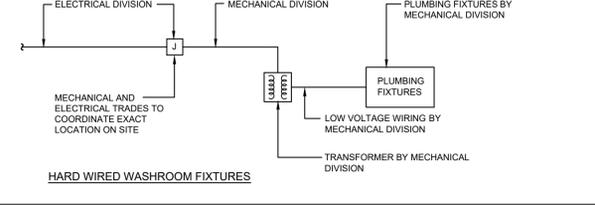
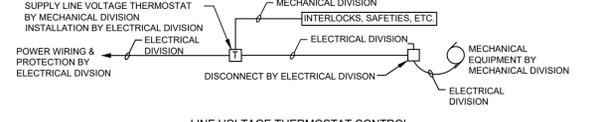
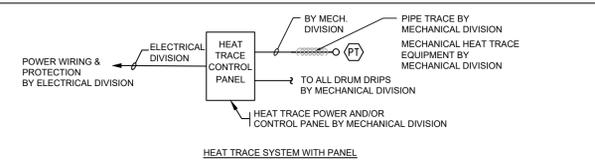
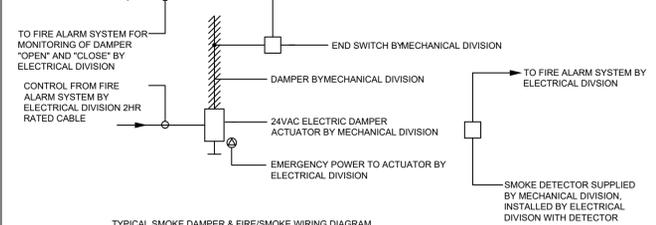
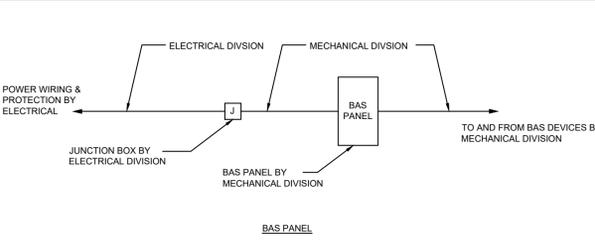
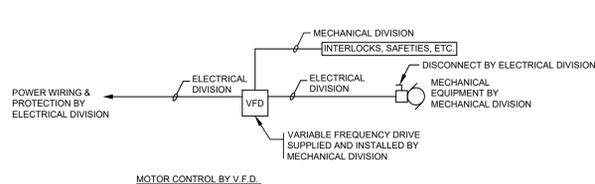
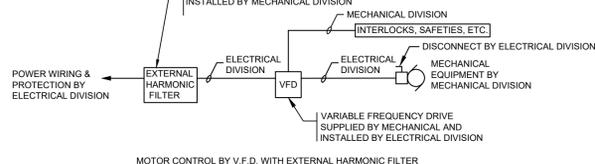
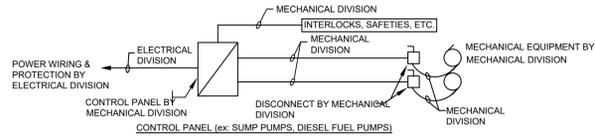


