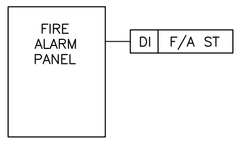
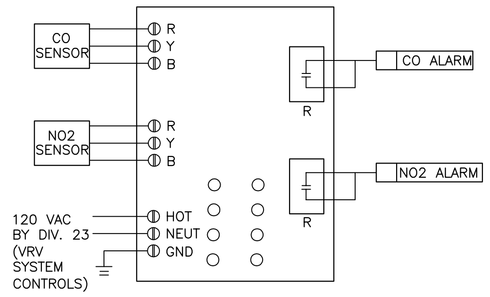


FIRE ALARM CONTROL DIAGRAM

SCALE : N.T.S.

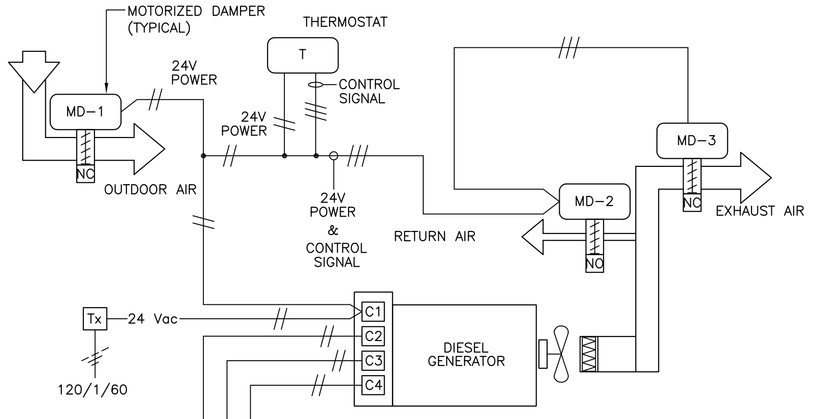
1 M9



GAS DETECTION CONTROL DIAGRAM

SCALE : N.T.S.

2 M10

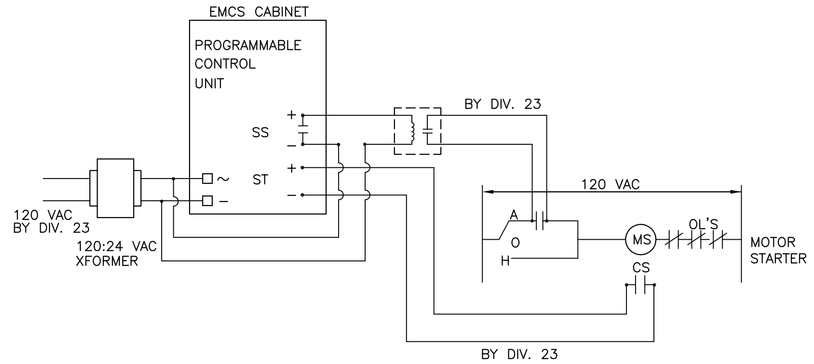


MD-1 TO BE NORMALLY CLOSED
MD-2 TO BE NORMALLY OPEN
MD-3 TO BE NORMALLY CLOSED
ON GENERATOR START-UP, MD-1 TO OPEN & MD-2 & MD-3 TO MODULATE TO MAINTAIN SPACE SET POINT TEMPERATURE.
T – LOW VOLTAGE HEATING THERMOSTAT (SUPPLIED AND INSTALLED AS PART OF DIV. 23)
Tx – TRANSFORMER (SUPPLIED AND INSTALLED AS PART OF DIV. 23)
C1 – N.O. CONTACT IN GENERATOR CONTROL PANEL (CLOSES WHEN GENERATOR RUNS)
C2 – N.O. CONTACT IN GENERATOR CONTROL PANEL (CLOSES WHEN GENERATOR RUNS)
C3 – N.O. CONTACT IN GENERATOR CONTROL PANEL (OPENS WHEN GENERATOR RUNS)
C4 – N.O. CONTACT IN GENERATOR CONTROL PANEL (OPENS WHEN GENERATOR RUNS)

GENERATOR ROOM VENTILATION CONTROL SCHEMATIC

SCALE : N.T.S.

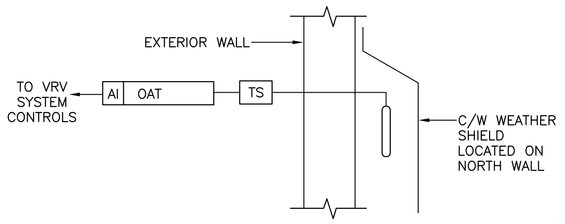
3 M10



MOTOR STARTER LOGIC CONTROL DIAGRAM

SCALE : N.T.S.

