	25	B. Loos		NHT
	H-V4 to P-5	1957	EP-09-102	01/23/03	Pass	3	25	B. Loos		NHT
	H-V1 to P-5	1957	EP-09-102	01/23/03	Pass	3	25	B. Loos		NHT

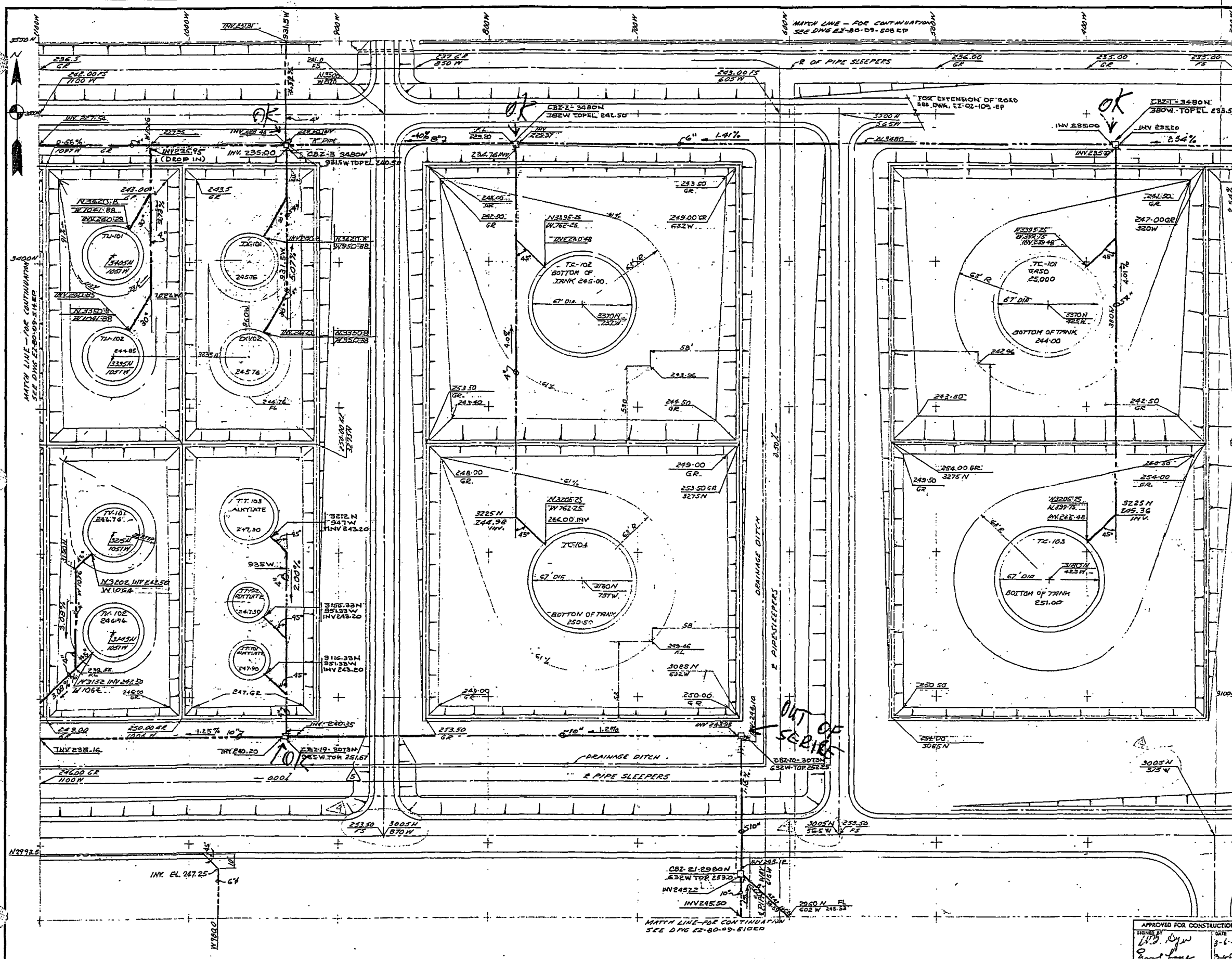
UNDERGROUND PROCESS AND WASTEWATER LINES									
PLATFORMER UNIT AND NHT UNIT									
P-5 Flows N. @ W980°-0° thru Manhole 31 232.33 (ISOM Manhole) to EZ80- 09-509-EP Map	1957	EP-09-102, EZ80- 09-509-EP & EZ80-09- Sewer2							NHT (Connects to ISOM Manhole)

PLATFORMER UNIT AND NHT UNIT				
P-5 Flows N. @ W980'-0" thru Manhole 31 232.33 (ISOM Manhole) to EZ80-09-509-EP Map	1957	EP-09-102, EZ80-09-509-EP & EZ80-09-Sewer2		NHT (Connects to ISOM Manhole)



HAN. 4/20/77

TO CUSTOMER ISSUED DATE
REV. 4
REV. 3
REV. 2
REV. 1
TO SHOP ISSUED DATE
REV. 4
REV. 3
REV. 2
REV. 1



REVISIONS
1. 02-03-1957, CATCH BASIN & MANHOLE DETAILS
2. 02-03-1957, KEY PLAN
3. 02-03-1957, SEE DETAIL - TANK SHELL ASSEMBLY
4. 02-03-1957, SITE GRADING PLAN
5. 02-03-1957, REFERENCE DRAWING
DWG. NO. 22-80-09-508-EP

REVISIONS
1. 02-03-1957, CHG'D. TOP EL. OF CB-2-3 FROM 250.00 TO 251.67
2. 02-03-1957, CHANGED FROM 6" TO 8" DIA. IN CIVIL DWG.
3. 02-03-1957, MOVED CB-2-3 & DIT. DRAIN WAS W-935H
4. 02-03-1957, CORR. FIELD REQUEST
5. 02-03-1957, CORR. ONLY DRAWS
6. 02-03-1957, ADDED DRAIN FROM COOLING TOWER
7. 02-03-1957, REVISED CB-2-3
8. 02-03-1957, ISSUED FOR CONST. J. H. CLARK
DWG. NO. 22-80-09-508-EP

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DRAINAGE & SEWERAGE
2950 N TO 3550 N
300 W TO 1100 W

EL PASO NATURAL GAS PRODUCTS COMPANY
GALLUP, NEW MEXICO
DRAWING SIZE

APPROVED FOR CONSTRUCTION
SIGNED: [Signature]
DATE: 9-6-57

SCALE: 1"=40'
DATE: 9-6-57
CHECKED BY: [Signature]
DATE: 9-6-57
APPROVED BY: [Signature]
DATE: 9-6-57
JOB ENG'N: [Signature]
DATE: 9-6-57

DET.
CHK.
57

AREA LIMITS N.26+80

EQUIPMENT LIST

- VEGETS
- P-V1 OXYGEN STRIPPER
 - P-V2 UNFINING STRIPPER RECEIVER
 - P-V3 PLATFORMING REACTOR #1
 - P-V4 PLATFORMING REACTOR #2
 - P-V5 PLATFORMING REACTOR #3
 - P-V6 PLATFORMING REACTOR PRODUCTS SEPARATOR
 - P-V7 STABILIZER
 - P-V8 STABILIZER RECEIVER
 - P-V9 CHEMICAL CONDENSATE GAUGING TANK
 - P-V10 UNFINING REACTOR
 - P-V11 UNFINING REACTOR PRODUCTS SEPARATOR
 - P-V12 FLASH DRUM
 - P-V13 UNFINING WATER INJECTION SUCTION TANK
 - P-V14 STARTING AIR RECEIVER (IN COMPRESSOR HOUSE)
 - P-V15 STARTING AIR RECEIVER (IN COMPRESSOR HOUSE)
 - P-V16 COMPRESSOR CODLING WATER MAKE-UP TANK
 - P-V17 PLATFORMING UNIT SURGE DRUM
 - P-V18 FUEL GAS BALANCE DRUM
 - P-V21 STEAM/WATER SEPARATOR
 - P-V22 SLOW DOWN DRUM

- HEATERS
- P-PH1 PLATFORMING CHARGE HEATER
 - P-PH2 UNFINING HEATER
- HEAT EXCHANGERS
- P-E1 UNFINING STRIPPER FEED EXCHANGER
 - P-E2 UNFINING STRIPPER CONDENSER
 - P-E3 PLATFORMING COLD COMBINED FEED EXCH.
 - P-E4 PLATFORMING HOT COMBINED FEED EXCH.
 - P-E5 PLATFORMING REACTOR PRODUCTS CONDENSER
 - P-E6 PLATFORMING REACTOR PRODUCTS COOLER
 - P-E7 STABILIZER FEED EXCHANGER
 - P-E8 STABILIZER REBOILER
 - P-E9 STABILIZER CONDENSER

- P-E11 STABILIZER BOTTOMS FINAL COOLER
- P-E12 UNFINING NAPHTHA FEED EXCH.
- P-E13 UNFINING GAS PREHEATER
- P-E14 UNFINING REACTOR PRODUCTS CONDENSER
- P-E15 UNFINING REACTOR PRODUCTS COOLER
- P-E16 RECYCLE GAS COMPRESSOR JACKET WATER COOLER
- P-E17 RECYCLE GAS COMPRESSOR LUBE OIL COOLER
- P-E24A15 STABILIZER FEED 4 BOTTOMS

COMPRESSORS

- P-CM18 RECYCLE GAS COMPRESSOR

PUMPS

- P-P2 PLATFORMING REACTOR CHARGE PUMP
- P-P1A18 UNFINING STRIPPER REFLUX PUMP
- P-P1A18 UNFINING STRIPPER REBOILER PUMP
- P-P1A15 STABILIZER REFLUX PUMP
- P-P6 CHEMICAL CONDENSATE INJECTION PUMP
- P-P7 UNFINING REACTOR CHARGE PUMP
- P-P8 UNFINING WATER INJECTION PUMP (NOT SHOWN)
- P-P9A STEAM/CONDENSATE PUMP
- P-P9B

MISCELLANEOUS

- P-V1 EXHAUSTER (NOT SHOWN)
- REFERENCE DRAWINGS
- EP-35-101 PLOT PLAN
 - EZ-03-106 SUMP DETAILS
 - AP-04-103 TYPICAL PIPING AT DRAIN SUMP
 - AP-04-103 BILL OF MATERIAL

NOTES

- 1. FUTURE UNFINING EQUIPMENT IS SHOWN
- 2. INVERT ELEVATION FOR ALL "A" DRAIN FUNNELS IN PUMP DRAIN HEADER WILL BE 253'-10"

NO.	DATE	REVISIONS
1	11-1-57	REVISED DRAIN FUNNEL LOC.
2	11-1-57	ADDED DRAIN SUMP P-P9A & DRAIN
3	11-1-57	ADDED DRAIN SUMP P-P9B & DRAIN
4	11-1-57	ADDED DRAIN SUMP P-P9C & DRAIN
5	11-1-57	ADDED DRAIN SUMP P-P9D & DRAIN
6	11-1-57	ADDED DRAIN SUMP P-P9E & DRAIN
7	11-1-57	ADDED DRAIN SUMP P-P9F & DRAIN
8	11-1-57	ADDED DRAIN SUMP P-P9G & DRAIN
9	11-1-57	ADDED DRAIN SUMP P-P9H & DRAIN
10	11-1-57	ADDED DRAIN SUMP P-P9I & DRAIN

APPROVED FOR CONSTRUCTION

SIGNED: [Signature] DATE: 11-1-57

FOR CRUDE UNIT UNDERGROUND PIPING SEE DWG. EC-05-165

UNFINING-PLATFORMING UNIT CONTROL HOUSE

SOUTHWESTERN ENGINEERING COMPANY
600 SOUTH PAVES, LOS ANGELES, CALIF.

UNFINING-PLATFORMING UNIT
UNDERGROUND PIPING PLAN

EL PASO NATURAL GAS PRODUCTS COMPANY
REFINERY

SCALE: 1" = 10'-0"

DATE: 11-1-57

REVISIONS: 10

EP-09-102

Replace 5 ea
90° elbow
and piping

Replace 3
4" 90° elbow
PIPEWAY N.23+75

Replace
sewer
lid

Replace 3, 90°
elbow's

Replace 2 ea 4" 90° elbow

Replace 90° elbow

APPROVED FOR CONSTRUCTION

SIGNED: [Signature] DATE: 11-1-57

UNFINING-PLATFORMING UNIT CONTROL HOUSE

SOUTHWESTERN ENGINEERING COMPANY
600 SOUTH PAVES, LOS ANGELES, CALIF.

UNFINING-PLATFORMING UNIT
UNDERGROUND PIPING PLAN

EL PASO NATURAL GAS PRODUCTS COMPANY
REFINERY

SCALE: 1" = 10'-0"

DATE: 11-1-57

REVISIONS: 10

EP-09-102

**GAS CONCENTRATION UNIT
UNDERGROUND PIPING PLAN**

UNDERGROUND PROCESS AND WASTEWATER LINES

Gas Concentration Unit Underground Piping Plan

<u>ID Number</u> <u>(Sewer Box or</u> <u>Catch Basin</u>	<u>Lateral Drains and/or</u> <u>Headers</u>	<u>Date</u> <u>Installed</u>	<u>Drawing</u> <u>Reference</u>	<u>Test</u> <u>Date</u>	<u>Pass/Fail/</u> <u>Repair</u> <u>Information</u>	<u>Test</u> <u>Water</u> <u>Column</u> <u>(Feet)</u>	<u>Test</u> <u>Duration</u> <u>(Minutes)</u>	<u>Signature</u>	<u>Investigation</u> <u>Results</u>
G-1	G-P4A To G-P4B To G-1	1957	EG-09-102-EP	01/09/02	Pass	4	70	B.Loos	
	G-V5 To G-1	1957	EG-09-102-EP	01/09/02	Pass	4	70	B.Loos	
	G-V4 To G-1	1957	EG-09-102-EP	01/09/02	Pass	4	70	B.Loos	
	G-P3 To G-1	1957	EG-09-102-EP	01/09/02	Pass	4	70	B.Loos	
G-1 Flows W. To G-2		1957	EG-09-102-EP	01/09/02	Pass	4	70	B.Loos	
G-2	G-V3 To G-2	1957	EG-09-102-EP	01/09/02	Pass	4	70	B.Loos	
	G-E6 To G-2	1957	EG-09-102-EP	01/09/02	Pass	4	70	B.Loos	
G-2 Flows W. To G-3		1957	EG-09-102-EP	01/09/02	Pass	4	70	B.Loos	
G-3	G-V2 To G-3	1957	EG-09-102-EP	01/10/02	Pass	7	45	B.Loos	
	G-V8B To G-V8A To G-3	1957	EG-09-102-EP	01/10/02	Pass	7	45	B.Loos	
G-3 Flows W. To G-4	G-P2B to G-P2A To G-3		EG-09-102-EP	01/10/02	Pass	7	45	B.Loos	
			EG-09-102-EP	01/10/02	Pass	7	45	B.Loos	
G-4	G-C1A To G-4	1957	EG-09-102-EP	01/11/02	Pass	7	25	B.Loos	
	G-V1 To G-4	1957	EG-09-102-EP	01/11/02	Pass	7	25	B.Loos	
G-4 Flows W. To F-4		1957	EG-09-102-EP & EF-09-102 SH.1	01/11/02	Pass	7	25	B.Loos	

AREA LIMITS N 26+80.0

NEUTRALIZING PIT

AREA LIMITS W 6+00

W 3+30

AREA LIMITS W 3+30

PIPEWAY & N 25+75

MATCH LINE 2479-0

REFERENCE DWGS

THE BRIM AT WILSON CORRAL, PENNELS, AZ 05-103
UNDERGROUND PIPING PLAN, EC 09-101
PORTLAND, OREGON, PIPING PLAN, EC 09-101
AREA LOCATION PLAN, EC 09-101
PIPELINE LOCATION PLAN, EC 09-101
PIPELINE LOCATION PLAN, EC 09-101

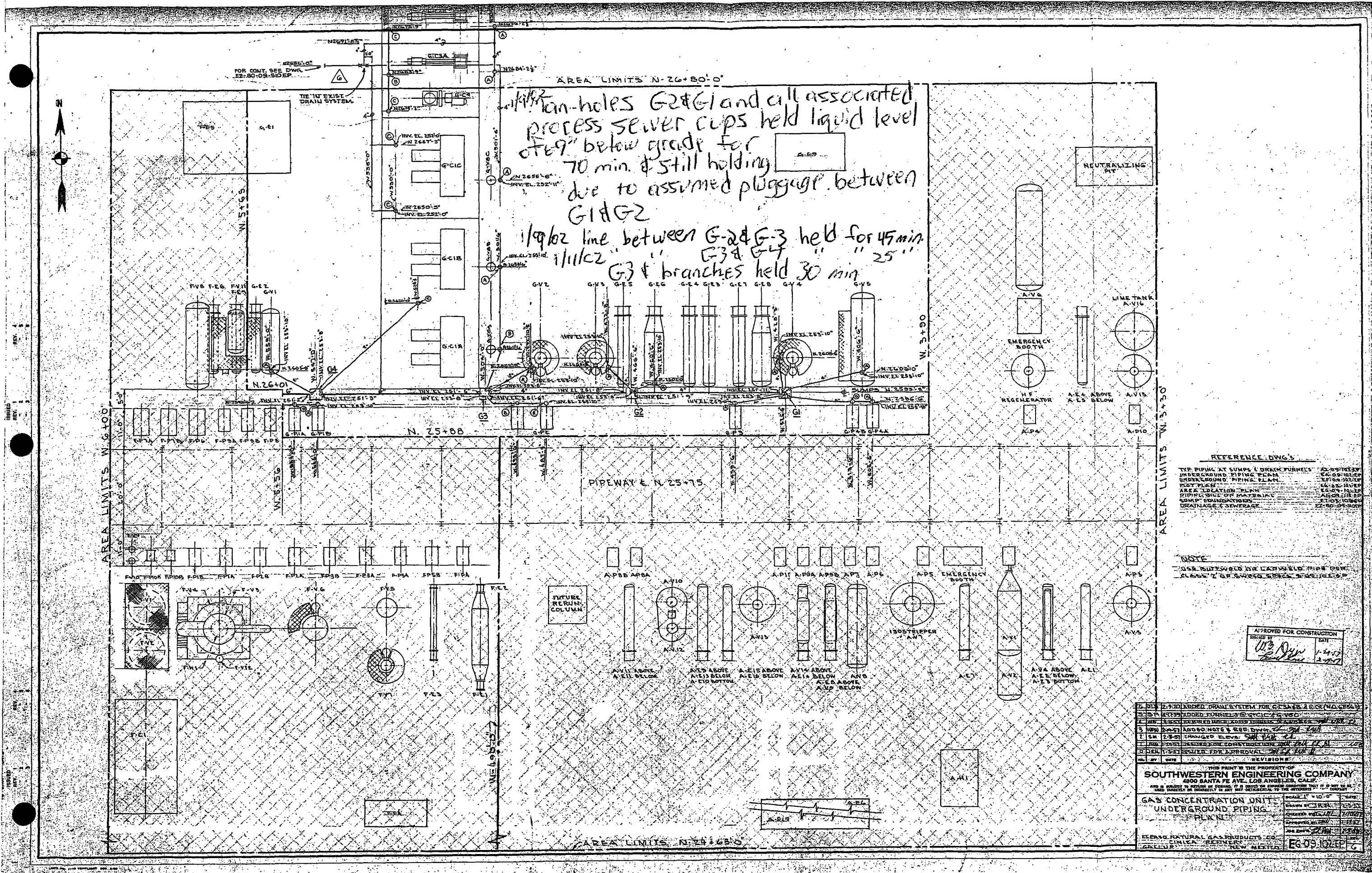
NOTE
LIVE BUT WELD OR LAY WELD PIPE
PER CLASS OF SWEET'S SPEC. 4000

APPROVED FOR CONSTRUCTION
SIGNED BY: [Signature]
DATE: 1-24-77

1. SEE P-101-1000 - MAIN LINE FLOW FOR CO. BALANCE SHEET	2. SEE P-101-1000 - MAIN LINE FLOW FOR CO. BALANCE SHEET
3. SEE P-101-1000 - MAIN LINE FLOW FOR CO. BALANCE SHEET	4. SEE P-101-1000 - MAIN LINE FLOW FOR CO. BALANCE SHEET
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99. SEE P-101-1000 - MAIN LINE FLOW FOR CO. BALANCE SHEET	100. SEE P-101-1000 - MAIN LINE FLOW FOR CO. BALANCE SHEET

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ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING,
OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT
THE WRITTEN PERMISSION OF THE COMPANY.

