MECHANICAL DRAWING LIST

DWG #	DRAWING NAME	SCALE	NOTES
M000–TI	MECHANICAL LEGEND, DRAWING LIST	N.T.S.	
M101–TI	THIRD FLOOR CONSTRUCTION PLAN – HVAC	1:100	
M201–TI	MECHANICAL EQUIPMENT SCHEDULE & DETAILS	AS SHOWN	
P101–TI	THIRD FLOOR CONSTRUCTION PLAN–PLUMBING & FIRE SUPPRESSION	1:100	

LEGAL DESCRIPTION

PLAN OF SUBDIVISION F (EXCEP THAT PART ROW LANE)
OF LOTS 4 TO 6 PLAN 1246 LOTS 7, 8 AND 9 (EXCEPT THE NORTH 6 FEET, NOW LANE)
THE EASTERLY 26 FEET OF LOTS 10 AND 11; THE WEST 25 FEET OF THE EAST 51 FEET
OF LOTS 10 AND 11; THE WEST 80 FEET OF LOT 10; THE WEST 80 FEET OF LOT 11;
LOT 12 (EXCEPT THE NORTH 6 FEET, NOW LANE)
PLAN 462
ALL OF BLOCK 28
DISTRICT LOT 302, GROUP 1, NEW WESTMINSTER DISTRICT

CIVIL ADDRESS

125 EAST 10TH AVE, VANCOUVER, BC

GENERAL NOTES:

1. PROVIDE OPENINGS IN NEW FULL–HEIGHT WALLS FOR EXISTING DUCTWORK, PIPES AND CONDUIT TO PASS THROUGH. SEAL AROUND PENETRATIONS FOR SOUND ATTENUATION AND SMOKE/FIRE SEPARATION AS REQUIRED.
2. PROVIDE INSULATION ON NEW SUPPLY, RETURN AIR DUCT. PROVIDE INSULATION FOR THE EXHAUST AIR DUCTWORK FOR THE FIRST 5m.
3. WHERE EXISTING DIFFUSERS ARE RELOCATED TO OPPOSITE SIDE OF EXISTING DUCT TAP ON SUPPLY MAINS, A NEW DUCT TAP WILL BE PROVIDED FOR CONNECTION.
4. UPON COMPLETION OF INSTALLATION, REBALANCE DIFFUSERS TO INDICATED AIR FLOW AND SUBMIT AIR BALANCING REPORT.
5. ALL FAULTY OR NON–COMPLYING DUCT CONNECTIONS ON EXISTING DIFFUSER RUNOUTS TO BE UPGRADED TO MEET INSTALLATION STANDARDS.
6. CONTRACTOR TO CO–ORDINATE TEMP. SENSOR LOCATION WITH ARCHITECT TO AVOID INSTALLATION OVER DIMMER SWITCHES OR HEAT EMITTING DEVICES PRIOR TO INSTALLATION.
7. CONTRACTOR TO ENSURE ALL TEMP. SENSOR & COVERS ARE PROTECTED FROM DAMAGE. REPORT ANY DAMAGED TEMP. SENSOR TO ENGINEER PRIOR TO START OF WORK. ALLOW TO REPLACE IN PRICING.
8. TEMP. SENSOR ARE TO BE CHECKED FOR PROPER OPERATION AND ARE TO BE CALIBRATED. DAMAGED TEMP. SENSOR & COVERS TO BE REPORTED TO ENGINEER FOR REPLACEMENT BY BUILDING OPERATIONS STAFF.
9. LOCATION OF EXISTING EQUIPMENT SHOWN ON THIS DRAWING IS FOR INFORMATION ONLY. CONTRACTOR SHOULD REVIEW AND CHECK THE EXACT LOCATION, SIZE, ELEVATION AND INVERT OF ALL EXISTING EQUIPMENT AND PIPING ON SITE PRIOR TO COMMENCING WITH WORK.
10. MODIFY THE SIZE AND ROUTING OF NEW DUCTWORK AS REQUIRED TO SUIT THE SITE CONDITION WITHOUT EXTRA COST TO THE OWNER. PROVIDE ADEQUATE OFFSETS, AND TRANSITIONS ON NEW DUCTWORK AS REQUIRED TO SUIT SITE CONDITIONS. CAPTURE ALL VARIATIONS ON AS BUILT DRAWINGS. SUBMIT AS–BUILT DRAWINGS ON COMPLETION OF PROJECT.
11. PATCH AND MAKE GOOD DAMAGED CEILING, WALL, AND FLOOR FOR NEW MECHANICAL WORK. REPLACE ANY DAMAGED AND/OR CUT CEILING TILE.
12. SEISMICALLY RESTRAIN ALL RELOCATED AND NEW MECHANICAL EQUIPMENT, FANS, DIFFUSERS AND ANY OTHER CEILING EQUIPMENT.
13. PROVIDE BALANCING DAMPER TO EACH TAKE OFF.
14. CONTRACTOR TO REVISE TEMP. SENSOR ZONING AS SHOWN ON DRAWING. ALL TEMP. SENSOR TO BE CALIBRATED AND CALIBRATON REPORT SUBMITTED PRIOR TO PROJECT COMPLETION.
15. FIRE STOP ALL PENETRATIONS THROUGH FIRE RATED WALLS OR SLABS.
16. CONTACT THE BUILDING ENGINEER FOR ALL WORK AFFECTING BASE BUILDING HVAC, PLUMBING OR LIFE SAFETY SYSTEMS.
17. ALL EXISTING/NEW SPRINKLER HEADS SHALL BE TO SUIT FINAL FINISHED CEILING PLAN AND ELEVATIONS. CONTRACTOR SHALL CONFIRM CEILING ELEVATIONS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL PROVIDE ALL ADDITIONAL SPRINKLERS AS MAY BE REQUIRED. NO EXTRA COST WILL BE CONSIDERED BASED ON FAILURE OF THE CONTRACTOR TO ALLOW FOR EXTRA SPRINKLERS AS REQUIRED DURING CONSTRUCTION TO CONFORM TO ALL NFPA REQUIREMENTS AND THE AUTHORITY HAVING JURISDICTION, WHETHER SHOWN ON THE DRAWINGS OR NOT.
18. NEW SWAY BRACING AND PIPE BRACING SHALL BE ADDED AND EXISTING BRACING REVISED/UPGRADED ACCORDINGLY TO MEET REQUIREMENTS SET OUT IN NFPA NO. 13. PIPE HANGERS AND SWAY BRACING LOCATION SUBJECT TO CITY APPROVAL.
19. ALL MATERIAL TO BE USED SHALL BE "NEW" AND ULC LISTED FOR FIRE PROTECTION SYSTEMS. INSTALLATION OF MATERIALS SHALL BE BY APPROVED CONTRACTOR.
20. WORK & MATERIAL SHALL COMPLY WITH THE NATIONAL BUILDING CODE, NFPA 13, AND THE CITY BY LAW.
21. GIVE NOTICES, OBTAIN PERMIT AND PAY FEES SO WORK SPECIFIED MAY BE CARRIED OUT.
22. THE QUALITY OF WORKMANSHIP AND MATERIAL SHALL MATCH OR EXCEED THE BASE BUILDING STANDARD. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CODE INCLUDING SEISMIC RESTRAINT OF MECHANICAL SYSTEM COMPONENTS.
23. FLEXIBLE DUCTWORK SHALL BE EQUAL TO THERMAFLEX TYPE S–LP–10. FLEX DUCT CONNECTIONS SHALL BE CLAMPED. MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 1m.
24. ALL NEW AND EXISTING MECHANICAL EQUIPMENTS SHALL BE BALANCED AND COMMISSIONED.
25. PROVIDE CLEANING FOR THE ALL EXISTING AND NEW DUCTS, HVAC EQUIPMENT ETC., SEE MECHANICAL SPEC. FOR DETAIL.
26. PROVIDE FLUSHING/CLEANING AND BALANCING FOR THE EXISTING HYDRONIC HEATING SYSTEM, SEE MECHANICAL SPEC. FOR DETAIL.
27. CONTRACTOR TO CHECK EXISTING DUCTS, INSULATION, REPORT DEFECTS TO DEPARTMENT REPRESENTATIVE AND PROVIDE REPLACEMENT COSTS.
28. CONTRACTOR TO CHECK EXISTING HYDRONIC HEATING SYSTEM, REPORT DEFECTS TO DEPARTMENT REPRESENTATIVE AND PROVIDE REPLACEMENT COSTS.
29. RE–COMMISSION SYSTEM WHERE MECHANICAL EQUIPMENT HAVE BEEN RENOVATED.
30. NEW CONTROL COMPONENTS ADDED TO THE EXISTING DDC CONTROL SYSTEM MUST BE FULLY COMPATIBLE WITH THE EXISTING DDC CONTROL SYSTEM.
31. CONTRACTOR TO ALLOW ADDITIONAL COST FOR EXISTING DDC SERVICE PROVIDER (ESC) TO UPDATE EXISTING DDC CONTROL PROGRAM.
32. REMOVE ALL REDUNDANT AND ABANDONED CONTROLS WIRING.
33. ASBESTOS WILL BE REMOVED BY OTHERS. SEE ARCH. DRAWING FOR DETAIL.
34. REPLACE ALL EXISTING DRY SPRINKLER HEADERS IN PENTHOUSE MECHANICAL ROOM WHICH WERE RECALLED TO COMPLY WITH NFPA–13.
35. REPLACE ALL EXISTING DRY SPRINKLER HEADERS IN PARKADE AND BASEMENT ETC. WHICH ARE OVER 50 YEARS OLD TO COMPLY WITH NFPA–13.

