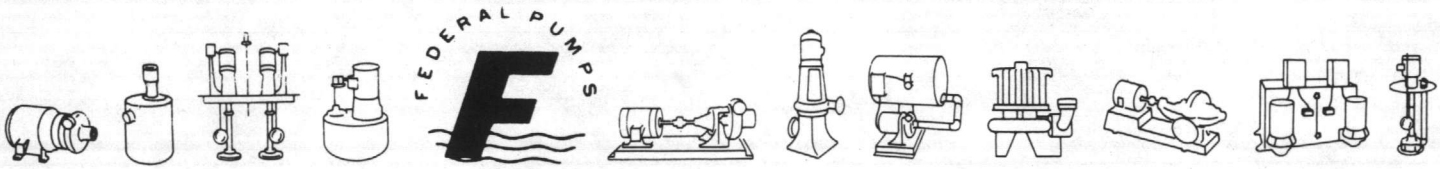


SURFACE WASH PUMP



ESTABLISHED 1927 • CENTRIFUGAL PUMPS • TURBINE PUMPS • ROTARY PUMPS • SEWAGE & SUMP PUMPS • BOILER FEED PUMPS • CONDENSATE PUMPS • CELLAR DRAINERS • HOT WATER CIRCULATORS

FEDERAL PUMP CORPORATION • 1144 UTICA AVE. BROOKLYN 3, N. Y. • GL 1-2000

PROJECT: WATER TREATMENT PLANT
 CAMP LEJEUNE, N. C.
 CONTRACT No. ~~##~~-N62470-70-C-0939

October 7, 1970
 Refer To:
 RECORD No. B-29283

CONTRACTOR: CORBIN CONSTRUCTION CO.

Representative:
 J. C. Holland Sales Co.

ARCHITECT:

ENGINEER:

Revised: 12-22-70

ITEM NO. 1: SURFACE WASH PUMP. In Accordance with paragraphs 11A.5 & 11A.7

QUANTITY	DESCRIPTION
1	INSTALLATION: HORIZONTALLY SPLIT CASE PUMP & MOTOR UNIT
1	PUMP 39C-15-4 Brz. Ftd. BASIN/PIT DEPTH single stage, double suction, Mech. seal, s/s shaft, C.I. base. EDR SQ.FT. 200 GPM 116 PSIG/TDH
1	MOTOR drip prf ball brg. H.P. 15 R.P.M. 1750 VOLTS 480 PHASE 3 CYCLE 60
	BASIN/RECEIVER

MODIFICATIONS, CONTROLS, AND ACCESSORIES
 Curve included

The suction and discharge connections are in the lower half of the casing allowing the removal of the rotating element without disturbing the pipe connections.

Motor starters shall be furnished by others

APPROVED or APPROVED AS NOTED
 By: D. Hart
 Quality Control Representative
 Corbin Construction Company
 Date: 7 Jan 71

1,338,889

APPROVED OR APPROVED AS NOTED
BY: _____
Quality Control Representative
Corbin Construction Company
Date: _____

FEDERAL PUMP CORPORATION • 1144 UTICA AVE. BROOKLYN 3, N. Y. • GL 1-2000

ITEM NO. 2 **SEWAGE PUMPING UNIT:** In accordance with paragraphs 15F.8 and MIL-P-21251 and Dwg. 1338913

QUANTITY	DESCRIPTION
1	INSTALLATION: DUPLEX SEWAGE EJECTOR UNIT.
2	PUMP VSA-4A-1 $\frac{1}{2}$ -4 4" discharge BASIN/PIT DEPTH caple of passing 2 $\frac{1}{2}$ " solids EDR SQ.FT. 100 GPM 22 ### /TDH
2	MOTOR drip prf ball bear. H.P. 1 $\frac{1}{2}$ R.P.M. 1750 VOLTS 480 PHASE 3 CYCLE 60
1	BASIN/RECEIVER 53" dia. steel coverplate for 48" dia. pit opening.
1	MODIFICATIONS, CONTROLS, AND ACCESSORIES Pedestal mounted, NEMA 1, automatic alternating float switch assembly. NOTE: MOTOR STARTERS SHALL BE FURNISHED BY OTHERS.

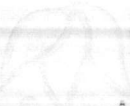
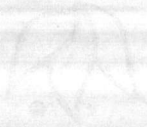
ITEM NO.

