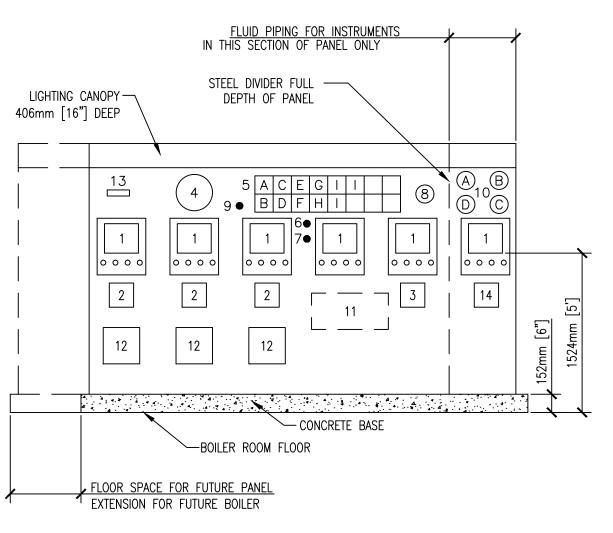
Department of Veterans Affairs



ELEVATION

DESIGNER NOTES:

- PANEL APPROX. 3810mm[12'-6"]Wx610mm[2'-0"]Dx2438mm[8"-0"]H. SHOW ACTUAL SIZE ON DWGS.
- SOME RECORDING & MONITORING FUNCTIONS MAY BE HANDLED BY A COMPUTER WORK STATION & THEREFORE MAY BE DELETED FROM THIS PANEL.
- ON SOME PROJECTS. IT MAY BE DESIRABLE TO LOCATE EMERGENCY GENERATOR ANNUNCIATORS & METERS ON THIS PANEL.
- PROVIDE SMOKE DENSITY MONITORS ONLY ON PLANTS BURNING HEATED OIL OR WHERE REQUIRED BY LOCAL CODES.
- ON PLANTS WHERE DRAFT CONTROL SYSTEMS ARE PROVIDED, CONSIDER LOCATING THE DRAFT GAGES ON THIS PANEL ABOVE THE BOILER OPERATION RECORDERS. THE GAGES ARE NORMALLY LOCATED ON THE BURNER CONTROL PANELS.
- DELETE THE "ENGINEERING NOTES" FROM THE PROJECT DRAWINGS.



BOILER PLANT INSTRUMENTATION PANEL

<u>ITEM</u>

DESCRIPTION

- BOILER / BOILER PLANT DIGITAL DATA RECORDER
 - A. STEAM FLOW: INDICATE, RECORD, INTEGRATE, [0-]KG/S [LB/HR])
 - B. BOILER OUTLET FLUE GAS TEMPERATURE: RECORD (0-500°C [0-1000°F])
 - C. FLUE GAS OXYGEN CONTENT: RECORD (0-10% OXYGEN)
 - D. HIGH PRESS STEAM DIST: RECORD, INTEGRATE, (0-___ KG/S [LB/HR]
 - E. MED PRESS STEAM DIST: RECORD, INTEGRATE, (O-___ KG/S [LB/HR])
 - F. LAUNDRY STEAM DIST: RECORD, INTEGRATE, (0-___ KG/S [LB/HR])
 G. BOILER PLANT STEAM: RECORD, INTEGRATE, (0-___ KG/S [LB/HR])
 - H. STEAM HEADER PRESS: RECORD (0-2000 kPa [0-300 PSIG])
 - I. BOILER FEEDWATER TEMP: RECORD (0-150°C [0-300°F])
 - J. OUTSIDE AIR TEMP: RECORD $(-35^{\circ}C[-30^{\circ}F] \text{ TO } +50^{\circ}C[+120^{\circ}F])$
- BOILER CONTROL STATIONS (MANUAL/AUTOMATIC, BIAS) (THESE CONTROL STATIONS MAY BE LOCATED ON THE BURNER CONTROL PANELS INSTEAD OF ON THE
 - INSTRUMENTATION PANEL.) A. COMBUSTION CONTROL SUBMASTER
 - B. DRAFT CONTROL (WHEN SPECIFIED)
 - C. OXYGEN TRIM (WHEN SPECIFIED)
- MASTER STEAM PRESSURE CONTROLLER
- CLOCK
- ALARM ANNUNCIATOR
 - A. CONDENSATE STORAGE TANK HIGH LEVEL
 - B. CONDENSATE STORAGE TANK LOW LEVEL
 - C. FEEDWATER HEATER HIGH LEVEL
 - D. FEEDWATER HEATER LOW LEVEL
 - E. HIGH STEAM HEADER PRESS
 - F. EMERGENCY GAS VALVE CLOSED
 - G. HIGH NATURAL GAS HEADER PRESS (SET AT 35 kPa [5 PSIG] ABOVE MAIN REGULATOR SET PRESS) H. LP IGNITER GAS IN USE-FOR EMERGENCY ONLY (PROVIDE HIGH PRESS SWITCH SET AT 14 kPa [2]
- I. LOW EXCESS AIR BOILER NO. (PROVIDE ONE POINT FOR EACH BOILER, SET AT ___ % OXYGEN)
- ANNUNCIATOR ACKNOWLEDGE BUTTON
- ANNUNCIATOR TEST BUTTON
- ANNUNCIATOR BELL / HORN
- EMERGENCY GAS SAFETY SHUT OFF VALVE CONTROL
- PRESSURE GAGES
 - A. STEAM HEADER (0-1500 kPa [0-200 PSIG])
 - B. NATURAL GAS HEADER (0-100 kPa [0-15 PSIG])

 - C. FUEL OIL HEADER (0-1500 kPa [0-200 PSIG])D. BOILER FEEDWATER HEADER (0-2000 kPa [0-300 PSIG]) (WHEN HEADER SERVING ALL BOILERS IS PROVIDED)
- START-STOP BUTTONS AND PILOT LIGHTS FOR PUMPS 11.
- 12. SMOKE DENSITY MONITOR (WHEN SPECIFIED)
- 13. REMOTE REGISTER FOR GAS METER (WHEN SPECIFIED)
- 14. FEEDWATER DEAERATOR TANK AND CONDENSATE STORAGE TANK WATER LEVEL CONTROL STATION