LEGEND (HVAC)

ABBREVIATIONS

AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
A/P	ACCESS PANEL
BD	BALANCE DAMPER
SP	STATIC PRESSURE
PD	PRESSURE DROP
VAV	VARIABLE AIR VOLUME
WMS	WIRE MESH SCREEN
(CE)	CONNECT TO EXISTING
(RE)	REMOVE EXISTING
(REL)	RELOCATE EQUIPMENT
(ETR)	EXISTING TO REMAIN

GENERAL – H.V.A.C.

MD / 65C	MECHANICAL DETAIL DETAIL NO. (SPEC. SECTION 15950)
3 / M31	DETAIL NO. ON SHEET NO.
HC–12	EQUIPMENT
10	NOTE NO.
2	DRAWING REVISION NO.
E / M–6	SECTION NO. ON SHEET NO.
A / – DETAIL SCALE: 1:50	DETAIL NO. FROM SHEET NO.
A / – SECTION SCALE: 1:50	SECTION NO. FROM SHEET NO.
#	AIR VOLUME (L/S)

CONTROL AND INSTRUMENTATION - HVAC

- STEM & DIAL THERMOMETERS
- PRESS./TEMP. SENSORS
- MOTORIZED AIR DAMPER
- PRESSURE MEASURING DEVICE
- CO_2 SENSOR
- BACKDRAFT DAMPER
- FLOW MEASURING DEVICE
- FLOW SWITCH SENSOR
- MOTORIZED DAMPER
- THERMOSTAT/ROOM SENSOR
- HUMIDISTAT
- CONTROL SWITCH
- TIME CLOCK