QUANTITY	DESCRIPTION
	INSTALLATION:
	PUMP BASIN/PIT DEPTH EDR SQ.FT. GPM PSIG/TDH
	MOTOR H.P. R.P.M. VOLTS PHASE CYCLE
	BASIN/RECEIVER

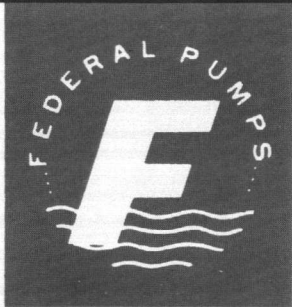
MODIFICATIONS, CONTROLS, AND ACCESSORIES

APPROVED or APPROVED AS NOTED

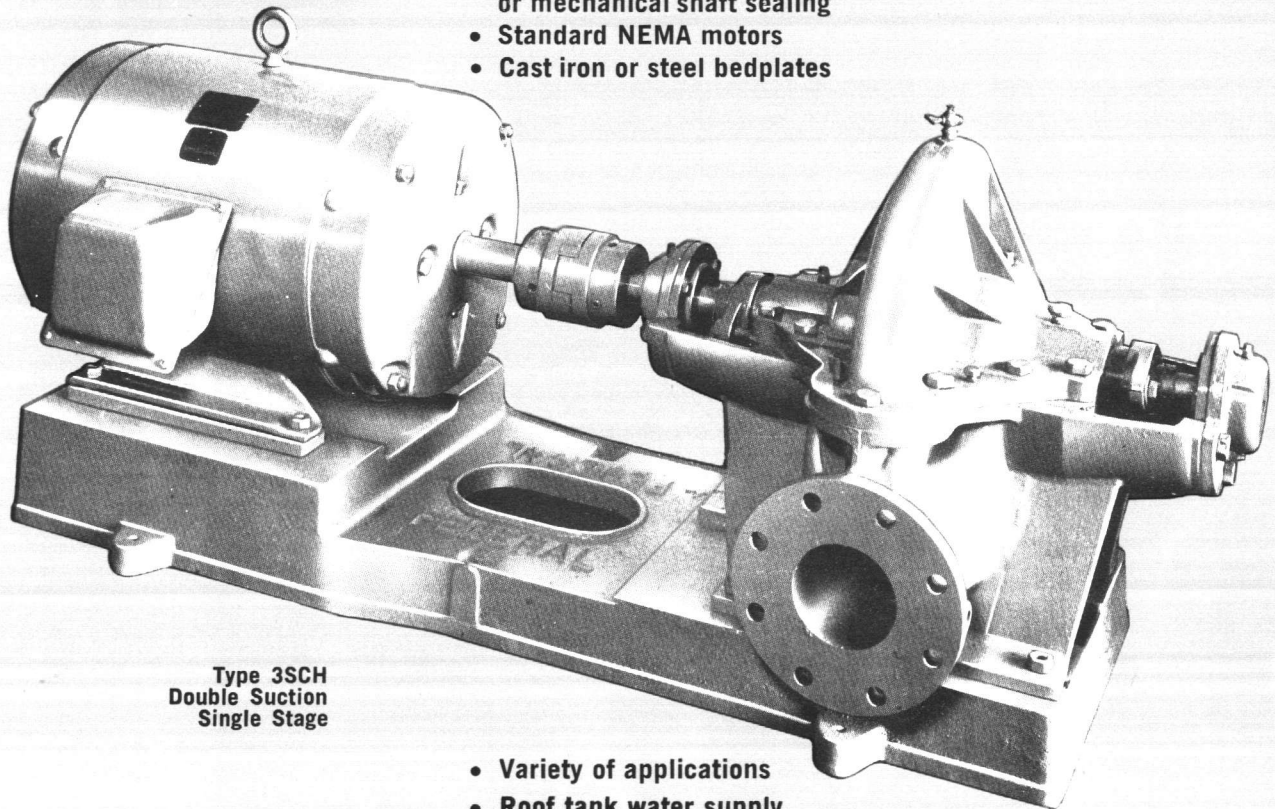
By: *[Signature]*
Quality Control Representative
Corbin Construction Company
Date: 7/27/71



horizontally split case pumps



- Double suction
- Flexibly coupled
- Horizontally split casing
- Hydraulically balanced impellers
- 1150, 1750, or 3450 R.P.M.
- Packed stuffing box or mechanical shaft sealing
- Standard NEMA motors
- Cast iron or steel bedplates



**Type 3SCH
Double Suction
Single Stage**

- Variety of applications
- Roof tank water supply
- Hydropneumatic water pressure systems
- Hot water circulation
- Condensate return
- Boiler feed water
- Chilled water circulation
- Condenser water service
- Process applications

ESTABLISHED 1927

FEDERAL PUMP CORPORATION

1144 UTICA AVENUE • BROOKLYN, N. Y. 11203

ENGINEERING SELECTION TABLE — 1750 R.P.M.

