

NOTE
 1. SPLIT AND/OR ADJUST METAL DECK SUCH THAT A MINIMUM OF 4" WIDE CONCRETE RIB WILL OCCUR DIRECTLY ABOVE BEAM.

Project: Carver Greenfield Sludge Dehydration & ERS
 Contract No. 1
 L.A. County Sanitary Dist. #2
 Owner: Foster Wheeler
 Engineer: Brinderson Corporation
 Contractor: Bepex Corporation
 Sub Contractor No: 86000512

Supplier's Purchase Agreement No.: 44-7 TorusOne

To Follow: Monorail Boiler & Mach. Co.
 DP-13, 1M-100, 1M-110, & 1M-120
 11K
 Description of location within the facility being constructed, where installation is intended:
 Between Columns 9-11 & 81-9
 At Elev. 72'-0"

61719

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CERTIFIED DRAWING
 BEPEX CORP.
 DATE 11/16/88 PER [Signature]
 FOR [Signature]

REV.	DATE	ECN. NO. 1	DESCRIPTION	DR	CHK
H	10-7-88		20 WAS 10" & ADDED ANOTHER SECTION FF	DES	
E			REVISED FOR THE 23" MOVE TO THE EAST	DESIGN	
D			REVISED PER STRUCTURAL ENG. DRAW DATED 8-9-88	BD	
C			26 WAS 33, 3-11 WAS 3-6"		
			ADDED STRUCTURAL SUPPORTS TO VIEWS		
			73-14 WAS 73-0" INCREASED CONCRETE ROSTER		
B	5-8-88		REVISED PER HANDED OVER FROM CITY OF LA	RWD	
A	1-13-88		REDESIGN	DESIGN	

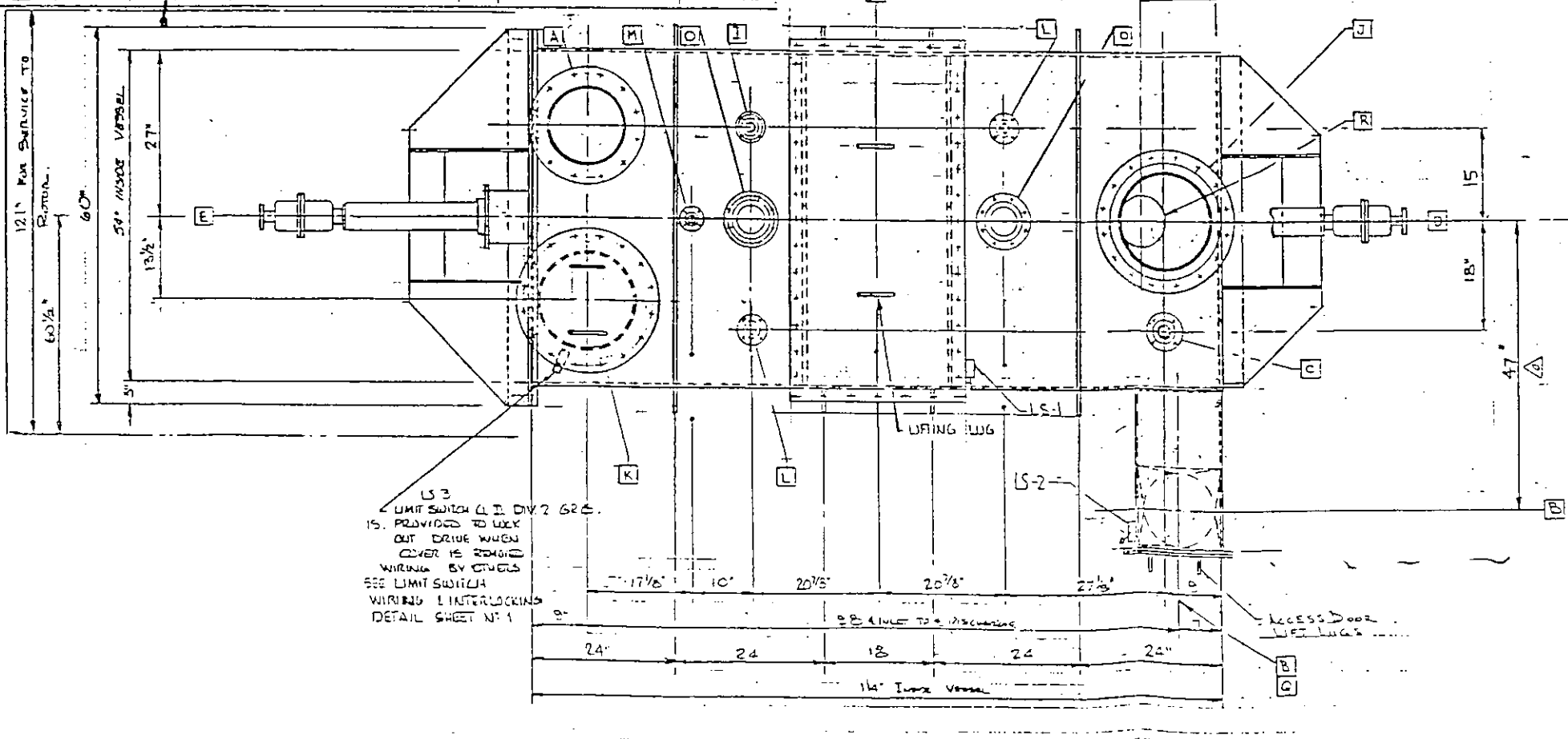
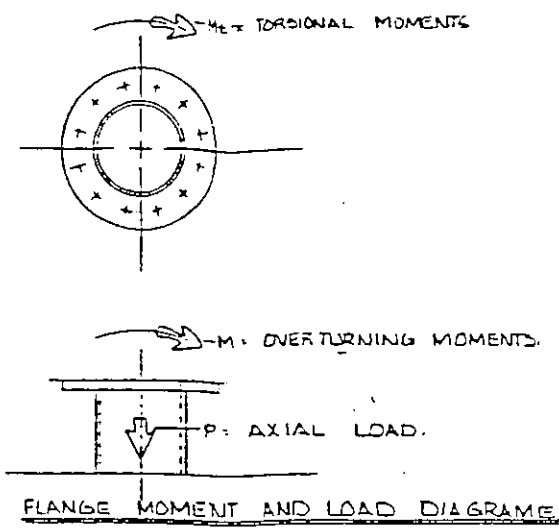
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bepex corporation

