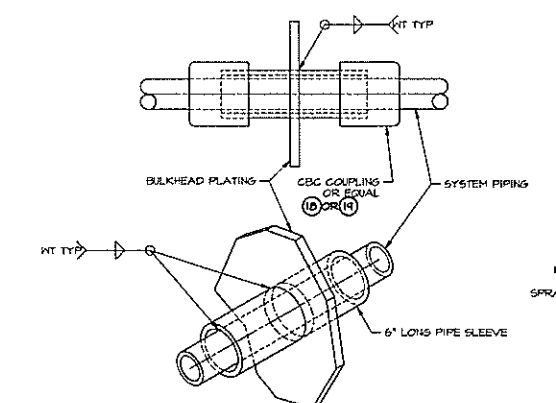
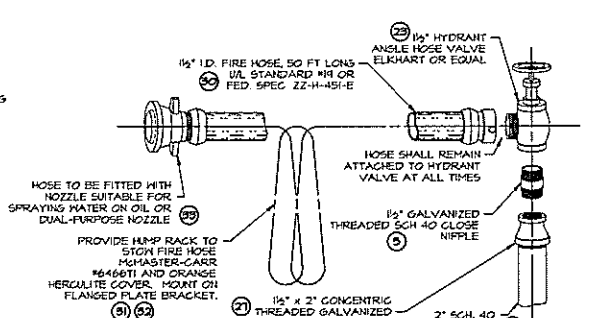


PORT PROFILE
 HORIZONTAL SCALE: 3/32" = 1'-0"
 VERTICAL SCALE: 3/16" = 1'-0"