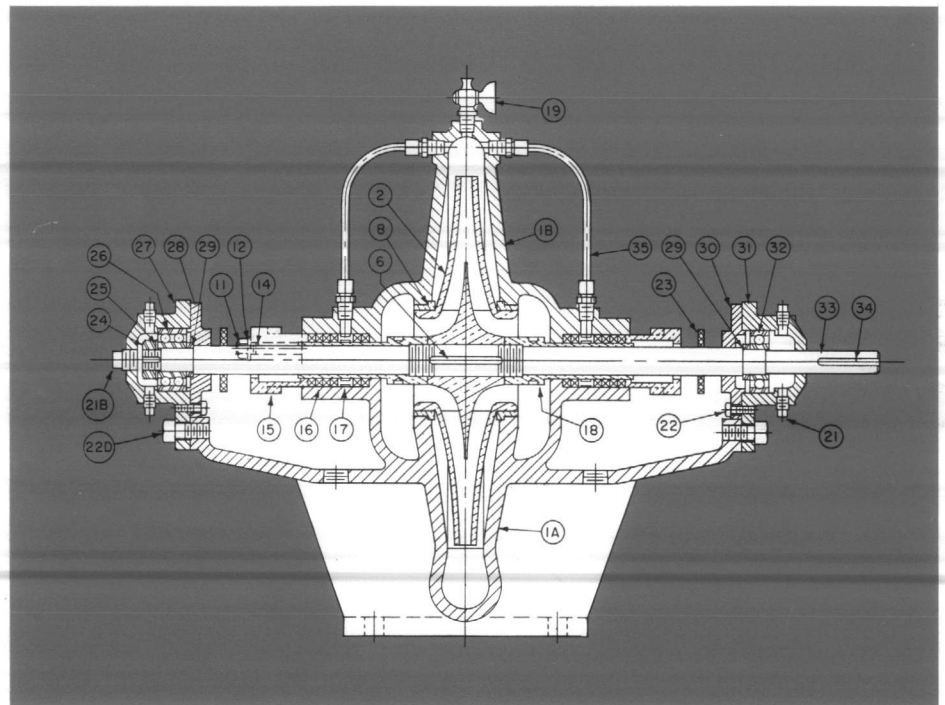
(1150 R.P.M. and 3450 R.P.M. selections available upon request)

TOTAL DYNAMIC HEAD (FEET)

G.P.M.	40	50	60	70	80	90	100	120
50	2SCL-1½-4	2SCL-2-4	2SCL-2-4	2SCL-3-4	2SCL-5-4	2SCL-5-4	2SCL-5-4	3SC-7½-4
100	2SCL-2-4	2SCL-3-4	2SCL-3-4	2SCL-5-4	2SCL-5-4	2SCL-5-4	2SCL-7½-4	3SC-7½-4
150	3SC-3-4	2SCL-5-4	2SCL-5-4	2SCL-5-4	2SCL-5-4	2SCL-7½-4	3SC-7½-4	3SC-10-4
200	3SC-3-4	3SC-5-4	3SC-5-4	3SC-7½-4	3SC-7½-4	3SC-10-4	3SC-10-4	3SC-15-4
250	3SC-5-4	3SC-5-4	3SC-7½-4	3SC-7½-4	3SC-7½-4	3SC-10-4	3SC-10-4	3SC-15-4
300	3SC-5-4	3SC-7½-4	3SC-7½-4	3SC-10-4	3SC-10-4	3SC-10-4	3SC-15-4	3SC-15-4
350	3SC-7½-4	3SC-7½-4	3SC-10-4	3SC-10-4	3SC-10-4	3SC-15-4	3SC-15-4	3SC-20-4
400	3SC-7½-4	3SC-10-4	3SC-10-4	3SC-10-4	4SCH-15-4	4SCH-15-4	3SCH-20-4	3SCH-20-4
450	4SCH-10-4	4SCH-10-4	4SCH-10-4	4SCH-15-4	4SCH-15-4	4SCH-15-4	4SCH-20-4	4SCH-25-4
500	4SCH-10-4	4SCH-10-4	4SCH-10-4	4SCH-15-4	4SCH-15-4	4SCH-20-4	4SCH-20-4	4SCH-25-4
600	4SCH-10-4	4SCH-15-4	4SCH-15-4	4SCH-15-4	4SCH-20-4	4SCH-20-4	4SCH-20-4	4SCH-25-4
700	6SC-10-4	6SC-15-4	4SCH-15-4	4SCH-20-4	4SCH-20-4	4SCH-20-4	4SCH-25-4	4SCH-30-4
800	6SC-15-4	6SC-15-4	4SCH-20-4	4SCH-20-4	4SCH-25-4	4SCH-25-4	4SCH-25-4	4SCH-40-4
900	6SC-15-4	6SC-15-4	6SC-20-4	6SC-25-4	6SC-25-4	6SC-30-4	6SC-30-4	4SCH-40-4
1000	6SC-15-4	6SC-20-4	6SC-20-4	6SC-25-4	6SC-25-4	6SC-30-4	6SC-40-4	4SCH-40-4
1200	6SC-20-4	6SC-20-4	6SC-25-4	6SC-25-4	6SC-30-4	6SC-30-4	6SC-40-4	5SCH-50-4
1400	6SC-20-4	6SC-25-4	6SC-30-4	6SC-30-4	6SC-40-4	6SC-40-4	8SC-50-4	6SCH-60-4
1600	8SC-20-4	8SC-25-4	8SC-30-4	8SC-40-4	8SC-40-4	8SC-50-4	8SC-50-4	8SC-60-4
1800	8SC-25-4	8SC-30-4	8SC-40-4	8SC-40-4	8SC-50-4	8SC-50-4	8SC-60-4	6SCH-75-4
2000	8SC-30-4	8SC-40-4	8SC-40-4	8SC-50-4	8SC-50-4	8SC-60-4	8SC-60-4	6SCH-75-4