**SCOPE OF WORK FOR MECHANICAL EQUIPMENT**



MECHANICAL LEGEND		EXISTING DEVICES ARE TONED:
	SUPPLY OR OUTSIDE AIR DUCT (UP / DOWN)	
	RETURN AIR DUCT (UP / DOWN)	
	EXHAUST AIR DUCT (UP / DOWN)	
	DAMPER DF - FIRE DG - GRAVITY BACKDRAFT DA - AUTOMATIC W/ OPERATOR DFS - FIRE/SMOKE	DM - MANUAL BALANCING DS - SMOKE
	DOUBLE LINE DUCT - SINGLE LINE DUCT	
	DOUBLE LINE DUCT - SINGLE LINE DUCT WITH LINING AS NOTED	
	DOUBLE LINE DUCT - SINGLE LINE DUCT WITH ACOUSTIC INSULATION	
	DOUBLE LINE DUCT - SINGLE LINE DUCT WITH SILENCER	
	DOUBLE LINE DUCT - SINGLE LINE DUCT WITH FIRE WRAP	
	FLEX DUCT WITH TAKE-OFF C/W MANUAL BALANCING DAMPER	
	RETURN AIR GRILLE	
	EXHAUST GRILLE	
	TRANSFER GRILLE	
	SQUARE DIFFUSER	
	LINEAR DIFFUSER	
	VAV BOX	
	VAV BOX WITH ATTENUATOR	
	MECHANICAL EQUIPMENT AS INDICATED (REVIT)	
	THERMOSTAT	
	TEMPERATURE SENSOR - (DIGITAL)	
	HUMIDITY SENSOR	
	LEAK DETECTOR	
	SPEED CONTROLLER	
	ON/OFF SWITCH - CONTROL SWITCH	
	LINE BREAK	
	FD - FLOOR HD - HUB AD - AREA	FFD - FUNNEL FLOOR GD - GARAGE
	ROOF DRAIN (SIZE)	
	CATCH BASIN MAN HOLE AS INDICATED	
	RUNNING TRAP	
	TD - TRENCH GTD - GARAGE	
	BACKWATER VALVE	
	CLEANOUT - SUSPENDED / CLEANOUT - BURIED	
	HB - HOSE BIB NFB - NON-FREEZE HOSE BIB WH - WALL HYDRANT	
	NON-FREEZE GROUND HYDRANT	
	CAP	
	FIRE EXTINGUISHER	
	FIRE EXTINGUISHER WITH CABINET	

MECHANICAL LEGEND		EXISTING DEVICES ARE TONED:
	ISOLATION VALVE	
	CIRCUIT BALANCING VALVE	
	AUTOMATIC FLOW CONTROL VALVE	
	BALANCING VALVE	
	CHECK VALVE	
	PRESSURE REDUCING VALVE	
	SUPERVISED VALVE	
	(SAFETY) RELIEF VALVE	
	2 OR 3 WAY CONTROL VALVE	
	SOLENOID VALVE	
	SHUT OFF FIRE SAFE VALVE	
	DRAIN VALVE	
	STRAINER	
	UNION	
	AIR VENT	
	FLOW SWITCH	
	PRESSURE GAUGE	PRESSURE WELL
	THERMOMETER	THERMOMETER WELL
	TEMPERATURE GAUGE	
	WATER METER / GAS METER / METER AS NOTED	
	BACKFLOW PREVENTOR	
	PIPE GUIDE / PIPE ANCHOR	
	WALL SLEEVE	
	EXPANSION JOINT	
	ELBOW TURNING DN / TEE OUTLET TURNING DN.	
	ELBOW TURNING UP / TEE OUTLET TURNING UP	
	PIPE END CAPPED	
	RUNNING TRAP	
	HEAT TRACE	
	FLOW ARROW	
	LINE BREAK	
	SAN - SANITARY DRAIN IN CEILING SPACE	
	SAN - SANITARY DRAIN BELOW SLAB	
	SAN.P - SANITARY DRAIN - PUMPED	
	D - INDIRECT DRAIN	
	V - SANITARY VENT	
	ST - STORM DRAIN - SUSPENDED FROM CEILING	
	ST - STORM DRAIN - BURIED (BELOW FLOOR)	
	ST.P - STORM DRAIN - PUMPED	
	DOMESTIC COLD WATER	
	DOMESTIC HOT WATER	
	DOMESTIC HOT WATER RECIRCULATION	
	DOMESTIC HOT WATER - HIGH TEMPERATURE	
	DOMESTIC HOT WATER RECIRC - HIGH TEMPERATURE	
	CWS - CONDENSER WATER - SUPPLY	
	CWR - CONDENSER WATER - RETURN	

