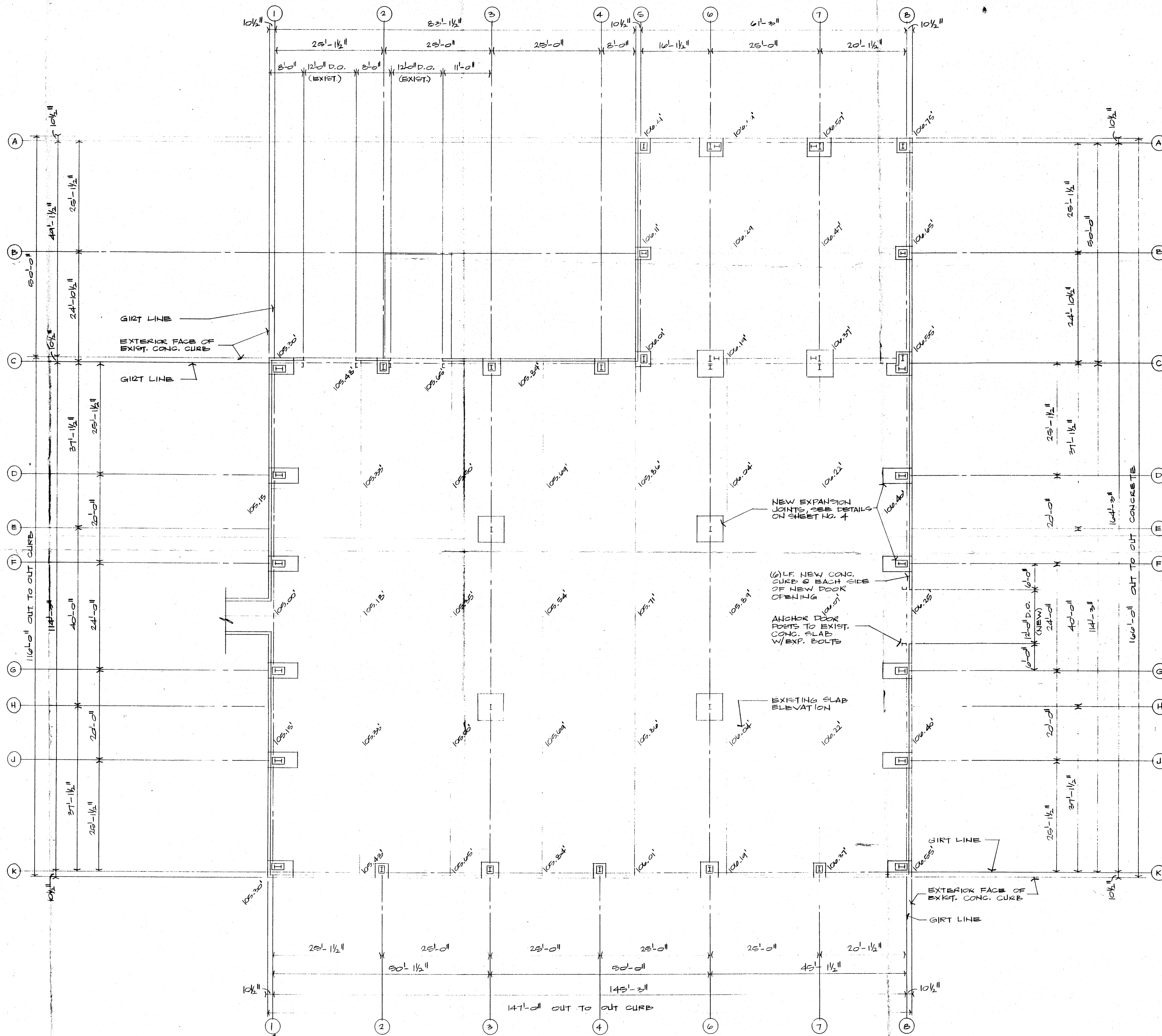




03/24/99



FLOOR PLAN
SCALE 3/32" = 1'-0"

GREGORY CONSTRUCTION CO.
1009 S. HENRY
TROY, MI 48068
313-828-3771

LAURENCE S. GREGORY, P.E., P.C.
313-828-3771

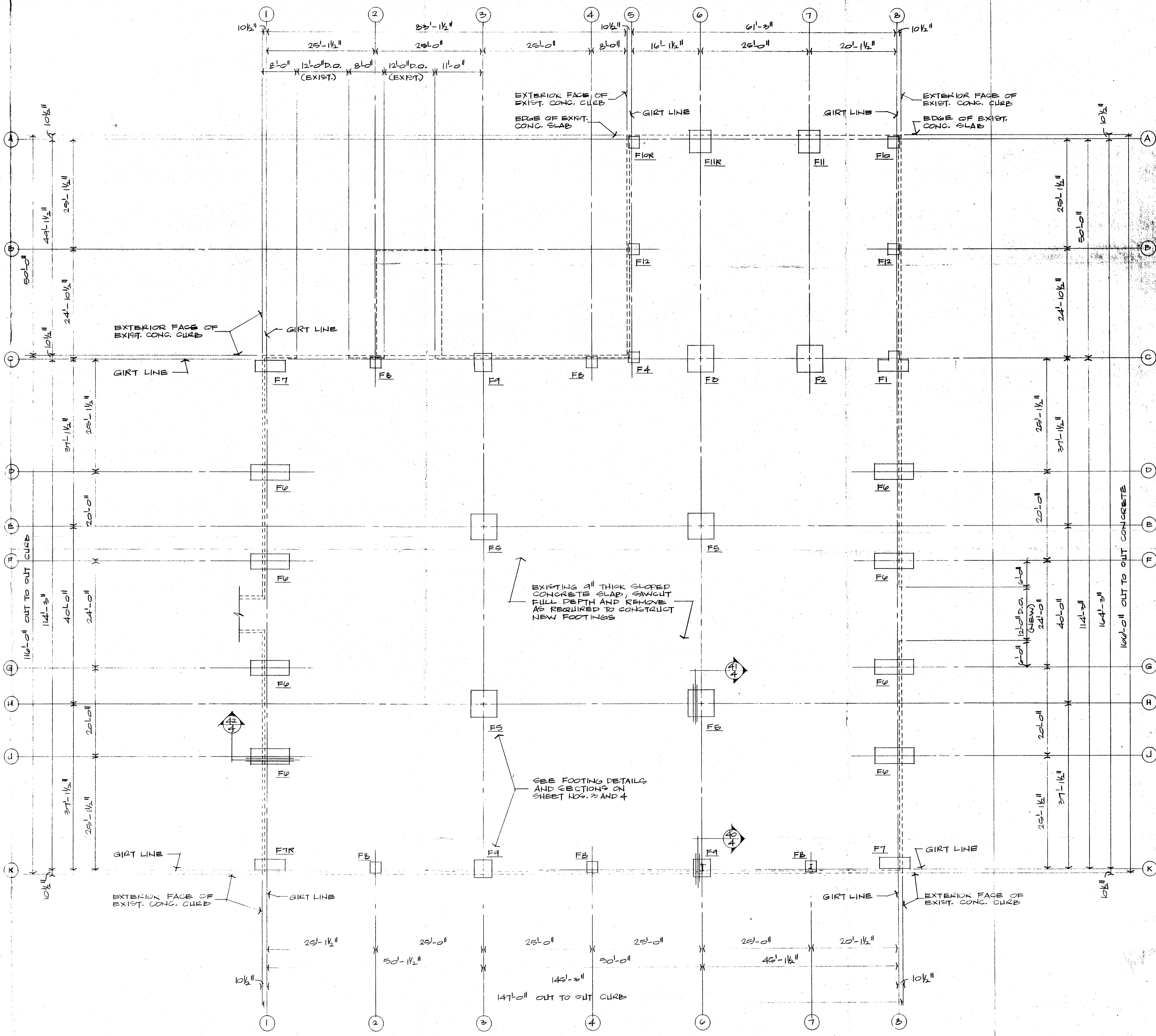
ISSUED FOR:

APPROVAL 12-16-92

DRAWN LSG	DRUM SHELTER CONTAINMENT BUILDING FOR:
DATE 12-15-92	DOW CORNING CORPORATION
CHECKED	BLDG. 809
DATE	MIDLAND PLANT

SHEET NO. **1**

FOOTING SCHEDULE					
TYPE	LOCATION	EXIST. SLAB ELEVATION	TOP OF FTG. ELEVATION	BOTT. OF FTG. ELEVATION	FOOTING THICKNESS
F1	C-8	106.55'	104.50'	101.50'	3'-0"
F2	C-7	106.37'	106.67'	102.67'	4'-0"
F3	C-6	106.16'	106.67'	102.67'	4'-0"
F4	C-5	106.01'	105.00'	102.50'	2'-6"
F5	E-6, H-6	105.96'	106.67'	102.33'	4'-4"
	E-3, H-3	105.53'		102.00'	4'-8"
F6	D-1, J-1	105.17'	104.50'	101.50'	3'-0"
	F-1, G-1	105.06'		101.50'	3'-0"
	D-3, J-3	106.42'		101.50'	3'-0"
	F-5, G-5	106.31'		101.50'	3'-0"
F1	C-1	105.30'	104.50'	101.50'	3'-0"
	K-8	106.55'	104.50'	101.50'	3'-0"
F1R	K-1	105.30'	104.50'	101.50'	3'-0"
F2	C-2, K-2	105.52'	105.00'	102.00'	3'-0"
	K-7	106.37'		102.83'	2'-2"
F4	C-3, K-3	105.73'	105.00'	102.00'	3'-0"
	K-6	106.16'	105.00'	102.67'	2'-4"
F1R	A-8	106.73'	105.00'	103.25'	1'-9"
F1R	A-5	106.21'	105.00'	102.67'	2'-4"
F1L	A-7	106.57'	105.00'	102.83'	2'-2"
F1R	A-6	106.36'	105.00'	102.83'	2'-2"
F1R	B-5	106.11'	105.00'	102.50'	2'-6"
	B-3	106.65'		103.00'	2'-0"



FOUNDATION NOTES

- Foundations are designed to support "Landmark" structural system as manufactured by Butler Manufacturing Co., Kansas City, MO. The system shall be designed to support (30) psf roof snow load, (10) psf collateral load, (80) mph wind speed, Exposure "B", in accordance with Uniform Building Code, 1985 edition. Butler Structural Framing Plans and Erection Drawings shall be signed and sealed by an Engineer licensed in the State of Michigan.
- Foundation design based on allowable soil bearing capacity of 3000 psf.
- All concrete shall have a minimum compressive strength of 3000 psi at (28) days.
- All concrete reinforcing steel shall be Grade 60.
- All anchor bolts shall meet ASTM A307. Provide leveling nuts and washers for erection of fixed base endwall columns. Place high strength non-shrink grout between endwall column base plate and top of footing.

FOUNDATION PLAN
SCALE 3/32" = 1'-0"

GREGORY CONSTRUCTION CO.
 1009 S. HENRY
 BAY CITY, MICHIGAN 48706
 517-892-4551

LAWRENCE S. GREGORY, P.E.
 2228 CHURCH DR.
 BAY CITY, MI 48706
 517-892-3771

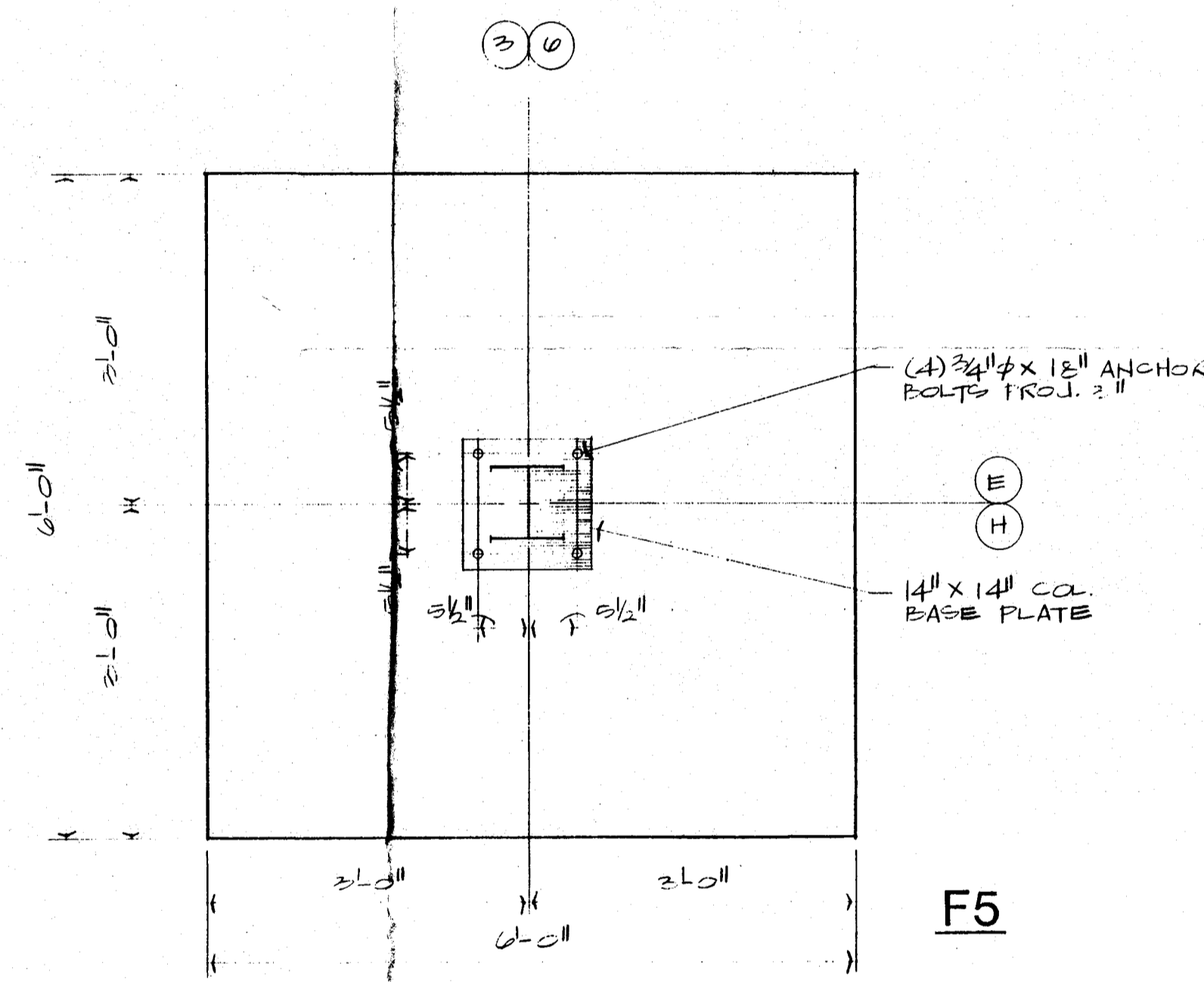
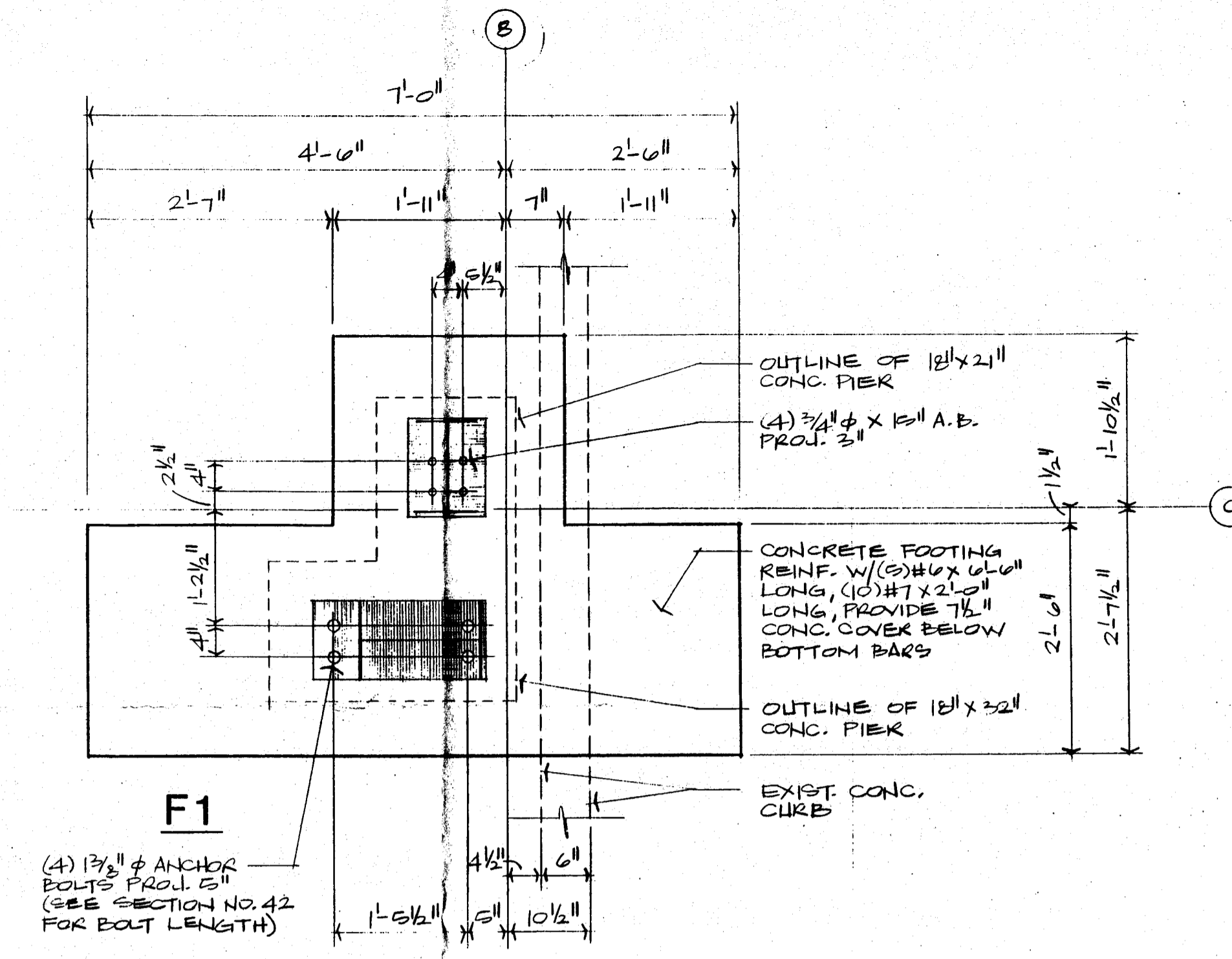
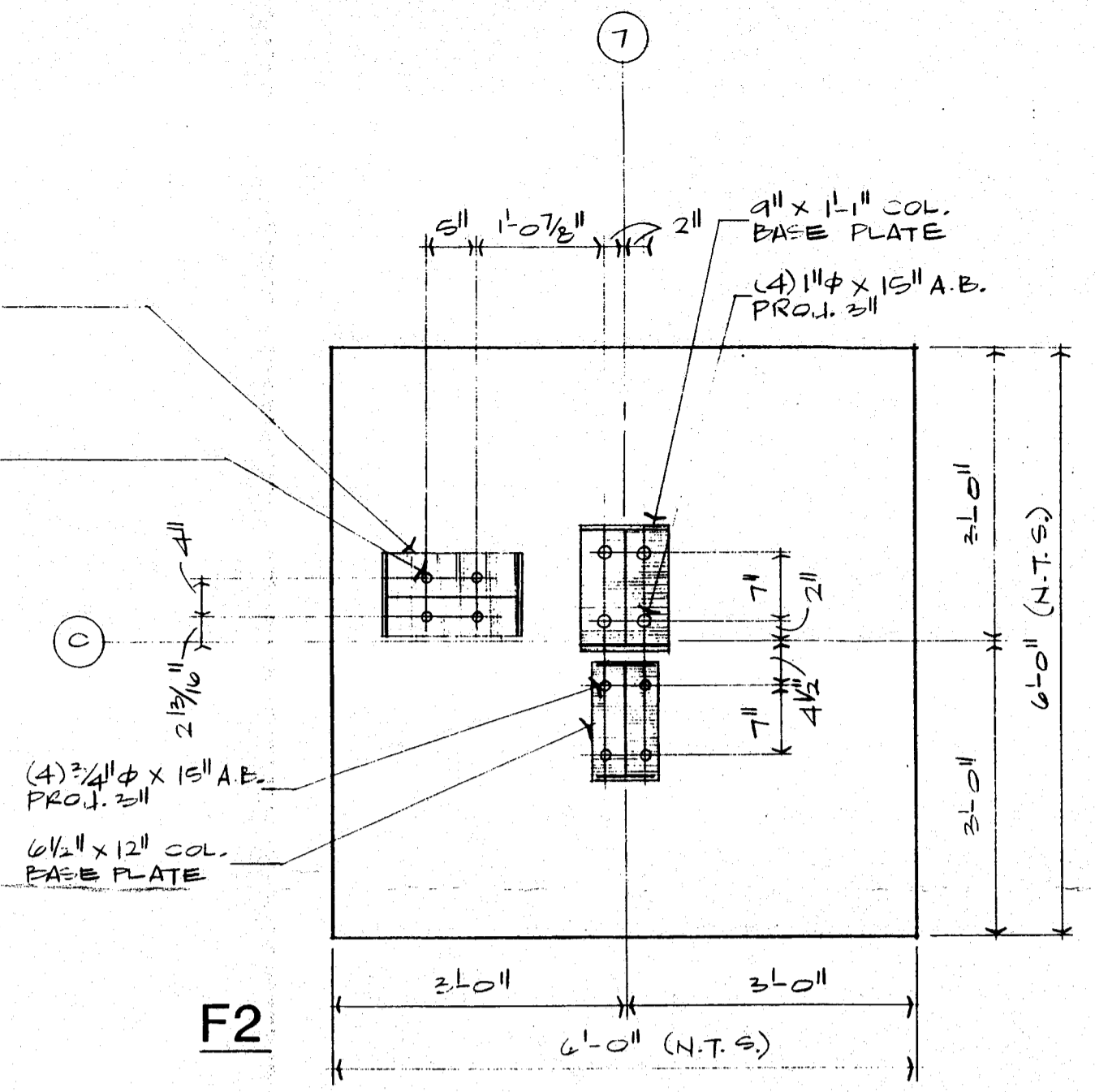
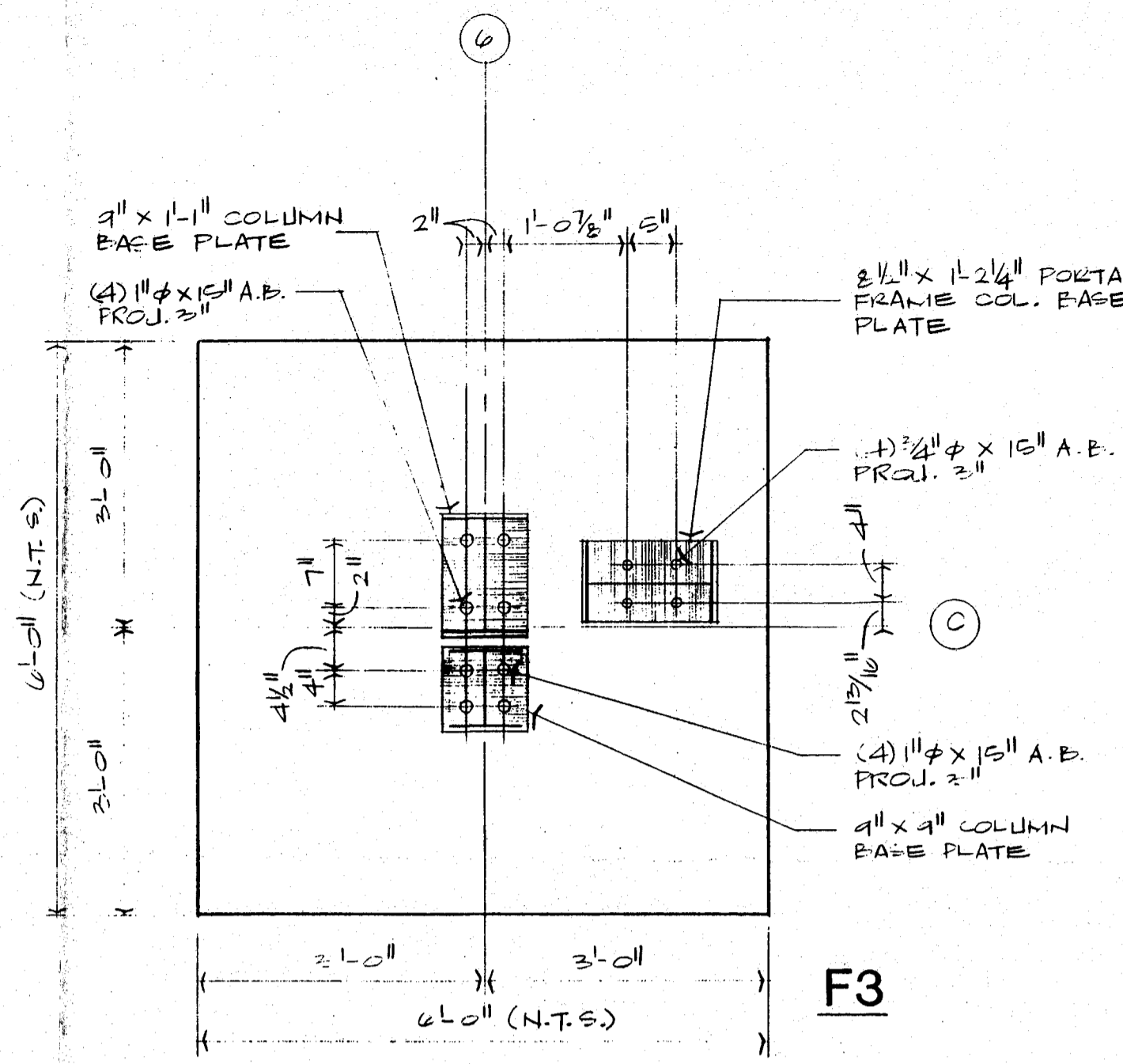
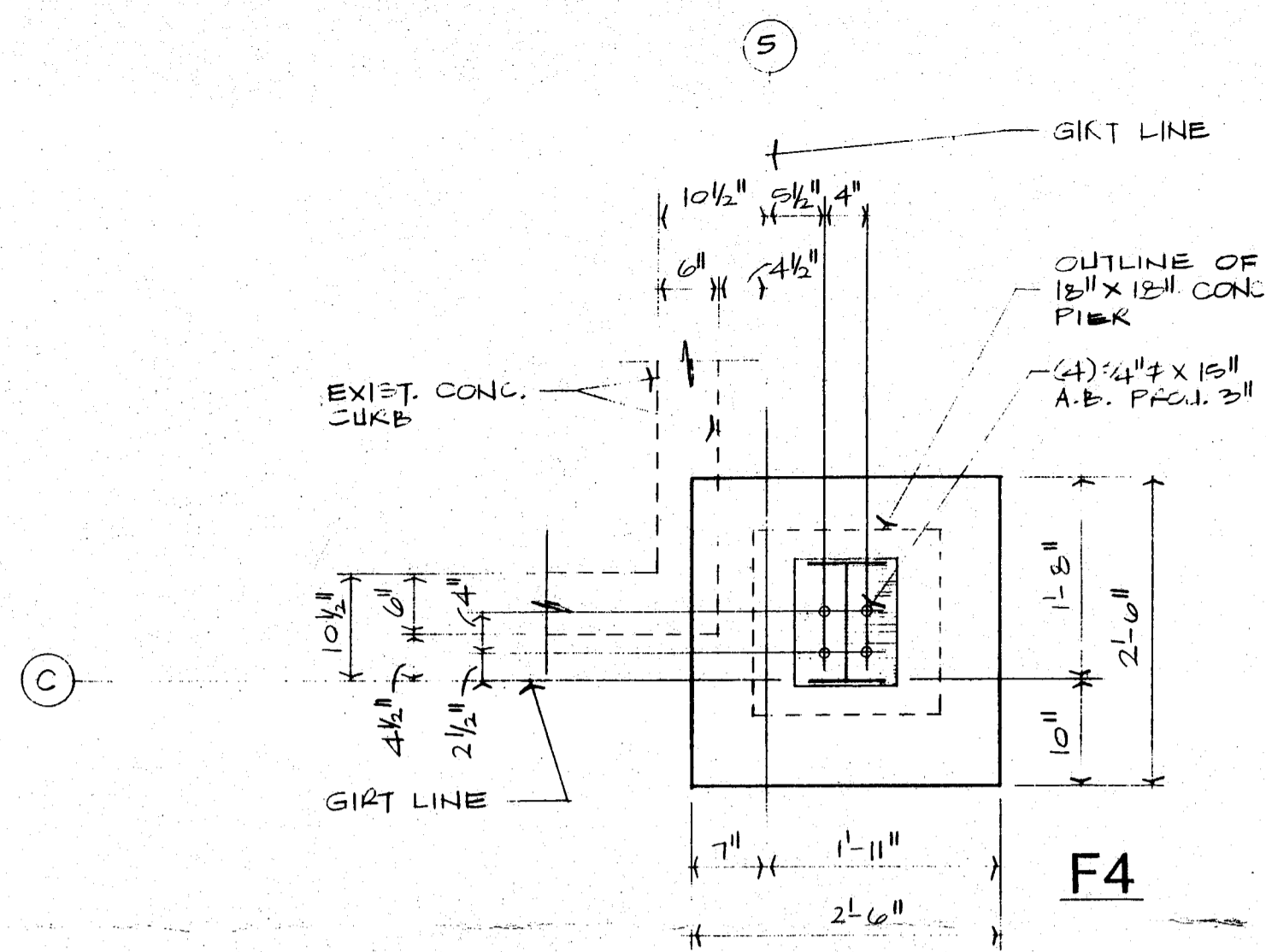
ISSUED FOR:
 APPROVAL 12-15-92

DRAWN LSG
 DATE 12-15-92
 CHECKED
 DATE

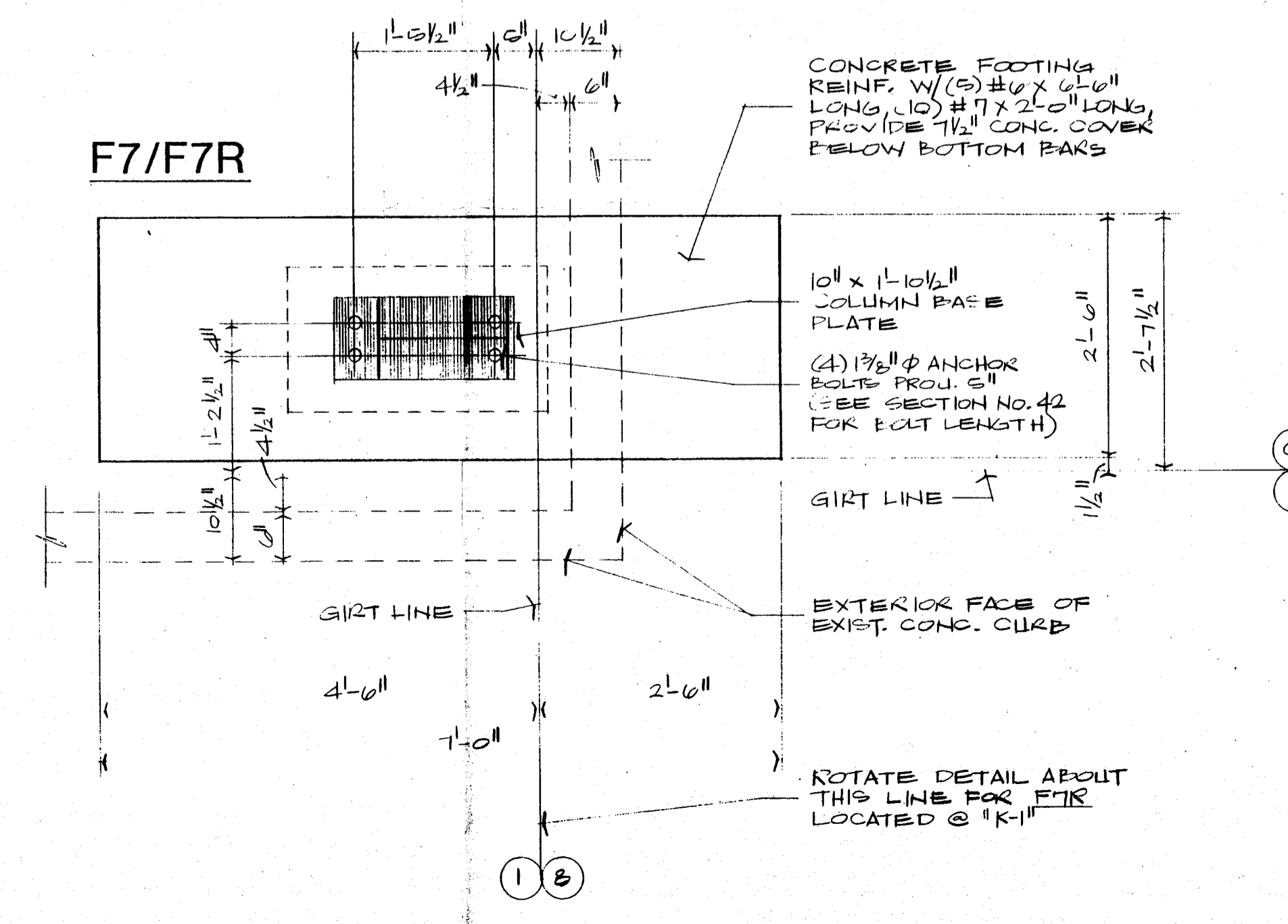
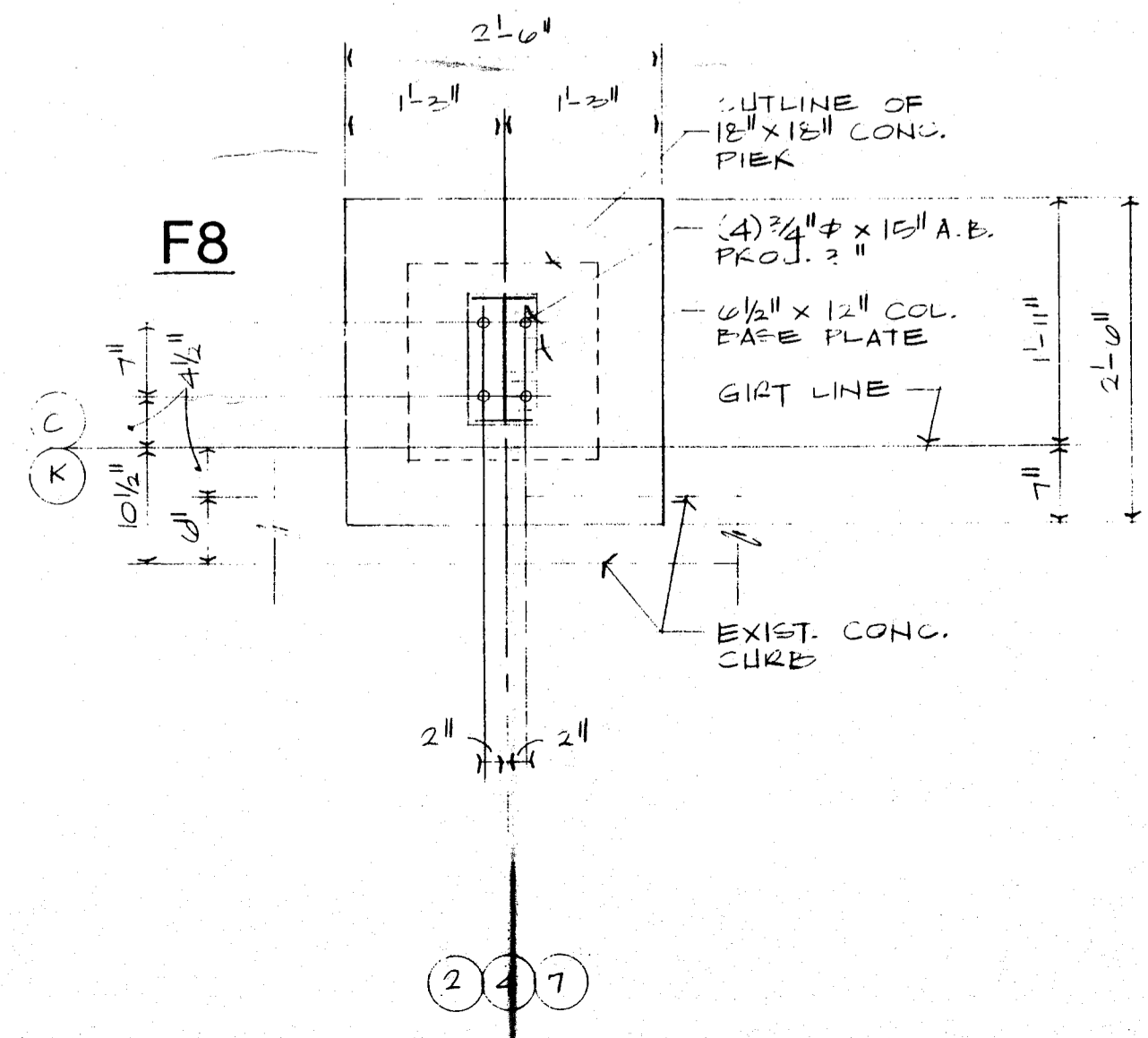
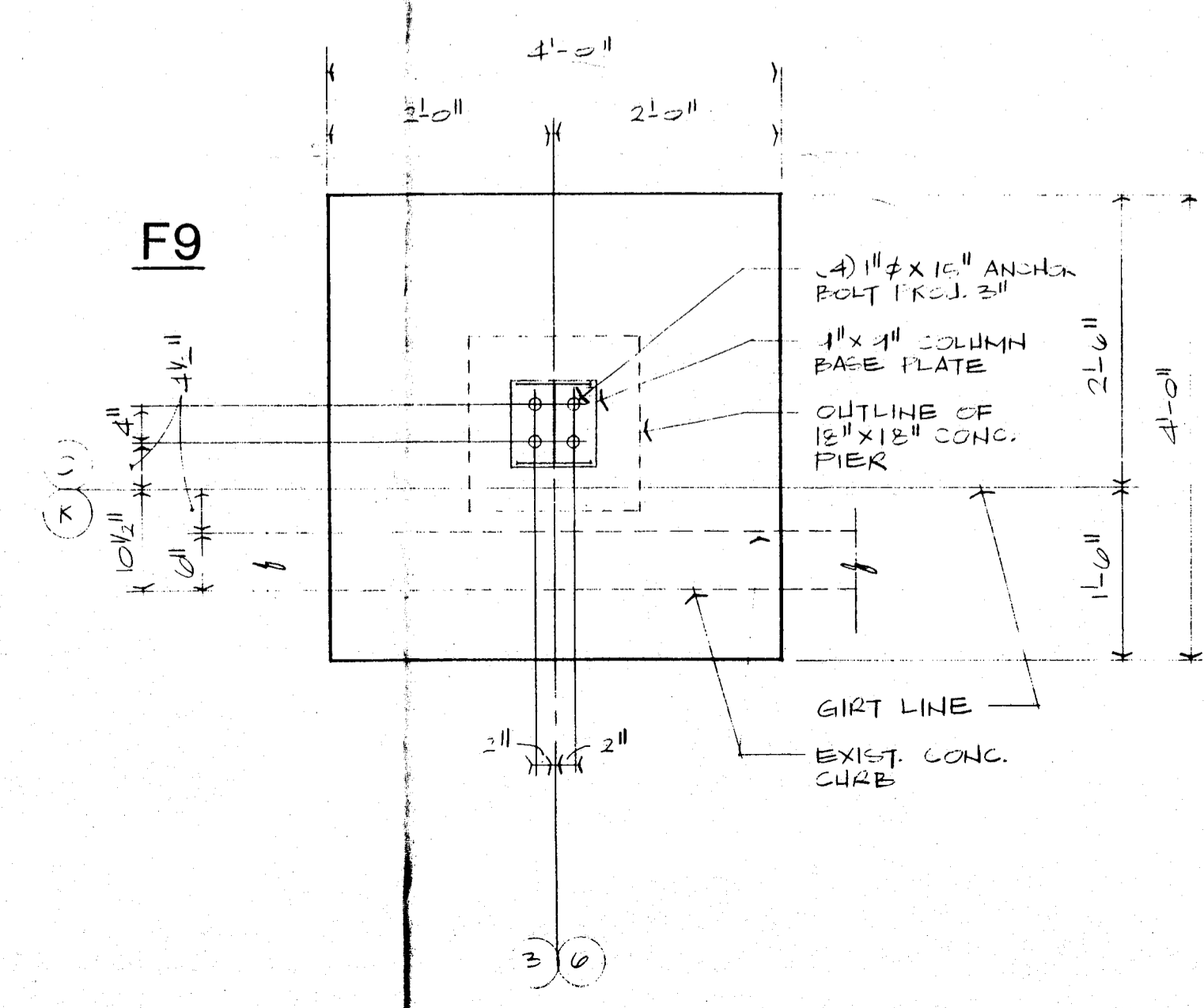
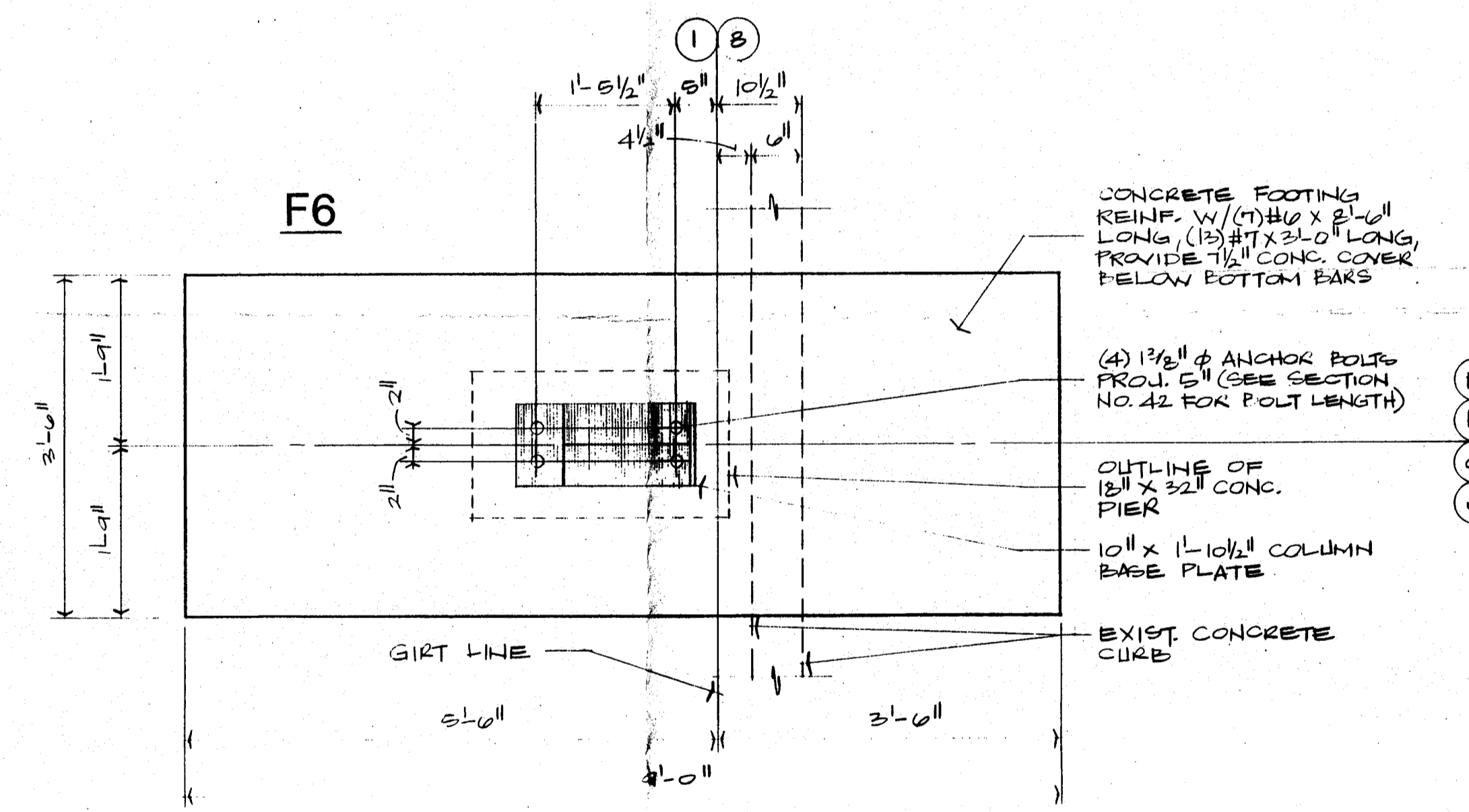
DRUM SHELTER CONTAINMENT BUILDING FOR:
DOW CORNING CORPORATION
 BLDG. 809
 MIDLAND PLANT

SHEET NO
2

03/24/99



FOOTING DETAILS
SCALE 3/4" = 1'-0"



ISSUED FOR:

APPROVAL 12-16-92

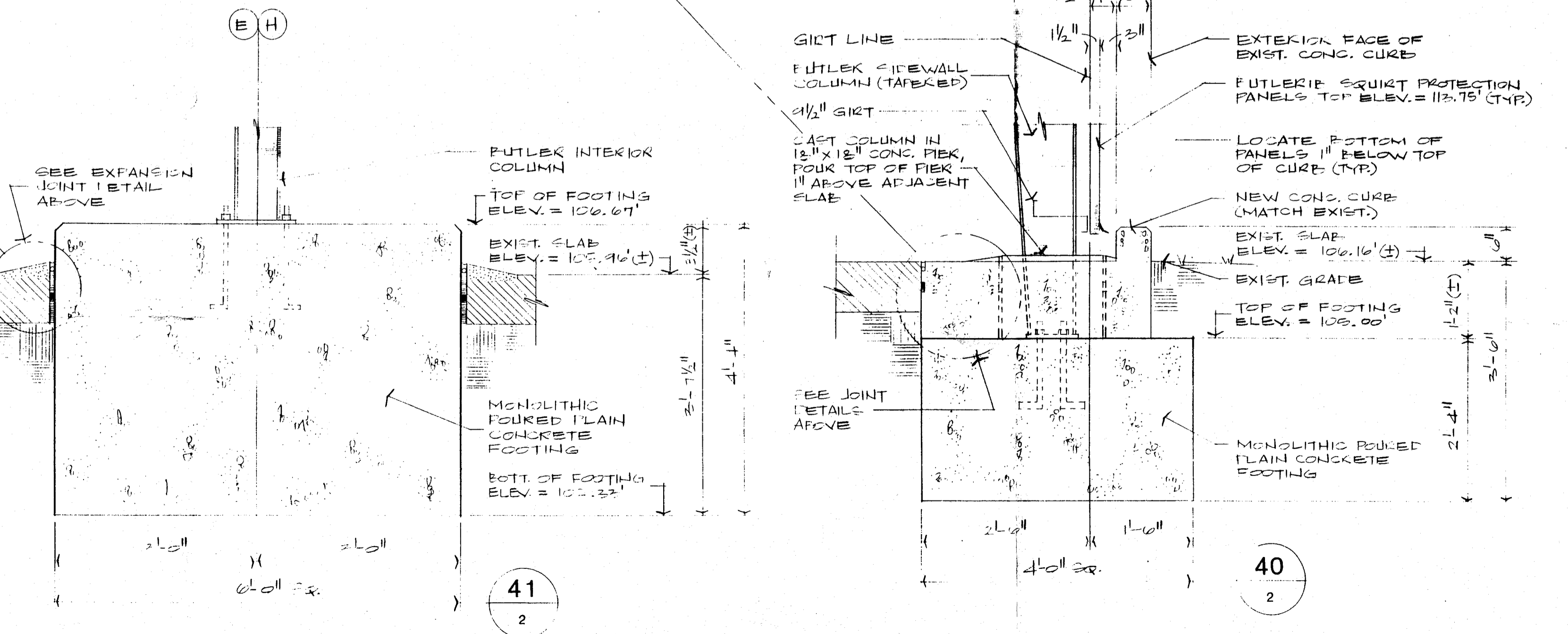
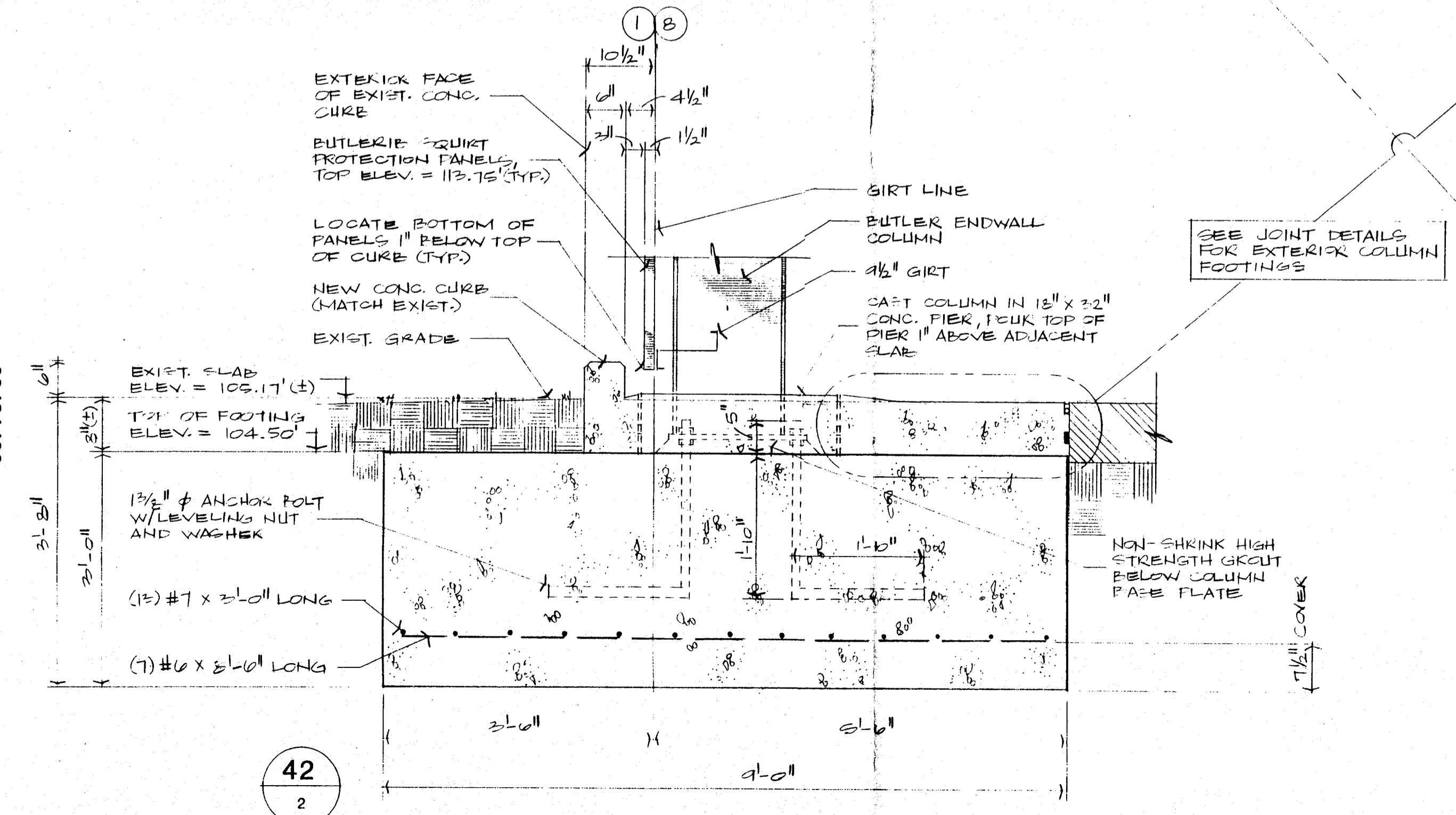
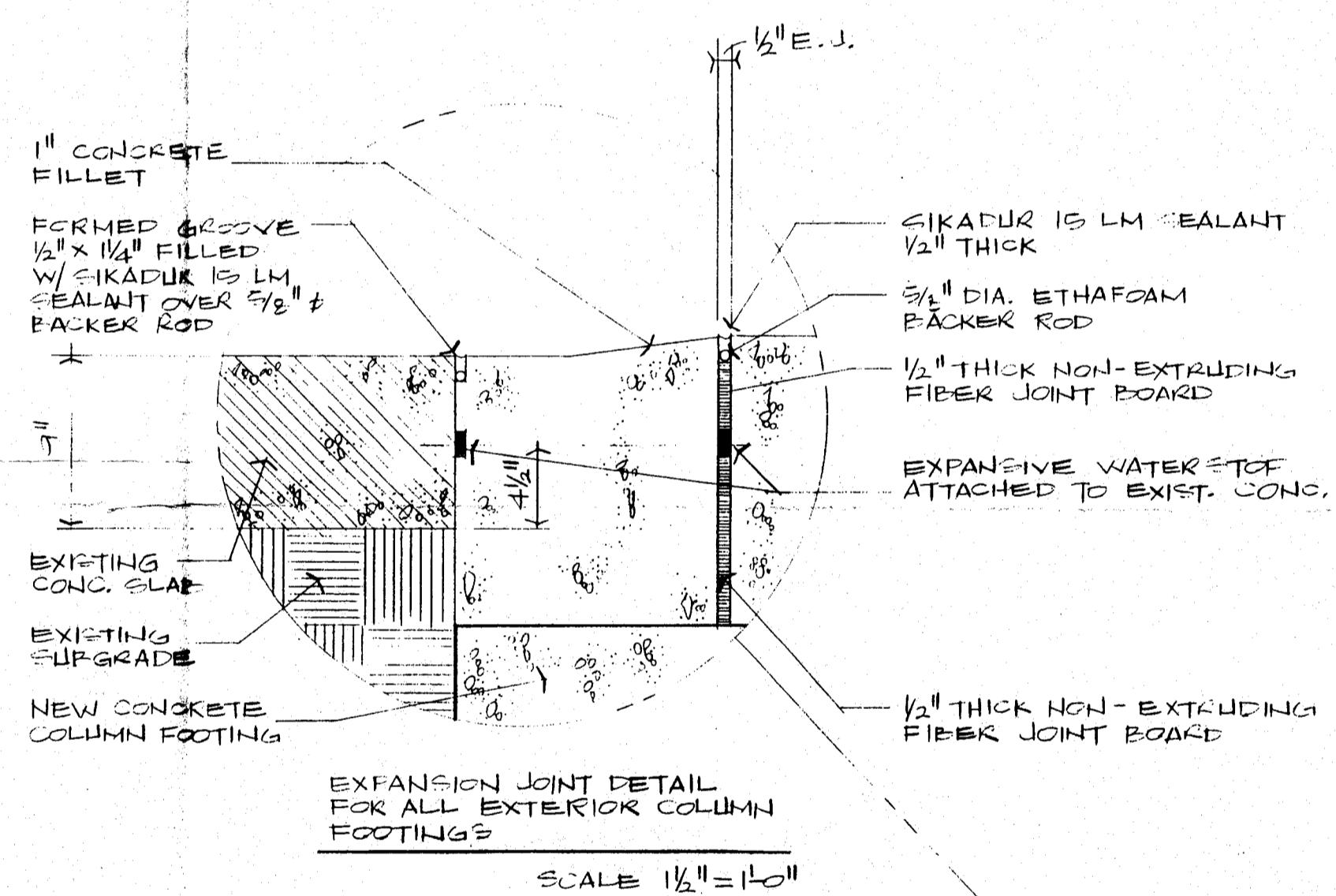
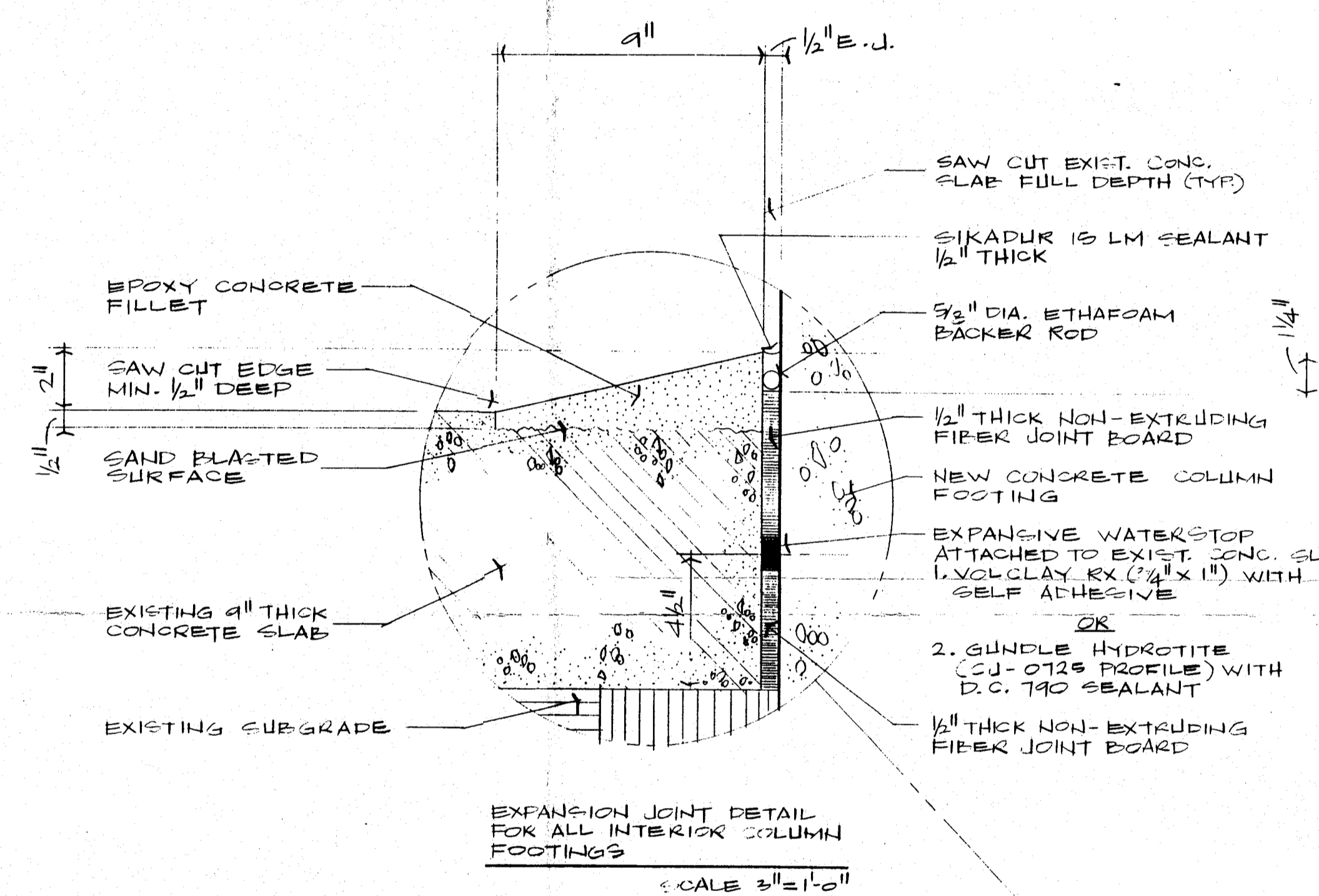
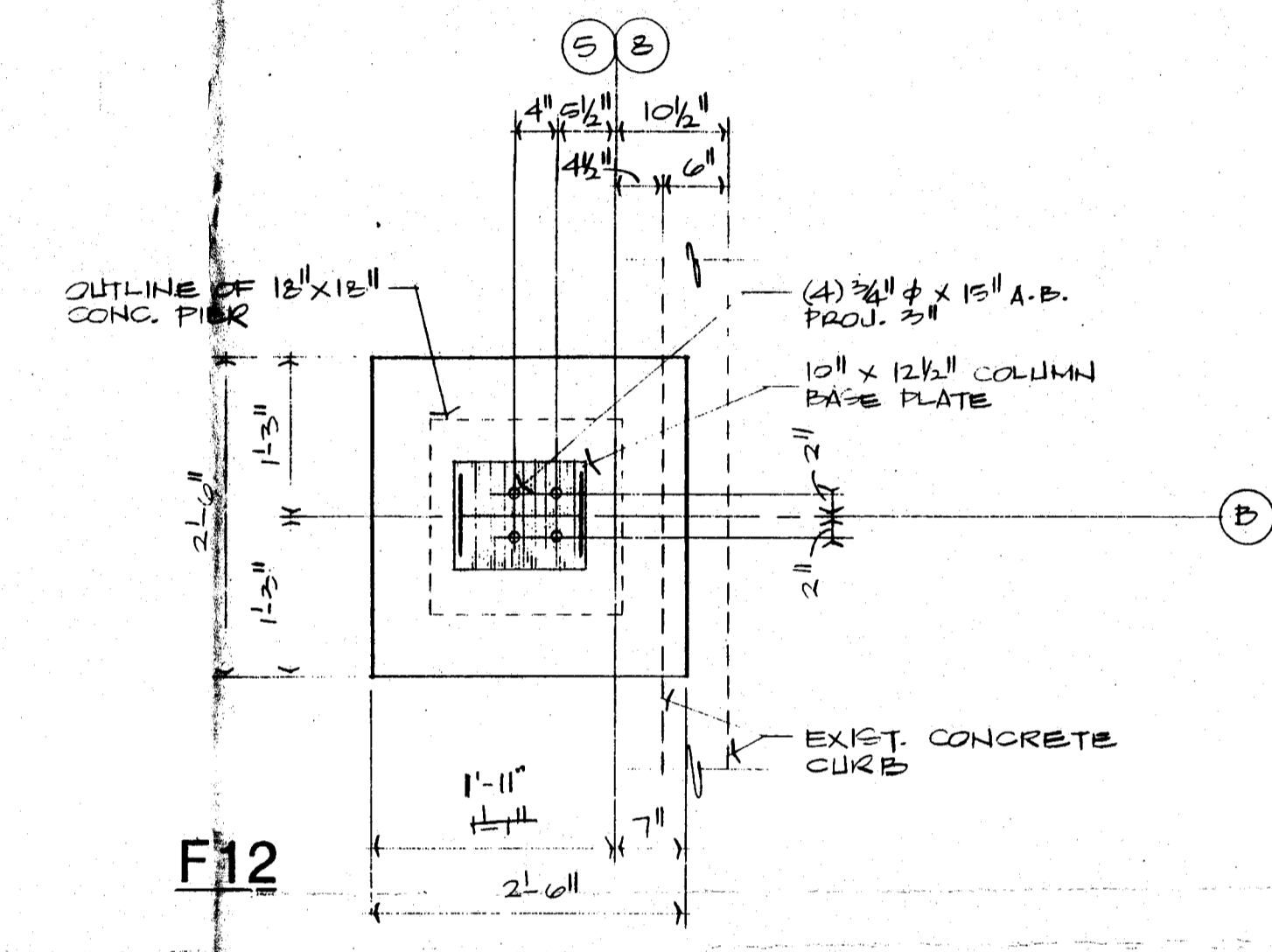
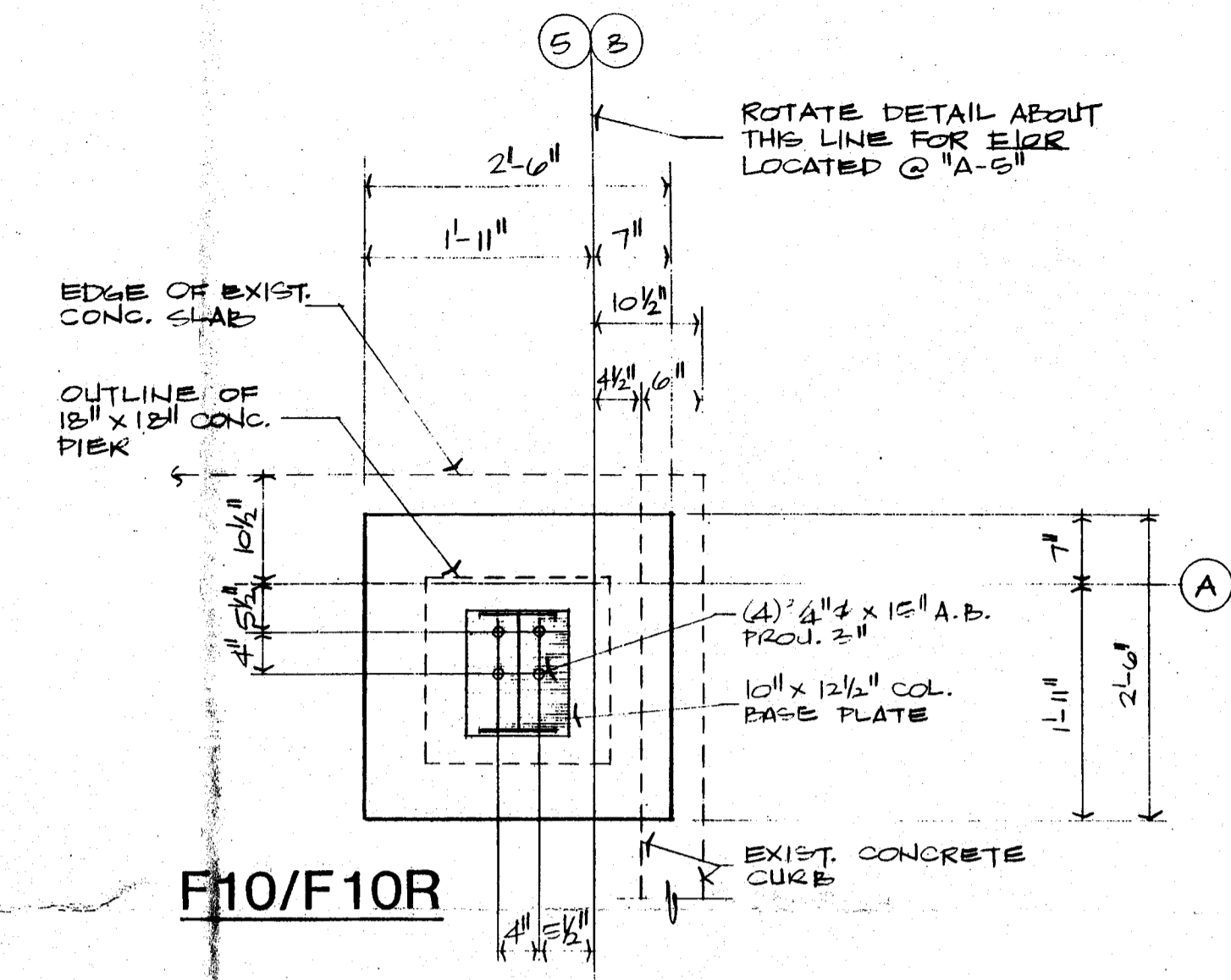
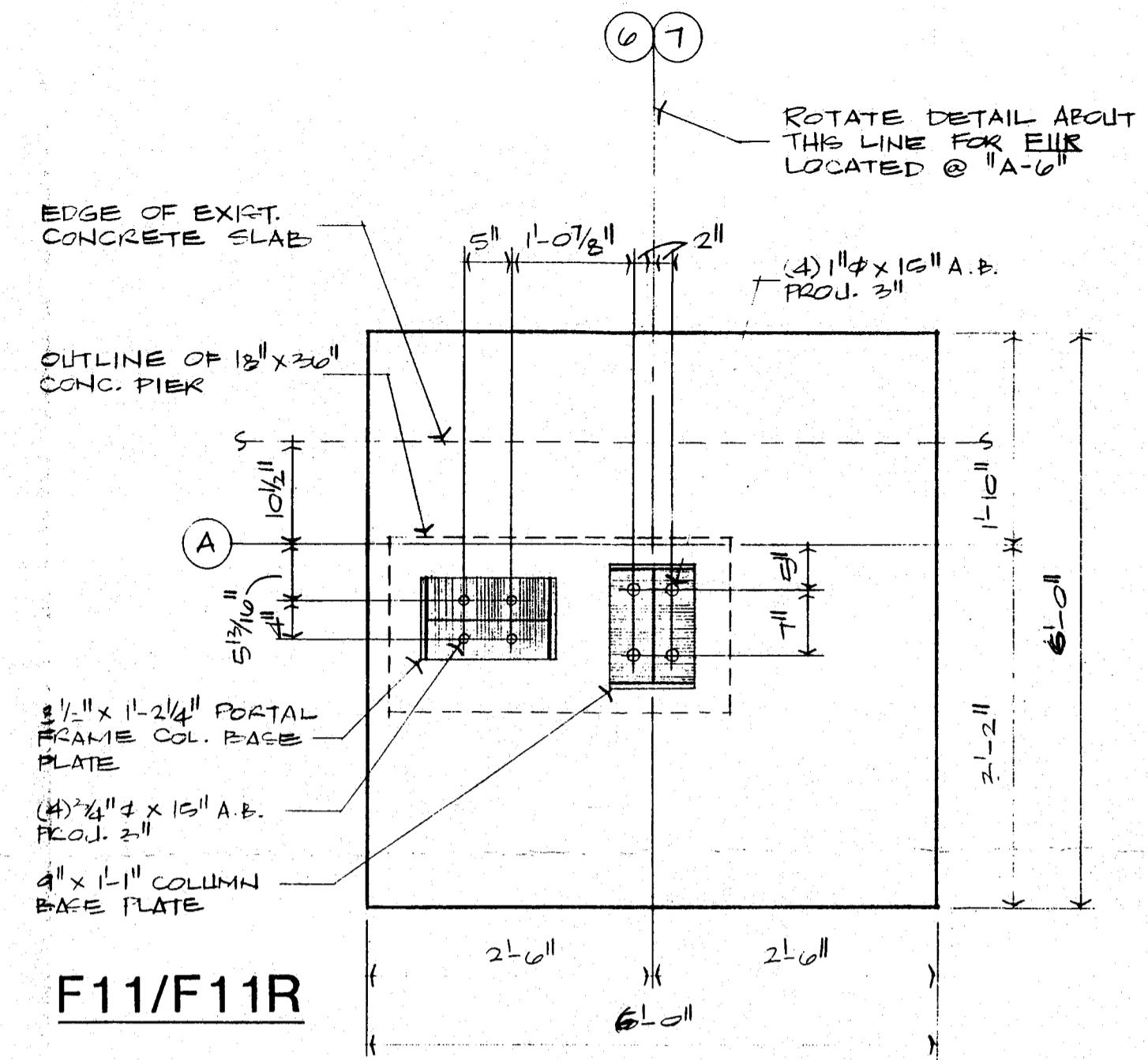
DRAWN LSG
DATE 12-15-92
CHECKED
SHEET NO.

DRUM SHELTER CONTAINMENT BUILDING FOR:
DOW CORNING CORPORATION
BLDG. 809
MIDLAND PLANT

3

GREGORY CONSTRUCTION CO.
1009 S. HENRY
BAY CITY, MICHIGAN 48706

LAURENCE S. GREGORY, P.E., P.C.
3705 N. HENRY, MI 48808
313-828-3771



FOOTING DETAILS AND SECTIONS
 SCALE 3/4" = 1'-0"

03/24/99

BOLT CHART				
	QTY.	DESCRIPTION	BOLT	NUT
(A)	4	3/4" X 2 1/2" A325T	097284	095235
(B)	6	3/4" X 2 1/2" A325T	097284	095235
(C)	8	3/4" X 2 1/2" A325T	097284	095235
(D)	12	3/4" X 2 1/2" A325T	097284	095235
(E)	8	7/8" X 2 1/4" A325T	097285	095237
(F)	12	1" X 3" A325T	097287	095238

NOTE:
ALL BOLTS ARE HIGH STRENGTH (A325-T) HEX HEAD WITH HEAVY HEX NUTS AND ARE TO BE INSTALLED USING THE "TURN-OF-THE-NUT TIGHTENING" METHOD SPECIFIED IN THE AISC MANUAL.

WX FLANGE BRACES			
	CODE	DETAIL	"Y" DIM
(1)	005673	C003	1'-10 1/2"
(2)	005650	C004	2'-4 1/2"
(3)	005727	C003	3'-4 1/2"
(4)	005654	C004	2'-10 1/2"
(5)	005742	C003	2'-4 1/2"

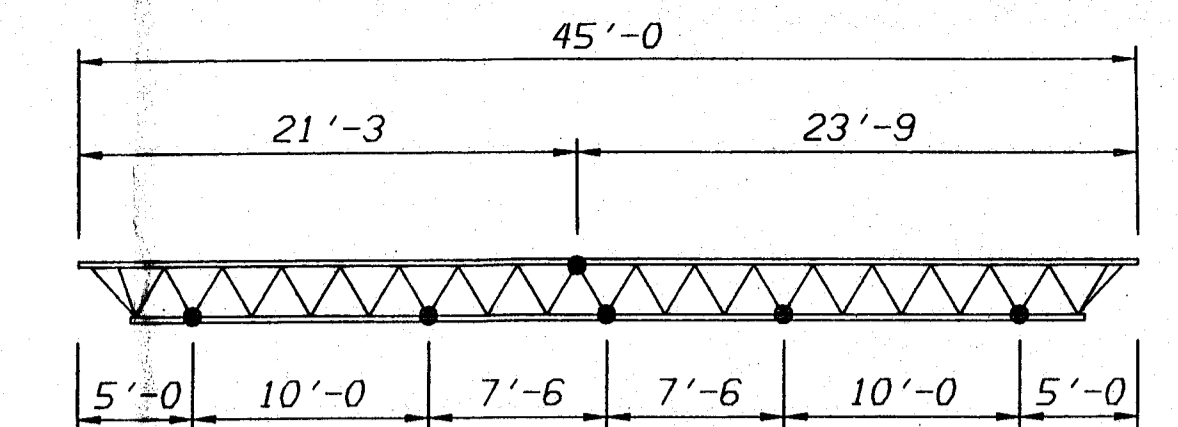
LM FLANGE BRACE			
	CODE	DETAIL	LENGTH
(6)	700098-31-2	FB01	2'-7 1/4"

PURLIN BRACES FOR WX

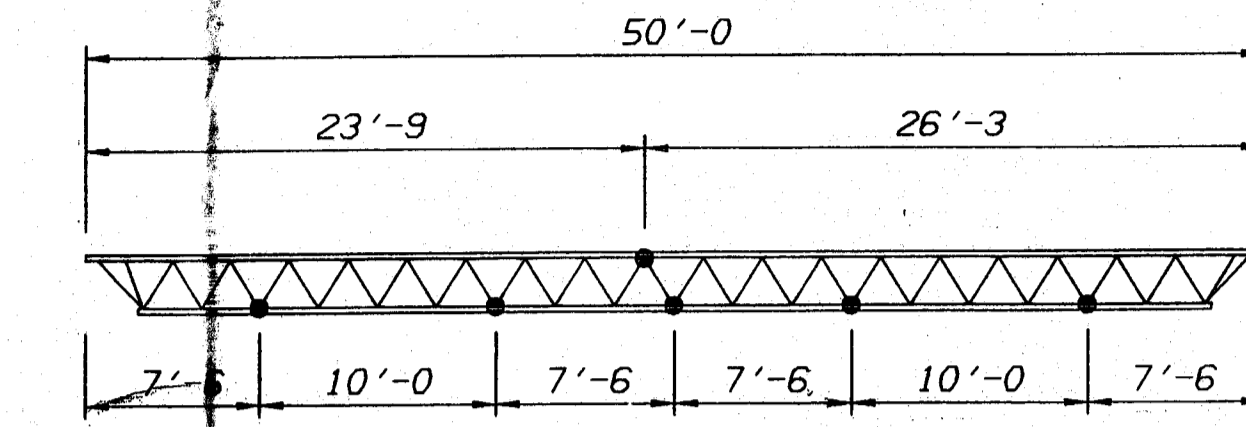
(2) ROWS TOP
 544067 3'-11 SPACES
 544167 5'-0 SPACES
 544047-16 1'-1 SPACE FIELD
 WORK TO EAVE MEMBER OF LANDMARK
 SEE PLANO DRAWINGS 107988 & 1080028

PURLIN BRACES FOR LANDMARK

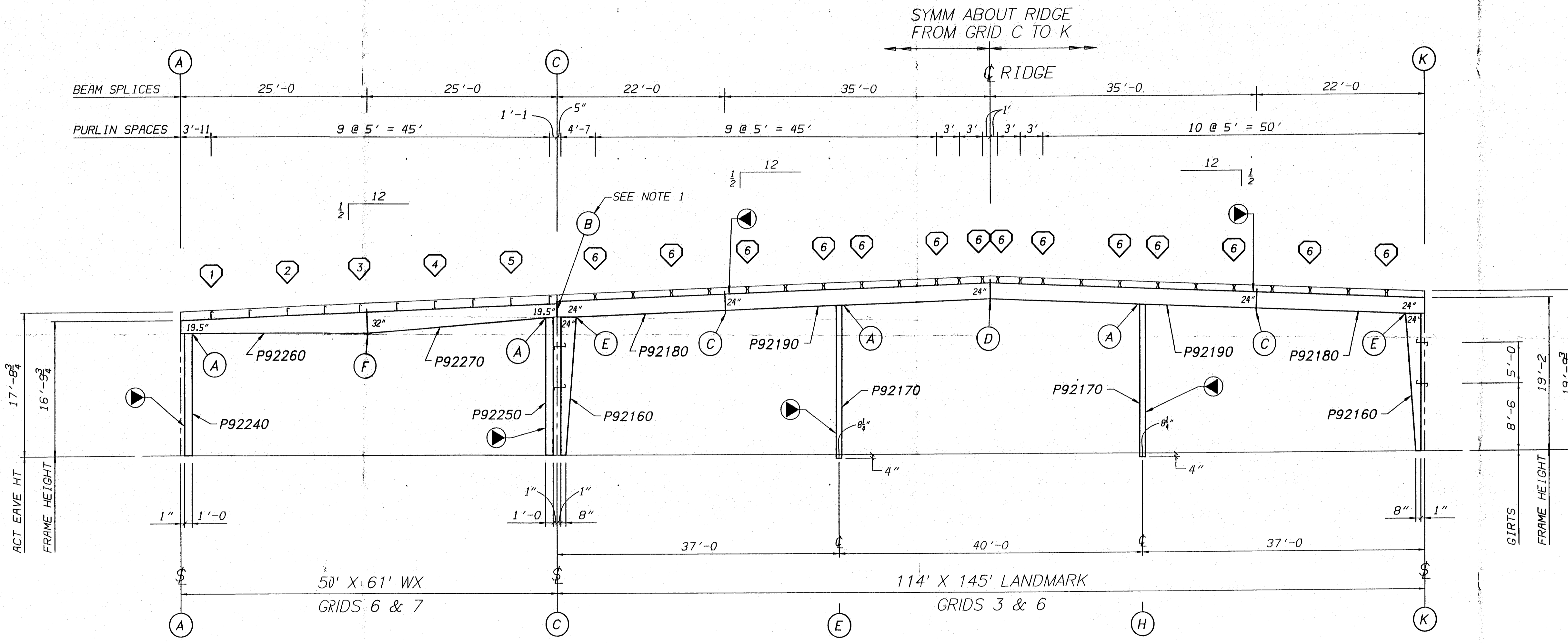
EAVE LOCATIONS
 544003 TOP (W/O PURLIN AT EAVE)
 544040 TOP (WITH PURLIN AT EAVE)
 544097 & 544098 DIAGONAL
 5' SPACES
 544083-40-1 TOP AND BOTTOM
 3' SPACES
 544083-40-1 TOP AND BOTTOM
 AT RIDGE
 544000 TOP
 544001 BOTTOM
 SEE PLANO DRAWING 105817 FOR CONNECTIONS
 SEE DIAGRAMS THIS SHEET FOR LOCATIONS



PURLIN BRACE LOCATION FOR 45' TRUSS PURLIN



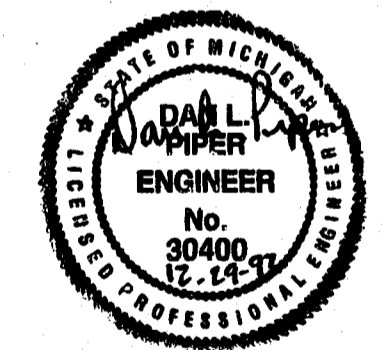
PURLIN BRACE LOCATION FOR 50' TRUSS PURLIN



CROSS SECTION

GENERAL NOTES:

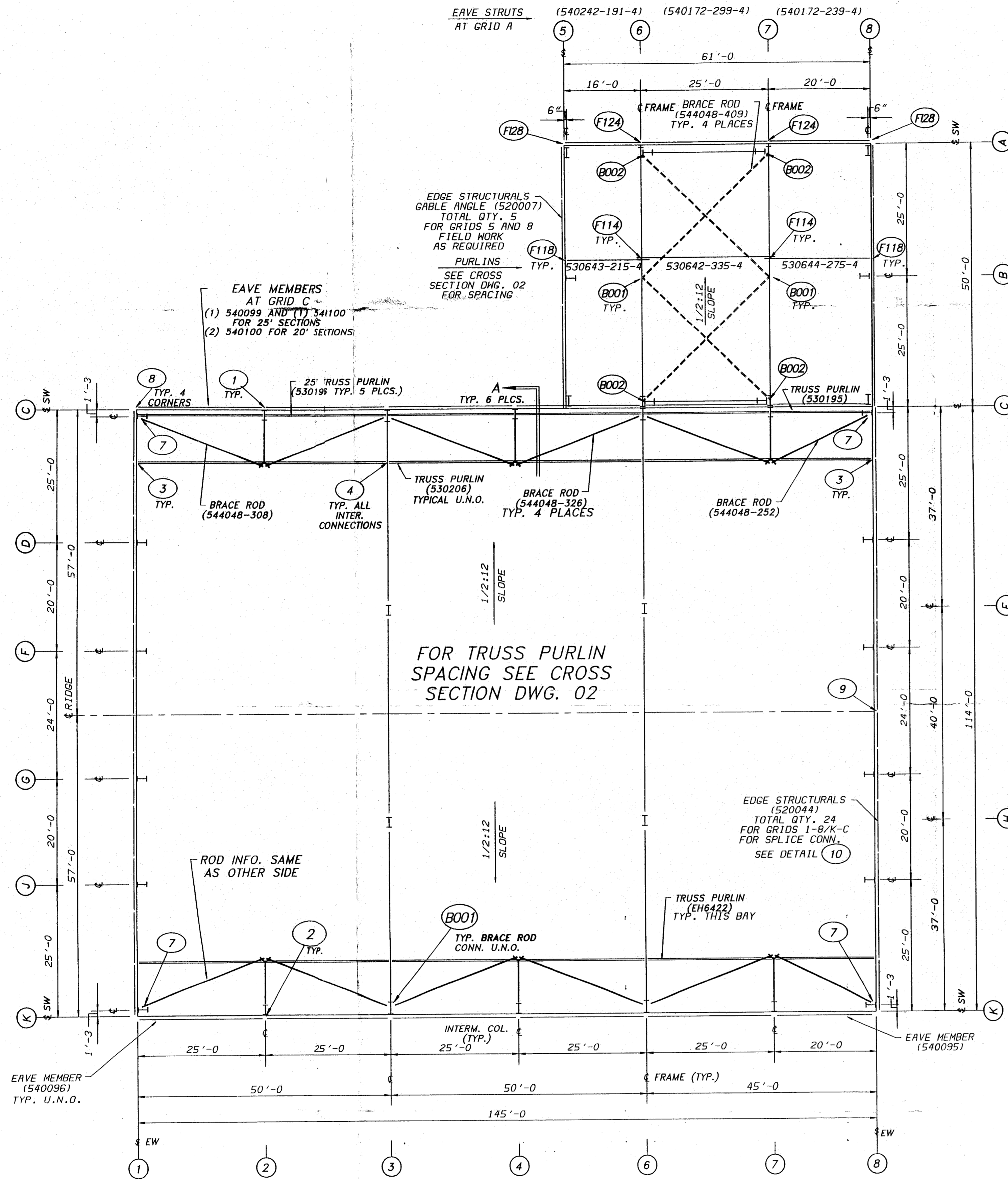
- BOLT CODE B IS THE CONNECTION OF THE WX BEAM TO THE EAVE BEAM OF THE LANDMARK. AT GRID 7 CONNECT TO INTERMEDIATE SIDEWALL COLUMN AND USE (2) ET2005 SHIM PLATES.
- INDICATES DIRECTION MARK. LOCATE AS SHOWN.
- SEE SHEET -05C FOR DETAILS.



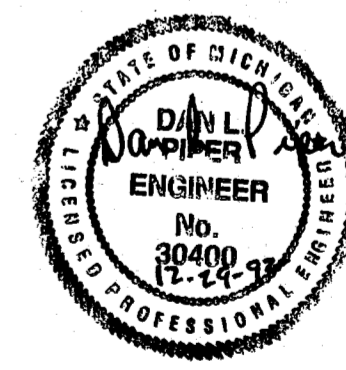
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DATE:		DATE:		DATE:		DATE:			GREGORY CONSTRUCTION	DOW CORNING	114 X 145 X 20 LMDS 50 X 61 X 20 WX 1/2:12 UBC-85 EXP B 40 SL 80 MPH 10 COLL	CROSS SECTION		004127402
DRAWN BY:		DRAWN BY:		DRAWN BY:		DRAWN BY:			BAY CITY, MICHIGAN	MIDLAND, MICHIGAN			CHECKED BY: HURD	DATE: 12-15-92
CHECKED BY:		CHECKED BY:		CHECKED BY:		CHECKED BY:							DRAWING NUMBER:	REV.
												D 92-041274-02	00	

66/12/21/92 BIEKER DRAWING.DISK: (DRAWINGS.CUSTOM) 004127402.DG

FRONT ENDWALL



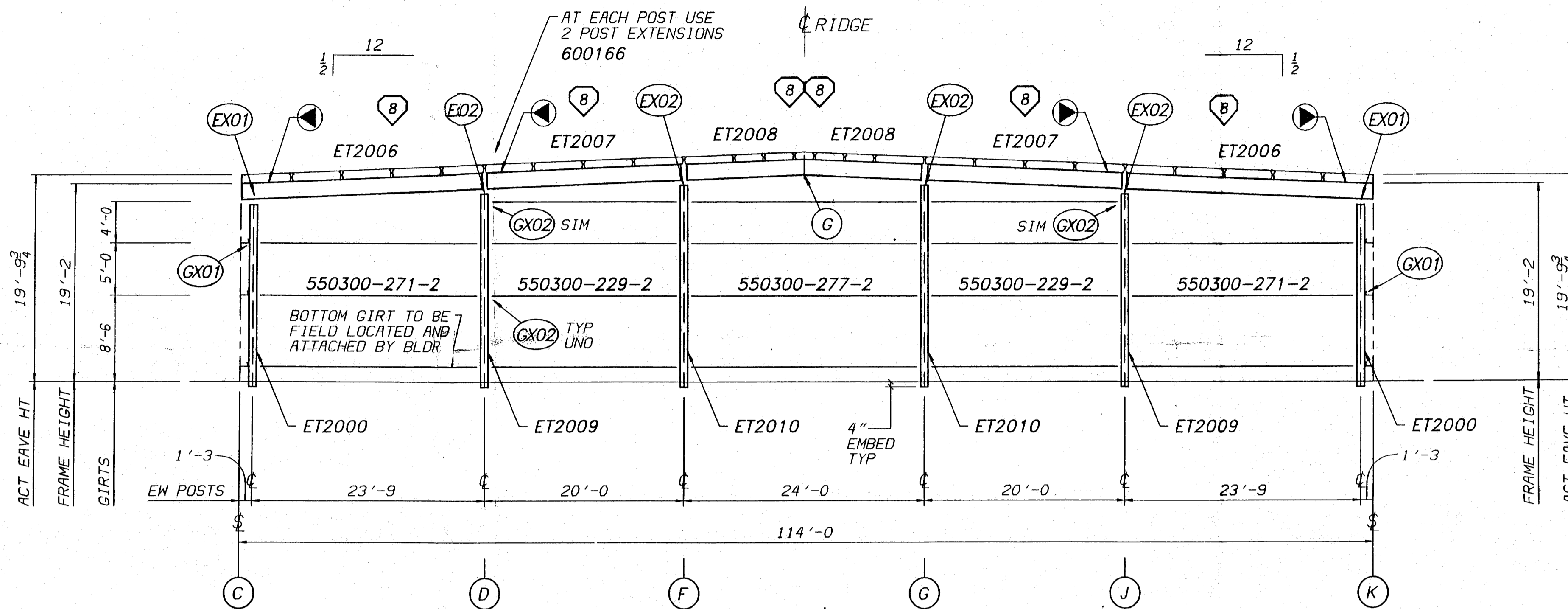
ROOF STRUCTURAL LAYOUT



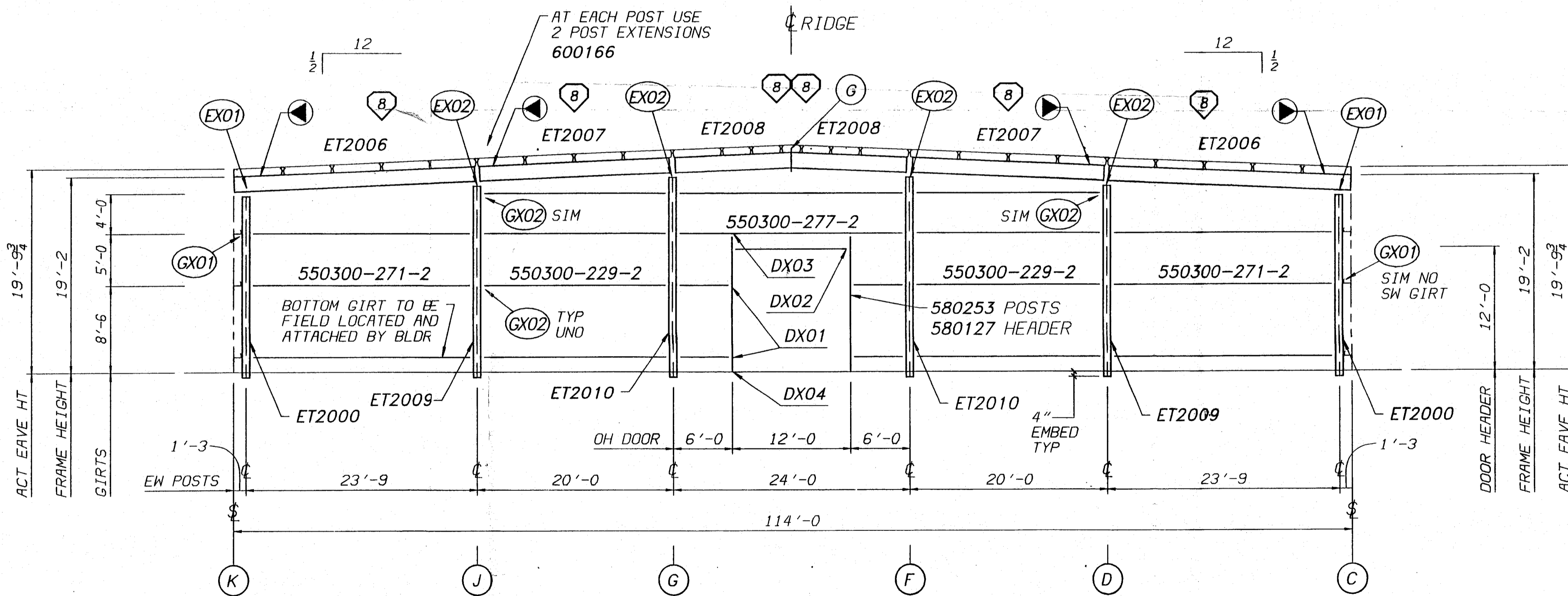
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DRAWN BY: YAKEL	RG FILE NO: D04127404
CHECKED BY: BIEKER	DATE: 12-14-92
DRAWING NUMBER: D92-041274-04	REV. 00

REVISION NO. 1	REVISION NO. 2	REVISION NO. 3	REVISION NO. 4	BUILDER:	PROJECT:	BUILDING ORDER DESCRIPTION:	DRAWING TITLE:
DATE:	DATE:	DATE:	DATE:	GREGORY CONSTRUCTION	DOW CORNING	114 X 145 X 20 50 X 61 X 20 WX 1/2:12 UBC 1985 40SL/80mph/10CL EXP. B	ROOF STRUCTURAL LAYOUT
DRAWN BY:	DRAWN BY:	DRAWN BY:	DRAWN BY:	 BUTLER MANUFACTURING COMPANY GENERAL OFFICES-KANSAS CITY, MISSOURI			
CHECKED BY:	CHECKED BY:	CHECKED BY:	CHECKED BY:				

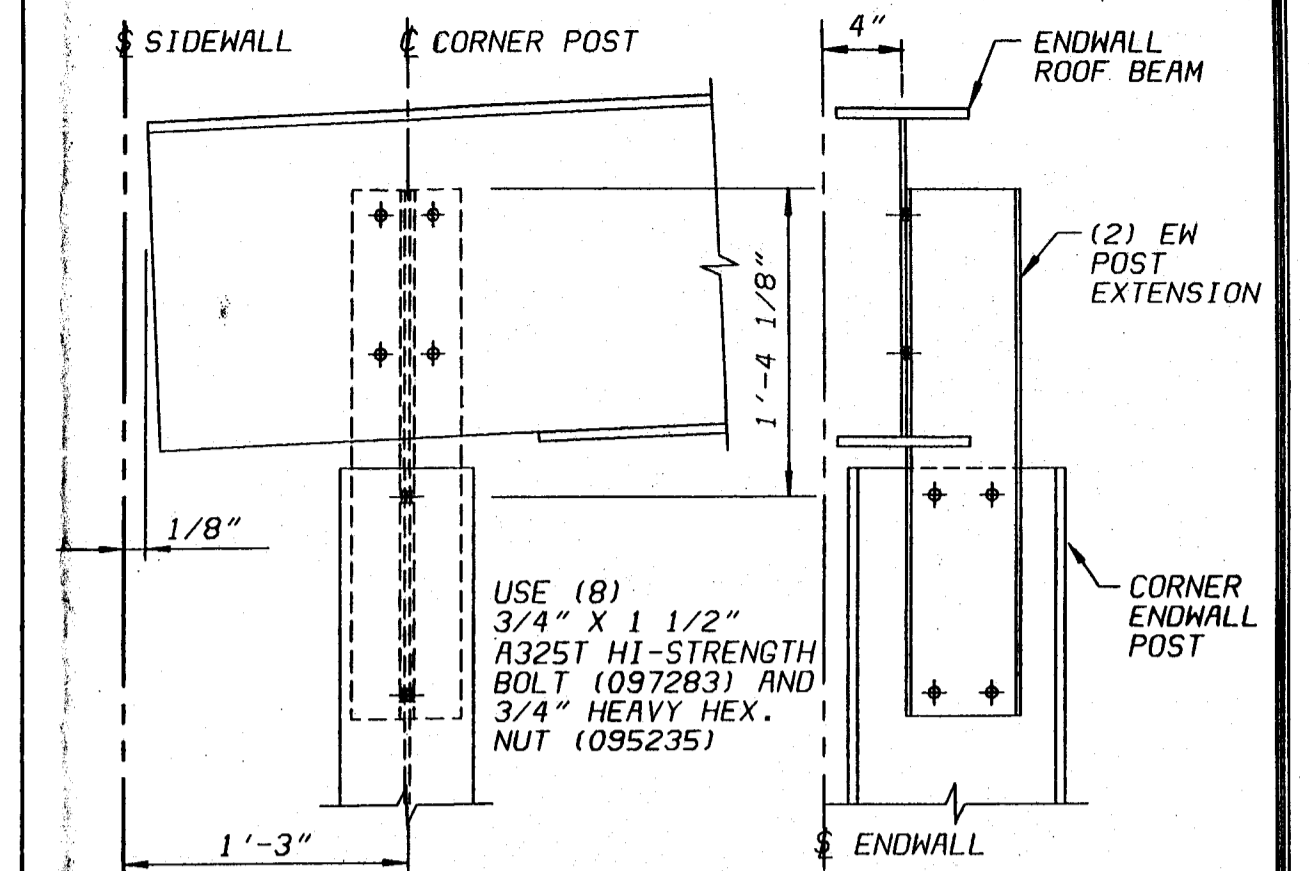
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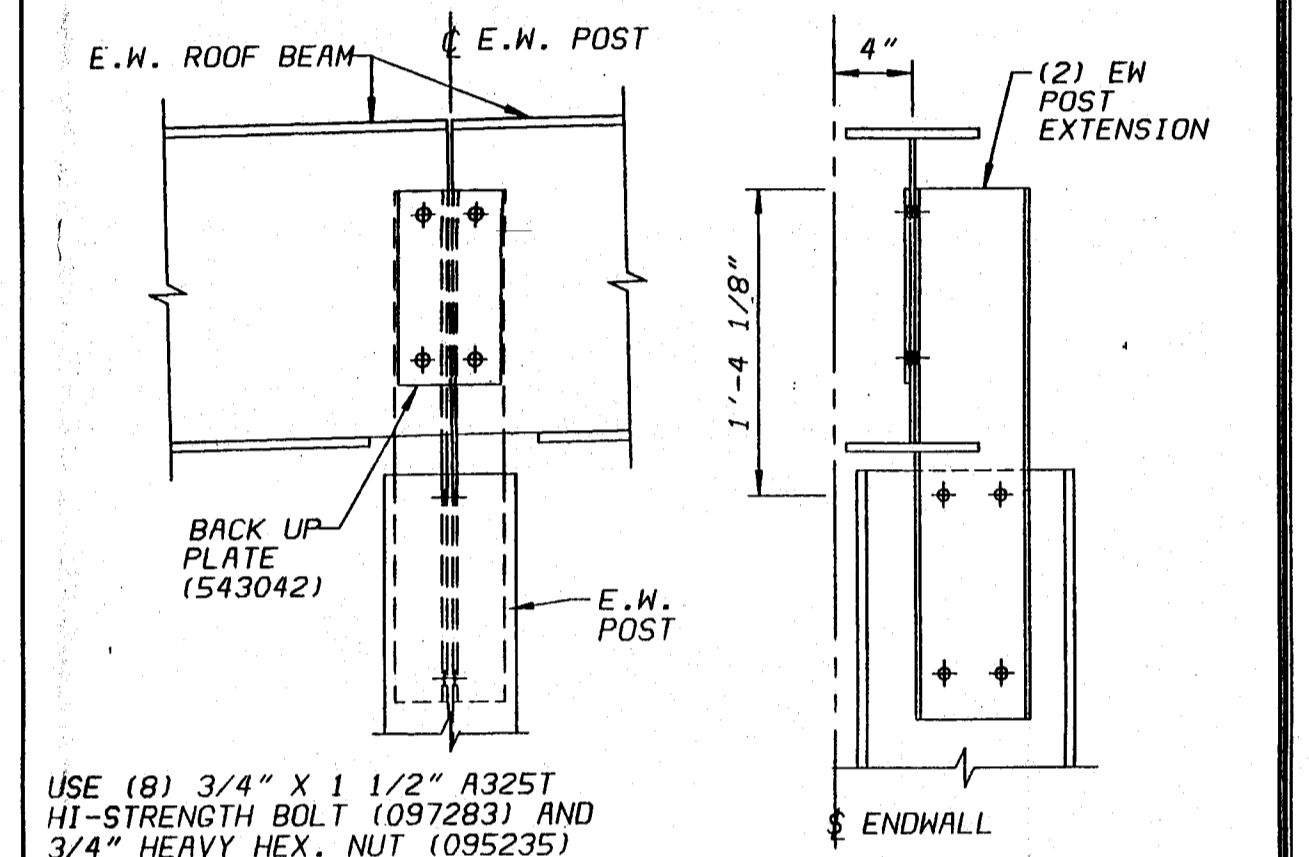
FRONT ENDWALL ELEVATION GRID 1



REAR ENDWALL ELEVATION GRID 8



DETAIL EX01 - CORNER POST TO ROOF BEAM CONNECTION

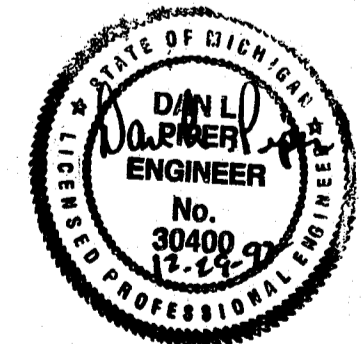


DETAIL EX02 - ENDWALL POST TO ROOF BEAM CONNECTION AT ENDWALL POST LOCATION

BOLT CHART			
QTY.	DESCRIPTION	BOLT	NUT
8	1" X 3" A325T	097287	095238

NOTE:
ALL BOLTS ARE HIGH STRENGTH (A325-T) HEX HEAD WITH HEAVY HEX NUTS AND ARE TO BE INSTALLED USING THE "TURN-OF-THE-NUT TIGHTENING" METHOD SPECIFIED IN THE AISC MANUAL.

EW FLANGE BRACE		
CODE	DETAIL	LENGTH
B	FB02	2'-4"

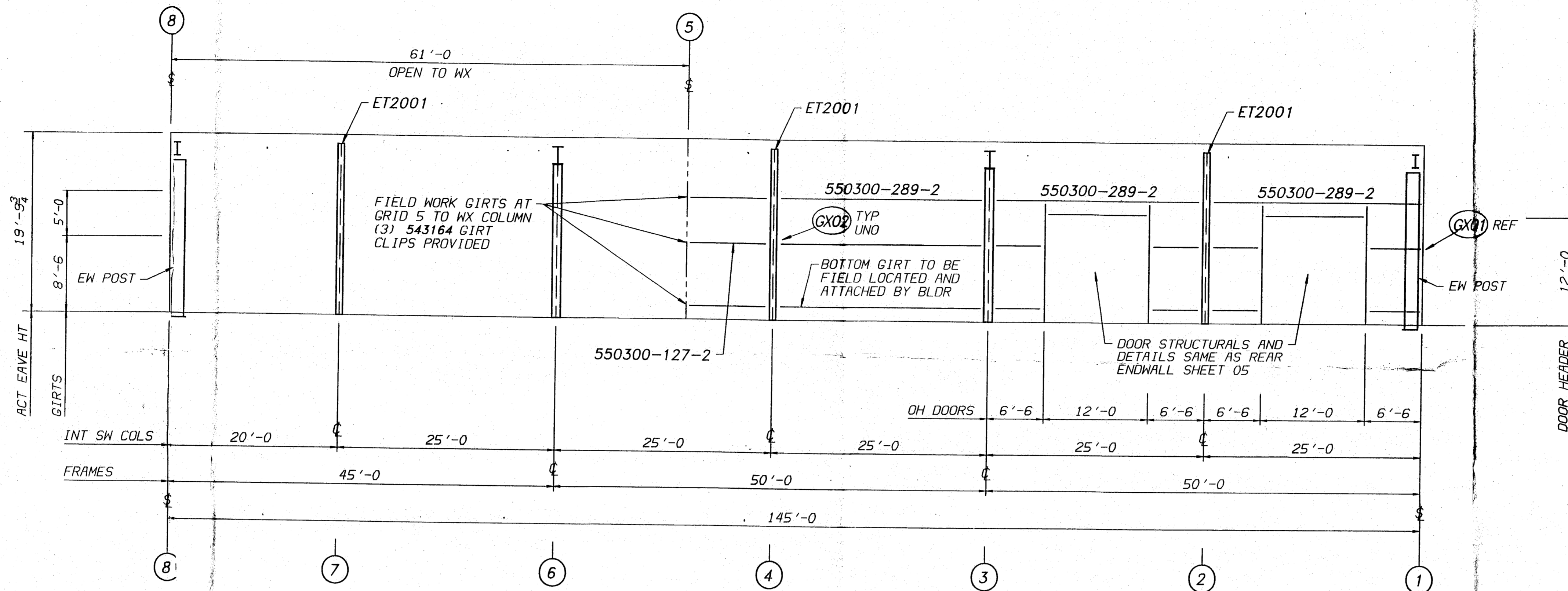


ENGINEER APPROVAL:	<i>[Signature]</i>
DRAWN BY: BIEKER	AG FILE NO: D04127405
CHECKED BY: HURD	DATE: 12-15-92
DRAWING NUMBER:	REV.
D 92-041274-05	00

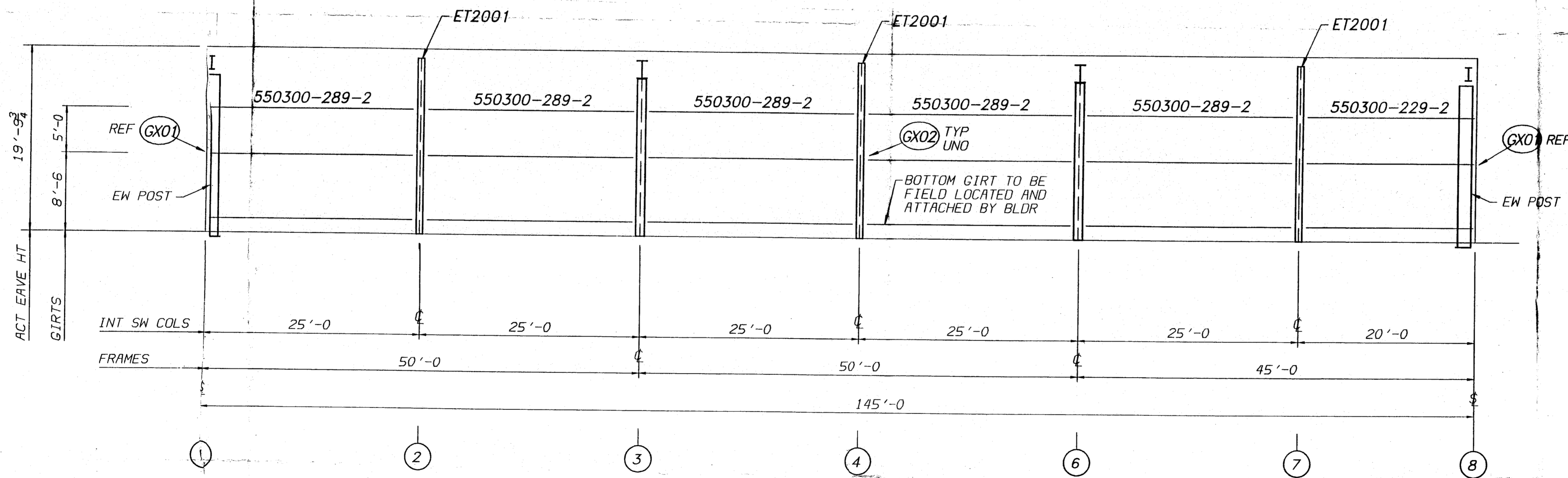
11:2:46.7 12/21/92 BIEKER.DRAWINGS.CUSTOM.D04127405.DWG

REVISION NO. 1	REVISION NO. 2	REVISION NO. 3	REVISION NO. 4
DATE:	DATE:	DATE:	DATE:
DRAWN BY:	DRAWN BY:	DRAWN BY:	DRAWN BY:
CHECKED BY:	CHECKED BY:	CHECKED BY:	CHECKED BY:

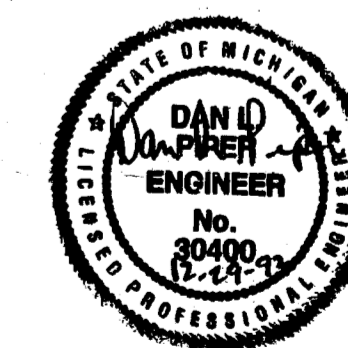
 BUTLER MANUFACTURING COMPANY GENERAL OFFICES-KANSAS CITY, MISSOURI	BUILDER:	PROJECT:	BUILDING ORDER DESCRIPTION:	DRAWING TITLE:
	GREGORY CONSTRUCTION BAY CITY, MICHIGAN	DOW CORNING MIDLAND, MICHIGAN	114 X 145 X 20 LMDS 50 X 61 X 20 WX 1/2:12 UBC-85 EXP B 40 SL 80 MPH 10 COLL	ENDWALL ELEVATIONS



LEFT SIDEWALL ELEVATION GRID C



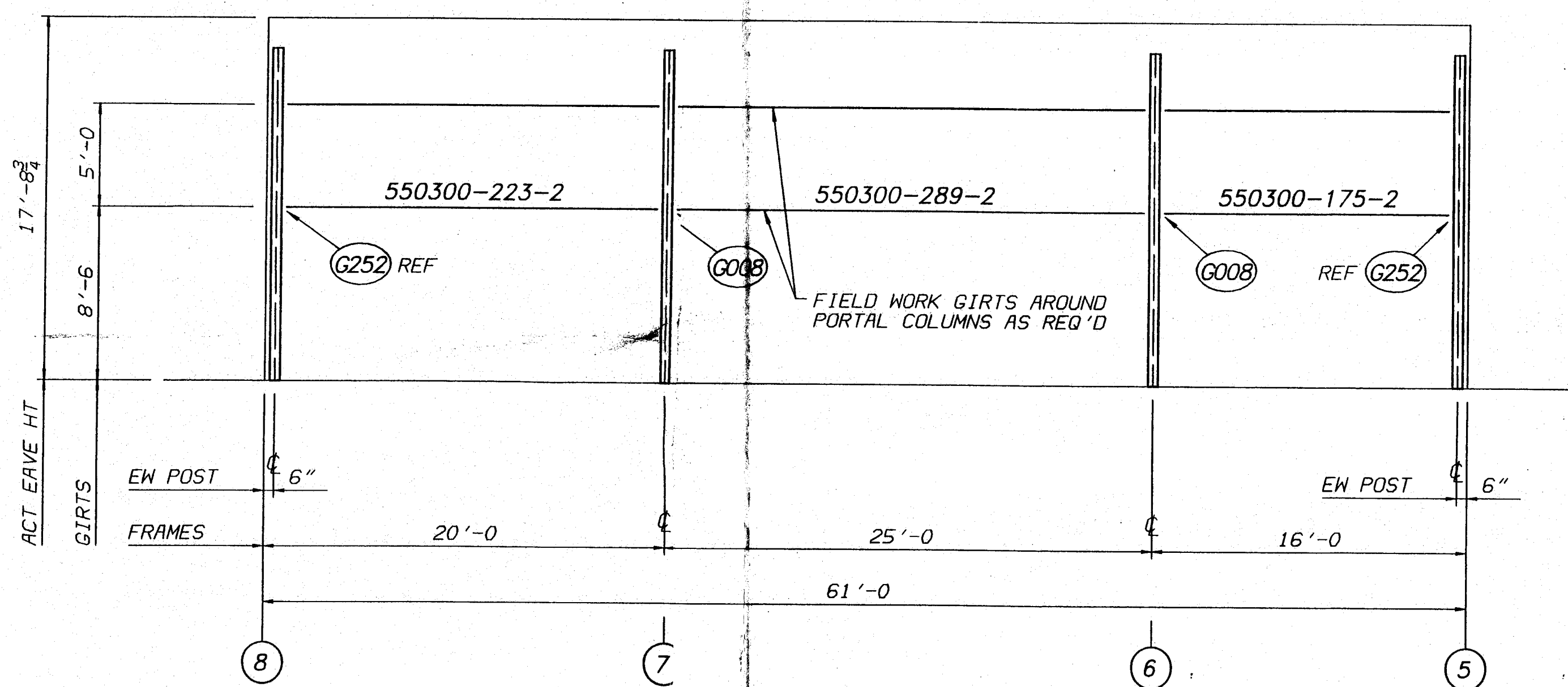
RIGHT SIDEWALL ELEVATION GRID A



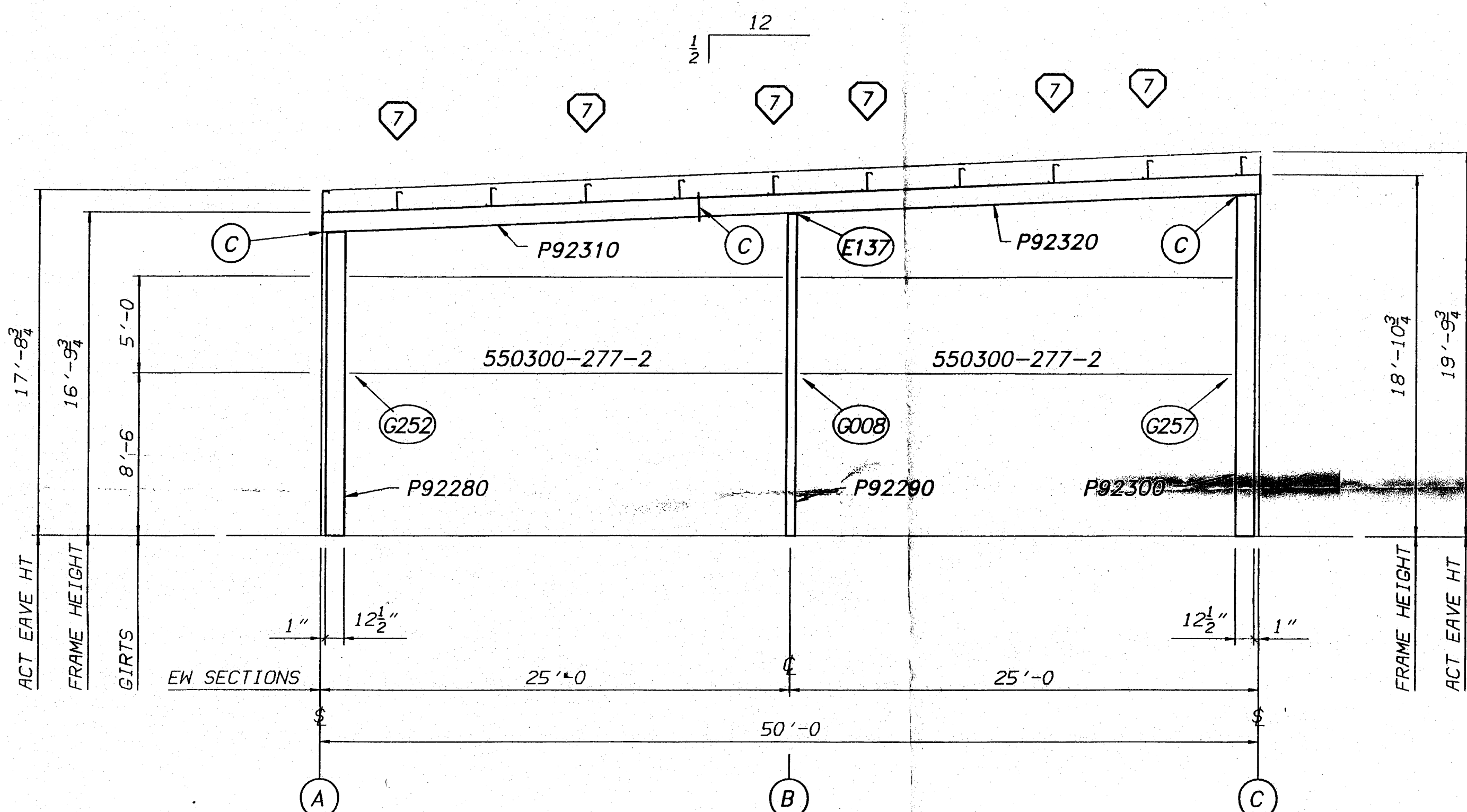
66/12/158
I:\13\13.8\12\21\252 BIEKER DRAWING\DISK\DRAWINGS\CUSTOM\04127405A.DG

