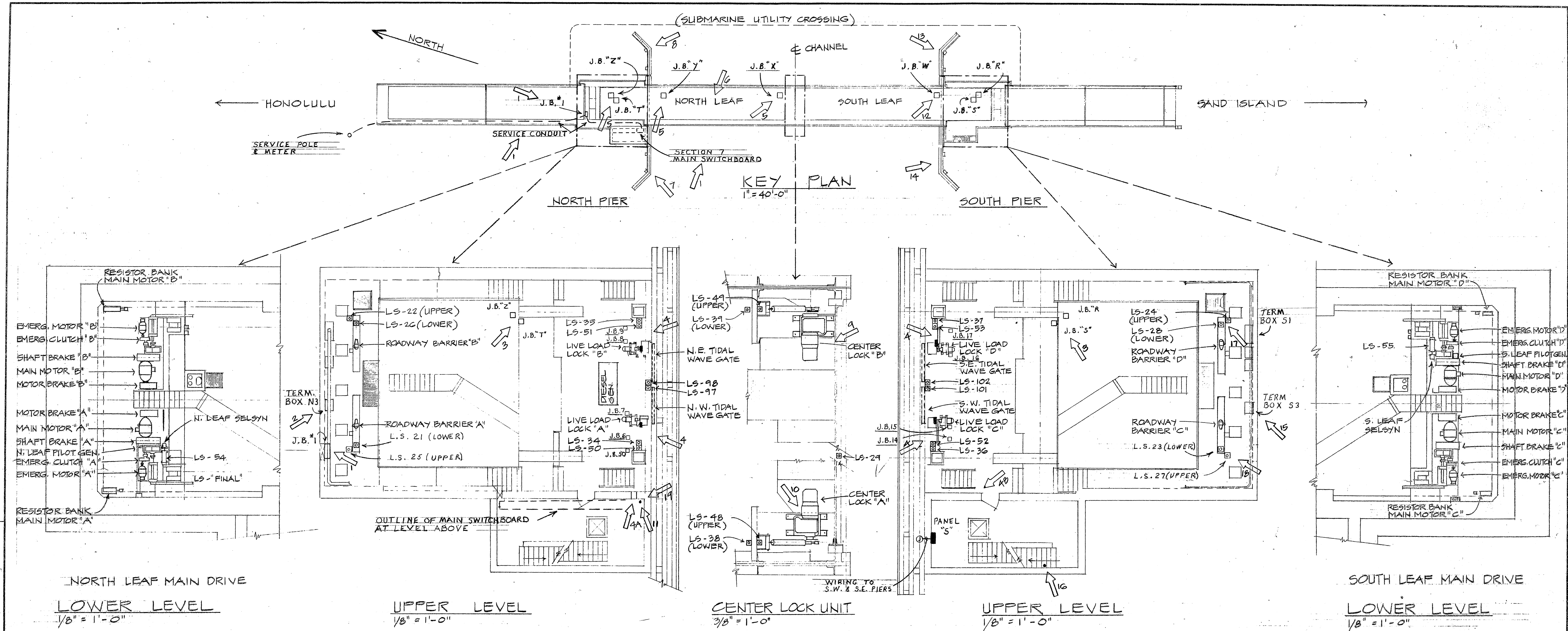
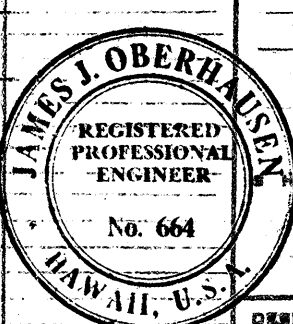




| RACEWAY, CONDUCTOR, & ENCLOSURE REPAIR SCHEDULE |                               |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------|-------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ITEM NO.                                        | ITEM DESCRIPTION              | PHOTO NO. SHEET            | WORK UNDER THIS CONTRACT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 1                                               | J.B. #1                       | 1                          | PROVIDE NEW 23 5/8" X 2 1/8" X 6 3/4" FIBERGLASS, WATER-TIGHT J.B. (EQUAL TO VYNCO). REMOVE 3" SERVICE CONDUIT FROM J.B. #1, AND ROUTE THROUGH NEW J.B. #1. REPLACE EXIST. SERVICE CONDUCTORS FROM METER TO SWITCHBOARD W/ 3-500MCM. XHHW CONDUCTORS, 600V.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 2                                               | TERM. BOX #N3                 | 2A & 2B                    | REPLACE EXISTING TERMINAL BLOCKS WITH 2-9 POLE G.H. 10987-H2 STRIPS. SEAL ENTRANCE FROM WIREWAY POSITIVELY. SCRAPE & REPAINT INTERIOR & EXTERIOR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 3                                               | TRUNNION WIRING               | 3                          | REPLACE 5-#12, 1" LIQUID-TIGHT FLEX AT BOTH NORTH & SOUTH PIERS. (BETWEEN J.B. #2 & J.B. #1, AND J.B. #R & J.B. #S) LENGTHS TO BE SAME AS EXISTING.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 4                                               | LIVE LOAD LOCKS A, B, C & D   | 4A & 4B (SHEET 5 PHOTO 11) | REPLACE J.B. #5, 6, 7, 8, & 9 AT NORTH PIER AND J.B. #5, 14, 15, 16 & 17 AT SOUTH PIER WITH NEW 7 1/4" X 6" X 5 1/8" FIBERGLASS WATER-TIGHT J.B.'S WITH NON-GROUNDING HUBS FOR ALL CONDUITS AND WEEP HOLES. HOWEVER A #10 EQUIPMENT GROUNDING CONDUCTOR SHALL BE CARRIED THROUGHOUT. ALL CONDUCTORS FROM M.C.C. AT NORTH PIER TO LIVE LOAD LOCK MOTORS A & B WITH THEIR ASSOCIATED LIMIT SWITCHES SHALL BE REPLACED. ALL CONDUCTORS FROM TERM. BOX #1 AT SOUTH PIER TO LIVE LOAD LOCKS C & D WITH THEIR ASSOCIATED LIMIT SWITCHES SHALL BE REPLACED. #14 THIN TO EACH LIMIT SWITCH & #12 THIN TO EACH MOTOR & BRAKE. (SEE SHT. 6 FOR CONDUCTOR REQUIREMENT) ALL RIGID CONDUITS SHALL BE SCHEDULE 40 PVC. LIQUID-TIGHT FLEX CONDUIT SHALL BE USED AS FINAL CONNECTION TO EACH MOTOR BRAKE OR LIMIT SWITCH. NEW CONDUIT AT NORTH LEAF SHALL START AT EXISTING CONDUIT AT 4B. 4A. NEW CONDUIT AT SOUTH LEAF SHALL START AT EXISTING CONDUIT AT 4B. 4A. |
