REF.	EQUIPMENT SCHEDULE HEATING CENTRE 1
V1, V2	LTHW STEEL CONSTRUCTION 400 LITERS EXPANSION VESSEL
GB 01 GB 02 GB 03	3 NO. 115kW WALL HUNG GAS CONDENSING BOILERS (DE-DIETRICH INNOVANS PRO MCA115 C/W CASCADE SYSTEM OR EQUIVALENT TO ENGINEERS APPROVAL)
HE1	400 KW PLATE HEAT EXCHANGER, ALFA LAVAL OR EQUAL TO ENGINEERS APPROVAL
PU1	PACKAGED PRESSURIZATION SET C/W BREAK TANK, SINGLE PHASE PUMP UNIT AND BMS CONNECTION
PU2	PACKAGED PRESSURIZATION SET C/W BREAK TANK, SINGLE PHASE PUMP UNIT AND BMS CONNECTION
P01	(EXISTING VARIABLE SPEED PUMP IS A GRUNDFOS UPS 50-60/2F PUMP SERVING EXISTING CIRCUIT 1 IN SCHOOL) CONTRACTOR TO REVIEW AND REPLACE WITH MATCHING FLOW RATE AND HEAD AS REQUIRED.
P02	(EXISTING VARIABLE SPEED PUMP IS A GRUNDFOS UPS 32-120-F PUMP SERVING EXISTING CIRCUIT 2 IN SCHOOL) CONTRACTOR TO REVIEW AND REPLACE WITH MATCHING FLOW RATE AND HEAD AS REQUIRED.
P03	(EXISTING VARIABLE SPEED PUMP IS A GRUNDFOS UPS 40-60/2F PUMP SERVING EXISTING CIRCUIT 3 IN SCHOOL) CONTRACTOR TO REVIEW AND REPLACE WITH MATCHING FLOW RATE AND HEAD AS REQUIRED.
P04	VARIABLE SPEED SHUNT PUMP, GRUNDFOS 1PH PUMP FLOW RATE - 2.8L/S, HEAD - 5.4M HEAD. PUMP HOUSING CAST IRON
P05	VARIABLE SPEED SHUNT PUMP, GRUNDFOS 1PH PUMP FLOW RATE - 2.8L/S, HEAD - 5.4M HEAD. PUMP HOUSING CAST IRON

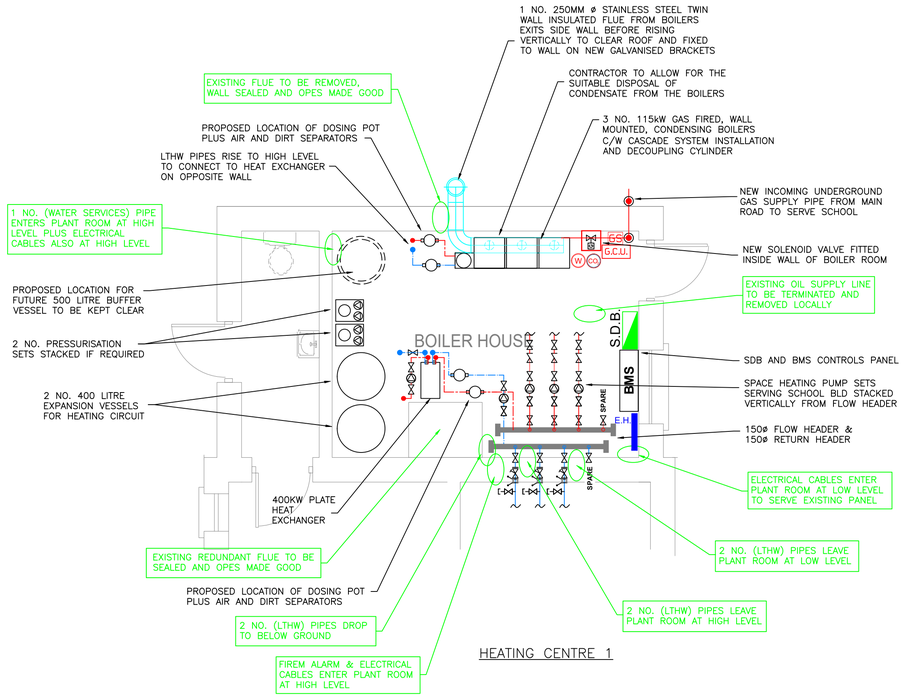
REF.	EQUIPMENT SCHEDULE HEATING CENTRE 2
V3 & V4	LTHW STEEL CONSTRUCTION 100 LITERS EXPANSION VESSEL
GB 04	1 NO. 90kW COMPACT WALL MOUNTED GAS CONDENSING BOILER (DE-DIETRICH INNOVENS PRO MCA90 OR EQUIVALENT TO ENGINEERS APPROVAL)
HE2	100 KW PLATE HEAT EXCHANGER, ALFA LAVAL OR EQUAL TO ENGINEERS APPROVAL
PU3	PACKAGED PRESSURIZATION SET C/W BREAK TANK, SINGLE PHASE PUMP UNIT AND BMS CONNECTION
P06	(EXISTING VARIABLE SPEED PUMP IS A GRUNDFOS UPC 40-60 1PH PUMP) CONTRACTOR TO REVIEW AND REPLACE WITH MATCHING FLOW RATE AND HEAD AS REQUIRED.
P07	VARIABLE SPEED SHUNT PUMP, GRUNDFOS 1PH PUMP FLOW RATE - 0.8L/S, HEAD - 5.4M HEAD. PUMP HOUSING CAST IRON
P08	VARIABLE SPEED SHUNT PUMP, GRUNDFOS 1PH PUMP FLOW RATE - 0.8L/S, HEAD - 5.4M HEAD. PUMP HOUSING CAST IRON