REVISION NO. 1		REVISION NO. 2		REVISION NO. 3		REVISION NO. 4		ENGINEER APPROVAL:	
DATE:		DATE:		DATE:		DATE:		DRAWN BY: BIEKER	AG FILE NO: 04127405A
DRAWN BY:		DRAWN BY:		DRAWN BY:		DRAWN BY:		CHECKED BY: HURD	DATE: 12-15-92
CHECKED BY:		CHECKED BY:		CHECKED BY:		CHECKED BY:		DRAWING NUMBER:	REV.
 BUTLER MANUFACTURING COMPANY GENERAL OFFICES-KANSAS CITY, MISSOURI								BUILDER: GREGORY CONSTRUCTION BAY CITY, MICHIGAN	
								PROJECT: DOW CORNING MIDLAND, MICHIGAN	
								D 92-041274-05A 00	

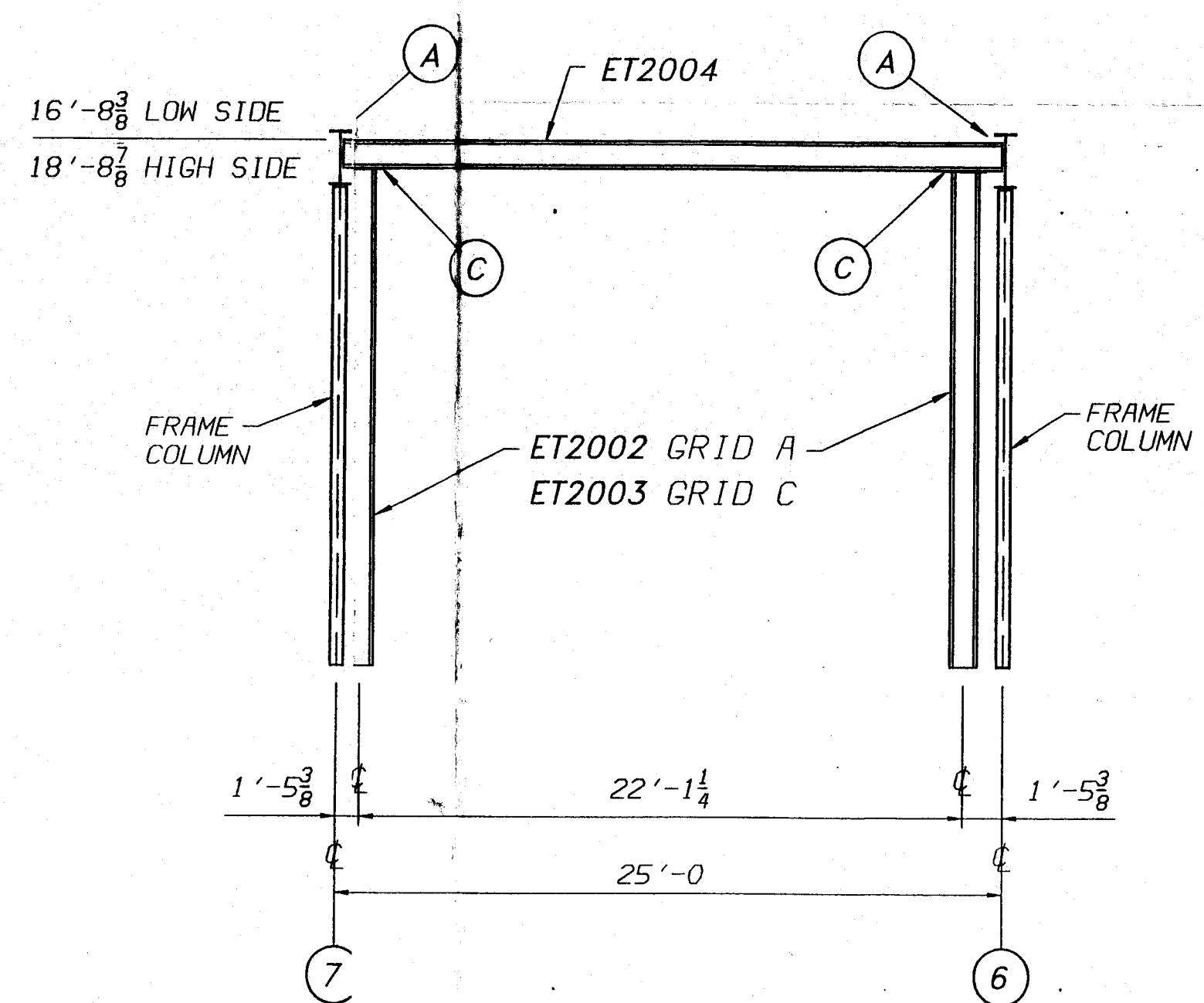
ALL GIRTS ON THIS ELEVATION ARE PROVIDED FOR FUTURE USE AND WILL REQUIRE FIELD WORK TO COLUMNS



WX SIDEWALL ELEVATION GRID A



WX ENDWALL ELEVATION GRID 5
REVERSE FOR ENDWALL AT GRID 8

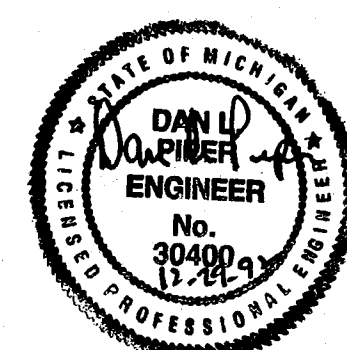


PORTAL FRAME GRID A AND C

BOLT CHART			
QTY.	DESCRIPTION	BOLT	NUT
A 4	3/4" X 2 1/2" A325T	097284	095235
C 8	3/4" X 2 1/2" A325T	097284	095235

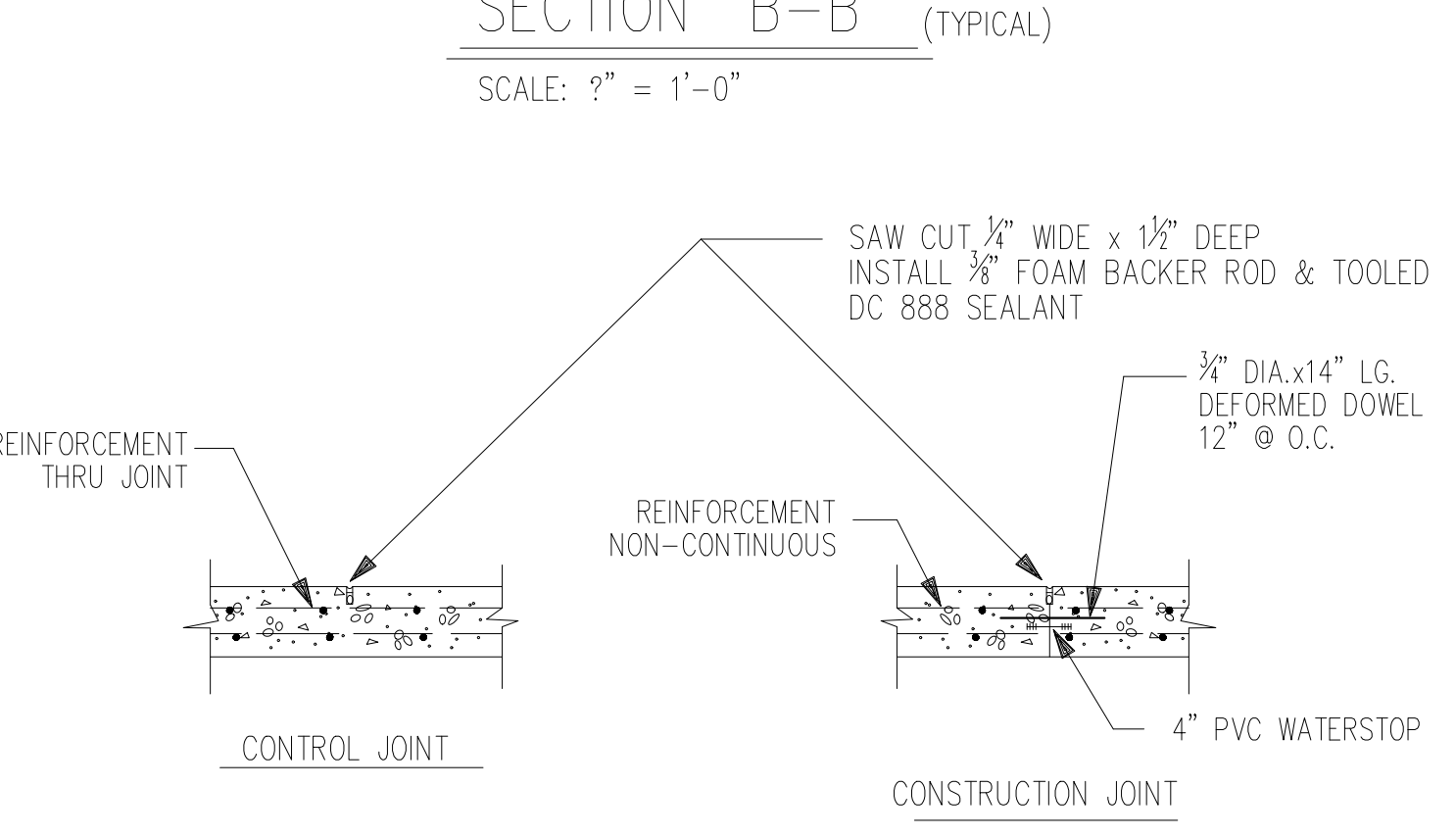
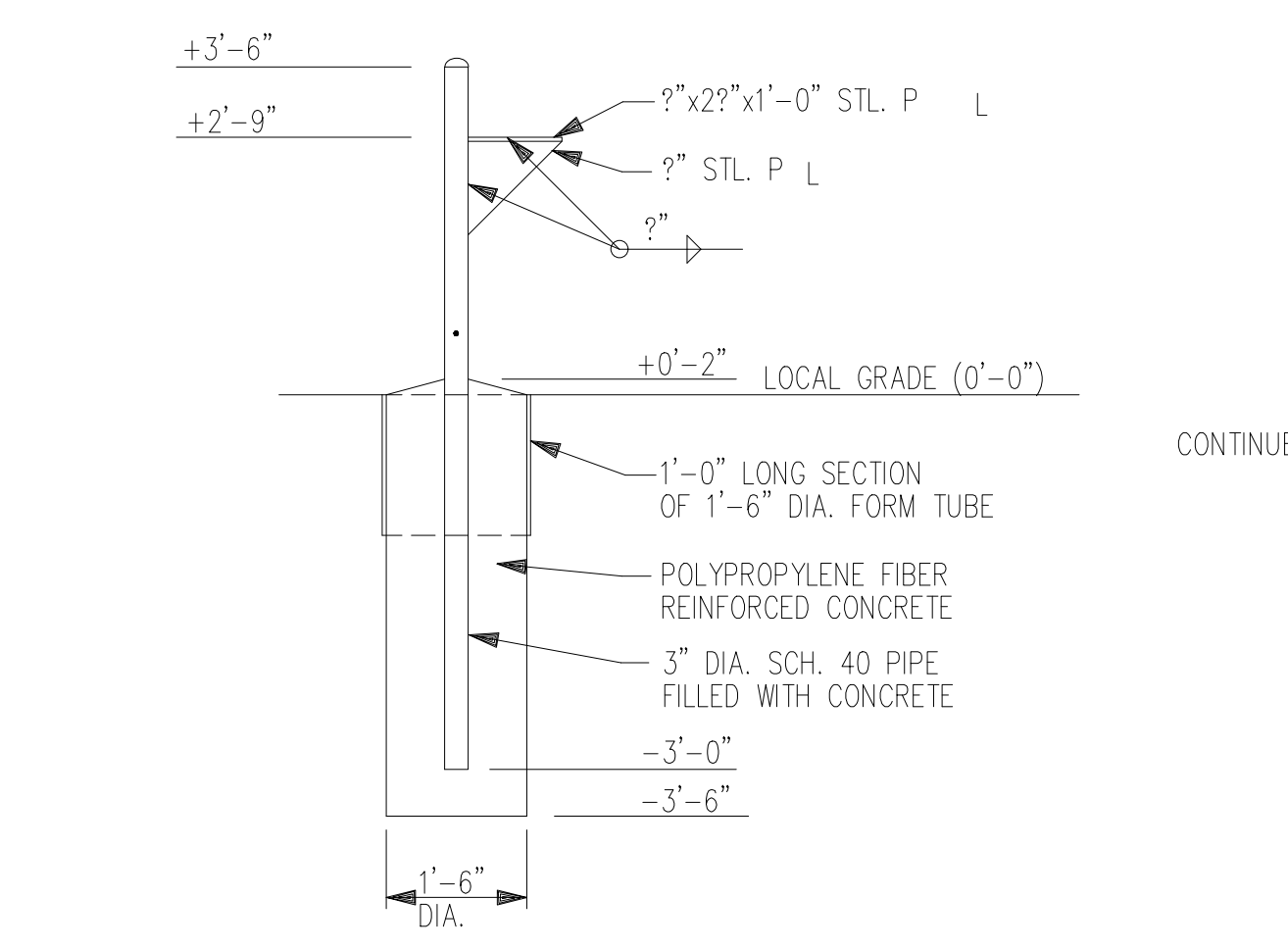
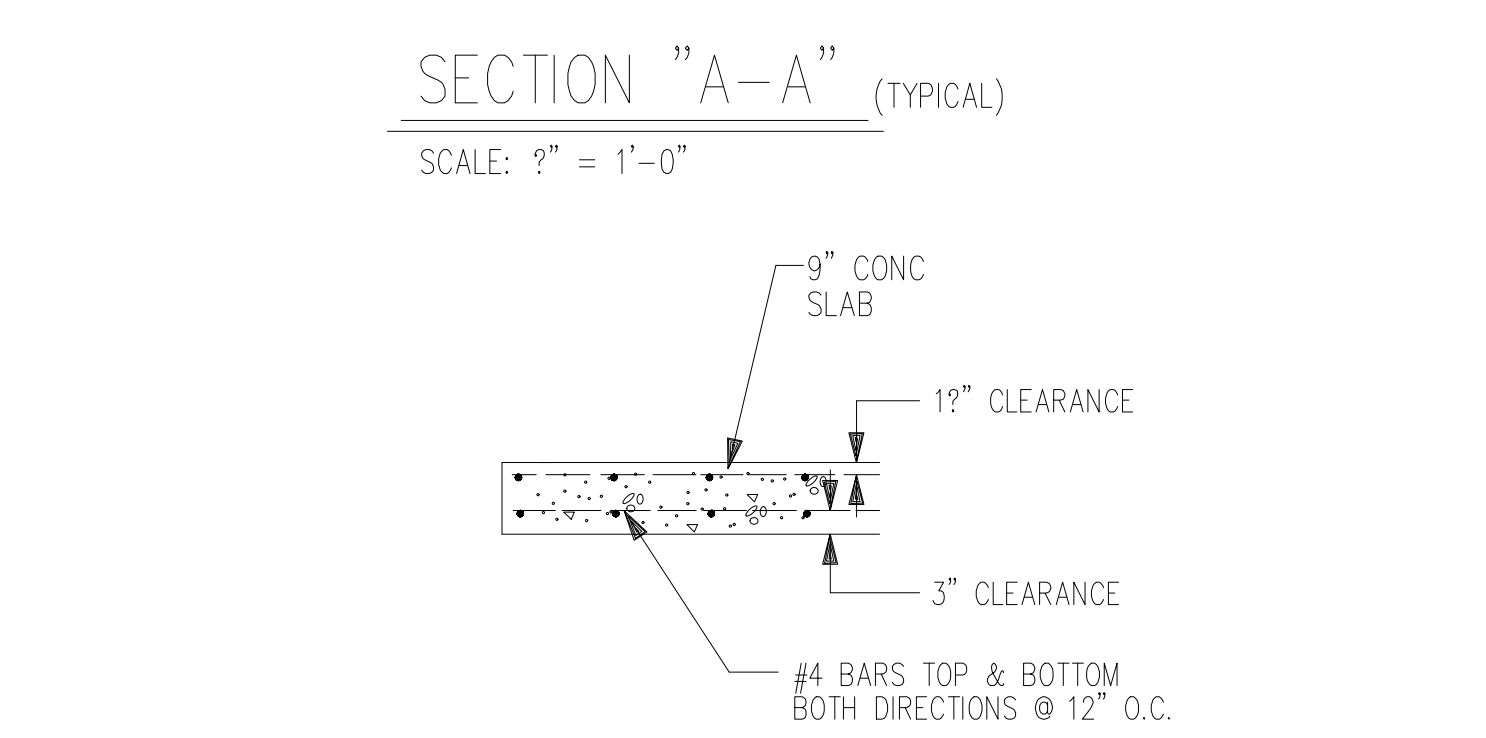
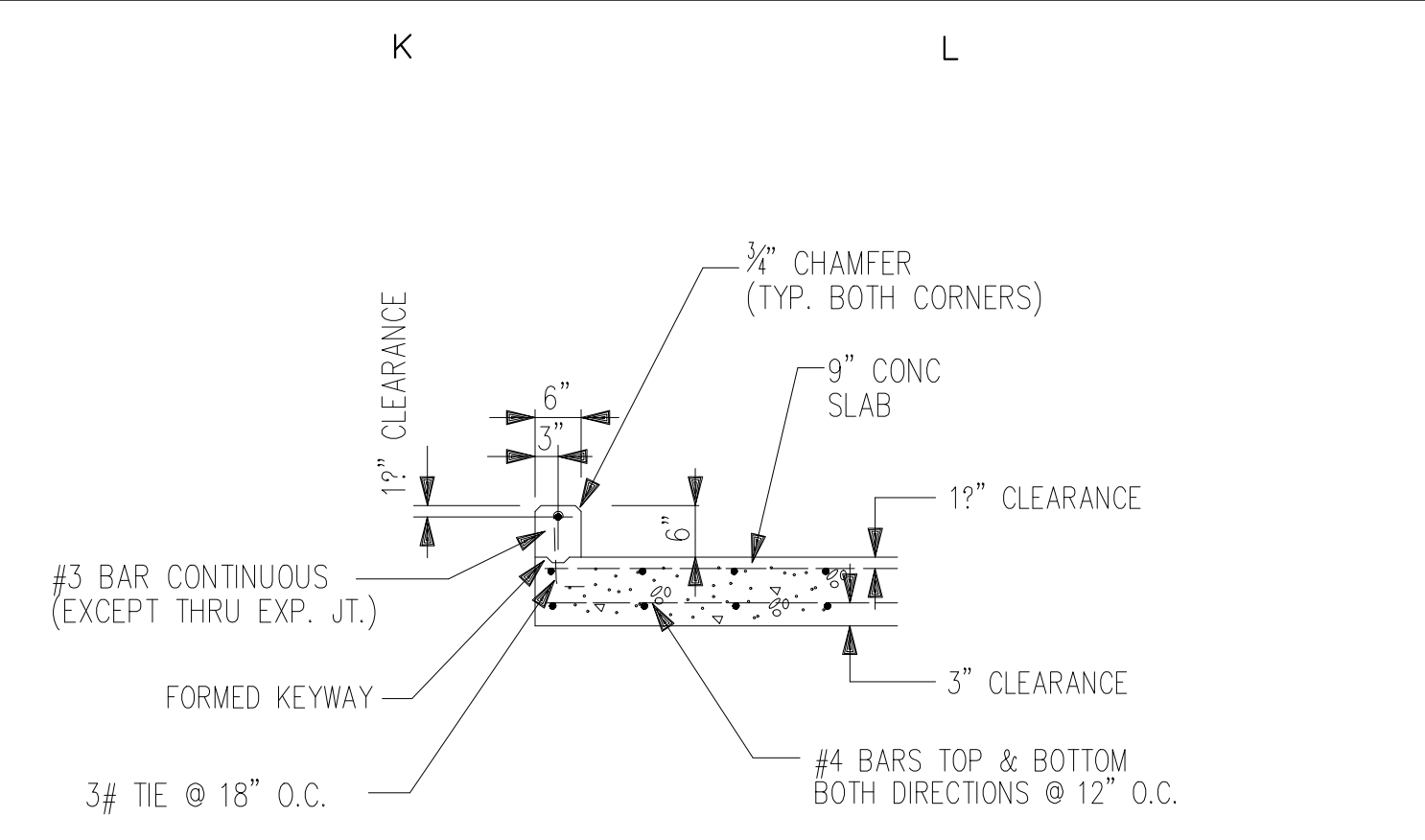
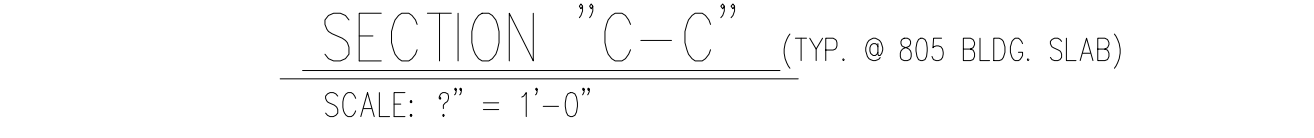
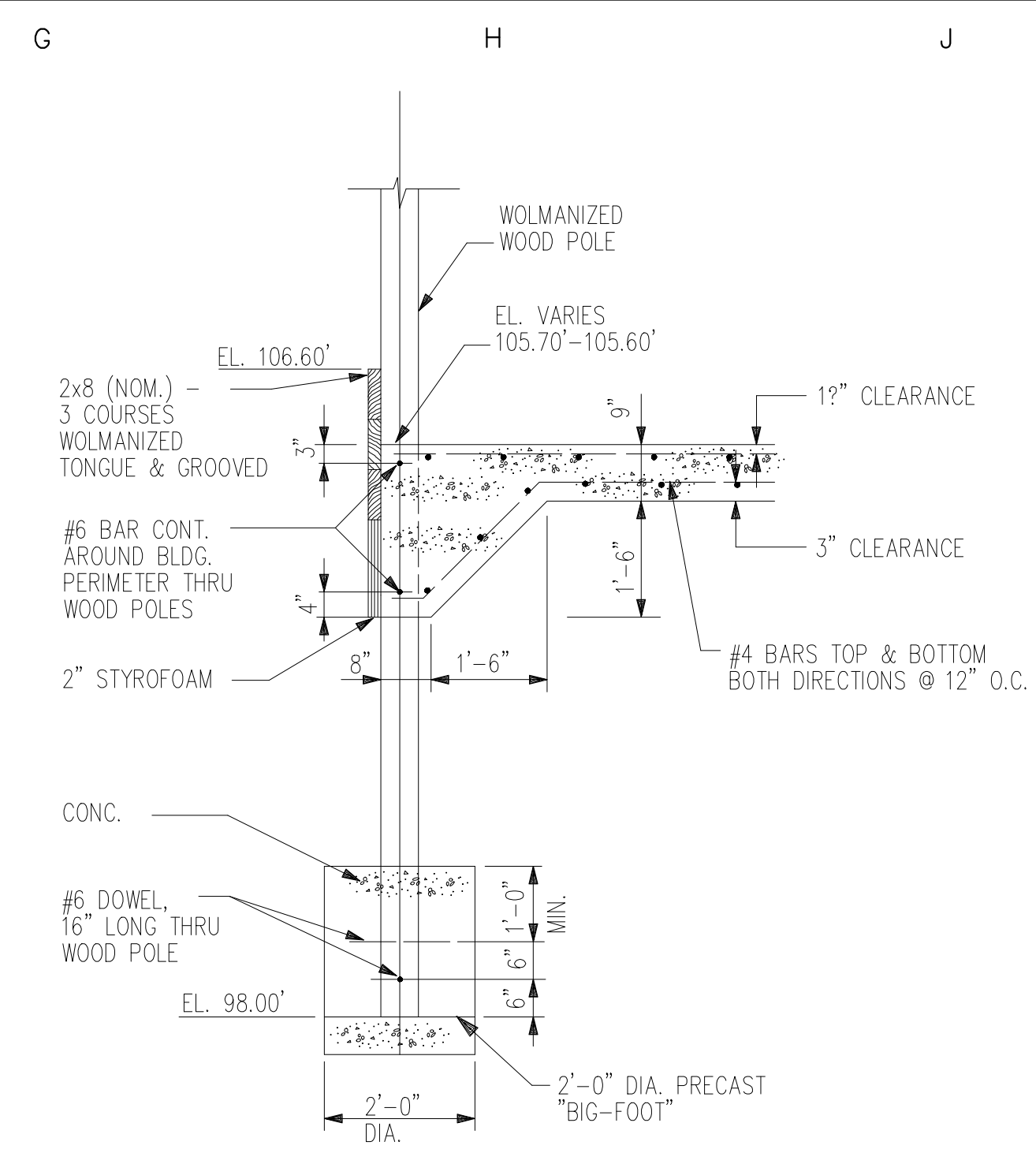
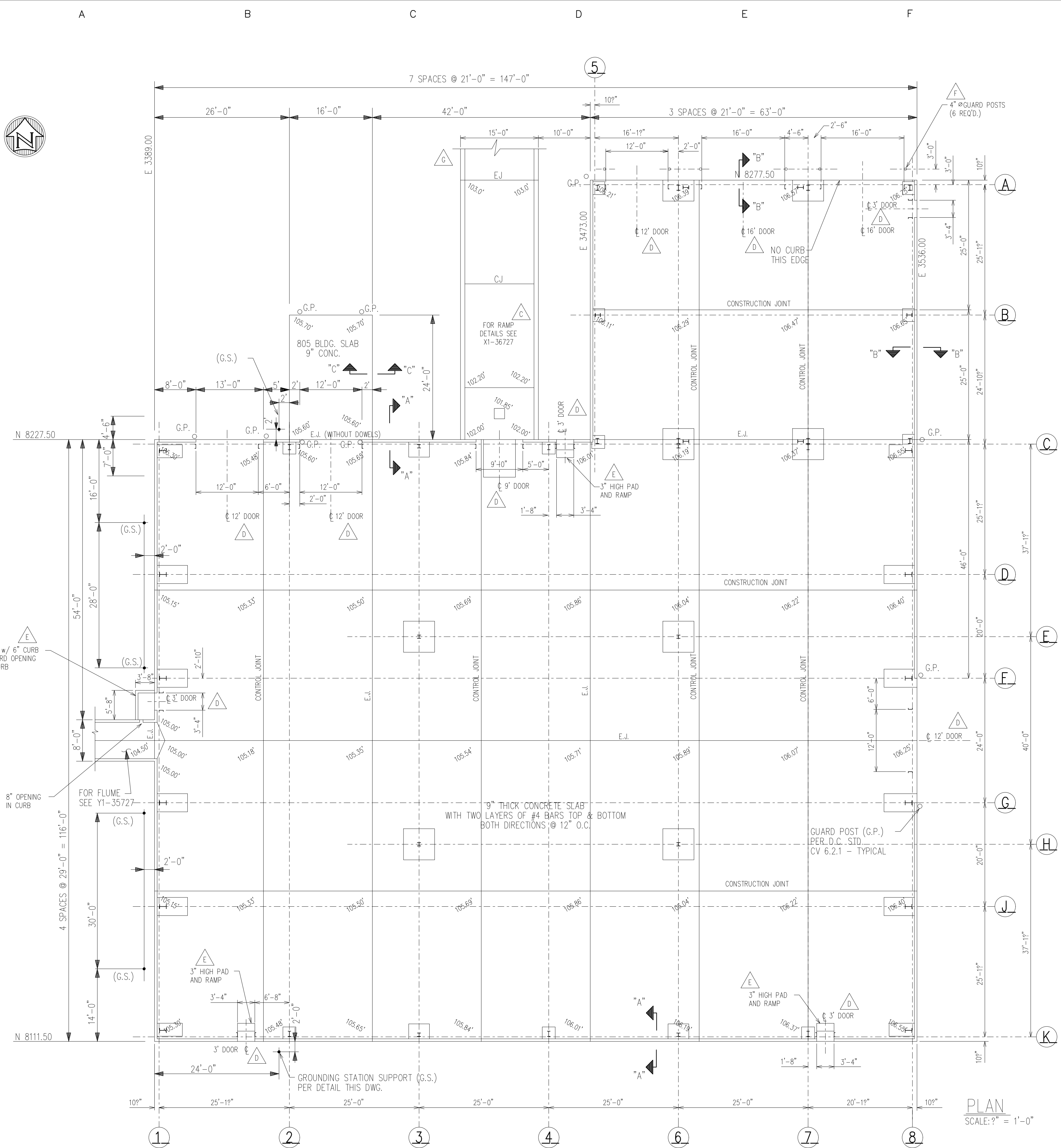
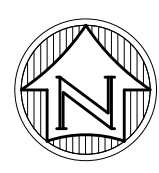
NOTE:
ALL BOLTS ARE HIGH STRENGTH (A325-T) HEX HEAD WITH HEAVY HEX NUTS AND ARE TO BE INSTALLED USING THE "TURN-OF-THE-NUT TIGHTENING" METHOD SPECIFIED IN THE AISC MANUAL.

WX EW FLANGE BRACE		
CODE	DETAIL	LENGTH
7	005660	C001 1'-4 1/2"

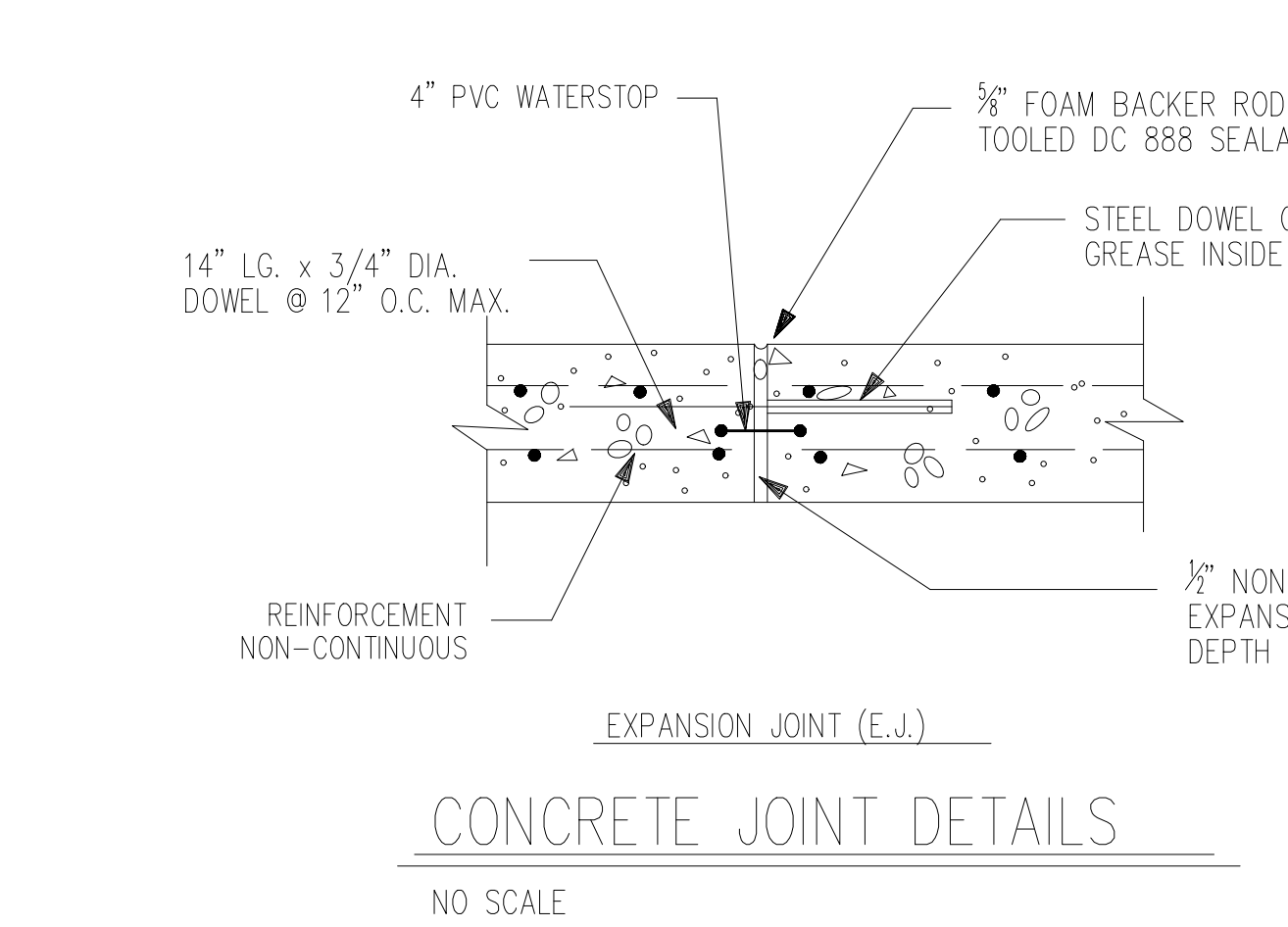


REVISION NO. 1	REVISION NO. 2	REVISION NO. 3	REVISION NO. 4	BUILDER:	PROJECT:	BUILDING ORDER DESCRIPTION:	DRAWING TITLE:	ENGINEER APPROVAL:
DATE: _____ DRAWN BY: _____ CHECKED BY: _____	DATE: _____ DRAWN BY: _____ CHECKED BY: _____	DATE: _____ DRAWN BY: _____ CHECKED BY: _____	DATE: _____ DRAWN BY: _____ CHECKED BY: _____	BUTLER BUTLER MANUFACTURING COMPANY GENERAL OFFICES-KANSAS CITY, MISSOURI	GREGORY CONSTRUCTION BAY CITY, MICHIGAN	DOW CORNING MIDLAND, MICHIGAN 114 X 145 X 20 LMDS 50 X 61 X 20 WX 1/2:12 UBC-85 EXP B 40 SL 80 MPH 10 COLL	WX WALL ELEVATIONS	 DRAWN BY: BIEKER CHECKED BY: HURD DATE: 12-15-92 DRAWING NUMBER: D92-041274-05B REV. 00

66/72/60 12:10:59.8 12/21/92 BIEKER.DRAWING.DSK: DRAWINGS-CUSTOM\DO4127405B.DG



GROUNDING STATION SUPPORT DETAIL
SCALE: ?" = 1'-0"



CONCRETE JOINT DETAILS
NO SCALE

- GENERAL NOTES:
- SLABS SHALL HAVE EXPANSION, CONTROL, AND CONSTRUCTION JOINTS LOCATED AS SHOWN. ALL JOINTS SHALL CONTINUE THRU CURBS.
 - ALL CONCRETE SHALL BE 4,000 PSI COMPRESSIVE STRENGTH FOR THIS SLAB CONSTRUCTION.
 - ALL STEEL REINFORCEMENT SHALL BE GRADE 60 DEFORMED BARS.

IN JAN-MAR, 1993, PREFAB BUTLER MANUFACTURING CO. STEEL BUILDING WAS ERECTED OVER EXISTING CONCRETE SLAB. FOUNDATION AND SLAB MODIFICATION DETAILS ARE COVERED BY CONTRACTOR RECORD PRINTS. GREGORY CONSTRUCTION CO.

DATE LAST GENERAL UPDATE: 04JAN2010

AF		V		K	
AG		W		L	
AH		X		M	
AJ		Y		N	
AK		Z		P	
AL		AA		Q	
AM		AB		R	
AN		AC		S	
AP		AD		T	
AQ		AE		U	

MARK	LOC.	REVISIONS	BY	DATE	APP.
A	GEN	REVISED AS BUILT	R.F.	10-15-87	JLV
B	GEN	ADDED FOOTINGS FOR STEEL FRAMING, REFERENCE ONLY	R.F.	02MAR93	PC
C	C-6	ADDED LOADING DOCK RAMP	R.F.	14JUL94	NSD
D	GEN	ADDED DOOR LOCATIONS	R.F.	16SEP94	PC
E	A-4	ADDED CONCRETE SLAB AND RAMP AT PERSONNEL DOORS	R.F.	18OCT94	PC
F	D-7	ADDED GUARD POSTS AT DOORS ALONG NORTH SIDE	R.F.	18JAN95	PC
G	C-7	REVISED LOADING RAMP	JAM	25JUN97	NSD
H					
I					
J					

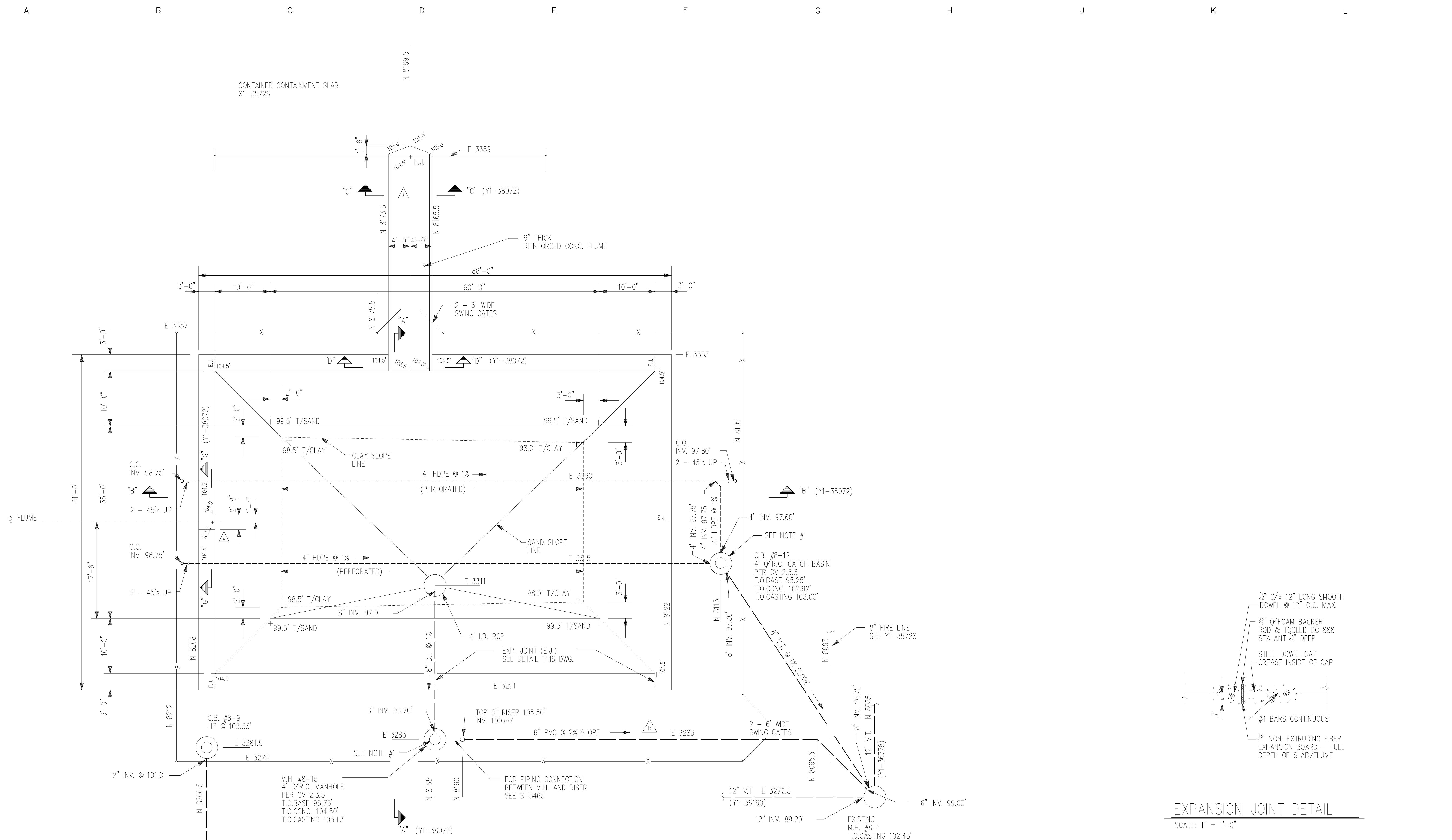
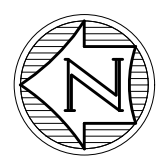
CADD

DOW CORNING CORPORATION

MIDLAND PLANT BLDG. 809
CONTAINER CONTAINMENT SLAB
PLAN & DETAILS

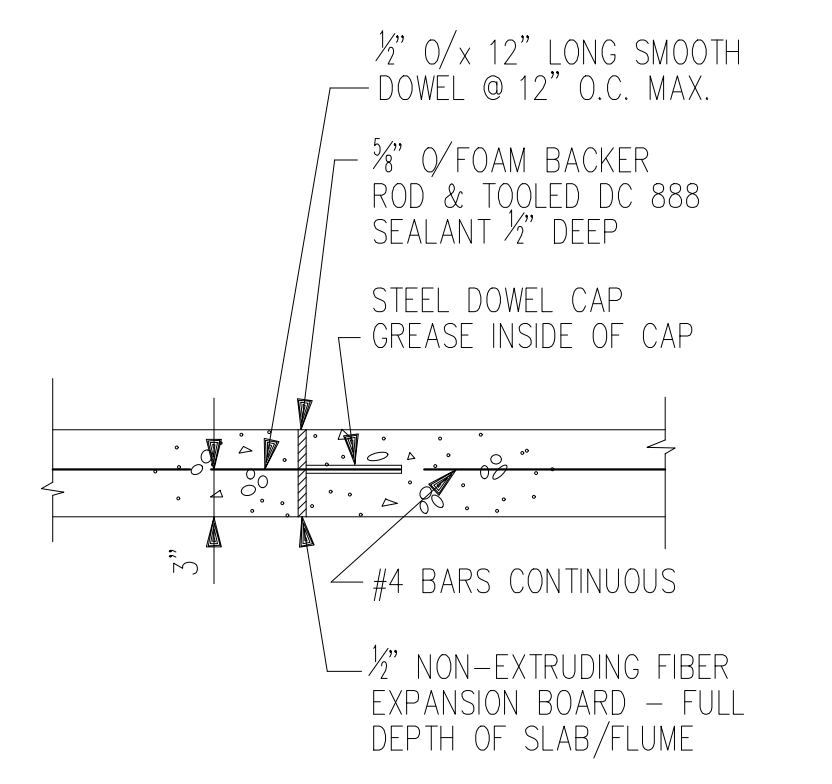
DESIGNED	J.L.VANDERMALE	DATE	08-18-86
DRAWN	J.K.LAFAYE	DATE	09-09-86
CHECKED	J.L.VANDERMALE	DATE	09-02-87
APPROVED	R.G.COOK	DATE	09-04-87

SCALE	INCH	FOOT	DRAWING NUMBER	REVISION
	AS NOTED		X1-35726	G



PLAN REFERENCE NOTES:
 #1 PROVIDE KOR-N-SEAL BOOTS FOR ALL PIPE PENETRATIONS THROUGH NEW MANHOLES.

PLAN
 SCALE: 1/4\" = 1'-0"



EXPANSION JOINT DETAIL
 SCALE: 1\" = 1'-0"

LAST GENERAL UPDATE: 04JAN2010

MARK	LOC.	REVISIONS	BY	DATE	APP.	DESIGNED	DATE
A	8-4	REVISED FLUMES	JKL	03-29-88	JLV	J.L.VANDERMALE	08-18-86
B	E-2	ADDED 6\"/>					
C							
D							
E							
F							
G							
H							
J							

MARK	LOC.	REVISIONS	BY	DATE	APP.	DESIGNED	DATE
A	8-4	REVISED FLUMES	JKL	03-29-88	JLV	J.L.VANDERMALE	08-18-86
B	E-2	ADDED 6\"/>					
C							
D							
E							
F							
G							
H							
J							

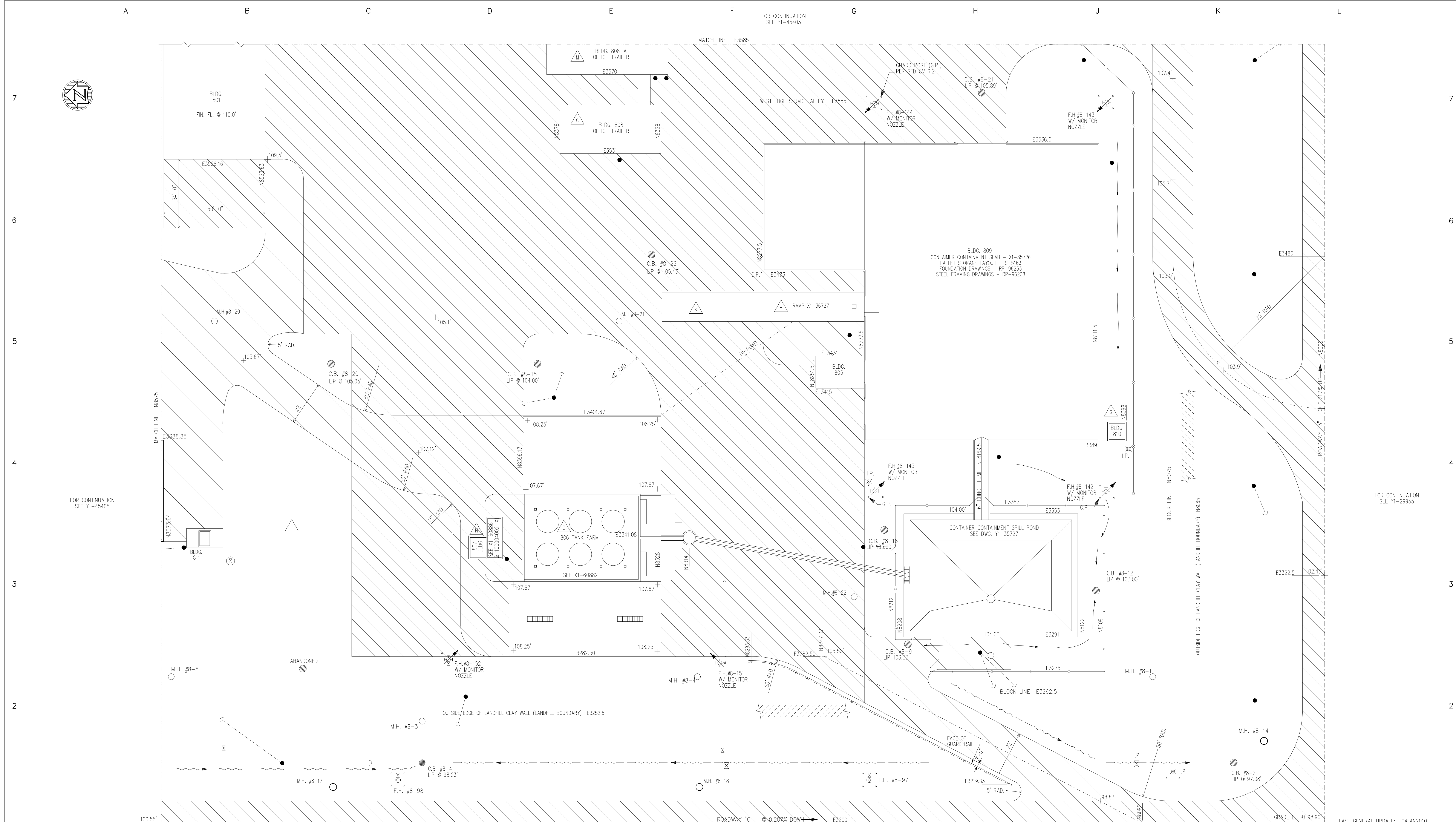
SCALE	INCH	FOOT	DRAWING NUMBER	REVISION
	AS NOTED		Y1-35727	B

CADD

DOW CORNING CORPORATION

MIDLAND PLANT 800 BLOCK
 CONTAINER CONTAINMENT SPILL POND
 PLAN

SCALE: AS NOTED | INCH: AS NOTED | FOOT: | DRAWING NUMBER: Y1-35727 | REVISION: B



FOR CONTINUATION
SEE Y1-45403

FOR CONTINUATION
SEE Y1-45405

FOR CONTINUATION
SEE Y1-29955

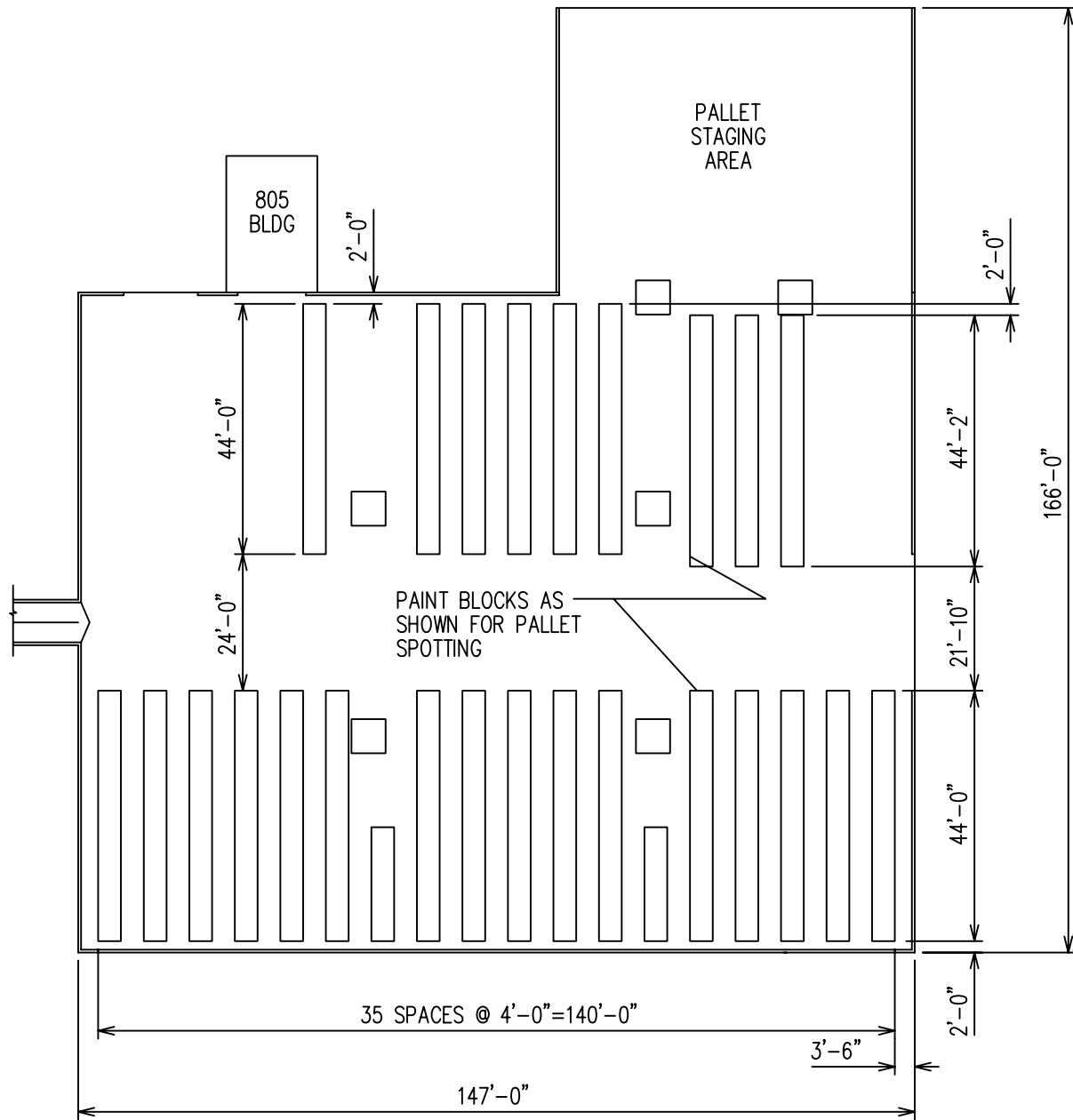
LAST GENERAL UPDATE: 04JAN2010

FOR CONTINUATION
SEE Y1-30887

REV	DESCRIPTION	DATE	BY	APP	DESIGNED	DATE	REFERENCES		SCALE	INCH	FOOT	DRAWING NUMBER	REVISION
							NUMBER	TITLE					
V													
W													
X													
Y													
Z													
AA													
AB													
AC													
AD													
AE													
K	F-5 ADDED LOADING SLAB	JAM 25JUN97	NSD	MARK	LOC								
L	GEN REVISED POWER POLES PER WADE-TRIM SURVEY	WRL 01FEB99	SFH	A	GEN	ADDED CONTAINER CONTAINMENT SLAB & SPILL POND							
M	E-7 ADDED NEW 808-A TRAILER AND POWER POLES	CWR 27JUL99	SFH	B	GEN	GENERAL UPDATE							
N	D-3 ADDED 807 BLDG. ADDITION	CAF 12JAN07	SFH	C	GEN	UPDATE-ADDED 806 TANK FARM, BLDGS. 807 & 808							
P				D	GEN	GENERAL UPDATE							
Q	B-3 REMOVED 803 TANK FARM	E	B-3	PC	REMOVED 803 TANK FARM								
R				F	GEN	GENERAL UPDATE							
S	J-4 ADDED BLDG. 810	G	J-4	SFH	ADDED BLDG. 810								
T	F-5 ADDED RAMP NORTH OF BLDG. 809	H	F-5	NSD	ADDED RAMP NORTH OF BLDG. 809								
U	C-2 1995 PAVING UPDATES	J	C-2	SFH	1995 PAVING UPDATES								
REVISIONS							DATE	DATE	DATE	DATE	DATE	DATE	DATE
BY							DATE	DATE	DATE	DATE	DATE	DATE	DATE
APP							DATE	DATE	DATE	DATE	DATE	DATE	DATE
DESIGNED							DATE	DATE	DATE	DATE	DATE	DATE	DATE
DRAWN							DATE	DATE	DATE	DATE	DATE	DATE	DATE
CHECKED							DATE	DATE	DATE	DATE	DATE	DATE	DATE
APPROVED							DATE	DATE	DATE	DATE	DATE	DATE	DATE
R.G. COOK							DATE	DATE	DATE	DATE	DATE	DATE	DATE

DOW CORNING CORPORATION
MIDLAND PLANT 800 BLOCK
 ROADS & GROUNDS
 SOUTHWEST SECTION

SCALE: 1"=20'
 DRAWING NUMBER: Y1-45401
 REVISION: N



DOW CORNING CORPORATION

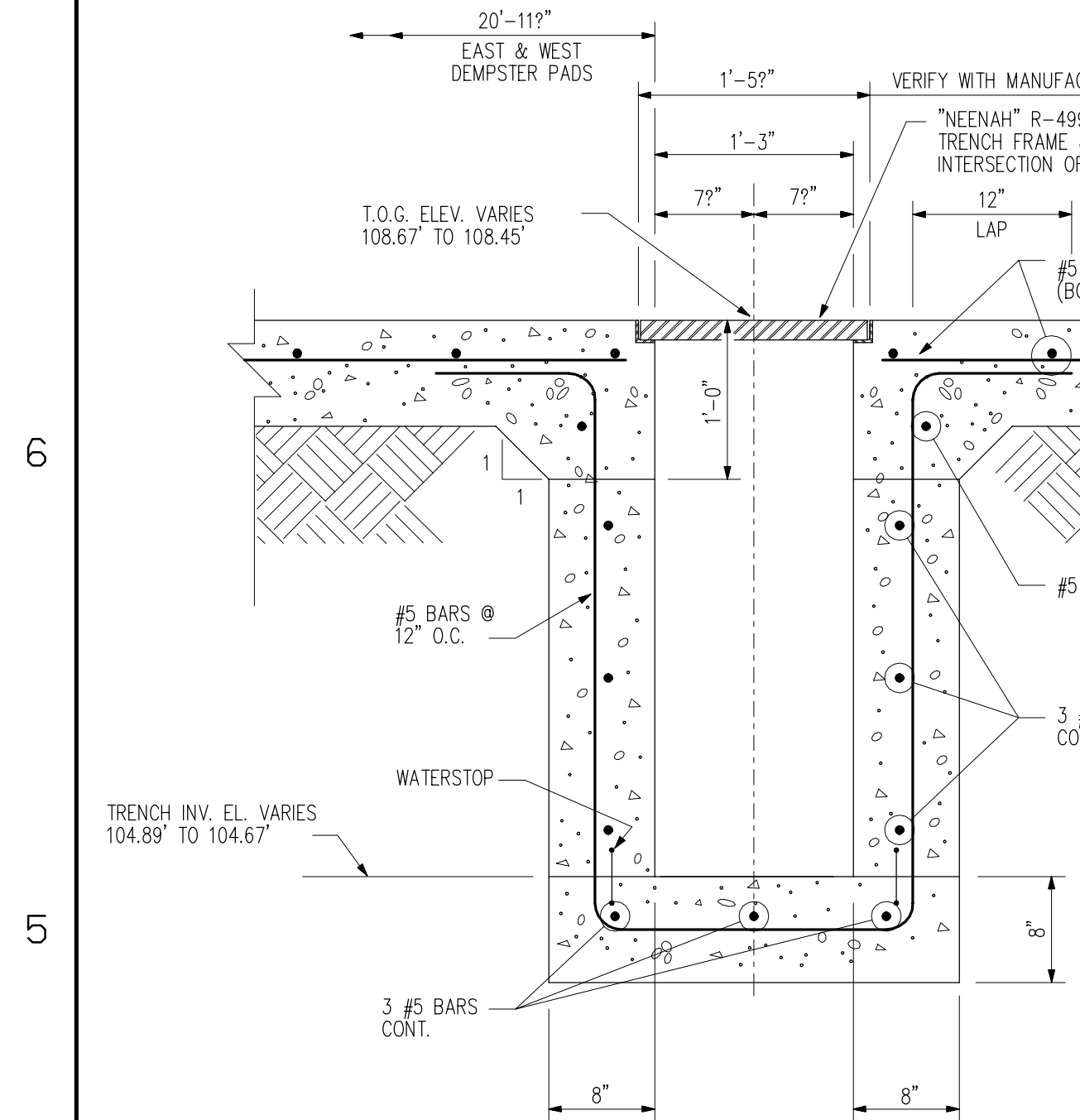
DRAWN BY: NLW DATE: JUNE, 2011
CHECKED BY: MG EDITED BY: NLW030210
FILE NAME: FgC1-2.Dwg