PARTS LIST

- 1A* PUMP CASING (LOWER HALF)
- 1B* PUMP CASING (UPPER HALF)
- 2 IMPELLER
- 6 IMPELLER KEY
- 8 CASING WEARING RING
- 10 CASING GASKET (NOT SHOWN)
- 10A SHAFT SLEEVE GASKET
- 11 GLAND NUT
- 12 GLAND WASHER
- 14 GLAND STUD
- 15 PACKING GLAND
- 15A PACKING RETAINING BUSHING
- 16 PACKING
- 17 WATER SEAL RING
- 18 SHAFT SLEEVE
- 18A SLEEVE LOCK NUT
- 19 VENT COCK
- 21 PLUG
- 21B PLUG
- 22B CAP SCREW
- 22E CAP SCREW (NOT SHOWN)
- 23 FLINGER
- 26 OUTER BALL BEARING
- 27 OUTER BEARING HOUSING
- 28 OUTER BEARING CAP
- 29 THRUST COLLAR
- 30 INNER BEARING CAP
- 31 INNER BEARING HOUSING
- 32 INNER BALL BEARING
- 33 SHAFT
- 34 SHAFT KEY
- 35 WATER SEAL PIPE
- 67 SET SCREW
- 83 RETAINING RING



Note: Construction varies slightly on different pump sizes.

NOTE: Units shown in the selection table are non-overloading with their motors at the stated condition point and for a reasonable drop in head. Not all selections are non-overloading throughout the entire operating range. See performance curves for additional information.

EXPLANATION OF MODEL NUMBERS: Example: 3SCH-25-4; 3 indicates 3" discharge; SCH indicates type of pump (SCL, SC, SCH and SCU are single-stage pumps of various head ranges, SSC are two-stage pumps); -25 indicates motor horsepower; -4 indicates motor speed (-4=1750 RPM, -2=3450 RPM, -6=1150 RPM).

TOTAL DYNAMIC HEAD (FEET)

	140	160	180	200	220	240	260	280	G.P.M.
	3SC -10-4	2SSC -10-4	2SSC -10-4						50
	3SC -10-4	2SSC -10-4	2SSC -15-4	2SSC -15-4	2SSC -15-4	2SSC -20-4	2SSC -20-4	2SSC -20-4	100
	3SC -15-4	2SSC -15-4	2SSC -15-4	2SSC -15-4	2SSC -20-4	2SSC -20-4	2SSC -20-4	2SSC -25-4	150
	3SC -15-4	3SCH -20-4	3SCH -20-4	2SSC -20-4	2SSC -20-4	2SSC -25-4	2SSC -25-4	2½SSC-30-4	200
	3SC -20-4	3SCH -20-4	3SCH -25-4	2½SSC-25-4	2½SSC-25-4	2½SSC-30-4	2½SSC-30-4	3SSC -40-4	250
	3SC -20-4	3SCH -25-4	3SCH -25-4	2½SSC-25-4	2½SSC-30-4	2½SSC-30-4	3SSC -40-4	3SSC -40-4	300
	3SCH -25-4	3SCH -25-4	3SCH -30-4	3SSC -30-4	3SSC -40-4	3SSC -40-4	3SSC -40-4	3SSC -50-4	350
	3SCH -25-4	3SCH -25-4	3SCH -30-4	3SSC -40-4	3SSC -40-4	3SSC -40-4	3SSC -50-4	3SSC -50-4	400
	3SCH -25-4	3SCH -30-4	4SCH -40-4	3SSC -40-4	3SSC -40-4	3SSC -40-4	3SSC -50-4	3SSC -50-4	450
	4SCH -30-4	4SCH -40-4	4SCH -40-4	3SSC -40-4	3SSC -50-4	3SSC -50-4	3SSC -50-4	3SSC -60-4	500
	4SCH -30-4	4SCH -40-4	4SCH -50-4	5SSC -60-4	5SSC -60-4	4SSC -60-4	4SSC -75-4	4SSC -75-4	600
	4SCH -40-4	4SCH -40-4	4SCH -50-4	5SSC -60-4	5SSC -60-4	5SSC -75-4	5SSC -75-4	5SSC-100-4	700
	4SCH -40-4	4SCH -50-4	4SCH -50-4	5SSC -75-4	5SSC -75-4	5SSC -75-4	5SSC-100-4	5SSC-100-4	800
	4SCH -50-4	4SCH -50-4	5SCH -60-4	5SCH -75-4	5SCU -75-4	5SCU-100-4	5SCU-100-4	5SSC-100-4	900
	4SCH -50-4	5SCH -60-4	5SCH -75-4	5SCH -75-4	5SCU -75-4	5SCU-100-4	5SCU-100-4	5SSC-100-4	1000
	5SCH -60-4	5SCH -60-4	5SCH -75-4	5SCH -75-4	5SCU-100-4	5SCU-100-4	5SCU-125-4	5SCU-125-4	1200
	5SCH -60-4	5SCH -75-4	5SCU -75-4	5SCU-100-4	5SCU-100-4	5SCU-125-4	5SCU-125-4	6SCU-200-4	1400
	5SCU -75-4	5SCU-100-4	5SCU-100-4	5SCU-100-4	5SCU-125-4	5SCU-125-4	6SCU-150-4	6SCU-200-4	1600
	6SCH-100-4	6SCH-100-4	6SCH-100-4	6SCH-125-4	6SCU-150-4	6SCU-150-4	6SCU-200-4	6SCU-200-4	1800
	6SCH-100-4	6SCH-100-4	6SCH-125-4	6SCH-125-4	6SCU-150-4	6SCU-150-4	6SCU-200-4	6SCU-200-4	2000