TOLERANCES UNLESS OTHERWISE SPECIFIED	ISO 128 METHOD A	TITLE
FRACTIONS 1/16"	3X	TD-48-9 TORX DISC COOLER
DECIMALS .001"	MACH. FIN UNLESS NOTED	TAG NO. 1K, 1L, 1M-E-112
ANGLES 1/16"	DR. FOR HANDED OVER	SCALE 1/4" = 1'-0" (AS NOTED)
HOLE DIA. .010" - .005"	DR. FOR HANDED OVER	DRAWING NO. 86000512
		REVISED PER HANDED OVER
		DATE 11/16/88
		BY [Signature]
		CHECKED BY [Signature]
		DATE 11/16/88
		PROJECT NO. 86000512

NOZZLES			ALLOWABLE NOZZLE MOMENTS & LOADS				
BEPEX LETTER	FOSTER WHEELER	SIZE RATING	SERVICE	QTY	P ± Lbs.	M ± Lbs.	M ± Lb.Ft.
A	1	12" 150# RF	FEED INLET WAVE FLG 1/2" TK-150# OR.	1	2000	1700	20000
B	2	12" 150# RF	SOLIDS OUTLET WAVE FLG 1/2" TK-150# OR.	1	1400	1200	10000
C	3	2" 150# RF	VENT	1	500	370	370
D	4	3" 150# RF	ROTOR COOLING WATER INLET	1	SEE NOTE 12		
E	5	3" 150# RF	ROTOR COOLING WATER OUTLET	1	SEE NOTE 12		
F	6	1/2" 150# RF	TE CONNECTION POINTS	2	350	200	430
G	—	—	THERMOWELL	2	N/A	N/A	N/A
H	—	—	THERMOCOUPLE	2	N/A	N/A	N/A
I	7	1/2" 150# RF	SNUFFING STEAM	1	330	200	430
J	8	1/6" 150# RF	PSE CONNECTION POINT	1	2000	3500	30000
K	—	16" 150# RF	ACCESS DNNG & COVER 12" R FLG 150# OR.	1	N/A	N/A	N/A
L	9	1/2" 150# RF	SPARE & BLIND FLG.	2	330	200	430
M	10	3/4" 150# RF	NITROGEN TO TROUGH	1	170	50	93
N	11	3/4" 150# RF	NITROGEN TO SEALS	1	170	50	93
O	12	4" 150# RF	PIT CONNECTION POINT	2	800	450	4000
P	—	23" 146	ACCESS DNNG & COVER	1	N/A	N/A	N/A
Q	—	14" 27	WEIR ACCESS DNNG & COVER	1	N/A	N/A	N/A
R	—	8" 150# RF	VESSEL CLEAN OUT & COVER	1	N/A	N/A	N/A

DWG A-502801



LS 3
UNIT SWITCH (L.S. DIV 2 GRG.)
IS PROVIDED TO LOCK
OUT DRIVE WHEN
COVER IS REMOVED
WIRING BY OTHERS
SEE LIMIT SWITCH
WIRING & INTERLOCKING
DETAIL SHEET N-1

ITEM	QTY	MAT'L	PART NO.	DESCRIPTION
A				Project: Carver Greenfield Sludge Dewateration & FRS Contract No. 1 L.A. County Sanitary Dist. #2
B				Owner: Foster Wheeler
C				Engineer: Brinderson Corporation
D				Contractor: Bepex Corporation
E				Sub Contractor No: 86000512
F				44-7 TorusDisc
G				Supplier's Purchase Agreement No: To Follow
H				Manufacturer's Name: Moorhead Boiler & Mach. Co.
I				Contract Drawing Reference: D1-13, 1M-140, 1M-180, & 1M-200
J				Applicable Specifications: 11K
K				Description of location within the facility being constructed, where installation is intended: Between Columns 7-11 & B 1-G At Elev. 72'-0"