FIGURE C1-2 CONTAINER STORAGE CONFIGURATION IN 809 BUILDING

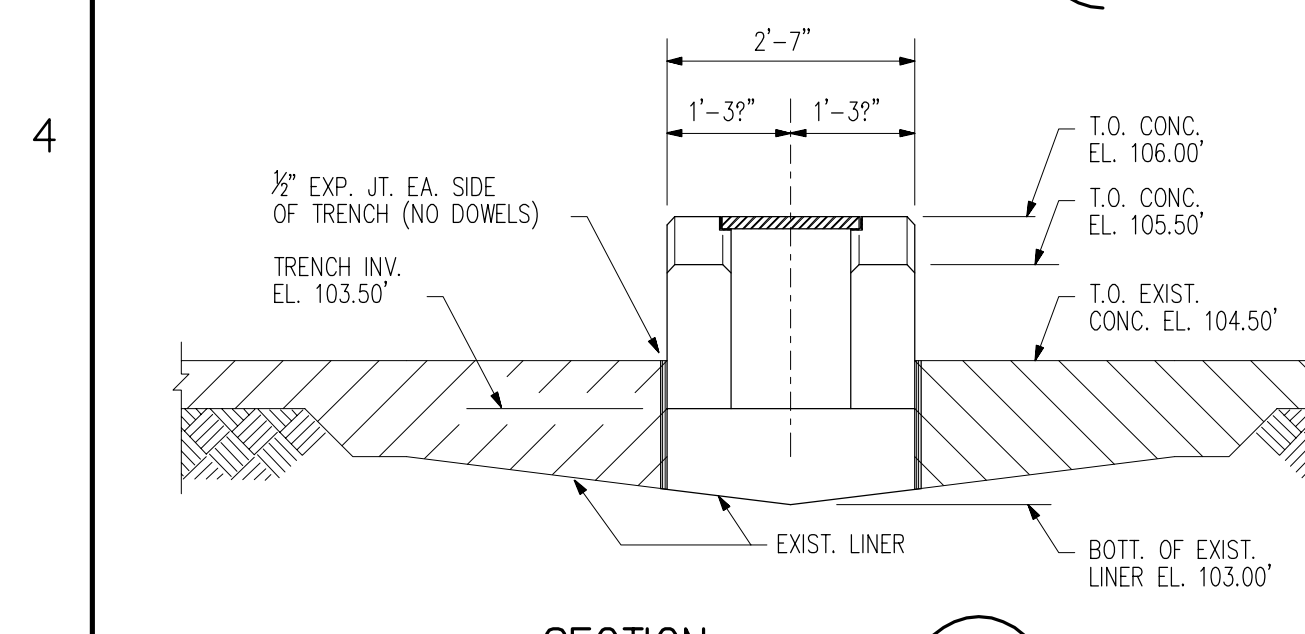
DOW CORNING CORPORATION MIDLAND SITE
3901 SOUTH SAGINAW
MIDLAND, MICHIGAN

PROJECT
NUMBER

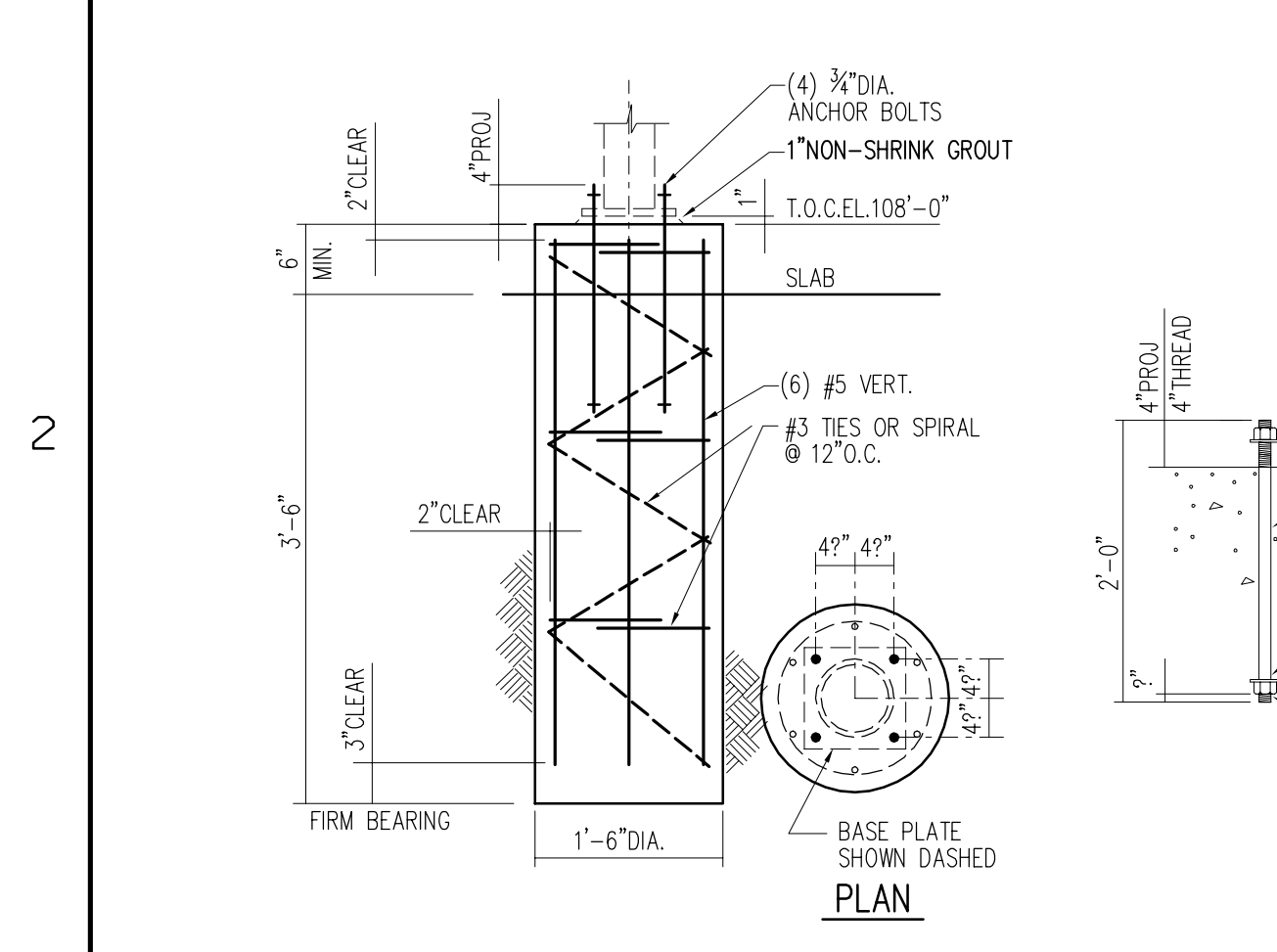
SCALE: AS SHOWN



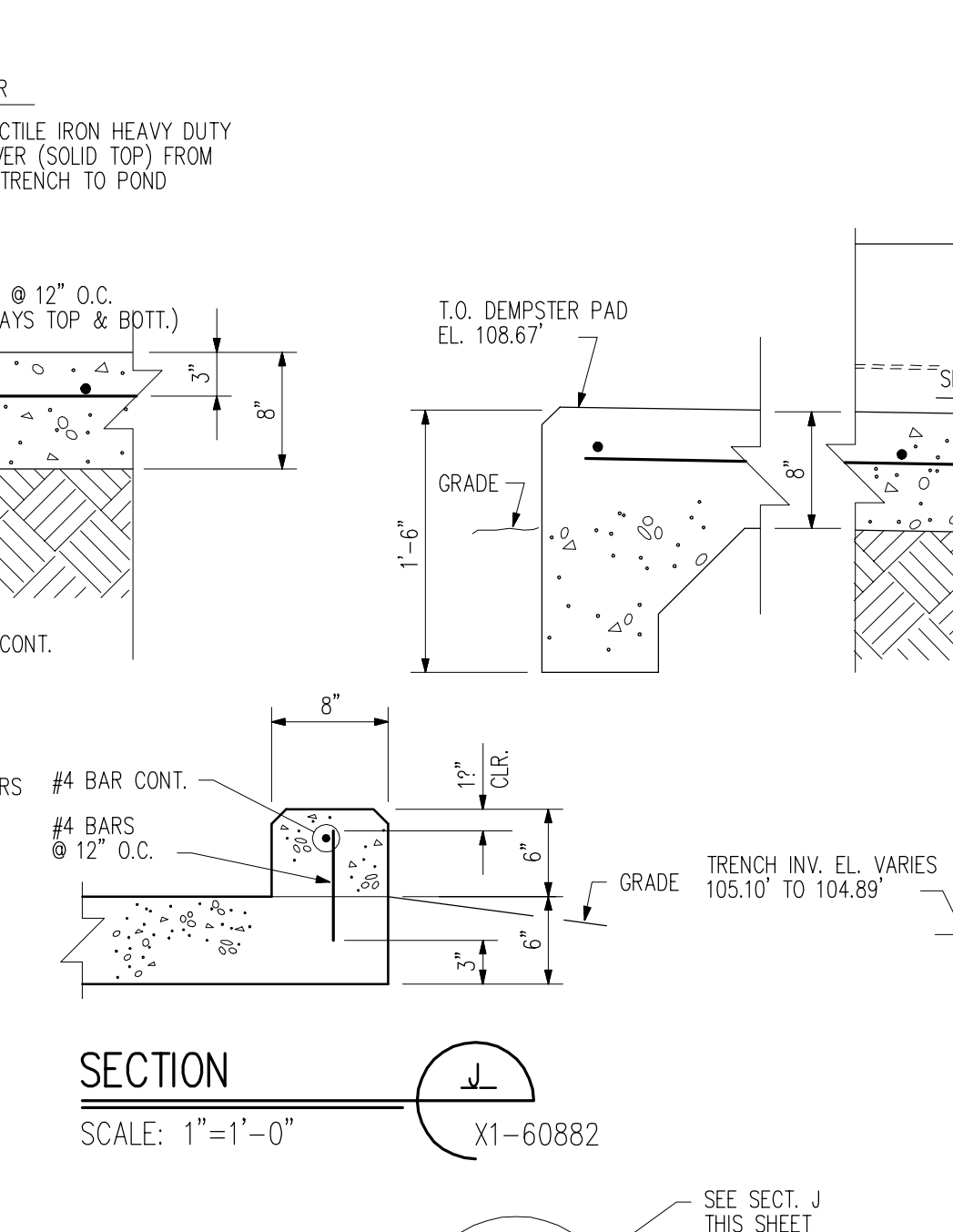
SECTION B
SCALE: 1"=1'-0"
X1-60882



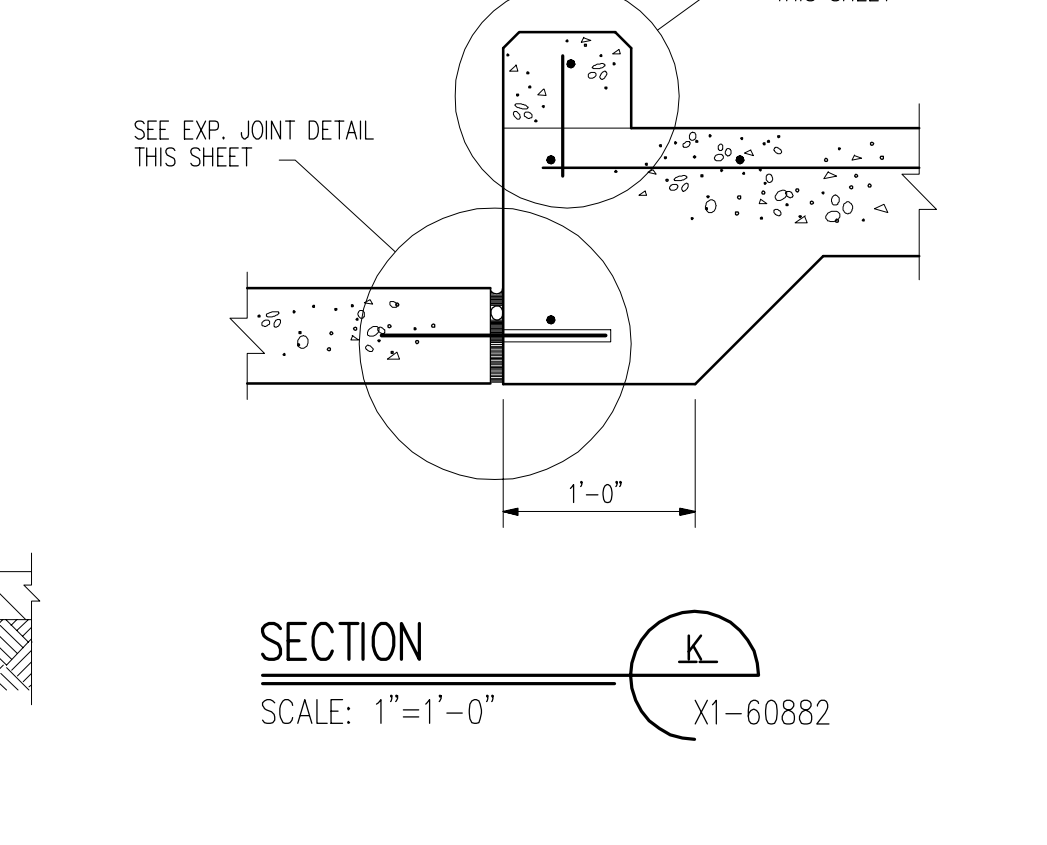
SECTION H
SCALE: 3/4"=1'-0"
X1-60882



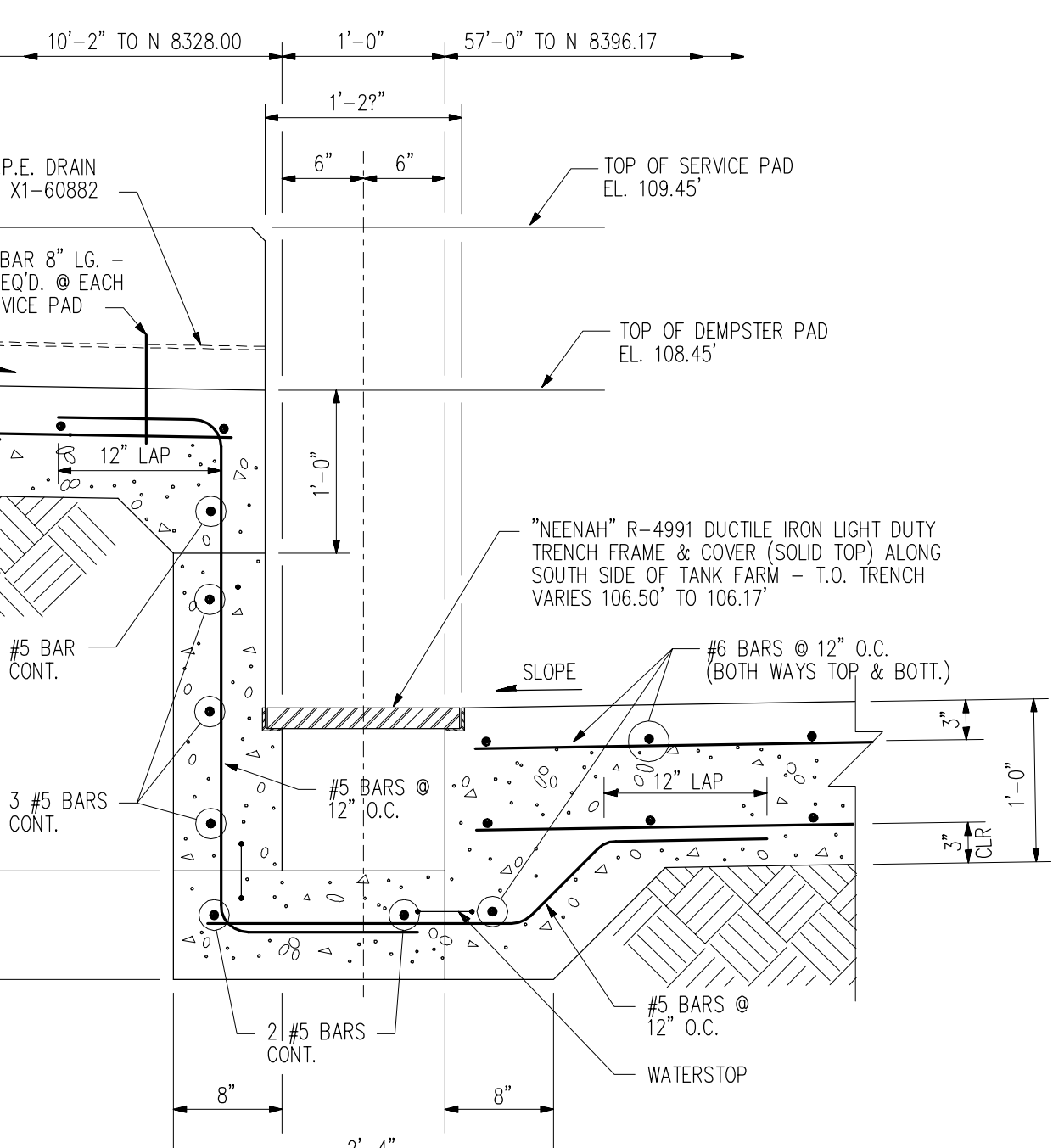
PIPE POLE FOUNDATION DETAIL "1"
SCALE: 3/4"=1'-0"



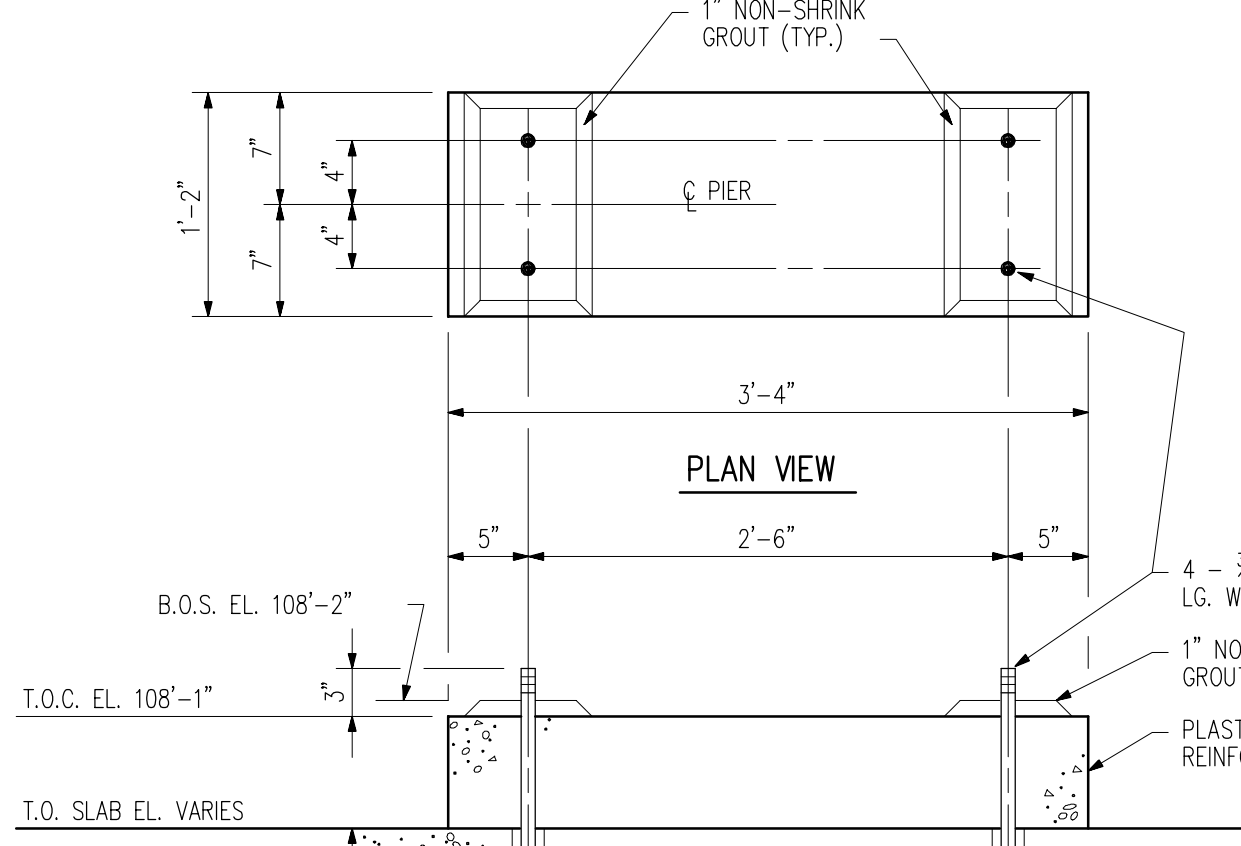
SECTION J
SCALE: 1"=1'-0"
X1-60882



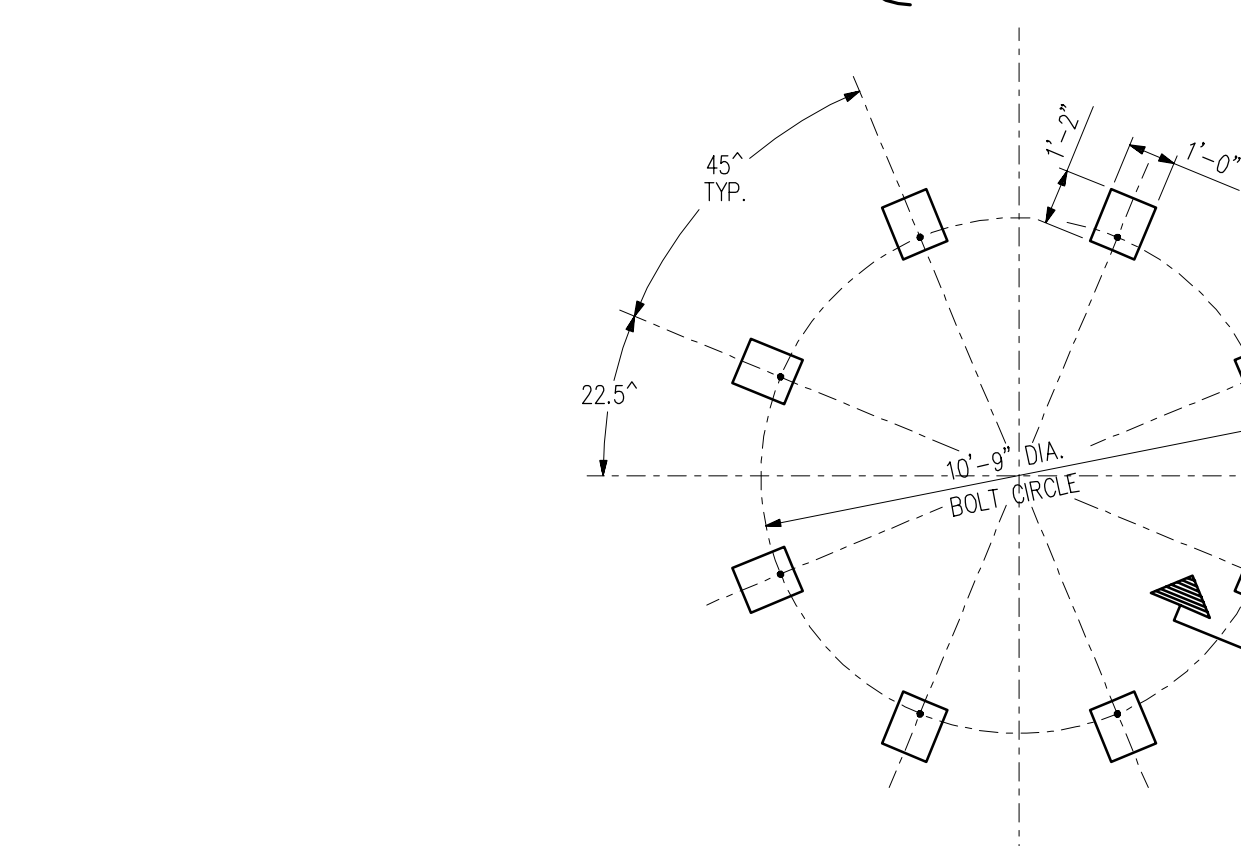
SECTION K
SCALE: 1"=1'-0"
X1-60882



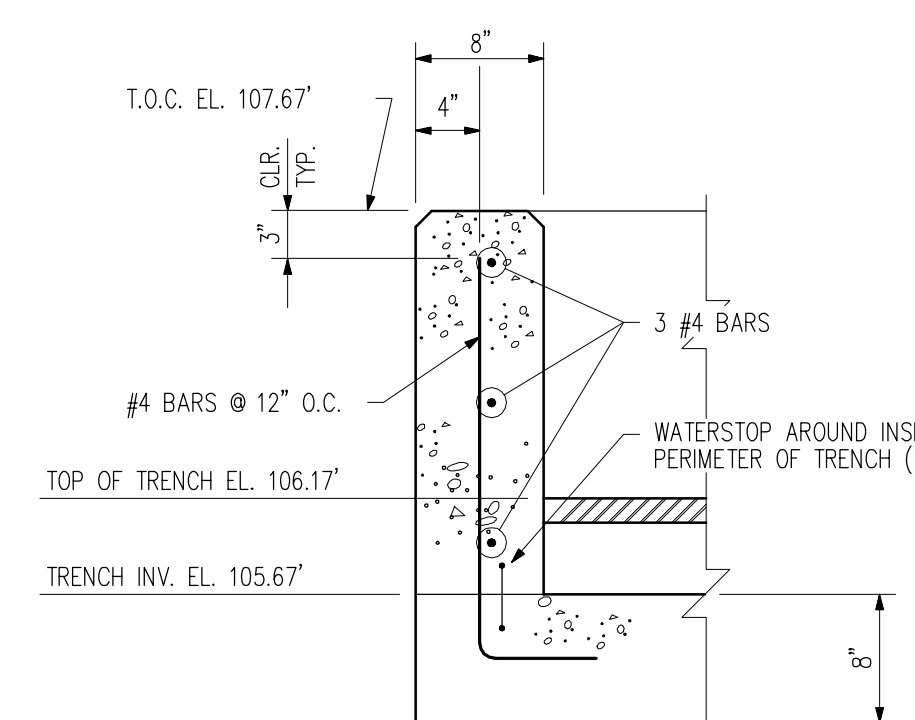
SECTION C
SCALE: 1"=1'-0"
X1-60882



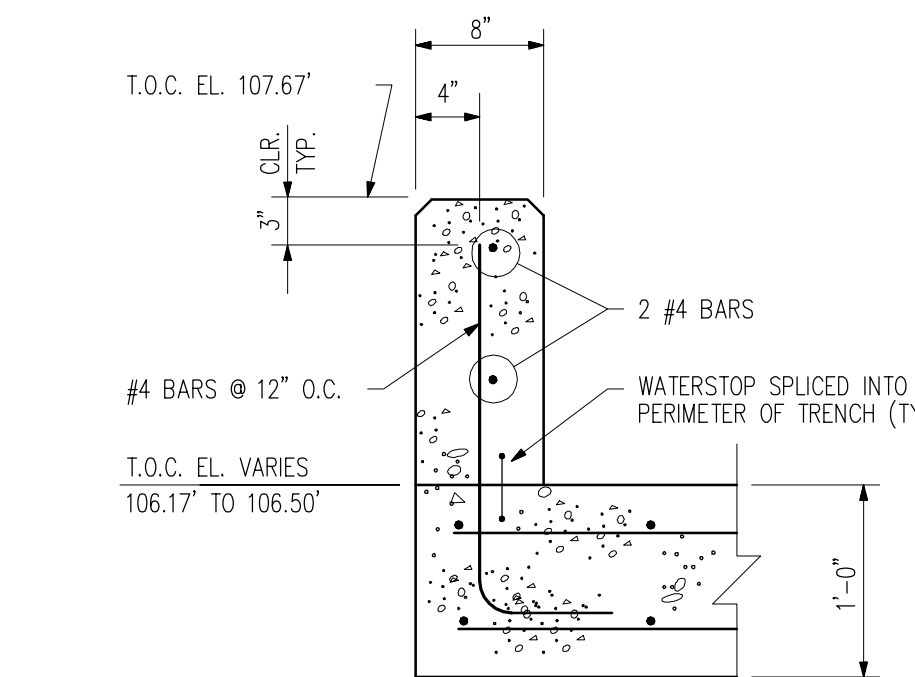
SECTION L
SCALE: 1"=1'-0"
X1-60882



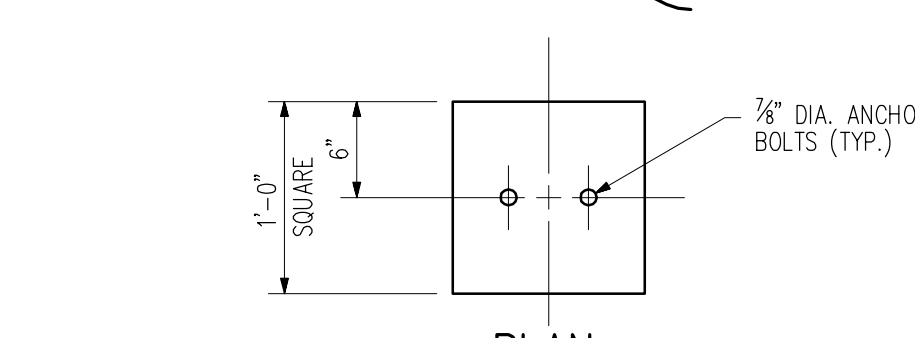
TYPICAL EQUIP. PAD LAYOUT
SCALE: 3/4"=1'-0"



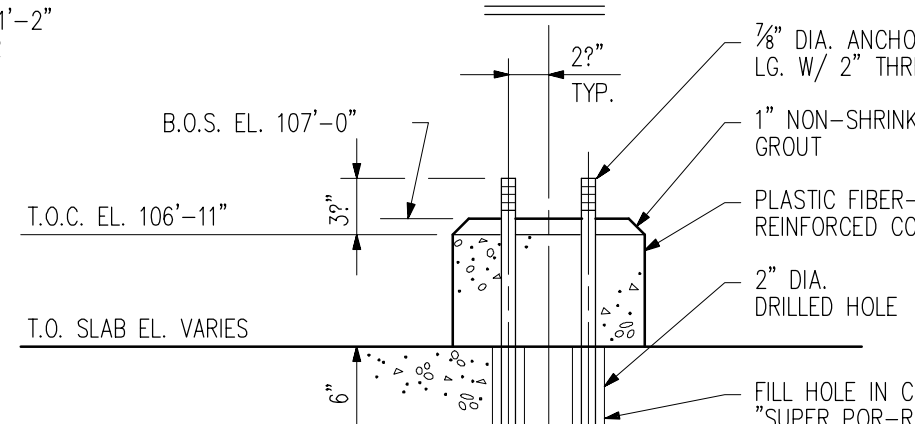
SECTION D
SCALE: 1"=1'-0"
X1-60882



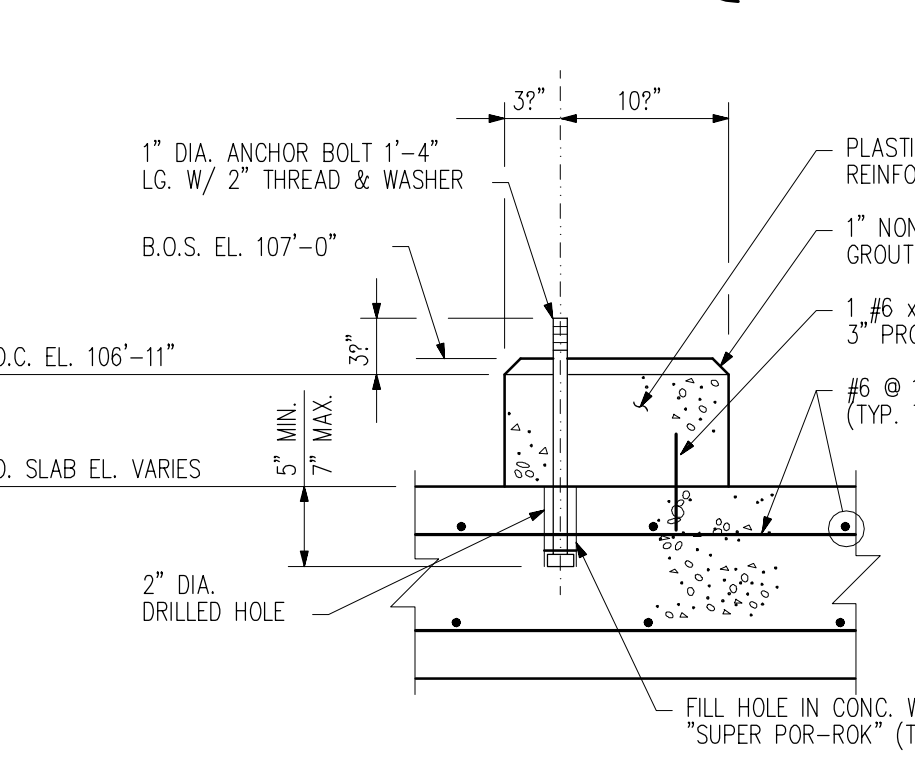
SECTION E
SCALE: 1"=1'-0"
X1-60882



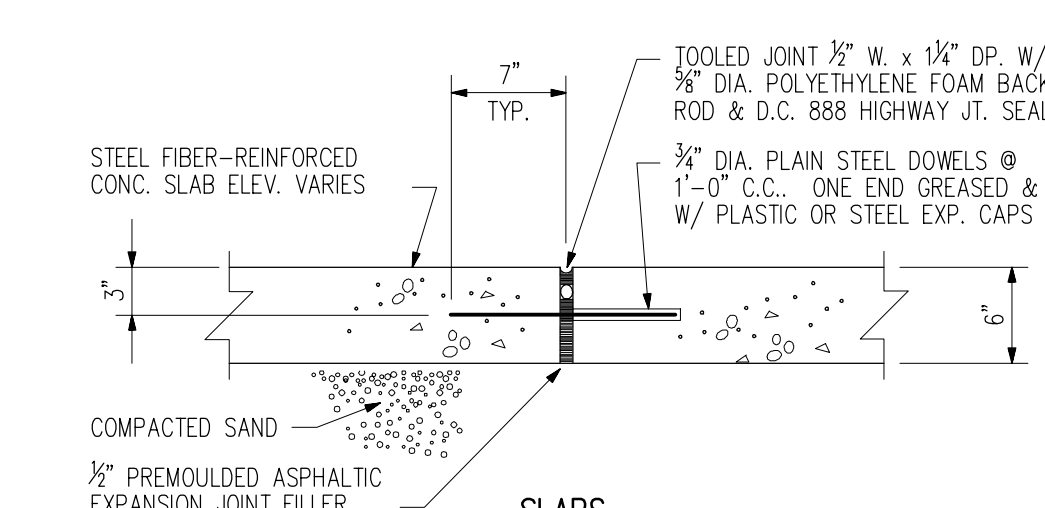
PLAN



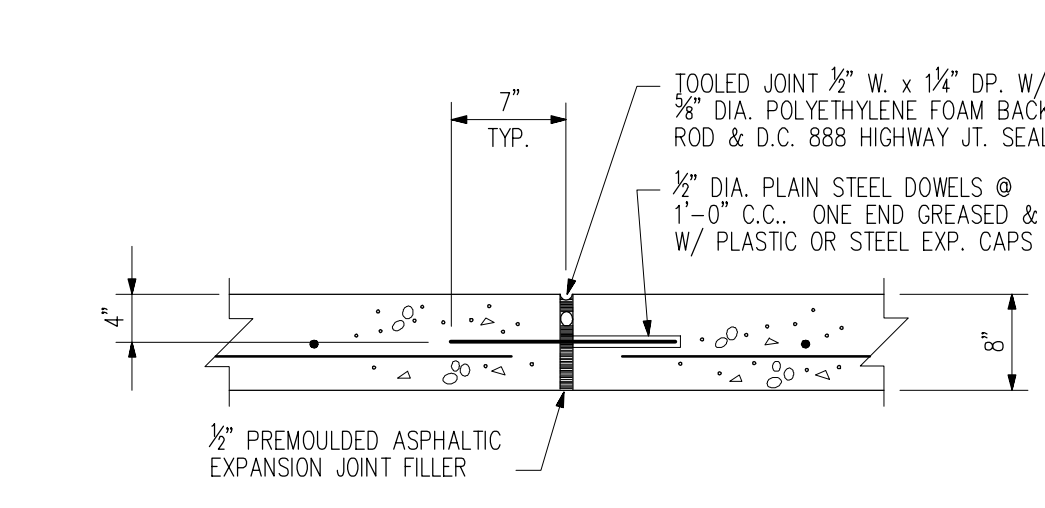
SECTION F
SCALE: 1"=1'-0"
X1-60882



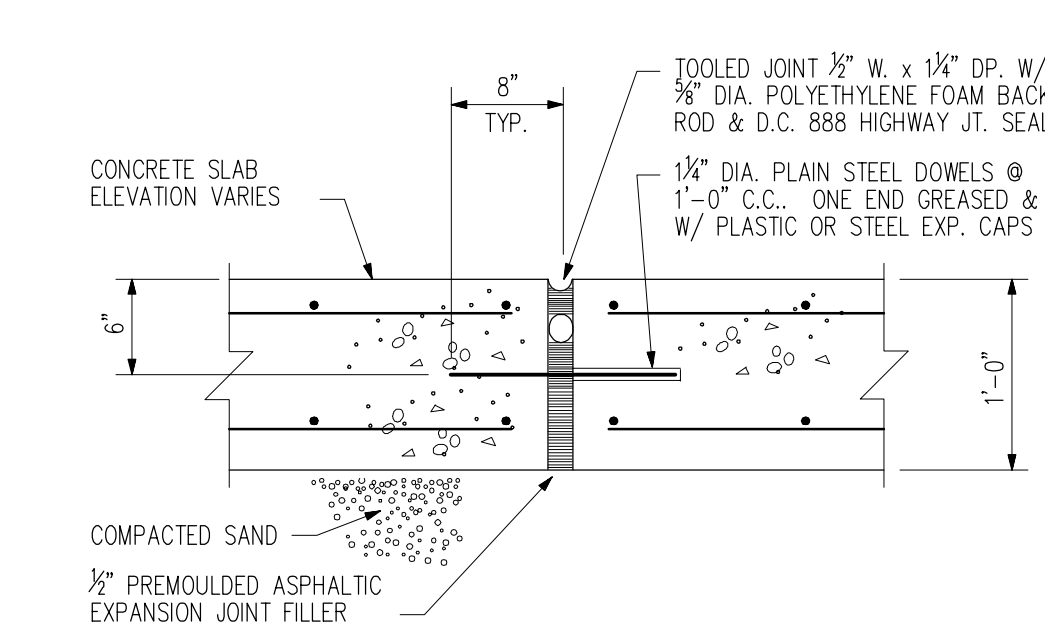
SECTION G
SCALE: 1"=1'-0"
X1-60882



SLABS



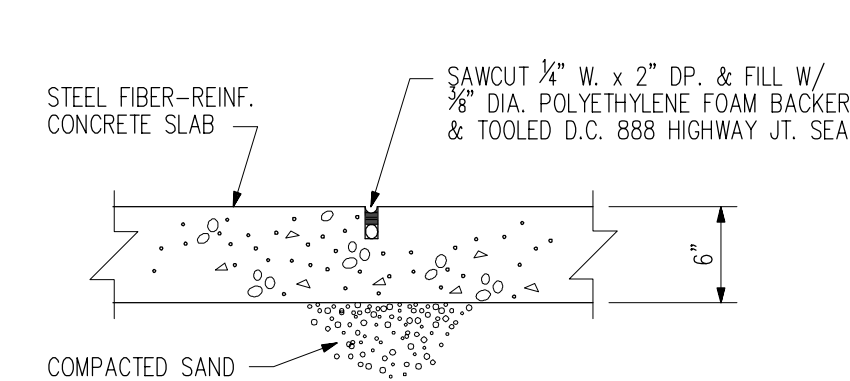
TRENCH WALLS



TANK FOUNDATION

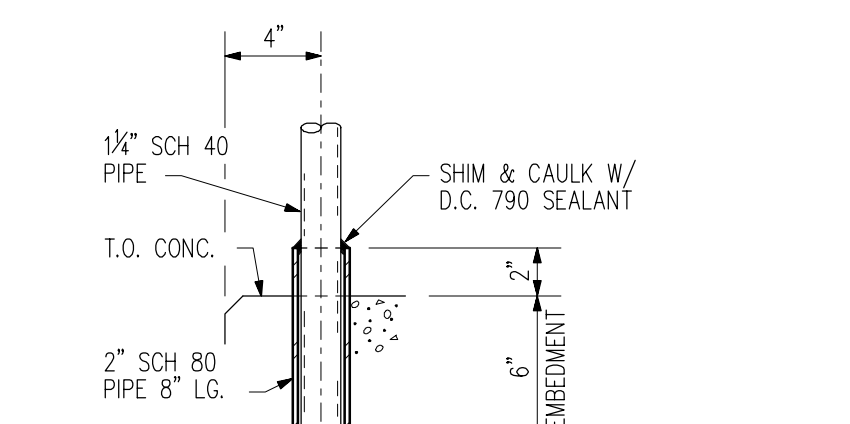
TYPICAL EXPANSION JOINTS

NO SCALE SEE DWG. X1-60882



TYPICAL CONTROL JOINT

NO SCALE SEE DWG. X1-60882



TYPICAL HANDRAIL CONNECTION

SCALE: 1 1/2"=1'-0" SEE DWG. X1-60882

LAST GENERAL UPDATE: 04JAN2010

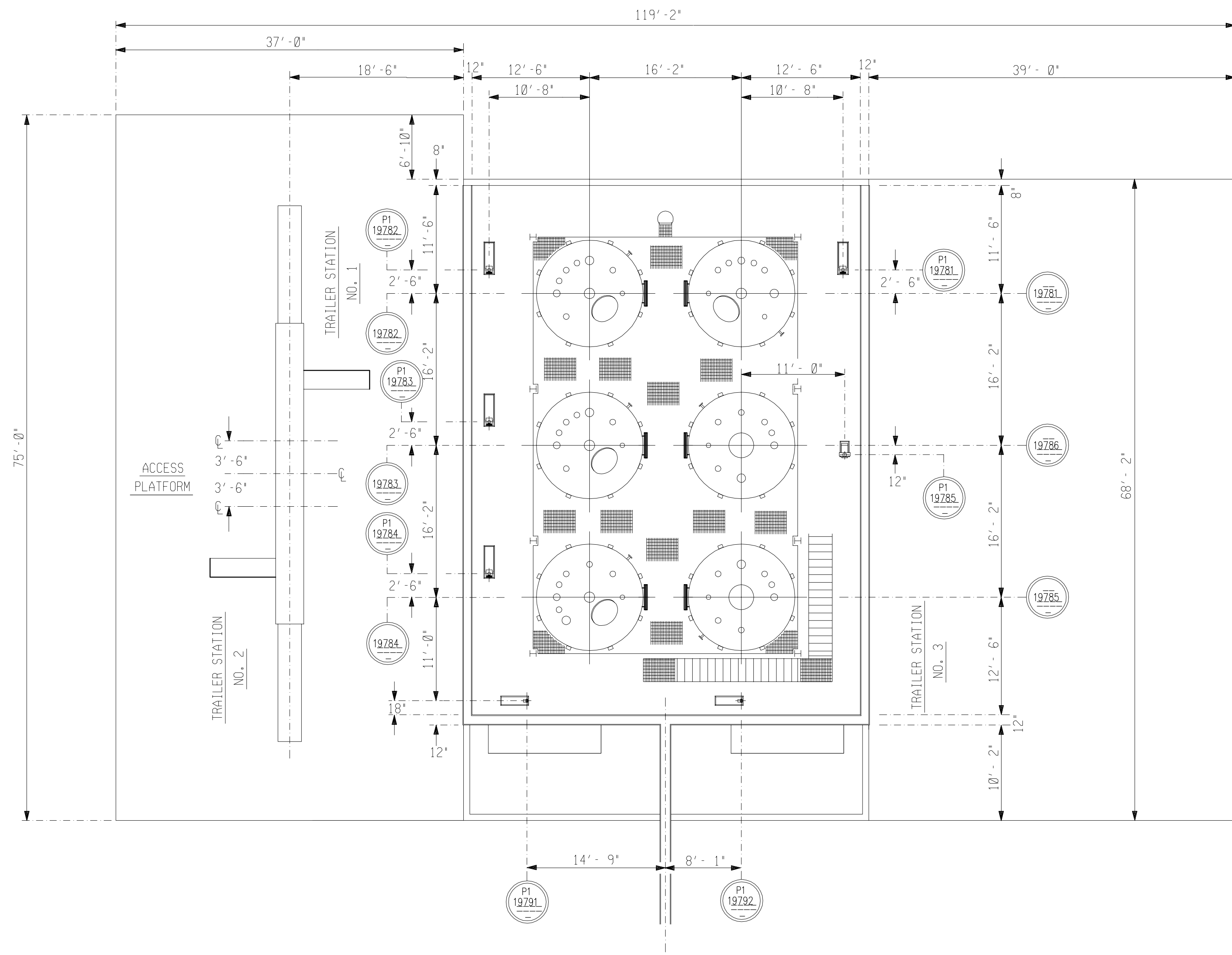
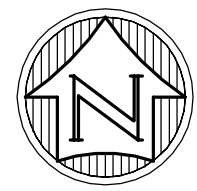
CADD

REVISIONS				REVISIONS				DESIGNED				DRAWN				CHECKED				APPROVED											
MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE	MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE	MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE	MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE	MARK	LOCATION	DATE	REVISIONS
H				A	C-2	09-26-89	AS BUILT	D.A.W.	K.J.W.	09-26-89	DESIGNED																				
J				B	A-2	27FEB04	ADDED PIPE POLE FOUNDATION	REP	ABK	09-26-89	K.J.WALKER																				
K				C																											
L				D																											
M				E																											
N				F																											
P				G																											

DOW CORNING CORPORATION
WASTE CONTROL BLDG. 806
TANK FARM
SLAB AND FOUNDATION DETAILS

DATE 01-11-88
DATE 01-29-88
DATE 06-08-88
DATE 06-10-88

SCALE: INCH AS NOTED, FOOT X1-60883, REVISION B



PLAN VIEW TANK FARM 806 BLDG.
SCALE: 1 / 8" = 1' - 0"

LAST GENERAL UPDATE: 04JAN2010

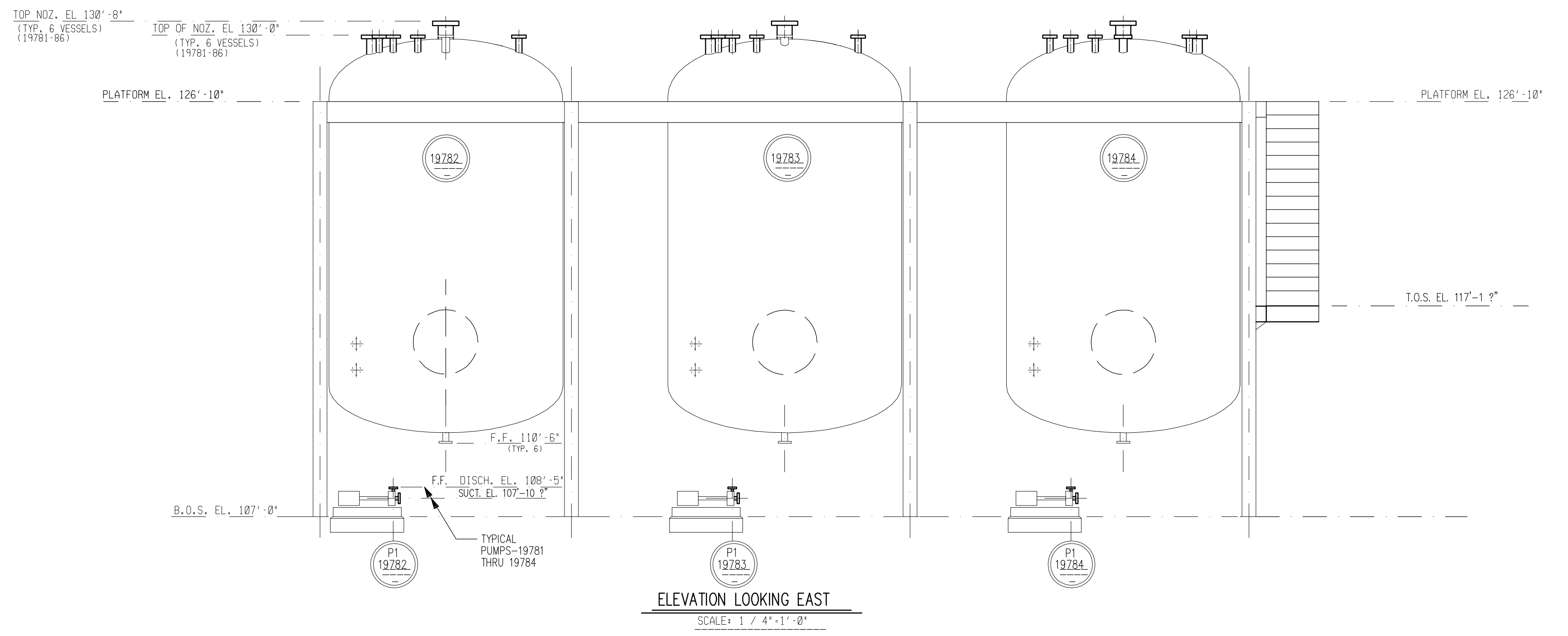
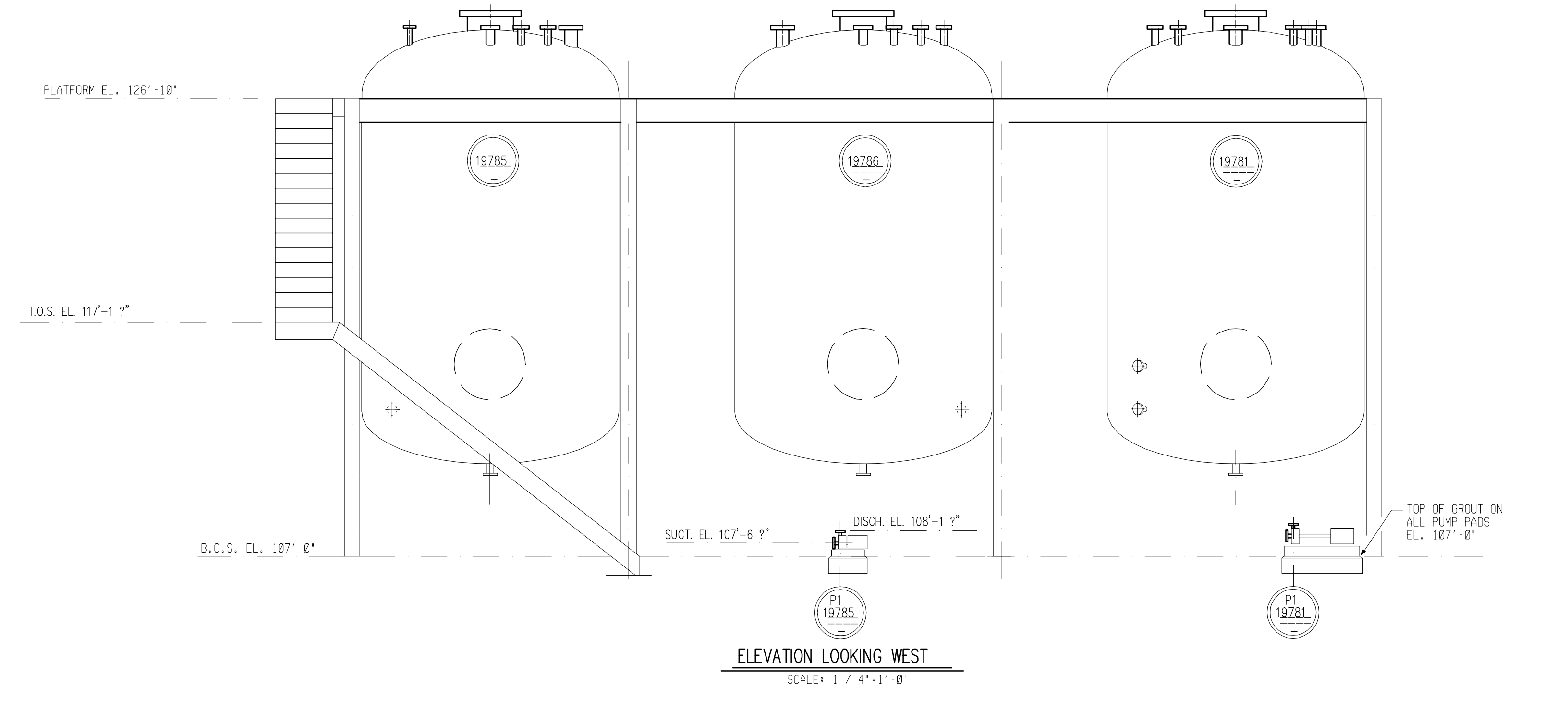
CADD

H						A					DESIGNED	DATE	DOW CORNING CORPORATION MIDLAND PLT BLDG 806 TANK FARM EQUIPMENT LOCATION PLAN
J						B				J. MOQUIN	04-13-88		
K						C				DRAWN	DATE		
L						D				DEBOLT DESIGN	05-15-88		
M						E				CHECKED	DATE		
N						F				S.K. SAHA	05-15-88		
P						G				APPROVED	DATE	SCALE	
MARK	LOCATION	DATE	REVISIONS			CHANGED	APPROVED	DATE	MARK	LOCATION	DATE	INCH: 1 / 8" = 1' - 0" FOOT: W1-71228 REVISION: 0	

A B C D E F G H J K

6
5
4
3
2
1

6
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2
1



LAST GENERAL UPDATE: 04JAN2010

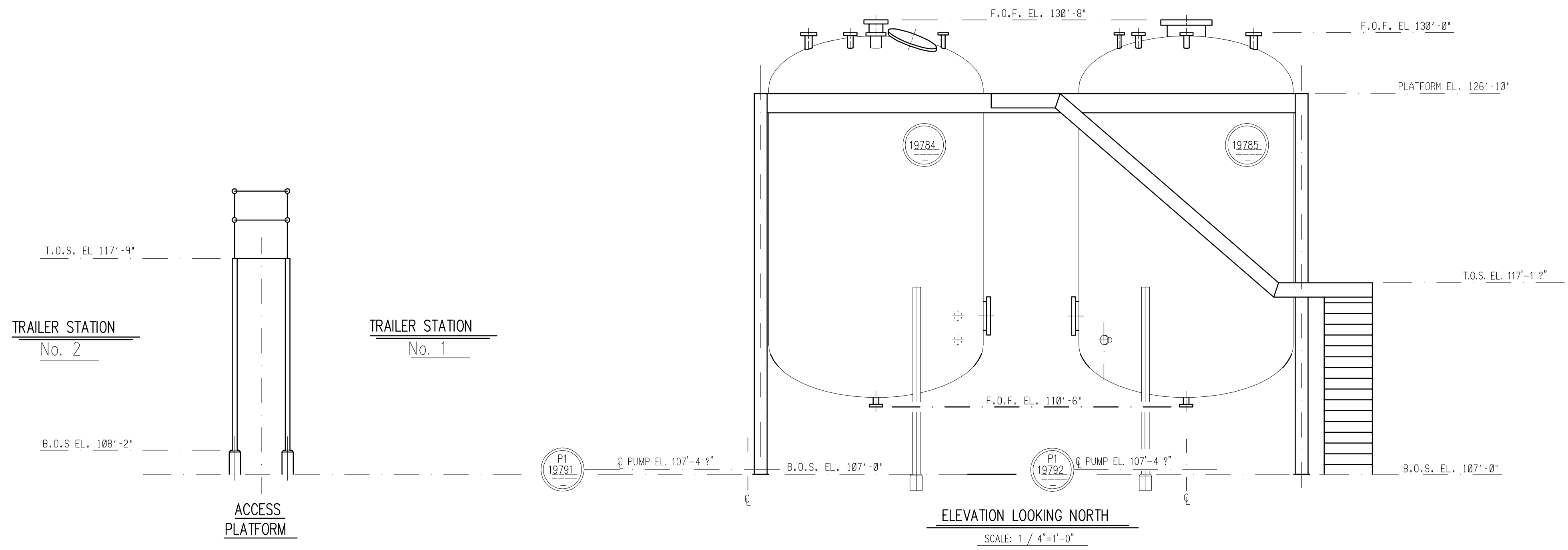
H						A	D-1	8-8-88	CHANGED SUCT. & DISCH. ELEV. ON PUMPS P1-19781 THRU P1-19784	J. MOQUIN	SKS	8-8-88	DESIGNED	J. MOQUIN	DATE	04-13-88	DOW CORNING CORPORATION MIDLAND PLT. BLDG 806 TANK FARM EQUIPMENT - EAST & WEST ELEVATION	
J						B							DRAWN	DEBOLT DESIGN	DATE	05-03-88		
K						C							CHECKED	S.K. SAHA	DATE	05-15-88		
L						D							APPROVED	S.K. SAHA	DATE	05-15-88		
M						E							SCALE	INCH	FOOT	DRAWING NUMBER		REVISION
N						F								1	4" = 1'-0"	W1-71229	A	
P						G												
MARK	LOCATION	DATE	REVISIONS			CHANGED	APPROVED	DATE	MARK	LOCATION	DATE	REVISIONS			CHANGED	APPROVED	DATE	