FLUID CATALYTIC CRACKING UNIT
UNDERGROUND PIPING
PLAN
SCALE: 1" = 10'-0"
DATE: 1-24-77
DRAWN BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]
PROJECT NO.: 2479-0
SHEET NO.: 1 OF 1



man-holes G-2 & G-1 and all associated process sewer cups held liquid level of 6'9" below grade for 70 min. & still holding due to assumed plugging between G-1 & G-2

1/9/02 line between G-2 & G-3 held for 45 min. 1/11/02 G-3 & G-4 G-3 & branches held 30 min. 25"

REFERENCE DWG'S

TYP. PIPING AT SUMPS & DRAIN FURNEL'S	EA-05-10123
UNDERGROUND PIPING PLAN	EA-05-10124
UNDERGROUND PIPING PLAN	EA-05-10125
POT PILES	EA-05-10126
AREA LOCATION PLAN	EA-05-10127
PIPING SCHEDULE	EA-05-10128
ADJUST. ELEVATIONS	EA-05-10129
DRAINAGE & SEWERAGE	EA-05-10130

NOTE

USE BUTTSWELD OR CARBON PIPE PER CLASS 2 OF ASME B31.3

APPROVED FOR CONSTRUCTION

DATE 1-24-02

BY [Signature]

REVISIONS

NO.	DATE	DESCRIPTION
1	1-24-02	2-3-10 ADDED DRAIN SYSTEM FOR G-2 & G-3 & G-4 (NO. 05-10123)
2	1-24-02	2-3-10 ADDED FURNEL'S @ G-2 & G-3 & G-4
3	1-24-02	2-3-10 ADDED FURNEL'S @ G-2 & G-3 & G-4
4	1-24-02	2-3-10 ADDED FURNEL'S @ G-2 & G-3 & G-4
5	1-24-02	2-3-10 ADDED FURNEL'S @ G-2 & G-3 & G-4
6	1-24-02	2-3-10 ADDED FURNEL'S @ G-2 & G-3 & G-4
7	1-24-02	2-3-10 ADDED FURNEL'S @ G-2 & G-3 & G-4
8	1-24-02	2-3-10 ADDED FURNEL'S @ G-2 & G-3 & G-4
9	1-24-02	2-3-10 ADDED FURNEL'S @ G-2 & G-3 & G-4
10	1-24-02	2-3-10 ADDED FURNEL'S @ G-2 & G-3 & G-4

THIS PRINT IS THE PROPERTY OF SOUTHWESTERN ENGINEERING COMPANY 4800 SANTA FE AVE. LOS ANGELES, CALIF. 90010

GAS CONCENTRATION UNIT UNDERGROUND PIPING PLAN

SCALE: 1" = 10'-0"

DATE: 1-24-02

BY: [Signature]

FOR: [Signature]

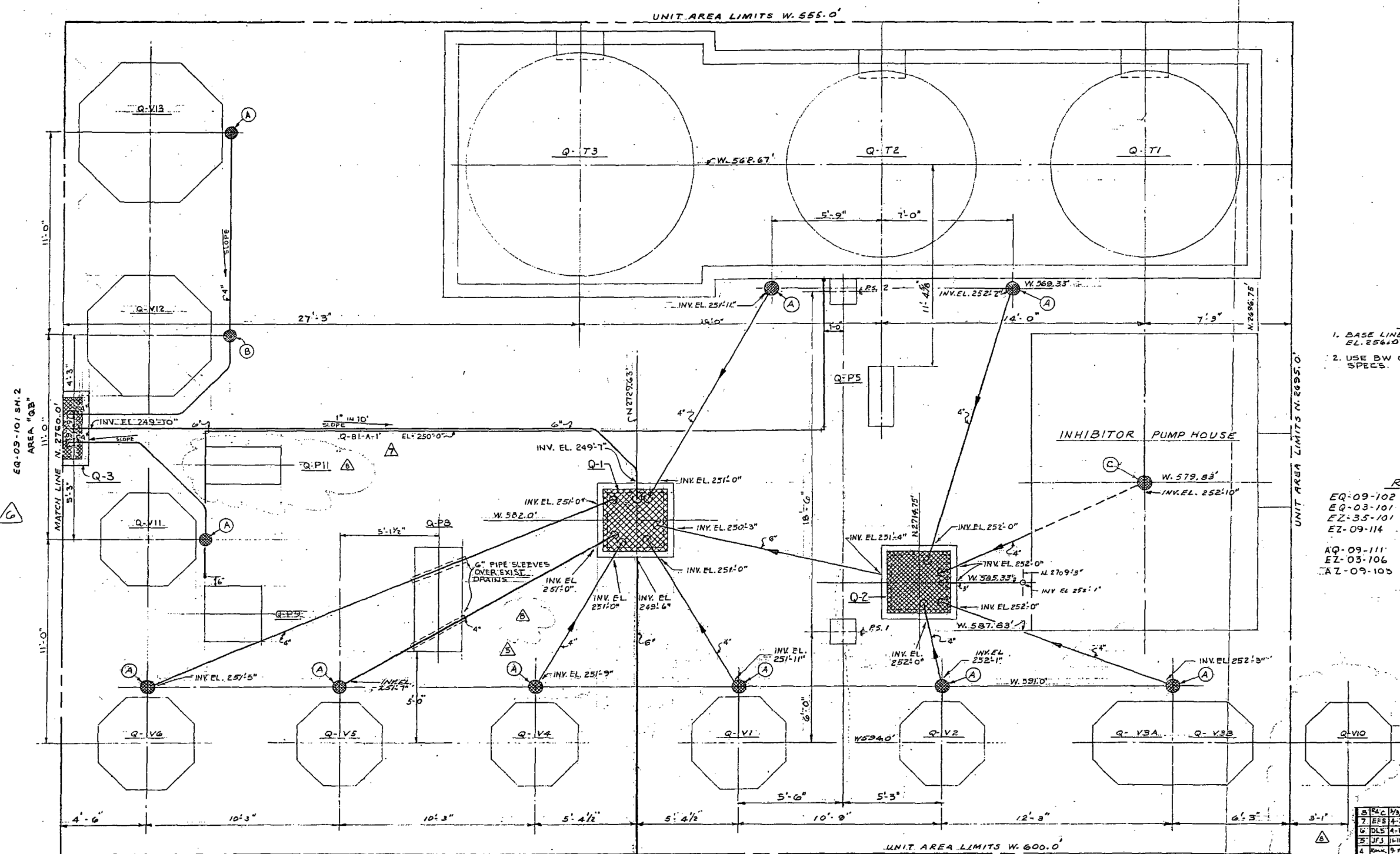
EG-09-10123

TREATERS

UNDERGROUND PROCESS AND WASTEWATER LINES

Treaters

<u>ID Number</u> <u>(Sewer Box or</u> <u>Catch Basin</u>	<u>Lateral Drains and/or</u> <u>Headers</u>	<u>Date</u> <u>Installed</u>	<u>Drawing</u> <u>Reference</u>	<u>Test Date</u>	<u>Pass/Fail/</u> <u>Repair</u> <u>Information</u>	<u>Test</u> <u>Water</u> <u>Column</u> <u>(Feet)</u>	<u>Test</u> <u>Duration</u> <u>(Minutes)</u>	<u>Signature</u>	<u>Investigation</u> <u>Results</u>
Q-1 N2729.63' W582.0'	Q-3 to Q-1	1957	EQ-09-101 SH.1	04/02/03	Pass	2.33+	30	B Loos	
	Q-T2 to Q-1	1957	EQ-09-101 SH.1	04/02/03	Pass	2.33+	30	B Loos	
	Q-V6 to Q-1	1957	EQ-09-101 SH.1	04/02/03	Pass	2.33+	30	B Loos	
	Q-V5 to Q-1	1957	EQ-09-101 SH.1	04/02/03	Pass	2.33+	30	B Loos	
	Q-V4 to Q-1	1957	EQ-09-101 SH.1	04/02/03	Pass	2.33+	30	B Loos	
	Q-V1 to Q-1	1957	EQ-09-101 SH.1	04/02/03	Pass	2.33+	30	B Loos	
	Q-2 to Q-1	1957	EQ-09-101 SH.1	04/02/03	Pass	2.33+	30	B Loos	
Q-1 West to CBZ-23			EZ-80-09-510EP						Continue DHT
Q-2 N2714.75' W585.33'	Q-T1 to Q-2	1957	EQ-09-101 SH.1	04/02/03	Pass	1+	30	Philbert Brown	
	Inhibitor Pump House to Q-2	1957	EQ-09-101 SH.1	04/02/03	Pass	1+	30	Philbert Brown	
	N2709'-3" W585.33' to Q-2	1957	EQ-09-101 SH.1	04/02/03	Pass	1+	30	Philbert Brown	
	Q-V3A/Q-V3B to Q-2	1957	EQ-09-101 SH.1	04/02/03	Pass	1+	30	Philbert Brown	
	Q-V2 to Q-2	1957	EQ-09-101 SH.1	04/02/03	Pass	1+	30	Philbert Brown	
Q-3 N2760.67' W576.00'	Q-V13 to Q-V12 to Q-3	1957	EQ-09-101 SH.1	04/03/03	Pass	2.5+	30	Philbert Brown	
	Q-V11 to Q-3	1957	EQ-09-101 SH.1	04/03/03	Pass	2.5+	30	Philbert Brown	
	Q-V17 to Q-V16 to Q-V9 to Q-V7 to Q-V14 to Q-3	1957	EQ-09-101 SH.2	04/03/03	Pass	2.5+	30	Philbert Brown	
	Q-T6/Q-P10 to Q-3	1957	EQ-09-101 SH.2	04/03/03	Pass	2.5+	30	Philbert Brown	
	Q-V15 to Q-3	1957	EQ-09-101 SH.2	04/03/03	Pass	2.5+	30	Philbert Brown	



- GENERAL NOTES**
1. BASE LINE EL. 0'-0" IS EQUIVALENT TO DATUM EL. 256'-0"
 2. USE BW OR LW PIPE PER CLASS "Z" OF SWECO SPECS. 509-102.

- REFERENCE DRAWINGS**
- EQ-09-102 PIPING PLAN BELOW EL. 11'-0"
 - EQ-03-101 FOUNDATION LOCATION PLAN
 - EZ-35-101 PLOT PLAN
 - EZ-09-114 PIPING FIRE PROTECTION AREA "J"
 - AQ-09-111 UNDERGROUND PIPING
 - EZ-03-106 BILL OF MATERIAL LIST (UNDERGROUND PIPING)
 - AZ-09-103 SUMP STRUCTURAL DETAILS
 - TYPICAL PIPING AT DRAIN SUMPS & FUNNELS

NO.	BY	DATE	REVISIONS
1	WJL	11-10-51	DELETED Q-11 & Q-12 TO Q-13
2	EFS	4-7-51	ADDED Q-BI-A-1 (NO. 65544748540)
3	DLS	4-1-51	ADDED Q-P7, Q-19, Q-VII, Q-13 (NO. 65544748540)
4	JFJ	11-10-51	RELOCATED Q-P6 (NO. 65544748540)
5	WJL	5-1-51	ADDED DRAIN FOR INHIBITOR BLDG SINK
6	WJL	4-3-51	NORTH COORDINATION SUMP Q-12 CHG TO Q-13
7	WJL	2-18-51	ISSUED FOR CONSTRUCTION
8	WJL	12-22-51	REVISED PER U.O.R. COMMENTS - ISSUED FOR APPROVAL
9	WJL	11-23-51	ISSUED FOR APPROVAL

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USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTERESTS OF THIS COMPANY.

TREATING UNIT
PLAN
UNDERGROUND PIPING
AREA "QA"

EL PASO NATURAL GAS PRODUCTS CO.
CINIZA REFINERY
GALLUP, NEW MEXICO

APPROVED FOR CONSTRUCTION
SIGNED BY *[Signature]* DATE 11/23/51
J. L. [Signature] 11/23/51

SCALE 3/8" = 1'-0"
DRAWN BY PATRICK 11-23-51
CHECKED BY WELLS 11-23-51
APPROVED BY [Signature] 11-23-51
JOB SHEET 11-23-51 11-23-51

EQ-09-101 SH. 1

TANK FARM

UNDERGROUND PROCESS AND WASTEWATER LINES

TANK FARM

ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results
CBZ-20 3073N 632W	CBZ-21 flows N under road to start of tank farm to CBZ-20	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100						
CBZ-19 3073N 935W	CBZ-20 flows W to CBZ-19	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100						
	Tk 453 drain flows S connects to Y from Tk 452 continues to Y from Tk 451 to CBZ-19	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100						
CBZ-18 3073N 1118W	CBZ-19 flows W to CBZ-18 (See EZ-80-09-514EP)	1957	EZ-80-509-EP, EZ-80-09-514EP, 95103-CC-104, & Z-01-100						
	Tk 227 drain flows S to join Tk 228 drain SW to CBZ-18	1957	EZ-80-509-EP, EZ-80-09-514EP, & Z-01-100						
	Tk 342 flows S to join Tk 343 drain S to CBZ-18	1957	EZ-80-509-EP, & Z-01-100						
CBZ-17 3073N 1260W	Tk 107 flows S to join Tk 108 drain onto S to CBZ-17	1957	EZ-80-09-514EP, & Z-01-100						
CBZ-28 2993.5N 1182.5W	CBZ-28 flows NW to CBZ-17 Sump B-6 (Biolerhouse) flows N to CBZ-28	1957	EZ-80-09-514EP EZ-80-09-513EP, EZ-80-09-514EP & EZ-81-09-102EP						
CBZ-16 3073N 1350W	CBZ-17 flows W to CBZ-16 Tk 321 drain flows S to join Tk 232 drain onto CBZ-16	1957	EZ-80-09-514EP, & Z-01-100						
CBZ-15 3073N 1440W	CBZ-16 flows W to CBZ-15 Tk 235 drain flows S to join Tk 106 onto CBZ-15	1957	EZ-80-09-514EP, & Z-01-100						
CBZ-14 3073N 1493W	CBZ-15 flows W to CBZ-14 CBZ-30 flows N to CBZ-14	1957	EZ-80-09-514EP, & Z-01-100						
		1957	EZ-80-09-513EP & EZ-80-09-514EP						

UNDERGROUND PROCESS AND WASTEWATER LINES

TANK FARM

ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results
CBZ-1 3480N 380W	Start Tk 568 drain flows N and W to CBZ-1	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100						
	Tk 570 drain flows N to Y from Tk 569 & onto CBZ-1	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100						
CBZ-2 3480N 782W	CBZ-1 flows W to CBZ-2	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100						
	Tk 572 drain flows N to join Y from Tk 571 drain to CBZ-2	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100						
CBZ-3 3480N 931.5W	Tk 112 drain flows N to join Y from Tk 111 to CBZ-3	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100						
	Tk 226 drain flows S to CBZ-3	1957	EZ-80-508EP, EZ-80-509-EP, 95103-CC-104, & Z-01-100						
Underground? "T" 3480N 1026W	CBZ-3 flows W to "T"	1957	EZ-80-09-509EP & Z-01-100						
	Tk 116 drain flows N to join Y from Tk 115 drain to "T"	1957	EZ-80-09-509EP & Z-01-100						
CBZ-4 3480N 1233W	CBZ-3 through "T" to CBZ-4	1957	EZ-80-09-509EP, EZ-80-09-514EP, & Z-01-100						
	Tk 567 drain flows N to CBZ-4	???	EZ-80-09-514EP, & Z-01-100						
	Tk 225 drain flows S to CBZ-4	1957	EZ-80-09-514EP, EZ-80-09-515EP, & Z-01-100						
CBZ-5 3480N 1325W	CBZ-4 flows W to CBZ-5	1957	EZ-80-09-514EP, & Z-01-100						
	Tk 338 flows N to CBZ-5	1957	EZ-80-09-514EP, & Z-01-100						
	Tk 339 flows S to CBZ-5	1957	EZ-80-09-514EP, EZ-80-09-515EP, & Z-01-100						
CBZ-6 3480N 1493W	CBZ-5 flows W to CBZ-6	1957	EZ-80-09-514EP, & Z-01-100						
	Drain fr conc floor for booster & charge pumps flows S to CBZ-6	1957	EZ-80-09-514EP, & Z-01-100						
	CBZ-14 flows N to CBZ-6	1957	EZ-80-09-514EP, & Z-01-100						

UNDERGROUND PROCESS AND WASTEWATER LINES

TANK FARM

ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results
CBZ-26 3480N 1750W	CBZ-6 flows W to CBZ-26 Tk 101 drain flows N to CBZ-26	1957	EZ-80-09-514EP, & Z-01-100						
	Tk 102 drain flows N to join Tk 101 drain onto CBZ-26	Prior 1995	EZ-80-514EP, 95103-CC-104, & Z-01-100						
	CBZ-13 flows S to CBZ-26	1957	EZ-80-09-514EP, EZ-80-09-515EP, & Z-01-100						
CBZ-27 3480N 1850W	CBZ-26 flows W to CBZ-27	1957	EZ-80-09-514EP, & Z-01-100						
API Separator	CBZ-27 flows N NW to API Separator	1957	EZ-80-09-514EP & EZ-80-08-515EP						Now flows to New API Pit (2004)
CBZ-7 3745N 370W	Catch Basin at RRR pumped up to CBZ-7 Tk 582 drain flows N to CBZ-7		95103-CC-104						
	CBZ-7 flows W to CBZ-8	1957	EZ-80-09-508EP & Z-01-100						
CBZ-8 3745N 675W	Tk 581 drain flows NW to CBZ-8	1957	EZ-80-09-508EP & Z-01-100						
	Tk 575 drain flows N to join Tk 577 drain to NE to CBZ-8	1957	EZ-80-09-508EP & Z-01-100						
CBZ-9 3985N 675W	CBZ-31 uses pump to pump to CBZ-9	1957	EZ-80-09-508EP & Z-01-100						
CBZ-31 3939N 460W	Drain N3850 W460 flow N to join "Y" from Tk 574 drain to CBZ-31	1957	EZ-80-09-508EP & Z-01-100						
	CBZ-32 flows W to CBZ-31	1957	EZ-80-09-508EP & Z-01-100						
CBZ-32 3939N 425W	Tk 576 drain flows NW to CBZ-32	1957	EZ-80-09-508EP & Z-01-100						
CBZ-10 3985N 780W	CBZ-9 flows W to CBZ-10	1957	EZ-80-09-508EP & Z-01-100						
	Tk 579 drain flows W to CBZ-10	1957	EZ-80-09-508EP & Z-01-100						