TYPICAL WALL MOUNTED BOILERS

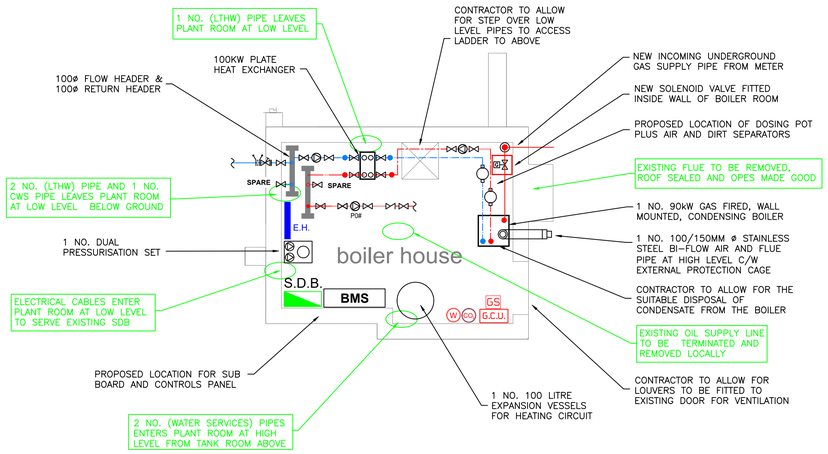


EXAMPLE OF PROPOSED WALL MOUNTED 90KW GAS FIRED BOILER



HEATING CENTRE 1

EXISTING PIPED SERVICES ENTERING OR LEAVING BOILER HOUSE INDICATED IN GREEN.



HEATING CENTRE 2

1. UNDER NO CIRCUMSTANCES IS THE CONTRACTOR TO ORDER ANY MATERIALS FOR THE MECHANICAL SERVICES INSTALLATION BEFORE AGREEING QUANTITY AND MANUFACTURE WITH THE CONSULTING ENGINEER.
2. CONTRACTOR TO AGREE FINAL LOCATIONS OF ALL ITEMS IN THE MECHANICAL SERVICES INSTALLATION WITH THE CONSULTING ENGINEER BEFORE INSTALLING SAME.
3. DRAWING TO BE READ IN CONJUNCTION WITH OTHER SERVICE DRAWINGS AND MECHANICAL SPECIFICATION.
4. ALL FLUES FROM BOILERS TO BE TWIN WALL INSULATED FLUES, CORRECTLY INSTALLED TO MANUFACTURES RECOMMENDATIONS C/W DRAINS VENTS AND SUPPORT BRACKETS WHERE REQUIRED.
5. ALL PLANT ITEMS TO BE MOUNTED ON SUITABLE SIZE OF PLINTHS WITHIN THE BOILER HOUSE AND ALL PIPES TO BE FULLY INSULATED AND LABLED.
6. ALL VALVE'S ABOVE 32Ø MUST BE INSULATED WITH PROPRIETARY JACKETS WITH VELCRO FIXINGS.
7. ALL METERS MUST BE CLEARLY LABELED WITH THEIR FUNCTION.

