

SEQUENCE OF OPERATIONS

FUEL DISPENSING SEQUENCE OF OPERATION:

THE FOLLOWING SEQUENCE OF OPERATIONS IS APPLICABLE FOR BOTH THE DIESEL AND GASOLINE FUEL DISPENSERS.

1. WHEN THE USER SCANS A RADIO FREQUENCY IDENTIFICATION (RFID) KEY AT THE FUEL MANAGEMENT SYSTEM (FMS) CONTROLLER, THE FMS CONTROLLER SHALL SIGNAL THE DISPENSER CONTROLLER TO ALLOW FUEL DISPENSING.
2. WHEN THE USER PULLS THE DISPENSER HANDLE, THE DISPENSER HANDLE RELAY SHALL PROVIDE A SIGNAL TO THE DISPENSER CONTROLLER.
3. THE DISPENSER CONTROLLER SHALL START THE FUEL PUMP.
4. THE DISPENSER CONTROLLER SHALL SEND A SIGNAL TO THE TANK CONTROL PANEL.
5. THE TANK CONTROL PANEL SHALL OPEN THE ANTI-SIPHON MOTORIZED BALL VALVE.
6. WHEN THE USER RELEASES THE DISPENSER HANDLE, THE FUEL PUMP SHALL STOP.
7. THE TANK CONTROL PANEL SHALL CLOSE THE ANTI-SIPHON MOTORIZED BALL VALVE AT THE DIESEL FUEL SUPPLY PIPE.

DIESEL AND GASOLINE STORAGE TANKS HIGH LEVEL-SHUTOFF SEQUENCE OF OPERATION:

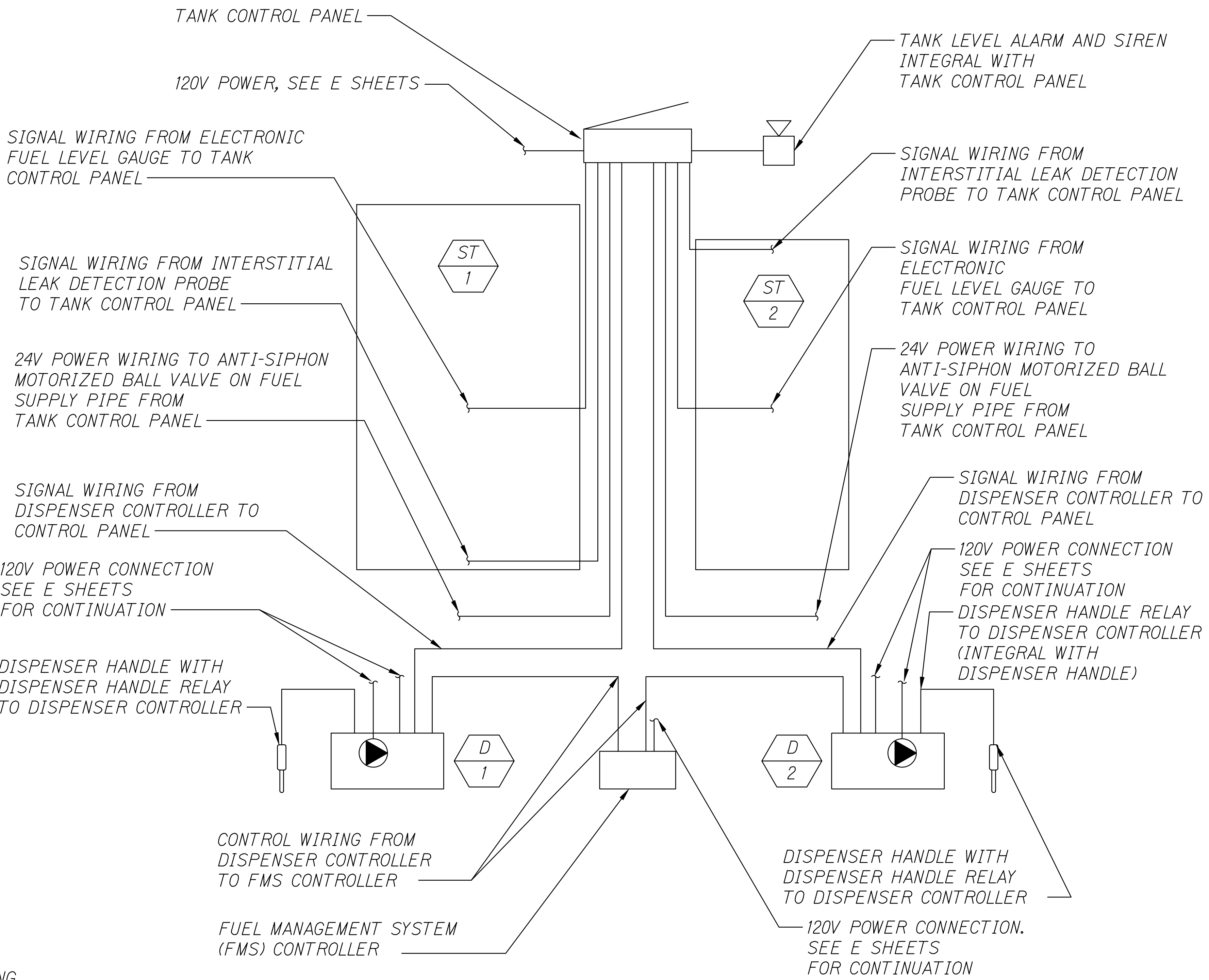
THE FOLLOWING SEQUENCE OF OPERATION SHALL BE PROVIDED AND PRE-PROGRAMMED INTO THE TANK CONTROL PANEL

