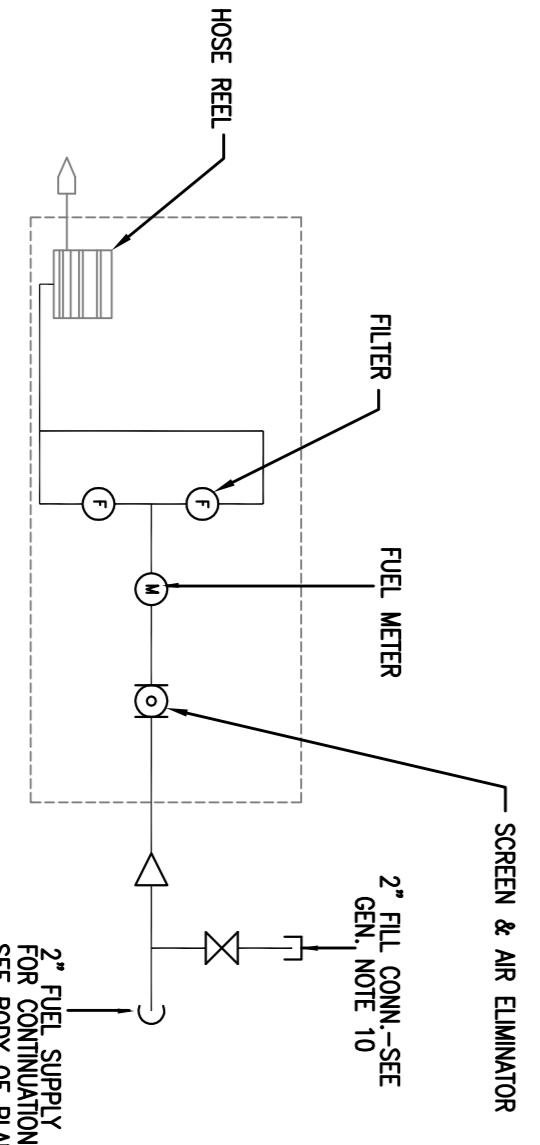
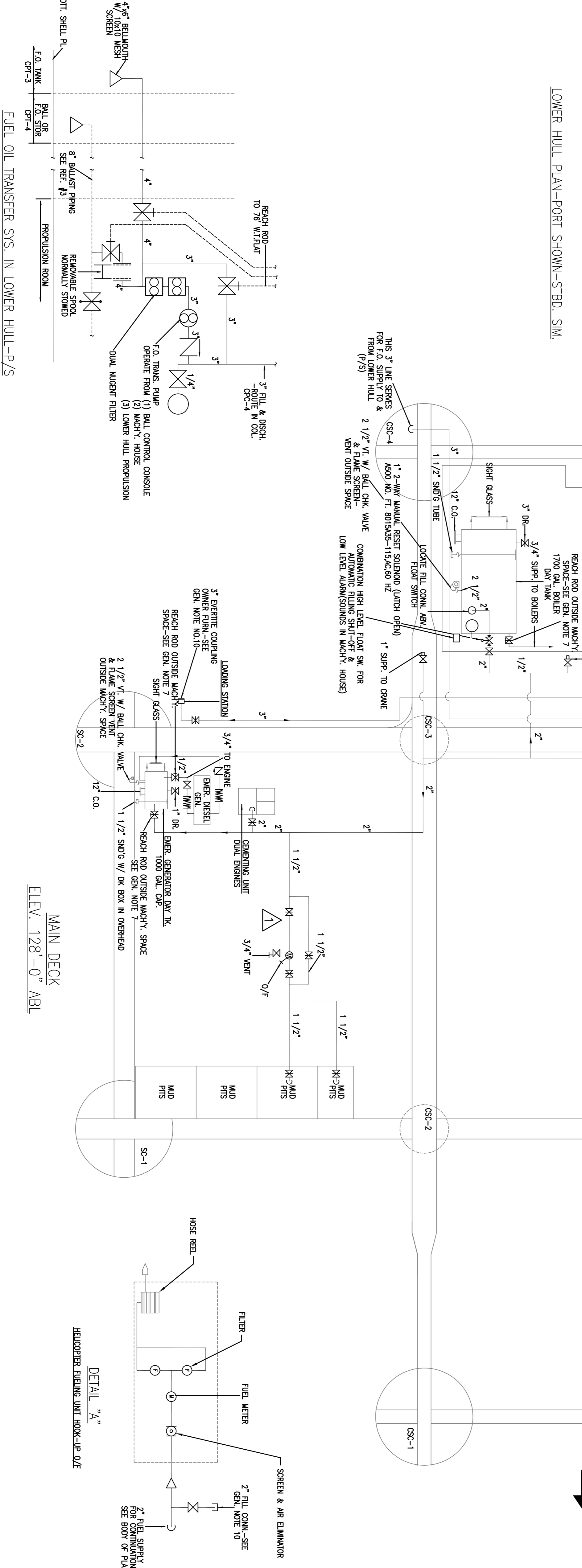