| 5                                               | J.B. #2, #X, #Y & #Z          | 5A, 5B & 5C                | ALL UNUSED WIRES BETWEEN J.B. #S SHALL BE REMOVED. REPLACE ALL WIRES LOAD SIDE OF J.B. #2 (THROUGH J.B. #Y & J.B. #X TO MOTORS & LIMIT SWITCHES) EXCEPT FOR ROADWAY & NAVIGATION LIGHT BRANCH CIRCUITS. POWER WIRING TENDS TO MIGRATE FROM J.B. #X, THRU J.B. #Y TO J.B. #Z WHEN BRIDGE IS UP. BUNDLE & TAPE WIRES BY CIRCUIT. SECURE WITH "KELLEMS" GRIPS AT J.B. #X & J.B. #Y. FOR CONDUCTOR REQUIREMENT, SEE SHEET - 6. TAG ALL WIRES.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 6                                               | NORTH LEAF CONDUITS           | 6A & 6B                    | THE PHOTO SHOWS TYPICAL DEFICIENCIES. EXISTING CONDUITS ARE TO BE SECURED TO BRIDGE STRUCTURE ONCE IN EVERY LENGTH WITH APPROPRIATE GALVANIZED (AND FIELD PAINTED) FITTINGS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 7                                               | NORTH WEST PIER WIRING        | 7                          | REPAIR SEPARATED CONDUITS WITH SLACK LOOP OF LIQUID-TIGHT FLEX. REPLACE #12 BRANCH CKT. WIRING FROM PANEL. SECURE EACH CONDUIT LENGTH. MAINTAIN EXIST. SWITCHING.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 8                                               | N.E. PIER WIRING              | 8                          | SECURE EACH CONDUIT LENGTH. REPLACE CONDUIT COVER.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 9                                               | CENTER LOCK MOTOR "B"         | 9                          | REPLACE BROKEN BOLT ON GEAR BOX AND MOTOR TERMINAL BOX.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 10                                              | CENTER LOCK MOTOR "A"         | 10                         | SECURE LOOSE CONDUIT AT DECK.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 11                                              | TIDAL WAVE GATE WIRING        | 11 & 4A                    | REPLACE 1 1/4" CONDUIT FROM J.B. #50 TO UNION IN CORRIDOR WITH 1 1/4" SCHED. 40 PVC. REPLACE UNION WITH 7 1/4" X 6" X 5 1/8" FIBERGLASS WATER-TIGHT J.B. (EQUAL TO VYNCO). REPLACE 5-#14, 6-#12 BETWEEN NEW J.B. AND J.B. #50. ADD #10 EQUIP. GRD. CONDUCTOR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 12                                              | J.B. #W                       | 12                         | REPLACE BROKEN HUB.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 13, 14                                          | S.E. & S.W. PIER WIRING       | 13 & 14                    | REPLACE BROKEN RACEWAYS WITH SLACK LOOPS OF LIQUID-TIGHT FLEX. REWIRE WITH #12 AWG FROM PNL #S.