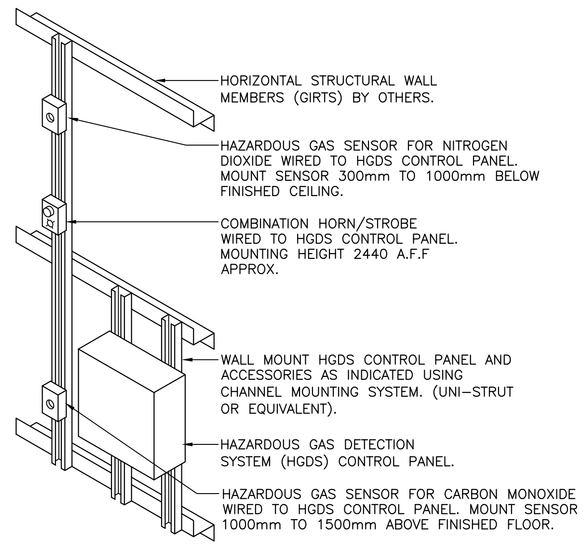
4 M10



OUTDOOR AIR TEMP. MONITORING WIRING DIAGRAM

SCALE : N.T.S.

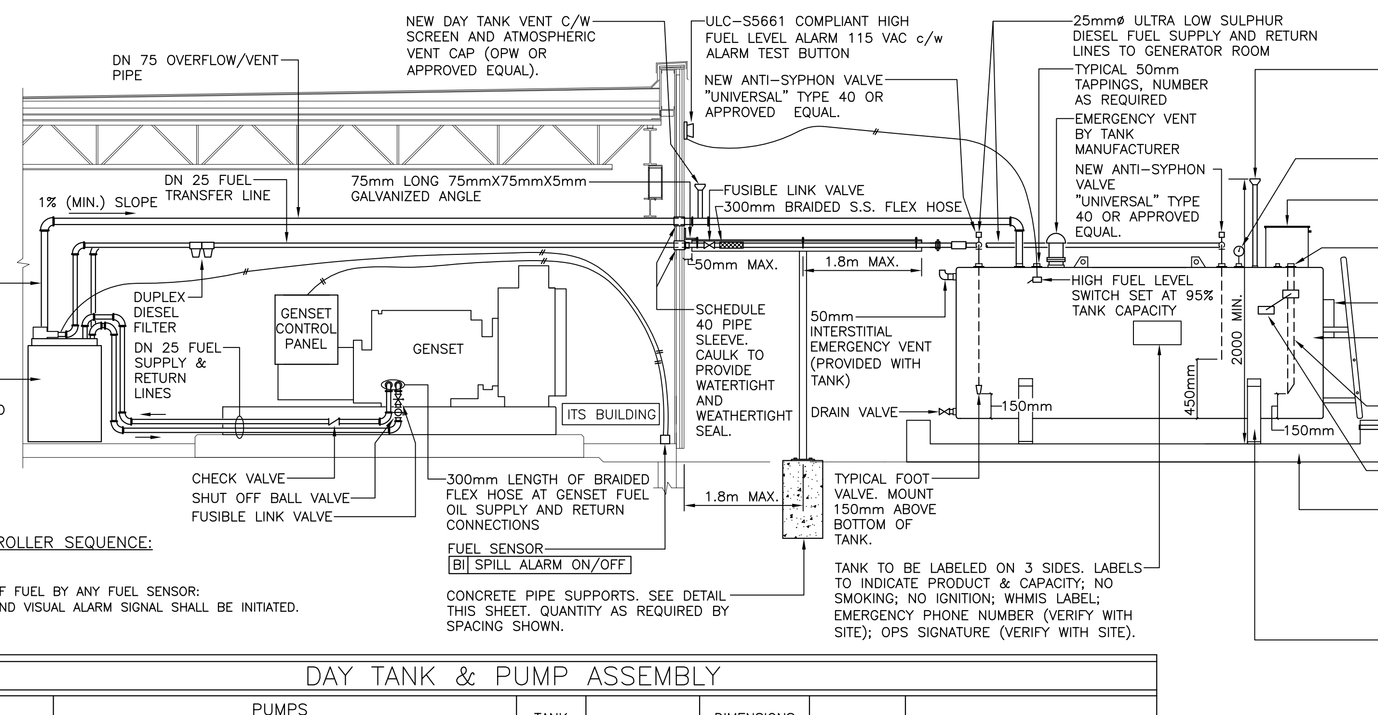
6 M10



HAZARDOUS GAS DETECTION SYSTEM (HGDS) MOUNTING DETAIL

SCALE : N.T.S.

7 M4



GENERATOR CONTROLLER SEQUENCE:

FUEL SPILL ALARM
1) UPON DETECTION OF FUEL BY ANY FUEL SENSOR:
   a) AN AUDIBLE AND VISUAL ALARM SIGNAL SHALL BE INITIATED.