MECHANICAL LEGEND		EXISTING DEVICES ARE TONED:
	VAV BOX	
	VAV BOX WITH HEATING COIL	
	FAN POWERED VAV BOX	
	DIFFUSER, REGISTER OR GRILLE TYPE = Sx, Rx, Ex	
	RADIATION OR (RA) RADIANT PANEL	
	CONNECT TO EXISTING	
	EQUIPMENT TAG (REFER TO SCHEDULE)	
	PLUMBING FIXTURE TAG	
	RISER TAG	
	'REFER TO KEYNOTE' NUMBER	
	'REFER TO DETAIL NOTE' NUMBER	
	DENOTES MATCHLINE	
	DENOTES CROSS SECTION DETAIL CALL OUT	
	DENOTES DETAIL CALLOUT	
<b>DEMOLITION</b>		
	R - REMOVE	RL - RELOCATE
	DENOTES EXISTING EQUIPMENT, PIPE, DUCT TO BE 'REMOVED'	
	DENOTES EXISTING EQUIPMENT TO BE 'REMOVED'	
	DENOTES EXISTING EQUIPMENT, PIPE, DUCT TO BE 'RELOCATED'	
<b>EXISTING</b>		
	EXISTING TO REMAIN (TONED)	
	DOMESTIC COLD WATER - HIGH PRESSURE	
	DOMESTIC HOT WATER - HIGH PRESSURE	
	DOMESTIC HOT WATER RECIRC - HIGH PRESSURE	
	CONDENSATE DRAIN	
	CONDENSATE - LOW PRESSURE	
	CONDENSATE - PUMPED	
	MAKEUP WATER	
	STEAM - HIGH PRESSURE	
	STEAM - MEDIUM PRESSURE	
	STEAM - LOW PRESSURE	

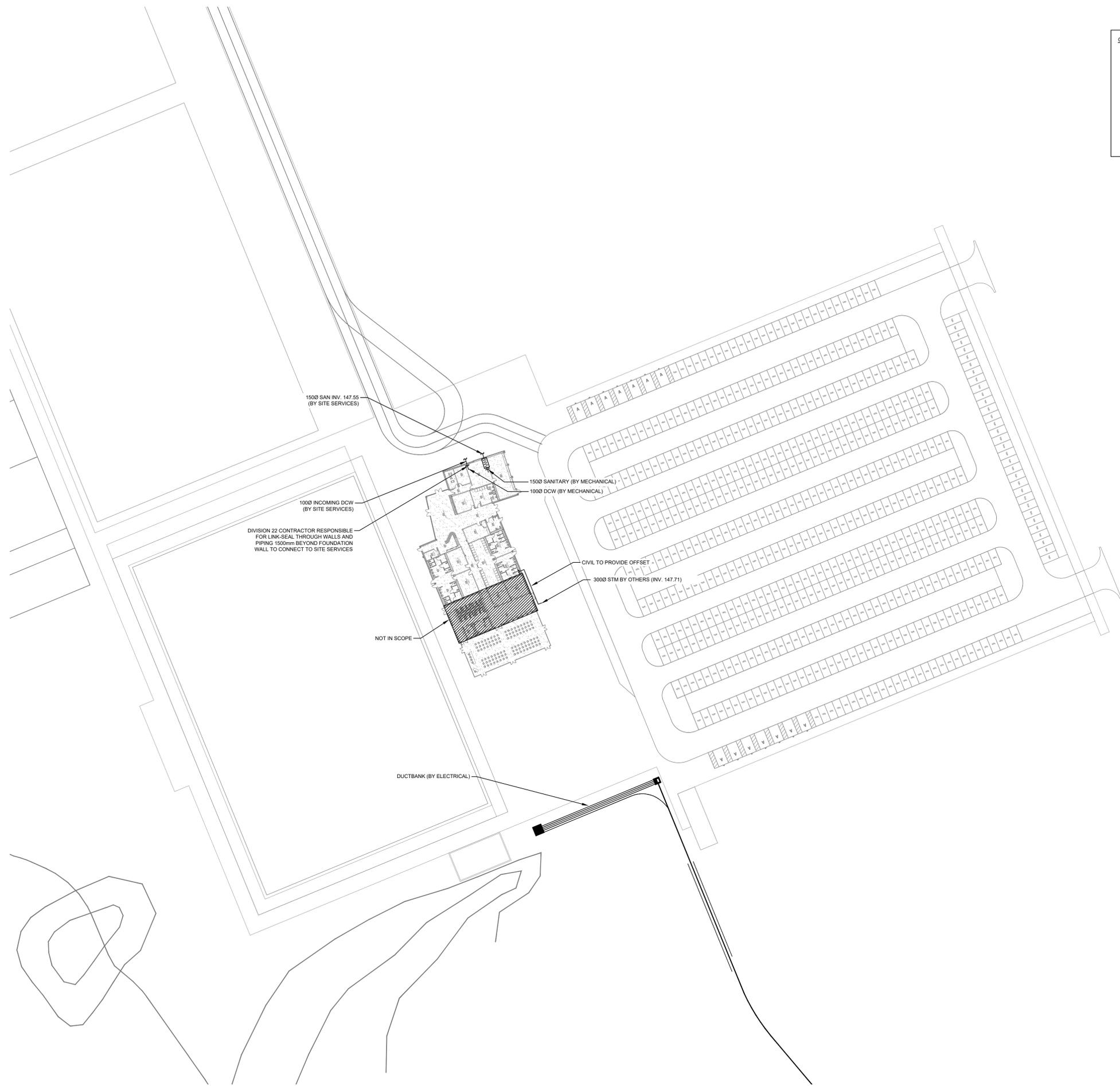
MECHANICAL LEGEND		EXISTING DEVICES ARE TONED:
	OPEN/CLOSE	
	AIR FLOW SENSOR	
	MODULATING	
	FIRE ALARM SYSTEM	
	END SWITCH	
	START/STOP	
	ENABLE/DISABLE	
	HIGH HUMIDITY SENSOR	
	PRESSURE DIFFERENTIAL	
	SMOKE DETECTOR	
	FIRE STAT	
	FREEZE STAT	
	DIGITAL INPUT	
	DIGITAL OUTPUT	
	ANALOGUE INPUT	
	ANALOGUE OUTPUT	
	TEMPERATURE SENSOR	
	FLOW SENSOR	
	PRESSURE SENSOR	
	HUMIDITY SENSOR	