A B C D E F G H J K

A B C D E F G H J K

6
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1

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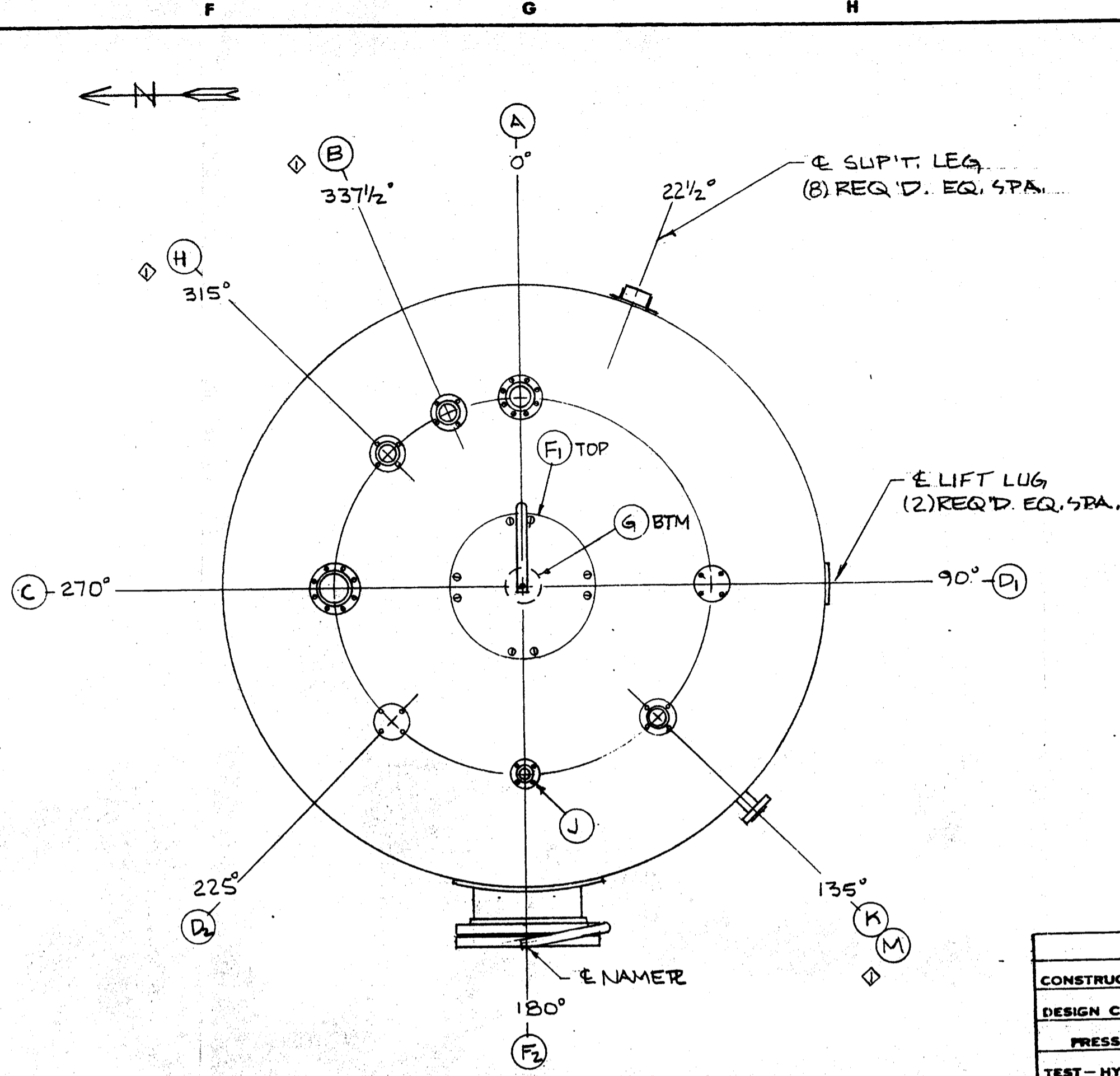
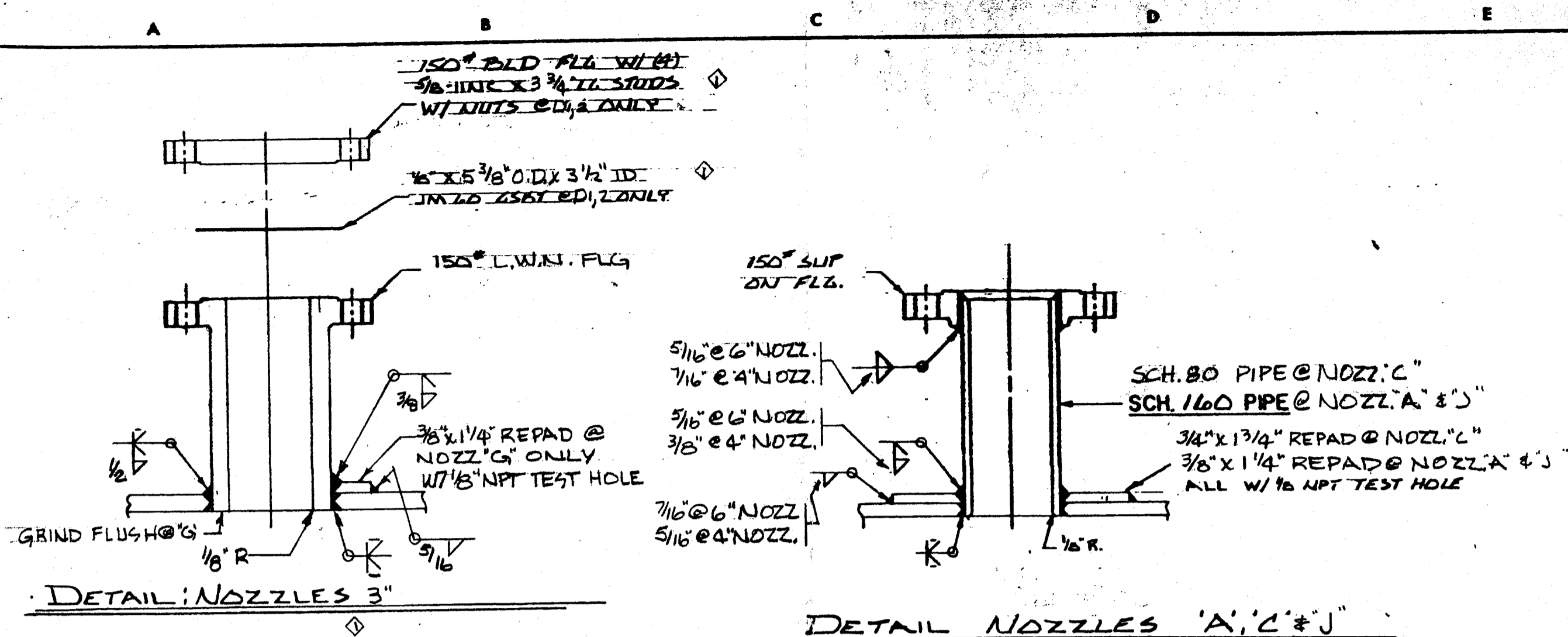


LAST GENERAL UPDATE: 04JAN2010

CADD

H							A							DESIGNED	DATE	DOW CORNING CORPORATION MIDLAND PLT BLDG 806 TANK FARM EQUIPMENT - SOUTH ELEVATION	
J							B						J. MOQUIN	03-29-88			
K							C						DRAWN	DATE			
L							D						DEBOLT DESIGN	05-15-88			
M							E						CHECKED	DATE			
N							F						S.K. SAHA	05-15-88			
P							G						APPROVED	DATE			
MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE	MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE	S.K. SAHA	05-15-88	SCALE	
														INCH	FOOT	DRAWING NUMBER	REVISION
														1 / 4" = 1' - 0"		W1-71230	0

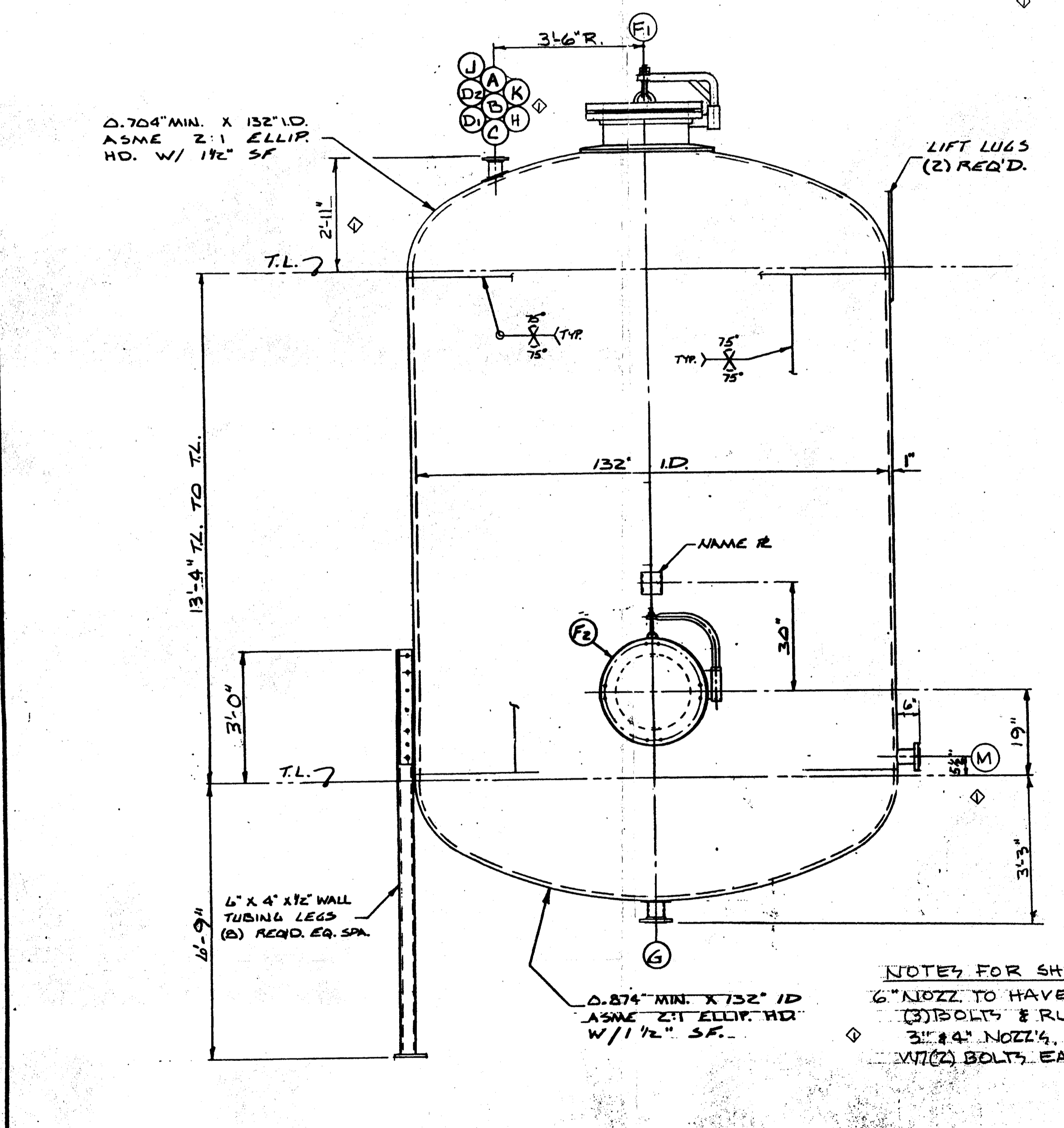
A B C D E F G H J K



FITTING SCHEDULE			
MK	NO. REQ'D.	DESCRIPTION	REMARKS
A	1	4"-150° NOZZ. SO	INLET
B	1	3"-150° NOZZ. L.W.N.	RECIRC.
C	1	6"-150° NOZZ. SO	RELIEF
D ₁	1	3"-150° NOZZ. L.W.N.	SPARE W/ BLIND
E			
F ₂	2	24" 150° NOZZ SO	MANWAY
G	1	3"-150° NOZZ L.W.N.	OUTLET
H	1	3"-150° NOZZ L.W.N.	LEVEL SWITCH
D ₂	1	3"-150° NOZZ L.W.N.	SPARE W/ BLIND
K	1	3"-150° NOZZ L.W.N.	LEVEL INST.
J	1	4"-150° NOZZ SO	N ₂ BLANKET
M	1	3" 150° NOZZ. L.W.N.	LEVEL SWITCH

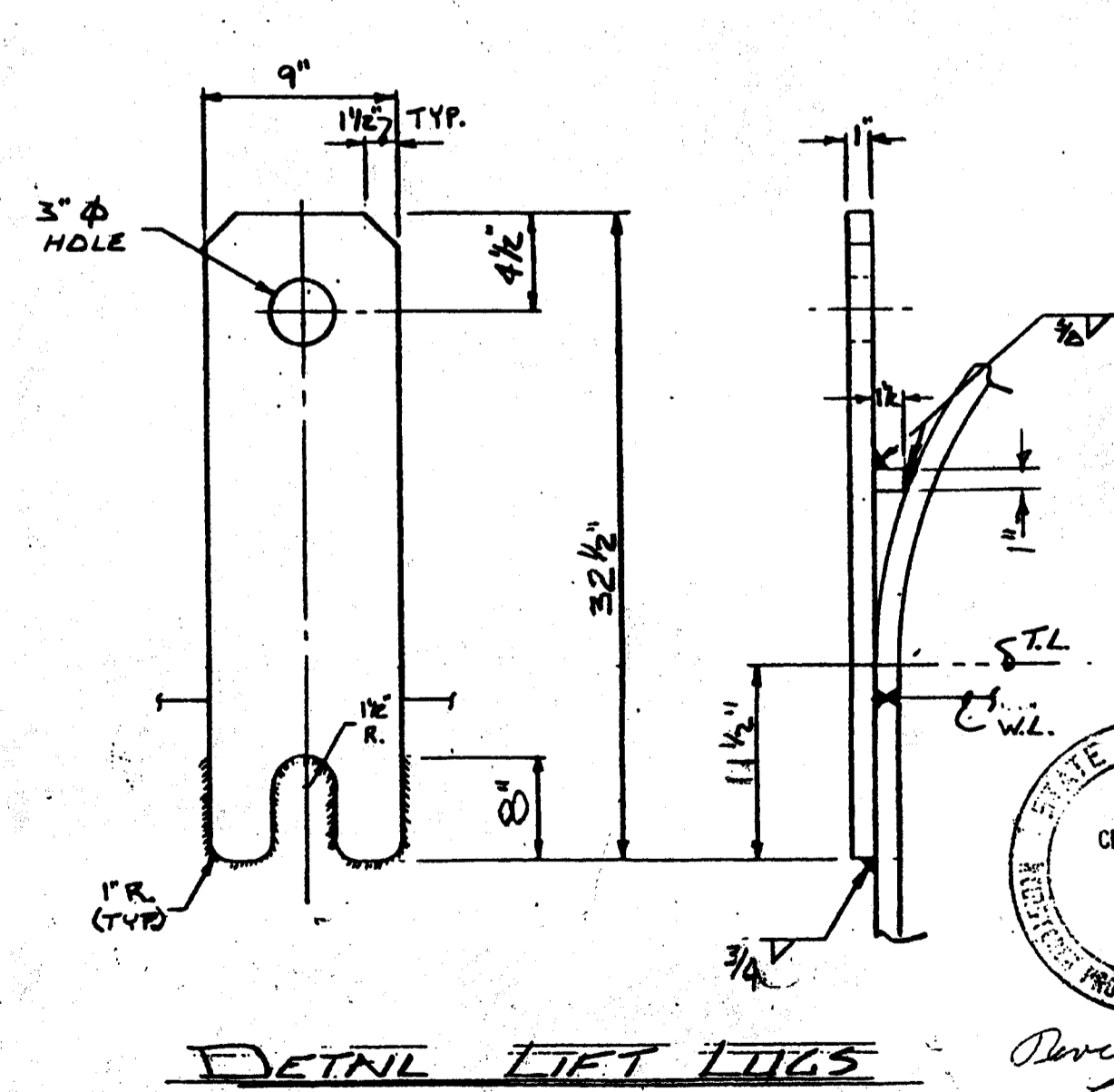
WELD NOTES
 CS-TO CS MG-ID R-70 WIRE
 " " M13 E 7018 STICK
 " " SA1-70 L-50 WIRE B60 FLUX

NOZZLE FLANGE DIMENSIONS TO CONFORM TO 150° ANSI SLIP ON FLG STDS. BOLT HOLES TO STRADDLE 1/2" PARALLEL TO PRINCIPAL VESSEL 1/2"



SPARE PARTS LIST
 (2) 1/8" x 28 1/4" O.D. x 24" I.D. GASKET
 (2) 1/8" x 5 3/8" O.D. x 3 1/2" I.D. GASKET

CERTIFIED FOR CONSTRUCTION
 SUPERIOR WELDING COMPANY
 DATE- 5-20-88
 APP'D- R.B.



NOTES FOR SHIPPING COVERS
 6" NOZZ. TO HAVE 1/2" SHIPPING COVER W/ (3) BOLTS & RUBBER GASKETS
 3" x 4" NOZZ.'S TO HAVE 150° BLD. FLG.'S W/ (2) BOLTS. EA. & RUBBER GASKETS.

STATE OF ILLINOIS
 CHARLES C. SUNGER
 62-16970
 PROFESSIONAL ENGINEER

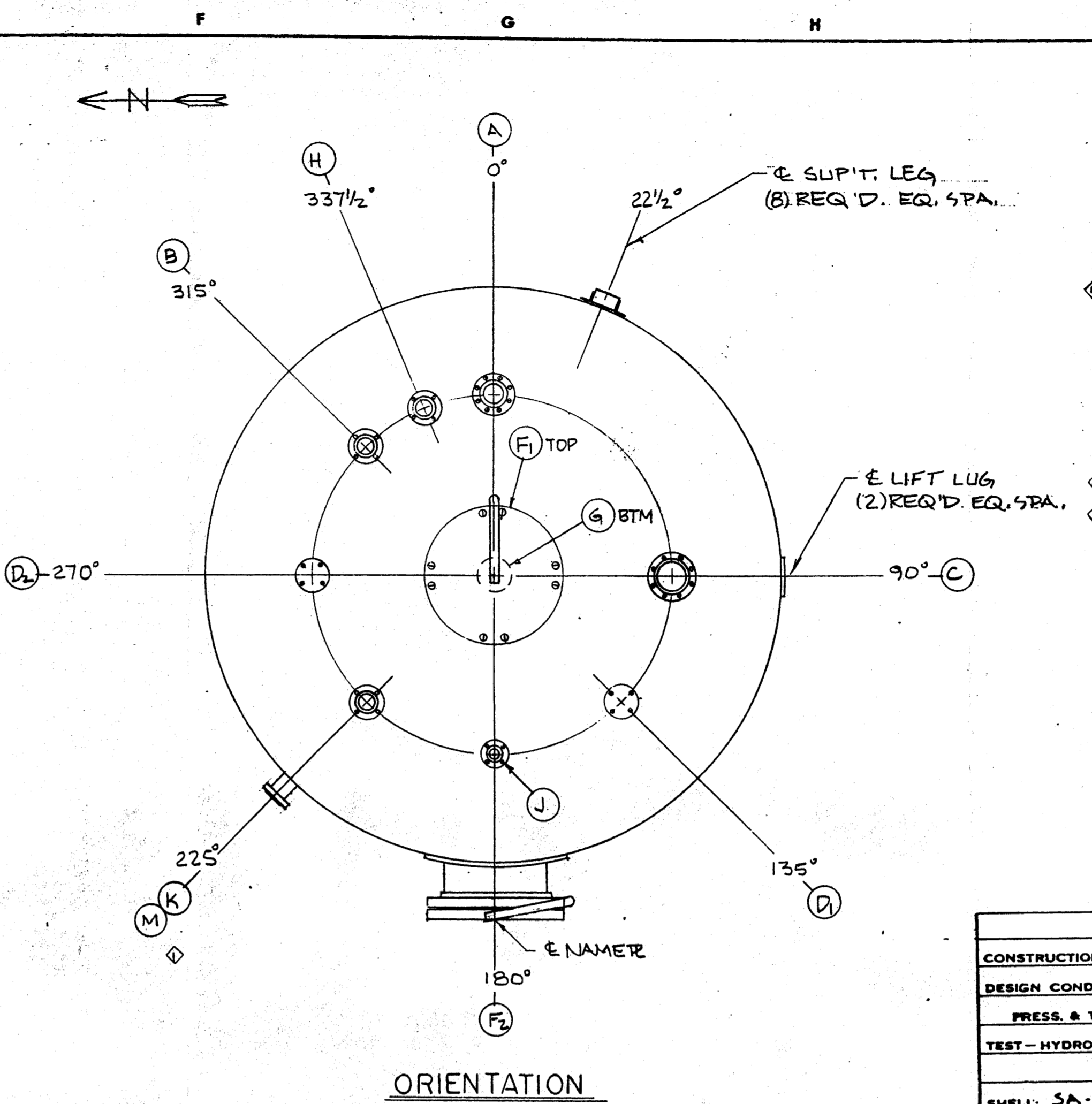
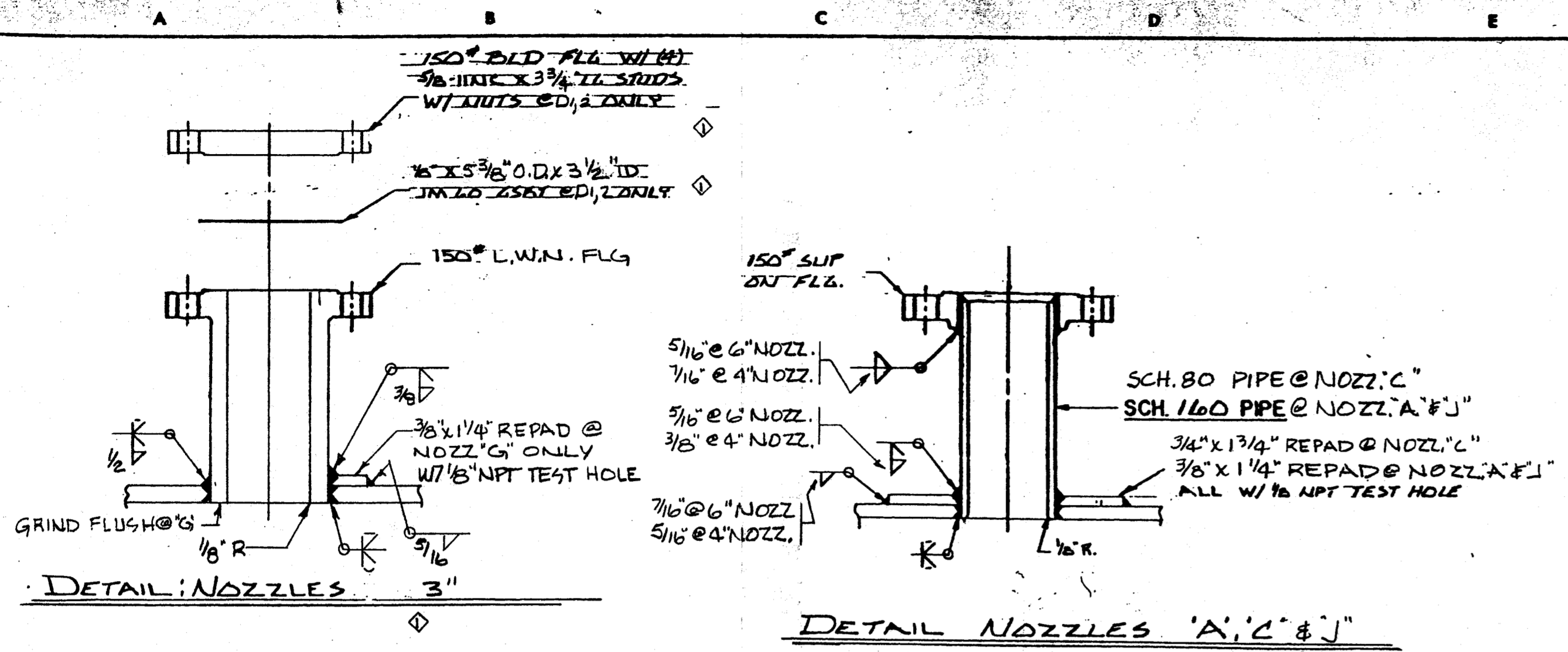
VESSEL SPECIFICATIONS			
CONSTRUCTION: CODE-ASME SECT. VIII DIV. I 1984 EDITION 12-31-84 ADD	SHELL	JACKET, COIL OR TUBE	
DESIGN CONDITIONS:	PRESS. & TEMP. F.V. 150 PSIG @ -20° TO 520° F	TEST - HYDROSTATIC	HORIZ. @ 245 PSIG
MATERIAL			
SHELL: SA-516-70			
HEADS: SA-516-70			
JACKET SHELL:			
JACKET HEADS:			
SHELL NOZZLES: NECKS SA-106-B		FLANGES SA-105	
JACKET NOZZLES: NECKS		FLANGES	
COILS:			
BOLTING: SA-193-B7 W/ SA-194-ZH NUTS SHIPPING: CS			
RE-PADS: SA-516-70		LIFT LUGS: SA-516-70	
GASKETS: JM-60 SHIPPING GSKTS.: RUBBER			
SUPPORTS: SA-36			
CODE INSPECTION & STAMP: ASME BY LUMBERMENS MUTUAL CASUALTY CO			
INSPECTION - OTHER - BY CUSTOMER			
HEAD TO SHELL: PER ILLINOIS (1985)			
RADIOGRAPH: SPOT		THERMAL TREATMENT: NOT REQ'D.	
CORR. ALLOW: STA. HD. 1/2"		SANDBLAST: NOT REQ'D.	
PAINT: NOT REQ'D.			
WORKING VOLUME: 10000 GAL.			
WEIGHT: EMPTY - 34549 LBS		FULL OF H ₂ O - 135507 LBS. VOL - 12115 GAL	
REFERENCE DWG. & SPEC: DOW CORNING DATA SHTS. M800-0007 SHT 1 & 2			
SPEC. NO. 2149 REV. 1, SK. NO. M800-19875 & 6			
REFERENCE ORDER: 132610			
ITEM: 19785			
PROJECT: 107021			
REF DWG: L88-0054-C			
NO. REVISIONS DATE		SUPERIOR WELDING COMPANY	
1 REV. PER APP. 5/21/88 5-11-88		DECATUR, ILLINOIS	
2 COR. FOR CONST.		JOB NO. 08-88-0054-01	
		DWG. L88-0054-A	

ELEVATION

DETAIL LIFT LUGS
 (2) REQ'D. EQ. SPA.

NO.	REVISIONS	DATE	DESIGNED BY	DATE	DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE

DOW CORNING CORPORATION
 MIDLAND PLANT 606 TANK FARM
 WASTE IPA/SILOXANE STORAGE TANK
 SCALE: 1" = 1'-0" DRAWING NUMBER: 1485



FITTING SCHEDULE			
MK	NO. REQ'D	DESCRIPTION	REMARKS
A	1	4"-150° NOZZ. SO	INLET
B	1	3"-150° NOZZ. L.W.N.	RECIRC.
C	1	6"-150° NOZZ. SO	RELIEF
D	1	3"-150° NOZZ. L.W.N.	SPARE W/ BLIND
E			
F	2	24" 150° NOZZ. SO	MAINWAY
G	1	3"-150° NOZZ. L.W.N.	OUTLET
H	1	3"-150° NOZZ. L.W.N.	LEVEL SWITCH
Dz	1	3"-150° NOZZ. L.W.N.	SPARE W/ BLIND
K	1	3"-150° NOZZ. L.W.N.	LEVEL INST.
J	1	4"-150° NOZZ. SO.	N ₂ BLANKET
M	1	3"-150° NOZZ. L.W.N.	LEVEL SWITCH

WELD NOTES

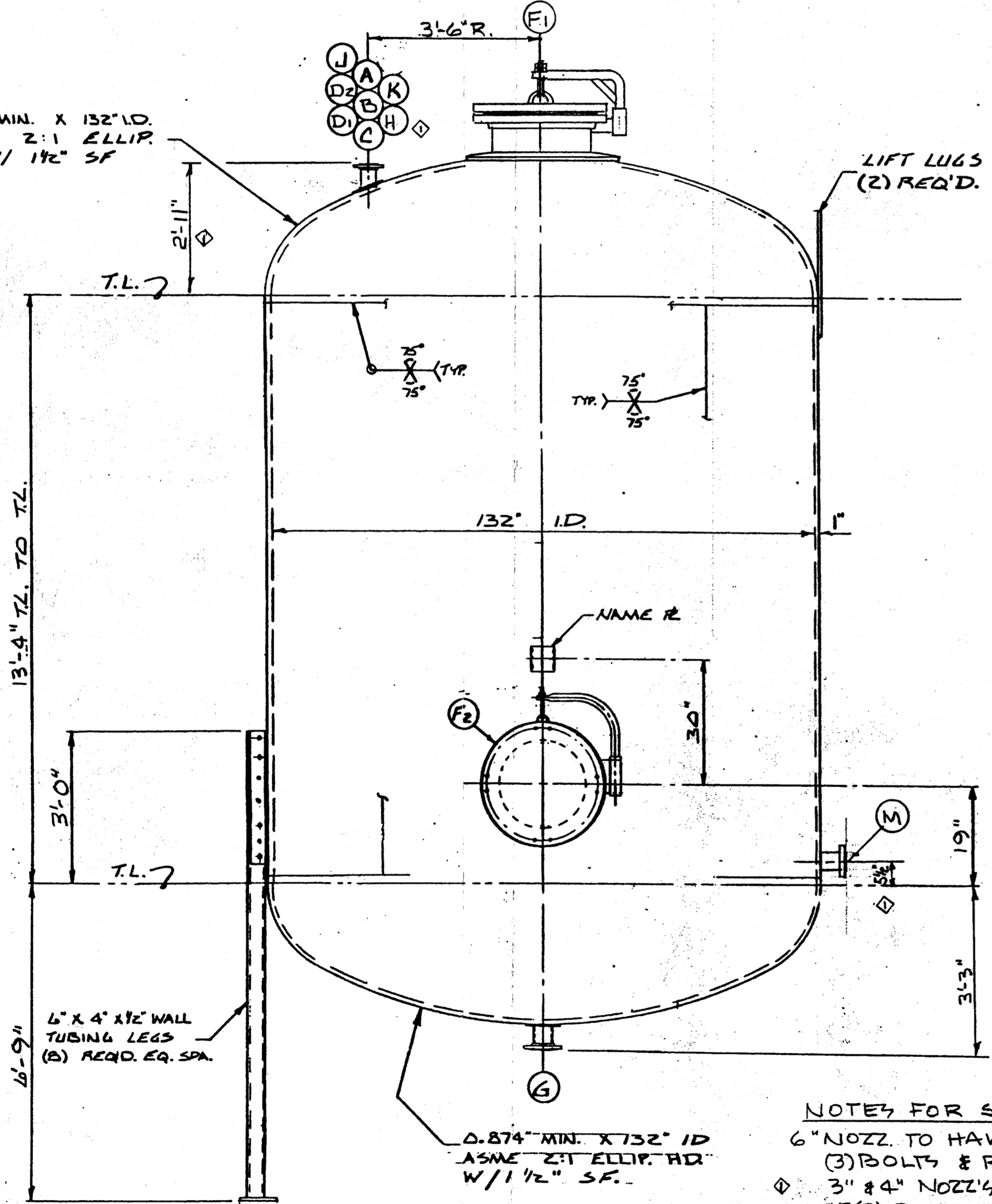
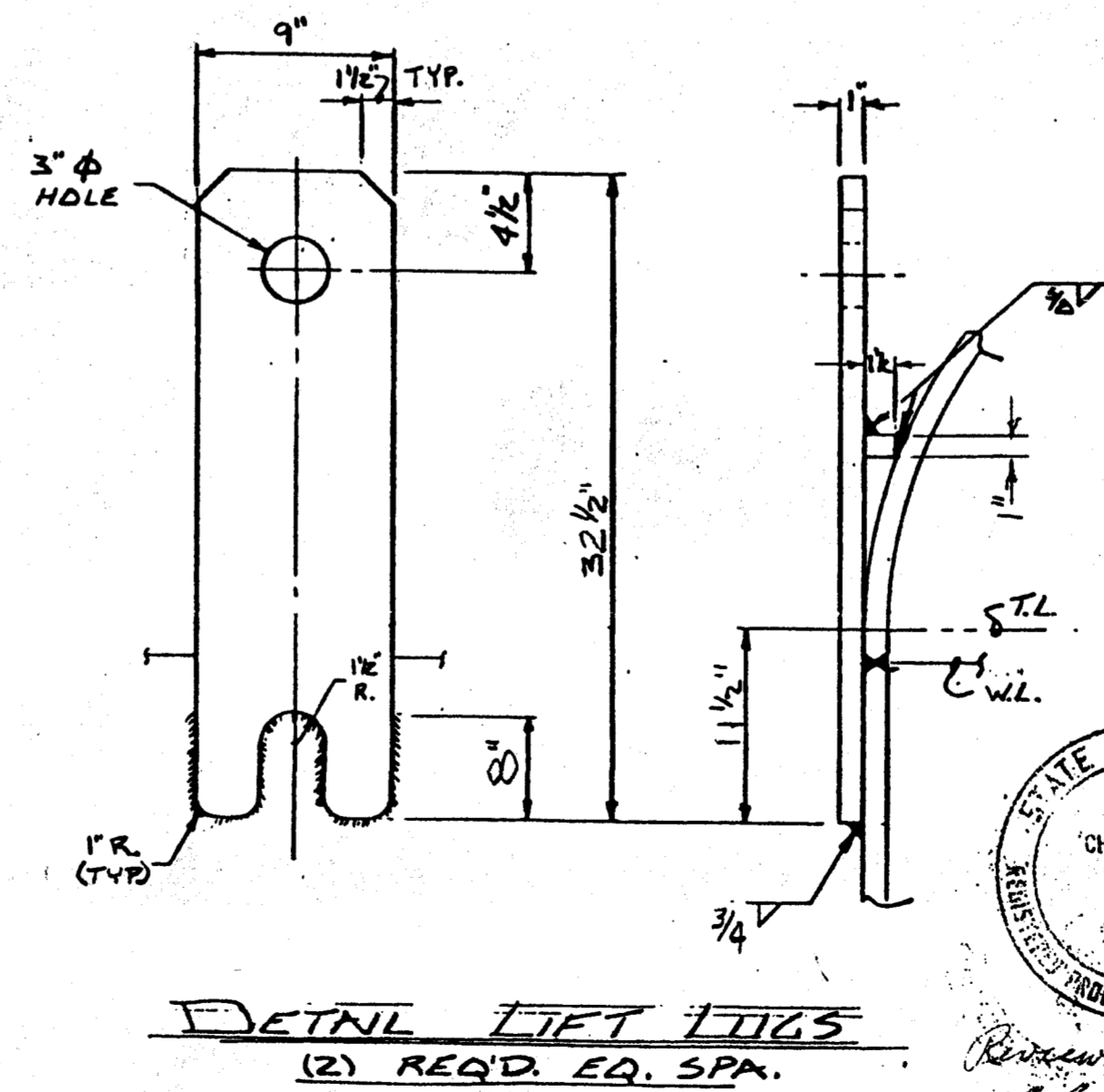
CS-TO CS	MIG-10	R-70 WIRE
"	MIG	E 7018 STICK
"	SAI-70	L-50 WIRE 860 FLUX

NOZZLE FLANGE DIMENSIONS TO CONFORM TO 150° ANSI SLIP ON FLG STDS. BOLT HOLES TO STRADDLE 1/2" PARALLEL TO PRINCIPAL VESSEL 1/2"

VESSEL SPECIFICATIONS	
CONSTRUCTION: CODE-ASME SECT VIII DIV I 1984 EDITION 12-31-84 ADD	JACKET, COIL OR TUBE
DESIGN CONDITIONS: SHELL	JACKET, COIL OR TUBE
PRESS. & TEMP. F.V. 150 PSIG @ -20° TO 520° F	
TEST-HYDROSTATIC HORIZ. @ 245 PSIG	
MATERIAL	
SHELL: SA-516-70	
HEADS: SA-516-70	
JACKET SHELL:	
JACKET HEADS:	
SHELL NOZZLES: NECKS SA-106-B	FLANGES SA-105
JACKET NOZZLES: NECKS	FLANGES
COILS:	
BOLTING: SA-193-B7 W/ SA-194-ZH NUTS SHIPPING: CS	
RE-PADS: SA-516-70	LIFT LUGS: SA-516-70
GASKETS: JM-60	SHIPPING GSKTS.: RUBBER
SUPPORTS: SA-36	
CODE INSPECTION & STAMP ASME BY LUMBERMEN'S MUTUAL CASUALTY CO.	
INSPECTION-OTHER- BY CUSTOMER	
HEAD TO SHELL: 5 SPOT X-RAY	THERMAL TREATMENT NOT REQ'D
RADIOGRAPH: 5 SPOT X-RAY	
CORR. ALLOW: TOP HD & SHELL: 0.125"	SANDBLAST: NOT REQ'D
CORR. ALLOW: BTM HD: 0.25"	
PAINT: NOT REQ'D.	
WORKING VOLUME: 10000 GAL.	
WEIGHT: EMPTY = 34549 LBS FULL OF H ₂ O = 135507 LBS, VOL = 12115 GAL	
REFERENCE DWG. & SPECS: DOW CORNING DATA SHTS. M800-V002 SHT 1 & 2	
SPEC. NO. 2149 REV. 1, SK. NO. M800 19875 #6	
REFERENCE ORDER: 132610	
ITEM: 19786	
PROJECT 107021	
REF DWG L88-0054-C	NO. REQ'D. (1)
NO. REVISIONS DATE	SUPERIOR WELDING COMPANY
REV. PER APPL 5/2/88	DECATUR, ILLINOIS
CERT. FOR CONST. 5-1-88	
	JOB NO 05-88-0054-02
	DWG. L88-0054-B

- SPARE PARTS LIST**
- (2) 1/2" x 28 1/4" O.D. x 24" I.D. GASKET
 - (2) 1/8" x 5 3/8" O.D. x 3 1/2" I.D. GASKET

CERTIFIED FOR CONSTRUCTION
SUPERIOR WELDING COMPANY
DATE: 5-20-88
APP'D: RB



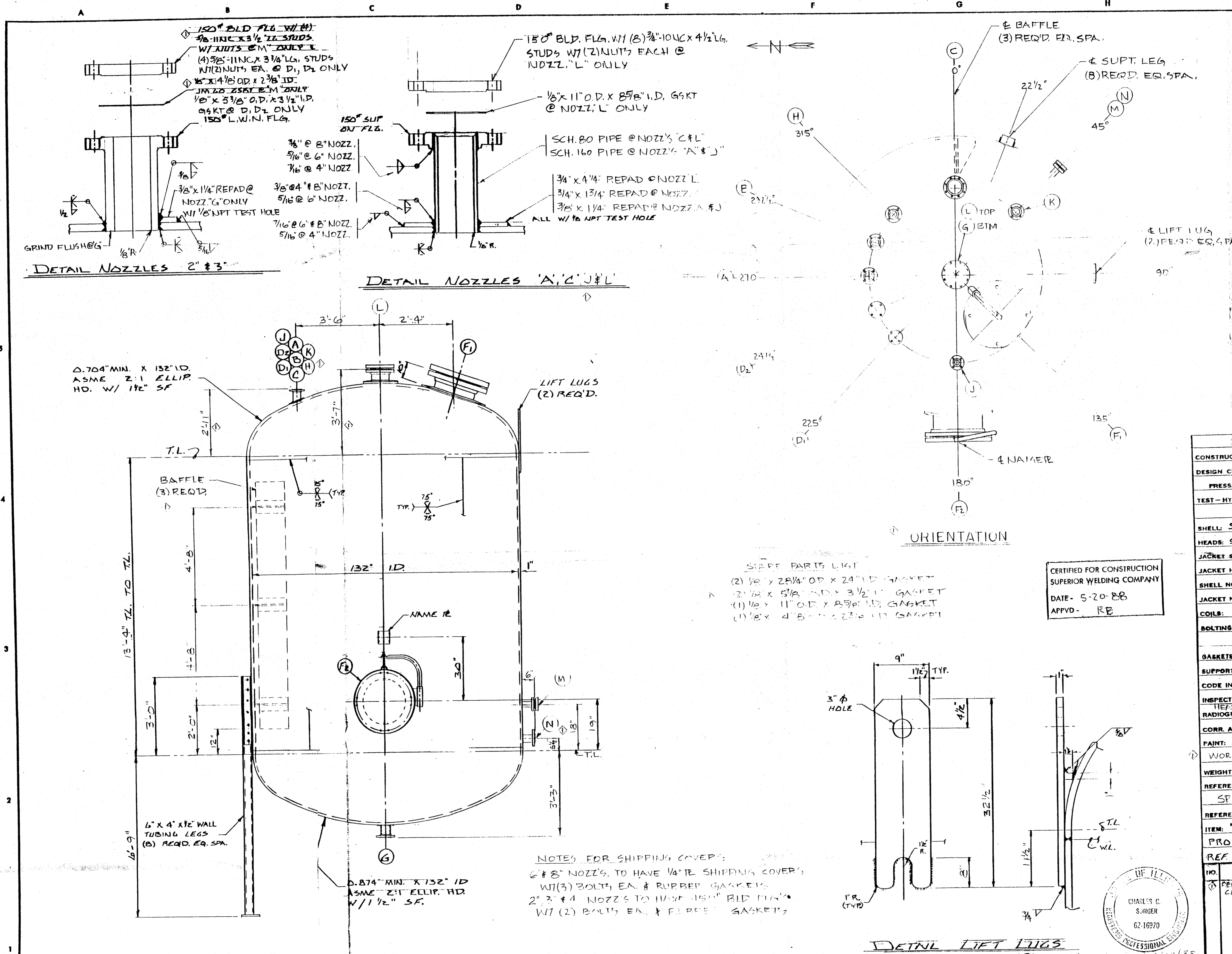
NOTES FOR SHIPPING COVERS

- 6" NOZZ. TO HAVE 1/2" SHIPPING COVER W/ (3) BOLTS & RUBBER GASKETS
- 3" #4" NOZZ'S, TO HAVE 150° BLD. FLG'S. W/ (2) BOLTS EA. & RUBBER GASKETS

MARK	LOCATION	DATE	REVISIONS	CHANGED BY	APPROVED BY	DATE	MARK	LOCATION	DATE	REVISIONS	CHANGED BY	APPROVED BY	DATE

DESIGNED BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

DOW CORNING CORPORATION
MIDLAND PLANT 806 TANK FARM
WASTE IPA/SILOXANE STORAGE TANK
SCALE: INCH FOOT
DRAWING NUMBER: WF-7486



FITTING SCHEDULE			
MK	NO. REQ'D	DESCRIPTION	REMARKS
A	1	4" 150# NOZZ. 50	INLET
B	1	3" 150# NOZZ. L.W.N.	RECIRC.
C	1	6" 150# NOZZ. 50	RELIEF
D ₁	1	3" 150# NOZZ. L.W.N.	SPARE W/BLIND
E			
F ₁	2	2" 150# NOZZ 50	MANWAY
G	1	3" 150# NOZZ L.W.N.	OUTLET
H	1	3" 150# NOZZ L.W.N.	LEVEL SWITCH
D ₂	1	3" 150# NOZZ L.W.N.	SPARE W/BLIND
K	1	3" 150# NOZZ L.W.N.	LEVEL INST.
J	1	4" 150# NOZZ 50	N ₂ BLANKET

WELD NOTES

CS-TO CS	MG-1D	R-7D WIRE
"	M1B	E 7018 STICK
"	SA1-70	L-50 WIRE 860 FLUX

1 1 2" 150# NOZZ. 50 AGITATOR W/BLIND
 1 1 2" 150# NOZZ. L.W.N. SPARE W/BLIND
 1 1 3" 150# NOZZ L.W.N. LEVEL SWITCH

NOZZLE FLANGE DIMENSIONS TO CONFORM TO 150# ANSI SLIP ON FLG STDS. BOLT HOLES TO STRADDLE 1/4" PARALLEL TO PRINCIPAL VESSEL FLG

VESSEL SPECIFICATIONS

CONSTRUCTION: CODE-ASME SECT. VIII DIV. I 1984 EDITION 12-31-84 ADD

DESIGN CONDITIONS:	SHELL	JACKET, COIL OR TUBE
PRESS. & TEMP. EV. 150 PSIG @ 20°F TO 520°F		
TEST - HYDROSTATIC	HORIZ. @ 245 PSIG	

MATERIAL

SHELL: SA-516-70
HEADS: SA-516-70

JACKET SHELL:

SHELL NOZZLES: NECKS SA-106-B FLANGES SA-105
JACKET NOZZLES: NECKS FLANGES

COILS:

BOLTING: SA-193-B7 W/ SA-194-ZH NUTS SHIPPING: CS
RE-PADS: SA-516-70 LIFT LUGS: SA-516-70

GASKETS: JM-60 SHIPPING GSKTS.: RUBBER

SUPPORTS: SA-36

CODE INSPECTION & STAMP ASME BY LUMBERMENS MUTUAL CASUALTY CO.

INSPECTION - OTHER - BY CUSTOMER

HEADS: 3/8" R. PER PART 5 (1) & (2) (b)
RADIOGRAPH: 50% X-RAY THERMAL TREATMENT NOT REQ'D.
CORR. ALLOW: TOP HD & SHELL: 0.125" SANDBLAST: NOT REQ'D.
CORR. ALLOW: BTM HD: 0.25"

PAINT: NOT REQ'D.

WORKING VOLUME: 10000 GAL.

WEIGHT: EMPTY = 36016 LBS FULL OF H₂O = 137034 LBS VOL = 12115 GAL

REFERENCE DWG. & SPECS: DOW CORNING DATA SHTS. M800-V001 SH113Z SPEC. 2149 REV. 1 SK. NO. M800-19781 THRU 4

REFERENCE ORDER: 132-610

ITEM: 17181

PROJECT 10721

REF DWG L88-0055-E NO. REQ'D. (1)

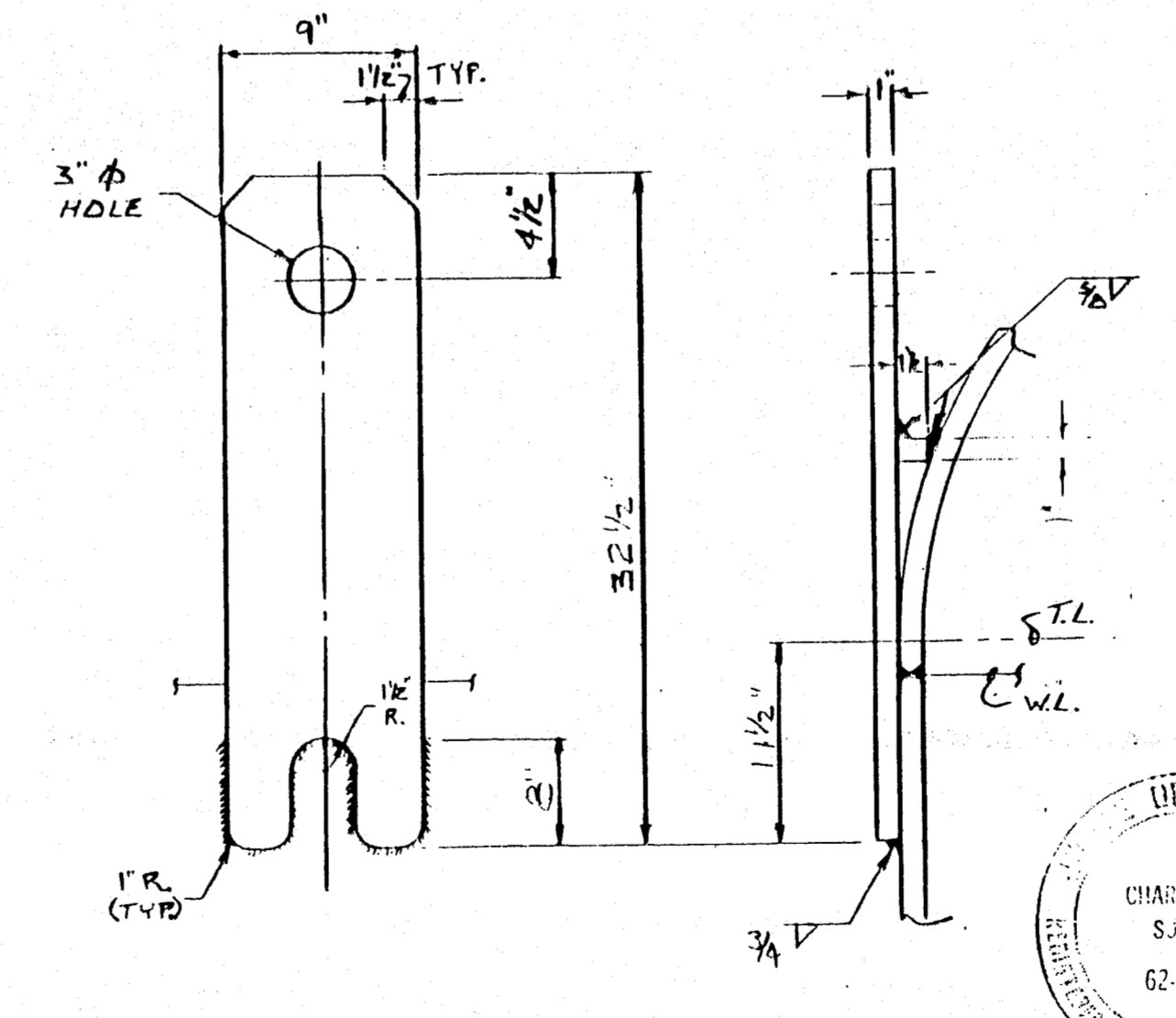
NO.	REVISIONS	DATE	APPROVED BY
1	REV PER PART 5/2/88	5/2/88	CS
2	CORR FOR 10721	5/11/88	CS

SUPERIOR WELDING COMPANY
DECATUR, ILLINOIS

JOB NO. 05-88-0055-01
DWG. L88-0055-A

- STAMP PARTS LIST**
- (2) 1/2" x 2 3/4" OD x 24" LD GASKET
 - (2) 1/2" x 5 1/8" OD x 3 1/2" LD GASKET
 - (1) 1/2" x 11" OD x 8 5/8" LD GASKET
 - (1) 1/2" x 4 1/8" x 2 3/8" LD GASKET

CERTIFIED FOR CONSTRUCTION
SUPERIOR WELDING COMPANY
DATE: 5-20-88
APPVD: RE



NOTES FOR SHIPPING COVERS:

- 6" 8" NOZZ'S. TO HAVE 1/4" TIE SHIPPING COVERS W/ (3) BOLTS EA. & RUBBER GASKETS
- 2" 3" & 4" NOZZ'S TO HAVE 150# BLD FLG W/ (2) BOLTS EA. & RUBBER GASKETS

ELEVATION

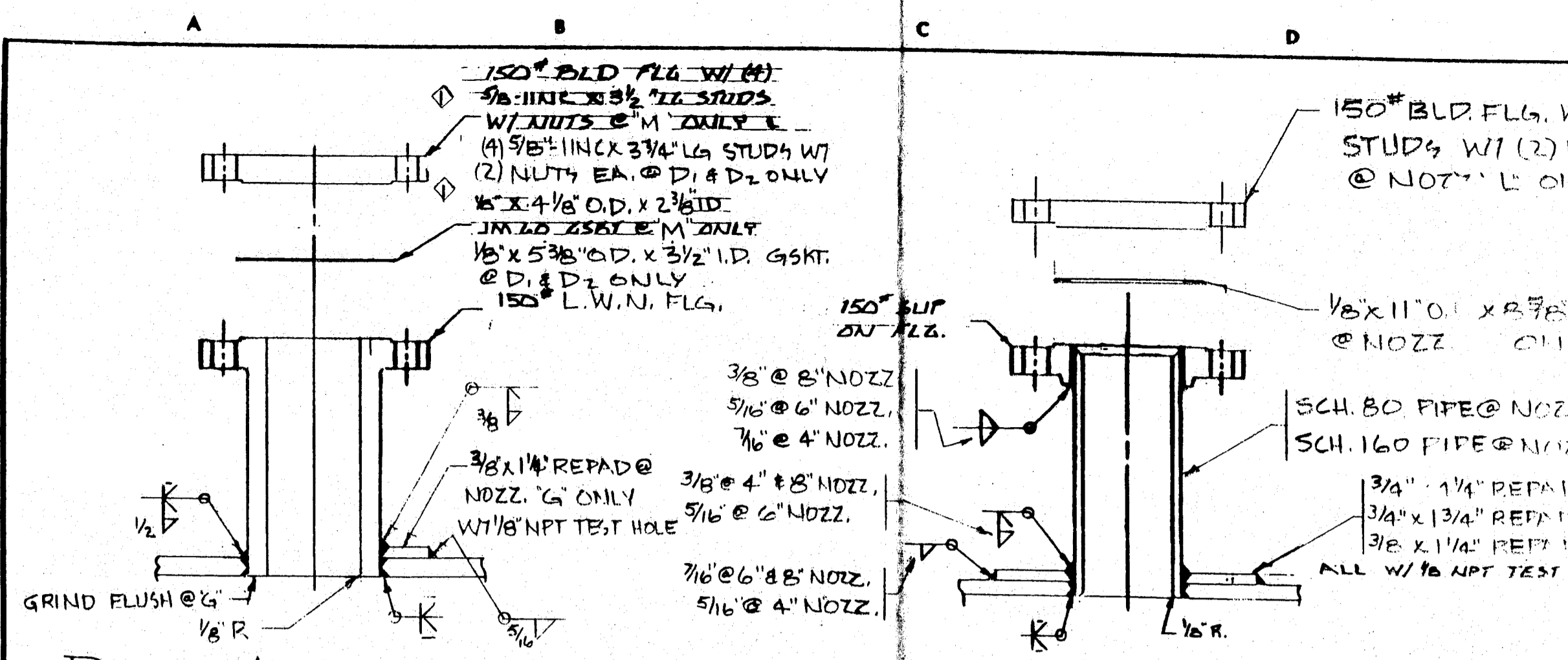
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DOW CORNING CORPORATION