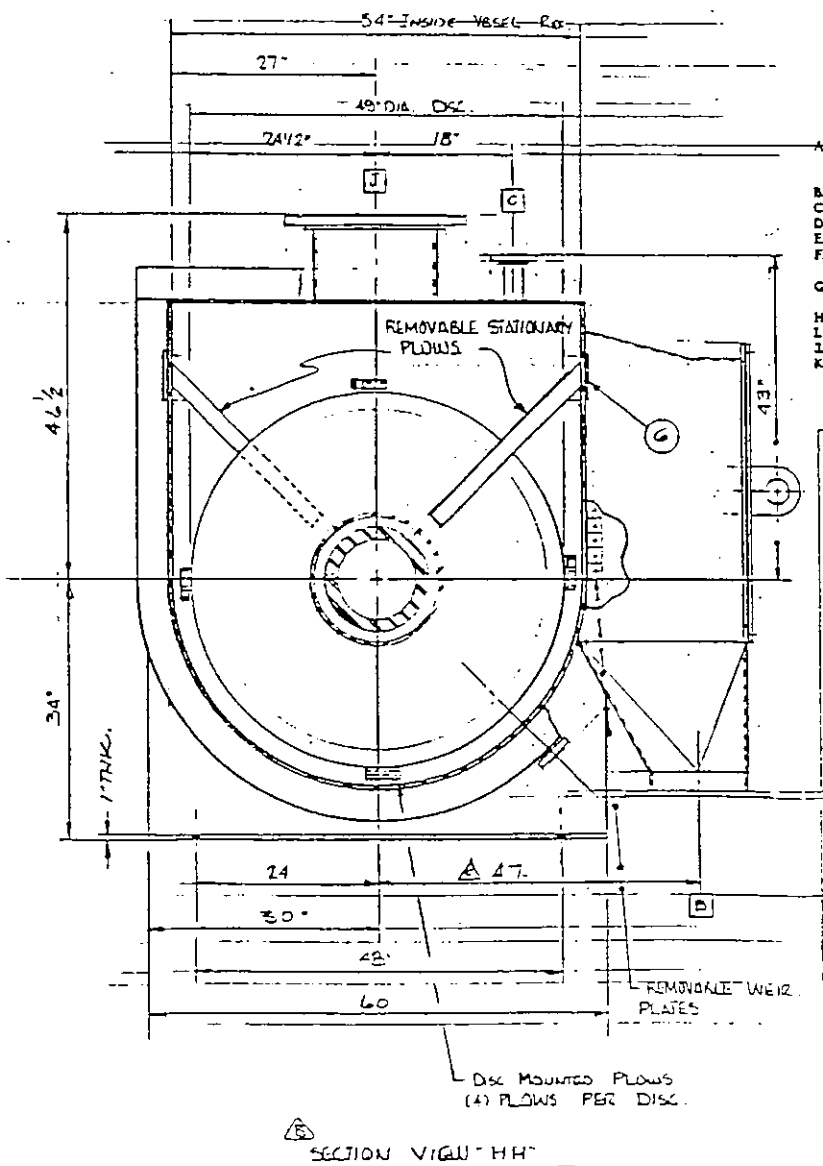
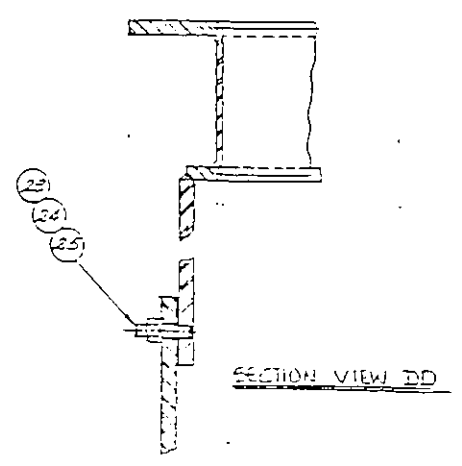
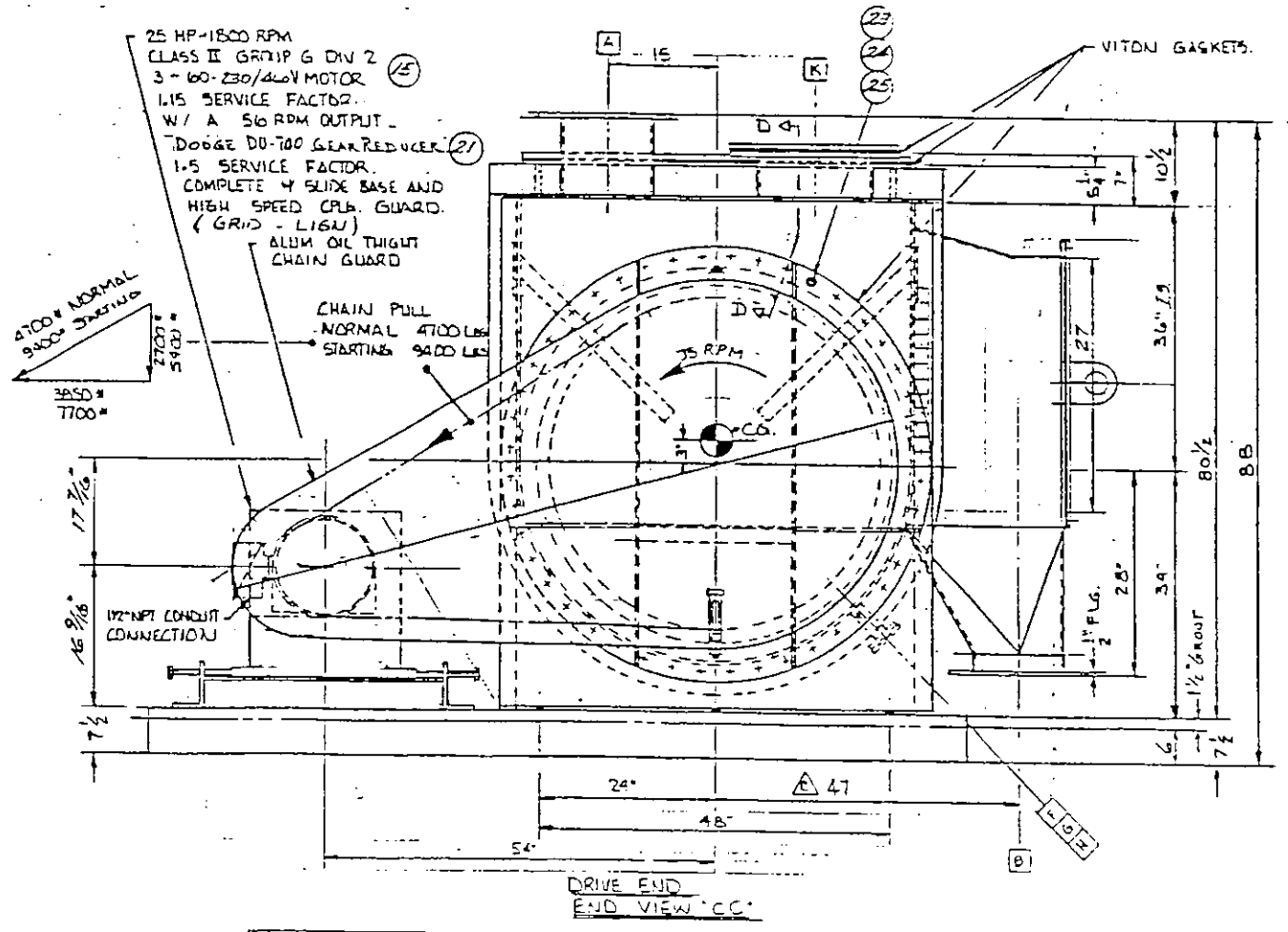
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CERTIFIED DRAWING
BEPEX CORP.
DATE: 11/11/85 PER: [Signature]
FOR: [Signature]