MECHANICAL DRAWING LIST	
DWG. No.	DRAWING TITLE
M-000.0	MECHANICAL LEGEND AND DRAWING LIST - BASE SCOPE
M-011.0	SITE PLAN - BASE SCOPE
M-110.0	EAST VSTS BELOW GRADE GAME PLUMBING & DRAINAGE - BASE SCOPE
M-111.0	EAST VSTS GROUND FLOOR GAME PLUMBING & DRAINAGE - BASE SCOPE
M-112.0	EAST VSTS ROOF GAME PLUMBING & DRAINAGE - BASE SCOPE
M-113.0	EAST VSTS BELOW GRADE LEGACY PLUMBING & DRAINAGE - BASE SCOPE
M-114.0	EAST VSTS GROUND FLOOR LEGACY PLUMBING & DRAINAGE - BASE SCOPE
M-115.0	EAST VSTS ROOF LEGACY PLUMBING & DRAINAGE - BASE SCOPE
M-211.0	EAST VSTS GROUND FLOOR GAME FIRE PROTECTION - BASE SCOPE
M-311.0	EAST VSTS GROUND FLOOR GAME HVAC - BASE SCOPE
M-312.0	EAST VSTS ROOF GAME HVAC - BASE SCOPE
M-313.0	EAST VSTS GROUND LEGACY FLOOR HVAC - BASE SCOPE
M-411.0	EAST VSTS GROUND FLOOR GAME HVAC PIPING - BASE SCOPE
M-412.0	EAST VSTS ROOF GAME HVAC PIPING - BASE SCOPE
M-413.0	EAST VSTS GROUND LEGACY FLOOR HVAC PIPING - BASE SCOPE
M-500.0	EAST VSTS MECHANICAL PART PLAN - BASE SCOPE
M-600.0	EAST VSTS HEATING AND COOLING SCHEMATIC - BASE SCOPE
M-601.0	EAST VSTS HVAC AIRSIDE SCHEMATIC - BASE SCOPE
M-602.0	EAST VSTS DOMESTIC WATER GAME SCHEMATIC - BASE SCOPE
M-603.0	EAST VSTS HVAC SANITARY GAME SCHEMATIC - BASE SCOPE
M-604.0	EAST VSTS HVAC STORM SCHEMATIC - BASE SCOPE
M-605.0	EAST VSTS DOMESTIC WATER LEGACY SCHEMATIC - BASE SCOPE
M-606.0	EAST VSTS HVAC SANITARY LEGACY SCHEMATIC - BASE SCOPE
M-700.0	CONTROLS SCHEMATICS - BASE SCOPE
M-800.0	MECHANICAL SCHEDULES I - BASE SCOPE
M-801.0	MECHANICAL SCHEDULES II - BASE SCOPE
M-802.0	MECHANICAL SCHEDULES III - BASE SCOPE
M-900.0	MECHANICAL DETAILS I - BASE SCOPE
M-901.0	MECHANICAL DETAILS II - BASE SCOPE

