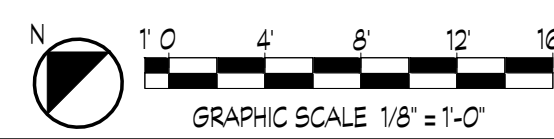


SERVICE BAYS FLOW DIAGRAM
NO SCALE

SEQUENCE OF OPERATIONS:

- GAS DETECTION:** THE GAS DETECTION SYSTEM SHALL OPERATE AND OVER-RIDE ALL OTHER SEQUENCES.
 - THERE ARE THREE SETS OF CARBON MONOXIDE AND NITROGEN DIOXIDE SENSORS, TO PROVIDE FULL COVERAGE OF ALL OF THE VEHICLE MAINTENANCE BAYS.
 - IF ANY ONE OF THE CARBON MONOXIDE AND/OR NITROGEN DIOXIDE DETECTORS SENSES GAS CONCENTRATIONS ABOVE LEVEL ONE SET POINTS (20 PPM OF CARBON MONOXIDE AND/OR 3 PPM OF NITROGEN DIOXIDE), THE FOLLOWING SHALL OCCUR.
 - MOTORIZED DAMPERS AT EACH OF THE THREE OUTSIDE AIR LOUVERS SHALL OPEN.
 - ALL THREE ROOF MOUNTED EXHAUST FANS SHALL BE ENERGIZED.
 - END SWITCHES SHALL PROVIDE INDICATION THAT DAMPERS ARE WIDE OPEN, BUT SHALL NOT PROCLUDE ANY EXHAUST FANS FROM OPERATING.
 - IF ANY ONE OF THE CARBON MONOXIDE AND/OR NITROGEN DIOXIDE DETECTORS SENSES GAS CONCENTRATIONS CONTINUING TO RISE ABOVE LEVEL TWO SET POINTS (50 PPM OF CARBON MONOXIDE AND/OR 5 PPM OF NITROGEN DIOXIDE), THE GAS DETECTION PANEL SHALL INITIATE AUDIBLE AND VISUAL ALARMS.
 - EXHAUST FAN(S) SHALL CONTINUE TO OPERATE UNTIL GAS CONCENTRATIONS ARE REDUCED TO BELOW SET POINT LEVELS.
 - WHEN CARBON MONOXIDE AND/OR NITROGEN DIOXIDE GAS CONCENTRATIONS FALL BELOW THE LEVEL ONE SET POINTS (NOTED ABOVE), THE EXHAUST FAN(S) SHALL DE-ENERGIZE AND MOTORIZED DAMPER(S) SHALL CLOSE.
- VEHICLE EXHAUST:**
 - VEHICLE EXHAUST UTILITY FAN SHALL BE MANUALLY STARTED, WITH TAILPIPE HOSE CONNECTED TO VEHICLE(S) PLANNED TO BE OPERATED.
 - MOTORIZED DAMPERS AT EACH OF THE THREE OUTSIDE AIR LOUVERS SHALL OPEN.
 - WHEN VEHICLE EXHAUST FAN IS DE-ENERGIZED, AND IF GAS DETECTION SYSTEM IS NOT IN LEVEL ONE OR LEVEL TWO ALARM, THE OUTSIDE AIR MOTORIZED DAMPERS SHALL CLOSE.
- SUMMER VENTILATION:**
 - THE SPACE TEMPERATURE SENSOR SHALL, UPON A RISE IN ROOM TEMPERATURE ABOVE ITS SET POINT (80°F, ADJUSTABLE), OPEN THE OUTSIDE AIR LOUVERS' MOTORIZED DAMPERS, AND ENERGIZE THE ROOF MOUNTED EXHAUST FANS.

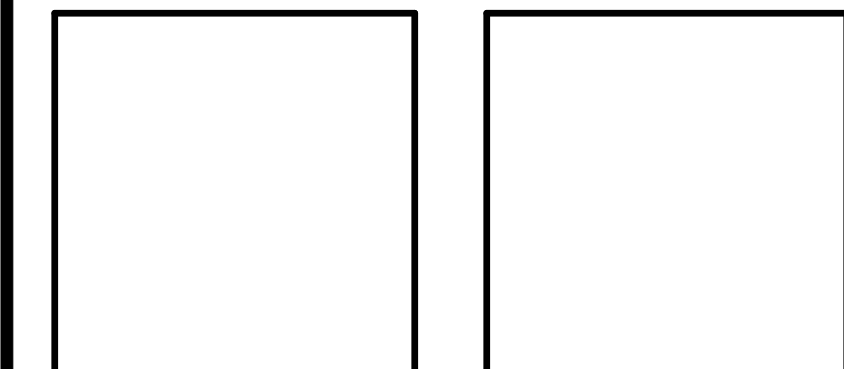


General Notes:

**NOT FOR BIDDING
PURPOSES**

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Salisbury, Maryland 21801
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Revision		

Project:
**DELAWARE ARMY
NATIONAL GUARD**
**VEHICLE MAINTENANCE BLDGS - CO/NO2
DETECTION DESIGN**
FIELD MAINTENANCE SHOP #3 (FMS-3)
1197 RIVER ROAD
NEW CASTLE, DE 19720

Set No.: DESIGN		Sheet Title: MECHANICAL AND ELECTRICAL FLOOR PLAN	
Proj.No.: 0499-J011.D02		Scale: AS NOTED	
Dwn.By: DH & SM		Date: 11/26/13	
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