FEATURES

CASING: Close-grained cast iron, horizontally split thru center of shaft for simple removal of entire rotating assembly without disturbing suction and discharge pipe connections. Both sections are bored and faced in one machine setting to insure perfect alignment. Standard pumps, viewed from the drive end, have suction on the right; the reverse can be specified when pump is ordered.

IMPELLER: Double suction design insures perfect hydraulic balance. Impeller is machined from single piece bronze casting, balanced and cut to meet exact conditions of service required.

WEARING RINGS: Bronze wearing rings are easily replaced; insure minimum slippage and high efficiency.

SHAFT: Turned and ground to insure maximum power transmission with minimum vibration or deflection.

SHAFT SLEEVES: Cast bronze sleeves extend through

stuffing box; easily replaced; protect the shaft from corrosion and wear.

BEARINGS: Nationally recognized manufacture. Heavy duty ball bearings; grease lubricated.

STUFFING BOXES: Ample depth for maximum pump working pressures. Lantern ring water-seal available if required. Glands are bronze split type for simple packing adjustment (mechanical shaft seals are available if preferred).

COUPLING: Flexible type; sized for maximum power transmission.

BEDPLATE: Cast iron drip-rim type with drain tapping and gROUTING opening. Fabricated steel bedplates are also available.

DRIVERS: Electric motor drive is standard. Gasoline or diesel engine and steam turbine drivers are also available for special applications.

SUGGESTED SPECIFICATIONS FOR ARCHITECTS AND ENGINEERS

Furnish and install as shown on plans a Type SC (or SSC) horizontally split case, single stage (or two-stage), centrifugal pump, Model _____, as manufactured by Federal Pump Corporation. Pump shall have a capacity of _____ G.P.M. against a Total Dynamic Head of _____ feet, and shall be flexibly-coupled to a _____ H.P., _____ Phase _____ cycles, _____ volts, _____ R.P.M. drip-proof motor. Casing shall be of extra heavy cast iron, the upper half of which shall be removable without disconnecting suction or discharge piping.

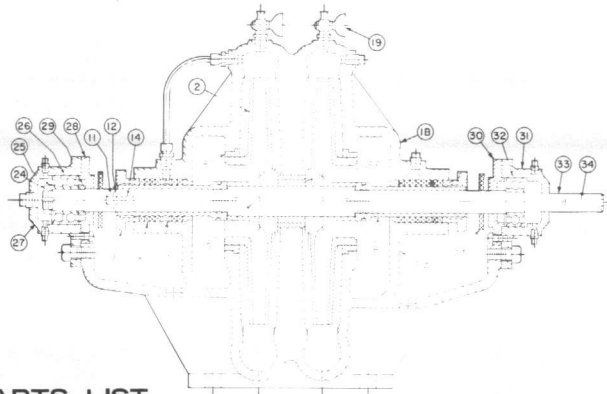
Impeller(s) shall be enclosed, single-piece, cast bronze, of the double suction type, (single suction mounted back-to-back for two-stage pumps).

Pump shall have renewable wearing rings. Shaft shall be of high grade alloy steel protected by renewable bronze sleeves. Inboard and outboard bearings shall be mounted in dust and moisture-proof housings.

Pumps shall have deep stuffing boxes with adjustable glands (or mechanical shaft seals, if preferred).

Entire unit shall be mounted on common extra heavy cast iron drip-rim bedplate.

TWO STAGE horizontally split case pumps



PARTS LIST

1A*	PUMP CASING (Lower Half)	23	FLINGER
1B*	PUMP CASING (Upper Half)	24	BEARING LOCK NUT
2	IMPELLER	25	BEARING LOCK WASHER
6	IMPELLER KEY	26	OUTER BALL BEARING
8	CASING WEARING RING	27	OUTER BEARING HOUSING
10	CASING GASKET (Not Shown)	28	OUTER BEARING CAP
11	GLAND NUT	29	THRUST COLLAR
12	GLAND WASHER	30	INNER BEARING CAP
14	GLAND STUD	31	INNER BEARING HOUSING
15	PACKING GLAND	32	INNER BALL BEARING
16	PACKING	33	SHAFT
17	WATER SEAL RING	34	SHAFT KEY
18	SHAFT SLEEVE	86	INTER-STAGE SPACER
19	VENT COCK		

*Furnished Only As A Complete unit

CASING: Close-grained cast iron, horizontally split through center of shaft. Both sections are bored and faced in one machine setting to insure perfect alignment.