SEE DETAIL 3 THIS SHEET AND DRAWING M12 FOR DETAILS ON VENTILATION CONTROL OF GENERATOR ROOM.

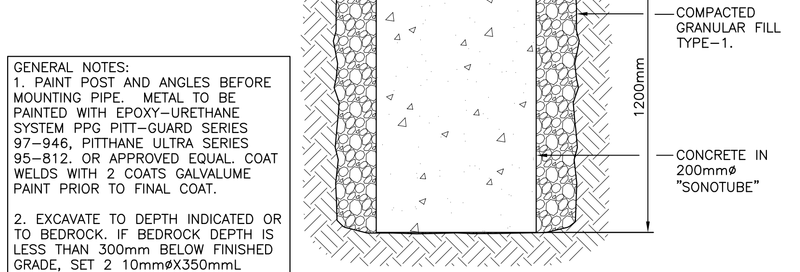
DAY TANK & PUMP ASSEMBLY

MANUFACTURER	MODEL	PUMPS					TANK VOLUME	CONTAINMENT	DIMENSIONS LxWxH (mm)	WEIGHT	ACCESSORIES
		APPLICATION	FLOW	POWER	POWER SUPPLY	DISCHARGE PRESSURE					
TRAMONT	TRS SERIES	SUPPLY #1	0.25 L/S	0.25 KW	120/1/60	48.2 KPa	378 L	150%	711x914x1158	200 Kg	REDUNDANT OVERFILL PROTECTION PUMP SWITCH
		SUPPLY #2	0.25 L/S	0.25 KW							
		RETURN	0.50 L/S	0.50 KW							

GENERATOR FUEL TRANSFER DETAIL AND CONTROL DIAGRAM

SCALE : N.T.S.

5 M3



GENERAL NOTES:
1. PAINT POST AND ANGLES BEFORE MOUNTING PIPE. METAL TO BE PAINTED WITH EPOXY-URETHANE SYSTEM PPG PITT-GUARD SERIES 97-946, PITTHANE ULTRA SERIES 95-812. OR APPROVED EQUAL. COAT WELDS WITH 2 COATS GALVALUME PAINT PRIOR TO FINAL COAT.

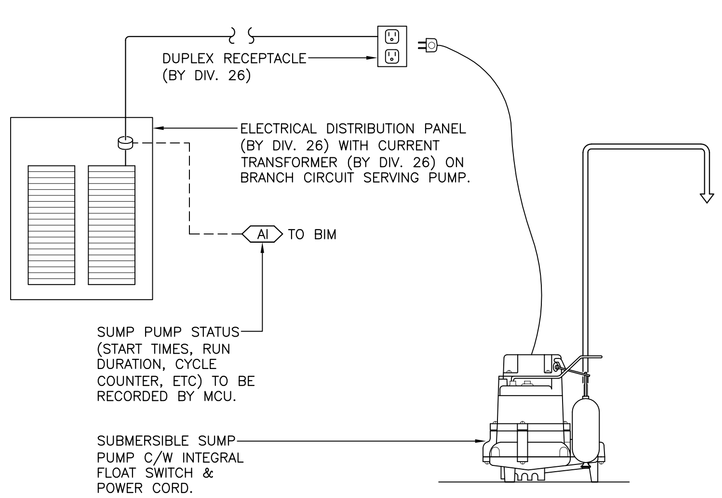
2. EXCAVATE TO DEPTH INDICATED OR TO BEDROCK. IF BEDROCK DEPTH IS LESS THAN 300mm BELOW FINISHED GRADE, SET 2 10mmøX350mmL THREADED RODS, IN HILTI HY ISO ANCHORS INTO BEDROCK. CENTER RODS ON SONOTUBE AND ENSURE MIN. 200mm OF THREADED ROD EMBEDDED IN CONCRETE.

PIPE SUPPORT
SCALE – N.T.S.

PIPE SUPPORT DETAIL

SCALE : N.T.S.

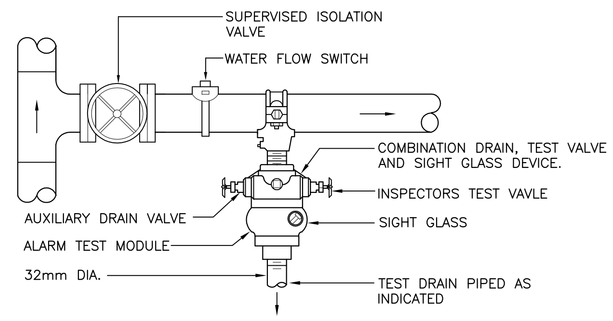
8 M10



CONTROL DIAGRAM - SUMP PUMP P2

SCALE : N.T.S.