REV.	DATE	ECN. NO.	DESCRIPTION	DR. TECH.
G			15x27 OPEN WAS 21 x 35	DCI
C			47" V.A. 42" REVISED STIFFENER LOCATIONS	
			20 JAN 15-12 WAS 7" WGS W/ 98" V.A. WAS 37"	
B	59 85		REVISED PER ADDITIONAL DWE.	DCI
A	12-13-84		REDRAWN	DCI

TOLERANCES UNLESS OTHERWISE SPECIFIED		ISO 129 METHOD A	TITLE
FRACTIONS	1/16, 1/8, 1/4, 3/8, 1/2	3/16, 1/4, 3/8, 1/2	TD-48-9 TORUS DISC COOLER
DECIMALS	0.0005, 0.001, 0.002, 0.005, 0.01, 0.02, 0.05, 0.1, 0.2, 0.5, 1.0	MACH FIN UNLESS NOTED	TGA N° 1K, 1L, 1M E-112
ANGLES	15, 30, 45, 60, 75, 90, 105, 120, 135, 150, 165, 180	DR. TECH.	DATE: 11/11/85
WELDS	AS SHOWN	DATE: 11/11/85	DWG NO: D 502801
LETTERS	AS SHOWN	DATE: 11/11/85	REV: 16
PART NO.			

ITEM	QTY	MAT'L	PART NO.	DESCRIPTION
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Project: Carver Greenfield
 Sludge Dehydration & ERS
 Contract No. 1
 L.A. County Sanitary Dist. #2
 Engineer: Foster Wheeler
 Contractor: Brinderson Corporation
 Sub Contractor: Bepex Corporation
 26600312
 48-3 TorusDisc

Supplier's Purchase
 Agreement No.: To Follow
 Manufacturer's Name: Moorehead Boiler & Mach. Co.
 Contract Drawing Reference: IPI-13, IM-140, IM-180, & IM-200
 Applicable Specifications: 11K
 Description of location: Between Columns
 within the facility being
 constructed, where
 installation is intended: 3-11 & 3-1-G
 At Elev. 72'-0"

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CERTIFIED DRAWING
 BEPEX CORP.