IMPELLERS: Single piece cast bronze, balanced and cut to meet exact conditions of service specified. Keyed and locked to shaft. The two impellers are mounted with opposed suction openings to provide for perfect hydraulic balance, eliminating thrust on the bearings.

WEARING RINGS: Bronze wearing rings are easily replaced; insure minimum slippage and high efficiency.

SHAFT: Turned and ground to insure maximum power transmission with minimum vibration or deflection.

SHAFT SLEEVES: Cast bronze sleeves extend through stuffing box; easily replaced.

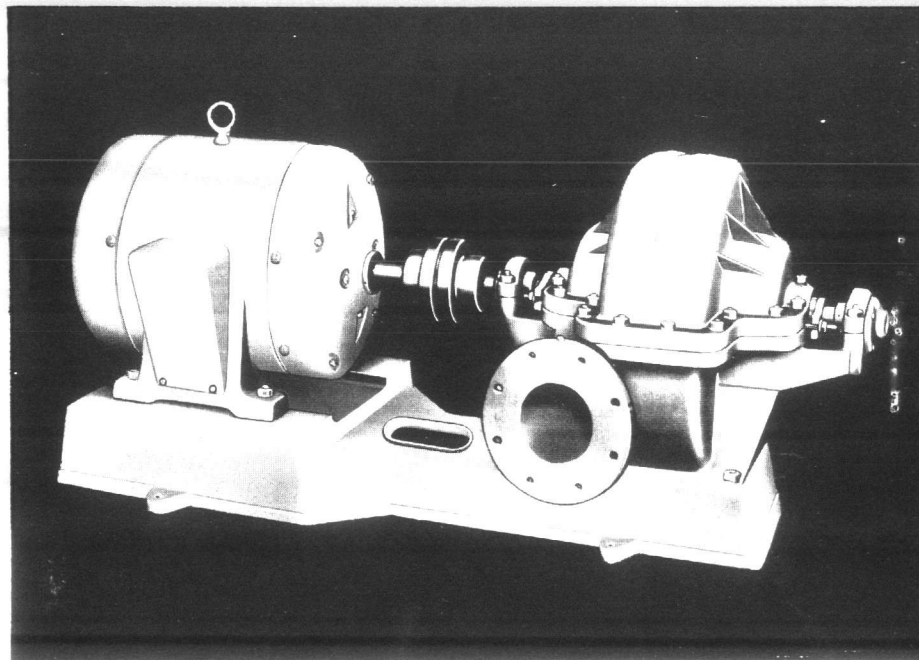
BEARINGS: Nationally recognized manufacture. Heavy duty ball bearings; grease lubricated.

STUFFING BOX: Ample depth for maximum pump working pressures. Lantern ring water-seal available on first stage stuffing box if required.

GLANDS: Bronze glands allow for quick and easy packing adjustment. Drip pockets and drip tappings are provided.

COUPLING: Flexible type; sized for maximum power transmission.

BEDPLATE: Cast iron drip-rim type, with drain tapping and grouting openings. Fabricated steel bedplates are also available.



ESTABLISHED 1927

FEDERAL PUMP CORPORATION

1144 UTICA AVENUE • BROOKLYN, N. Y. 11203

CENTRIFUGAL PUMPS • TURBINE PUMPS • SEWAGE EJECTORS • SUMP PUMPS • BOILER FEED UNITS • CONDENSATE UNITS • HEATING & AIR CONDITIONING CIRCULATORS