UNDERGROUND PROCESS AND WASTEWATER LINES

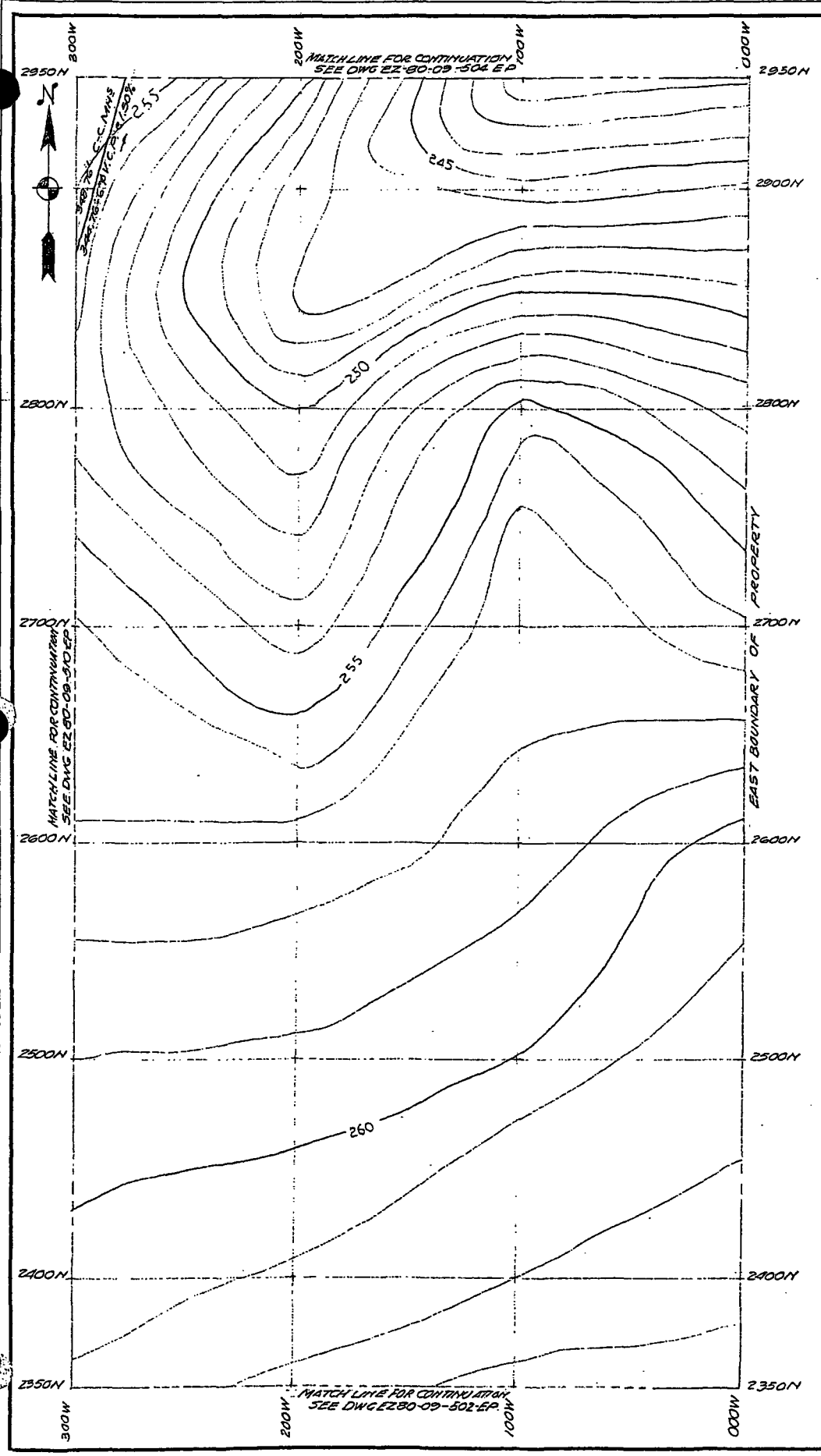
TANK FARM

ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results
CBZ-11 3985N 1136W	CBZ-10 flows W to CBZ-11	1957	EZ-80-09-508EP, EZ-80-09-515EP & Z-01-100						
CBZ-12 3985N 1492W	CBZ-11 flows W to CBZ-12	1957	EZ-80-09-515EP & Z-01-100						
	Tk 345, Tk 344 & Tk 337 drains to CBZ-12???	AFTER 1957	NO Drawing						
CBZ-13 3985N 1750W	CBZ-12 flows W to CBZ-13	1957	EZ-80-09-515EP & Z-01-100						
CBZ-30 2931.17N 1485.50W	Mkt 4 drain N to Mkt 1 drain to Mkt 2 drain to Mkt 3 drain E & NE to CBZ-30	1957	EZ-80-09-513EP						
CBZ-29 2737.82N 1485.50W	CBZ-29 N to CBZ-30 Drains fr old Fuel Oil Loading N2618.82 W1619.75 & N2649.94 W1595.0 flow NW to CBZ-29	1957	EZ-80-09-513EP EZ-80-09-513EP						
	2781.17N drain pipe to CBZ-29	1957	EZ-80-09-513EP						I & E Shop now
	2756.17N drain pipe to CBZ-29	1957	EZ-80-09-513EP						I & E Shop now
	2731.17N drain pipe to CBZ-29	1957	EZ-80-09-513EP						I & E Shop now
	Truck Loading, 3 Area Drains flow to sump, then sump flows to CBZ-29	1957	EZ-80-09-513EP & EZ-09-250EP						
	4" Oily & Acid Drain from Lab Sinks & Floor to tie in between Truck Loading Sump and CBZ-29	1957	EZ-80-09-513EP, EZ-09-250EP & EZ-09-174						

UNDERGROUND PROCESS AND WASTEWATER LINES

TANK FARM

ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results
C.B. No. 5 ~3590N 112.35W	RRR Drains L S (Loading Spot) #13 to LS #12 to LS #11 to LS #10 to CB #5	1957	EZ-80-09-504EP EZ-80-09-505EP						RRR
C.B. No. 4	LS #9, LS #8, LS #7, & LS #6 "T" into C.B. No.5 to C.B. No.4	1957	EZ-80-09-505EP						RRR
C.B. No. 3	C.B. No.4 to C.B. No. 3	1957	EZ-80-09-505EP						RRR
C.B. No. 2	LS#5, LS#4, & LS#3 "T" in C.B. No.3 to C.B. No.2	1957	EZ-80-09-505EP						RRR
3870N 112.35W	LS #2 & LS #1 "T" to C.B. No.2 to C.B. No. 1	1957	EZ-80-09-505EP						RRR
C.B. No.1 to Sewerage Basin		1957	EZ-80-09-506EP	Made area where MH No. 8 was to a large concrete containment, sewage basin taken out of service					
MH No.7 3739.58N 137.00W	MH No.6 to MH No. 7	1957	EZ-80-09-505EP						RRR
MH No.8 4089.58N 137.00W	MH No.7 N to MH No.8	1957	EZ-80-09-505EP	Made area where MH No. 8 was to a large concrete containment, sewage basin taken out of service					
MH No.8 to Sewerage Basin		1957	EZ-80-09-505EP EZ-80-09-506EP	Made area where MH No. 8 was to a large concrete containment, sewage basin taken out of service					



REV. 4

ISSUED REV. 1

REV. 1

ISSUED REV. 1

APPROVED FOR CONSTRUCTION
 DESIGNED BY *E. Lane*
 DRAWN BY *W. J. O'Connell*
 DATE 4-4-57

EZ-80-09-504	CATCH BASIN & MANHOLE DETAILS
EZ-80-09-503	SITE GRADING PLAN
EZ-80-09-502	KEY MAP - SEWERAGE & DRAINAGE
DWG NO.	REFERENCE DRAWINGS

NO.	BY	DATE	REVISIONS

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SEWERAGE & DRAINAGE PLAN
 2350N TO 2950N
 000W TO 300W

EL PASO NATURAL GAS PRODUCTS COMPANY
 CALLUP CINEBA REFINERY NEW MEXICO.

EZ80-09-503 EP

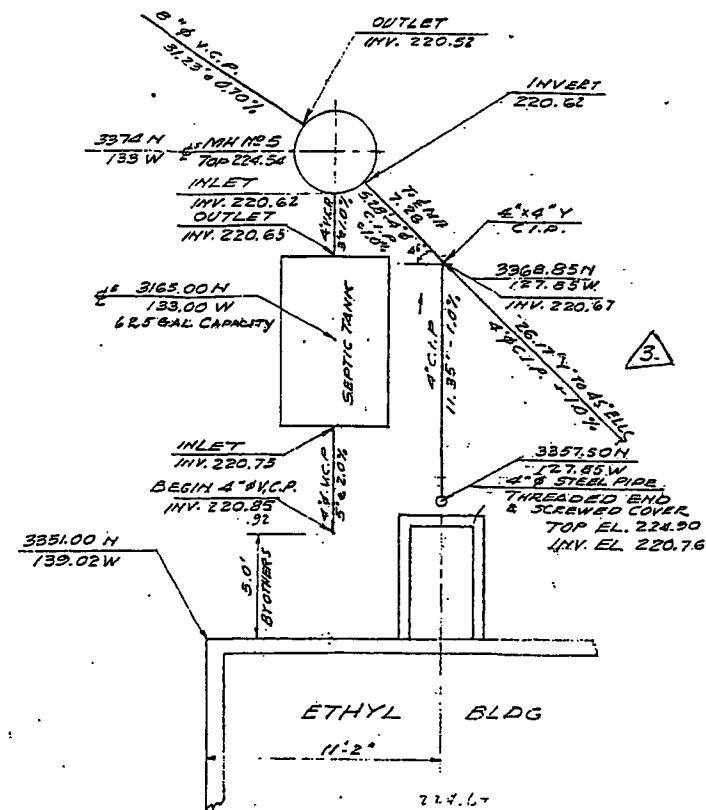
SCALE 1"=50' DATE 4-4-57
 DRAWN BY FRED W. 4-4-57
 CHECKED BY *W. J. O'Connell* 4-4-57
 APPROVED BY *E. Lane* 4-4-57
 JOB ENGINEER *E. Lane* 4-4-57

A-7026

DET.

CHK.

M.F. 57



INSERT
Scale: $\frac{1}{4}'' = 1.0$

EC-80-05-123	CATCH BASINS FOR TANK CAR DRAINAGE
EC-80-05-124	TYP. SECT. OF DRAIN FROM R.R. TRACER TO SEWER MAIN
EC-80-05-125	CATCH BASIN - MANHOLE DETAILS
EC-80-05-126	KEY PLAN
EC-83-135P	DETAILS, S&P DETAIL D. TANK SHELL ASSEMBLY
EC-80-05-127	SITE GRADING PLAN
DWG NO.	REFERENCE DRAWINGS

3	UJF	144400ZJAN, C.B. #1706	
4	UJF	7:55 AM ADDED C.B. #1706 TO R.R. TRACK DRAINAGE (CS0000)	12/24/74
5	UJF	8:15 AM ADDED NOTE: REVISID JETTY TANKS FOR 14	12/24/74
6	UJF	8:45 AM ADDED JOURNALING FROM NECHANCE FOR 14	12/24/74
7	UJF	2:25 PM ISSUED FOR COMET	12/24/74
8	UJF	3:15 PM ISSUED FOR APPROVAL	12/24/74

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29.50N TO 35.50N
000W TO 300W

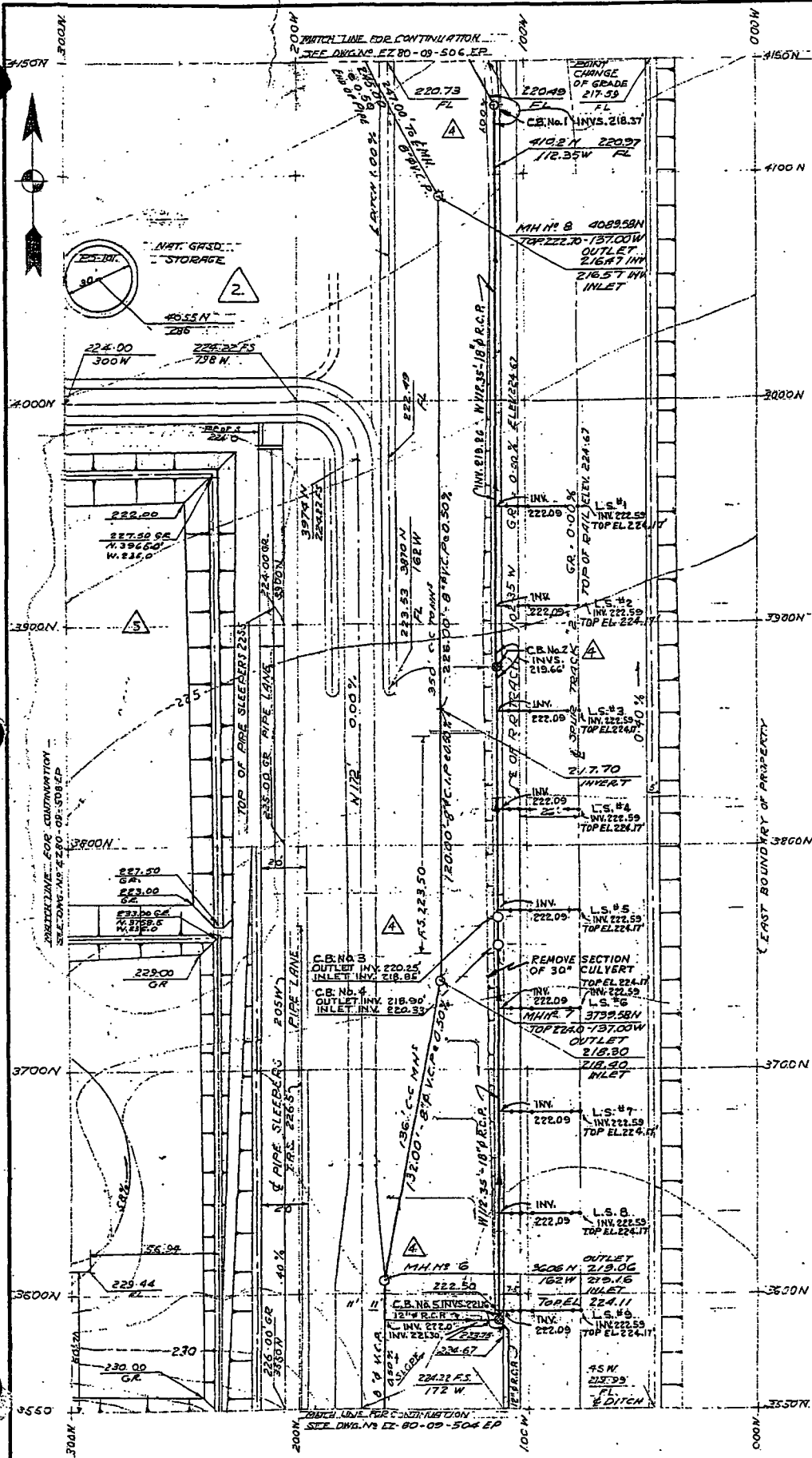
DRAWING SIZE

SCALE 1/30" = 1'-0"	DATE
DRAWN BY FRED W.	3-15-54
CHECKED BY JH	3-18-54
APPROVED BY JH	3-19-54
JOB NO. 84	3-22-54

EX-80-02-504EP

DRAWING SIZE

A-7026



DO NOT SCALE - FOLLOW DIMENSIONS

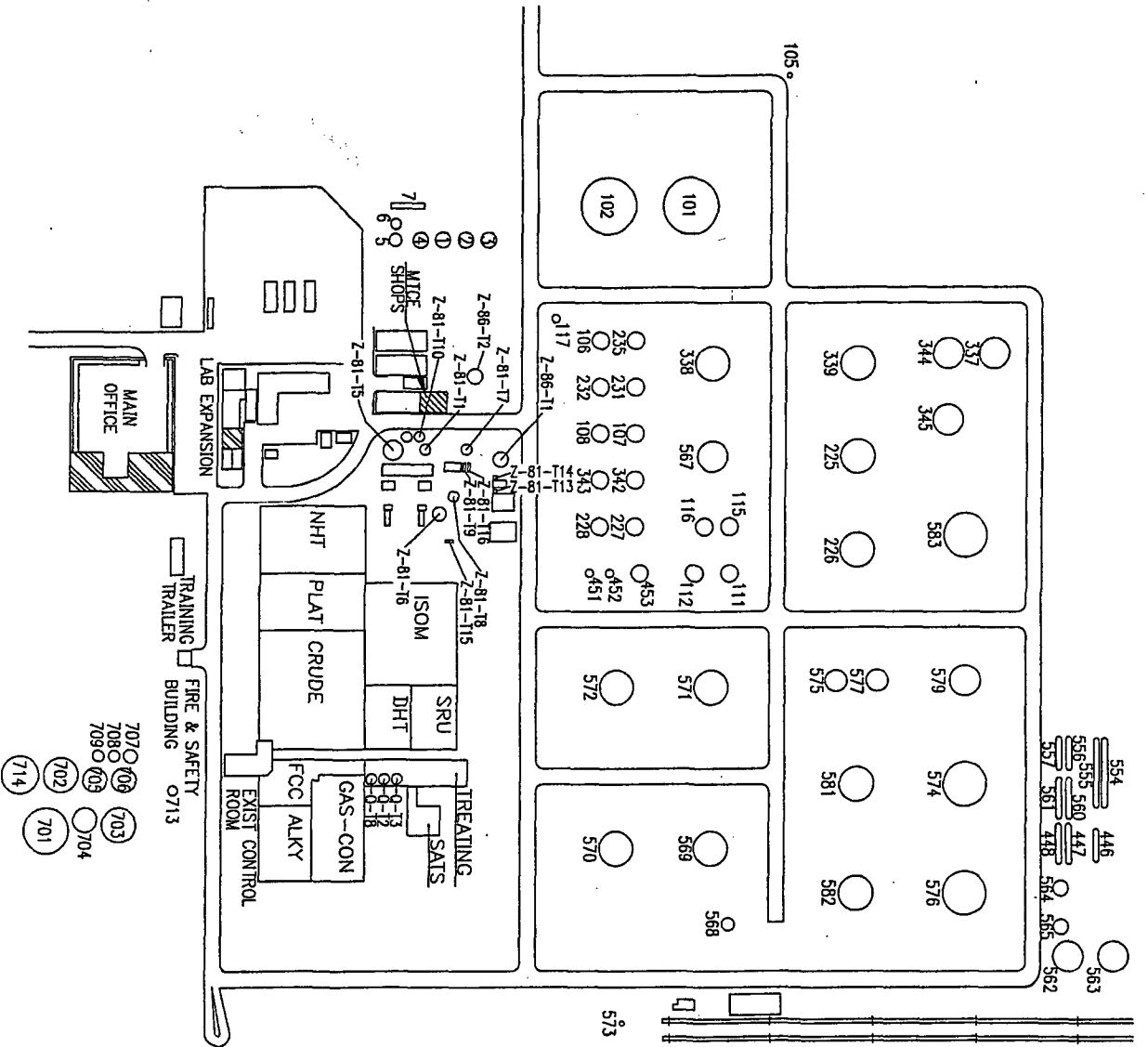
APPROVED FOR CONSTRUCTION
 SIGNED: [Signature]
 DATE: 7-21-57
 E. L. [Signature]

EF-80-09-553	CATCH BASIN FOR TANK C&R DRAINAGE
EF-80-09-552	TYR SECT. OF DRAIN FROM R.R. TRACKS TO SEWER MAIN
EF-80-09-551	CATCH BASIN & MAN HOLE DETAILS
EF-80-09-550	KEY PLAN
EF-80-09-549	SITE GRADING PLAN
EF-80-09-548	REFERENCE DRAWING

