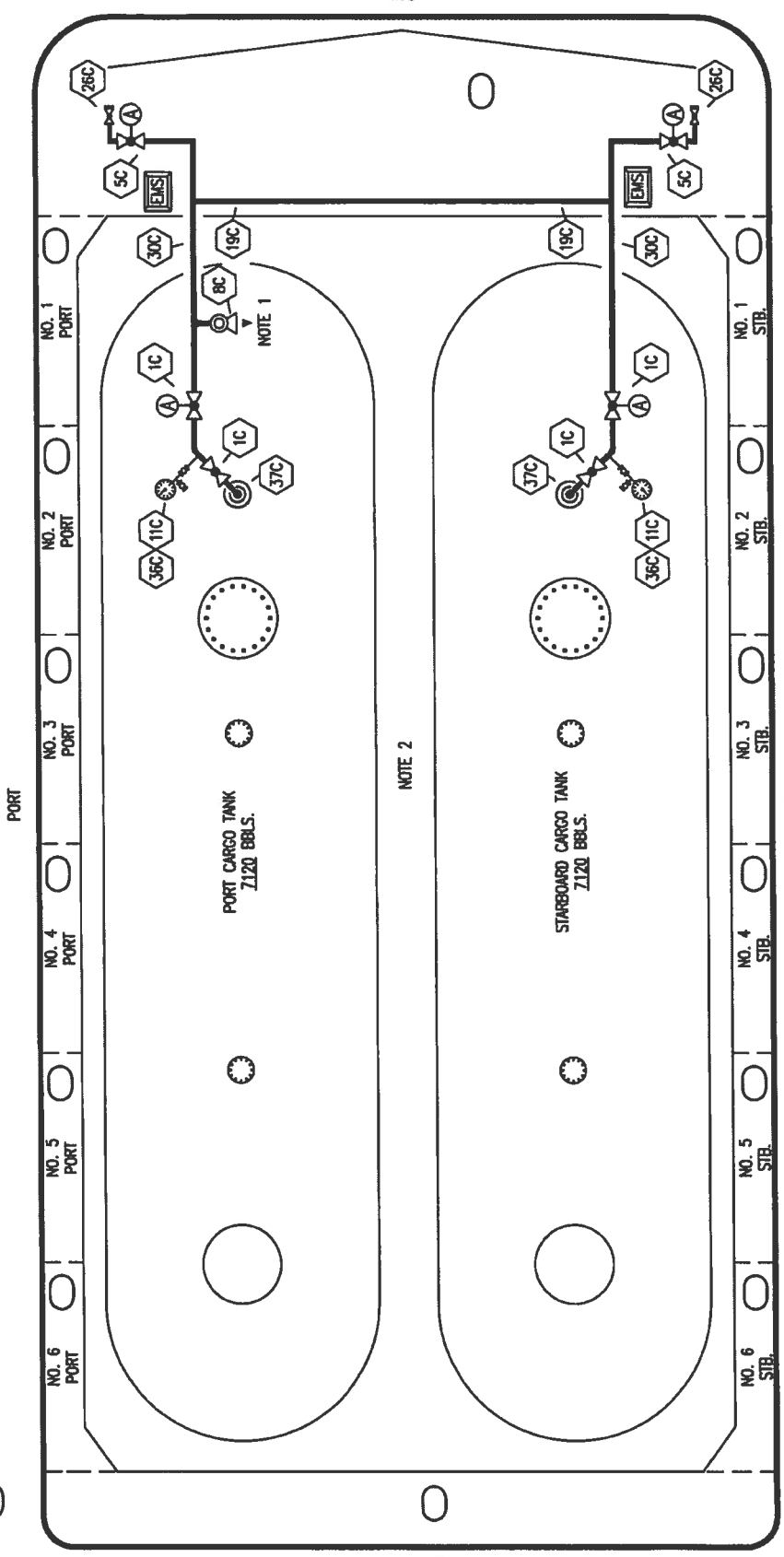




KIRBY INLAND MARINE

**CARGO
PIPING FLOW DIAGRAM**

REV.	0	SCALE: NONE	ISSUED FOR APPROVAL	BY CHK/APPI	DATE	0 11/14/11	JN DDA	ISSUED FOR APPROVAL	REVISION DESCRIPTION	PAGE: 1 OF 3	REV. 0
------	---	-------------	---------------------	-------------	------	------------	--------	---------------------	----------------------	--------------	--------



