

GROUND FLOOR

Refrigerant Pipework

ALL REFRIGERANT PIPEWORK SHALL BE INSTALLED ON DEDICATED SUPPORT TRAY WORK, SUPPORTED THROUGHOUT ITS LENGTH AND SUITABLE CLIPPED IN ACCORDANCE WITH GOOD PRACTICE. FULL ACCESS IS REQUIRED TO ALL REFRIGERANT PIPEWORK THROUGHOUT COMPLETE RUNS

- 1 INCOMING GAS SUPPLY, METER & SIZENED VALVE WITH NECESSARY ISOLATION AND SOLIDHOOD VALVES. BRANCH BELOW GROUND TO KITCHEN. SOLIDHOOD VALVE TO CLOSE ON FIRE ALARM CONDITION OR WHEN PLANTROOM FAN STOPPING ACTIVATED - VALVE TO REMAIN OPEN FOR ROUTINE FIRE ALARM TEST. HIRE CONTRACTORS TO LIASE
- 2 GAS SUPPLY TO KITCHEN RANGE AND HWS GENERATOR - REFER TO SITE PLAN
- EXTERNAL LOUVRED PLANTROOM DOORS REQUIRED FOR COMBUSTION AIR VENTILATION
- 2 No. INDEPENDENT GAS FIRED HOT WATER GENERATORS WITH STORAGE CYLINDERS. COMPLETE WITH FLUES, PUMPS CONTROLS AND ALL MANUFACTURERS SAFETY FEATURES
- 2 No. INDEPENDENT COLD WATER STORAGE TANKS ARRANGED FOR CROSS FLOW COMPLETE WITH BALL VALVE HOLDING, ACCESS, COVER AND DRAINS ETC. MOUNTED ON BUILDERSWORK TANK SUPPORT PLATFORM. VALVED PIPE LINK ACROSS MCHS AND BECKS IN PLANTROOM TO ALLOW CROSS FLOW BETWEEN SYSTEMS IN EVENT OF EITHER MAINS WATER FAILURE, OR BOOSTER PUMP SET FAILURE
- PRIMARY, SECONDARY HEATING PUMPS (1 VY RADIATOR AND 1 VY HWS CIRCUIT) AND PRIMARY HWS PUMP SETS, PIPEWORK AND CONTROL VALVES ON FRAME AGAINST WALL
- PLANTROOM SUPPLY AIR HANDLING UNIT SERVING TEMPERED AND FILTERED OUTSIDE FOR SUMMER VENTILATION
- AIR HANDLING UNIT SERVING TEMPERED AND FILTERED OUTSIDE TO GROUND FLOOR AIR CONDITIONED OFFICES AND GENERAL CIRCULATION AREAS
- FULLY ACCESSIBLE SERVICES RISER DUCT FOR VENTILATION NETWORK TO COMMON ROOMS AND CORRIDORS AS INDICATED, FOR LPHW, WATER SERVICES AND GROUND FLOOR VRY ALL SYSTEM REFRIGERATION PIPEWORK. DUCTWORK TO HAVE FIRE DAMPERS AND ACCESS PANELS AT SLAB AND CORRIDOR WALL PENETRATIONS

MECHANICAL SERVICES - HVAC

General
THE CONTRACTOR SHALL DESIGN, INSTALL, TEST AND COMMISSION THE HEATING, VENTILATION COOLING SYSTEMS, IN ACCORDANCE WITH ALL INDUSTRY REGULATIONS, RELAVENT CODES OF PRACTICE AND BUILDING CONTROL REQUIREMENTS.

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE ROOM DATA SHEETS

- 1 LST LPHW HEATING RADIATOR WITH THERMOSTATIC CONTROL VALVE, LOCK SHIELD VALVE, AIR VENT AND DRAIN COCK. BY BEDROOM TRV'S SHALL BE REMOVE WALL MOUNTED TYPE. WINDOW CILL HEIGHT IS 600mm
NOTE: LPHW PIPEWORK RADIATOR CIRCUIT TO BE FULLY DESIGNED AND DRAWN BY THE CONTRACTOR
- 2 VRY SIMULTANEOUS HEATING AND COOLING A/C CHASSIS TYPE DUCTED UNIT CEILING RECESSED IN SUSPENDED CEILING VOID WITH SUPPLY DUCTWORK TO DIFFUSERS. RETURN AIR FROM VOID VIA GRILLES. LOW NOISE. LOCAL ROOM TEMPERATURE CONTROL
- 2 VRY SYSTEM WALLMOUNTED OR CEILING SUSPENDED TYPE HEATING AND COOLING UNIT.
- 2 VRY SYSTEM RECESSED CASSETTE TYPE HEATING AND COOLING UNIT. 4- WAY BLOW
- SD 4-WAY BLOW PATTERN SUPPLY AIR DIFFUSER. GENERALLY (600x600)mm
- RG 4-WAY BLOW PATTERN RETURN AIR DIFFUSER. GENERALLY (600x600)mm (TO MATCH SUPPLY)
- WALL OR CEILING MOUNTED EXTRACT FAN
- FD FIRE DAMPER IN INSTALLATION FRAME, WITH DUCT ACCESS PANEL, AT ALL FIRE WALL/BARRIER PENETRATIONS AND MEANS OF ESCAPE ROUTES