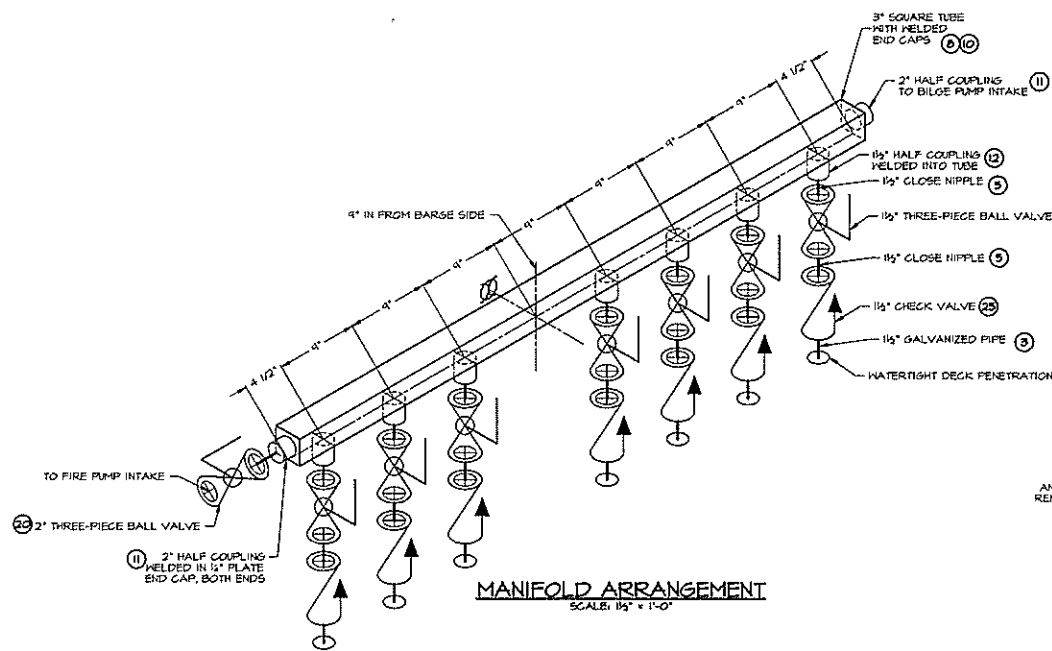
REVISIONS			
NO.	DESCRIPTION	DATE	APPROVED
1	FIRST ISSUE	07/29/99	



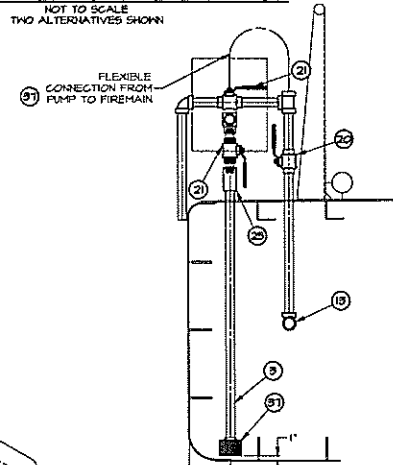
TYPICAL WATERTIGHT PENETRATION
 NOT TO SCALE
 TWO ALTERNATIVES SHOWN



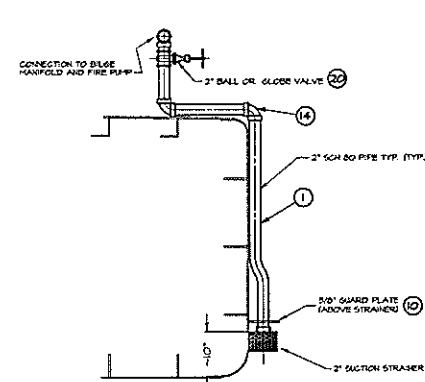
TYPICAL FIRE HOSE STATION
 NOT TO SCALE



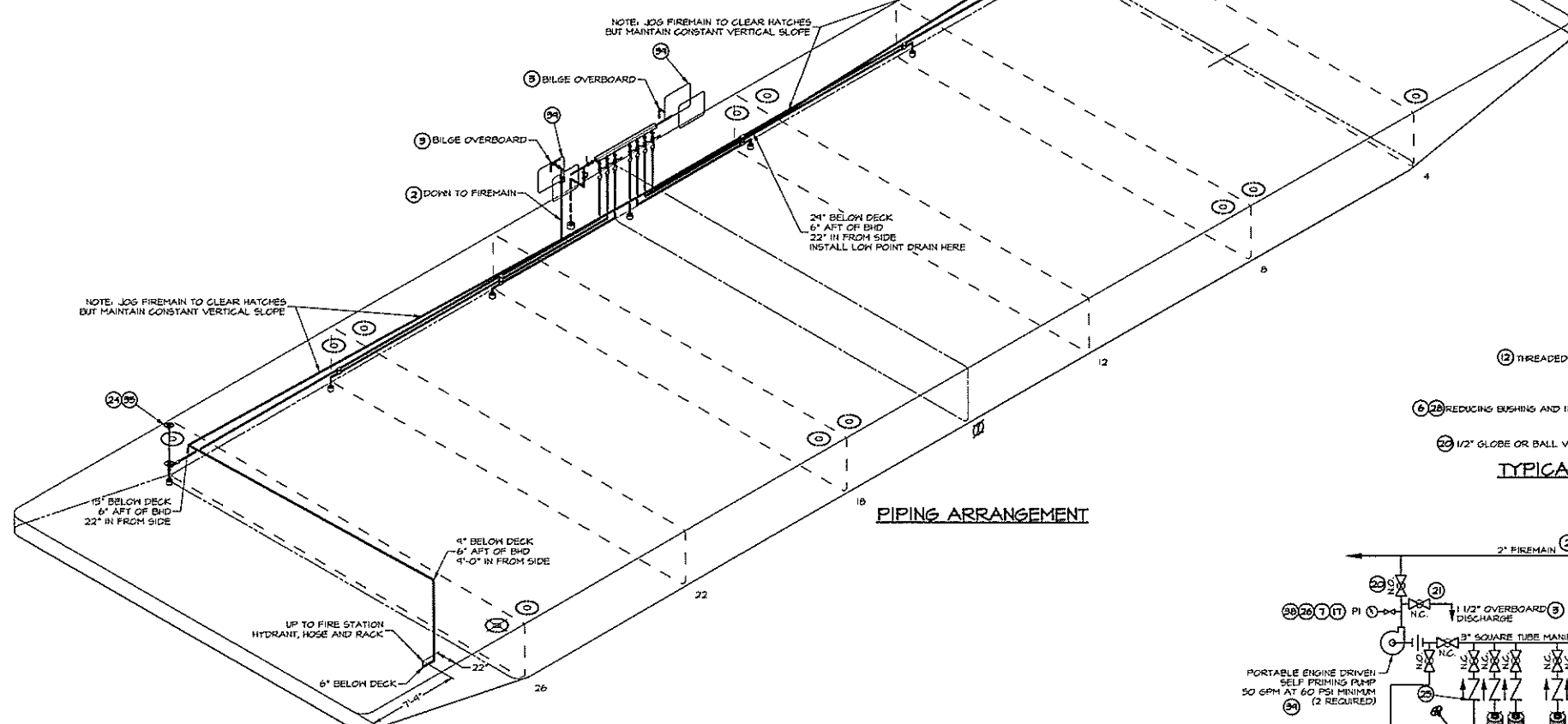
MANIFOLD ARRANGEMENT
 SCALE: 1/2" = 1'-0"



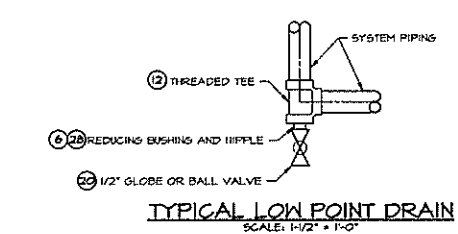
SECTION AT MANIFOLD
 SCALE: 3/4" = 1'-0"



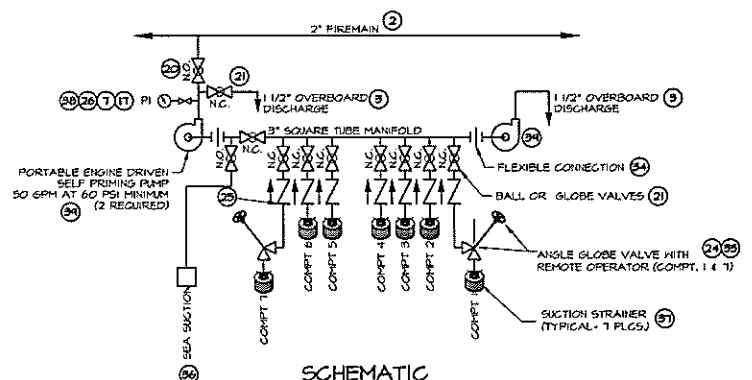
SEA SUCTION ARRANGEMENT
 SCALE: 3/4" = 1'-0"