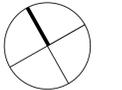




- GENERAL NOTES:**
1. NEW SERVICE CONNECTION LOCATIONS AND INVERTS SHALL BE AS SPECIFIED BY THE CIVIL ENGINEER, REFER TO CIVIL DRAWINGS FOR COORDINATION. MECHANICAL SCOPE OF WORK TO BEGIN 1500MM OUT FROM THE FOUNDATION WALL.
  2. SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
  3. ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
  4. MECHANICAL CONTRACTOR SHALL PROVIDE SCHEDULE 40 SLEEVES AND LINK SEALS FOR ALL SITE SERVICES.
  5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INVERTS AND COORDINATION WITH SITE SERVICES AND STRUCTURAL ELEMENTS.
  6. PROVIDE ELECTRIC PIPE TRACING ON ALL PIPING SUBJECT TO FREEZING OR IN UNHEATED SPACES.
  7. WATER METER WILL BE RELOCATED FROM THE BUNKER ITO THE BUILDING DURING CONSTRUCTION.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR PROGRESS	2024-11-16
ISSUED FOR PROGRESS	2024-09-02
ISSUED FOR PROGRESS	2024-06-15
Revision	001



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
 Address: 56 Centennial Park Rd. Toronto, ON  
**EAST VSTS SITE PLAN - BASE SCOPE**

project no. : 2024-0112  
 scale : 1:600  
 date :