1. WHEN THE FUEL LEVEL SENSOR AT THE DIESEL FUEL STORAGE TANK REACHES 90% CAPACITY
 - 1.1. THE FUEL LEVEL SENSOR WILL SIGNAL THE TANK CONTROL PANEL.
 - 1.2. THE TANK CONTROL PANEL SHALL START AN AUDIBLE AND VISIBLE HIGH LEVEL ALERT.
2. WHEN THE FUEL LEVEL SENSOR IN THE DIESEL FUEL STORAGE TANK REACHES 5% CAPACITY, THE TANK CONTROL PANEL SHALL START A VISIBLE LOW LEVEL ALERT.
3. WHEN THE FUEL LEVEL SENSOR AT THE GASOLINE FUEL STORAGE TANK REACHES 90% CAPACITY
 - 3.1. THE FUEL LEVEL SENSOR WILL SIGNAL THE TANK CONTROL PANEL.
 - 3.2. THE TANK CONTROL PANEL SHALL START AN AUDIBLE AND VISIBLE HIGH LEVEL ALERT.
4. WHEN THE FUEL LEVEL SENSOR IN THE DIESEL FUEL STORAGE TANK REACHES 5% CAPACITY, THE TANK CONTROL PANEL SHALL START A VISIBLE LOW LEVEL ALERT.

EMERGENCY SHUTOFF SEQUENCE OF OPERATION:

1. WHEN THE EMERGENCY SHUTOFF BUTTON IS PRESSED, ALL POWER TO THE DISPENSING FACILITY SHALL TERMINATE INCLUDING ALL POWER TO ALL DISPENSERS, PUMPS, TANK CONTROL PANELS, AND FUEL MANAGEMENT CONTROLLERS. REFER TO ELECTRICAL SHEETS FOR EMERGENCY SHUTOFF BUTTON LOCATIONS.
2. WHEN POWER IS RESTORED TO THE DISPENSING FACILITY FOLLOWING AN EMERGENCY SHUTOFF:
 - 2.1. THE FUEL MANAGEMENT CONTROLLER SHALL RETURN TO STANDBY MODE AND BE CAPABLE OF ACCEPTING RFID SCANS. THE FUEL MANAGEMENT CONTROLLER SHALL NOT REQUIRE MANUAL RESTART.
 - 2.2. THE DIESEL AND GASOLINE DISPENSERS SHALL RETURN TO STANDBY MODE AND BE READY TO DISPENSE FUEL UPON SIGNAL FROM THE FMS CONTROLLER. DISPENSERS SHALL NOT REQUIRE MANUAL RESTART.

NOTE: EMERGENCY SHUTDOWN IS PROVIDED BY ELECTRICAL CONTRACTOR



BASEYARD CONTROLS WIRING SCHEMATIC

SCALE: NOT TO SCALE

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4/30/24
EXP. DATE
This work was prepared by me or under my supervision.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CONTROL DIAGRAMS AND SEQUENCE OF OPERATIONS
MAUI DISTRICT BASEYARD OFFICE EXPANSION & RENOVATION, PART 2
Project No. HWY-M-03-21, Phase 2
Scale: AS SHOWN Date: JULY 2022

SHEET No. M700 OF 15 SHEETS