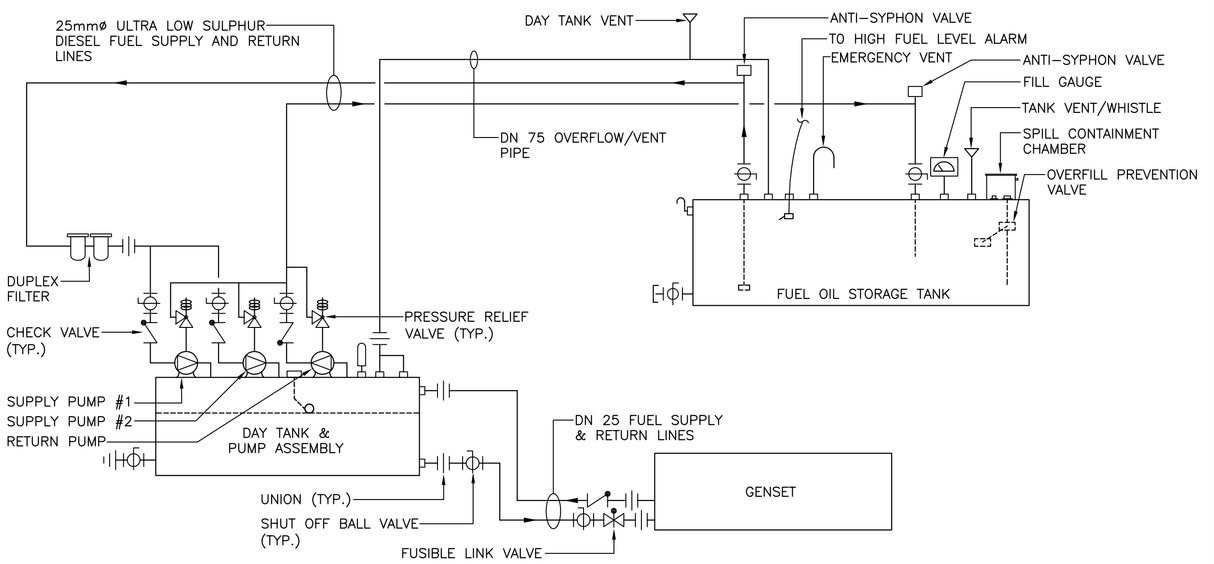
9 M10



DETAIL - SPRINKLER LOCAL CONTROL VALVE ARRANGEMENT

SCALE : N.T.S.

10 M5



GENERATOR FUEL OIL SYSTEM SCHEMATIC

SCALE : N.T.S.

11 M10

Public Works and Government Services Canada / Travaux Publics et Services gouvernementaux Canada

amec foster wheeler

PROVINCE OF NEWFOUNDLAND AND LABRADOR
PEGNL Newfoundland and Labrador
PERMIT HOLDER
This Permit Allows
JUL.11.2017
Amec Foster Wheeler Americas Limited
To practice Professional Engineering in Newfoundland and Labrador.
Permit No. as issued by PEG 00018
which is valid for the year 2017 .

REGISTERED PROFESSIONAL ENGINEER
PEGNL Newfoundland and Labrador
DOUGLAS F. WATERS
SIGNATURE
11/07/17
DATE
NEWFOUNDLAND & LABRADOR

NOTES:

1. CONTRACTOR TO VERIFY ALL SITE CONDITIONS, LOCATIONS AND DIMENSIONS PRIOR TO COMMENCING WORK. TRACE OUT ALL SYSTEMS BEFORE INITIATING WORK. COORDINATE SYSTEM SHUT DOWNS & SERVICE INTERRUPTIONS WITH OWNER.
2. PROVIDE ALL MATERIALS & LABOUR REQUIRED TO INSTALL ALL REQUIRED COMPONENTS IN ACCORDANCE WITH APPLICABLE CODES, REGULATIONS & DRAWINGS THAT FORM PART OF THIS CONTRACT.
3. DO NOT SCALE FROM DRAWINGS.
4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

revisions		date
D	ISSUED FOR TENDER	JUL 11 2017
C	ISSUED FOR TENDER	JUN 28 2017
B	ISSUED FOR 99% REVIEW	MAY 25 2017
A	ISSUED FOR CLIENT REVIEW	APR 28 2017

project / projet

MCTS CENTRE AND C&P BUILDING

PLACENTIA

drawing / dessin

MECHANICAL DETAILS

designed / conçu D.W
date JULY 11, 2017
drawn / dessiné TBB
date JULY 11, 2017
approved / approuvé
date JULY 11, 2017
Tender / Soumission
J.F. MACGILLIVRAY JUNE 30/17
PWGSC Project Manager / Administrateur de projets TPSGC

project number / no. du projet
R.081781.004

drawing no. / no. du dessin
M10