drawing no. : **M-011.0**

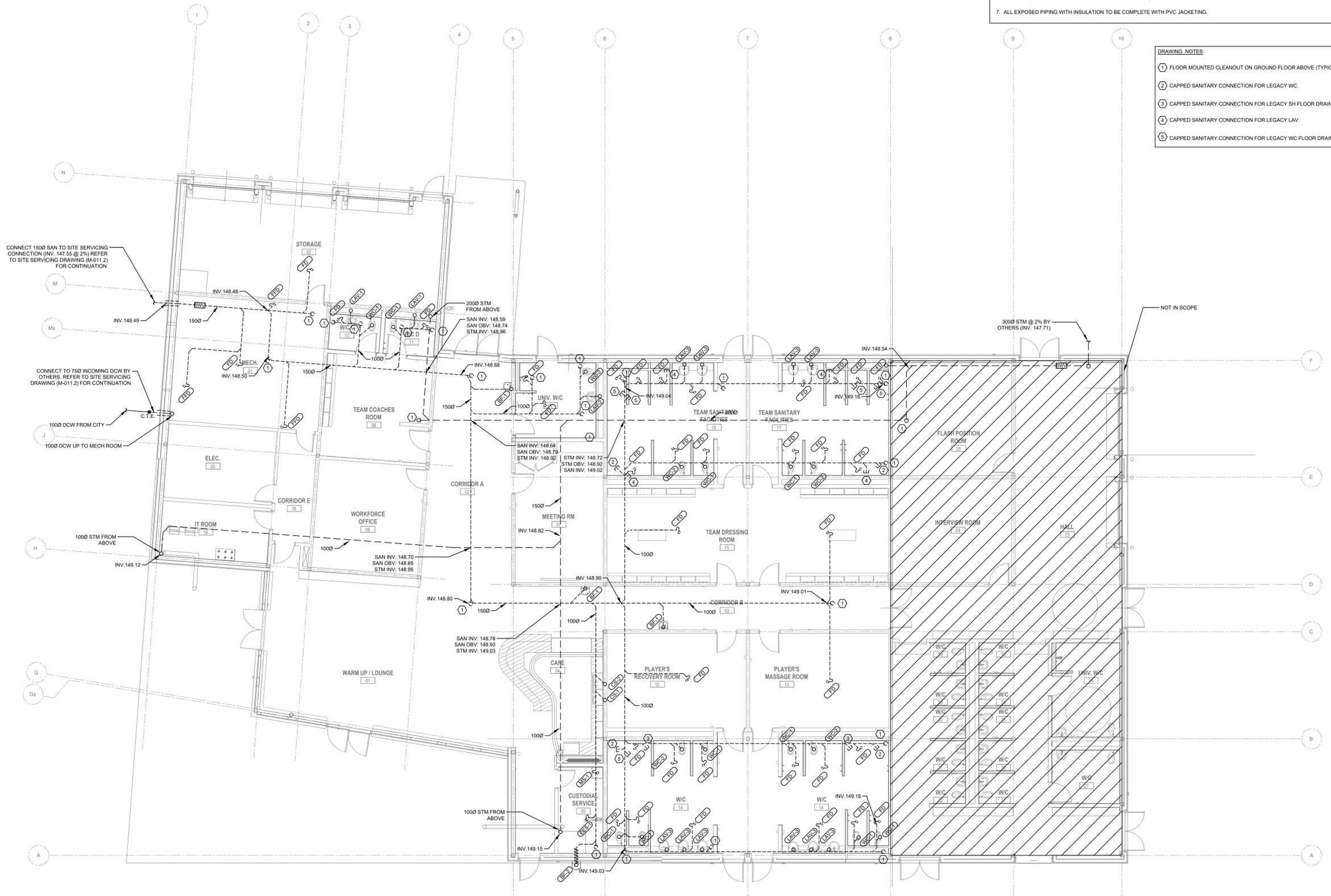


**GENERAL NOTES:**

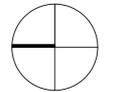
- SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
- ALL FOUNDATION PLUMBING TO BE PVC.
- PROVIDE COMPLETE SANITARY VENT SYSTEM IN ACCORDANCE WITH THE OBC.
- PROVIDE CLEANOUTS ON ALL DRAINAGE AND WASTE SYSTEMS, NOT LIMITED TO CLEANOUTS SHOWN ON THE DRAWINGS.
- ALL FLOOR DRAIN P-TRAPS SHALL BE PRIMED FROM A CENTRAL ELECTRONIC TRAP SEAL PRIMER. DIVISION 22 CONTRACTOR MUST COORDINATE WITH ELECTRICAL TRADE FOR CIRCUIT LOCATIONS DURING SHOP DRAWING STAGE, OTHERWISE DIVISION 22 TRADE WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH CIRCUIT WIRING.
- ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.

**DRAWING NOTES:**

- FLOOR MOUNTED CLEANOUT ON GROUND FLOOR ABOVE (TYPICAL).
- CAPPED SANITARY CONNECTION FOR LEGACY WC.
- CAPPED SANITARY CONNECTION FOR LEGACY SH FLOOR DRAIN.
- CAPPED SANITARY CONNECTION FOR LEGACY LAV.
- CAPPED SANITARY CONNECTION FOR LEGACY WC FLOOR DRAIN.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-22
ISSUED FOR PROGRESS	2024-08-15
Revision	020



FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd, Toronto, ON

EAST VSTS BELOW GRADE GAME  
PLUMBING & DRAINAGE -  
BASE SCOPE

project no. : 2024-0112  
scale : 1:100  
date :