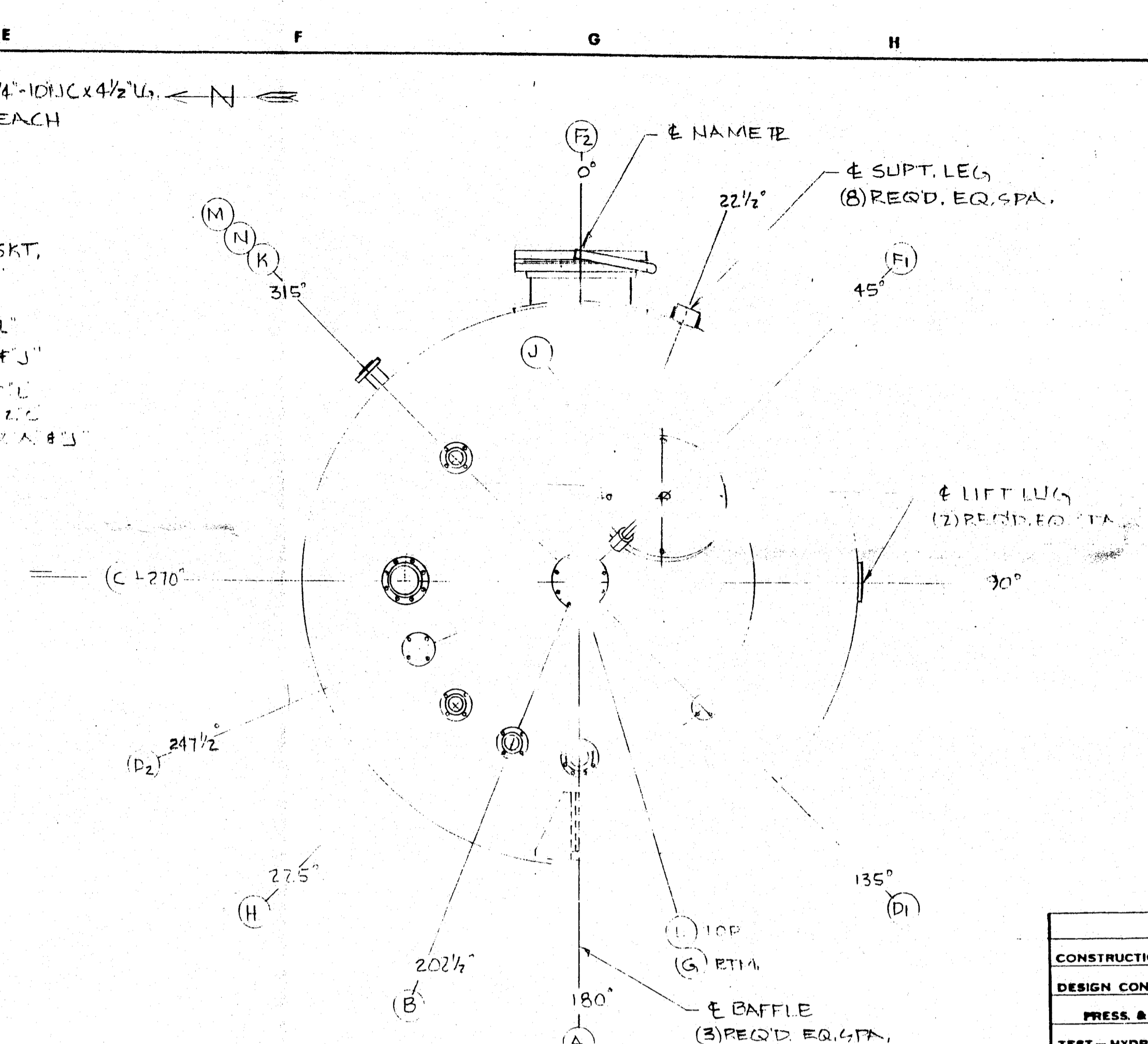
MIDLAND PLANT, 806 TANK FARM
WASTE SOLVENT STORAGE TANK

SCALE	INCH	FOOT	DRAWING NUMBER	REVISION
			WI-71488	0

03/24/99



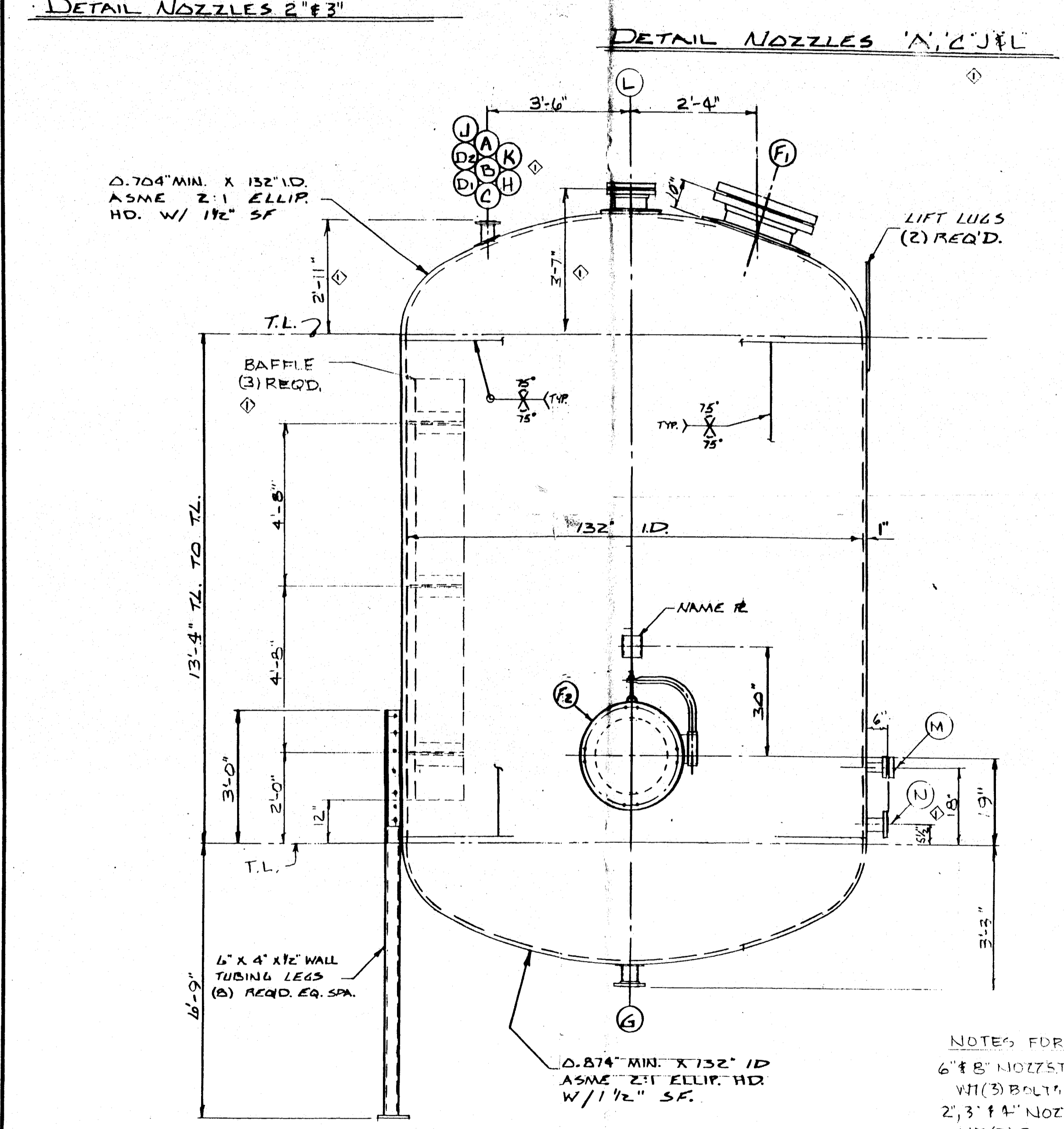
DETAIL NOZZLES 1, 2, 3, 4



ORIENTATION

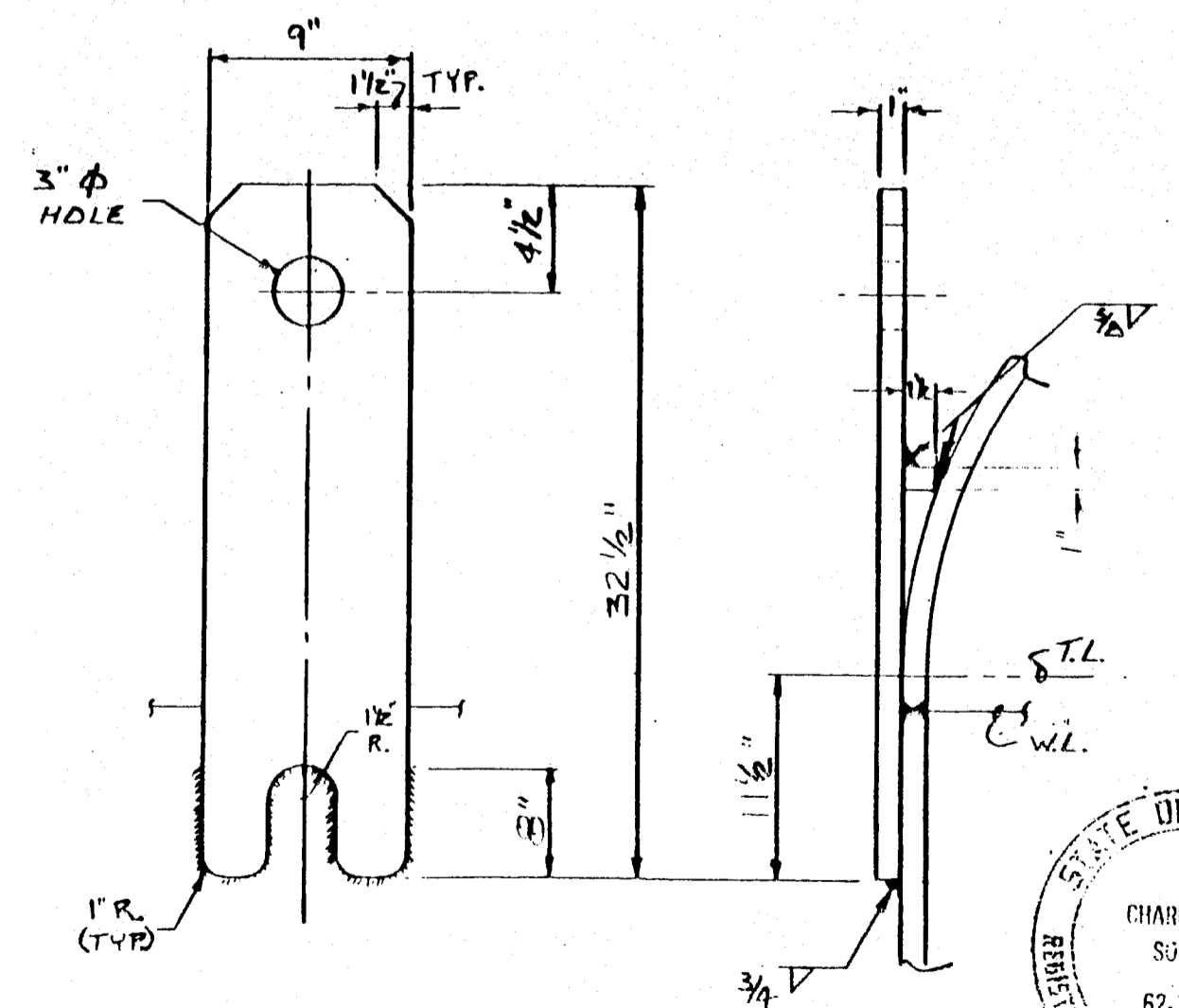
- SPACE PARTS LIST
- (2) 2" x 28 1/4" O.D. x 24" I.D. GASKET
 - (1) 1 1/2" x 4 1/8" O.D. x 27 1/2" I.D. GASKET
 - (2) 1/2" x 5 3/8" O.D. x 3 1/2" I.D. GASKET
 - (1) 1/2" x 11" O.D. x 8 5/8" I.D. GASKET

CERTIFIED FOR CONSTRUCTION
SUPERIOR WELDING COMPANY
DATE - 5-20-88
APP'VD - R.P.



ELEVATION

NOTES FOR SHIPPING COVER:
6" x 8" NOZZLES TO HAVE 1/4" SHIPPING COVERS;
W/ (3) BOLTS EN. & RUBBER GASKETS;
2, 3" x 4" NOZZLES TO HAVE 150# BLD. FLGS,
W/ (2) BOLTS EN. & RUBBER GASKETS.



DETAIL LIFT LUGS
(2) REQ'D. EQ. SPA.

FITTING SCHEDULE			
MK	NO. REQ'D	DESCRIPTION	REMARKS
A	1	4"-150# NOZZ. SO	INLET
B	1	3"-150# NOZZ. L.W.N.	RECIRC.
C	1	6"-150# NOZZ. SO	RELIEF
D1	1	3"-150# NOZZ. L.W.N.	SPARE W/ BLIND
E			
F1	2	24" 150# NOZZ SO	MANWAY
G	1	3" 150# NOZZ L.W.N.	OUTLET
H	1	3" 150# NOZZ L.W.N.	LEVEL SWITCH
D2	1	3" 150# NOZZ L.W.N.	SPARE W/ BLIND
K	1	3" 150# NOZZ L.W.N.	LEVEL INVT.
J	1	4" 150# NOZZ SO	1 1/2" BLANKET

WELD NOTES

CS-TO CS	MG-ID	R-70 WIRE
"	MIB	E 7018 STICK
"	SAI-70	L-50 WIRE BLD FLUX

L	1	8" 150# NOZZ. S.O.	AGITATOR W/ BLIND
M	1	2" 150# NOZZ. L.W.N.	SPARE W/ BLIND
N	1	3" 150# NOZZ. L.W.N.	LEVEL SWITCH

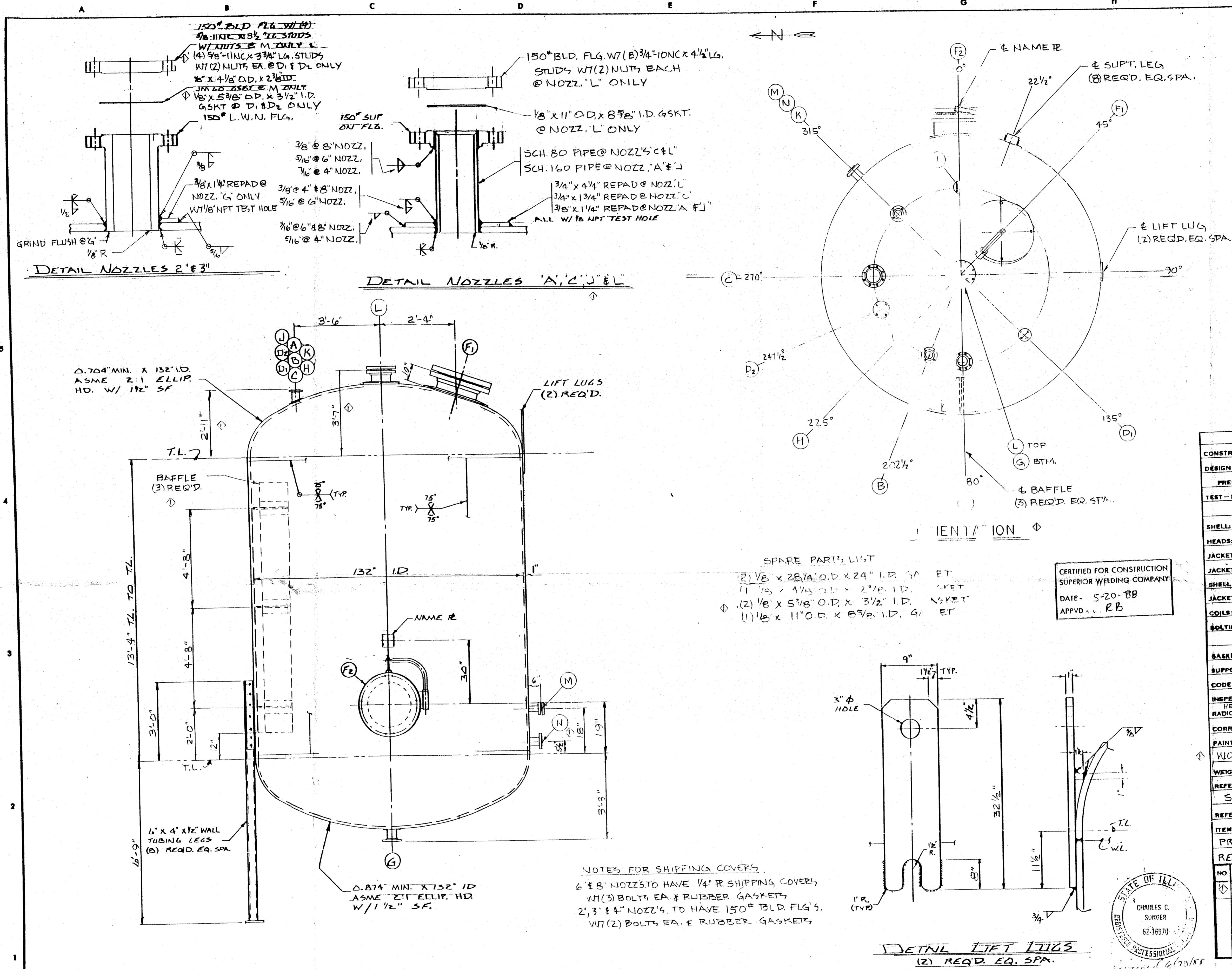
NOZZLE FLANGE DIMENSIONS TO CONFORM TO 150#
ANSI SLIP ON FLG STDS. BOLT HOLES
TO STRADDLE 1/2" PARALLEL TO PRINCIPAL VESSEL 1/2"

VESSEL SPECIFICATIONS	
CONSTRUCTION: CODE-ASME SECT. VIII DIV. I 1984 EDITION 12-31-86 ADD	
DESIGN CONDITIONS: SHELL	JACKET, COIL OR TUBE
PRESS. & TEMP. F.V. 150 PSIG @ -20° TO 520°F	
TEST-HYDROSTATIC HORIZ. @ 245 PSIG	
MATERIAL	
SHELL: SA-516-70	
HEADS: SA-516-70	
JACKET SHELL:	
JACKET HEADS:	
SHELL NOZZLES, NECKS SA-106-B	FLANGES SA-105
JACKET NOZZLES, NECKS	FLANGES
COILS:	
BOLTING: SA-193-B7 W/ SA-194-ZH NUTS SHIPPING: CS	
RE-PADS: SA-516-70	LIFT LUGS: SA-516-70
GASKETS: JM-60 SHIPPING GSKTS.: RUBBER	
SUPPORTS: SA-36	
CODE INSPECTION & STAMP ASME BY LUMBERMENS MUTUAL CASUALTY CO.	
INSPECTION-OTHER-BY CUSTOMER	
HEADS TO BE FULL PER UW-15(b)	
RADIOGRAPH: SPOT X-RAY	THERMAL TREATMENT NOT REQ'D.
CORR. ALLOW: 5/16" THK SHELL 0.125"	SANDBLAST: NOT REQ'D.
PAINT: NOT REQ'D.	
WORKING VOLUME: 10000 GML	
WEIGHT: EMPTY = 36076 LBS FULL OF H ₂ O = 137034 LBS VOL = 12115 GAL	
REFERENCE DWG. & SPECS: DOW CORNING DATA SHTS. M800-V001 SHT. 1 & 2	
SPEC. 2149 REV. 1 SK. No. M800-19781 THRU 4	
REFERENCE ORDER: 132610	
ITEM: 19782	
PROJECT 10721	
REF DWG L88-0055-E	NO. REQ'D. (1)
NO. REVISIONS DATE	SUPERIOR WELDING COMPANY DECATUR, ILLINOIS
REV. REV. APP'D. DATE BY	REV. 1
CERT. FOR CONGT.	JOB NO. 05-88-0055-02 DWG L88-0055-B

DOW CORNING CORPORATION			
MIDLAND PLANT 806 TANK FARM WASTE SOLVENT STORAGE TANK			
SCALE	INCH FOOT	DRAWING NUMBER	REVISION
		WI-71489	0

MARK	LOCATION	DATE	REVISIONS	CHANGED BY	APPROVED BY	DATE	MARK	LOCATION	DATE	REVISIONS	CHANGED BY	APPROVED BY	DATE

68/24/99



FITTING SCHEDULE			
MK	NO. REQ'D	DESCRIPTION	REMARKS
A	1	4"-150° NOZZ. SO	INLET
B	1	3"-150° NOZZ. L.W.N.	RECIRC.
C	1	6"-150° NOZZ. SO	RELIEF
D	1	3"-150° NOZZ. L.W.N.	SPARE W/ BLIND
E			
F	2	24" 150° NOZZ. SO	MANWAY
G	1	3"-150° NOZZ. L.W.N.	OUTLET
H	1	3"-150° NOZZ. L.W.N.	LEVEL SWITCH
Dz	1	3"-150° NOZZ. L.W.N.	SPARE W/ BLIND
K	1	3"-150° NOZZ. L.W.N.	LEVEL INST.
J	1	4"-150° NOZZ. SO	N ₂ BLANKET

WELD NOTES

CS-TO CS MG-ID R-70 WIRE
 " " M13 E 7018 STICK
 " " SA1-70 L-50 WIRE B60 FLUX

MK	NO. REQ'D	DESCRIPTION	REMARKS
L	1	8" 150° NOZZ. S.O.	AGITATOR W/ BLIND
M	1	2" 150° NOZZ. L.W.N.	SPARE W/ BLIND
N	1	3" 150° NOZZ. L.W.N.	LEVEL SWITCH

NOZZLE FLANGE DIMENSIONS TO CONFORM TO 150° ANSI SLIP ON FLG STDS. BOLT HOLES TO STRADDLE 1/2" PARALLEL TO PRINCIPAL VESSEL L₂

VESSEL SPECIFICATIONS

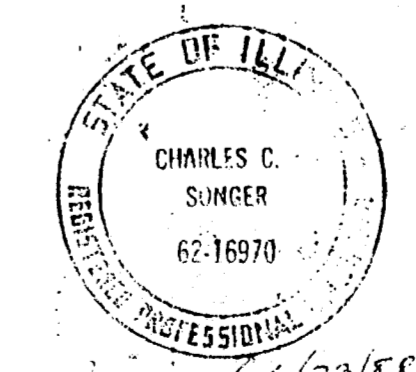
CONSTRUCTION: CODE-ASME SECT. VIII DIV. I 1986 EDIT. 12-31-86 ADD	
DESIGN CONDITIONS:	SHELL JACKET, COIL OR TUBE
PRESS. & TEMP. F.V. 150 PSIG @ -20° TO 520°F.	
TEST-HYDROSTATIC HORIZ. @ 2.45 PSIG	
MATERIAL	
SHELL SA-516-70	
HEADS: SA-516-70	
JACKET SHELL:	
JACKET HEADS:	FLANGES SA-105
SHELL NOZZLES: NECKS SA-106-B	FLANGES
COILS:	
BOLTING: SA-193-B7 W/ SA-194-2H NUTS SHIPPING: CS	
RE-PADS: SA-516-70 LIFT LUGS: SA-516-70	
GASKETS: JM-40 SHIPPING GSKTS.: RUBBER	
SUPPORTS: SA-36	
CODE INSPECTION & STAMP ASME BY LUMBERMENS MUTUAL CASUALTY CO.	
INSPECTION-OTHER- BY CUSTOMER	
HEAD: 1" SHELL PER 516.10 (3) (5) (6)	THERMAL TREATMENT NOT REQ'D.
RADIOGRAPH: SPOT X-RAY	SANDBLAST: NOT REQ'D.
CORR. ALLOW. STM. HD. 0.25"	
PAINT: NOT REQ'D.	
WORKING VOLUME: 10000 GAL.	
WEIGHT: EMPTY = 36276 LBS FULL OF H ₂ O = 137034 LBS VOL = 12115 GAL	
REFERENCE DWG. & SPECS: DOW CORNING DATA SHTS. M800-V001 SHT. 1 & 2 SPEC. 2143 REV. 1 SK. NO. M800-19781 THRU 4	
REFERENCE ORDER: 132610	
ITEM: 19783	
PROJECT 10721	
REF DWG L88-0055-E NO. REQ'D. (1)	

- SPARE PARTS LIST**
- (2) 1/2" x 28 1/4" O.D. x 24" I.D. GSKT. ET
 - (1) 1/2" x 4 1/2" O.D. x 2 1/2" I.D. GSKT. ET
 - (2) 1/8" x 5 3/8" O.D. x 3 1/2" I.D. GSKT. ET
 - (1) 1/8" x 11" O.D. x 8 5/8" I.D. GSKT. ET

CERTIFIED FOR CONSTRUCTION
 SUPERIOR WELDING COMPANY
 DATE: 5-20-88
 APPVD: RB

NOTES FOR SHIPPING COVERS

- 6" & 8" NOZZLS TO HAVE 1/4" R SHIPPING COVERS W/ (3) BOLTS EA. & RUBBER GASKETS
- 2", 3" & 4" NOZZLS TO HAVE 150° BLD FLG'S, W/ (2) BOLTS EA. & RUBBER GASKETS



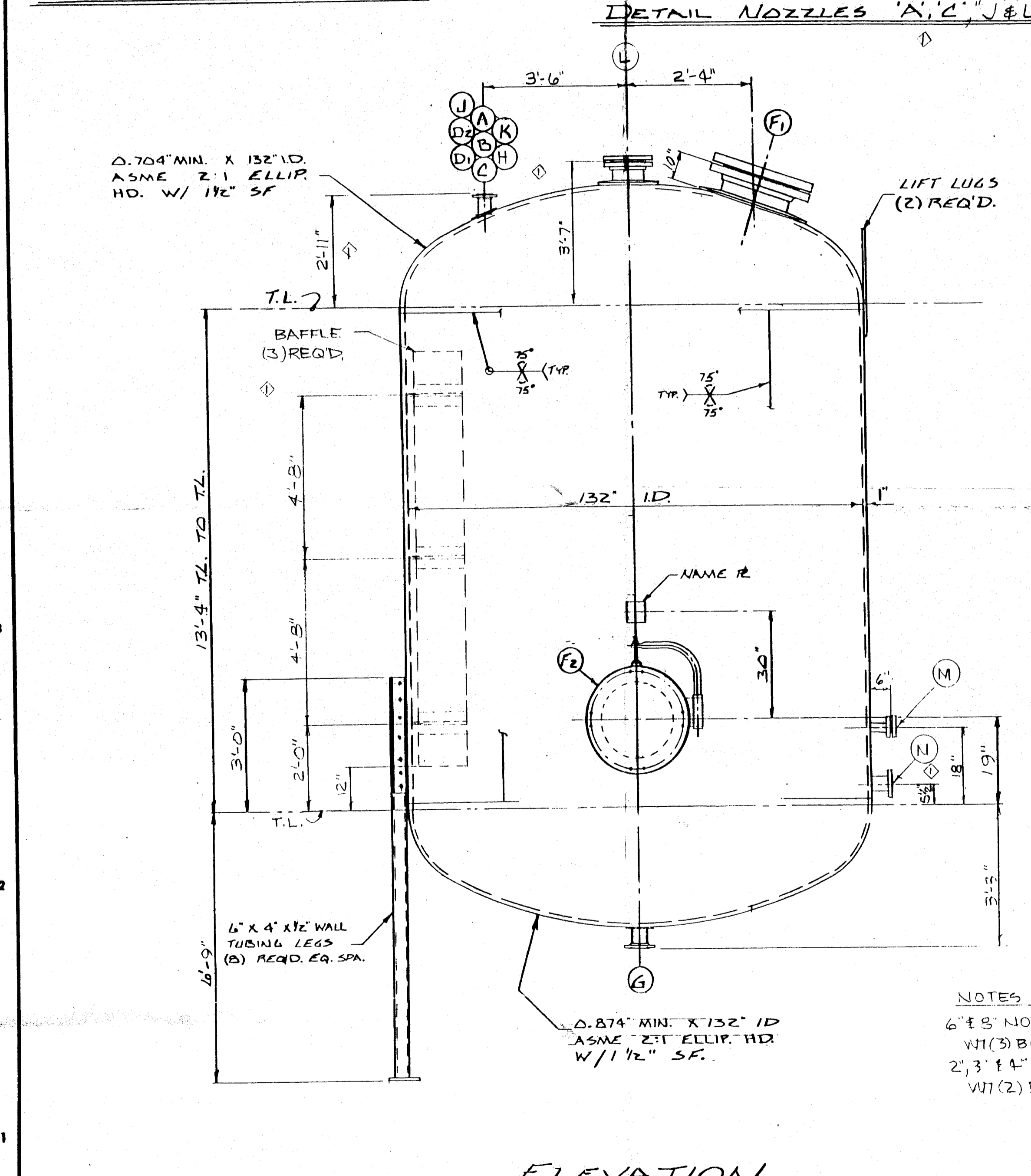
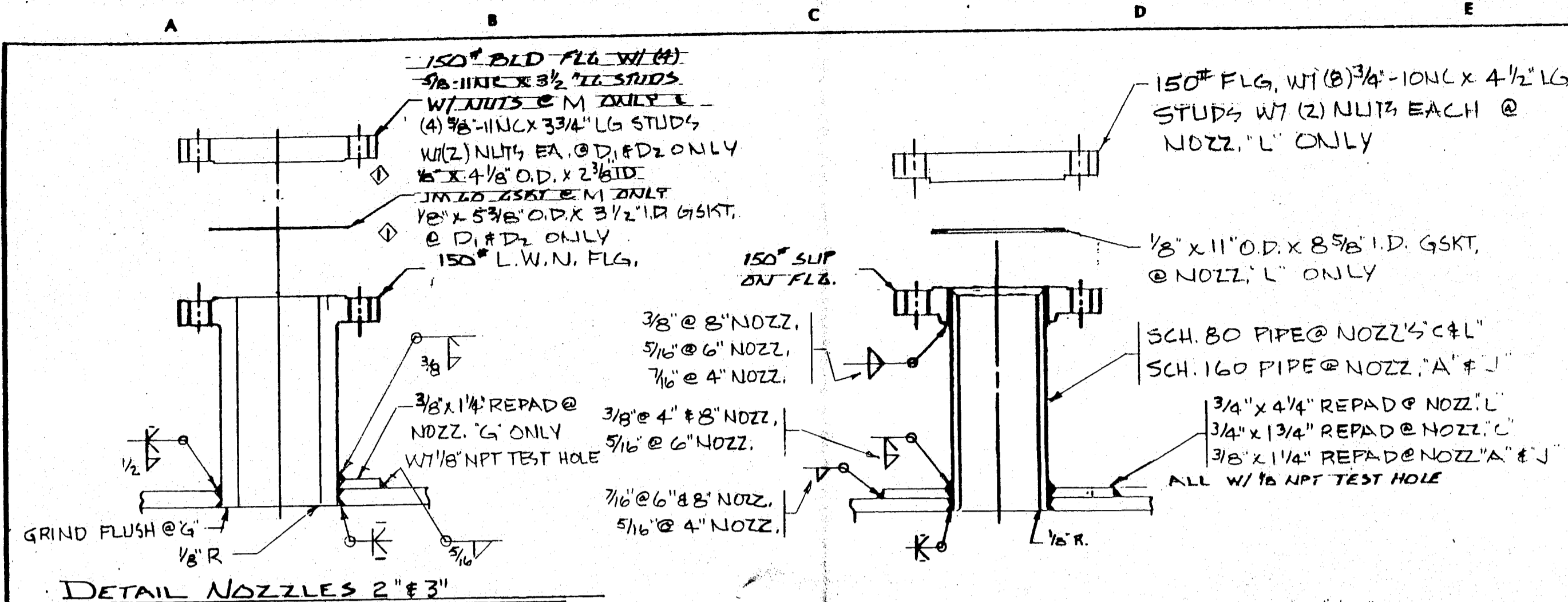
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DESIGNED BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

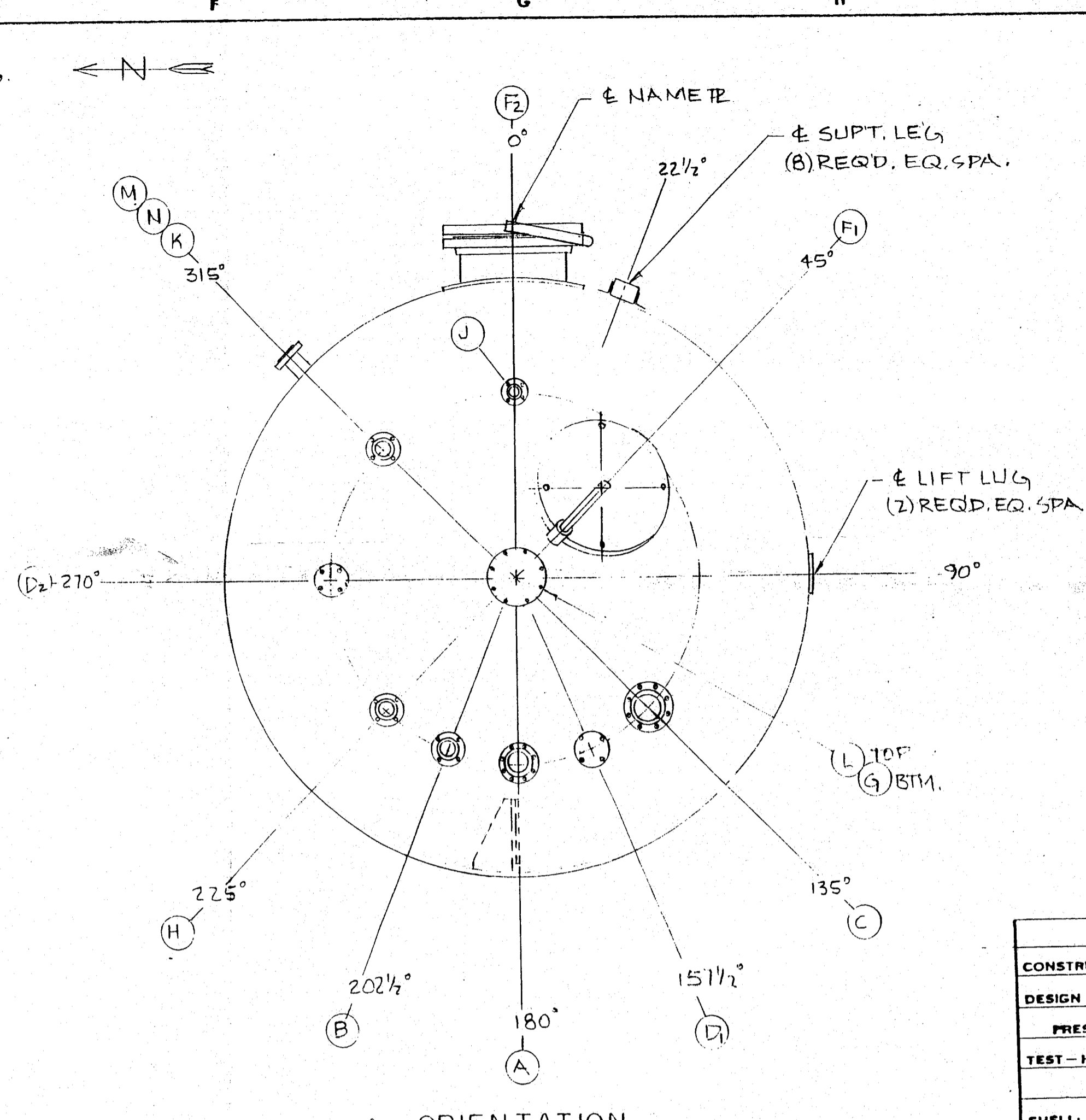
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DOW CORNING CORPORATION

MIDLAND PLANT 806 TANK FARM
 WASTE SOLVENT STORAGE TANK



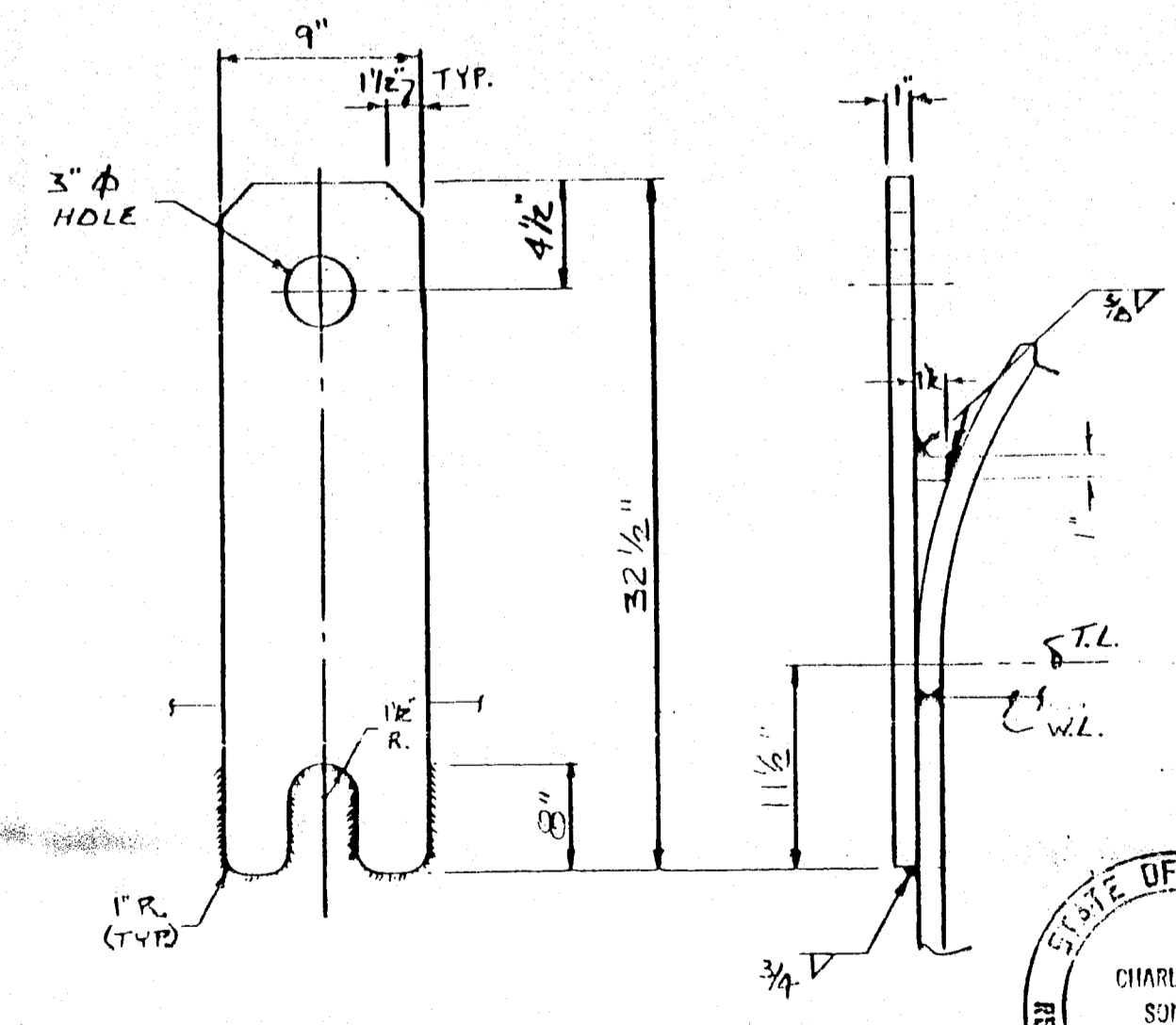
ELEVATION



ORIENTATION

STAIRS PLANT
 (2) 1/8" x 4 1/2" O.D. x 2 1/2" I.D. GASKET
 (1) 1/8" x 4 1/2" O.D. x 2 1/2" I.D. GASKET
 (2) 1/8" x 5 3/8" O.D. x 3 1/2" I.D. GASKET
 (1) 1/8" x 11" O.D. x 8 5/8" I.D. GASKET

CERTIFIED FOR CONSTRUCTION
 SUPERIOR WELDING COMPANY
 DATE - 5-20-88
 APP'VD - R.B.



DETAIL LIFT LUGS
 (2) REQ'D. EQ. SPA.

NOTES FOR SHIPPING COVERS
 6" x 8" NOZZLES TO HAVE 1/4" TH SHIPPING COVERS
 W/ (3) BOLTS EA. & RUBBER GASKETS
 2" x 3" x 4" NOZZLES TO HAVE 150° BLD FLG'S,
 W/ (2) BOLTS EA. & RUBBER GASKETS

FITTING SCHEDULE			
MK	NO. REQ'D	DESCRIPTION	REMARKS
A	1	4" 150° NOZZ. SO	INLET
B	1	3" 150° NOZZ. L.W.N.	RECIRC.
C	1	6" 150° NOZZ. SO	RELIEF
D	1	3" 150° NOZZ. L.W.N.	SPARE W/ BLIND
E			
F	2	24" 150° NOZZ SO	MANWAY
G	1	3" 150° NOZZ L.W.N.	OUTLET
H	1	3" 150° NOZZ L.W.N.	LEVEL SWITCH
Dz	1	3" 150° NOZZ L.W.N.	SPARE W/ BLIND
K	1	3" 150° NOZZ L.W.N.	LEVEL INST.
J	1	4" 150° NOZZ S.O.	N ₂ BLANKET

WELD NOTES

CS-TO CS	MG-10	R-70 WIRE
"	M13	E 7018 STICK
"	SAI-70	L-50 WIRE B60 FLUX

L	1	8" 150° NOZZ. S.O.	AGITATOR W/ BLIND
M	1	2" 150° NOZZ. L.W.N.	SPARE W/ BLIND
N	1	3" 150° NOZZ. L.W.N.	LEVEL SWITCH

NOZZLE FLANGE DIMENSIONS TO CONFORM TO 150° ANSI SLIP ON FLG STD. BOLT HOLES TO STRADDLE 1" PARALLEL TO PRINCIPAL VESSEL 1" VESSEL SPECIFICATIONS

CONSTRUCTION: CODE-ASME SECT VIII DIV I 1984 EDITION 12-31-84 ADD

DESIGN CONDITIONS: SHELL JACKET, COIL OR TUBE
 PRESS. & TEMP. EV. 150 PSIG @ -20° TO 520° F
 TEST-HYDROSTATIC HORIZ. @ 245 PSIG

MATERIAL

SHELL: SA-516-70
 HEADS: SA-516-70

JACKET SHELL:
 JACKET HEADS:
 SHELL NOZZLES: NECKS SA-106-B SA-105
 JACKET NOZZLES: NECKS FLANGES

COILS:
 BOLTING: SA-193-B7 W/ SA-194-2H NUTS SHIPPING: CS
 RE-PADS: SA-516-70 LIFT LUGS: SA-516-70

GASKETS: JM-40 SHIPPING GSKTS.: RUBBER
 SUPPORTS: SA-36

CODE INSPECTION & STAMP ASME BY LUMBERMENS MUTUAL CASUALTY CO.
 INSPECTION - OTHER - BY CUSTOMER
 HEAD TO SHELL: 5/8" RAY
 RADIOGRAPH: 5/8" RAY THERMAL TREATMENT NOT REQ'D.
 CORR. ALLOW. STM. HD.: 0.125" SANDBLAST: NOT REQ'D.
 PAINT: NOT REQ'D.

WEIGHT: EMPTY = 36276 LBS FULL OF H₂O = 137034 LBS VOL = 12115 GAL
 REFERENCE DWG. & SPECS: DOW CORNING DATA SHTS. M800-V001 SHT. 1 & 2
 SPE. 2147 REV. 1 5R. NO. M800-19781 THRU 4
 REFERENCE ORDER: 132610
 ITEM: 19794
 PROJECT: 10721
 REF DWG: L88-0055-E NO. REQ'D. (1)

NO. REVISIONS DATE SUPERIOR WELDING COMPANY DECATUR, ILLINOIS REV.
 REVISED PER L88-0055-E CERT. FOR CONST. 5-18-88

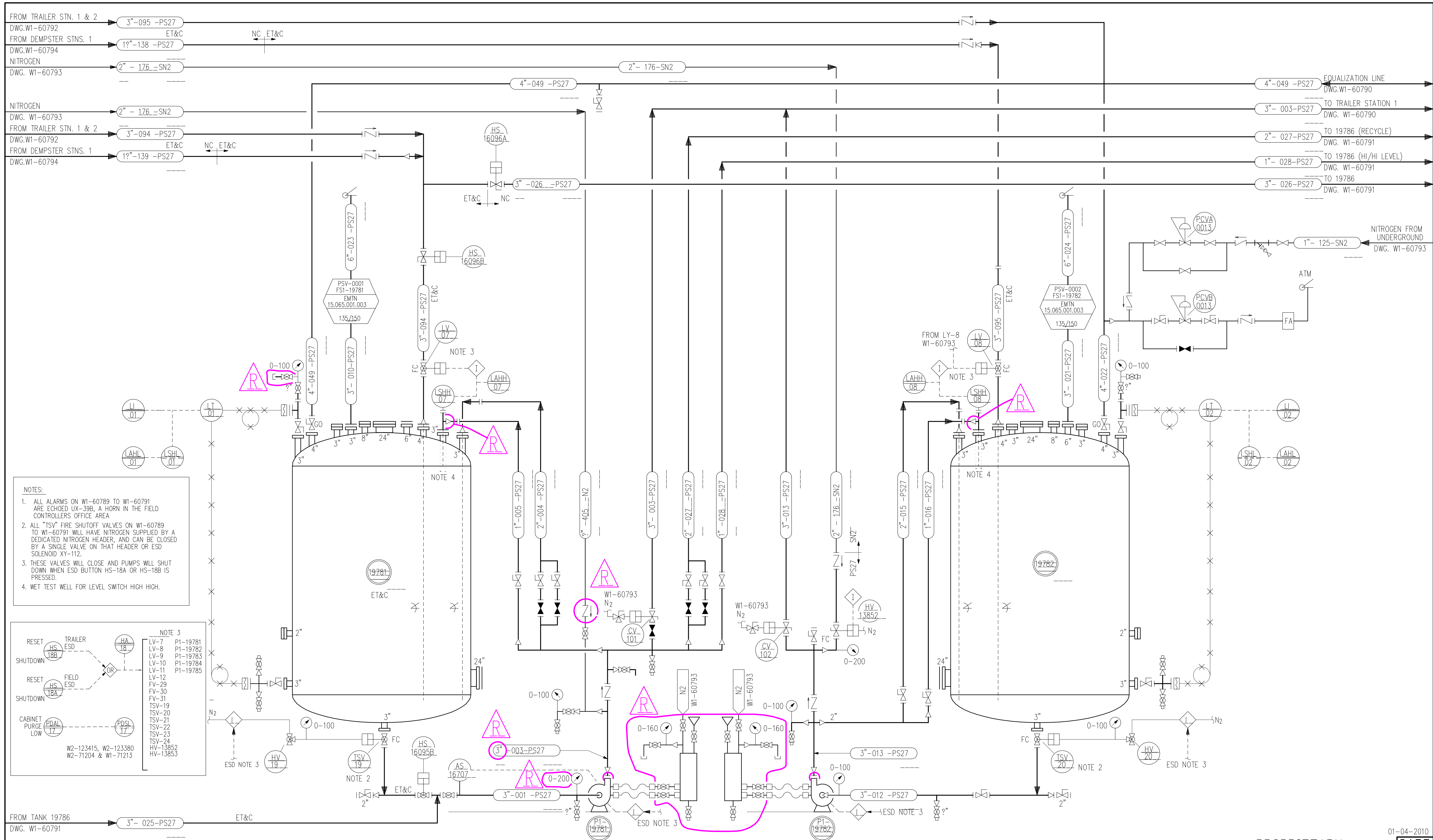
JOB NO. 05-88-0055-04
 DWG L88-0055-D

DOW CORNING CORPORATION

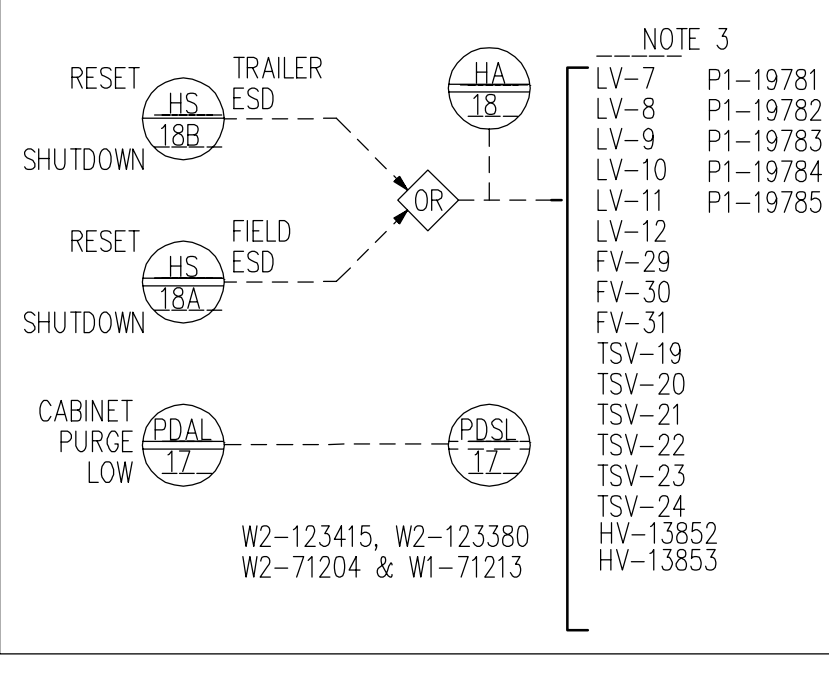
MIDLAND PLANT - 806 TANK FARM
 WASTE SOLVENT STORAGE TANK

SCALE	INCH	FOOT	DRAWING NUMBER	REVISION
			WI-71491	Q

MARK	LOCATION	DATE	REVISIONS	CHANGED BY	APPROVED BY	DATE	MARK	LOCATION	DATE	REVISIONS	CHANGED BY	APPROVED BY	DATE



- NOTES:**
1. ALL ALARMS ON W1-60789 TO W1-60791 ARE ECHOED UX-39B, A HORN IN THE FIELD CONTROLLERS OFFICE AREA.
 2. ALL "TSV" FIRE SHUTOFF VALVES ON W1-60789 TO W1-60791 WILL HAVE NITROGEN SUPPLIED BY A DEDICATED NITROGEN HEADER, AND CAN BE CLOSED BY A SINGLE VALVE ON THAT HEADER OR ESD SOLENOID XY-112.
 3. THESE VALVES WILL CLOSE AND PUMPS WILL SHUT DOWN WHEN ESD BUTTON HS-18A OR HS-18B IS PRESSED.
 4. WET TEST WELL FOR LEVEL SWITCH HIGH HIGH.



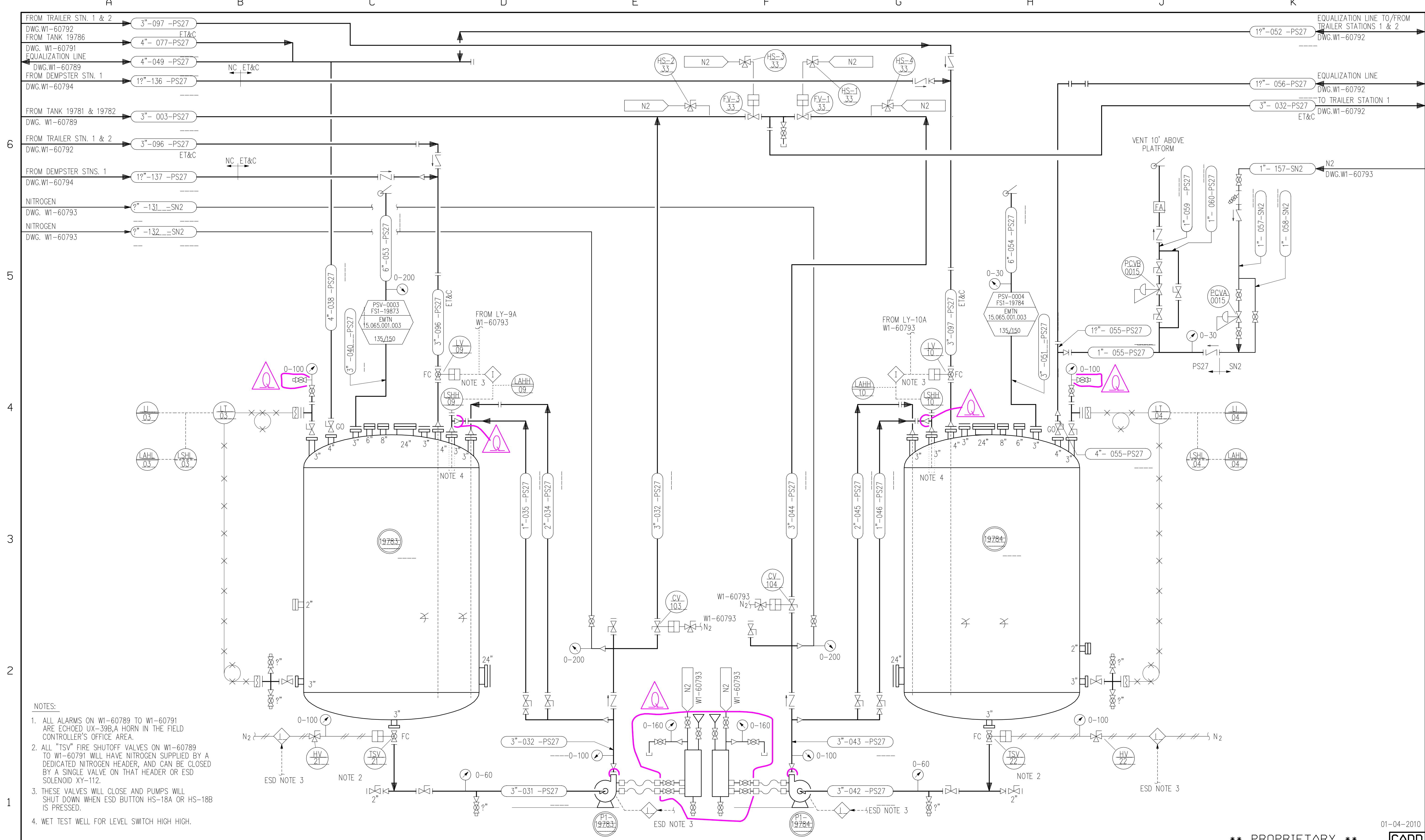
LINE NUMBER	SCHEDULE	FLANGE NUMBER	SCHEDULE		
FROM	TO	LAST NUMBER USED	FROM	TO	LAST NUMBER USED
001	030	028	001	099	022

MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE	MARK	LOCATION	DATE	REVISIONS
H	GEN	10-24-94	ADDED FALNGE NUMBERS AND SCHEDULE	MRN	MET	10-24-94	Q	GEN	9-7-00	REVISED PER PCR 800-99-5
J	GEN	10-29-96	ADDED ACTUATORS TO PLUG VALVES 3 & 9	JAM	DLW	10-29-96	R	GEN	25FEB04	REVISE PER HAZOP WALK DOWN
K	GEN	14OCT98	FIELD REVISIONS	RDR	SVP	14OCT98	S	GEN	12JAN09	REVISED PER HAZOP WALKDOWN
L	GEN	05NOV98	ADDED ESD TO TSV'S AND PUMPS	DLB	FPY	05NOV98	T			
M	GEN	22JUL99	FIELD REVISIONS	DLB	MDS	22JUL99	E	GEN	6-30-94	800 BLOCK HAZOP AS-BUILT REVISIONS
N	GEN	29OCT99	ADDED SEAL POTS/PIPING TO P1-19781/19782	RDR	JLW	29OCT99	F	GEN	8-19-94	REVISED VALVE NUMBERS TO DATE
P	GEN	05NOV99	ADDED LINE #2"-176-SN2 & HV-13852	RKW	RKW	05NOV99	G	GEN	9-22-94	REVISED VALVE NUMBERS TO DATE

MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE	MARK	LOCATION	DATE	REVISIONS
PAP	MRN	9-7-00	DESIGNED	C.G. ROWE						
RLB	MGS	25FEB04	DRAWN	S. UDELL						
LCA	MGS	12JAN09	CHECKED	SBR/TSW						
KDM	KDM	6-30-94	APPROVED	S.B. ROELOFS						
MRN	MET	8-19-94	DATE							
MRN	MET	9-22-94	DATE							

01-04-2010
 ** PROPRIETARY **
 CADD

DOW CORNING CORPORATION
 MIDLAND PLT 806 TANK FARM
 WASTE SOLVENT STORAGE
 P&ID SHEET 1 OF 6
 SCALE: INCH NONE FOOT DRAWING NUMBER W1-60789 REVISION S



- NOTES:
1. ALL ALARMS ON W1-60789 TO W1-60791 ARE ECHOED UX-39B, A HORN IN THE FIELD CONTROLLER'S OFFICE AREA.
 2. ALL "TSV" FIRE SHUTOFF VALVES ON W1-60789 TO W1-60791 WILL HAVE NITROGEN SUPPLIED BY A DEDICATED NITROGEN HEADER, AND CAN BE CLOSED BY A SINGLE VALVE ON THAT HEADER OR ESD SOLENOID XY-112.
 3. THESE VALVES WILL CLOSE AND PUMPS WILL SHUT DOWN WHEN ESD BUTTON HS-18A OR HS-18B IS PRESSED.
 4. WET TEST WELL FOR LEVEL SWITCH HIGH HIGH.