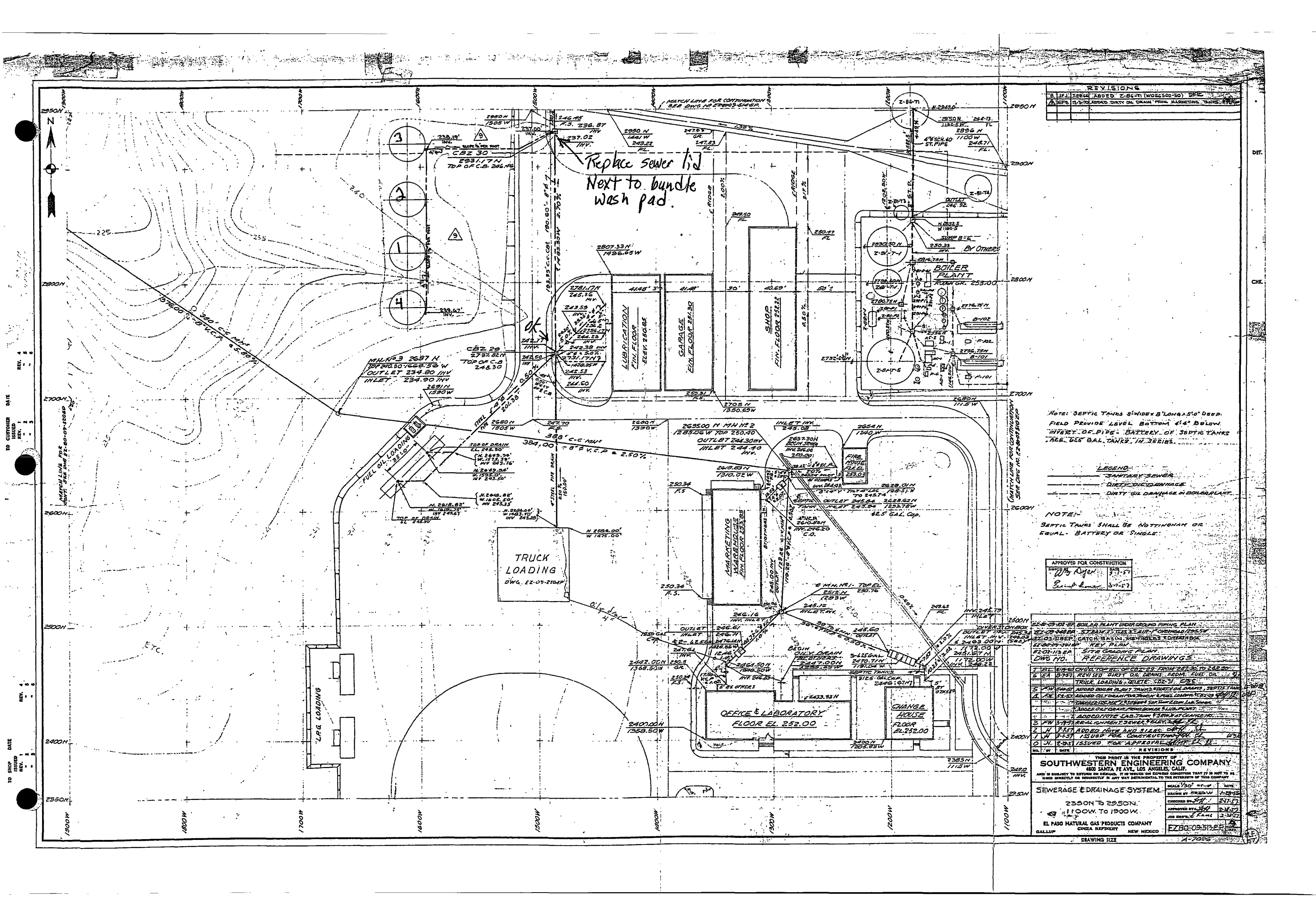
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NO.	BY	DATE	REVISIONS
1	J. E. [Signature]	7-21-57	ADDED C&R # 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

SEWERAGE & DRAINAGE PLAN
 SCALE: 1" = 40' - 0"
 DRAWN BY: FRED W. [Signature]
 CHECKED BY: [Signature]
 APPROVED BY: [Signature]
 JOB NO.: 80-09-553
 EL PASO NATURAL GAS PRODUCTS COMPANY
 GALLUP, NEW MEXICO
 DRAWING SIZE: A-1026



CONTRACTOR:	
Giant Refining Co.	
GALLUP, NEW MEXICO	
Giant Refinery	
TANK FARM PLAN	
DRG. BY: C.M.	DATE: 10/02/02
CHKD. BY: -	DATE: -
APPR. BY: -	DATE: -
WELD SPEC: -	DATE: -
DRAWING NO. Z-01-100	REV 0



REVISIONS		
1	ADD	2-BG-TI (WORKSHEET) DFL
2	ADD	12-3-70 ADDS DIRTY OIL DRAIN FROM MARKETING BLDG. TO

NOTE: SEPTIC TANKS 8' WIDE X 8' LONG X 5' 0" DEEP. FIELD PROVIDE LEVEL BOTTOM 4' 4" BELOW INVERT OF PIPE. BATTERY OF SEPTIC TANKS ARE 65' GAL. TANKS IN SERIES.

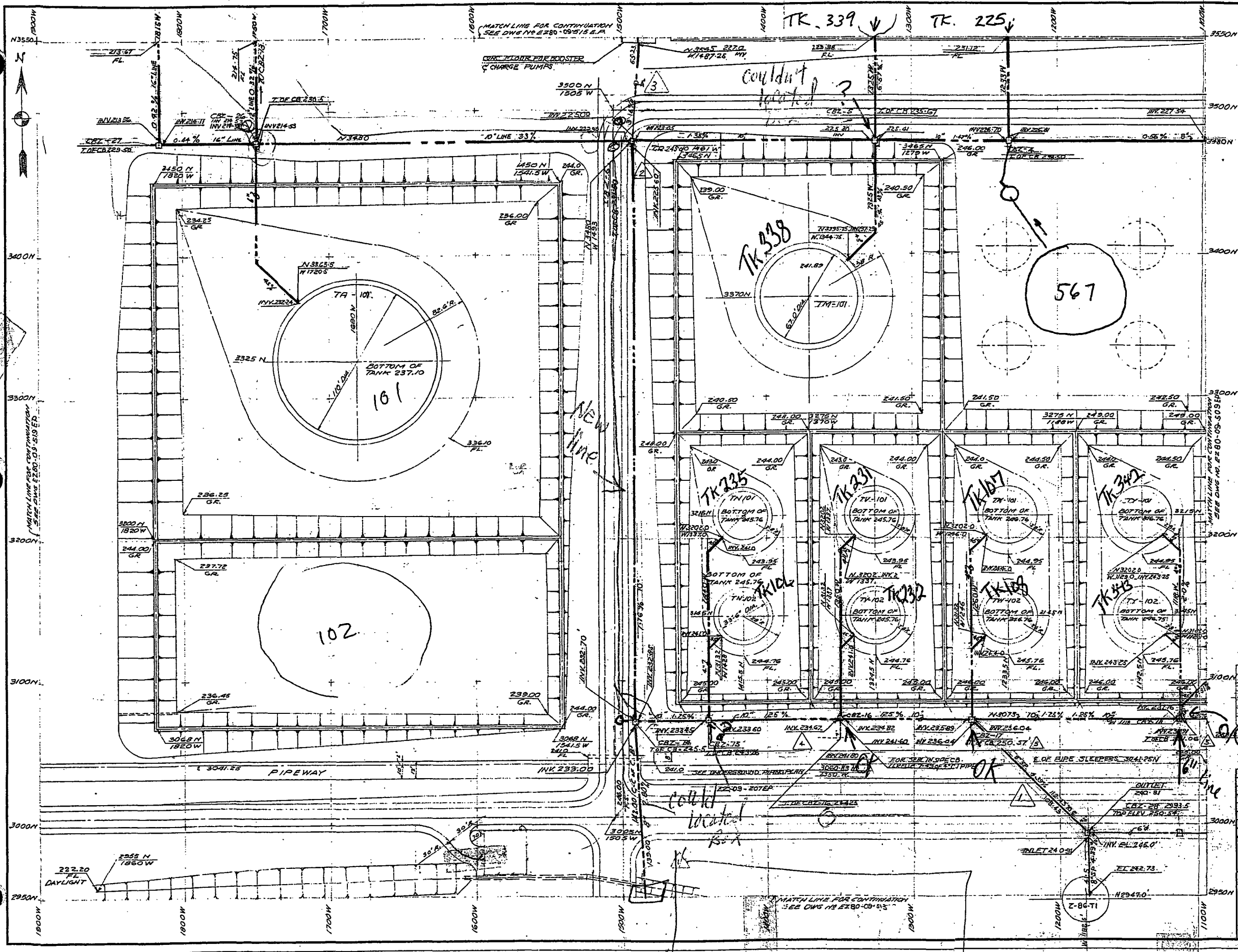
LEGEND:
--- SANITARY SEWER
--- DIRTY OIL DRAINAGE
--- DIRTY OIL DRAINAGE IN BOILER PLANT

NOTE: SEPTIC TANKS SHALL BE NOTTINGHAM OR EQUAL. BATTERY OR SINGLE.

APPROVED FOR CONSTRUCTION
W. R. Rye
S. J. Rye

REVISIONS	
1	REVISED BATTERY OIL DRAINAGE FROM MARKETING BLDG. TO
2	REVISED BATTERY OIL DRAINAGE FROM MARKETING BLDG. TO
3	REVISED BATTERY OIL DRAINAGE FROM MARKETING BLDG. TO
4	REVISED BATTERY OIL DRAINAGE FROM MARKETING BLDG. TO
5	REVISED BATTERY OIL DRAINAGE FROM MARKETING BLDG. TO
6	REVISED BATTERY OIL DRAINAGE FROM MARKETING BLDG. TO
7	REVISED BATTERY OIL DRAINAGE FROM MARKETING BLDG. TO
8	REVISED BATTERY OIL DRAINAGE FROM MARKETING BLDG. TO
9	REVISED BATTERY OIL DRAINAGE FROM MARKETING BLDG. TO
10	REVISED BATTERY OIL DRAINAGE FROM MARKETING BLDG. TO

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SEWERAGE & DRAINAGE SYSTEM
DRAWN BY: FRED W. J. 12-5-57
CHECKED BY: J. H. 12-5-57
APPROVED BY: W. R. Rye 12-5-57
EL PASO NATURAL GAS PRODUCTS COMPANY
CHINA REFINERY NEW MEXICO
DRAWING SIZE: A-7026



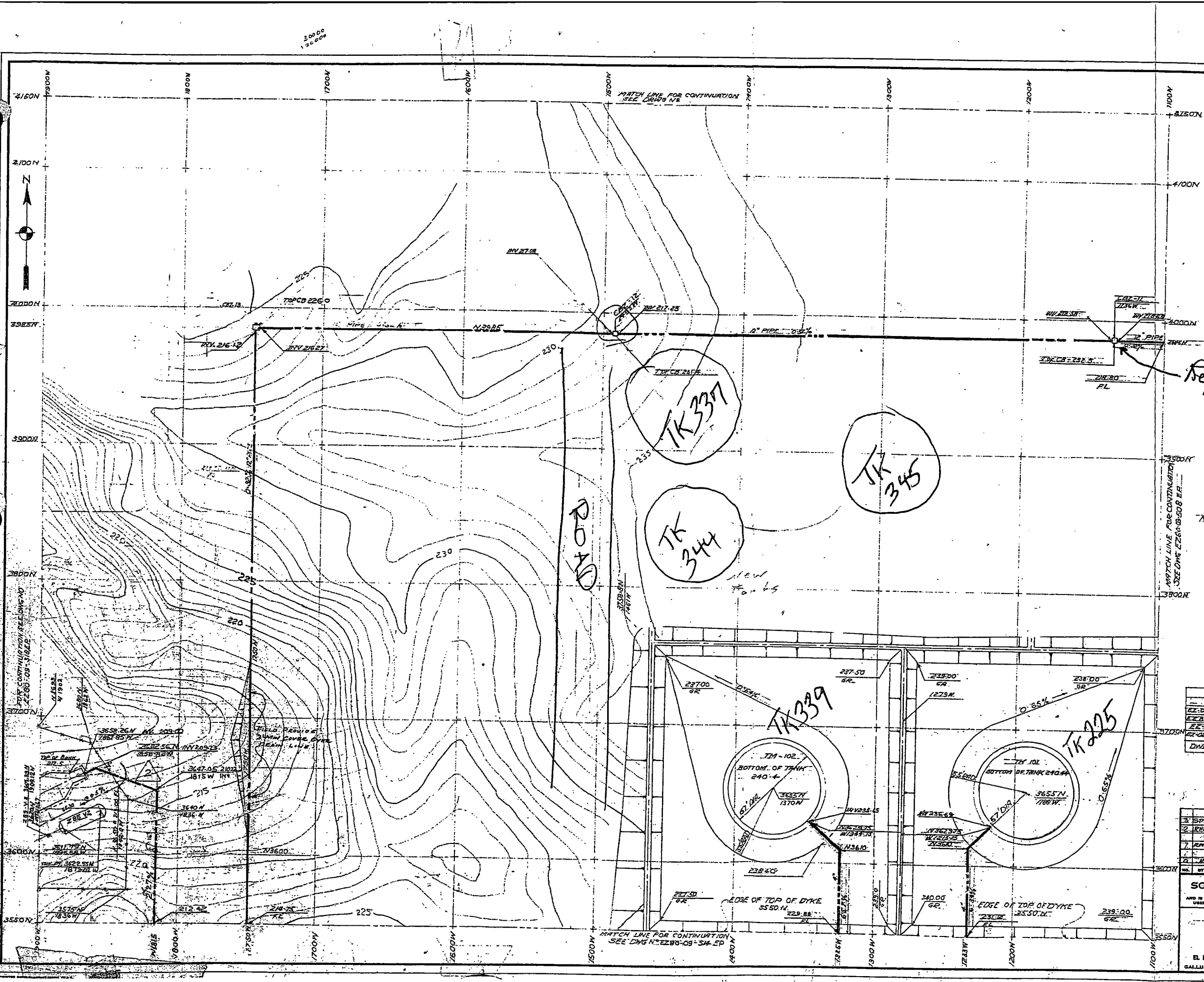
NOTE
FOR GENERAL NOTES & TYPICAL DETAILS
SEE DRWG. E280-09-515-12

APPROVED
FOR CONSTRUCTION
W.D. Dyer
DATE 2-18-57

REVISIONS
1. E280-09-515-12
2. E280-09-515-12
3. E280-09-515-12
4. E280-09-515-12
5. E280-09-515-12
6. E280-09-515-12
7. E280-09-515-12
8. E280-09-515-12
9. E280-09-515-12
10. E280-09-515-12

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SCALE 1/8" = 1'-0"
DATE 2-18-57
DRAWN BY P.D.W.
CHECKED BY R.D.W.
APPROVED BY W.D. DYER
JOB NO. E280-09-515-12
SOUTHWESTERN ENGINEERING COMPANY
GALLUP, NEW MEXICO
DRAWING SIZE A-7026



Rep lace sewer lid

NOTE
FOR GENERAL NOTES & TYPICAL DETAILS
SEE DWG. E280-05-EP

APPROVED
FOR CONSTRUCTION
W. J. R. J. W.
DATE 3-11-57

EX-101	11/57	CATCH BASIN & MANHOLE DETAILS
EX-102	11/57	SEPARATOR DETAILS
EX-103	11/57	SEPARATOR DETAILS
EX-104	11/57	SEPARATOR DETAILS
EX-105	11/57	SEPARATOR DETAILS
EX-106	11/57	SEPARATOR DETAILS
EX-107	11/57	SEPARATOR DETAILS
EX-108	11/57	SEPARATOR DETAILS
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EX-199	11/57	SEPARATOR DETAILS
EX-200	11/57	SEPARATOR DETAILS

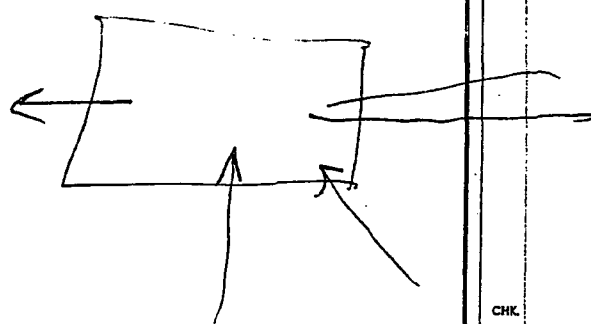
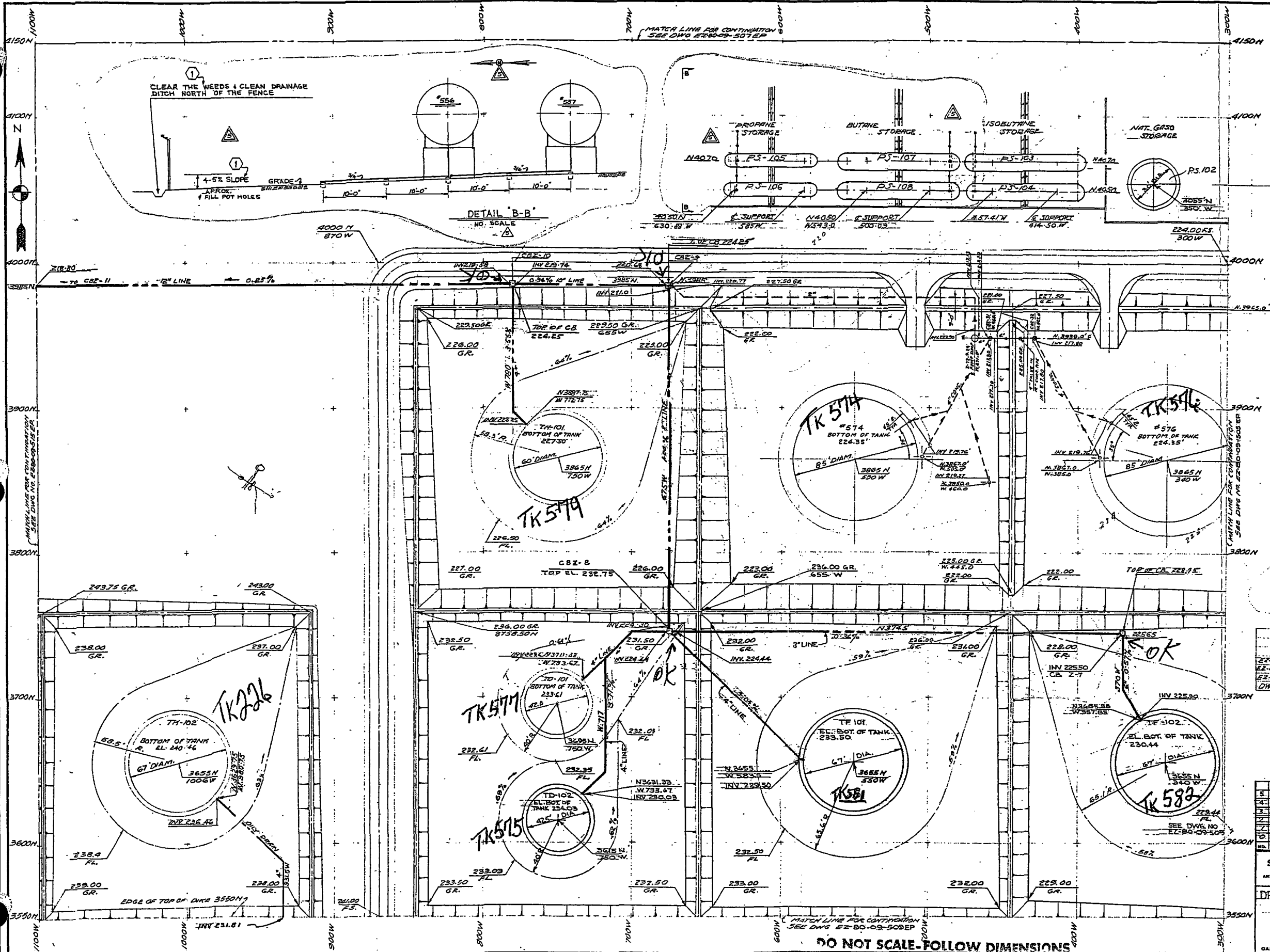
3	SPS 10-11-57	ADD TANK 340 DYE
4	RJR 6-1-57	REUSE TANK 340 DYE
5	RJR 6-1-57	REUSE TANK 340 DYE
6	RJR 6-1-57	REUSE TANK 340 DYE
7	RJR 6-1-57	REUSE TANK 340 DYE
8	RJR 6-1-57	REUSE TANK 340 DYE
9	RJR 6-1-57	REUSE TANK 340 DYE
10	RJR 6-1-57	REUSE TANK 340 DYE
11	RJR 6-1-57	REUSE TANK 340 DYE
12	RJR 6-1-57	REUSE TANK 340 DYE
13	RJR 6-1-57	REUSE TANK 340 DYE
14	RJR 6-1-57	REUSE TANK 340 DYE
15	RJR 6-1-57	REUSE TANK 340 DYE
16	RJR 6-1-57	REUSE TANK 340 DYE
17	RJR 6-1-57	REUSE TANK 340 DYE
18	RJR 6-1-57	REUSE TANK 340 DYE
19	RJR 6-1-57	REUSE TANK 340 DYE
20	RJR 6-1-57	REUSE TANK 340 DYE
21	RJR 6-1-57	REUSE TANK 340 DYE
22	RJR 6-1-57	REUSE TANK 340 DYE
23	RJR 6-1-57	REUSE TANK 340 DYE
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27	RJR 6-1-57	REUSE TANK 340 DYE
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29	RJR 6-1-57	REUSE TANK 340 DYE
30	RJR 6-1-57	REUSE TANK 340 DYE
31	RJR 6-1-57	REUSE TANK 340 DYE
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41	RJR 6-1-57	REUSE TANK 340 DYE
42	RJR 6-1-57	REUSE TANK 340 DYE
43	RJR 6-1-57	REUSE TANK 340 DYE
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45	RJR 6-1-57	REUSE TANK 340 DYE
46	RJR 6-1-57	REUSE TANK 340 DYE
47	RJR 6-1-57	REUSE TANK 340 DYE
48	RJR 6-1-57	REUSE TANK 340 DYE
49	RJR 6-1-57	REUSE TANK 340 DYE
50	RJR 6-1-57	REUSE TANK 340 DYE
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71	RJR 6-1-57	REUSE TANK 340 DYE
72	RJR 6-1-57	REUSE TANK 340 DYE
73	RJR 6-1-57	REUSE TANK 340 DYE
74	RJR 6-1-57	REUSE TANK 340 DYE
75	RJR 6-1-57	REUSE TANK 340 DYE
76	RJR 6-1-57	REUSE TANK 340 DYE
77	RJR 6-1-57	REUSE TANK 340 DYE
78	RJR 6-1-57	REUSE TANK 340 DYE
79	RJR 6-1-57	REUSE TANK 340 DYE
80	RJR 6-1-57	REUSE TANK 340 DYE
81	RJR 6-1-57	REUSE TANK 340 DYE
82	RJR 6-1-57	REUSE TANK 340 DYE
83	RJR 6-1-57	REUSE TANK 340 DYE
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85	RJR 6-1-57	REUSE TANK 340 DYE
86	RJR 6-1-57	REUSE TANK 340 DYE
87	RJR 6-1-57	REUSE TANK 340 DYE
88	RJR 6-1-57	REUSE TANK 340 DYE
89	RJR 6-1-57	REUSE TANK 340 DYE
90	RJR 6-1-57	REUSE TANK 340 DYE
91	RJR 6-1-57	REUSE TANK 340 DYE
92	RJR 6-1-57	REUSE TANK 340 DYE
93	RJR 6-1-57	REUSE TANK 340 DYE
94	RJR 6-1-57	REUSE TANK 340 DYE
95	RJR 6-1-57	REUSE TANK 340 DYE
96	RJR 6-1-57	REUSE TANK 340 DYE
97	RJR 6-1-57	REUSE TANK 340 DYE
98	RJR 6-1-57	REUSE TANK 340 DYE
99	RJR 6-1-57	REUSE TANK 340 DYE
100	RJR 6-1-57	REUSE TANK 340 DYE