CONTRACTOR TO TAKE NOTE OF THE FOLLOWING LIST OF REQUIREMENTS

FULL TEST AND REPORT OF THE CURRENT HEATING AND HOT WATER SYSTEM, ALL PIPE RUNS FROM BOTH BOILER HOUSES TO TERMINATION POINTS ETC TO CONFIRM WHAT WORKS OR IS NOT WORKING OR IS LEAKING BEFORE ANY STRIP OUT OF EXISTING PLANT EQUIPMENT TAKES PLACE.

ALL EXISTING PIPE SERVICES AND CABLES THAT ENTER OR LEAVE BOTH BOILER HOUSES NEED TO BE SURVEYED TO CONFIRM IF THEY ARE LIVE OR REDUNDANT OR NEED TO BE KEPT LIVE DURING THE STRIP OUT WORK IN THE BOILER HOUSES.

CONTRACTOR TO REVIEW EXISTING STEEL FLUES CONNECTED TO CHIMNEY AND PIPE INSUALTION FOR THE PRESENCE OF ASBESTOS AND IF FOUND ON SITE IT MUST BE VERIFIED AND REMOVED BY SPECIALIST UNDER LIENCE

ALL EXISTING SERVICES TO BE MAINTAINED OUTSIDE OF BOTH BOILER HOUSES DURING THE STRIP OUT AND REPLACEMENT OF PLANT EQUIPMENT.

MARK AND LABEL ALL EXISTING MECHANICAL AND ELECTRICAL SERVICES THAT ENTER OR LEAVE BOTH BOILER HOUSES FOR FUTURE REFERENCE.

STRIP BACK EXISTING WATER SERVICES AND LTHW FLOW AND RETURN PIPES TO SUITABLE FLANGE OR JOINT TO MAKE NEW CONNECTIONS TOO AS PART OF NEW INSTALLATION WITHIN BOTH BOILER HOUSES.

CHECK LOCATION OF EXISTING SCHOOL ROOM/ CORRIDOR STATS AFFECTING TEMP CONTROL IN SCHOOL AND CONFIRM SUITABLE CONTROL IS CURRENTLY AVAILABLE BACK TO BMS.

EXISTING SWITCH CONTROLS IN RECEPTION WILL BE REPLACED WITH SUITABLE REHEAT PANEL. CONTRACTOR TO ALLOW FOR DATA CONNECTION BETWEEN BMS PANEL AND REHEAT PANEL

CONTRACTOR TO ALLOW FOR NEW CONCRETE PLINTHS UNDER ALL NEW PLANT EQUIPMENT AND ANY EXISTING REDUNDANT PLINTHS SHOULD BE REMOVED. MAKE GOOD ALL BUILDERS WORK WALL OPES WITH SUITABLE MATCHING BRICK FINISH WHERE REQUIRED

ONCE ALL ITEMS OF PLANT ARE STRIPPED OUT, ALLOW FOR PAINTING OF WALLS AND FLOOR EITHER BEFORE FITOUT OR ON COMPLETION.