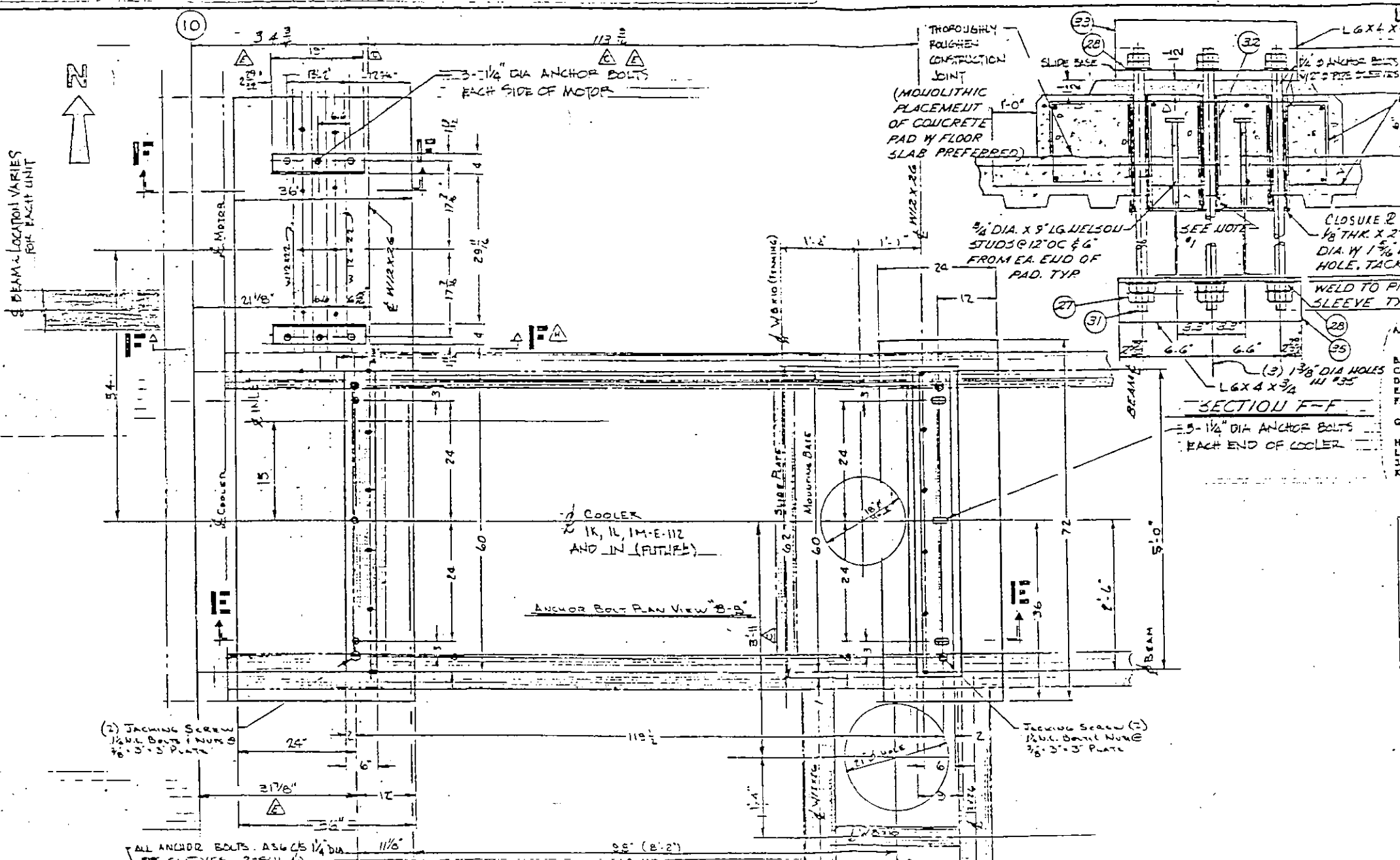
DATE 11/1/81 PER WJL
 FOR Revised P.D. 6212

REV.	DATE	ECN NO.	DESCRIPTION	DR	CHK
C	15/		47 WAS 42		
B	15/9/81		ADDED VIEW HH ~ 42" WEAIR 51"		
A	12/15/80		MCC-MANU		

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bepex corporation

TOLERANCES UNLESS OTHERWISE SPECIFIED	ISO 128 METHOD A	TITLE	TD-483B TORUS DISC COOLER
FRACTIONS 1/16	1/32	TAG NO.	1K-1L-1M-E-112
DECIMALS .001	MACH FIN UNLESS NOTED	CHK	WJL
ANGLES 1/2	DR	DATE	11/1/81
HOLES 1/16 - 1/2		NO.	D 202308
PLATE NO.			16



ITEM	QTY	MAT'L	PART NO.	DESCRIPTION
26				SLIDE PLATE
27				SLIDE BASE
28				3/4" DIA ANCHOR BOLTS
29				1/2" DIA X 9' LG. NELSON STUDS
30				CONCRETE PAD
31				WELD TO PIPE SLEEVE
32				CLOSURE 2'S
33				1/8" THK X 2 3/4" DIA W 1 3/8" DIA HOLE, TACK
34				L 6 X 4 X 3/4
35				3 (2) 1 3/8" DIA BOLLS

NOTE
 1. SPLIT AND/OR ADJUST METAL DECK SUCH THAT A MINIMUM OF 4" WIDE CONCRETE RIB WILL OCCUR DIRECTLY ABOVE BEAM.