DUCTWORK

- ACOUSTIC LINED DUCT, THICKNESS AS NOTED EXCEPT FOR DEFAULT THICKNESS (SEE SPEC)
- FLEXIBLE CONNECTION
- ROUND DUCT RIGID TO FLEXIBLE (RIGID / FLEXIBLE)
- ACCESS PANEL (A/P)
- FIRE DAMPER IN HORIZONTAL DUCT (F.D.)
- FIRE DAMPER IN VERTICAL DUCT, PLAN & ELEVATION (F.D.)
- AIR TRANSFER OPENING, SIZE AS NOTED (T.O. 300x200)
- DOOR UNDERCUT (UC)
- SUPPLY DUCT TOWARD, AWAY
- RETURN OR TRANSFER DUCT TOWARD, AWAY
- ROUND DUCT TOWARD, AWAY
- OUTDOOR AIR DUCT (O/A)
- SUPPLY AIR DUCT (S/A)
- RETURN AIR DUCT (R/A)
- EXHAUST AIR DUCT (E/A)
- BRANCH TAKEOFF SQUARE–>SQUARE
- BRANCH TAKEOFF SQUARE–>ROUND
- BRANCH TAKEOFF ROUND–>ROUND
- RELOCATE EXISTING DIFFUSER (R)
- DUCT DIMENSION (e.g. 250 DIA.) IN SINGLE–LINE DUCT (250ø)
- DUCT DIMENSIONS, SIDE FACING X DEPTH (500X400)
- DUCT TRANSITION, SINGLE LINE DUCT
- SQUARE ELBOW WITH MULTI–BLADE TURNING VANES
- BALANCING DAMPER
- MOTORIZED DAMPER
- DOOR GRILLE, DIMENSIONS & TYPE (DG) AS SCHEDULED
- AIR TERMINAL: 2@ – NO. REQUIRED (IF MORE THAN 1) B1 – TYPE (AS SCHEDULED) 150 – VOLUME, L/S OR CFM 600x200 – SIZE
- EXISTING SUPPLY DUCT TOWARD, AWAY
- EXISTING RETURN OR TRANSFER DUCT TOWARD, AWAY
- EXISTING ROUND DUCT TOWARD, AWAY
- EXISTING OUTDOOR AIR DUCT
- EXISTING SUPPLY AIR DUCT
- EXISTING RETURN AIR DUCT
- EXISTING EXHAUST AIR DUCT
- EXISTING MOTORIZED DAMPER
- EXISTING BRANCH TAKEOFF SQUARE–>SQUARE
- EXISTING BRANCH TAKEOFF SQUARE–>ROUND
- EXISTING BRANCH TAKEOFF ROUND–>ROUND

LEGEND (PIPING)

- PIPE CAP
- PIPE BREAK
- FLOW ARROW
- PIPING ELBOW DOWN
- PIPING ELBOW UP
- PIPING TEE UP
- PIPING TEE DOWN
- PIPING TEE
- GATE VALVE, ISOLATION VALVE
- GLOBE VALVE
- PRESSURE REDUCING VALVE
- CHECK VALVE
- BALL VALVE
- CIRCUIT BALANCING VALVE C/W PRESSURE PORTS
- Y STRAINER
- PRESSURE GAUGE AND COCK
- AIR VENT – MANUAL RADIATOR TYPE (AV)
- AUTOMATIC AIR VENT – HIGH CAPACITY (AAV)
- ANCHORS, PIPE GUIDES, EXPANSION JOINT
- DOMESTIC COLD WATER (DCW)
- DOMESTIC HOT WATER (DHW)
- DOMESTIC HOT WATER RECIRC. (DHR)
- EXISTING DOMESTIC COLD WATER (DCW)
- EXISTING DOMESTIC HOT WATER (DHW)
- EXISTING DOMESTIC HOT WATER RECIRC. (DHR)
- UNION CONNECTION WITH CONCENTRIC REDUCER TO MATCH LINE SIZE
- UNION CONNECTION
- FLANGED CONNECTION
- ORIFICE PLATE
- FLEXIBLE CONNECTOR
- EXPANSION JOINT
- GUIDE
- INTERMEDIATE ANCHOR
- MANUAL AIR VENT
- THERMOMETER
- BACKFLOW PREVENTER, DOUBLE CHECK TYPE
- METER
- FLOW SWITCH
- PUMP (REFER TO SCHEDULE)
- MOTORIZED AIR DAMPER
- RELIEF (R) OR SAFETY (S) VALVE
- ANGLE GATE VALVE (WITHOUT ACTUATOR)
- PLUMBING FIXTURE TAG (REFER TO SCHEDULE) (TYPE / QUANTITY)
- PLUMBING FIXTURES
- TWO–WAY CONTROL VALVE
- THREE–WAY CONTROL VALVE

LEGEND (FIRE SUPRESSION)

- DRY SPRINKLER
- SIDEWALL SPRINKLER
- PENDANT SPRINKLER (N)
- SPRINKLER LINE
- RELOCATE EXISTING SPRINKLER HEAD (R)
- EXISTING DRY SPRINKLER
- EXISTING SIDEWALL SPRINKLER
- EXISTING PENDANT SPRINKLER
- EXISTING SPRINKLER LINE

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Project title/Titre du projet
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PHASE 3
3rd FLOOR WEST TI

125 EAST 10TH AVENUE
VANCOUVER, BC

Consultant Signature Only
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