LINE NUMBER SCHEDULE			FLANGE NUMBER SCHEDULE		
FROM	TO	LAST NUMBER USED	FROM	TO	LAST NUMBER USED
031	060	060	100	199	132

MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE	MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE
H	GEN	10-24-94	ADDED FLANGE NUMBERS AND SCHEDULE	MRN	MET	10-24-94	D	GEN	26FEB04	REVISE PER HAZOP WALK DOWN	RLB	MGS	26FEB04
J	GEN	10-29-96	ADDED ACTUATORS TO PLUG VALVES 15 & 21	JAM	DLW	10-29-96	R	GEN	12JAN08	REVISED PER HAZOP WALKDOWN	LCA	MGS	12JAN08
K	GEN	15OCT98	FIELD REVISIONS	DLB	CVP	15OCT98	S						
L	GEN	05NOV98	ADDED ESD TO TSV'S AND PUMPS	DLB	FPY	05NOV98	D	GEN	2-3-92	ADDED VALVE NUMBERS	HAD	JRH	2-92
M	GEN	20OCT99	AS BUILT REVISIONS	JDW	MGS	20OCT99	E	GEN	6-30-94	800 BLOCK HAZOP AS-BUILT REVISIONS	KDM	KDM	6-30-94
N	GEN	29OCT99	ADDED SEAL POT/PIPING TO P1-19783/4	RDR	JLW	29OCT99	F	B-5 F-5	7-25-94	CHANGED EQID #'S ON N2 REGS & RELIEF VALVES	MRN	JAW	7-25-94
P	GEN	07SEPO0	REVISED PER PCR 800-99-5	PAP	MRN	07SEPO0	G	GEN	8-19-94	REVISED VALVE NUMBERS TO DATE	MRN	MET	8-19-94

DESIGNED	DATE	DRAWN	DATE	CHECKED	DATE	APPROVED	DATE
C.G. ROWE	11-19-87	S. UDELL	11-23-87	SBR/TSW	02-26-88	S.B. ROELOFS	03-04-88

** PROPRIETARY **

DOW CORNING CORPORATION

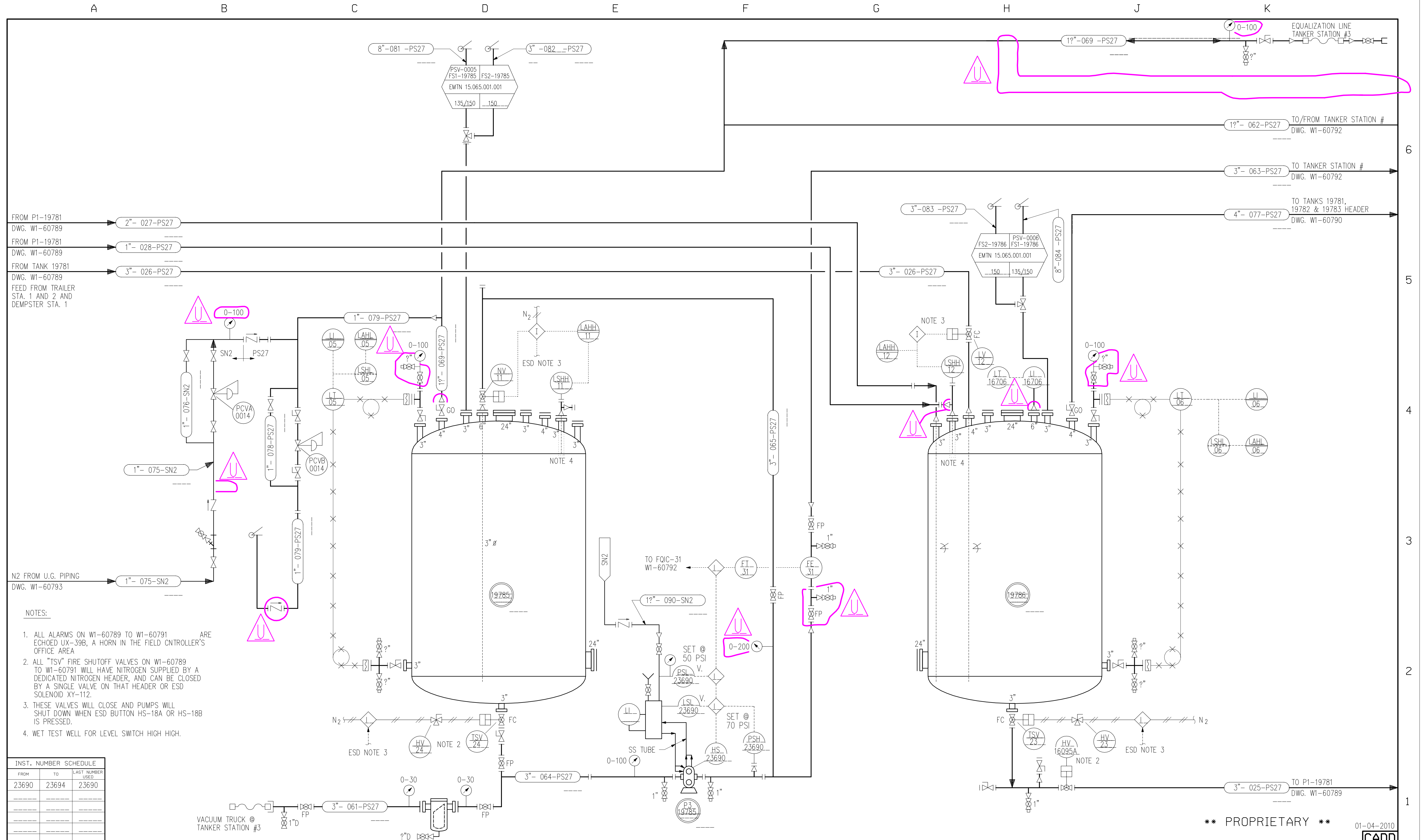
MIDLAND PLT 806 TANK FARM

WASTE SOLVENT STORAGE

P&ID SHEET 2 OF 6

SCALE: INCH NONE FOOT W1-60790 REVISION R

01-04-2010



FROM P1-19781
DWG. W1-60789
2" - 027-PS27

FROM P1-19781
DWG. W1-60789
1" - 028-PS27

FROM TANK 19781
DWG. W1-60789
3" - 026-PS27

FEED FROM TRAILER
STA. 1 AND 2 AND
DEMPSTER STA. 1

N2 FROM U.G. PIPING
DWG. W1-60793
1" - 075-SN2

- NOTES:
1. ALL ALARMS ON W1-60789 TO W1-60791 ARE ECHOED UX-39B, A HORN IN THE FIELD CNTRLLER'S OFFICE AREA
 2. ALL "TSV" FIRE SHUTOFF VALVES ON W1-60789 TO W1-60791 WILL HAVE NITROGEN SUPPLIED BY A DEDICATED NITROGEN HEADER, AND CAN BE CLOSED BY A SINGLE VALVE ON THAT HEADER OR ESD SOLENOID XY-112.
 3. THESE VALVES WILL CLOSE AND PUMPS WILL SHUT DOWN WHEN ESD BUTTON HS-18A OR HS-18B IS PRESSED.
 4. WET TEST WELL FOR LEVEL SWITCH HIGH HIGH.

INST. NUMBER SCHEDULE		
FROM	TO	LAST NUMBER USED
23690	23694	23690

LINE NUMBER SCHEDULE			FLANGE NUMBER SCHEDULE		
FROM	TO	LAST NUMBER USED	FROM	TO	LAST NUMBER USED
061	090	090	200	299	220

MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE	MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE
H	GEN	8-19-94	REVISED VALVE NUMBERS TO DATE	MRN	MET	8-19-94	D	GEN	9-06-00	REVISED PER PCR 800-99-5	PAP	MRN	9-06-00
J	GEN	10-25-94	ADDED FLANGE NUMBERS AND SCHEDULE	MRN	MET	10-25-94	R	GEN	8-27-03	REMOVED LINES, PUMP AND RESERVOIR REVISED FOR TEMPORARY PCR	CAF	MGS	8-27-03
K	D-5	04-23-96	REPLACED CHECK VALVE W/ SHUT OFF VALVE	JKL	SWN	04-23-96	S	GEN	07JAN04	REVISED/ADDED EQUALIZATION LINES	RFP	ABK	03MAR04
L	GEN	15OCT98	FIELD REVISIONS	DLB	CVP	15OCT98	T	E-1	16NOV05	REPLACED P3-19785 PER PCR#806-06-01	TAK	LES	14JUN06
M	GEN	05NOV98	ADDED ESD TO PUMPS AND TSV'S	WRL	JEH	17DEC98	U	GEN	12JAN09	REVISED PER HAZOP WALKDOWN	LCA	MGS	12JAN09
N	GEN	17DEC98	ADDED LINE 089 TO DRAWING	WRL	CMP	21JAN99	V						
P	J-5	21JAN99	REVISED VALVE PER AS-BUILT	WRL	CMP	21JAN99							

** PROPRIETARY ** 01-04-2010
CADD

DOW CORNING CORPORATION

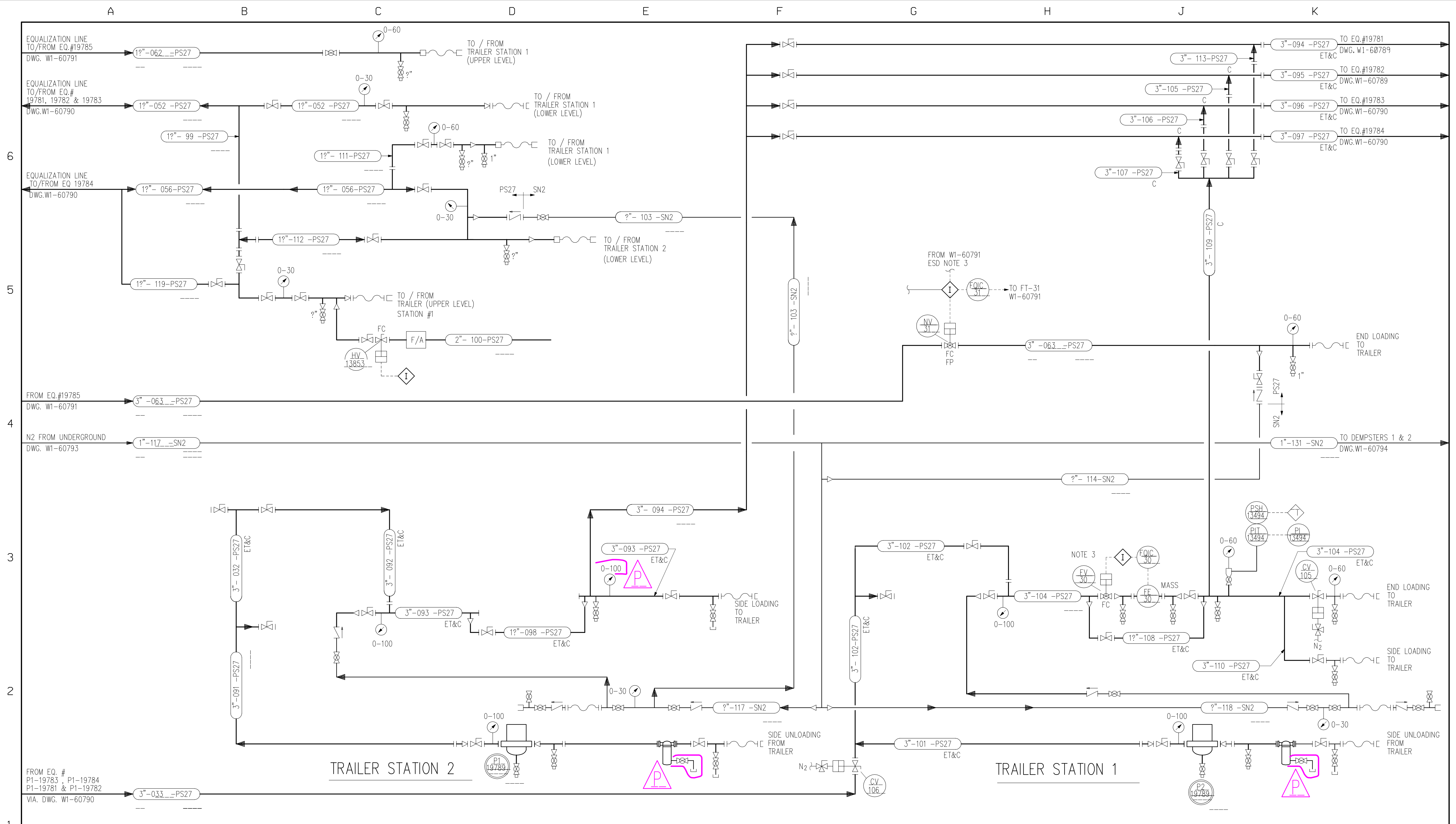
MIDLAND PLT 806 TANK FARM

WASTE IPA/SILOXANE STORAGE

SHEET 3 OF 6

DATE	11-19-87	DESIGNED	C.G. ROWE
DATE	11-23-87	DRAWN	S. UDELL
DATE	02-26-88	CHECKED	SBR/TSW
DATE	03-04-88	APPROVED	S.B. ROELOFS

SCALE: INCH NONE FOOT DRAWING NUMBER W1-60791 REVISION U



3. THESE VALVES WILL CLOSE WHEN ESD BUTTON HS-18A OR HS-18B IS PRESSED

P1 (19789) UNLOADING PUMP

(19789) STRAINERS

(19789) UNLOADING PUMP

P2 (19789) UNLOADING PUMP

** PROPRIETARY **

01-04-2010

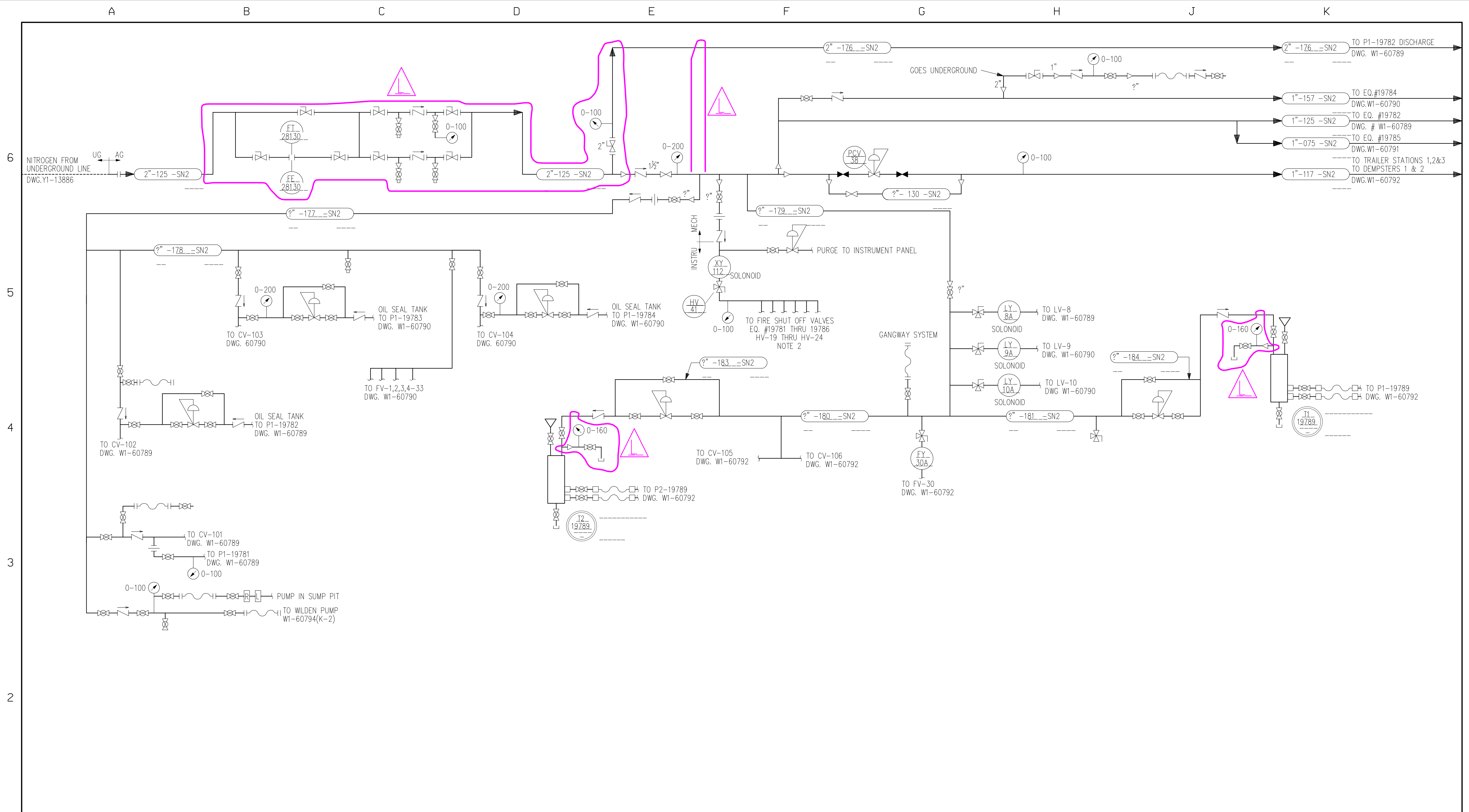
LINE NUMBER	SCHEDULE	FLANGE NUMBER	SCHEDULE		
FROM	TO	LAST NUMBER USED	FROM	TO	LAST NUMBER USED
091	120	119	300	399	328

MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE	MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE
H	GEN	10-25-94	ADDED FLANGE NUMBERS AND SCHEDULE	MRN	MET	10-25-94	D	D,J-2	5-3-89	ADDED P1,P2-19789	MOQUIN	SBR	5-3-89
J	GEN	10-29-96	ADDED ACTUATORS TO PLUG VALVES 56 & 57	JAM	DLW	10-29-96	B						
K	GEN	14OCT98	FIELD REVISIONS	RDR	SVP	14OCT98	C	GEN	3-16-90	ADDED EQUALIZATION LINE (1"-056)	HAD	JJ	3-90
L	GEN	05NOV99	REVISED LINES #056,99,103,112,100 & 119	RKW	MGS	05NOV99	D	GEN	2-4-92	ADDED VALVE NUMBERS	HAD	JRH	2-92
M	GEN	07SEP00	REVISED PER PCR 800-99-5	PAP	MRN	07SEP00	E	GEN	6-30-94	800 BLOCK HAZOP AS-BUILT REVISIONS	KDM	KDM	6-30-94
N	GEN	09JAN04	ADDED/REVISED EQUALIZATION LINES	RFP	ABK	03MAR04	F	GEN	8-19-94	REVISED VALVE NUMBERS TO DATE	MRN	MET	8-19-94
P	GEN	12JAN09	REVISED PER HAZOP WALKDOWN	LCA	MGS	12JAN09	G	GEN	9-22-94	REVISED VALVE NUMBERS TO DATE	MRN	MET	9-22-94

DESIGNED	DATE	CHECKED	DATE	APPROVED	DATE
C.G. ROWE	11-19-87	T.A. KAMINSKI	11-24-87	S.B. ROELOFS	03-04-88

DOW CORNING CORPORATION
 MIDLAND PLT 806 TANK FARM
 WASTE SOLVENT TRAILER
 LOADING/UNLOADING STATION
 P&ID SHEET 4 OF 6

SCALE	INCH	FOOT	DRAWING NUMBER	REVISION
	NONE		W1-60792	P



- ALL "TSV" FIRE SHUTOFF VALVES ON W1-60789 TO W1-60791 WILL HAVE NITROGEN SUPPLIED BY A DEDICATED NITROGEN HEADER, AND CAN BE CLOSED BY A SINGLE VALVE ON THAT HEADER
- THESE VALVES WILL CLOSE WHEN ESD BUTTON HS-18A OR HS-18B IS PRESSED

LINE NUMBER SCHEDULE			FLANGE NUMBER SCHEDULE		
FROM	TO	LAST NUMBER USED	FROM	TO	LAST NUMBER USED
121	130	130	400	499	406
176	195	184			

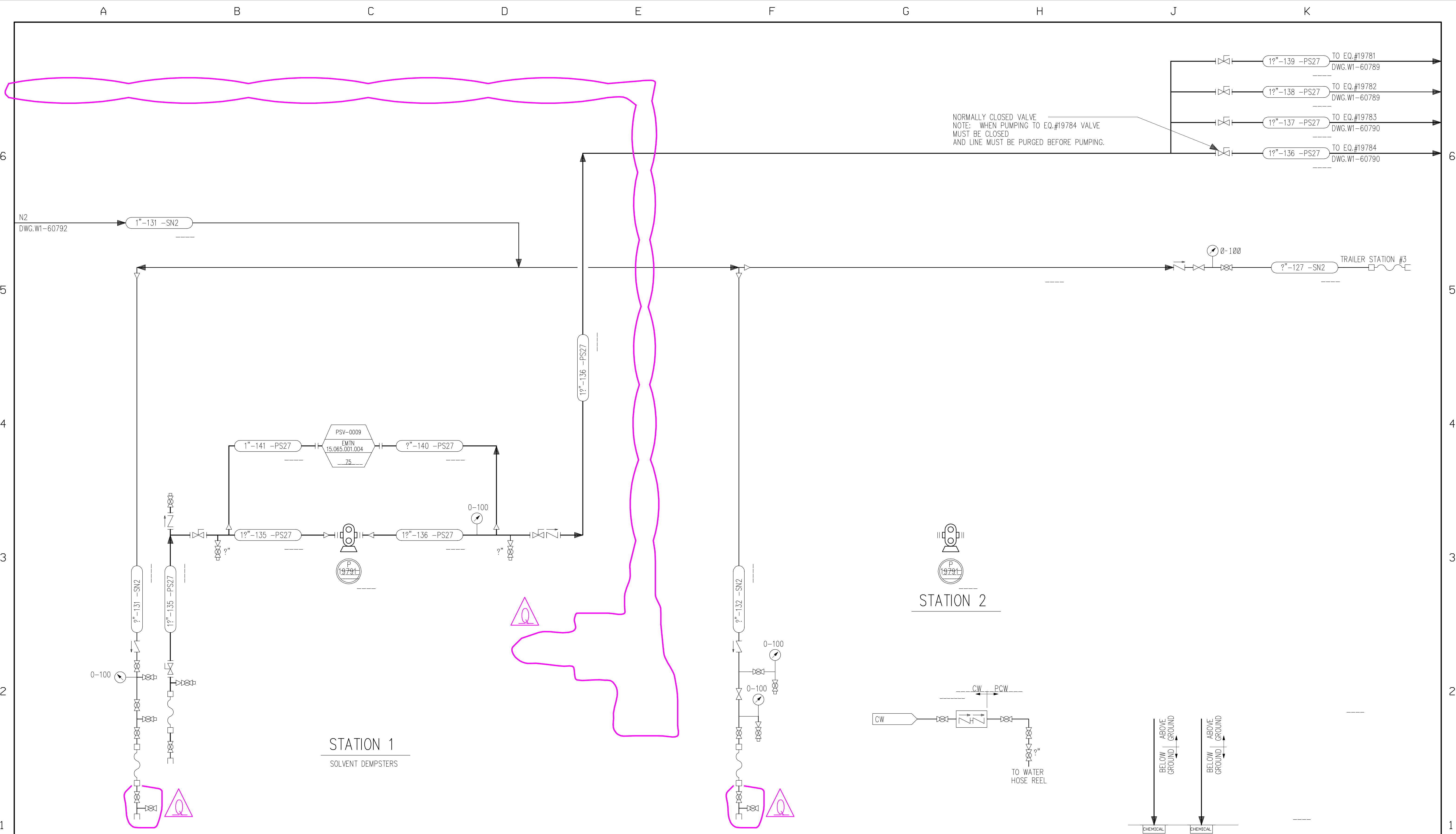
MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE	MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE
H	GEN	07SEP00	REVISED PER PCR 800-99-5	PAP	MRN	07SEP00	A						
J	GEN	28AUG03	REMOVED LINES 62, 121, 122 AND 123	CAF	MGS	27AUG03	B	K-6	10-4-91	ADDED LINE FOR EQUIP # 197840	HAD	SBR	3-25-88
K	GEN	02MAR04	REVISE PER HAZOP WALK DOWN	RLB	MGS	02MAR04	C	GEN	2-5-92	ADDED VALVE NUMBERS	HAD	JRH	10-4-91
L	GEN	14JAN09	REVISED PER HAZOP WALKDOWN	LCA	MCS	14JAN09	D	GEN	9-22-94	REVISED VALVES AND VALVE NUMBERS TO DATE	MRN	MET	2-92
M							E	GEN	10-25-94	ADDED FLANGE NUMBERS AND SCHEDULE	MRN	MET	9-22-94
N							F	GEN	15OCT98	FIELD REVISIONS	DLB	CVP	10-25-94
P							G	GEN	03NOV99	FIELD REVISIONS AND ADDED LINE #176	JDW	MCS	15OCT98

DATE	DESIGNED	DATE	SCALE	INCH	FOOT	DRAWING NUMBER	REVISION
11-23-87	C.G. ROWE	11-23-87	NONE			W1-60793	L
02-26-88	SBR/TSW	02-26-88					
03-04-88	S.B.ROELOFS	03-04-88					

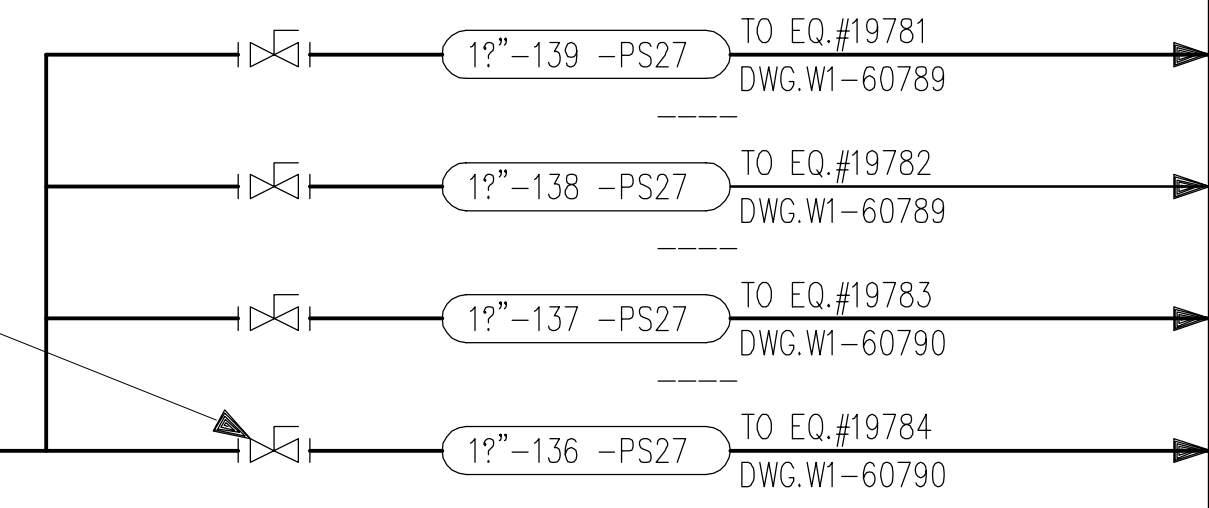
**** PROPRIETARY ****
DOW CORNING CORPORATION
 WASTE CONTROL 806 TANK FARM
 NITROGEN DISTRIBUTION
 SHEET 5 OF 6

04JAN2010

CADD

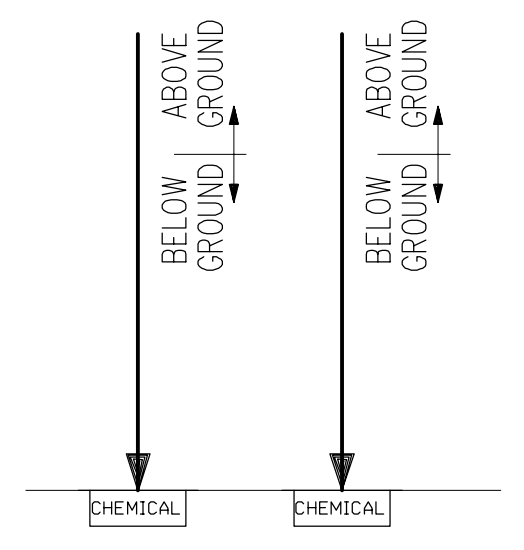


NORMALLY CLOSED VALVE
 NOTE: WHEN PUMPING TO EQ.#19784 VALVE
 MUST BE CLOSED
 AND LINE MUST BE PURGED BEFORE PUMPING.



STATION 1
 SOLVENT DEMPSTERS

STATION 2



LINE NUMBER SCHEDULE			FLANGE NUMBER SCHEDULE		
FROM	TO	LAST NUMBER USED	FROM	TO	LAST NUMBER USED
131	160	155	500	599	511
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---

MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE	MARK	LOCATION	DATE	REVISIONS	CHANGED	APPROVED	DATE
H	GEN	9-22-94	REVISED VALVES & VALVE NUMBERS TO DATE	MRN	MET	9-22-94	D	GEN	14JAN09	REVISED PER HAZOP WALKDOWN	LCA	MGS	14JAN09
J	GEN	10-25-94	ADDED FLANGE NUMBERS AND SCHEDULE	MRN	MET	10-25-94	R	GEN	14JAN09	REVISED PER HAZOP WALKDOWN	LCA	MGS	14JAN09
K	G-3	12-24-97	ADDED DURA CIRULATOR PUMP & COOLER COIL	WRL	DLW	12-24-97	C	G-3	4-2-90	ADDED DRAIN VALVE, AND NOTE	HAD	JMJ	4-90
L	GEN	14OCT98	FIELD REVISIONS	RDR	CVP	14OCT98	D	GEN	2-5-92	ADDED VALVE NUMBERS	HAD	JRH	2-92
M	GEN	07SEP00	REVISED PER PCR 800-99-5	PAP	MRN	07SEP00	E	GEN	10-13-92	ADDED LINE #151	KDM	KDM	3-93
N	GEN	08AUG03	REMOVED LINES AND PUMP P2-19785	CAF	MGS	27AUG03	F	GEN	6-30-94	800 BLOCK HAZOP AS-BUILT REVISIONS	KDM	KDM	6-30-94
P	GEN	02MAR04	REVISE PER HAZOP WALK DOWN	RLB	MGS	02MAR04	G	GEN	8-19-94	REVISED VALVES & VALVE NUMBERS TO DATE	MRN	MET	8-19-94

01-04-2010 **CADD**

** PROPRIETARY **

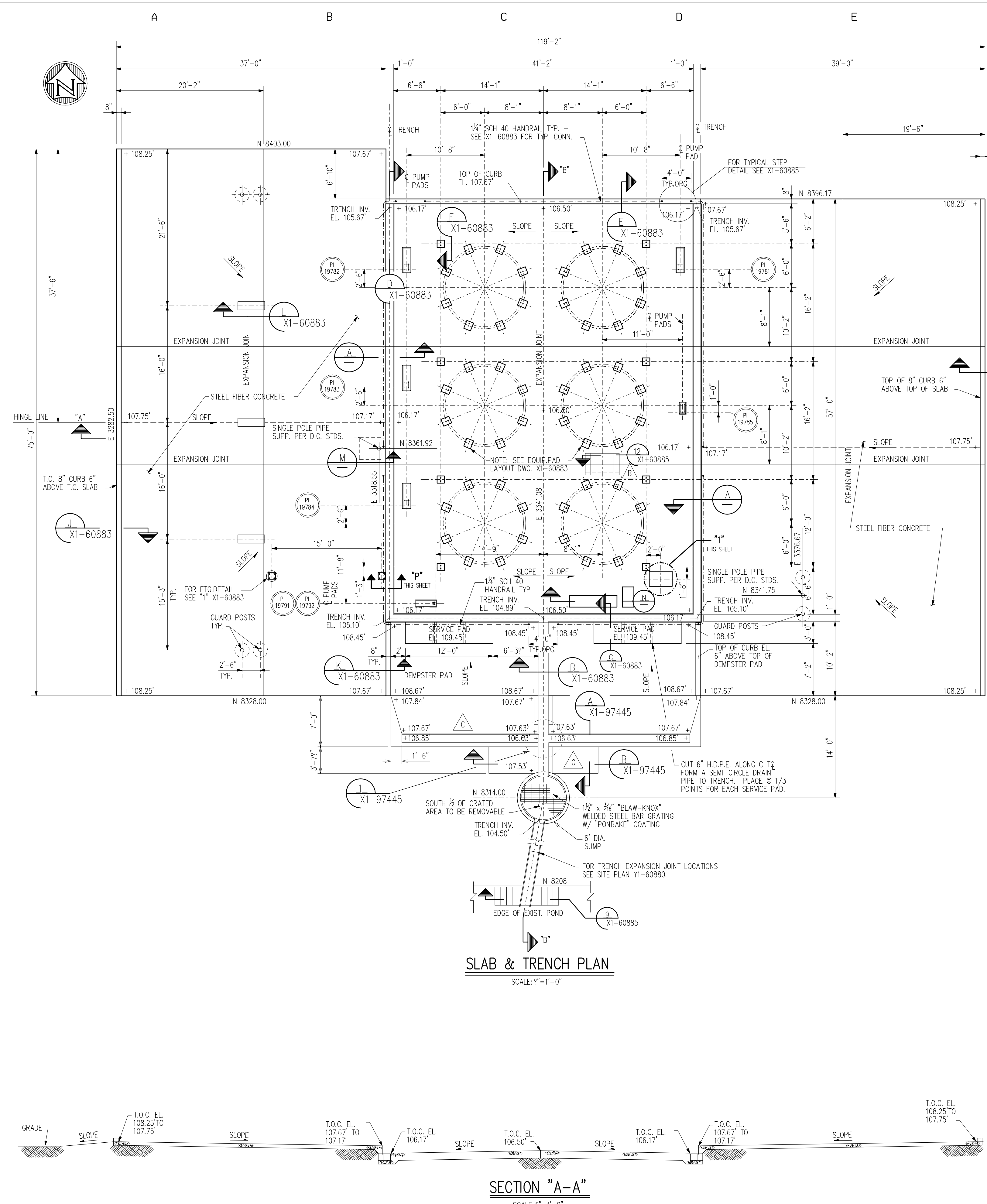
DOW CORNING CORPORATION

MIDLAND PLT 806 TANK FARM

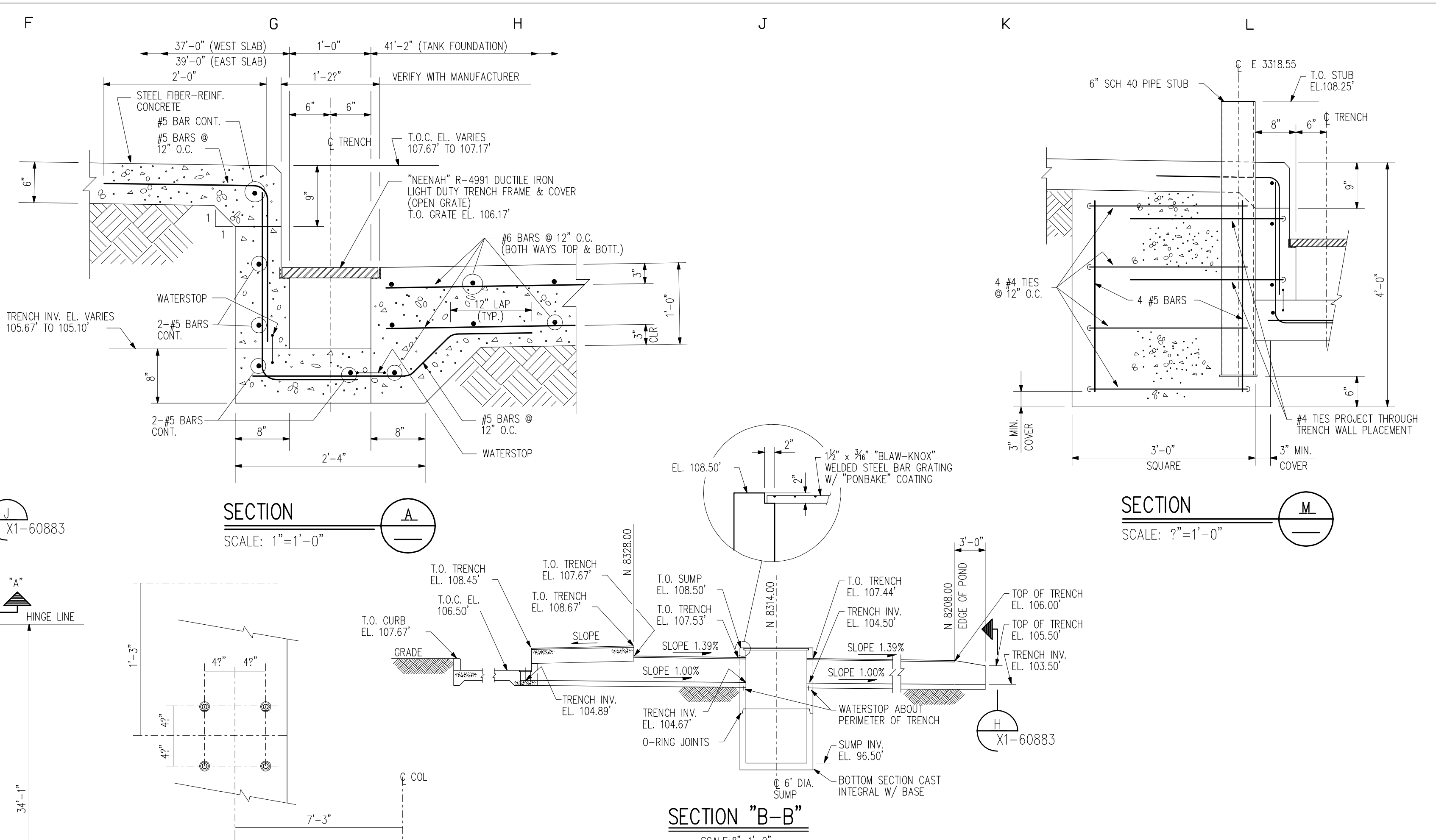
WASTE SOLVENT
 DEMPSTER UNLOADING STATION

SHEET 6 OF 6

DESIGNED C.G. ROWE	DATE 11-23-87	DRAWING NUMBER W1-60794	REVISION Q
DRAWN PW NELSON	DATE 11-23-87		
CHECKED SBR/TSW	DATE 02-26-88	SCALE	
APPROVED S.B.ROELOFS	DATE 03-04-88	INCH NONE	



SLAB & TRENCH PLAN
SCALE: 9"=1'-0"

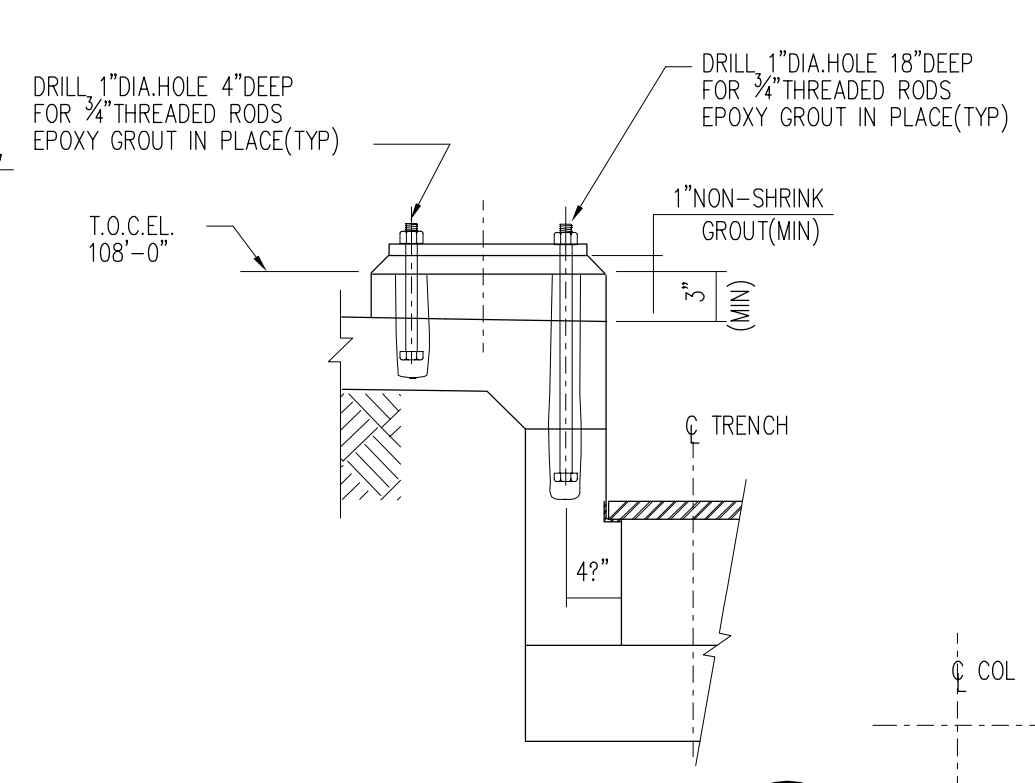


SECTION A
SCALE: 1"=1'-0"

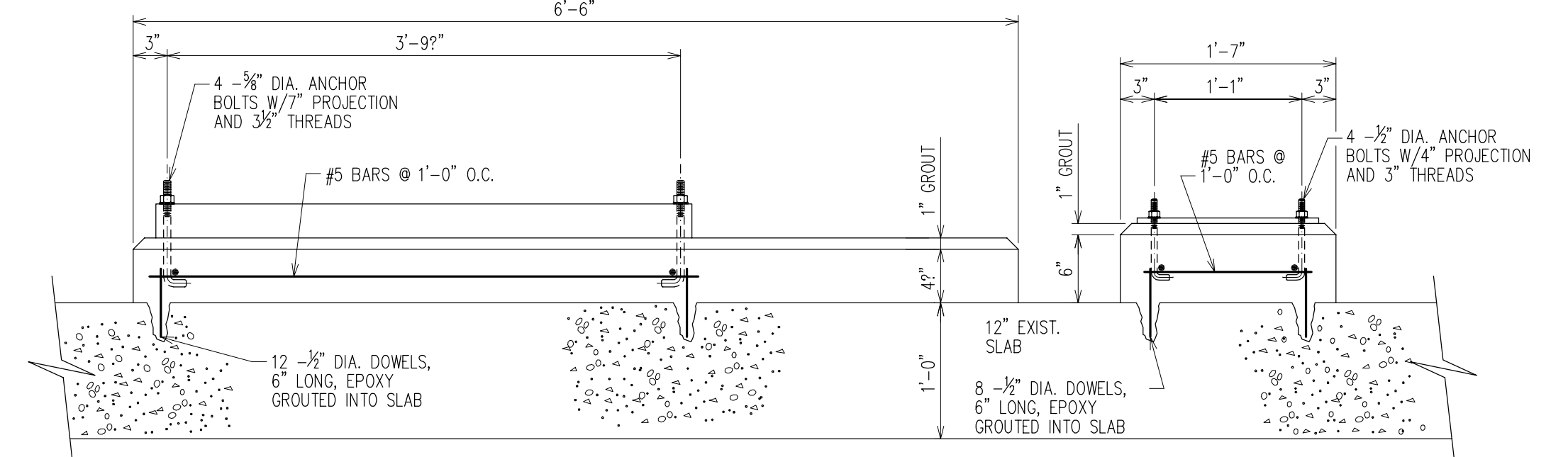
SECTION M
SCALE: 9"=1'-0"

PARTIAL PLAN

SECTION "B-B"
SCALE: 9"=1'-0"



SECTION P
SCALE: NONE



SECTION N
SCALE: 1"=1'-0"

SECTION "R"
SCALE: NONE REF: THIS SHEET

DETAIL "1"
SCALE: NONE REF: THIS SHEET

MARK	LOC.	REVISIONS	BY	DATE	TECH	INITIALS	MARK	LOC.	REVISIONS	BY	DATE	TECH	INITIALS	MARK	LOC.	REVISIONS	BY	DATE	TECH	INITIALS	MARK	LOC.
U							K							A	GEN	ADDED SECTION "M"	JAM	02JAN98	NSD			
V							L							B	GEN	ADDED SECTION "P"	RFP	27FEB04	ABK			
W							M							C								
X							N							D								
Y							O							E								
Z							P							F								
AA							Q							G								
AB							R							H								
AC							S							I								
							T							J								

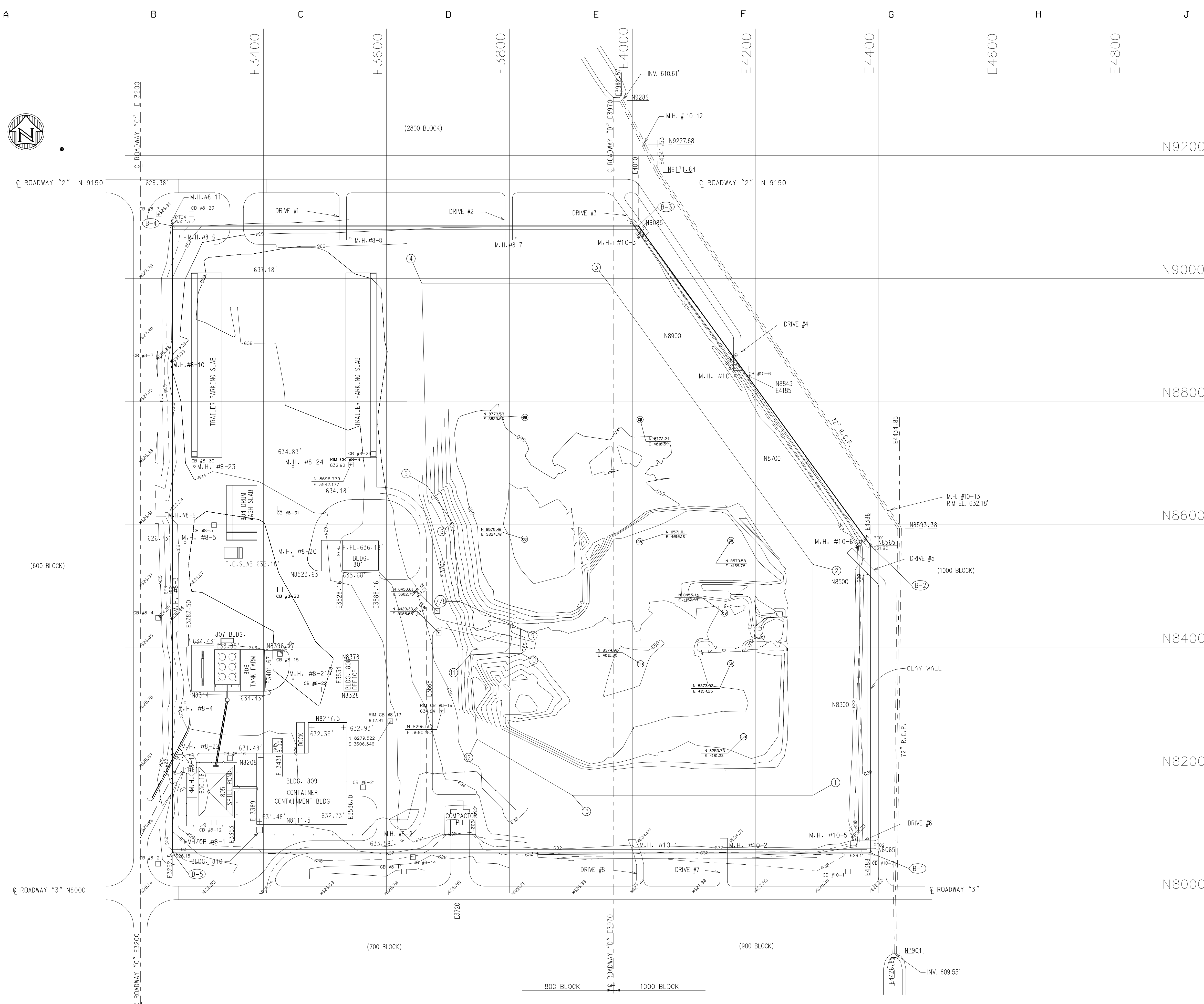
- GENERAL CONCRETE NOTES:**
- CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 28 DAYS.
 - REINFORCING STEEL SHALL BE INTERMEDIATE GRADE, DEFORMED, NEW BILLET-STEEL MEETING ASTM SPECIFICATIONS A615-87, GRADE 60.
 - ALL FILL SHALL BE COMPACTED TO 95% MODIFIED PROCTOR.
 - ALL EXPOSED CONCRETE CORNERS CHAMFERED 9" x 45".
 - ALLOWABLE SOIL PRESSURE 2000 P.S.F. FOR SOILS REPORT SEE FILE #87-356 IN RECORD PRINT #5839.
 - ALL ANCHOR BOLTS SHALL CONFORM TO ASTM SPEC. A-36.
 - ALL CONCRETE SHALL BE AIR-ENTRAINED.
 - WORK SHALL BE DONE IN ACCORDANCE WITH ACI-318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
 - PLASTIC FIBER-REINFORCED CONCRETE SHALL BE "FORTA FIBRE".
 - STEEL FIBER-REINFORCED CONCRETE SHALL BE "DRAMIX".
 - UNLESS OTHERWISE NOTED, #4 BARS SHALL BE LAPPED 21" MINIMUM, #5 BARS SHALL BE LAPPED 26" MINIMUM AND #6 BARS SHALL BE LAPPED 31" MINIMUM.
 - NO JOINTS ALLOWED OTHER THAN THOSE SHOWN ON DRAWINGS.

DESIGNED BY: K.J.WALKER	DATE 01-11-88	RELATED DRAWINGS NUMBER TITLE
DRAWN BY: D.A.W./L.K.O.	DATE 01-29-88	XI-60833 TANK FARM SLAB & FOUNDATION DETAIL
TECHNICAL APPROVAL: K.J.WALKER	DATE 06-04-88	
APPROVED FOR ISSUE: R.L.ZITTA	DATE 06-06-88	
PMSS INFOR-MATION	ENGRG. DISC. CA CONC	DWG. TYPE PLAN
SCALE 1" = 1'-0"	DRAWING NUMBER X1-60882	REVISION B

CADD

DOW CORNING CORPORATION
MIDLAND PLANT BLDG. 806
TANK FARM
SLAB AND FOUNDATION PLAN

LAST GENERAL UPDATE: 04JAN2010



REMAINING AVAILABLE LANDFILL SPACE (EXCLUDING FINAL COVER), CU. YD.	
CALCULATED AGAINST	OCT 1998
LANDFILL LICENSE CLOSURE VOLUME	301,915
LANDFILL INTERIM CLOSURE VOLUME	156,715

1998 BASE FILE POINTS			
POINT	NORTH	EAST	ELEV.(')
14	8199	4254	658.74
15	8521.9	4254	659.05
16	8951	3941.22	659.03
17	8951	3698.96	658.18
18	8676.08	3706.93	658.93
19	8616.60	3746.97	659.29
20	8501.08	3756.54	658.60
21	8450.04	3827.58	657.29
22	8350.04	3819.80	659.64
23	8348.31	3780.60	659.38
24	8273.75	3785.85	659.10
25	8199.00	3913.38	659.10
26	8900.15	3979.02	659.46
27	8830.36	3779.82	658.70
28	8799.12	3738.77	657.96
29	8780.53	3704.12	659.34
30	8229.22	4227.86	654.41
31	8527.67	4234.89	653.67
32	8875.23	3930.84	653.31
33	8813.03	3791.17	648.48
34	8798.48	3759.35	649.13
35	8770.59	3720.64	650.05
36	8677.41	3724.59	650.54
37	8616.79	3767.02	650.16
38	8514.32	3770.46	649.88
39	8450.21	3859.84	652.56
40	8350.00	3850.00	651.00
41	8334.20	3794.41	650.54
42	8278.55	3799.52	650.17
43	8213.10	3922.10	651.57
44	8749.62	3900.11	651.30
45	8599.32	3897.96	654.40
46	8449.29	3901.18	652.41
47	8301.12	3899.98	650.83
48	8598.66	4100.84	653.84
49	8450.03	4099.83	651.56
50	8301.88	4099.33	651.54
51	8428.15	4141.78	651.18
52	8449.83	4199.02	652.75
53	8500.47	4200.04	652.82
54	8481.03	4132.66	652.25
55	8446.91	4188.11	646.59
56	8475.19	4174.42	652.32
57	8474.89	4150.67	646.87
58	8440.67	4156.67	646.49

CONTROL POINTS			
	ELEVATION		
1	N8159	E4294	650.00
2	N8534.44	E4294	650.00
3	N8991	E3962.12	650.00
4	N8991	E3657.98	650.00
5	N8662.61	E3665.94	650.00
6	N8602.52	E3708	650.00
7/8	N8474.15	E3718.63	650.00
9	N8430	E3818.04	650.00
10	N8390	E3818.04	650.00
11	N8387.56	E3736.62	650.00
12	N8249.79	E3747.64	650.00
13	N8159	E3902.52	650.00