MOB

NOTE 2

STARBOARD

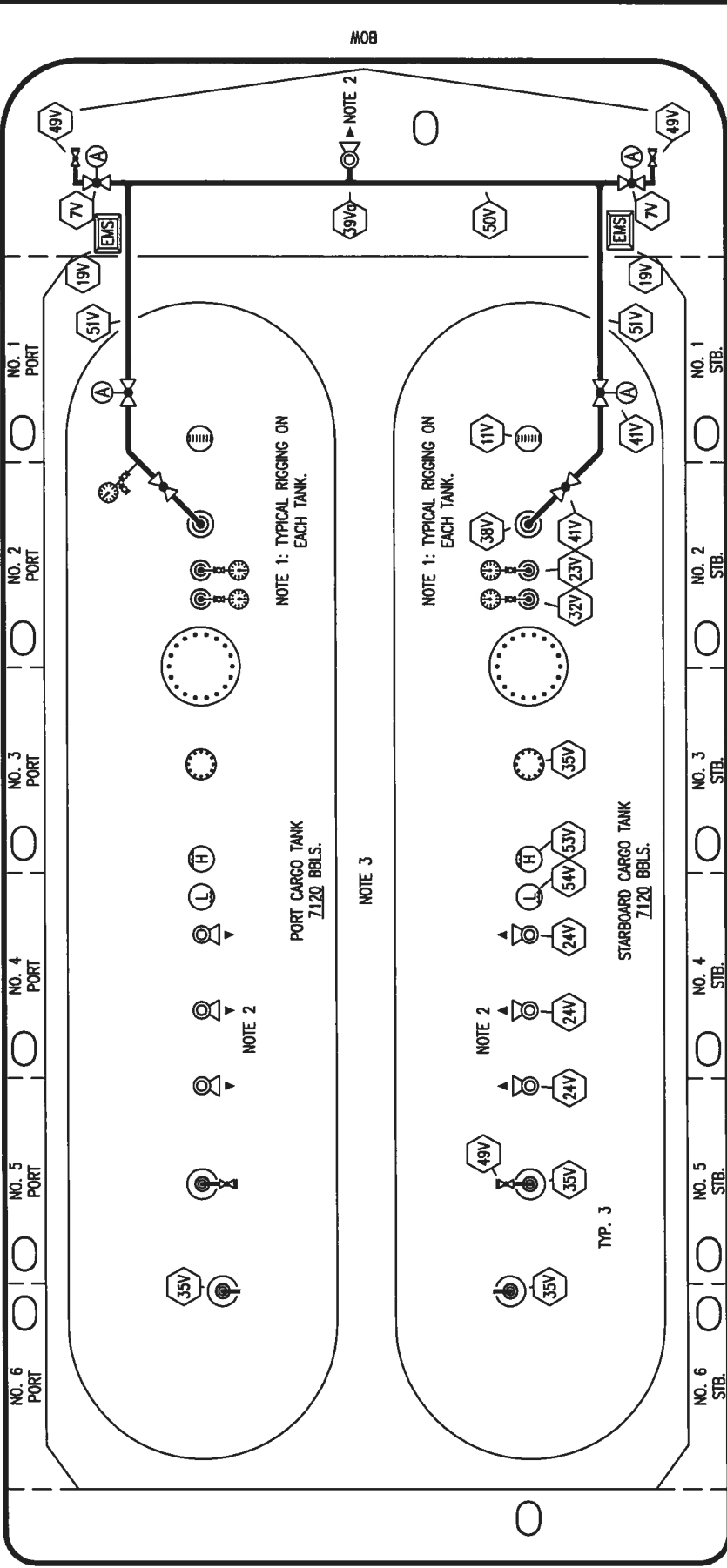
NOTE 1: P/V VALVES VENTED TO ATMOSPHERE
NOTE 2: 2" CONDUIT BELOW GRATE FOR EMS.

- NO. 1C 4" CARGO TANK VALVE
- NO. 5C 6" HEADER VALVE
- NO. 8C 3 RELIEF VALVE/4" STACK
- NO. 11C BLEED OFF VALVE
- NO. 19C 6" CARGO HEADER
- NO. 26C DRAIN (BLEED) VALVE
- NO. 30C 4" CARGO PIPELINE
- NO. 36C 0-300# PRESSURE GAUGE
- NO. 37C 4" CARGO DROP
- NO. (A) AIR ACTUATED AUTOMATIC VALVE ABOVE DECK PIPING