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DRAINAGE & SEWERAGE
3550N TO 4150N
AND
1100W TO 1900W

EL PASO NATURAL GAS PRODUCTS COMPANY
CINCA REFINERY
GALLUP
NEW MEXICO

DRAWING SIZE
A-7026



NOTES
① MAINT. EXPENSE-20

22-03-117 CATCHBASIN & MANHOLE DETAILS
22-03-5106 KEY PLAN
22-03-1086 SITE GRADING PLAN
DWG NO. REFERENCE DRAWINGS

APPROVED FOR CONSTRUCTION
DATE 3-13-57
BY W.B. Dwyer

1	2-15-57	WATER DRAWS & DRAINAGE (NO. 22-03-11-20)	22-03-117
2	2-15-57	AS BUILT (NO. 22-03-11-20)	22-03-117
3	2-15-57	ADDED TANKS #514 & 516 (NO. 22-03-11-20)	22-03-117
4	2-15-57	ADDED TANK #517 (NO. 22-03-11-20)	22-03-117
5	2-15-57	ADDED TANK #518 (NO. 22-03-11-20)	22-03-117
6	2-15-57	ADDED TANK #515 (NO. 22-03-11-20)	22-03-117
7	2-15-57	ADDED TANK #581 (NO. 22-03-11-20)	22-03-117
8	2-15-57	ADDED TANK #582 (NO. 22-03-11-20)	22-03-117
9	2-15-57	ADDED TANK #583 (NO. 22-03-11-20)	22-03-117
10	2-15-57	ADDED TANK #584 (NO. 22-03-11-20)	22-03-117

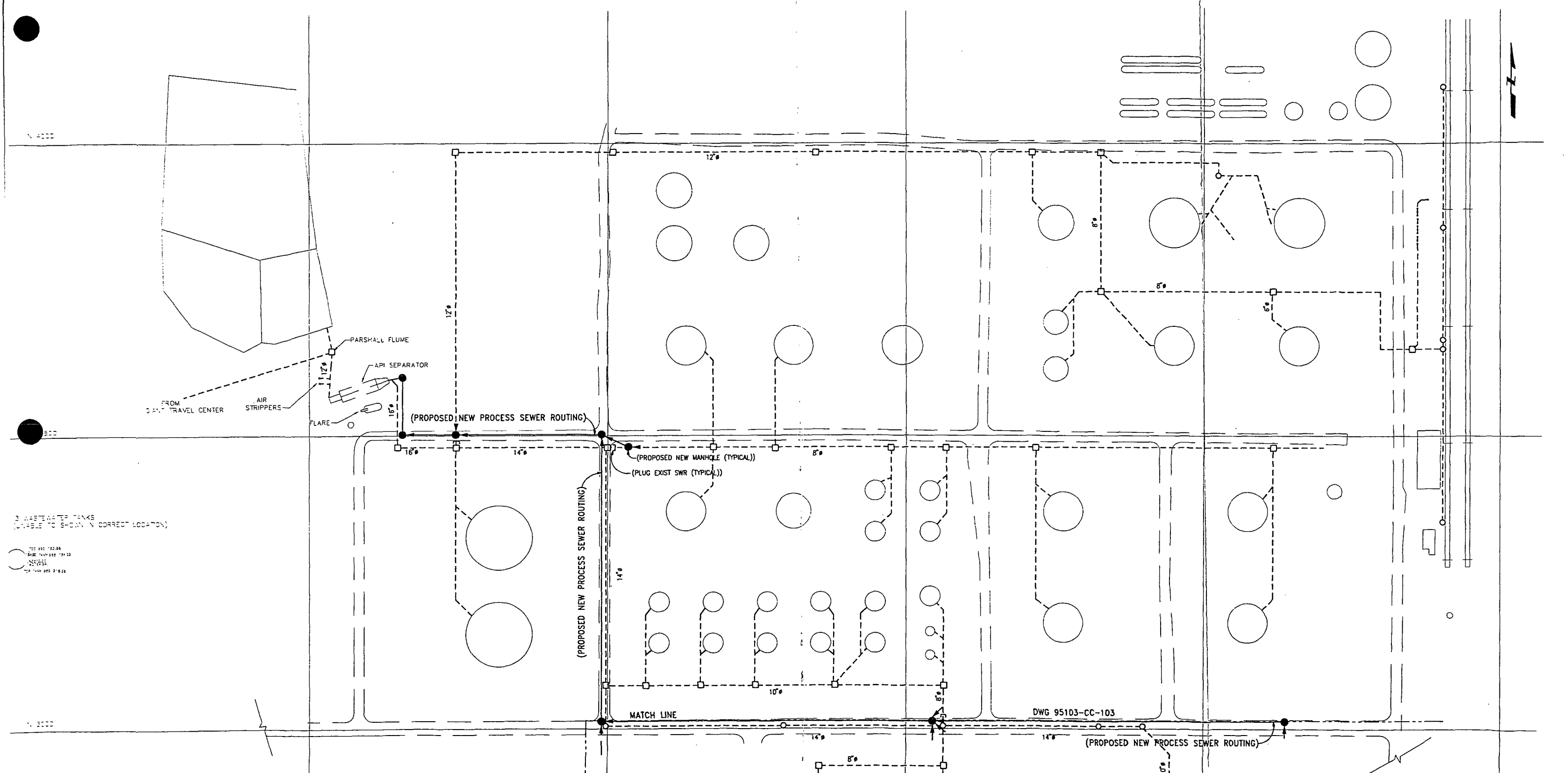
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DRAINAGE & SEWERAGE PLAN
3550N TO 4150N
300W TO 1100W

EL PASO NATURAL GAS PRODUCTS COMPANY
GALLUP, NEW MEXICO

DRAWING SIZE

DO NOT SCALE-FOLLOW DIMENSIONS



3. WASTEWATER TANKS
(SUBJECT TO 8-DAY IN CORRECT LOCATION)

100 950 100.00
100 950 100.00
100 950 100.00
100 950 100.00

LEGEND

- EDGE OF CONCRETE
- EXIST CONCRETE CURB
- APPROX RIDGE LINE (HP)
- EXIST PROCESS DRAINS
- EXIST TRENCH DRAINS
- PROPOSED CONCRETE AREA
- PROPOSED NEW PROCESS SEWER

NOTES

1. UNLESS NOTED ALL EXISTING PROCESS DRAINS ARE 4".
PIPE DIAMETER BASED ON INFORMATION PROVIDED BY GIANT REFINERY.
2. FIELD SURVEY WAS PERFORMED BY HAYNES ENGINEERING,
OF GALLUP, NM IN OCTOBER, 1995.

FOR REVIEW

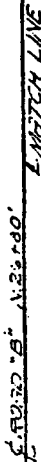
THIS DRAWING HAS BEEN ISSUED FOR REVIEW
AS OF 11/03/95
RAPLEY ENGINEERING SERVICES, INC.

CINIZA REFINERY **GIANT** REFINING CO. A DIVISION OF GIANT INDUSTRIES GALLUP NEW MEXICO

TANK FARM
PROCESS DRAINAGE
STUDY PLAN

A	11/03/95	CLIENT REVIEW	DPB	APRVD	SCALE	1"=80'	APRVD
MARK	DATE	DESCRIPTION	BY	APRVD	DATE	10-25-95	APRVD
					DRN	DPB	180
					CHK'D	DWG NO. 95103-CC-104	REV.

11/03/95 14:00 DPB AT SCALE 1"=80' BY RAPLEY ENGINEERING SERVICES, INC.



THIS POINT IS THE PROPERTY OF
SOUTHWESTERN ENGINEERING COMPANY
 4020 SANTA FE AVE. LOS ANGELES, CALIF.
 WE ARE SOLELY TO THE SERVICE OF OUR CUSTOMERS. IF YOU HAVE ANYTHING THAT IS NOT TO
 BE USED DIRECTLY, WE WILL BE RESPONSIBLE TO THE INTERESTS OF THAT PARTY.

BOILER PLANT
UNDERGROUND PIPING
PLAN

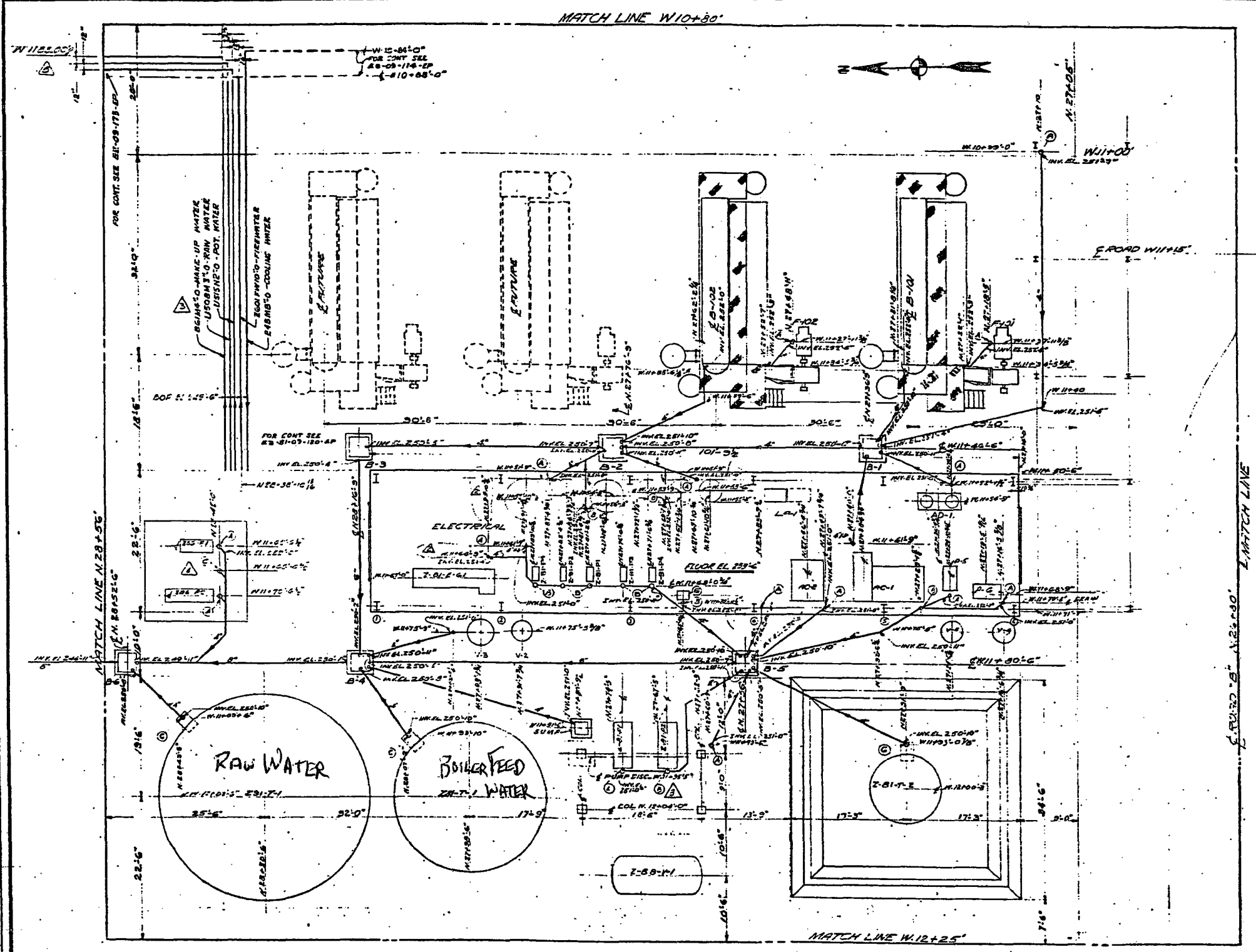
EL PASO NATURAL GAS PRODUCTS COMPANY
 CINCINNATI REFINERY NEW BEDFORD

SCALE	1/4" = 1'-0"	
DRAWN BY	R.E.S.	DATE
APPROVED BY	A.P.E.L.	11-2-54
CHECKED BY	W.J.G.	11-2-54
IN CHARGE	W.H.	11-2-54

EZ-81-9-102-EP

APPROVED FOR CONSTRUCTION	
DESIGNED BY H. J. Little E. Lane	DATE 4-29- 1977

BOILER PLANT



EQUIPMENT LIST GENERATORS

- B-101 STEAM GENERATOR
- B-102 STEAM GENERATOR

FANS

- F-101 DRAFT FAN
- F-102 DRAFT FAN

PUMPS

- P-1 FUEL OIL PUMP
- P-2 FUEL OIL PUMP (SPARE)

TANKS

- T-1 BOILER FEED WATER
- T-2 RAW WATER
- T-3 FUEL OIL

VESSELS

- V-1 DEAERATOR
- V-2 ACID STORAGE
- V-3 CHEMICAL BLOWDOWN TANK
- V-4 INSTRUMENT BLOWDOWN TANK
- V-5 INSTRUMENT AIR RECEIVER
- V-6 AUXILIARY AIR RECEIVER
- V-7 CHEMICAL MIXING TANK
- V-8 CHEMICAL SOLUTION TANK

COMPRESSORS

- A-1 INSTRUMENT AIR COMPRESSOR
- A-2 AUXILIARY AIR COMPRESSOR

MISCELLANEOUS

- M-1 INSTRUMENT AIR DRYER
- M-2 EMERGENCY GENERATOR
- M-3 PANEL BOARD
- M-4 HYPOCHLORITE

12-09-116-EP	FIRE PROTECTION PIPING - AREA J
12-09-120-EP	BOILER PLANT PIPING PLAN - AREA 81-F
12-09-175-EP	PIPE SLEEVES & BURIED PIPING - AREA J
12-09-134-EP	PIPE BILL OF MATERIAL
12-09-116-EP	FOUND. FOR BOILER HOUSE ENTR. TREAT. BLDG.
12-09-130-EP	FOUNDATION PLAN FOR GENERATORS 1 & 2
12-09-130-EP	SUMP FOUNDATIONS
12-09-130-EP	USE SW OR LW PER CLASS 'I' OF SWEED SPEC.
12-09-130-EP	AREA LOCATION
12-09-130-EP	PLOT PLAN
12-09-130-EP	TYPE PIPING AT SUMPS & DR. FUMELLS
DRAWING NO.	DRAWING TITLE
REFERENCE	DRAWINGS

THIS PRINT IS THE PROPERTY OF
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 1200 SANTA FE AVE., LOS ANGELES, CALIF.
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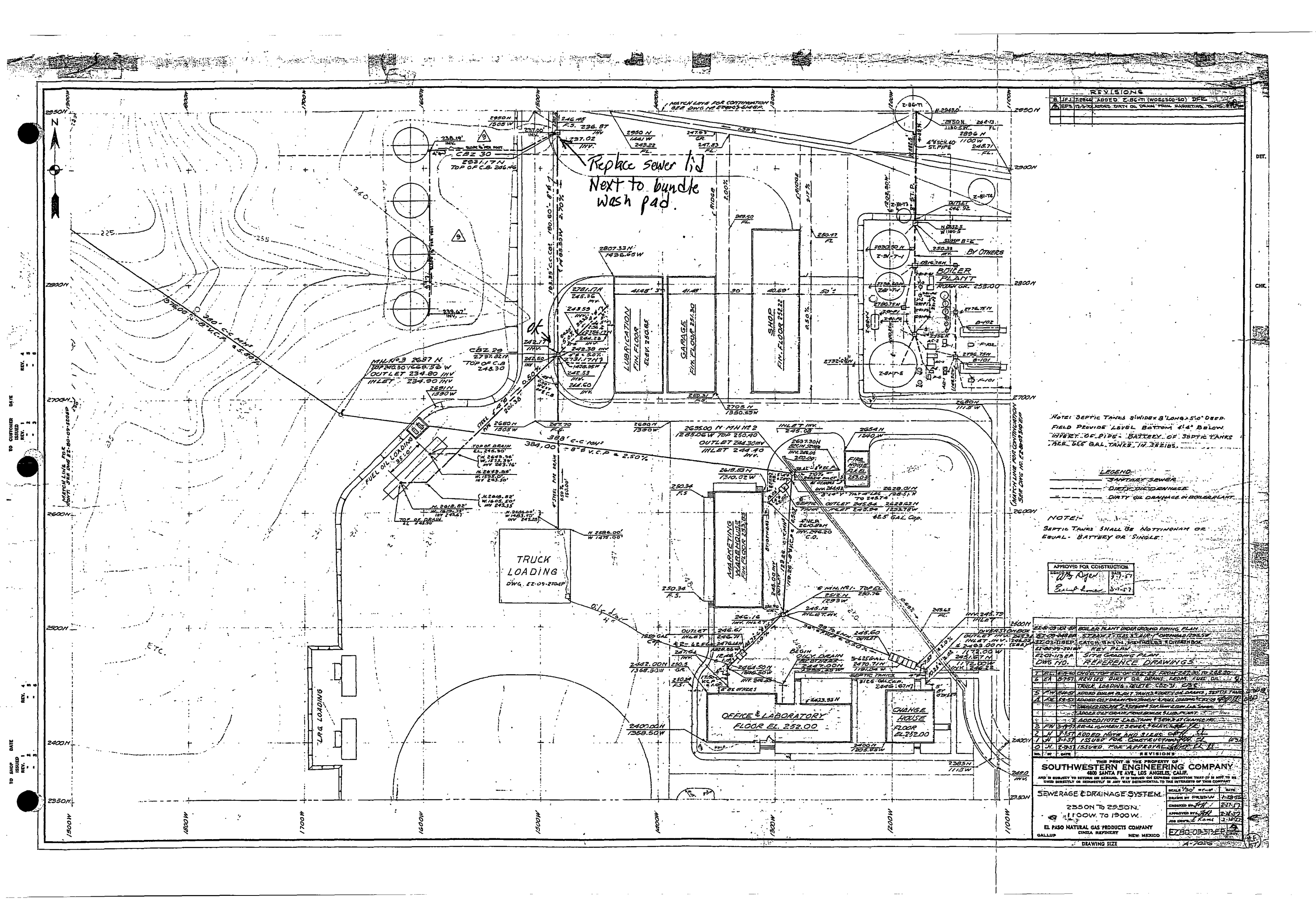
BOILER PLANT
UNDERGROUND PIPING
PLAN

BL PASO NATURAL GAS PRODUCTS COMPANY
 CINCINNATI, OHIO
 NEW MEXICO

DRAWING SIZE: 11" x 17"

APPROVED FOR CONSTRUCTION
 [Signature]
 [Date]

REVISIONS
 1. [Description]
 2. [Description]
 3. [Description]
 4. [Description]
 5. [Description]



Replace sewer lid
Next to bundle
wash pad.