BASE POINTS		
B-1	N8065	E4388
B-2	N8565	E4388
B-3	N9085	E4010
B-4	N9085	E3252.5
B-5	N8065	E3252.5

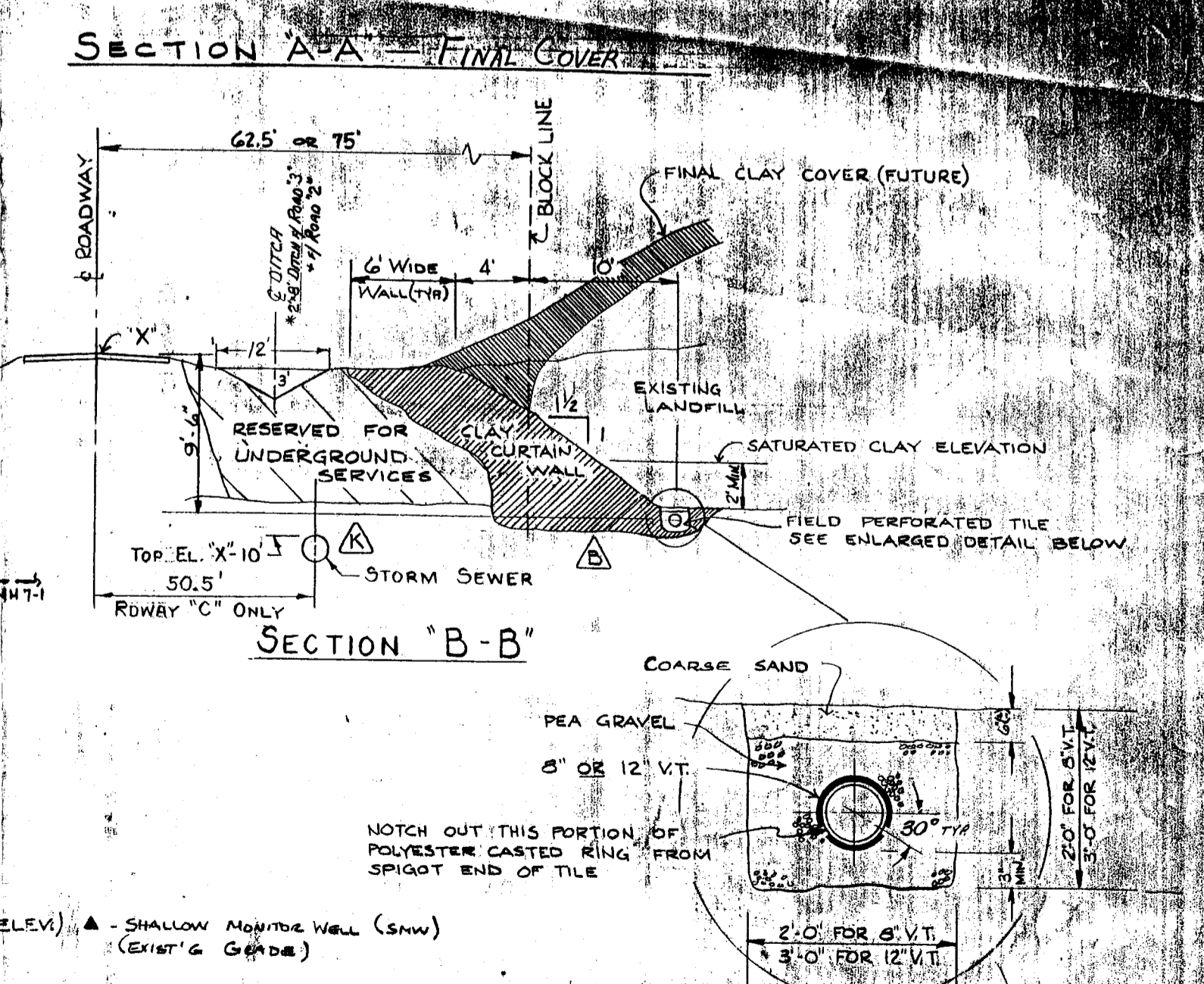
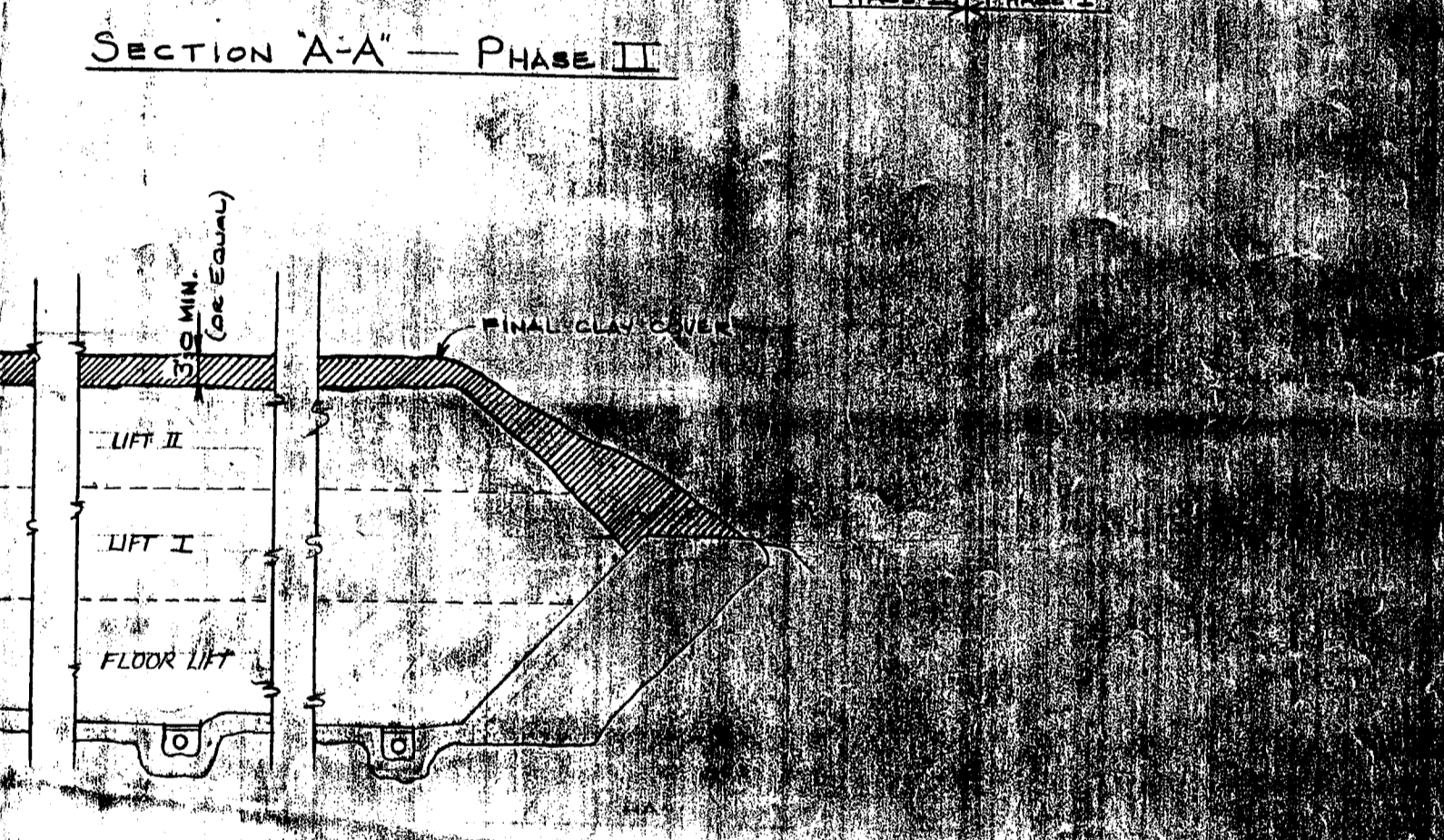
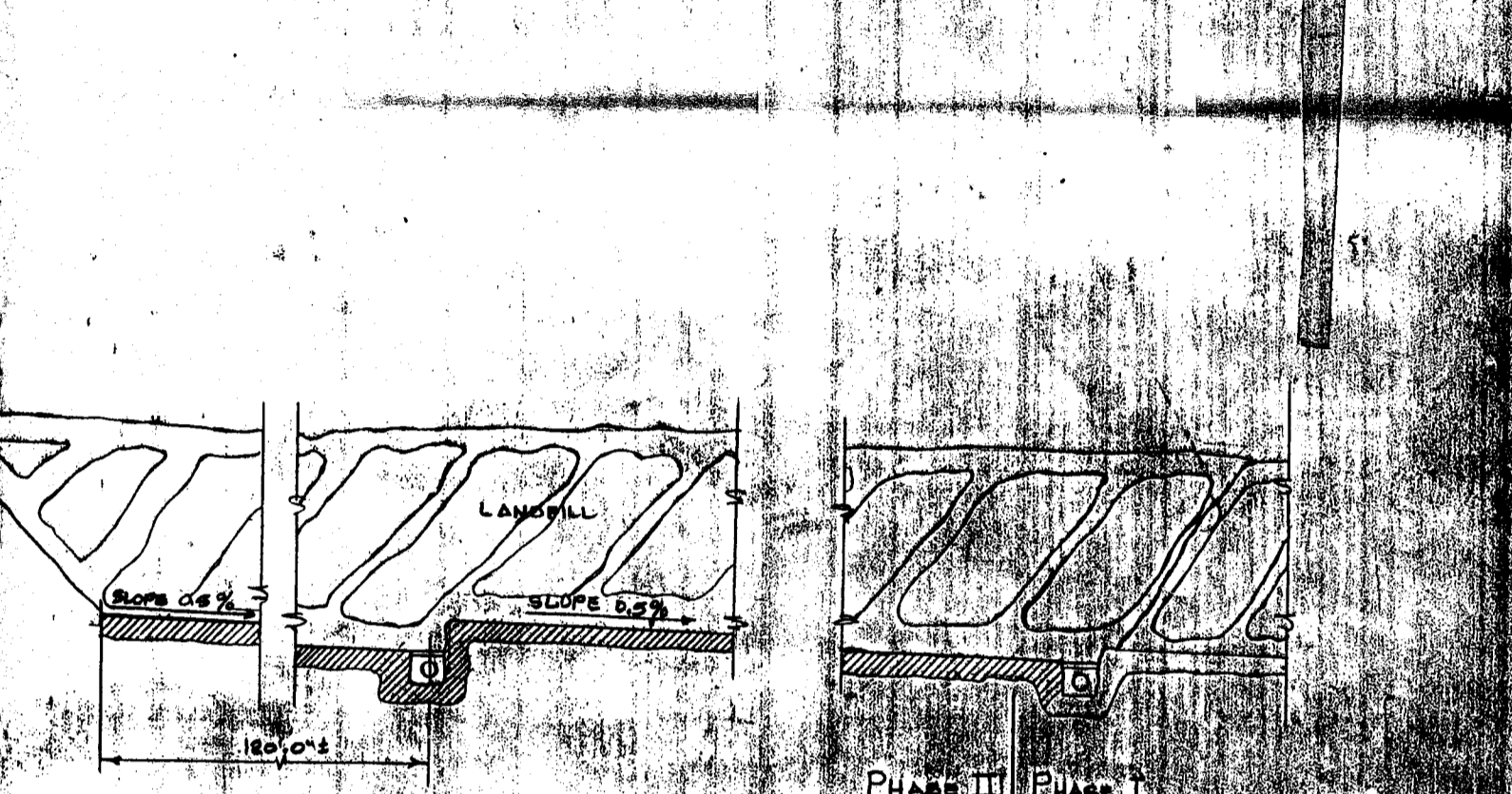
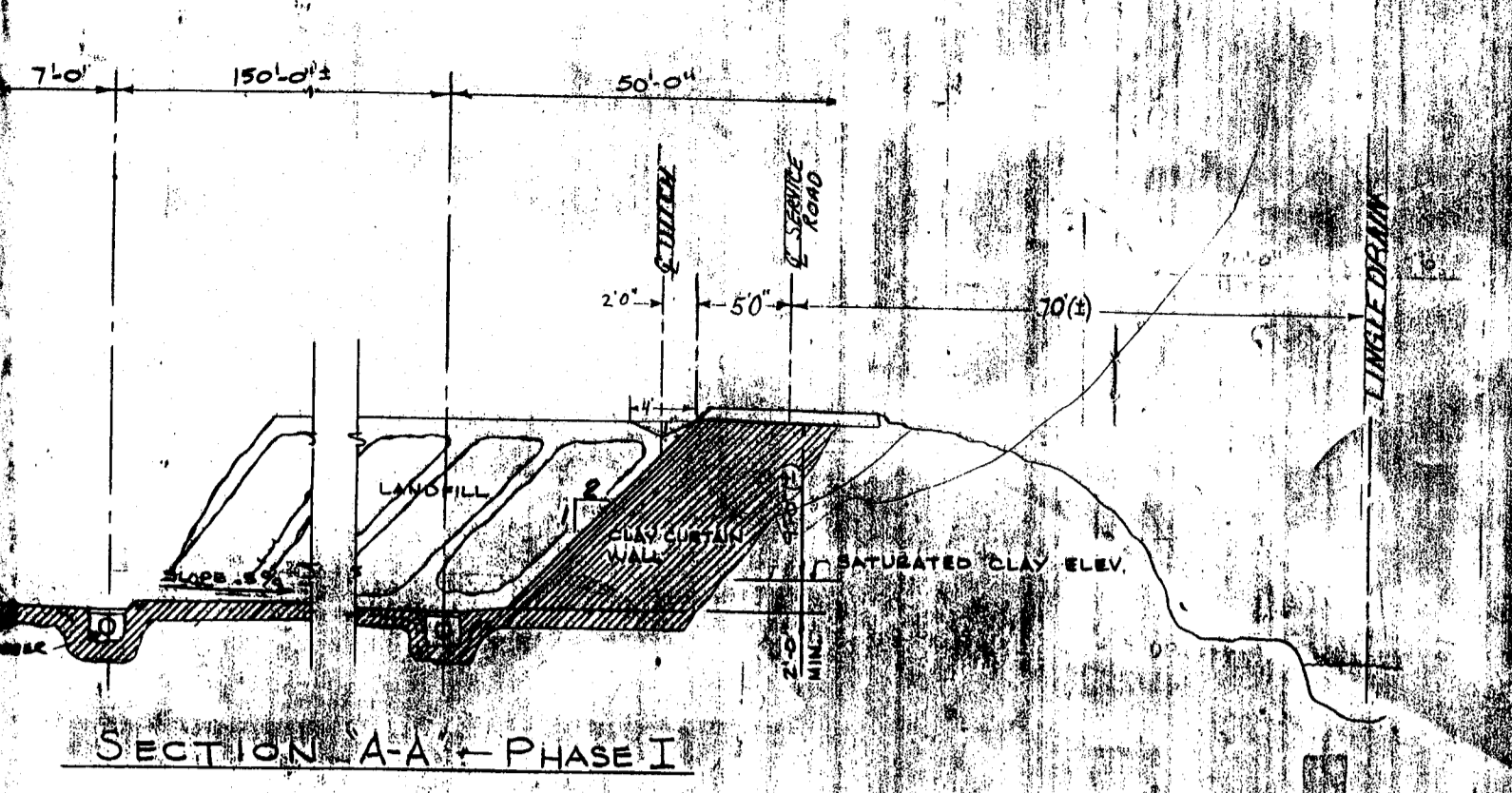
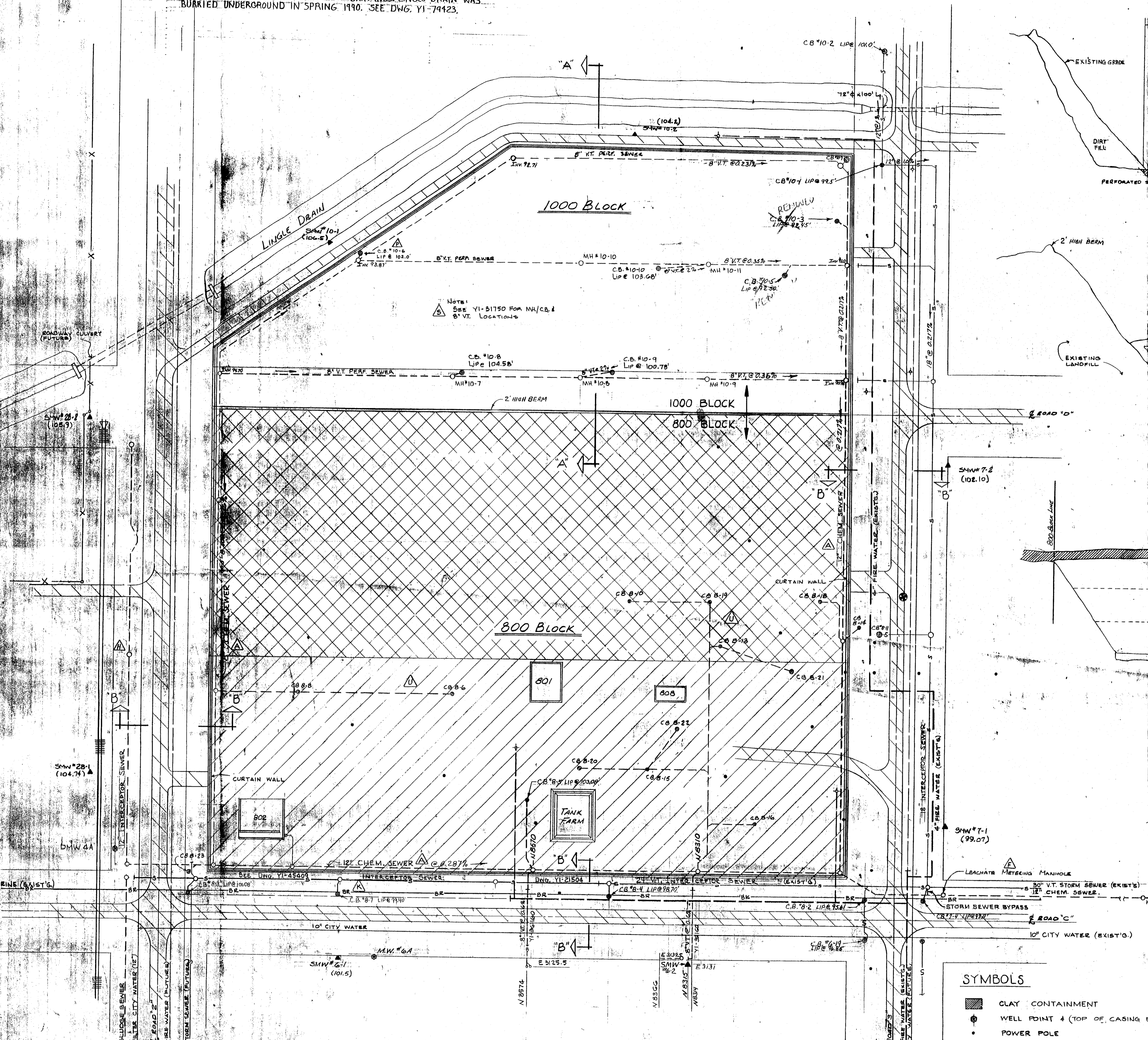
NOTES:
 1. THIS DRAWING REPRESENTS ELEVATION SURVEY OF HAZARDOUS WASTE LANDFILL AS OF 12/03/98 PER TOTAL STATION SURVEY DONE BY WADE-TRIM, BAY CITY. THIS TOPOGRAPHY IS USED TO DOCUMENT USED VOLUME AND FILLING RATE IN PLANT LANDFILL AND IS USED IN CALCULATION OF PROJECTED USABLE SPACE AGAINST FINAL CLOSURE PLAN CONTOURS PER DWG. Y1-36615 AND INTERM CLOSURE PLAN CONTOURS PER DWG. Y1-104982.
 2. PLANT ELEVATION 0.00' = 526.18' USGS
 LAST GENERAL UPDATE: 04JAN2010

MARK	LOC.	REVISIONS	BY	DATE	TECH APPR	INITIALS	MARK	LOC.	REVISIONS	BY	DATE	TECH APPR	INITIALS	MARK	LOC.	REVISIONS	BY	DATE	TECH APPR	INITIALS	DESIGNED BY:	DATE	RELATED DRAWINGS	TITLE	
U							A	GEN	UPDATE DRAWING	JAM	09NOV09	SFH									S.F. Hartman	24NOV08	Y1-36615 Y1-106152 Y1-104980	CLOSURE PLAN FINAL TOPOGRAPHY	
V							C														J.A. McRoberts	24NOV08	Y1-99199 Y1-99188 Y1-97452 Y1-93774 Y1-93777	1996 TOPOGRAPHY 1995 TOPOGRAPHY 1994 TOPOGRAPHY 1993 TOPOGRAPHY 1992 TOPOGRAPHY	
W							E														S.F. Hartman	24NOV08	Y1-97452 Y1-93774 Y1-93777	1993 TOPOGRAPHY 1992 TOPOGRAPHY 1992 TOPOGRAPHY	
X							F														R.L. Schroeder	24NOV08	PMSS INFOR-MATION	ENGRG. DISC. CA TOPO	DWG. TYPE PLAN
Y							G																		
Z							H																		
AA							I																		
AB							J																		
AC																									

DOW CORNING CORPORATION
MIDLAND PLANT **800/1000 BLOCK**
HAZARDOUS WASTE LANDFILL
2009 TOPOGRAPHY

SCALE: 1" = 80'
 DRAWING NUMBER: 0052-DWG-100021134-Y1
 REVISION: A

NOTE: THIS DRAWING SHOWS CONDITIONS AS OF 1986. FOR CURRENT LANDFILL CONDITIONS SEE APPLICABLE LANDFILL DRAWINGS. LINGE DRAIN WAS BURIED UNDERGROUND IN SPRING 1990. SEE DWG. YI-79423.



SYMBOLS

- CLAY CONTAINMENT
- WELL POINT # (TOP OF CASING ELEV.)
- ▲ SHALLOW MOUNTAIN WELL (SMW) (EXIST'G GARDEN)
- ⊙ POWER POLE
- ⊙ DENOTES CENTER OF SECTION 26 T4NR2E MIDLAND TOWNSHIP, MIDLAND COUNTY, MICHIGAN

REV	DATE	BY	CHKD	APP	DESCRIPTION
AF					
AG					
AH					
AJ					
AK					
AL					
AM					
AN					
AP					
AQ					

SEE NOTE AT UPPER LEFT CORNER

DESIGNED BY: G. MPHAMBLIN
DATE: 17 JULY 78

CHECKED BY: W. PLAVJANIC
DATE: 24 JULY 78

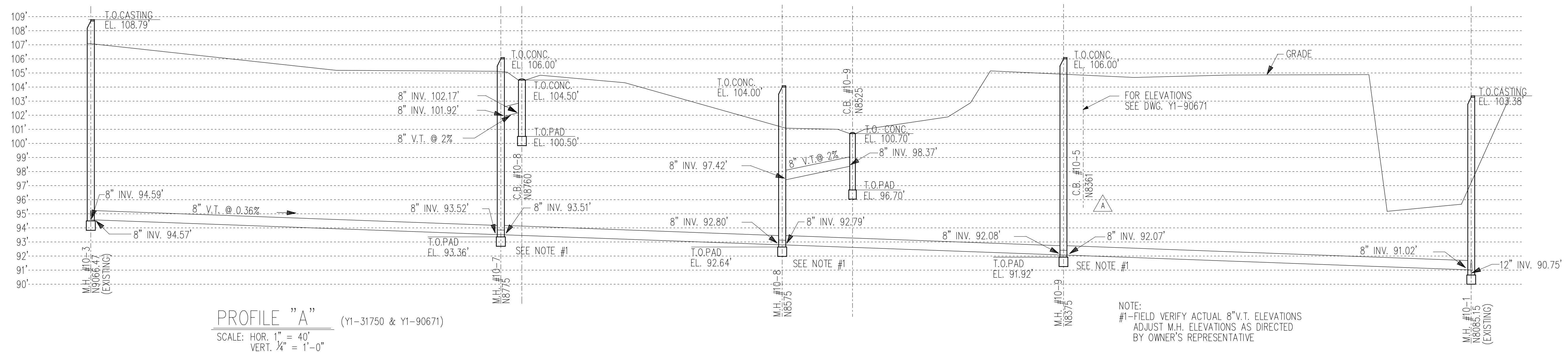
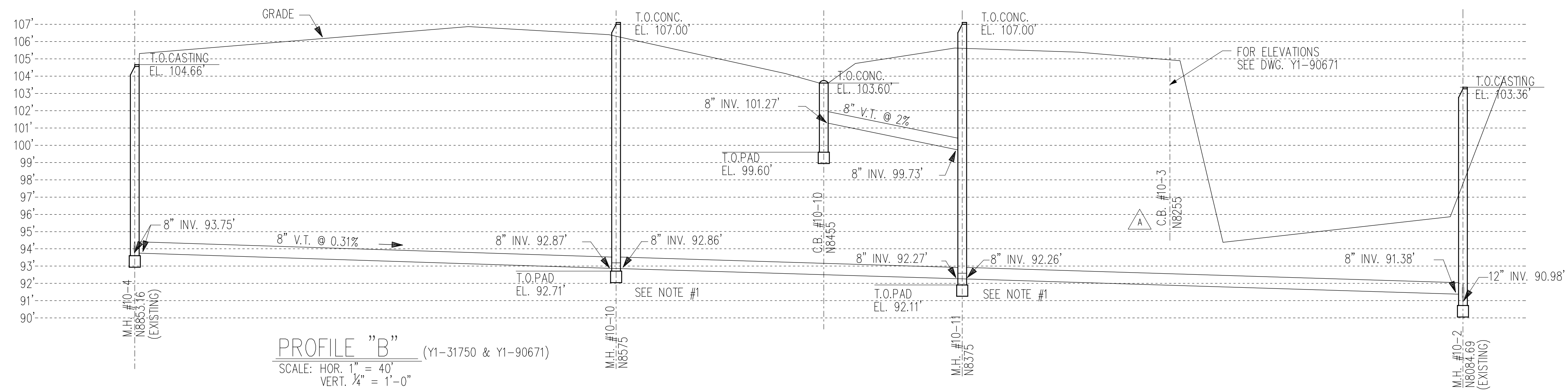
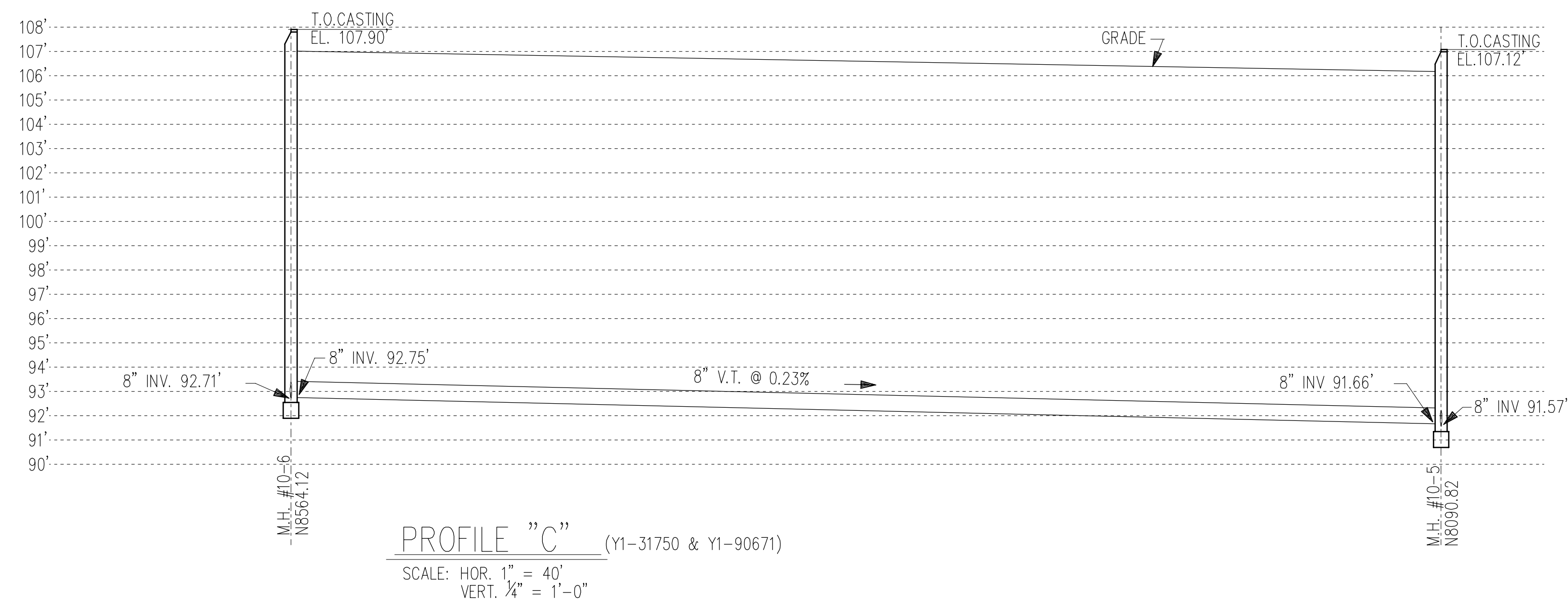
APPROVED BY: W. PLAVJANIC
DATE: 24 JULY 78

DOW CORNING CORPORATION
 MIDLAND, MICHIGAN

GENERAL PLANT LANDFILL DEVELOPMENT SITE PLAN

SCALE: 1" = 80'

YI-31900



NOTE:
THIS IS AN INSTALLATION DRAWING FOR THE LEACHATE COLLECTION SYSTEM. V.T. PIPE IN THIS APPLICATION WAS LAID WITH NOTCHED POLYESTER CAST RINGS ON SPIGOT END OF PIPE TO ALLOW FOR LEACHATE COLLECTION. PIPE WAS LAID IN 3'-0" WIDE DITCH WITH 6" BEDDING AND 6" COVER OF SPEC. M6-51 CONCRETE SAND.

GRADE PROFILE, TOP OF MANHOLE, TOP OF CATCH BASINS AND LOCATION OF SOME OF CATCH BASINS HAVE BEEN CHANGED AS THE FILLING OF LANDFILL CONTINUES.

FOR CURRENT GRADE ELEVATION AND ACTIVE CATCH BASINS, SEE DWG. Y1-90671 - LANDFILL CONTOURS.

NOTE: PLANT ELEVATION 0.00' = 526.18' USGS

REFERENCE DWG'S.
Y1-29958
Y1-31750
Y1-36160
Y1-36778
Y1-90671

NOTE:
#1-FIELD VERIFY ACTUAL 8"V.T. ELEVATIONS ADJUST M.H. ELEVATIONS AS DIRECTED BY OWNER'S REPRESENTATIVE

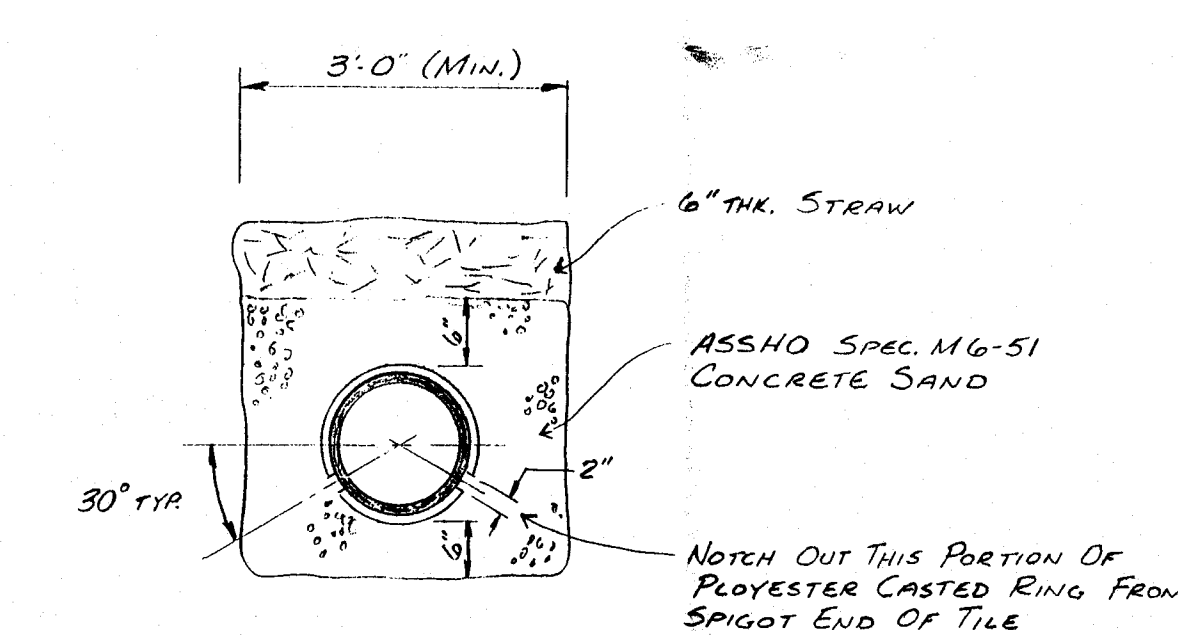
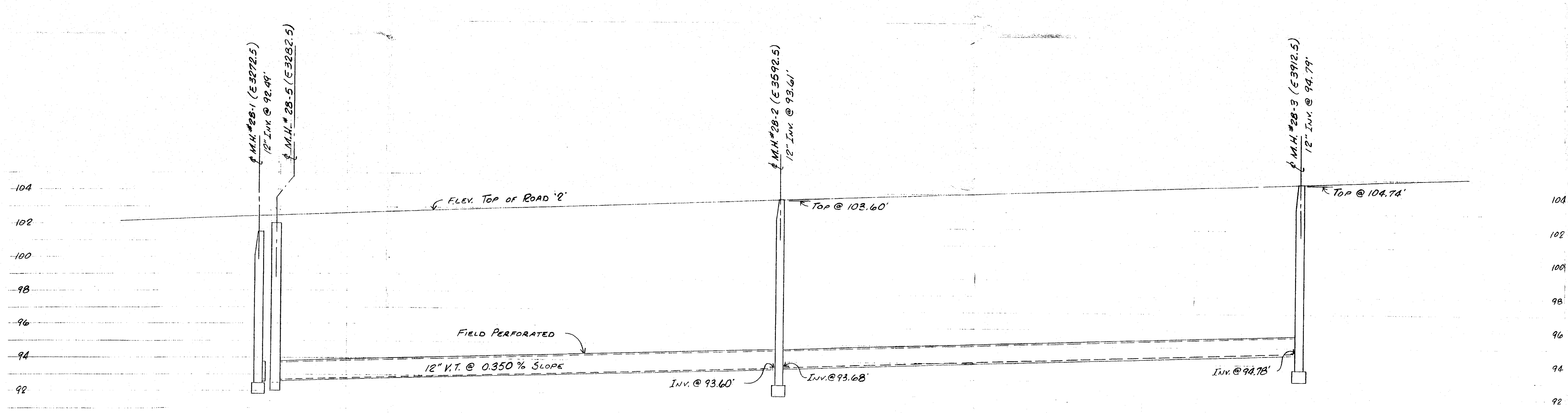
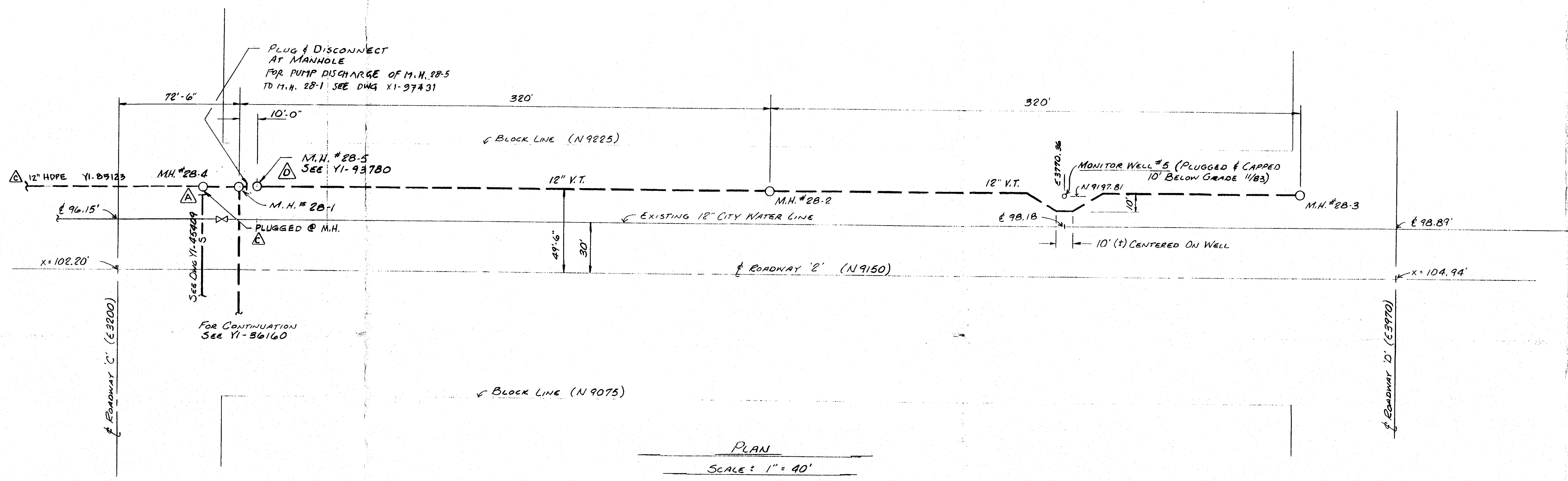
LAST GENERAL UPDATE: 04JAN2010

MARK	LOC.	REVISIONS	BY	DATE	APP	DESIGNED	DATE
A	GEN	REVISED PROFILE "A" & "B"	RJF	27JUL89	PC	J.L.VANDERMALE	06-10-86
B	GEN	REVISED NOTE AND REFERENCE DWGS.	RJF	02MAR93	PC	J.L.VANDERMALE	06-17-86
C						J.K.LAFAVE	06-11-86
D						CHECKED	
E						J.L.VANDERMALE	
F						APPROVED	
G						R.G.COOK	06-24-86
H							
J							

DOW CORNING CORPORATION

LANDFILL 1000 BLOCK
LEACHATE COLLECTION SYSTEM
SEWER PROFILES

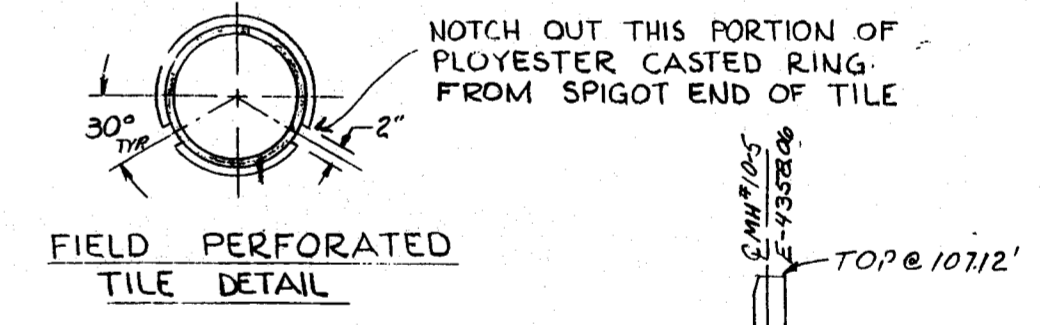
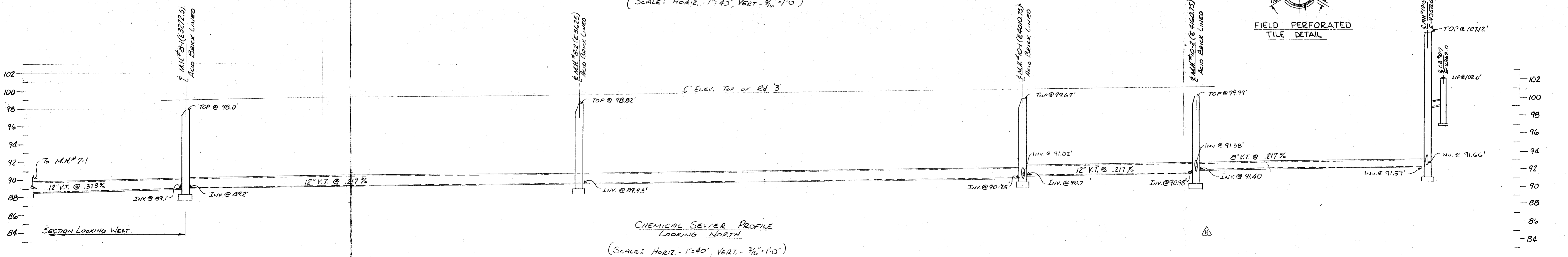
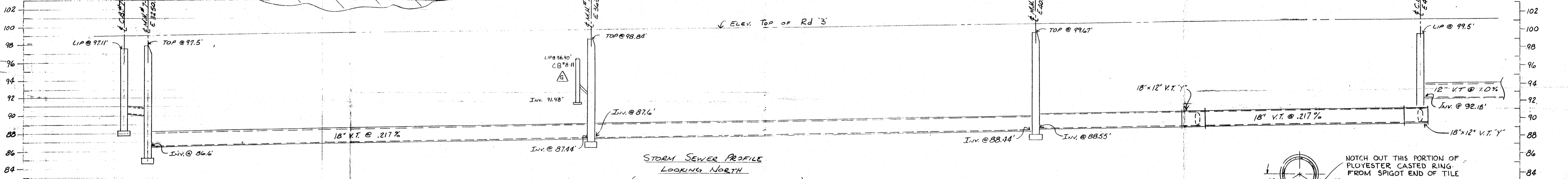
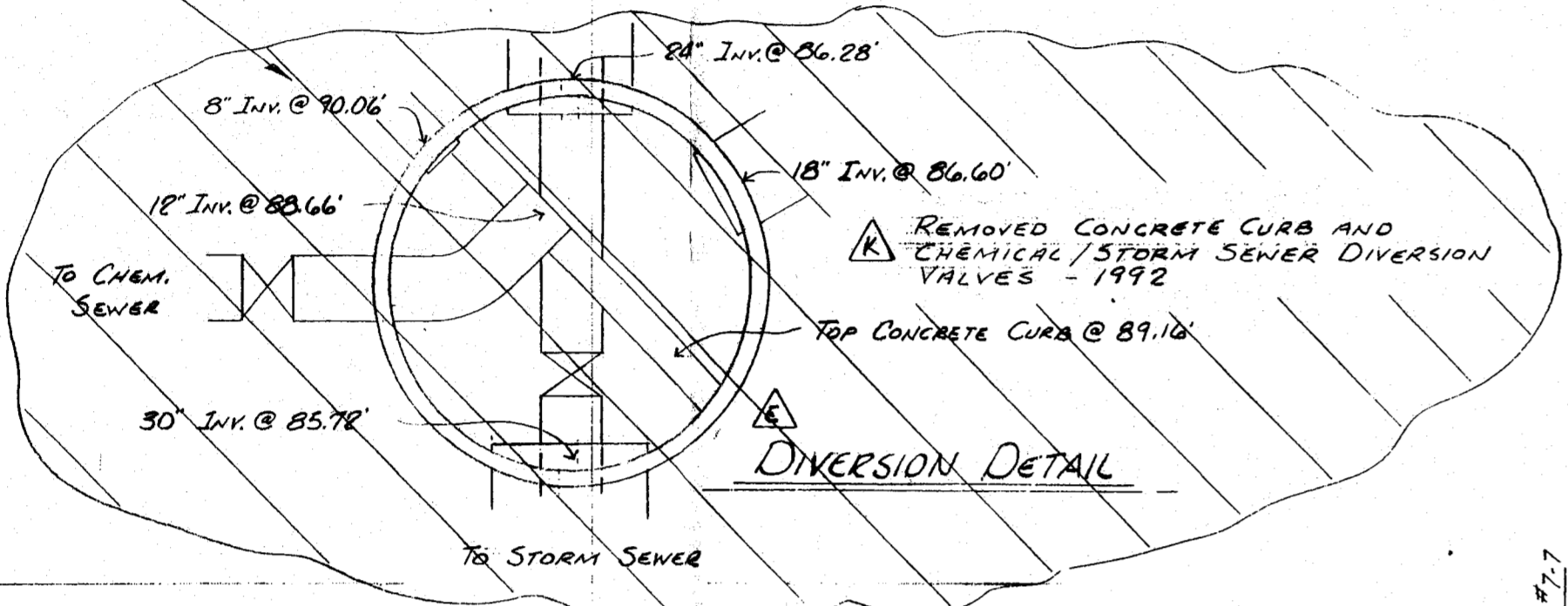
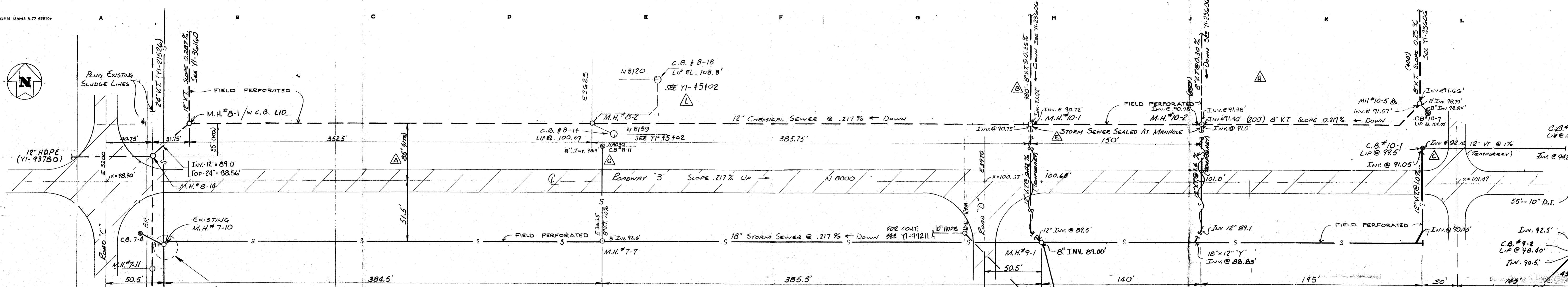
SCALE	INCH AS NOTED	FOOT	DRAWING NUMBER Y1-23606	REVISION B
-------	------------------	------	----------------------------	---------------



BY	DATE	APP	DESIGNED	DATE	CROSS REFERENCE
A B-7			G.M. HAMBLEN	7 JUNE 1983	
B L-1	7/4/83	RJF	E.J. FOOTE	9 JUNE 1983	
C B-7	7/17/83		G. BERTS		
D B-7	7/18/83	PC	W. P. PAULANICA	6/11/83	

DOW CORNING CORPORATION
MIDLAND MICHIGAN
CHEMICAL SEWER 2800 BLK.
ROADWAY '2' - BETWEEN ROADS 'C' & 'D'
PLAN & PROFILE
SCALE: As NOTED YI-31749

6/24/99



03/24/99

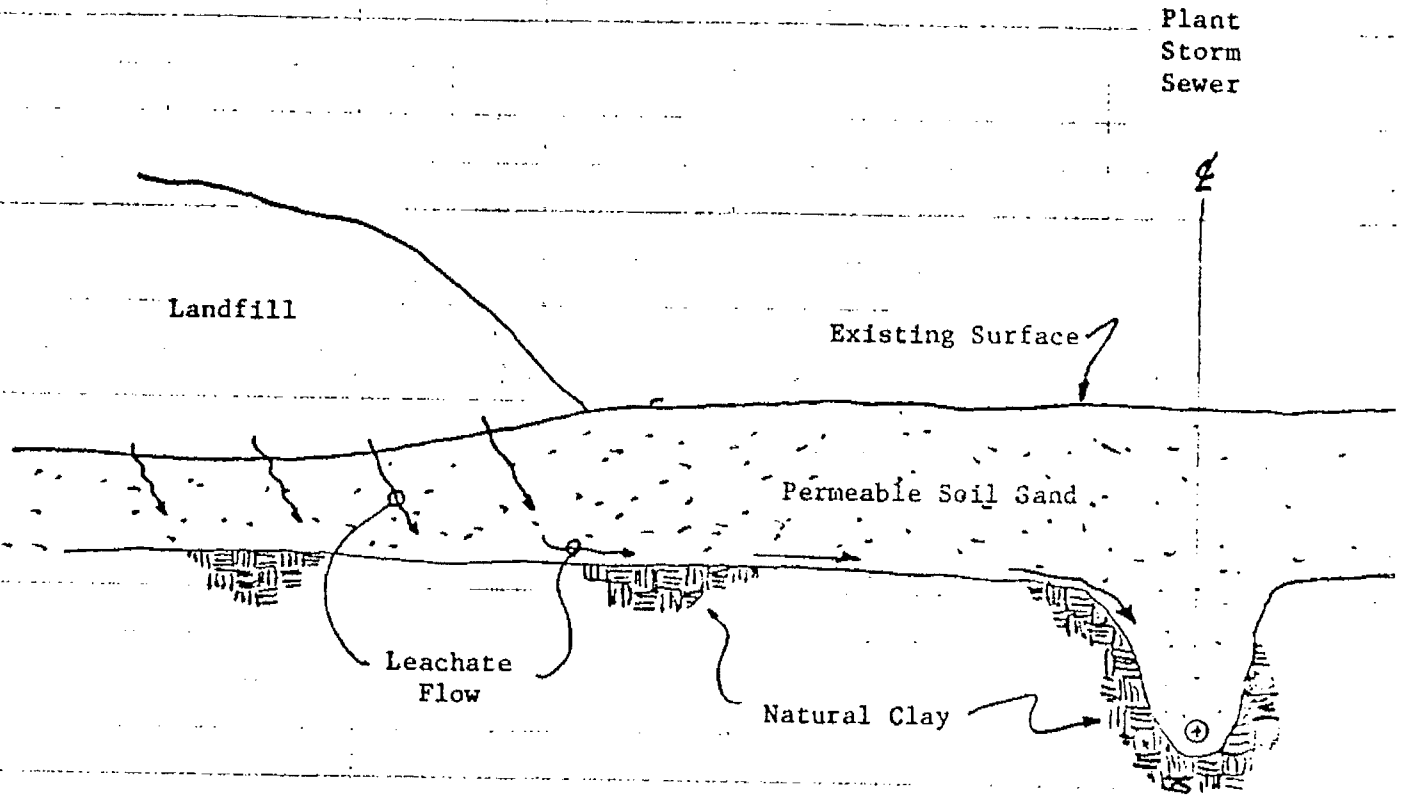
NO.	DATE	BY	APP.	REVISIONS
1	12/14/78	G.M.F.	G.M.F.	RELOCATED CHEMICAL SEWER LINE
2	12/14/78	R.J.F.	R.J.F.	ADDED 8\"/>
3	5/14/80	G.M.F.	G.M.F.	ADDED C.B.# 10 & 11
4	8/28/80	R.J.F.	R.J.F.	ADDED M.H.# 10.3
5	11/23/80	R.J.F.	R.J.F.	ADDED DIVERSION @ M.H.# 7.1 (1983)

AF		V		K	C.G.	REMOVED SEWER DIVERSION FROM M.H.# 7-10	R.J.F.	10/29/78	P.C.	LOCAL
AG		W		L	D.7	ADDED C.B.# 7 B-14 AND 8-18	P.C.	11/29/78	P.C.	DESIGN
AH		X		M	L.6	ADDED C.B.# 9-2; STORM TO LINGLE DRAIN	R.J.F.	9/24/78	S.F.H.	CHECK
AJ		Y		N	H.5.6	RE-ROUTED M.H.# 9-2 TO CHEM. SEWER	J.K.L.	10/16/78	S.F.H.	CHECK
AK		Z		P						
AL		AA		Q						

DOW CORNING CORPORATION
 MIDLAND MICHIGAN
 CHEMICAL & STORM SEWER
 ROADWAY '3' BETWEEN 'C' & 'D'

DOW CORNING CORPORATION

MIDLAND PLANT LANDFILL

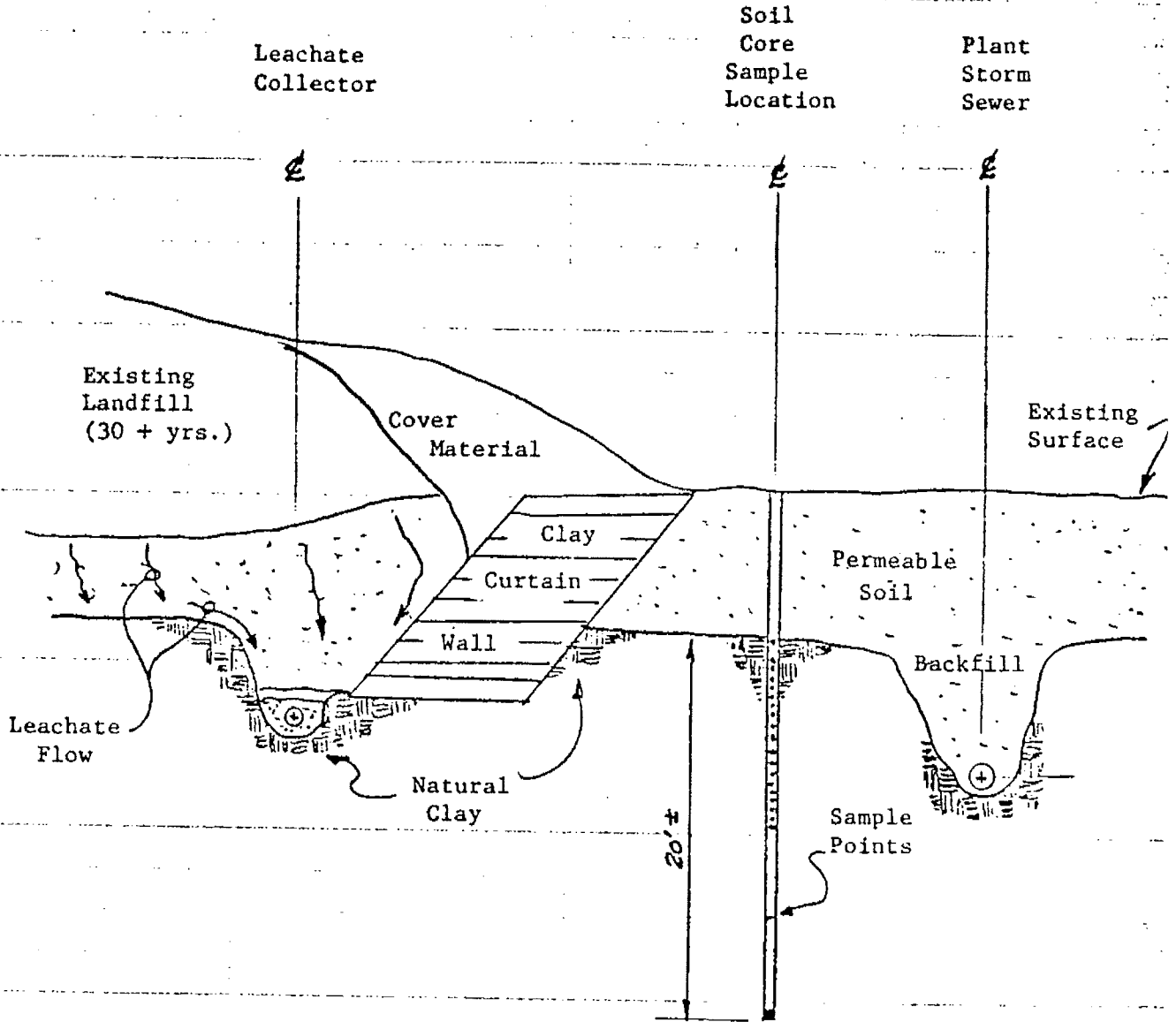


Soil Profile

Old Condition (1950 - 1980)

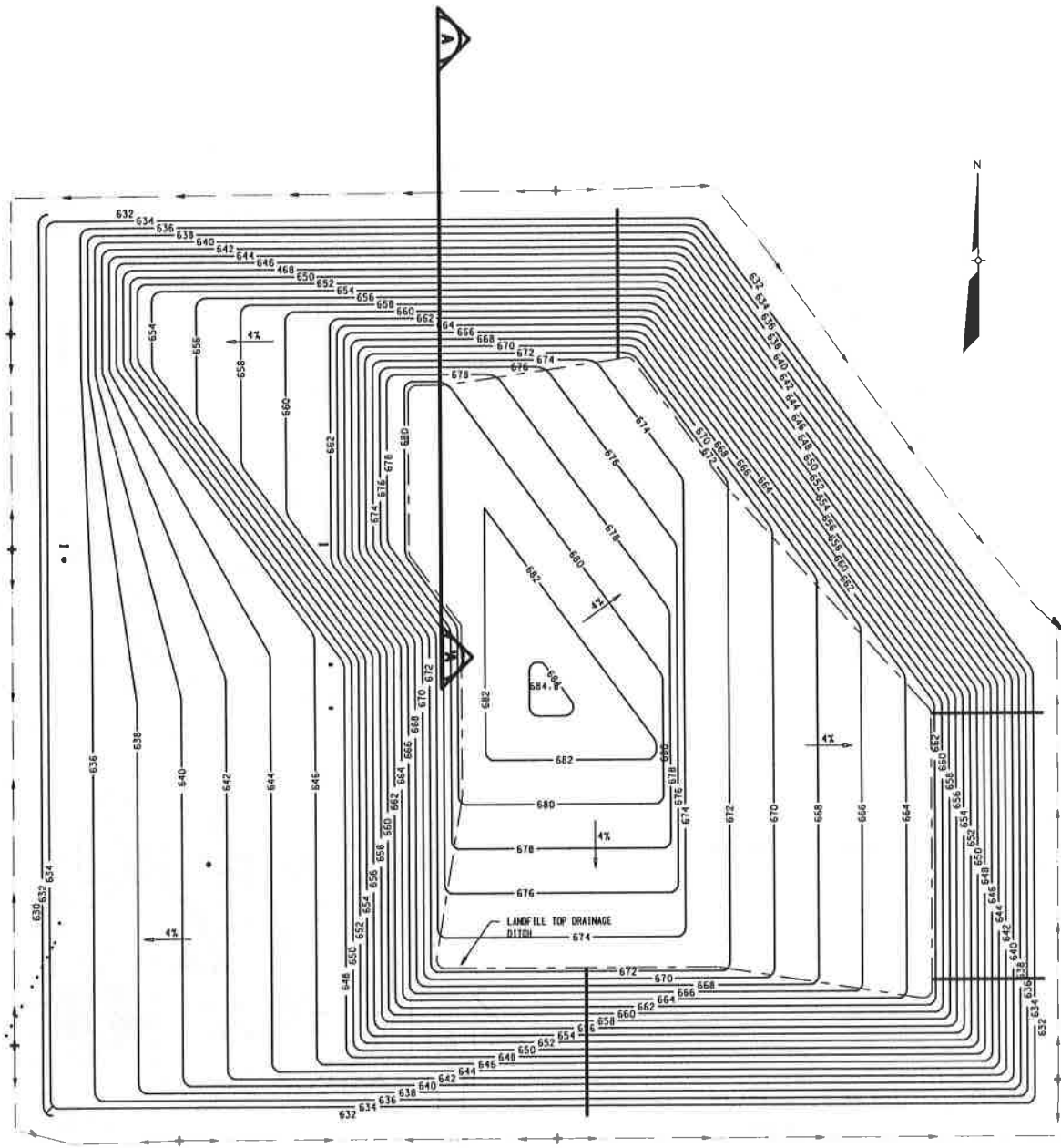
DOW CORNING CORPORATION

MIDLAND PLANT LANDFILL



Soil Sampling Profile

Existing Condition (1980 - Present)

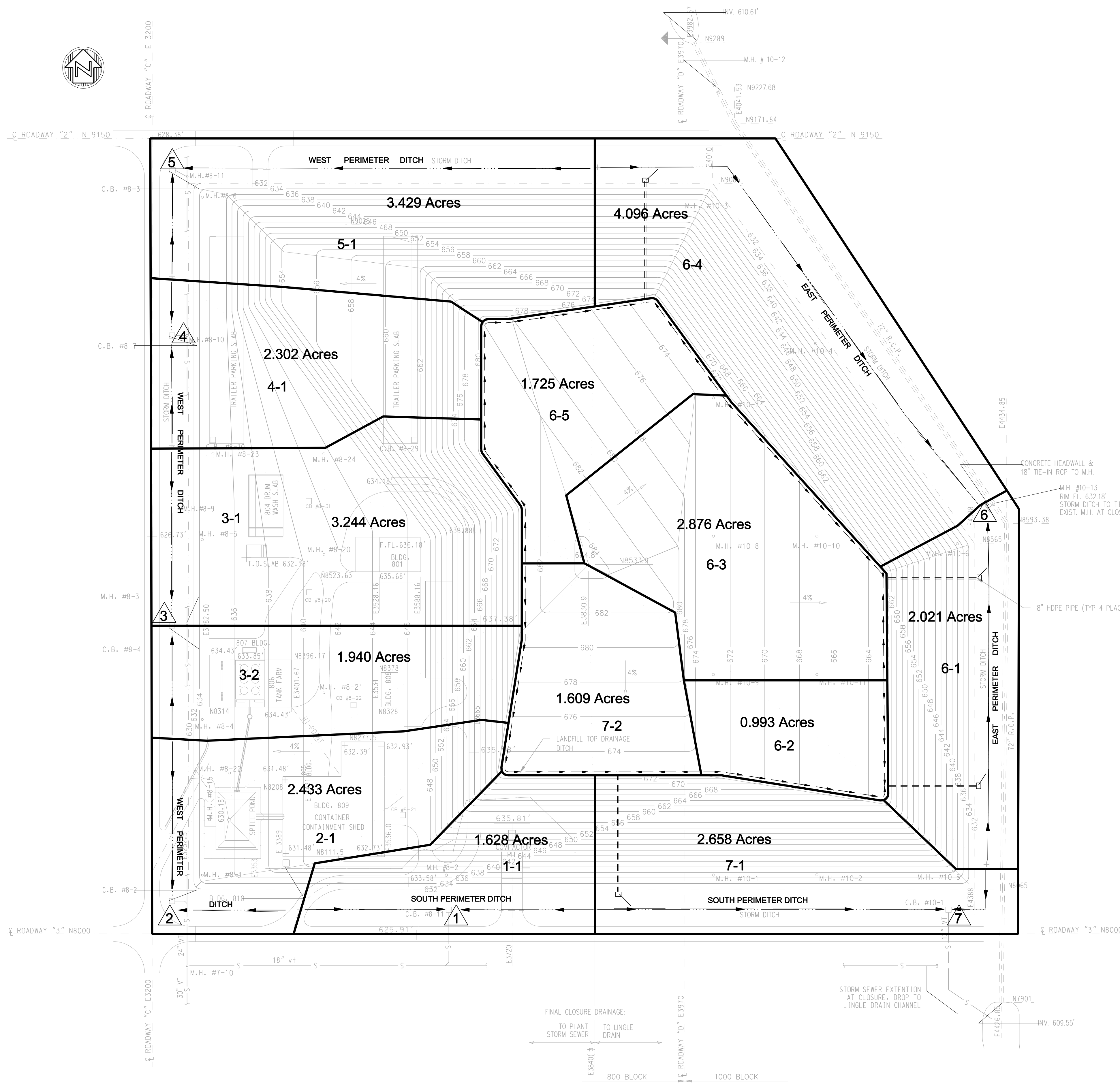


AECOM

FIGURE S1
SLOPE STABILITY
CROSS-SECTION
DOW CORNING CORPORATION
MIDLAND PLANT

MARCH 2011

PROJECT 60134827



NOTES:

1. FINAL CONTOURS ARE BASED ON:
 - A. TOTAL FILL VOLUME AT OR VERY CLOSE TO MAXIMUM LANDFILL VOLUME AS SPECIFIED IN LANDFILL CLOSURE PLAN DATED 5 - 1988.
 - B. SIDE SLOPE = 4:1
PLATEAU SLOPE = 4% MINIMUM
2. CONTOURS REPRESENT ELEVATION OF A CLOSURE CAP. ACTUAL ELEVATION OF FILL MATERIAL WILL BE 5.0' LOWER.

- SEDCAD STRUCTURE LOCATION/LABEL
- 6-3** SUBWATERSHED LABEL (STRUCTURE # - SWS #)
- PERIMETER DITCH AND FLOW DIRECTION
- DIVERSION BERM AND FLOW DIRECTION
- DOWNSLOPE PIPE AND ENERGY DISSIPATOR

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AECOM		SEDCAD LAYOUT
MIDLAND LANDFILL CLOSURE DOW CORNING CORPORATION		
Sneboygan, Wisconsin	NO	REVISIONS
DRN	DES	CHK
APP	APP	APP
Copyright © AECOM All Rights Reserved		NO
		DRN
		CHK
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		DATE

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