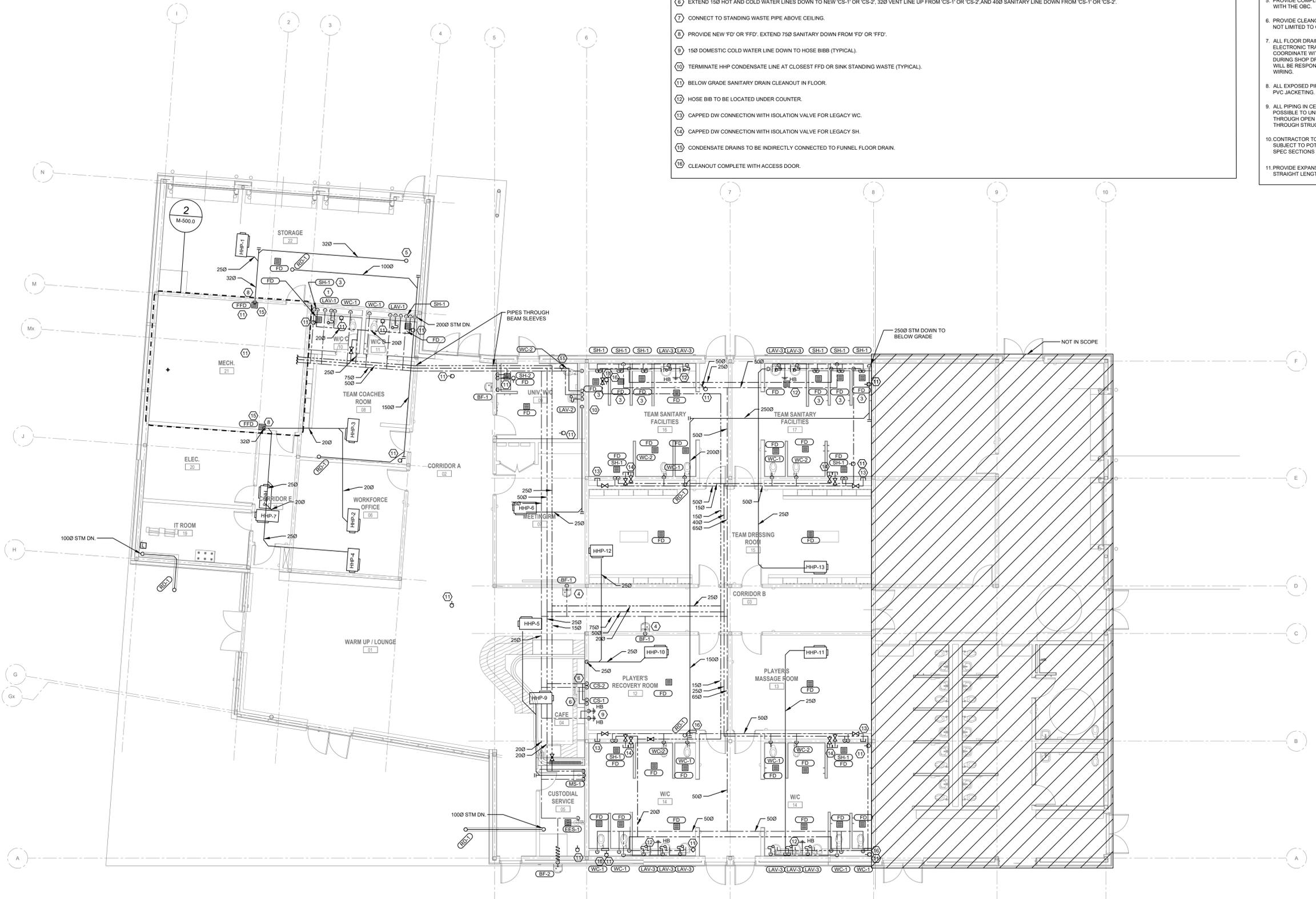
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**M-110.0**