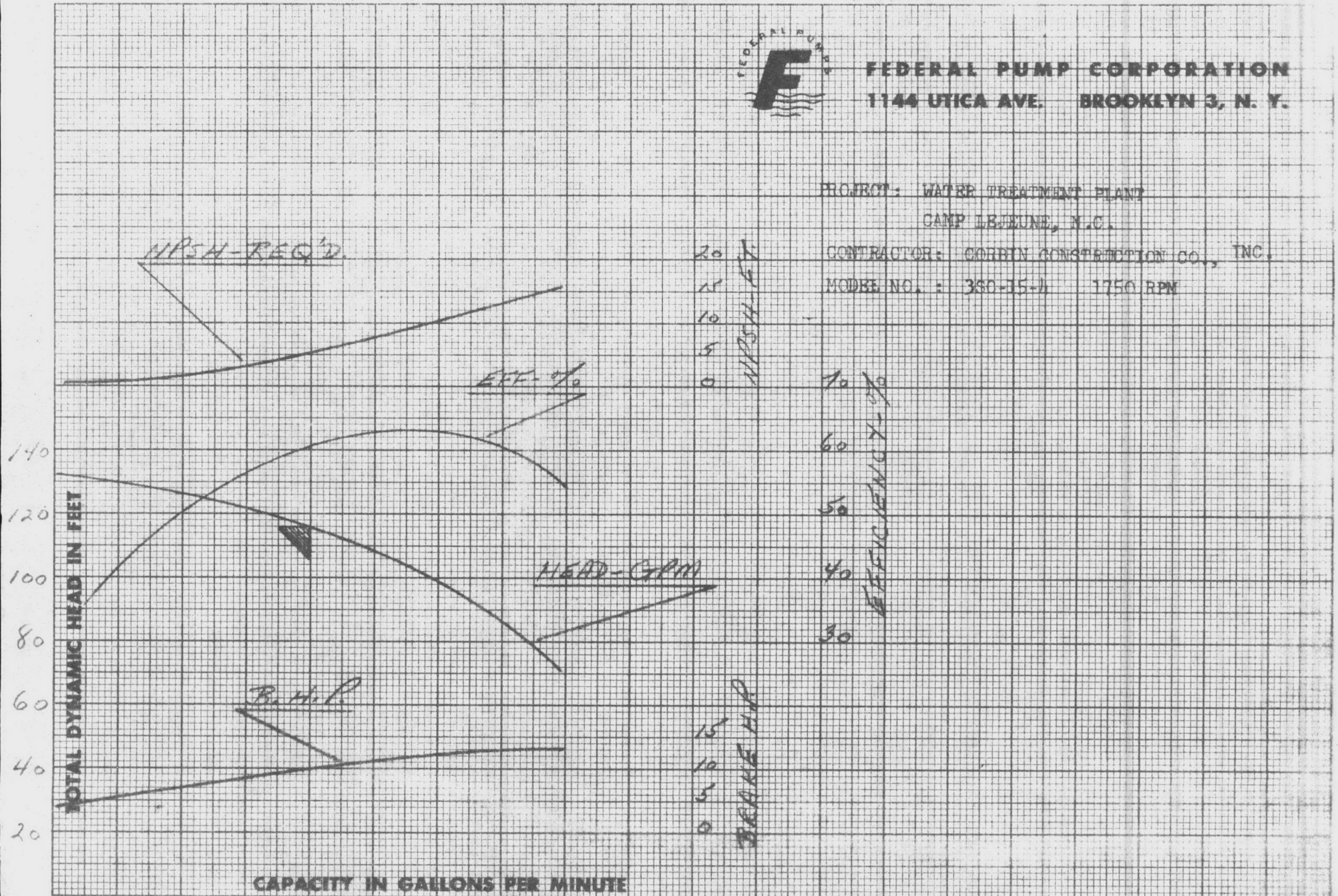
5M-12-67



FEDERAL PUMP CORPORATION
 1144 UTICA AVE. BROOKLYN 3, N. Y.

PROJECT: WATER TREATMENT PLANT
 CAMP LEJEUNE, N.C.

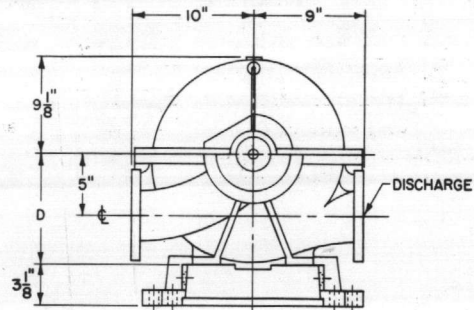
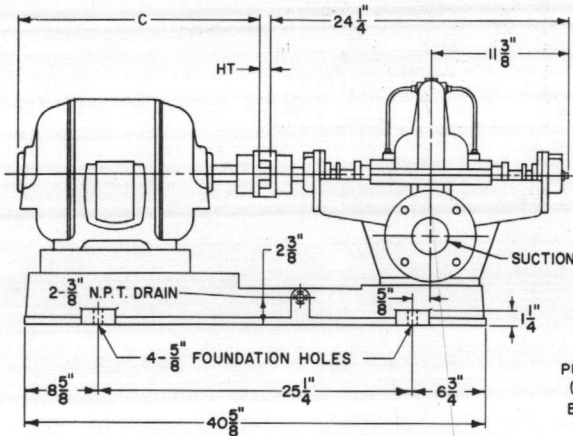
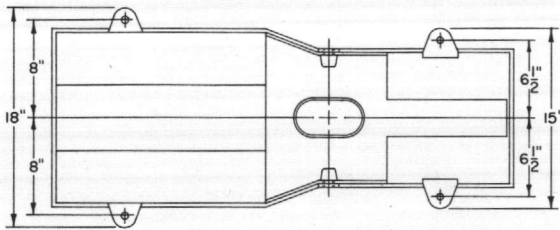
CONTRACTOR: CORBIN CONSTRUCTION CO., INC.
 MODEL NO.: 360-35-4 1750 RPM



0 50 100 150 200 250 300 350 400



TYPE **SC** horizontally split case pump
OUTLINE & DIMENSIONS
CAST IRON DRIP TYPE BEDPLATE



PUMP END OF BASE
(NARROW END)
BASE NO. BP-III

PUMP			MOTOR				C	HT	D
PUMP SIZE	DIS-CHARGE	SUC-TION	NEMA FRAME	1750 RPM	1150 RPM				
3SC	3	3	145T		1	12 3/4	1/2	12 1/8	
			182T	3	1 1/2	12 5/8	1/2	12 1/8	
			184T	5	2	13 5/8	3/4	12 1/8	
			213T	7 1/2	3	15 3/4	7/8	12 1/8	
			215T	10	5	17 1/4	7/8	12 1/8	
			254T	15	7 1/2	20 1/2	1	12 1/8	
			256T	20		22 1/4	1	12 1/8	
			284T	25		23 1/2	1	12 7/8	

ALL DIMENSIONS ARE IN INCHES.
PUMPS ARE FURNISHED AS STANDARD WITH 125# ASA DIS-CHARGE & SUCTION FLANGES. PUMPS WITH 250# ASA DIS-CHARGE & SUCTION FLANGES ARE FURNISHED WHEN RE-QUIRED.