Project: Carver Greenfield Sludge Densification & ERS
 Contract No. 1
 Owner: L.A. County Sanitary Dist. #2
 Engineer: Foster Wheeler
 Contractor: Brinderson Corporation
 Sub Contractor: Bepex Corporation
 Sub Contractor No.: 86000512
 42-9 TorusDac

Supplier's Purchase Agreement No.:
 Manufacturer's Name: To Follow
 Contract Drawing Reference: MF-13, 1M-140, 1M-150, & 1M-220
 Applicable Specifications: 11K
 Description of location within the facility being constructed, where installation is intended: Between Columns 5-11 & 51-G At Elev. 72'-0"

61719

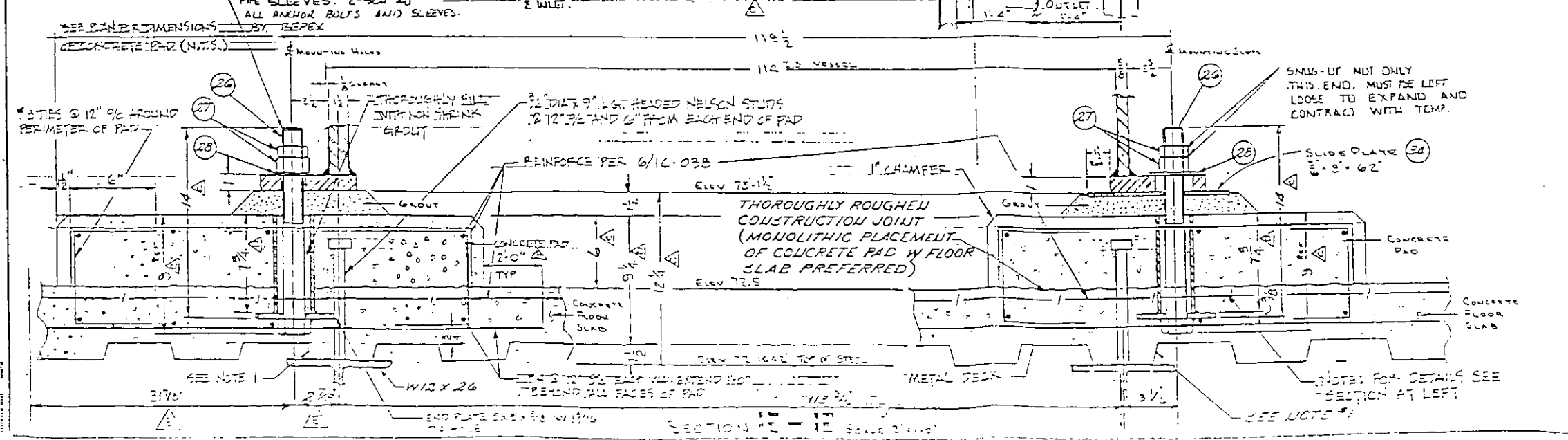
REV.	DATE	ECN. NO.	DESCRIPTION	DR	CHK
H	10-7-86		ADD ANOTHER SECTION FF	DRS	
E			REVISED FOR THE 2'-3" MOVE TO THE EAST	DRS	
D			REVISED PER STRUCTURAL ENGR DATED 6-9-86	BD	
C			38" WAS 32", 3" WAS 3 1/2"		
			ADDED STRUCTURAL SUPPORTS TO VIEWS		
			73'-14" WAS 73'-0" INCREASED CONCRETE PAD TO 48" W		
B	15-8-81		REVISED PER HANDED OVER FROM CITY OF LA	RMD	
A	12-15-80		REDRAWN	DRS	

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TOLEANCES UNLESS OTHERWISE SPECIFIED
 FRACTIONS 1/32"
 DECIMALS .0005"
 ANGLES 1/4°
 HOLES .010 - .015"