REVISIONS	
1	REVISION
2	REVISION
3	REVISION
4	REVISION
5	REVISION
6	REVISION
7	REVISION
8	REVISION
9	REVISION
10	REVISION

NOTE: SEPTIC TANKS 9' WIDE X 8' LONG X 5' 0" DEEP.
FIELD PROVIDE LEVEL BOTTOM 4" BELOW
INTERIOR OF PIPE. BATTERY OF SEPTIC TANKS
ALL 665 GAL. TANKS IN 36" I.D.

LEGEND:
--- SANITARY SEWER
--- DIRT/OIL DRAINAGE
--- DIRT/OIL DRAINAGE IN BOILER PLANT

NOTE:
SEPTIC TANKS SHALL BE NOTTINGHAM OR
EQUAL - BATTERY OR SINGLE.

APPROVED FOR CONSTRUCTION
W. R. Ryan
3-1-57
E. R. Ryan
3-1-57

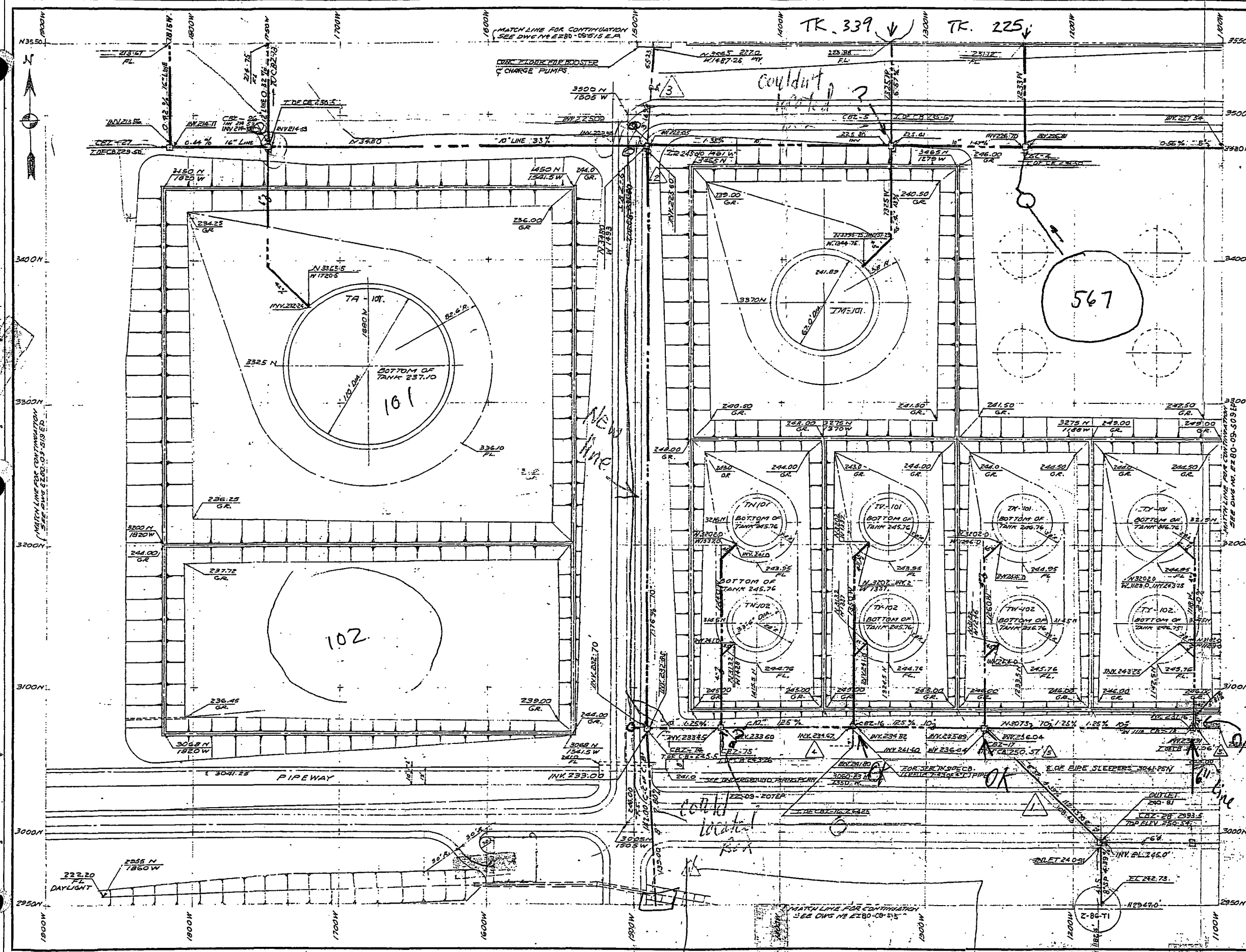
REFERENCE DRAWINGS	
1	PLAN OF BOILER PLANT UNDERGROUND PIPING PLAN
2	PLAN OF BOILER PLANT UNDERGROUND PIPING PLAN
3	PLAN OF BOILER PLANT UNDERGROUND PIPING PLAN
4	PLAN OF BOILER PLANT UNDERGROUND PIPING PLAN
5	PLAN OF BOILER PLANT UNDERGROUND PIPING PLAN
6	PLAN OF BOILER PLANT UNDERGROUND PIPING PLAN
7	PLAN OF BOILER PLANT UNDERGROUND PIPING PLAN
8	PLAN OF BOILER PLANT UNDERGROUND PIPING PLAN
9	PLAN OF BOILER PLANT UNDERGROUND PIPING PLAN
10	PLAN OF BOILER PLANT UNDERGROUND PIPING PLAN

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SEWERAGE & DRAINAGE SYSTEM
2350N TO 2950N
1100W TO 1900W
EL PASO NATURAL GAS PRODUCTS COMPANY
GALLUP
DRAWING SIZE
A-1026

TO CUSTOMER DATE
REV. 1
REV. 2
REV. 3
REV. 4

TO SHOP DATE
REV. 1
REV. 2
REV. 3
REV. 4



NOTE
FOR GENERAL NOTES & TYPICAL DETAILS
SEE DWG. EZ-80-03-515

APPROVED
FOR CONSTRUCTION
W.D. Dym
DATE 3-18-57

REVISIONS		
NO.	DATE	DESCRIPTION
1	3-18-57	ISSUED FOR CONSTRUCTION

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USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTERESTS OF THIS COMPANY.

DRAINAGE & SEWERAGE
2950N TO 3550N
1100W TO 1900W

EL PASO NATURAL GAS PRODUCTS COMPANY
GALLUP, NEW MEXICO

DRAWING SIZE
A-7022

ALKYLATION UNIT

UNDERGROUND PROCESS AND WASTEWATER LINES

Alkylation Unit

The Alky sewer tests were performed on all accessible lines inside battery limits. The lateral lines were either tested individually or with the main line between consecutive boxes. Each sewer test was performed by plugging each end of the line with an inflatable stopple. An inflatable bypass stopple or plug was installed on one end of the line and connected to a 1" pipe. The pipe was filled with water to a minimum of seven feet above grade. If the water maintained a constant "full" level for a period of one hour, then the line passed.

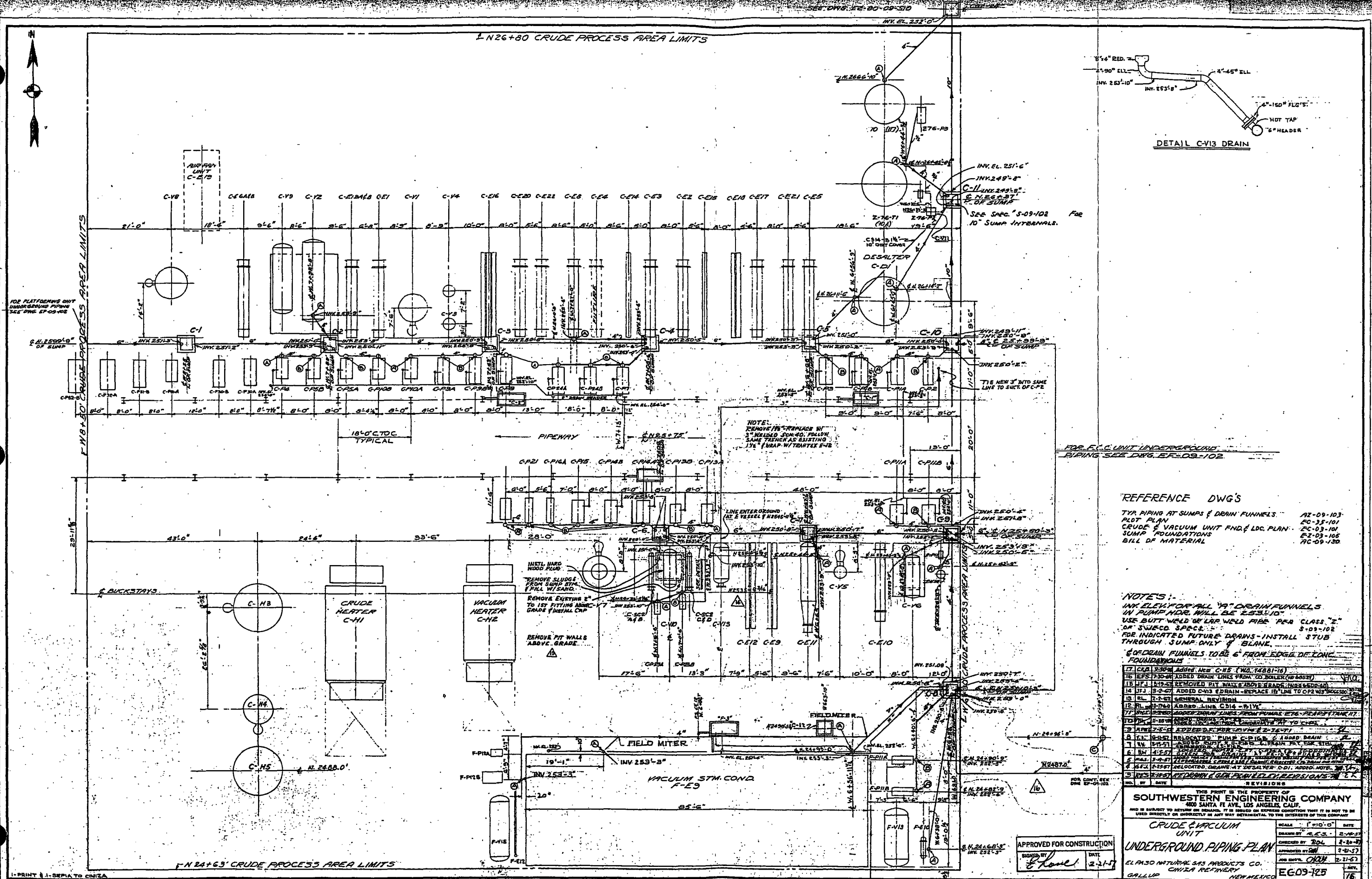
ID Number	Lateral Drains	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Signature	Investigation Results
A1	A-V23 & A-V24	1957	EA-09-102	A-04	Did not hold water	Robert Stock	
	A-V25	1957	EA-09-102	A-04	Taken out of Service & not tested	Robert Stock	
	A-P8A & A-P8B	1957	EA-09-102	A-04	Taken out of Service & not tested	Robert Stock	
	A-E10	1957	EA-09-102	A-04	Did not hold water	Robert Stock	
	A-V10	1957	EA-09-102	A-04	Did not hold water	Robert Stock	
Main line from Box A1 & A2	A-V10 & A-V22	1957	EA-09-102	A-04	Taken out of Service & not tested	Robert Stock	
	A-E-15	1957	EA-09-102	A-04	Taken out of Service & not tested	Robert Stock	
	A-P1A	1957	EA-09-102	A-04	Did not hold water	Robert Stock	
	A-P1A, A-P11, A-P9A & A-P9B	1957	EA-09-102	A-04	Did not hold water & water seals are severely corroded.	Robert Stock	
		1957	EA-09-102	A-04	Did not hold water	Robert Stock	
Main line from Box A2 & A3	A-P7	1957	EA-09-102	A-04	Taken out of Service & not tested	Robert Stock	
	A-P6A	1957	EA-09-102	A-04	Did not hold water	Robert Stock	
	A-V14 & A-V16	1957	EA-09-102	A-04	Taken out of Service & not tested	Robert Stock	
	A-V8 & A-V9	1957	EA-09-102	A-04	Taken out of Service & not tested	Robert Stock	
	A-V8	1957	EA-09-102	A-04	Taken out of Service & not tested	Robert Stock	
Main line from Box A3 & A4		1957	EA-09-102	A-04	Did not hold water & water seals are severely corroded.	Robert Stock	
	A-P6B	1957	EA-09-102	A-04	Did not hold water	Robert Stock	
	A-V7	1957	EA-09-102	A-04	Taken out of Service & not tested	Robert Stock	
	A-V2	1957	EA-09-102	A-04	Did not hold water	Robert Stock	
		1957	EA-09-102	A-04	The 6" line is corroded into the concrete sump wall on both ends of the line. The concrete sump box bottom floor is severely corroded.	Robert Stock	
Main line from Box A4 & A5	A-P3	1957	EA-09-102	A-04	Did not hold water	Robert Stock	
	A-V4 & A-V5	1957	EA-09-102	A-04	Did not hold water	Robert Stock	
	A-E1	1957	EA-09-102	A-04	Did not hold water	Robert Stock	
	A-P5A & A-P5B	1957	EA-09-102	A-04	Did not hold water	Robert Stock	
		1957	EA-09-102	A-04	The 6" line is corroded into the concrete sump wall on both ends of the line. The concrete sump box bottom floor is severely corroded.	Robert Stock	
Main line from Box A5 & A6		1957					
	A-E4 & A-E5	1957	EA-09-102	A-04	Did not hold water. The line is corroded into the concrete basin.	Robert Stock	
	A-P4 & A-P10	1957	EA-09-102	A-04	Taken out of Service & not tested	Robert Stock	
	A-V15	1957	EA-09-102	A-04	Taken out of Service & not tested	Robert Stock	
		1957	EA-09-102	A-04	The 6" line is corroded into the concrete sump wall on both ends of the line. The concrete sump box bottom floor is severely corroded.	Robert Stock	

UNDERGROUND PROCESS AND WASTEWATER LINES

Alkylation Unit

The Alky sewer tests were performed on all accessible lines inside battery limits. The lateral lines were either tested individually or with the main line between consecutive boxes. Each sewer test was performed by plugging each end of the line with an inflatable stopple. An inflatable bypass stopple or plug was installed on one end of the line and connected to a 1" pipe. The pipe was filled with water to a minimum of seven feet above grade. If the water maintained a constant "Full" level for a period of one hour, then the line passed.

ID Number	Lateral Drains A-V5	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Signature	Investigation Results
A6		1957	EA-09-102	A-04		Robert Stock	
Main line from Box A6 & ALSO Pit did not hold water.		1957	EA-09-102	A-04	Taken out of Service & not tested The 8" line is corroded into the concrete sump wall & the concrete sump box is severely corroded.	Robert Stock	
Sewer Box A6 Flows N. then NW. then W. To Neutralizing Pit		1957	EA-09-102				
From Neutralizing Pit Drains Toward NW To Catch Basin CBZ-25 at Treating Unit		1957	EZ-80-09-510EP				
From Catch Basin CBZ-25 to Catch Basin CBZ-24		1960	EZ-80-09-510EP				End of Alky Unit
Also From Catch Basin C-11(Crude Unit) To Catch Basin CBZ-24		1957	EC-09-125 & EZ-80-510EP				Info Only, See Crude Unit



REFERENCE DWG'S

TYPE PIPING AT SUMPS & DRAIN FUNNELS... AZ-09-103
PLOT PLAN... EC-35-101
CRUDE & VACUUM UNIT FND. & LDC. PLAN... EC-03-101
SUMP FOUNDATIONS... EC-03-102
BILL OF MATERIAL... AC-09-102

NOTES:

1. INK ELEV. FOR ALL 1/2" DRAIN FUNNELS IN PUMP HOOR. WILL BE 253.10'.
2. USE BUTT WELD OR LAP WELD PIPE PER CLASS "2" OR SWISCO. SPCE. S-09-102
3. FOR INDICATED FUTURE DRAINS - INSTALL STUB THROUGH SUMP ONLY & BLANK.