PORT

STERN

PORT



STERN

INGALLS IRON - EX: N/A



VAPOR

PIPING FLOW DIAGRAM

REV. **1**

SCALE: NONE

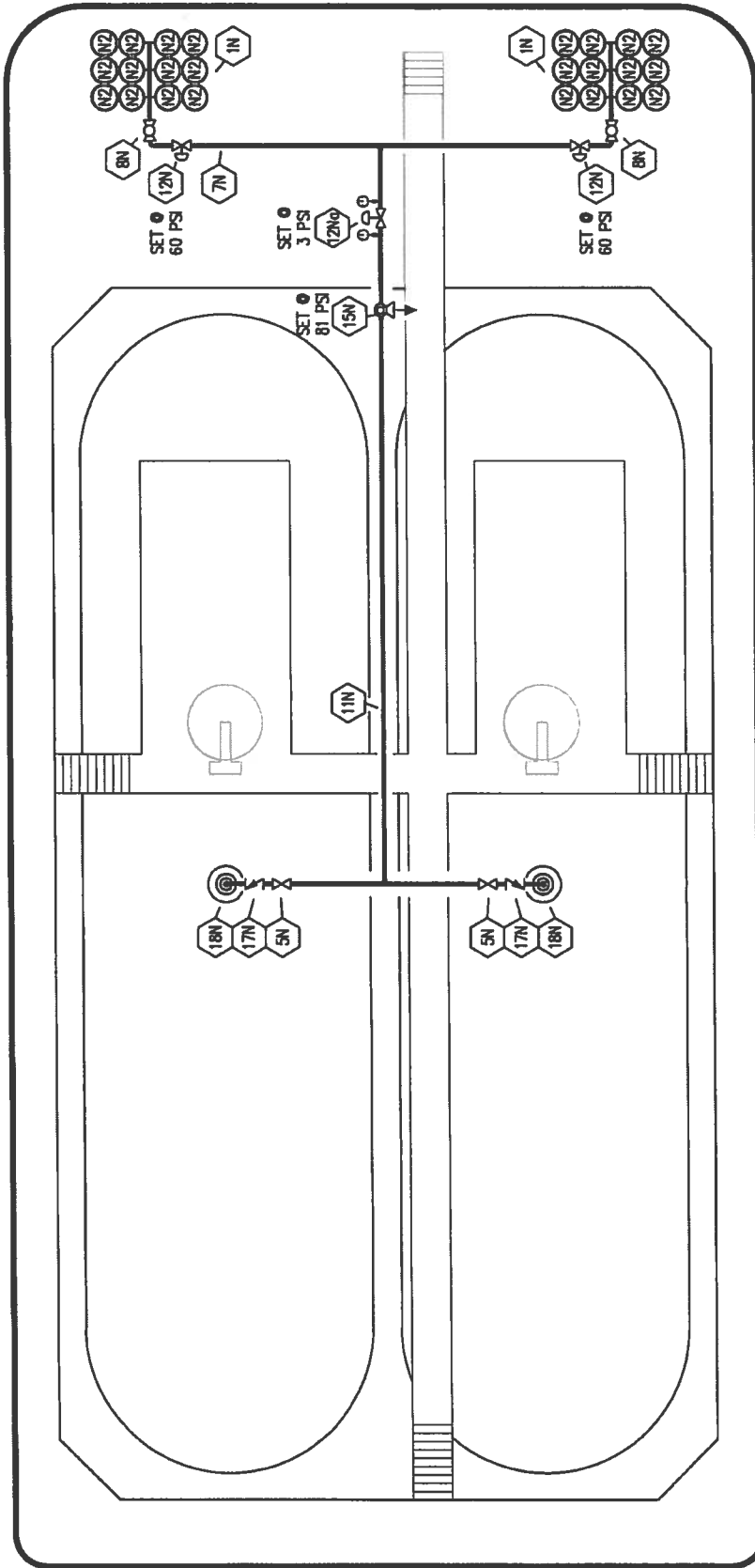
PAGE: 2 OF 3

NO.	DESCRIPTION	NO.	DESCRIPTION
7V	4" HEADER VALVE	49V	BLEED VALVE
11V	GAUGE STICK (MIDDLE)	50V	4" VAPOR HEADER
19V	EMERGENCY SHUT DOWN STATIONS	51V	3" VAPOR PIPELINE
23V	PRESSURE GAUGE 0-300#	53V	HIGH LEVEL GAUGE
24V	PRESSURE RELIEF VALVE	54V	LOW LEVEL GAUGE
31V	SAMPLE STATIONS	---	ABOVE DECK PIPING
32V	TEMPERATURE GAUGE 0-160 F	(A)	AIR ACTUATED AUTOMATIC VALVE
35V	12" NOZZLE W/ 2" BLIND		
38V	VAPOR DROP OR PENETRATION		
59V	4" STACK-3 PRESSURE/VACUUM VALVE		
41V	3" VAPOR TANK VALVE		

NOTE 1: TYPICAL RIGGING ON EACH TANK
 NOTE 2: P/V VALVES VENTED TO ATMOSPHERE
 NOTE 3: 2" CONDUIT BELOW GRADE FOR EMS.

REV.	DATE	BY	CHK/APP	REVISION DESCRIPTION
1	12/09/13	GP	DDA	REVISED PER CLIENT COMMENTS
0	11/14/11	JN	DDA	ISSUED FOR APPROVAL

PORT



#08

STARBOARD

STERN

- | NO. | DESCRIPTION |
|------|-------------------------------|
| 11N | NITROGEN BOTTLE RACK (12 PK.) |
| 5N | N2 SUPPLY VALVE |
| 7N | NITROGEN HEADER |
| 8N | N2 REGULATOR CONTROL VALVE |
| 11N | NITROGEN PIPELINE |
| 12N | HARRIS NITROGEN REGULATOR |
| 12Nq | FISHER NITROGEN REGULATOR |
| 15N | N2 RELIEF VALVE |
| 17N | N2 CHECK VALVE |
| 18N | N2 TANK PENETRATION |
- ABOVE DECK PIPING



KIRBY INLAND MARINE

**NITROGEN
PIPING FLOW DIAGRAM**

REV.	DATE	BY	CHK	APP	ISSUED FOR APPROVAL	SCALE:	REV.
0	11/14/11	JN	DDA			NONE	0
						3 OF 3	

CC 132