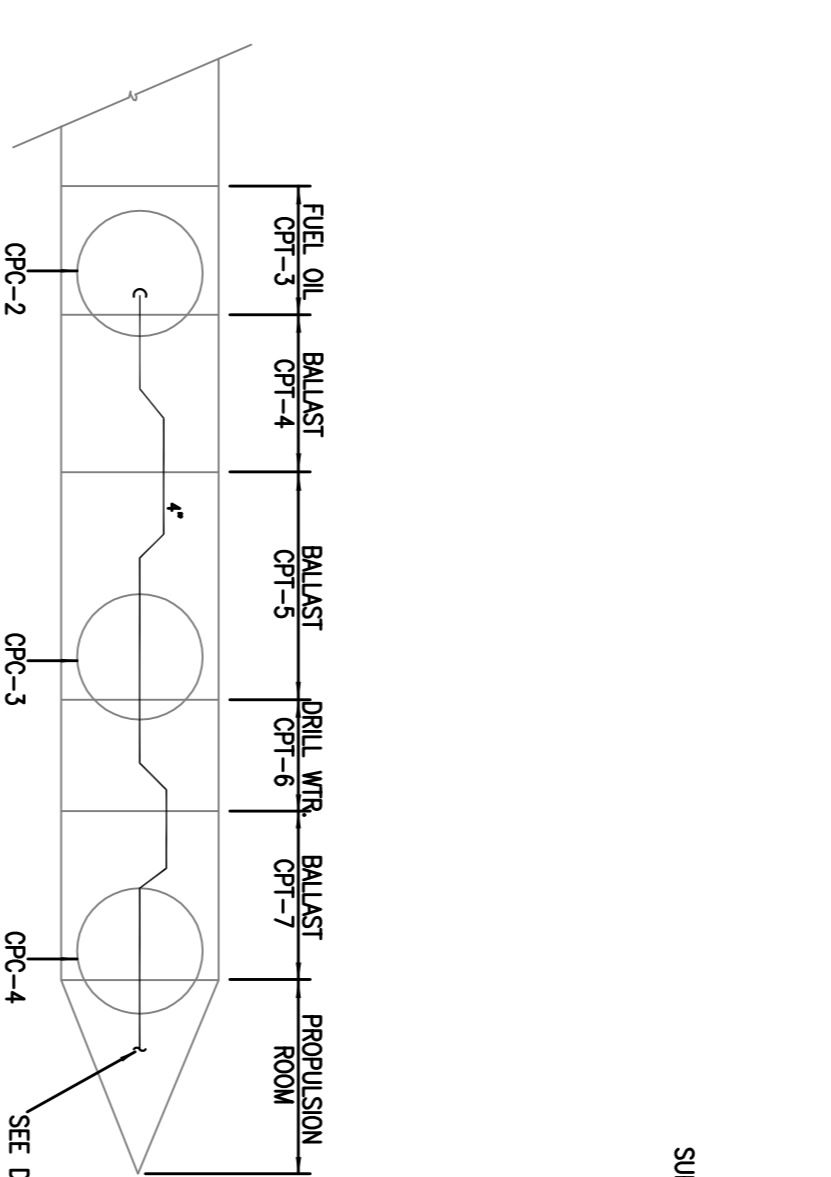
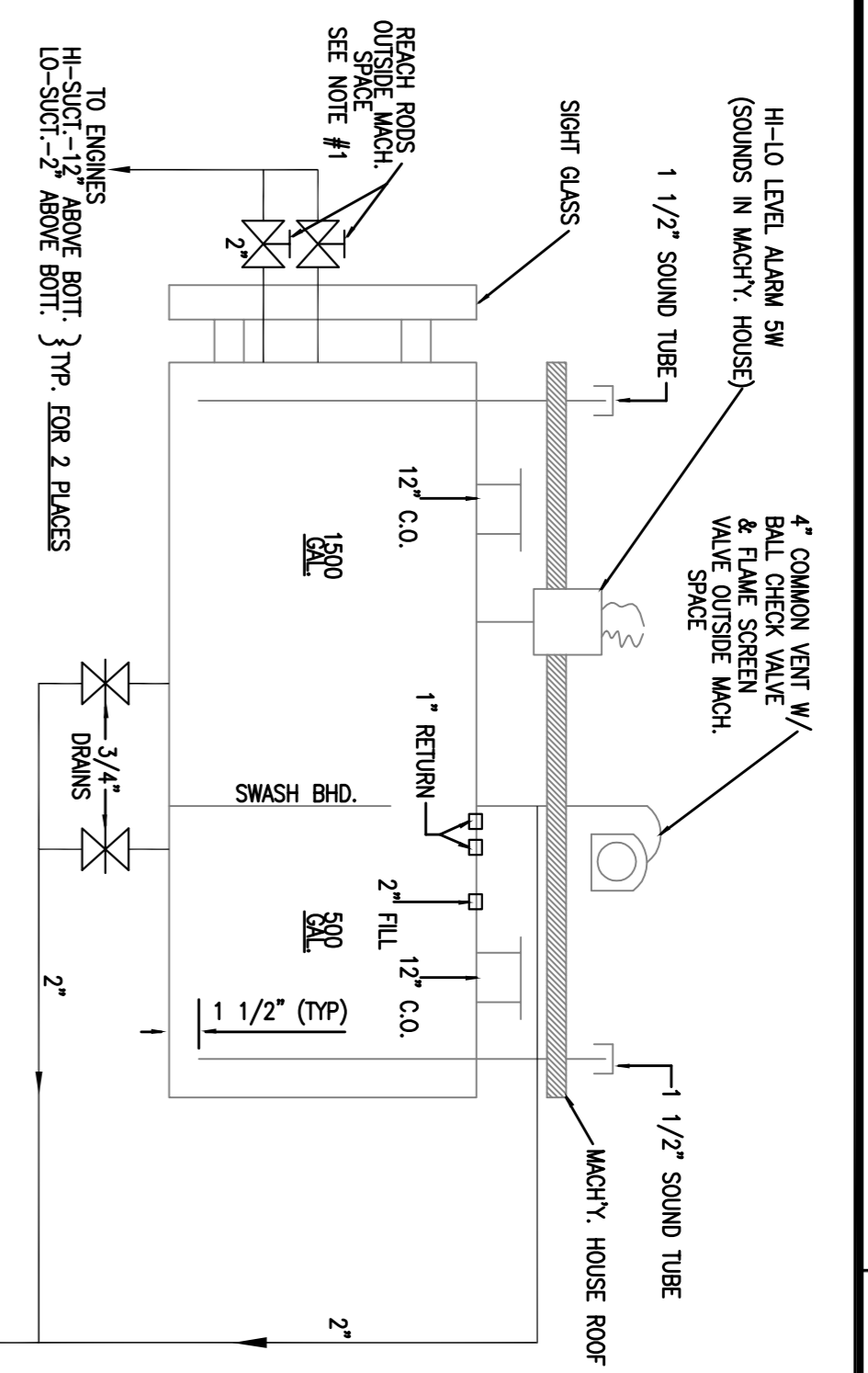