4. DRAIN FUNNELS TO BE 6" FROM EDGE OF CONC. FOUNDATIONS

17	CPA 1230-01	Added New C-H5 (WD. 14881-15)	
18	EPS 730-01	Added Drain Lines from CO. SOLDER (WD. 6053)	
19	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
20	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
21	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
22	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
23	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
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26	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
27	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
28	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
29	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
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31	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
32	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
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71	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
72	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
73	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
74	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
75	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
76	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
77	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
78	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
79	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
80	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
81	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
82	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
83	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
84	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
85	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
86	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
87	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
88	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
89	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
90	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
91	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
92	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
93	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
94	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
95	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
96	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
97	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
98	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
99	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	
100	UT 1	1/2" DRAIN REMOVED BYT. WALLS ABOVE GRADE (WD. 6053-01)	

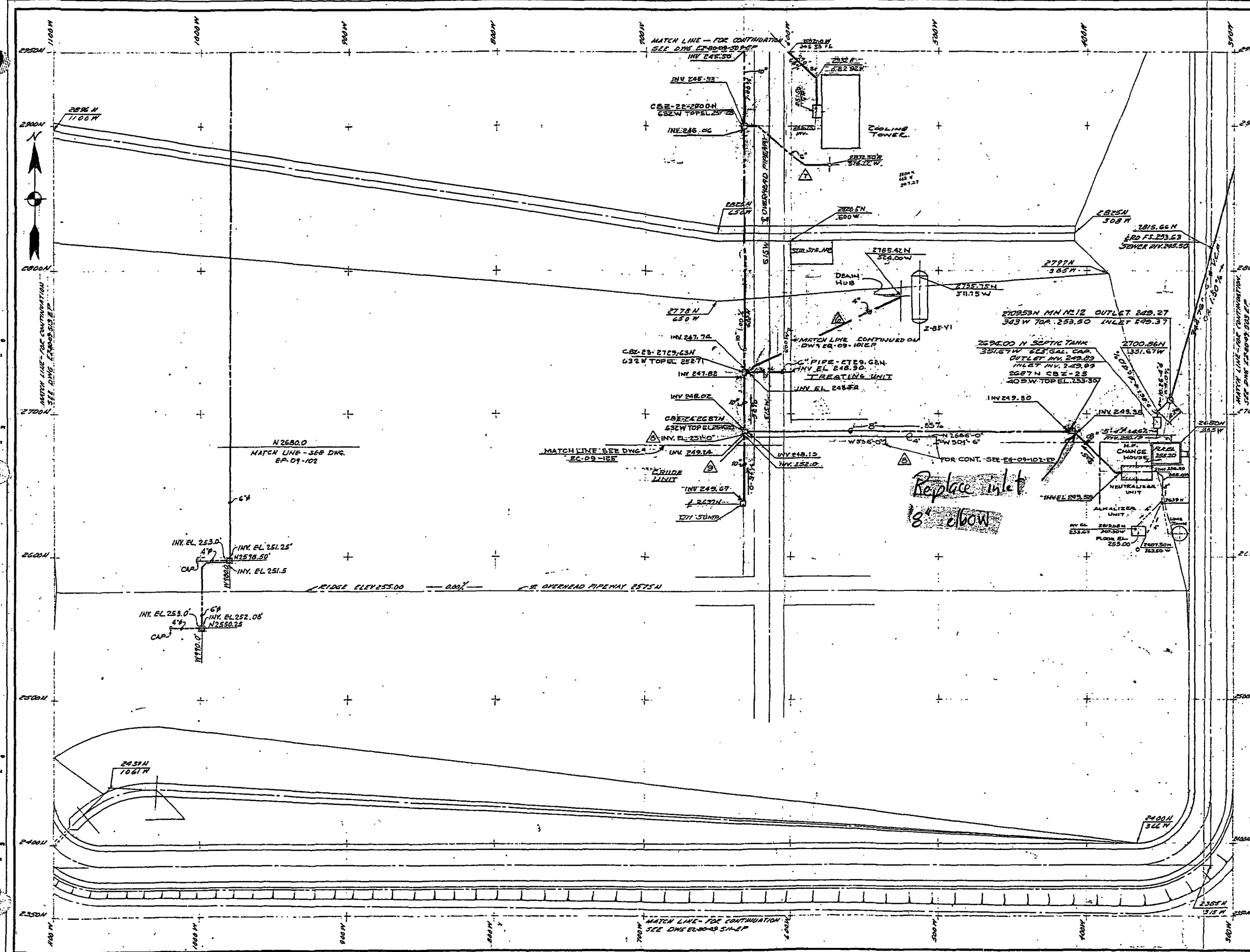
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CRUDE VACUUM UNIT
UNDERGROUND PIPING PLAN

APPROVED FOR CONSTRUCTION
SIGNED BY: *[Signature]* DATE: 2-21-57

SCALE: 1"=10'-0" DATE: 2-21-57
DRAWN BY: R.E.S. 2-21-57
CHECKED BY: R.D.L. 2-21-57
APPROVED BY: [Signature] 2-21-57
JOB NO.: 0024 DATE: 2-21-57
E.G.09-125 16

EL PASO NATURAL GAS PRODUCTS CO.
CHINA REFINERY
GALLUP, NEW MEXICO



NOTE 1 -
H.P. CHANGE HOUSE SHOWER
DRAINS TO ENTER NEUTRALIZER UNIT
FROM S.W. CORNER OF CHANGE HOUSE
SEPTIC TANKS 3' WIDE x 8' LONG x 5' DEEP
FIELD PROVIDE LEVEL BOTTOM 4' 4\"/>

APPROVED FOR CONSTRUCTION
SIGNATURE: *W. D. Dyer* DATE: 3-17-57
3-17

EC-09-10-EP	GAS CON. UNDERGROUND PIPING PLAN
AL-3K-80	ENTRANCE TO CBT-23 FROM TRNK 285 V2
AL-89-10-EP	DRAIN & OVERFLOW PIPE DETAILS
EP-03-10-EP	SUMP DETAILS
EP-03-10-EP	KEY PLAN
EC-09-10-EP	SITE GRADING PLAN
DWG NO.	REFERENCE DRAWING

- 1. H.P. CHANGE HOUSE SHOWER DRAIN TO ENTER NEUTRALIZER UNIT FROM S.W. CORNER OF CHANGE HOUSE
- 2. SEPTIC TANKS 3' WIDE x 8' LONG x 5' DEEP
- 3. FIELD PROVIDE LEVEL BOTTOM 4' 4\"/>
- 4. H.P. CHANGE HOUSE SHOWER DRAIN TO ENTER NEUTRALIZER UNIT FROM S.W. CORNER OF CHANGE HOUSE
- 5. SEPTIC TANKS 3' WIDE x 8' LONG x 5' DEEP
- 6. FIELD PROVIDE LEVEL BOTTOM 4' 4\"/>
- 7. H.P. CHANGE HOUSE SHOWER DRAIN TO ENTER NEUTRALIZER UNIT FROM S.W. CORNER OF CHANGE HOUSE
- 8. SEPTIC TANKS 3' WIDE x 8' LONG x 5' DEEP
- 9. FIELD PROVIDE LEVEL BOTTOM 4' 4\"/>
- 10. H.P. CHANGE HOUSE SHOWER DRAIN TO ENTER NEUTRALIZER UNIT FROM S.W. CORNER OF CHANGE HOUSE
- 11. SEPTIC TANKS 3' WIDE x 8' LONG x 5' DEEP
- 12. FIELD PROVIDE LEVEL BOTTOM 4' 4\"/>

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DRAINAGE & SEWERAGE

2350 N TO 2050 N
300 W TO 1100 W

EL PASO NATURAL GAS PRODUCTS COMPANY
GALLUP DIVISION NEW MEXICO

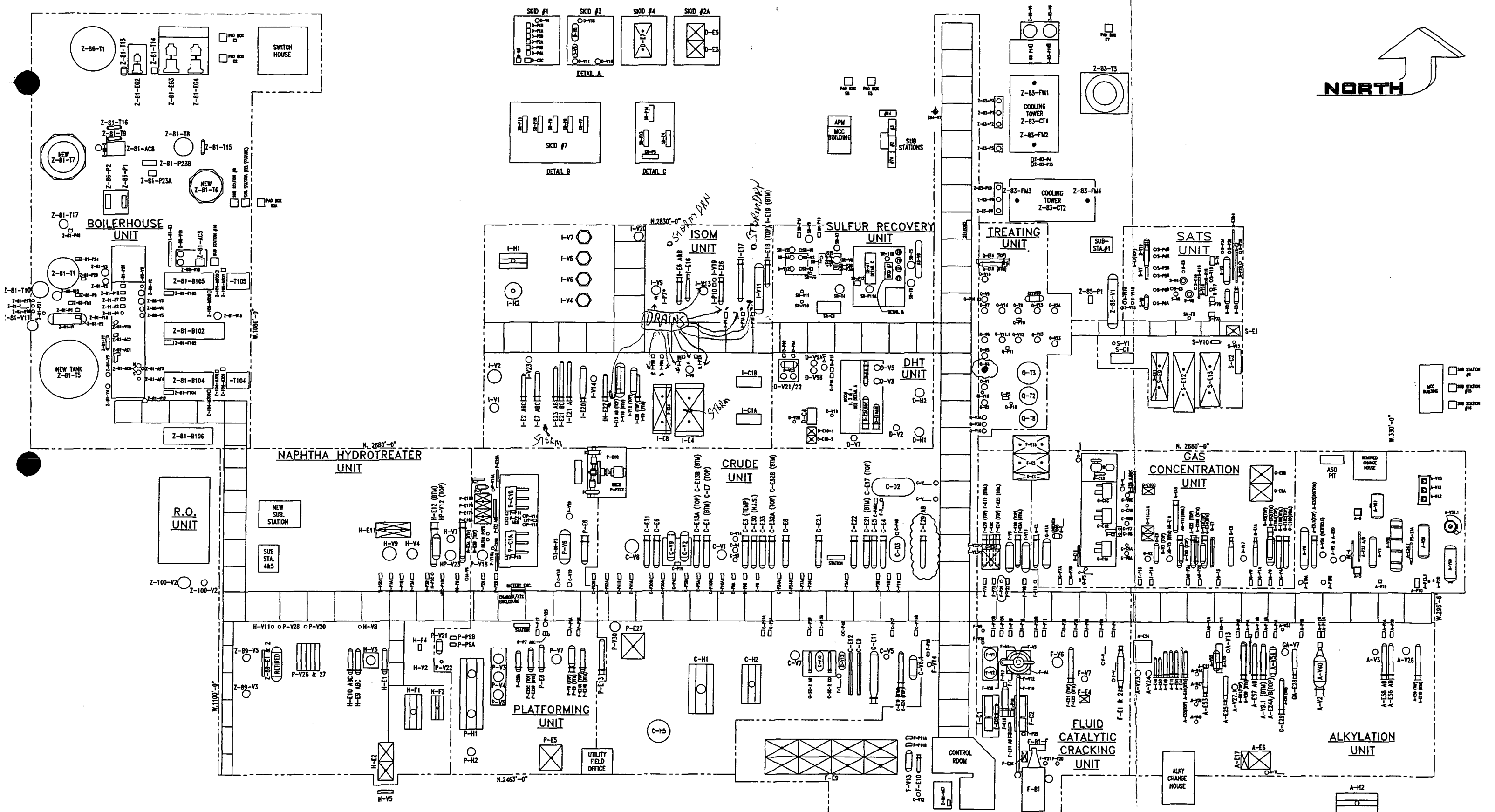
DRAWING SIZE: A-7028

ISOM UNIT

UNDERGROUND PROCESS AND WASTEWATER LINES

ISOM UNIT

ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results	NOTES
P-5 Flows N. @ W980"-0" thru Manhole 31 232.33 (ISOM Manhole) to EZ80-09-509-EP Map		1957	EP-09-102, EZ80-09-509-EP & EZ80-09-Sewer2		Info maps only used to reference point W980 from NHT					NHT (Connects to ISOM Manhole)
I believe these Drains connect to East to West 4" lateral to (Isom Manhole) 31 232.33	I-V9	1998	Z-35-104 & EZ-80-09-SEWER2							
	I-V13	1998	Z-35-104 & EZ-80-09-SEWER2							
	I-P6	1998	Z-35-104 & EZ-80-09-SEWER2							
	I-P1A	1998	Z-35-104 & EZ-80-09-SEWER2							
	I-P1B	1998	Z-35-104 & EZ-80-09-SEWER2							
	I-V11	1998	Z-35-104 & EZ-80-09-SEWER2							
	I-P5B	1998	Z-35-104 & EZ-80-09-SEWER2							
	I-P2B	1998	Z-35-104 & EZ-80-09-SEWER2							
	I-P2A	1998	Z-35-104 & EZ-80-09-SEWER2							
	I-V8	1998	Z-35-104 & EZ-80-09-SEWER2							
	I-H27	1998	Z-35-104 & EZ-80-09-SEWER2							



MASTER EQUIPMENT PLOT PLAN

SCALE:	1" = 30'-0"	APRV'D.:	
DATE:	28SEP00		
DRAWN BY:	C.L.M.		REV.
CHK'D.:	DWG NO.	Z-35-104	13

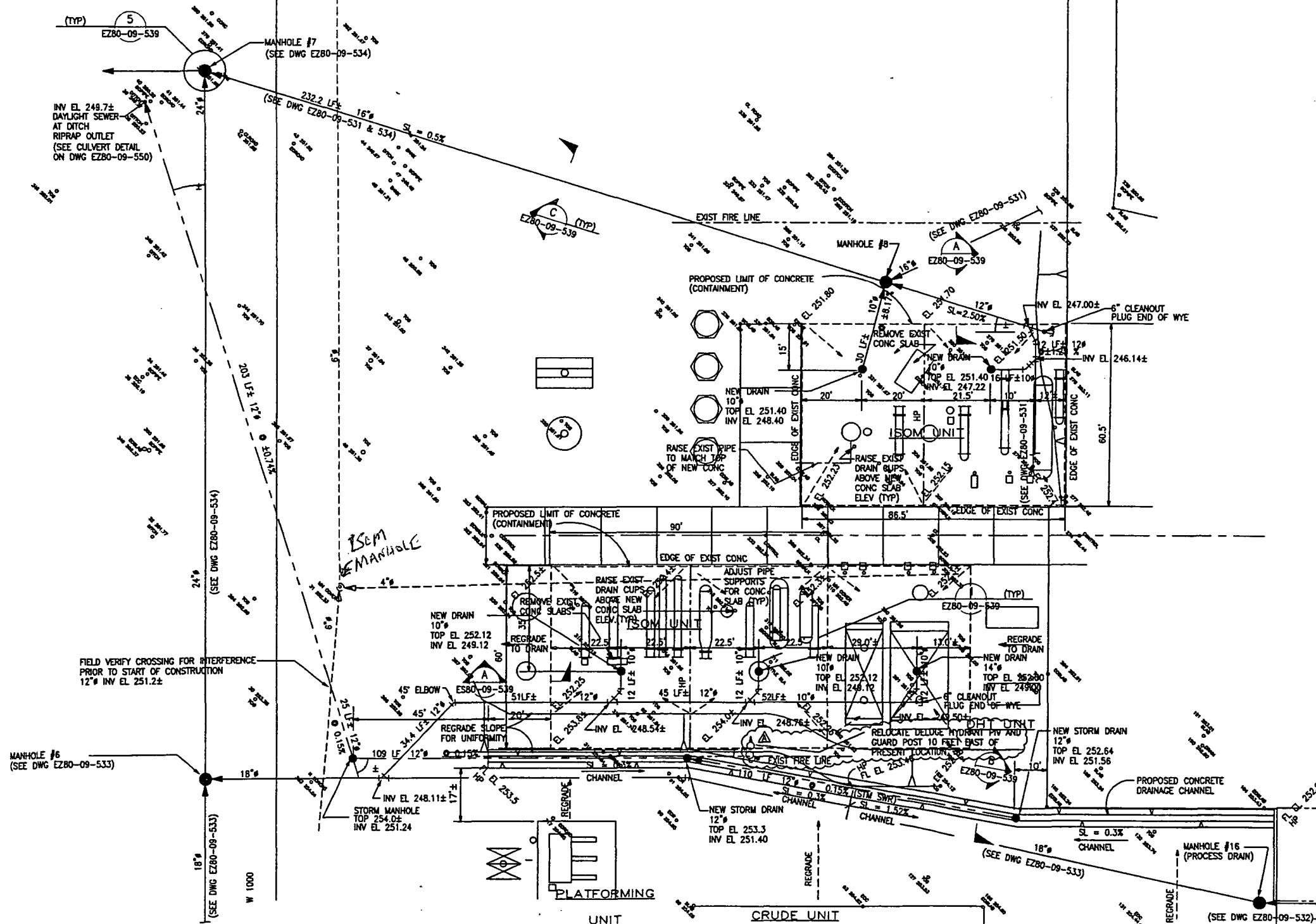
13	11/03	UPDATED	CLM	SCALE:	1" = 30'-0"	APRV D.:
MARK	DATE	DESCRIPTION	BY	APRVD	DATE:	
					DRAWN BY:	
					CHK'D:	
					C.I.M.	
					DWG NO.	Z-35-104
						REV. 13

NOTES

1. FOR GENERAL NOTES REFER TO DWG EZ80-09-531

LEGEND

- EDGE OF CONCRETE
- - - - - APPROX RIDGE LINE (HP)
- - - - - EXIST PROCESS DRAINS
- - - - - PROPOSED CONCRETE AREA
- - - - - PROPOSED NEW PROCESS SEWER
- - - - - PROPOSED NEW STORMWATER SEWER



ISSUED FOR
CONSTRUCTION

DATE: 12/04/97
RAPLEY ENGINEERING SERVICES, INC.

CINIZA REFINERY **GIANT** GALLUP NEW MEXICO
REFINING CO.
A DIVISION OF GIANT INDUSTRIES

ISOM UNIT
PROCESS STORM SEWER
PIPING & PAVING

MARK	DATE	ISSUED FOR APPROVAL	DESCRIPTION	BY	APRVD	SCALE	DATE	APRVD
A	3/15/01	ISSUED FOR APPROVAL	DESCRIPTION	RD	JH	1"=20'	01/05/98	APRVD
		CHK'D		DPB				APRVD
				CHK'D	JHW			APRVD

DWG NO. EZ80-09-SEWER2

AREA LIMITS N. 26-30

EQUIPMENT LIST

VESSLS

- P-V1 OXYGEN STRIPPER
- P-V2 UNIFORMING STRIPPER RECEIVER
- P-V3 PLATFORMING REACTOR #1
- P-V4 PLATFORMING REACTOR #2
- P-V5 PLATFORMING REACTOR #3
- P-V6 PLATFORMING REACTOR PRODUCTS SEPARATOR
- P-V7 STABILIZER
- P-V8 STABILIZER RECEIVER
- P-V9 CHEMICAL CONDENSATE GAUGING TANK
- P-V10 UNIFORMING REACTOR
- P-V11 UNIFORMING REACTOR PRODUCTS SEPARATOR
- P-V12 FLASH DRUM
- P-V13 UNIFORMING WATER INJECTION SUCTION TANK
- P-V14 STARTING AIR RECEIVER (IN COMPRESSOR HOUSE)
- P-V15 STARTING AIR RECEIVER (IN COMPRESSOR HOUSE)
- P-V16 COMPRESSOR COOLING WATER MAKE-UP TANK
- P-V17 PLATFORMING UNIT SURGE DRUM
- P-V18 FUEL GAS BALANCE DRUM
- P-V19 STEAM/WATER SEPARATOR
- P-V20 SLOW DOWN DRUM

HEATERS

- P-H1 PLATFORMING CHARGE HEATER
- P-H2 UNIFORMING HEATER

HEAT EXCHANGERS

- P-E1 UNIFORMING STRIPPER FEED EXCHANGER
- P-E2 UNIFORMING STRIPPER CONDENSER
- P-E3 PLATFORMING COLD COMBINED FEED EXCH.
- P-E4 PLATFORMING HOT COMBINED FEED EXCH.
- P-E5 PLATFORMING REACTOR PRODUCTS CONDENSER
- P-E6 PLATFORMING REACTOR PRODUCTS COOLER
- P-E7 STABILIZER FEED EXCHANGER
- P-E8 STABILIZER REBOILER
- P-E9 STABILIZER CONDENSER
- P-E10 STABILIZER BOTTOMS - FINAL COOLER
- P-E11 UNIFORMING NAPHTHA FEED EXCH.
- P-E12 UNIFORMING GAS PREHEATER
- P-E13 UNIFORMING REACTOR PRODUCTS CONDENSER
- P-E14 UNIFORMING REACTOR PRODUCTS COOLER
- P-E15 RECYCLE GAS COMPRESSOR JACKET WATER COOLER
- P-E16 RECYCLE GAS COMPRESSOR LUBE OIL COOLER
- P-E17 STABILIZER FEED & BOTTOMS

COMPRESSORS

- P-C101 RECYCLE GAS COMPRESSOR

Replace 2 ea 4" 90° elbow

PUMPS

- P-P1 PLATFORMING REACTOR CHARGE PUMP
- P-P1A1B UNIFORMING STRIPPER REFLEX PUMP
- P-P1A1B UNIFORMING STRIPPER REBOILER PUMP
- P-P1A1B STABILIZER REFLEX PUMP
- P-P6 CHEMICAL CONDENSATE INJECTION PUMP
- P-P7 UNIFORMING REACTOR CHARGE PUMP
- P-P8 UNIFORMING WATER INJECTION PUMP (NOT SHOWN)
- P-P9A STEAM/CONDENSATE P-V21 CIRC.
- P-P9B

MISCELLANEOUS

- P-M1 EXHAUSTER (NOT SHOWN)

REFERENCE DRAWINGS

- PICTORIAL: EP-35-101
- SUMP DETAILS: EE-03-106
- TYPICAL PIPING AT DRAIN SUMP & REBOILER: EE-03-103
- BILL OF MATERIAL: AP-09-131

NOTES

1. FUTURE UNIFORMING EQUIPMENT IS SHOWN.
2. INVERT ELEVATION FOR ALL "A" DRAIN FUNNELS IN PUMP DRAIN HEADER WILL BE 253'-10"

NO.	BY	DATE	REVISIONS
1	W. J. W.	1-25-57	REVISED DRAIN FUNNEL LOC.
2	W. J. W.	1-25-57	ADDED DRAIN SUMP & DRAIN LOC.
3	W. J. W.	1-25-57	ADDED DRAIN SUMP & DRAIN LOC.
4	W. J. W.	1-25-57	ADDED DRAIN SUMP & DRAIN LOC.
5	W. J. W.	1-25-57	ADDED DRAIN SUMP & DRAIN LOC.
6	W. J. W.	1-25-57	ADDED DRAIN SUMP & DRAIN LOC.
7	W. J. W.	1-25-57	ADDED DRAIN SUMP & DRAIN LOC.
8	W. J. W.	1-25-57	ADDED DRAIN SUMP & DRAIN LOC.
9	W. J. W.	1-25-57	ADDED DRAIN SUMP & DRAIN LOC.
10	W. J. W.	1-25-57	ADDED DRAIN SUMP & DRAIN LOC.