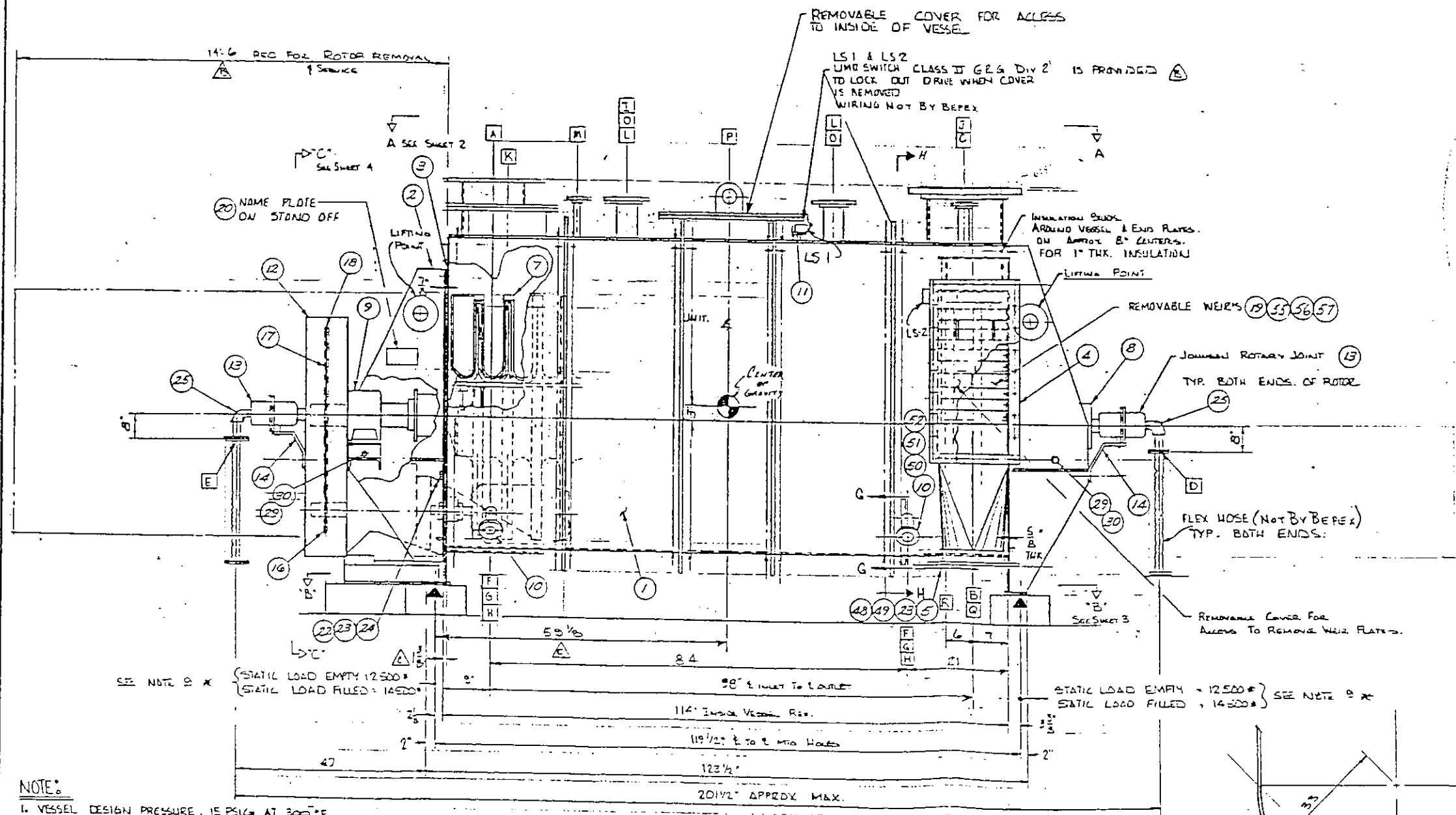
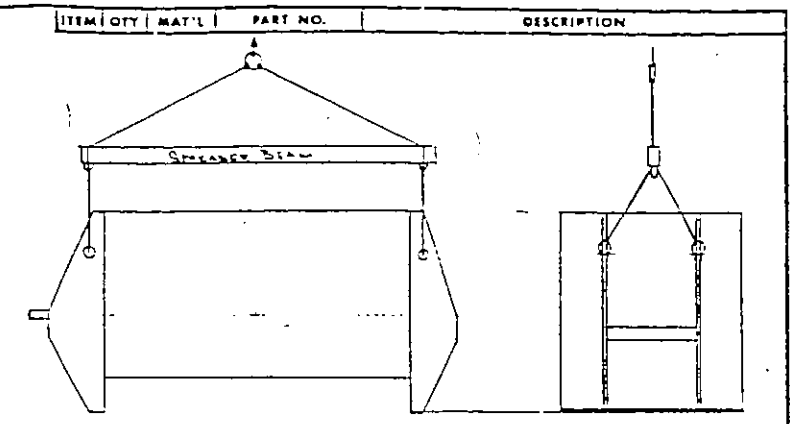
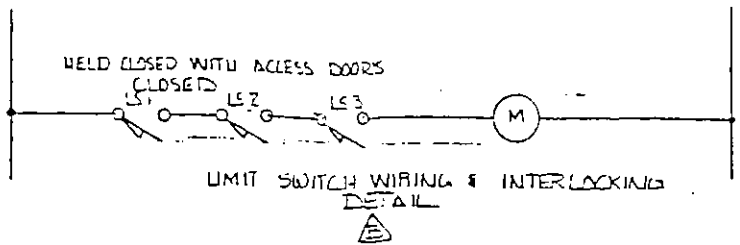
ISO 172 METHOD A
 MACH. FIN. UNLESS NOTED
 APP. UNLESS NOTED

TITLE
 TD-48-9 TORUS DISC COOLER
 TAG NO. 1K, 1L, 1M-E-112
 SCALE 1/4" = 1'-0" (NOT TO SCALE)
 DRAWN BY: DRS
 CHECKED BY: RMD
 DATE: 10-7-86
 D 502888



SHOP TEST PROCEDURES

1. HYDROSTATIC TEST VESSEL AT 22 1/2 PSIG. ASME "U" STAMP IS A22-0. A
2. HYDROSTATIC TEST ROTOR AT 150 PSIG. ASME "U" STAMP REQ'D.
3. MANUALLY TURN ROTOR ASS'Y A MIN OF 10 COMPLETE REV. TO CHECK FOR INTERFERENCES.
4. INSTALL AND REMOVE ALL WEIR FL'S TO INSURE FIT.