Condensate Drainage

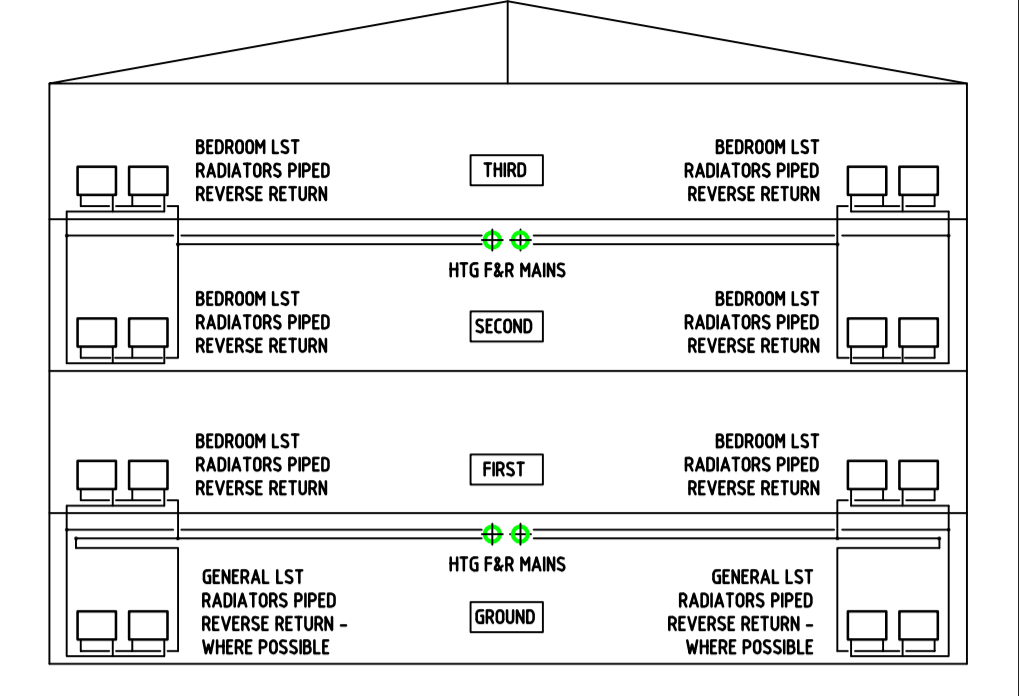
THE CONTRACTOR SHALL DESIGN AND INSTALL A STAND ALONE CONDENSATE DRAINAGE SYSTEM FROM ALL DX COOLING UNITS, TO DISCHARGE AT GROUND LEVEL WHERE ANY WATER SEAL TRAPS CAN BE SERVICED. CONNECTION OF CONDENSATE DRAINS TO LOCAL SOIL/WASTE OR RAINWATER DRAINS IS NOT ACCEPTABLE.

Ductwork Notes

ALL DUCTWORK TO HAVE CLEANING ACCESS HATCHES AT SUITABLE SPACING TO FACILITATE CLEANING THROUGHOUT WHOLE LENGTH OF ALL DUCTWORK SYSTEMS

HEATING SYSTEM PIPEWORK

LPHW HEATING MAINS SHALL RUN IN GROUND FLOOR AND FIRST FLOOR CEILING VOIDS AND FEED UP AND DOWN TO BEDROOM REVERSE RETURN CIRCUITS. COMPLETE WITH ALL NECESSARY BRANCH ISOLATION & BALANCING VALVES



Drawings List

- ES 01 TYPICAL BEDROOM MECHANICAL SERVICES
- ES 01 TYPICAL BEDROOM ELECTRICAL SERVICES
- ES 01 SITE PLAN INCOMING SERVICES EX LIGHTING
- ES 01 MCHN SERVICES
- M 01 GF HVAC SERVICES
- M 02 FF HVAC SERVICES
- M 03 SF HVAC SERVICES
- M 04 TF HVAC SERVICES
- M 05 GF / FF WATER SERVICES & DRAINAGE
- M 06 SF / TF WATER SERVICES & DRAINAGE
- M 07 ROOF PLAN PLANT LAYOUT
- M 08 AIR CONDITIONING SCHEMATIC
- M 09 HEATING & VENTILATION SCHEMATIC
- E 01 GF LIGHTING & FIRE ALARM
- E 02 FF LIGHTING & FIRE ALARM
- E 03 SF LIGHTING & FIRE ALARM
- E 04 TF LIGHTING & FIRE ALARM
- E 05 GF / FF POWER & ANCILLARY
- E 06 SF / TF POWER & ANCILLARY
- E 07 ROOF PLAN LIGHTING, POWER & LIGHTNING PROTECTION

GENERAL NOTE

THE DETAILS SHOWN ON THESE DRAWINGS ARE FOR PERFORMANCE SPECIFICATION DUTIES ONLY AND ARE INDICATIVE OF THE SERVICES TO BE DESIGNED, INSTALLED, TESTED AND COMMISSIONED BY THE DESIGN/BUILD CONTRACTOR

THE CONTRACTOR SHALL PRODUCE FULLY COORDINATED WORKING DRAWINGS PRIOR TO PROCUREMENT AND INSTALLATION OF THE SERVICES. THE CONTRACTOR SHALL SUBMIT THE DRAWINGS FOR REVIEW AND COMMENT BY THE PROFESSIONAL TEAM, AND BUILDING CONTROL.

Rev	Description	Date
C	CONTRACT ISSUE	
T	TENDER ISSUE	

client
THE ROYAL BRITISH LEGION

architect
ARMSTRONG BURTON ARCHITECTS

project
ROYAL BRITISH LEGION
WESTON-SUPER-MARE

MK Consulting Engineers Ltd
Building Services Engineering Design & Drafting
Tel: 07702 364 607 | Email: mkcad9@aol.com

Drawing Title
MECHANICAL SERVICES
GROUND FLOOR LEVEL
HEATING, VENTILATION & COOLING SERVICES

Scale	NTS	Drawn	AK
Date		Checked	AK

Drawing Number	Revision
MK/698/SAMPLE	C

Drawing Status
CONTRACT ISSUE