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UNIFORMING PLATFORMING UNIT
UNDERGROUND PIPING PLAN

SCALE: 1" = 10'-0"
DRAWN BY: R. L. S.
CHECKED BY: R. L. S.
APPROVED BY: R. L. S.

DATE: 1-25-57
JOB NO.: 253-10
SHEET NO.: 12

EP-09-102

Replace 5 ea 90° elbow and piping

Replace 3 4" 90° elbow PIPEWAY E N. 25-75

Replace sewer 10'

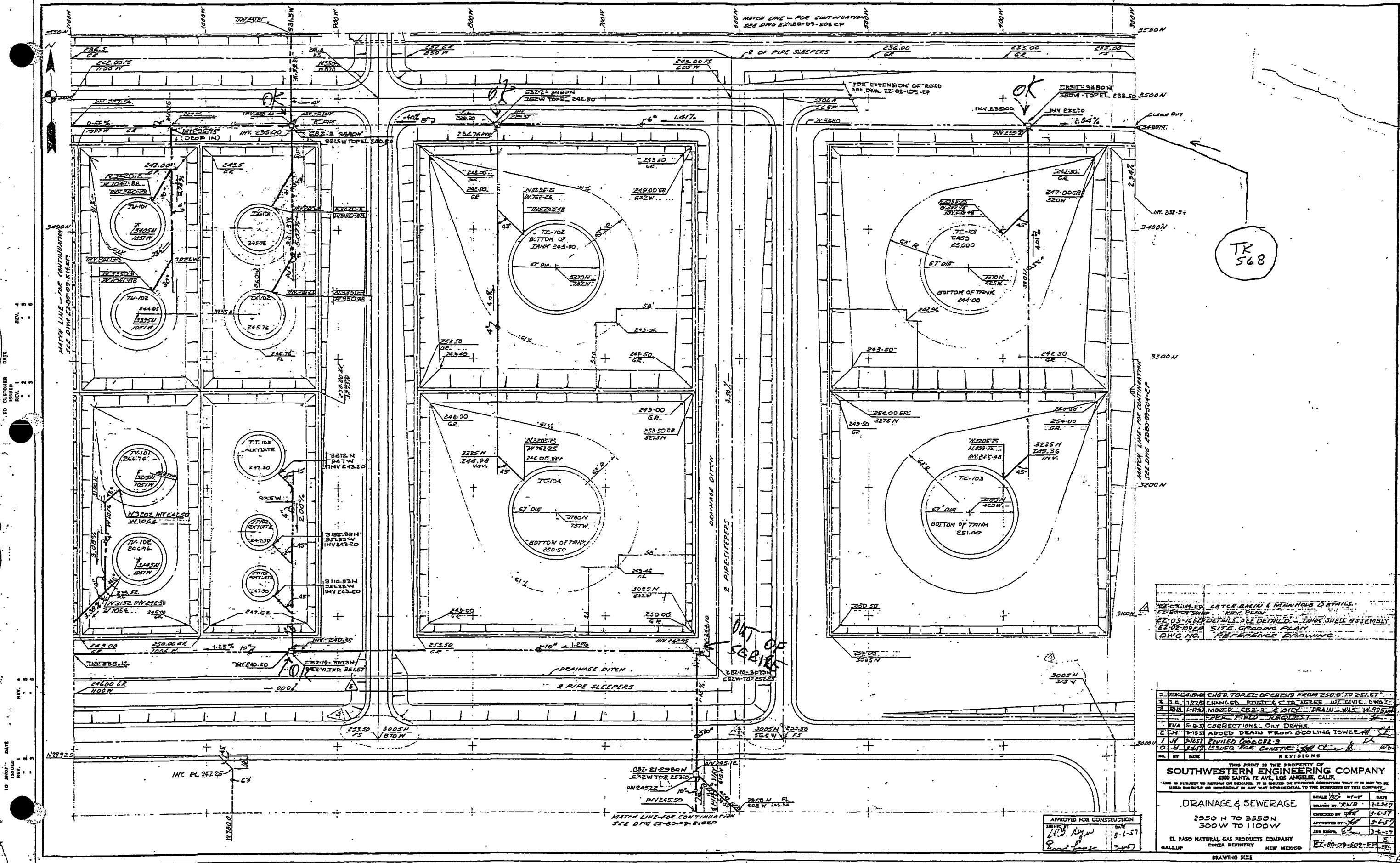
Replace 3, 90° elbows

Replace 90° elbow

APPROVED FOR CONSTRUCTION
SIGNED BY: W. J. W.
DATE: 1-25-57

UNIFORMING PLATFORMING UNIT
CONTROL HOUSE

FOR CRUDE UNIT UNDERGROUND PIPING SEE DWG. EC-01-125



TR
568

SEE DETAIL FOR CATCH BASIN & MANHOLE DETAILS.
SEE DETAIL FOR KEY PLAN.
SEE DETAIL FOR TANK SHELL ASSEMBLY.
SEE DETAIL FOR SITE GRADING PLAN.
DWG NO. REFERENCE DRAWING

NO.	BY	DATE	REVISIONS
1	W.D.	2-25-57	CHANGED TOP OF CB'S FROM 250.0 TO 251.67
2	W.D.	2-25-57	CHANGED ELEVATION OF CB'S TO AGREE WITH CIVIL DWG
3	W.D.	2-25-57	MOVED CB'S & DAILY DRAINAGE WAS 14.955
4	W.D.	2-25-57	ADDED FIELD REQUEST
5	W.D.	2-25-57	CORRECTIONS ONLY DRAINS
6	W.D.	2-25-57	ADDED DRAIN FROM COOLING TOWER
7	W.D.	2-25-57	REVISED CB'S
8	W.D.	2-25-57	ISSUED FOR CONSTRUCTION

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DRAINAGE & SEWERAGE
 2950 N TO 3550 N
 300 W TO 1100 W

EL PASO NATURAL GAS PRODUCTS COMPANY
 CHINA REFINERY NEW MEXICO

SCALE 1/8" = 1'-0"
 DATE 2-25-57
 DRAWN BY W.D.
 CHECKED BY J.W.
 APPROVED BY J.W.
 JOB NO. 2-25-57
 EX-80-09-502-EP

TO SHOW DATE
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

DET.
 CHK.
 57

AREA LIMITS N. 26-50

EQUIPMENT LIST

VEGETS

- P-VI OXYGEN STRIPPER
- P-VI UNFINING STRIPPER RECEIVER
- P-VI PLATFORMING REACTOR #1
- P-VI PLATFORMING REACTOR #2
- P-VI PLATFORMING REACTOR #3
- P-VI PLATFORMING REACTOR PRODUCTS SEPARATOR
- P-VI STABILIZER
- P-VI STABILIZER RECEIVER
- P-VI CHEMICAL & CONDENSATE GAUGING TANK
- P-VI UNFINING REACTOR
- P-VI UNFINING REACTOR PRODUCTS SEPARATOR
- P-VI FLASH DRUM
- P-VI UNFINING WATER INJECTION SUCTION TANK
- P-VI STARTING AIR RECEIVER (IN COMPRESSOR HOUSE)
- P-VI COMPRESSOR COOLING WATER MAKE-UP TANK
- P-VI PLATFORMING UNIT SURGE DRUM
- P-VI STEAM/WATER SEPARATOR
- P-VI SLOW DOWN DRUM

HEATERS

- P-PH1 PLATFORMING CHARGE HEATER
 - P-PH2 UNFINING CHARGE HEATER
- ## HEAT EXCHANGERS
- P-E1 UNFINING STRIPPER FEED EXCHANGER
 - P-E2 UNFINING STRIPPER CONDENSER
 - P-E3 PLATFORMING COLD COMBINED FEED EXCH.
 - P-E4 PLATFORMING HOT COMBINED FEED EXCH.
 - P-E5 PLATFORMING REACTOR PRODUCTS CONDENSER
 - P-E6 PLATFORMING REACTOR PRODUCTS COOLER
 - P-E7 STABILIZER FEED EXCHANGER
 - P-E8 STABILIZER REBOILER
 - P-E9 STABILIZER CONDENSER

- P-E10 STABILIZER BOTTOMS FINAL COOLER
- P-E11 UNFINING NAPHTHA FEED EXCH.
- P-E12 UNFINING GAS PREHEATER
- P-E13 UNFINING REACTOR PRODUCTS CONDENSER
- P-E14 UNFINING REACTOR PRODUCTS COOLER
- P-E15 UNFINING REACTOR PRODUCTS COOLER
- P-E16 RECYCLE GAS COMPRESSOR LUBE OIL COOLER
- P-E17 RECYCLE GAS COMPRESSOR LUBE OIL COOLER
- P-E24A1B STABILIZER FEED & BOTTOMS

COMPRESSORS

- P-CM1B RECYCLE GAS COMPRESSOR

PUMPS

- P-P2 PLATFORMING REACTOR CHARGE PUMP
- P-P1A1B UNFINING STRIPPER REFLUX PUMPS
- P-P1A1B UNFINING STRIPPER REBOILER PUMPS
- P-P1A1B STABILIZER REFLUX PUMPS
- P-P6 CHEMICAL CONDENSATE INJECTION PUMP
- P-P7 UNFINING REACTOR CHARGE PUMP
- P-P8 UNFINING WATER INJECTION PUMP (NOT SHOWN)
- P-P9 STEAM/CONDENSATE P-VI DRAIN
- P-P10

MISCELLANEOUS

- P-VI EXHAUSTER (NOT SHOWN)

REFERENCE DRAWINGS

- P-P 25-101 PLOT PLAN
- E-E 05-106 SUMP DETAILS
- T-T 03-103 TYPICAL PIPING AT DRAIN SUMPS & RECYCLE GAS COMPRESSOR
- B-B 09-131 BILL OF MATERIAL

NOTES

- 1. FUTURE UNFINING EQUIPMENT IS SHOWN
- 2. INVERT ELEVATION FOR ALL "A" DRAIN FUNNELS IN PUMP DRAIN HEADER WILL BE 253'-10"

NO.	BY	DATE	REVISIONS
1	W.H. JENKINS	10-1-57	REVISED DRAIN FUNNEL LOC.
2	W.H. JENKINS	10-1-57	ADDED DRAIN SUMP P-1A1B & P-1A2B
3	W.H. JENKINS	10-1-57	ADDED DRAIN SUMP P-1A1B & P-1A2B
4	W.H. JENKINS	10-1-57	ADDED DRAIN SUMP P-1A1B & P-1A2B
5	W.H. JENKINS	10-1-57	ADDED DRAIN SUMP P-1A1B & P-1A2B
6	W.H. JENKINS	10-1-57	ADDED DRAIN SUMP P-1A1B & P-1A2B
7	W.H. JENKINS	10-1-57	ADDED DRAIN SUMP P-1A1B & P-1A2B
8	W.H. JENKINS	10-1-57	ADDED DRAIN SUMP P-1A1B & P-1A2B
9	W.H. JENKINS	10-1-57	ADDED DRAIN SUMP P-1A1B & P-1A2B
10	W.H. JENKINS	10-1-57	ADDED DRAIN SUMP P-1A1B & P-1A2B

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UNFINING PLATFORMING UNIT	SCALE 1" = 10'	DATE 10-1-57
UNDERGROUND PIPING PLAN	DRAWN BY E.L.S.	CHECKED BY E.L.S.
	APPROVED BY E.L.S.	DATE 10-1-57
		DATE 10-1-57

PROJECT NO. **EP-09-102**

Replace 5ea
90° elbow
and piping

Replace 3
4" 90° elbow
PIPEWAY N. 25-75

Replace
sewer
10"

Replace 3, 90°
elbows

Replace 2ea 4" 90° elbow

Replace 90° elbow

APPROVED FOR CONSTRUCTION
SIGNED BY *W.H. Jenkins* DATE 10-1-57
BY *E. L. S.* DATE 10-1-57

UNFINING PLATFORMING UNIT
CONTROL HOUSE

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	2005											
					JUN			JUL			AUG			SEP		
320	Install 90 ell on inlet & outlet A-6	1	14JUL05	14JUL05												
330	Install 90 ell on inlet & outlet A-5	1	14JUL05	14JUL05												
340	Put crusher fines around pipe -	2	14JUL05	15JUL05												
370	Backfill & compact dirt in	2	15JUL05	18JUL05												
380	Backfill & compact dirt -	2	15JUL05	18JUL05												
420	Install blind flange on inlet to A-5	1	15JUL05	15JUL05												
430	Remove plug from drain hdr at	1	15JUL05	15JUL05												
440	Plug drain hdr at outlet of A-2	1	15JUL05	15JUL05												
390	Install exp joint along trenches	1	18JUL05	18JUL05												
350	Put crusher fines around 4" drain	1	18JUL05	18JUL05												
400	Pour concrete pavement-	1	19JUL05	19JUL05												
550	Cut concrete - A-4 to A-2 sumps	2	20JUL05	21JUL05												
450	Clean out A-4 sump & A-3 sump	1	20JUL05	20JUL05												
560	Cut concrete-6" drain to 4" drain	1	20JUL05	20JUL05												
580	Cut concrete-6" hdr to A-V2	1	20JUL05	20JUL05												
590	Cut concrete-6" drain hdr to A-P6	1	20JUL05	20JUL05												
655	Cut concrete from 6" hdr to A-P14	1	20JUL05	20JUL05												
460	Sandblast A-4 & A-3 sumps	1	21JUL05	21JUL05												
570	Cut concrete-6" drain to oil	1	21JUL05	21JUL05												
610	Excavate from 6" hdr to 4" drain	1	21JUL05	21JUL05												
600	Excavate from A-4 to A-2 sump	2	22JUL05	25JUL05												
490	Build forms for A-4 & A-3 sumps	2	22JUL05	25JUL05												
470	Pour epoxy grout in btm of A-4 &	1	22JUL05	22JUL05												
410	Put sealant on top of exp joint-A6	1	22JUL05	22JUL05												
650	Excavate from 6" hdr to A-P14	1	22JUL05	22JUL05												
620	Excavate from 6" drain to oil	1	25JUL05	25JUL05												
640	Excavate from 6" drain hdr to	1	25JUL05	25JUL05												
480	Cut holes in walls of A-4 & A-3	3	25JUL05	27JUL05												
630	Excavate from 6" header to A-V2	1	25JUL05	25JUL05												
700	Remove blind flange from inlet	1	26JUL05	26JUL05												
500	Set forms in A-4 sump	2	26JUL05	27JUL05												
1170	Put 6" crusher fines in trenches	1	26JUL05	26JUL05												
710	Install 4" drain from hdr to A-P5	1	27JUL05	27JUL05												

Start Date

03JUN05

Finish Date

22AUG05

Data Date

13JUN05

Run Date

15JUN05 15:10

Early Bar

Progress Bar

Critical Activity

Sheet 2 of 4

Date

Revision

Checked

Approved

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Alky Drain System

Preliminary Schedule

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	2005											
					JUN			JUL			AUG			SEP		
510	Set forms in A-3 sump	2	27 JUL 05	28 JUL 05	6	13	20	27	4	11	18	25	1	8	15	22
520	Install inlet & outlet to A-4 sump	1	27 JUL 05	27 JUL 05												
720	Plug outlet of A-4 sump	1	27 JUL 05	27 JUL 05												
660	Install 4" drain from hdr to A-V2	1	28 JUL 05	28 JUL 05												
530	Install inlet & outlet to A-3 sump	1	28 JUL 05	28 JUL 05												
680	Install 4" drain - hdr to sealant	1	28 JUL 05	28 JUL 05												
670	Install 4" drain from hdr to A-P6	1	29 JUL 05	29 JUL 05												
540	Pour epoxy grout in A-4 & A-3	1	29 JUL 05	29 JUL 05												
750	Test drains from sump A4 to	1	01 AUG 05	01 AUG 05												
730	Remove forms from sump A-4	1	01 AUG 05	01 AUG 05												
740	Remove forms from sump A-3	1	01 AUG 05	01 AUG 05												
760	Put crusher fines around 6"	1	02 AUG 05	02 AUG 05												
770	Put crusher fines around 4" drains	1	02 AUG 05	02 AUG 05												
780	Backfill & compact trenches - A-4	1	03 AUG 05	03 AUG 05												
800	Install exp joint along trenches	1	03 AUG 05	03 AUG 05												
810	Pour concrete pavement from A-4	1	04 AUG 05	04 AUG 05												
850	Cut concrete from A-2 & A-1	1	05 AUG 05	05 AUG 05												
860	Cut concrete from sump A-1 to	2	05 AUG 05	08 AUG 05												
790	Install 90 ell on inlet & outlet of	1	05 AUG 05	05 AUG 05												
830	Install blind flange on outlet of A-2	1	05 AUG 05	05 AUG 05												
840	Remove plug from A-2 sump	1	05 AUG 05	05 AUG 05												
890	Clean-out A-2 & A-1 sumps	1	08 AUG 05	08 AUG 05												
820	Put sealant on top of exp joints	1	08 AUG 05	08 AUG 05												
870	Cut concrete from 4" to A-E41	1	08 AUG 05	08 AUG 05												
900	Sandblast A-2 & A-1 sumps	1	09 AUG 05	09 AUG 05												
920	Build forms for A-2 & A-1 sumps	2	09 AUG 05	10 AUG 05												
910	Pour epoxy in btm of A-2 & A-1	1	09 AUG 05	09 AUG 05												
930	Cut holes in walls of A-2 & A-1	1	10 AUG 05	10 AUG 05												
940	Set forms in sump A-2	2	10 AUG 05	11 AUG 05												
960	Excavate from A-2 to A-1 sumps	1	11 AUG 05	11 AUG 05												
970	Excavate from A-1 sump to A-V	2	11 AUG 05	12 AUG 05												
950	Set forms in sump A-1	1	11 AUG 05	11 AUG 05												
980	Excavate from 4" drain to A-E41	1	12 AUG 05	12 AUG 05												

Start Date

03JUN05

Finish Date

22AUG05

Run Date

15JUN05 15:10

Early Bar

Progress Bar

Critical Activity

Sheet 3 of 4

Giant Refining

Alky Drain System

Preliminary Schedule

Date

Revision

Checked

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[illegible]

UNDERGROUND SINGLE LINED TANKS/SUMPS/PITS

<u>Identification</u>	<u>Reference</u>	<u>Date Installed</u>	<u>Drawing Reference</u>	<u>Test Date</u>	<u>Pass/Fail/Repair Information</u>	<u>Test Water Column (Feet)</u>	<u>Test Duration (Minutes)</u>	<u>Signature</u>	<u>Investigation Results</u>
55 Gallon Drum Pit	Tank 704	1985	Z-01-100						
55 Gallon Drum Pit	Tank 701	1985	Z-01-100						
55 Gallon Drum Pit	Tank 714	1985	Z-01-100						
55 Gallon Drum Pit	Tank 702	1985	Z-01-100						
55 Gallon Drum Pit	Tank 705	1985	Z-01-100						
55 Gallon Drum Pit	Tank 706	1985	Z-01-100						
55 Gallon Drum Pit	Tank 707	1985	Z-01-100						
55 Gallon Drum Pit	Tank 709	1985	Z-01-100						
~ 150 Gallon Tank	Tank 709	1985	Z-01-100						
~ 150 Gallon Tank	West Hot Oil Pump	1985	Z-01-100						
~150 Gallon Tank	Truck Fuel Oil Loading Rack	1985	Z-01-100						

NOTE: The above Pits & Tanks are mostly used for water drainage from tanks and are emptied frequently with vacuum truck.

ROADWAY



 PIT TAX LOADING

~ 150 GAL
PIT
↓


55 GAL
DRUM PIT
TK
707

55 GAL
DRUM PIT
706

703

TK
708

~ 150 GAL
PIT
TK
709

55 GAL
DRUM PIT
705

55 GAL
DRUM PIT

702

55 GAL
DRUM PIT

704

55 GAL
DRUM PIT

714

55 GAL
DRUM PIT

701