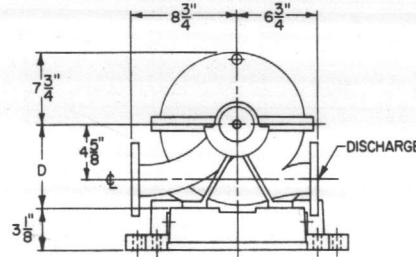
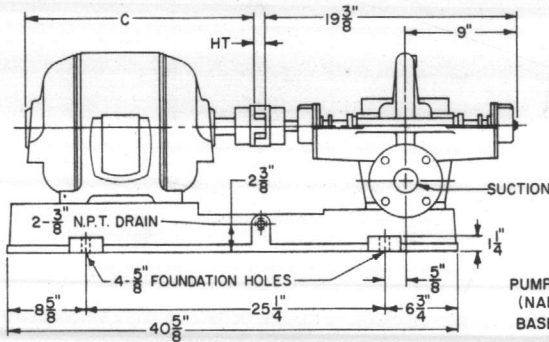
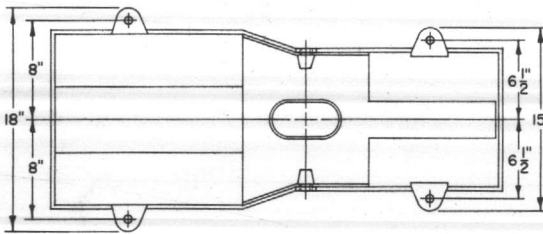
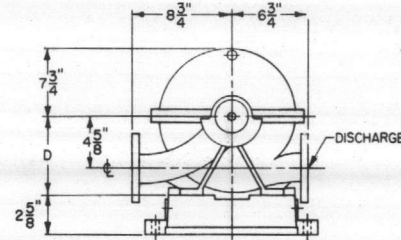
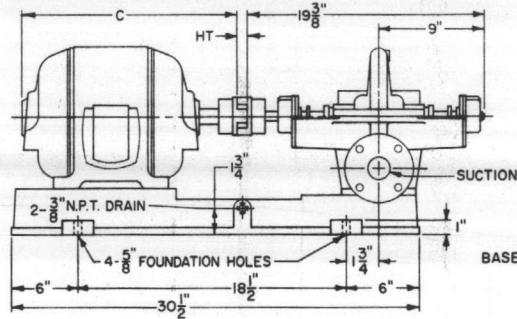
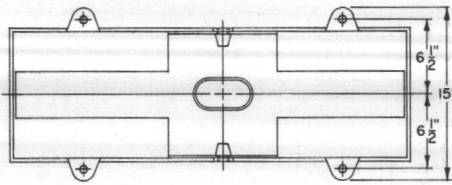


FEDERAL PUMP CORPORATION

1144 UTICA AVENUE • BROOKLYN, N. Y. 11203

TYPE SC horizontally split case pump
 OUTLINE & DIMENSIONS
 CAST IRON DRIP TYPE BEDPLATE

DRWG. NO.
 185.11



PUMP END OF BASE
 (NARROW END)
 BASE NO. BP-111

PUMP			MOTOR							MOTOR									
PUMP SIZE	DIS-CHARGE	SUC-TION	NEMA FRAME	3450 RPM	1750 RPM	1150 RPM	C	D	HT	BASE NO.	NEMA FRAME	3450 RPM	1750 RPM	1150 RPM	C	D	HT	BASE NO.	
2SCL	2	3	56		3/4		11 5/8		1/2	BP-110	213T	10	7 1/2		15 3/4	10 1/4	7/8	BP-110	
			56			1/2	12 3/8		1/2		215T	15			17 1/4		7/8		
			143T		1	3/4	11 3/4		1/2		254T	20			20 1/2	10 3/4	7/8	BP-111	
			145T		1 1/2-2	1	12 3/4		1/2										
			182T	5	3	1 1/2	12 5/8		1/2										
			184T	7 1/2	5	2	13 5/8		3/4										

ALL DIMENSIONS ARE IN INCHES.
 PUMPS ARE FURNISHED AS STANDARD WITH 125# ASA SUCTION AND DISCHARGE FLANGES. PUMPS WITH 250# ASA SUCTION AND DISCHARGE FLANGES WILL BE FURNISHED WHEN REQUIRED.



FEDERAL PUMP CORPORATION

1144 UTICA AVENUE • BROOKLYN, N. Y. 11203