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 15                                              | TERM. BOX #S3                 | 15                         | CLEAN, SCRAPE AND PAINT INTERIOR AND EXTERIOR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 16                                              | STAIR LIGHTING                | 16A & 16B                  | REPLACE 1" CONDUIT FROM CONDUIT BELOW TO SWITCH ABOVE AND #12 WIRING AS REQUIRED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 17, 18                                          |                               |                            | NOT USED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 19                                              | LOCAL TELEPHONE               | 19                         | REPLACE 1" CONDUIT AND FITTINGS, FROM "T" CONDUIT ABOVE TO "L" CONDUIT ON OTHER SIDE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 20                                              | LIQUID-TIGHT FLEXIBLE CONDUIT | GENERAL                    | THE FOLLOWING LIQUID-TIGHT FLEX CONDUIT ASSEMBLIES SHALL BE REPLACED TO CONFORM TO '78 NEC 351-8 (MAX. 3' UNSUPPORTED). USE APPLETON STNM FITTINGS: AT 2 CENTER LOCKS - TO MOTORS (2), TO LIMIT SWITCHES (4) AT 4 ROWY BARRIERS - TO MOTORS (4), TO LIMIT SWITCHES (8), MOTOR TO BRAKE (4) AT 4 LIVE LOAD LOCKS - TO MOTORS (4), TO LIMIT SWITCHES (8) AT 4 TIDAL WAVE GATES - TO MOTORS (4), TO LIMIT SWITCHES (8)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |



| REV                                                                                                         | DATE             | DESCRIPTION                    | BY | APPROVED |
|-------------------------------------------------------------------------------------------------------------|------------------|--------------------------------|----|----------|
| <b>STATE OF HAWAII</b><br><b>DEPARTMENT OF TRANSPORTATION</b><br><b>HARBORS DIVISION</b>                    |                  |                                |    |          |
| <b>JOB TITLE</b><br><b>ELECTRICAL RELATED MACHINERY REPAIRS</b><br><b>BASCULE BRIDGE - HONOLULU, HAWAII</b> |                  |                                |    |          |
| <b>SET TITLE</b><br><b>RACEWAYS, CONDUCTORS &amp; ENCLOSURES</b>                                            |                  |                                |    |          |
| DESIGNED BY: J.O.                                                                                           | APPROVED BY:     | <b>CHIEF, HARBORS DIVISION</b> |    |          |
| DRAWN BY: P.O.                                                                                              | CHECKED BY: J.O. | <b>JOB NUMBER</b>              |    |          |
| DATE: 7-10-78                                                                                               | <b>H.C. 1343</b> |                                |    |          |
| SCALE:                                                                                                      | <b>8</b>         |                                |    |          |