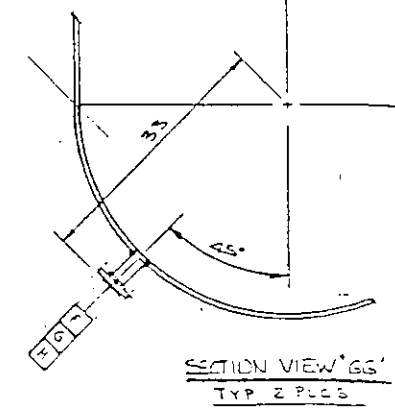


A. Project:	Carver Greenfield Sludge Dewatering & ERS
B. Owner:	Contract No. 1
C. Engineer:	L.A. County Sanitary Dist. #2
D. Contractor:	Foster Wheeler
E. Sub Contractor:	Brinderson Corporation
F. Sub Contractor No.:	BepeX Corporation 84000512
G. Supplier's Purchase Agreement No.:	48-9 TorusDisc
H. Manufacturer's Name:	To Follow
I. Contract Drawing Reference:	Moorehead Boiler & Mach. Co.
J. Applicable Specifications:	IP-13, IM-140, IM-180, & IM-200
K. Description of location within the facility being constructed, where installation is intended:	11K Between Columns 3-11 & B1-G At Elev. 72'-0"

61719

CERTIFIED DRAWING
 BEPEX CORP.
 DATE 11/14/78 PER [Signature]
 FOR [Signature]

- NOTE:**
1. VESSEL DESIGN PRESSURE, 15 PSIG AT 300°F. HYDROSTATIC TEST VESSEL AT 22 1/2 PSIG. ASME "U" STAMP WILL BE PROVIDED.
 2. ROTOR DESIGNED AND CONSTRUCTED PER ASME SECTION VIII CURRENT ISSUE FOR 100 PSIG AT 300°F. HYDROSTATIC TEST AT 150 PSIG. ASME "U" STAMP WILL BE PROVIDED. NO ADJUSTMENT TO HYDRO. TEST PRESS. IS NEEDED TO COMPENSATE FOR OPERATING TEMP.
 3. ROTOR DISC ASSY HAS BEEN DESIGNED TO INCLUDE 1/8" CORROSION ALLOWANCE (TOTAL).
 4. TROUGH SHELL HAS BEEN DESIGNED TO INCLUDE 1/8" CORROSION ALLOWANCE (TOTAL).
 5. ALL FLG. BOLTING TO STRUCTURE UNLESS NOTED OTHERWISE.
 6. MATERIAL OF CONSTRUCTION MILD STEEL A516 TO PLATE AND SA-106 B FOR SUPT. A.
 7. APPROX WGT: 25000 LBS. LESS DRIVE (EMPTY); FILLED WITH PRODUCT 29000 LBS. DRIVE WGT: 1700 LBS.
 8. POINT PER FIN SPEC SA-712 A.
 9. * THESE LOADS DO NOT INCLUDE DYNAMIC LOADS RESULTING FROM DRIVE CHAIN PULL (SEE SHEET 4).
 10. ROTOR WEAR TRANSFER AREA 8" DIA. x 40 50 FT.
 11. NOISE NOT TO EXCEED 85 DBA AT 3 FT.
 12. FLEXIBLE HOSE MUST BE PROVIDED AT THE FUME INLET AND OUTFLET CONNECTIONS TO MINIMIZE MOMENTS AND FUEL ON THE ROTOR JOINTS. HOSE ARE NOT PROVIDED BY BEPEX.



BRINDERSON PD NO. 0225-6212
 TWS 1K-E-112
 1L-E-112
 1M-E-112

REV	DATE	EGN. NO.	DESCRIPTION	FOR
15	10-3-80		REVISED E/M SHW 10 E REVISE OF DRG Q10001	
14	8-5-80		ADDED BILL OF MATERIAL & ITEM #75	
13			1 1/2" Vals 1 1/2" APPROX DIA TO CENTER OF GRAVITY	
12	8-2-80		REVISED PER MARKED DIM FROM CITY OF LA	
11	11-2-78		REWORK	
10				
9				
8				
7				
6				
5				
4				
3				
2				
1				

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TOLERANCES UNLESS OTHERWISE SPECIFIED	150 1/28	TITLE
FRACTIONS 1/16	METHOD A	TD. 48-9 TORUS DISC COOLER
DECIMALS .0005	6	TWS N° 1K-1L-1M-E-112
ANGLES 1/2	MACH FIN UNLESS NOTED	
RADIUS 1/32		
THREADS 1/8-16 UNF-2A		
WELDS 1/8" MIN		