PIPING ARRANGEMENT



TYPICAL LOW POINT DRAIN
 SCALE: 1/2" = 1'-0"



SCHEMATIC
 NOT TO SCALE
 1 1/2" BILGE SUCTIONS, TYP.
 2" SEAWATER SUCTION AND FIREMAIN

44	-	-	-
43	-	-	-
42	-	-	-
41	-	-	-
40	-	-	-
34	2	PORTABLE PUMP	GRAINGER 1/2HP, 6 HP KOHLER 4 CYCLE GASOLINE ENGINE
36	1	PRESSURE GAUGE	COMMERCIAL 0-150 PSI
37	7	SUCTION STRAINER 1-1/2"	McMASTER-CARR #44381 ZINC PLATED STEEL
38	1	SUCTION STRAINER 2" THREADED	McMASTER-CARR #44382 ZINC PLATED STEEL
35	2	REACH ROD WITH STUFFING TUBE	COMMERCIAL
34	2/B	HOSE, 2" WITH SST CLAMPS	-
33	2	NOZZLE, 1-1/2" HOSE, DUAL PURPOSE	UL STD 18 OR FED SPEC ZZ-H-451-E
32	2	HOSE RACK COVER	McMASTER-CARR #64152I
31	2	HOSE RACK	McMASTER-CARR #64667I
30	2	HOSE 1-1/2"	UL STD 18 OR FED SPEC ZZ-H-451-E
24	1	REDUCING COUPLING 1-1/2" x 1/2"	GALV MALL IRON
28	1	REDUCING BUSHING 2" x 1/2"	GALV MALL IRON
27	B	REDUCING COUPLING 2" x 1-1/2"	GALV MALL IRON
26	1	NEEDLE VALVE, 1/4"	BRONZE 150#
25	1	VALVE, CHECK, 1-1/2"	BRONZE 150#
24	2	VALVE, 1-1/2" ANGLE GLOBE	BRONZE 150#, WITH ITEM #35
23	2	VALVE, 1-1/2" HYDRANT, ANGLE HOSE	BRONZE 150#, ELKHART OR EQUAL
22	1	VALVE 1/2" THREADED BALL OR GLOBE	BRONZE 150#
21	B	VALVE, 1-1/2" THREADED BALL	BRONZE 150#, 3 PIECE
20	3	VALVE, 2" THREADED BALL	BRONZE 150#
18	1R	CBC COUPLING 1-1/2"	COMMERCIAL
18	4	CBC COUPLING 2"	COMMERCIAL
17	1	WELDOLET 1/4"	COMMERCIAL
16	A/R	ELBOW, 1-1/2" 90°	GALV MALL IRON
15	A/R	ELBOW, 2" 45°	GALV MALL IRON
14	A/R	ELBOW, 2" 90°	GALV MALL IRON
13	A/R	TEE, 2"	GALV MALL IRON
12	T	HALF COUPLING, 1-1/2"	GALV MALL IRON
11	2	HALF COUPLING, 2"	GALV MALL IRON
10	A/R	PLATE, 3/8"	ASTM A-36 STEEL
8	A/R	FB 1/4" x 1" (HANGERS & BRACKETS)	ASTM A-36 STEEL
8	B	6 FT 15 3/8" DIA"	ASTM A-300 GRADE B
7	A/R	NIPPLE, 1/4" SCH 40 CLOSE	GALV
6	A/R	NIPPLE, 1/2" SCH 40 CLOSE	GALV
5	A/R	NIPPLE, 1-1/2" SCH 40 CLOSE	GALV
4	A/R	NIPPLE, 2" SCH 40 CLOSE	GALV
3	A/R	PIPE, 1-1/2" SCH 40	ASTM A-53
2	A/R	PIPE, 2" SCH 40	ASTM A-53
1	A/R	PIPE, 2" SCH 80	ASTM A-53
ITEM	QTY.	DESCRIPTION	MATERIAL/SPECIFICATION/REMARKS

BILL OF MATERIALS

DWN.	W.G. HITT	TGMD, Inc. / Timothy Graul marine design naval architects	marine engineers
APPD.			
DATE	24 JULY 1999	Sturgeon Bay, WI 54235	
PROJECT	120'-0" x 35'-0" x 4'-9" BRUSSELS FERRY BARGE	Project No.	99005
	IDOT JOB D-18-07B-19	Scale:	3/16" = 1'-0"
	ILLINOIS DEPARTMENT OF TRANSPORTATION	REV.	Date: 07/29/99
TITLE	FIREMAIN AND BILGE SYSTEM	Drawing No.	524-201