| LEGEND |                                    |
|--------|------------------------------------|
| ⊠      | GATE VALVE                         |
| ⊠      | GATE VALVE W/ REACH ROD            |
| ⊠      | GATE VALVE W/ LOCKING DEVICE       |
| ⊠      | GATE VALVE-QUICK OPEN & SELF CLOSE |
| ⊠      | GLOBE VALVE                        |
| ⊠      | STOP-CHECK VALVE                   |
| ⊠      | SWING CHECK VALVE                  |
| ⊠      | STRAINER                           |
| ⊠      | SIMPLEX BASKET STRAINER            |
| ⊠      | WINSLOW FUEL FILTER                |
| ⊠      | PRESS GAUGE                        |
| ⊠      | ROTARY PUMP                        |
| ⊠      | FLOW METER                         |

- GENERAL NOTES**
1. ALL PIPE SIZES ARE NOMINAL I.P.S.
  2. ALL PIPING SHALL BE INSTALLED IN ACCORDANCE WITH A O.S. RULES & REG. FOR CLASS II.
  3. ALL PIPING SHALL BE PROPERLY SUPPORTED TO ALLOW FOR EXPANSION & PREVENT VIBRATION.
  4. ALL FUEL OIL PIPING SHALL BE STD. WTR. B.L.K. & ALL PIPING LOCATED OUTSIDE OF F.O. BALLAST OR DRILL WTR. TANKS SHALL BE PICKLED & PAINTED PRING THRU LOWER HULL & WTR. TKS. SHALL BE X-HVY. B.L.K.
  5. WELD RINGS SHALL BE USED AT ALL BUTT-WELDS.
  6. OVERFLOW ALARM TO BE LOCATED AT TOP OF MAIN BOX GARDER TANK; ALARM INDICATORS TO BE LOCATED IN BALLAST CONTROL ROOM.
  7. VALVES REFERRED TO THIS NOTE SHALL BE ARRANGED FOR LOCAL & REMOTE OPERATION OUTSIDE THE D.O. TANK COMP.
  8. FLEX HOSE ASSEMBLIES AT ENGINES SHALL BE WIRE REINFORCED WITH FIRE-RESISTANT COVER.
  9. FOR MATERIAL SPECIFICATIONS SEE REF #1
  10. PROVIDE MALE SCREENED CONNECTION AT LOADING STATIONS SUITABLE FOR ATTACHING ONE HALF OF ERB-TITE HOSE COUPLING.
  11. ALARM INDICATOR TO BE LOCATED IN MACH'Y. HOUSE AT F.O. SERVICE PUMPS CONTROL.

| Rev | Date     | By   | DESCRIPTION      | GENERAL USES (ISSUE APPROVED) |
|-----|----------|------|------------------|-------------------------------|
| 1   | 12/28/91 | B.T. | UPDATED AS BUILT |                               |

**NOTES**



**OCEAN STAR**

FUEL OIL FILL, TRANSFER & SERVICE SYSTEM  
PIPING DIAGRAM

ENGINEERS: DWG No. 167-PD-007  
SCALE: 1/8" = 1'-0"

DATE: 11/24/98 SHEET 1 OF 1