CONFIRMATION REQUIRED ON EXISTING FLOOR DRAINS, CONTRACTOR TO ALLOW FOR CONDENSATE TO DISCHARGE FROM NEW BOILERS TO DRAINS

EXISTING MAIN ELECTRICAL CONTAINMENT WITH INCOMING SUPPLIES TO BE REVIEWED AS THIS MAY NEED TO REMAIN IN PLACE. CONTRACTOR TO NOTE THAT SECONDARY ELECTRICAL CONTAINMENT NEEDS TO BE REPLACED WITH SEPERATION OF POWER, DATA CABLES AND FIRE ALARM CABLES INTO SEPERATE CONTAINMENT RUNS WHICH COMPLY WITH CURRENT ELECTRICAL GUIDE LINES

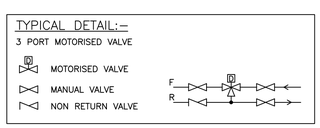
CONTRACTOR TO PURGE OIL LINE TO EXISTING BOILER ROOM, REMOVE ALL OIL PIPES ABOVE GROUND AND SEAL REMAINING LINES BELOW GROUND. CONTRACTOR TO DECANT REMAINING OIL AND REMOVE REDUNDANT OIL STORAGE TANKS FROM SITE FOR SUITABLE DISPOSAL OFF SITE.

CONTRACTORS TO REVIEW SELECTION OF EQUIPMENT AND LOCATIONS WITH QUANITY PROPOSED FOR INSTALLATION ON SITE.

ANY SERVICES THAT PENETRATE FIRE RATED CONSTRUCTION MUST BE FIRE STOPPED

CONTRACTORS TO ENSURE THAT ALL EXISTING MECHANICAL AND ELECTRICAL SERVICES ARE CAREFULLY REMOVED AND REMAINING REDUNDANT ITEMS MADE SAFE

TYPICAL DETAIL:-
3 PORT MOTORISED VALVE



BOILER HOUSE LEGEND

- GAS SLAM SHUT SOLENOID VALVE
- GS — COMBINED GAS CARBON MONOXIDE SENSOR
- G.C.U. — GAS CONTROL UNIT
- E.H. — OIL FILLED ELECTRICAL RADIATOR
- S.D.B. — ELECTRICAL SUB DISTRIBUTION BOARD
- BMS — MECHANICAL CONTROL PANEL (MCC)
- CO. — WALL MOUNTED FIRE EXTINGUISHER - 2 KG CARBON DIOXIDE
- W — WALL MOUNTED FIRE EXTINGUISHER - 6LTR WATER.

LEGEND

- MAINS WATER SUPPLY (MWS)
- HEATING PIPEWORK-RETURN
- ISOLATING VALVE
- NON RETURN VALVE
- PRESSURE REDUCING VALVE
- DOUBLE REGULATING VALVE
- DOUBLE CHECK VALVE
- DRAIN COCK
- HM — HEAT METER*
- DOUBLE REGULATING AND COMMISSIONING VALVE
- PRESSURE RELIEF VALVE
- A — ANTIVIBRATION
- WATER HAMMMER ARRESTOR
- HEATING PIPEWORK-SUPPLY
- COLD WATER SUPPLY (CWS)
- M — TWO PORT VALVE
- M — THREE PORT VALVE
- P — SENSOR POCKET (PRESSURE)
- T — SENSOR POCKET (TEMPERATURE)
- F — FROST THERMOSTAT
- S — FLOW SENSOR

LINKED TO BMS

- PRESSURE & TEMPERATURE GAUGE
- STRAINER
- M — WATER METER C/W ISOLATING VALVES*
- WATER PUMP C/W ISOLATING VALVES*
- AUTOMATIC AIR VENT VALVE
- FS — FLOW SWITCH

T1	ISSUED FOR TENDER	30.10.26	POB	JG
Issue	REVISION	DATE	BY	CKD.

Figured dimensions only should be taken from this drawing. All contractors must visit the site and be responsible for taking and checking all dimensions that relate to this work

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Job	MIDLETON CBS BOYS NS MIDLETON, CO. CORK.
Client	BOARD OF MANAGEMENT
Drawing	MECHANICAL SERVICES HEATING CENTRE 1 & 2 LAYOUT.

Job No. E26/2879	Scale 1:50@A1	Cad ref. 2879_Midleton_CBS.dwg
Drg. No. M1		Date JUNE 2026
Drawn PAUL O'BRIEN		
Checked JOHN GEANEY		