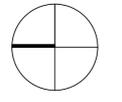


- DRAWING NOTES:**
- 1 EXTEND 150 HOT AND COLD WATER LINES DOWN TO NEW 'LAV-1', 'LAV-2', OR 'LAV-3', 320 VENT LINE UP FROM 'LAV-1', 'LAV-2', OR 'LAV-3', AND 400 SANITARY LINE DOWN FROM 'LAV-1', 'LAV-2', OR 'LAV-3' (TYPICAL).
  - 2 EXTEND 250 COLD WATER LINE DOWN TO NEW 'WC-1' OR 'WC-2', 500 VENT LINE UP FROM 'WC-1' OR 'WC-2', AND 750 SANITARY LINE DOWN FROM 'WC-1' OR 'WC-2' (TYPICAL).
  - 3 EXTEND 150 HOT AND COLD WATER LINES DOWN TO NEW 'SH-1' OR 'SH-2' AND 320 VENT LINE UP FROM 'SH-1' OR 'SH-2' (TYPICAL).
  - 4 PROVIDE NEW BOTTLE FILLER, 'BF-1' AS SPECIFIED. EXTEND NEW 150 COLD WATER LINE TO NEW BOTTLE FILLER 'BF-1', 320 VENT LINE UP FROM 'BF-1', AND 400 SANITARY LINE DOWN FROM 'BF-1' (TYPICAL).
  - 5 CONDENSATE DRAIN DOWN FROM MUA-1 ON ROOF.
  - 6 EXTEND 150 HOT AND COLD WATER LINES DOWN TO NEW 'CS-1' OR 'CS-2', 320 VENT LINE UP FROM 'CS-1' OR 'CS-2', AND 400 SANITARY LINE DOWN FROM 'CS-1' OR 'CS-2'.
  - 7 CONNECT TO STANDING WASTE PIPE ABOVE CEILING.
  - 8 PROVIDE NEW 'FD' OR 'FFD'. EXTEND 750 SANITARY DOWN FROM 'FD' OR 'FFD'.
  - 9 150 DOMESTIC COLD WATER LINE DOWN TO HOSE BIBB (TYPICAL).
  - 10 TERMINATE HHP CONDENSATE LINE AT CLOSEST FFD OR SINK STANDING WASTE (TYPICAL).
  - 11 BELOW GRADE SANITARY DRAIN CLEANOUT IN FLOOR.
  - 12 HOSE BIB TO BE LOCATED UNDER COUNTER.
  - 13 CAPPED DW CONNECTION WITH ISOLATION VALVE FOR LEGACY WC.
  - 14 CAPPED DW CONNECTION WITH ISOLATION VALVE FOR LEGACY SH.
  - 15 CONDENSATE DRAINS TO BE INDIRECTLY CONNECTED TO FUNNEL FLOOR DRAIN.
  - 16 CLEANOUT COMPLETE WITH ACCESS DOOR.

- GENERAL NOTES:**
1. SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
  2. CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL SERVICE AND DEVICES.
  3. ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
  4. ALL FOUNDATION PLUMBING TO BE PVC.
  5. PROVIDE COMPLETE SANITARY VENT SYSTEM IN ACCORDANCE WITH THE OBC.
  6. PROVIDE CLEANOUTS ON ALL DRAINAGE AND WASTE SYSTEMS, NOT LIMITED TO CLEANOUTS SHOWN ON THE DRAWINGS.
  7. ALL FLOOR DRAIN P-TRAPS SHALL BE PRIMED FROM A CENTRAL ELECTRONIC TRAP SEAL PRIMER. DIVISION 22 CONTRACTOR MUST COORDINATE WITH ELECTRICAL TRADE FOR CIRCUIT LOCATIONS DURING SHOP DRAWING STAGE. OTHERWISE DIVISION 22 TRADE WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH CIRCUIT WIRING.
  8. ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  9. ALL PIPING IN CEILING SPACE SHALL BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF ROOF. WHERE POSSIBLE, RUN PIPES THROUGH OPEN WEB JOISTS. COORDINATE OPENINGS FOR PIPES THROUGH STRUCTURAL BEAMS WITH STRUCTURAL, AS REQUIRED.
  10. CONTRACTOR TO PROVIDE THRUST RESTRAINTS ON ALL PIPING SUBJECT TO POTENTIAL HYDROSTATIC HEAD AS OUTLINED IN SPEC SECTIONS 22 13 16 AND 22 14 16.
  11. PROVIDE EXPANSION LOOP FOR HYDRONIC PIPING FOR ANY STRAIGHT LENGTH OF 100FT OR GREATER.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR PROGRESS	2024-08-15
Revision	020



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
Address: 56 Centennial Park Rd, Toronto, ON

**EAST VSTS GROUND FLOOR**  
**GAME PLUMBING & DRAINAGE**  
**- BASE SCOPE**

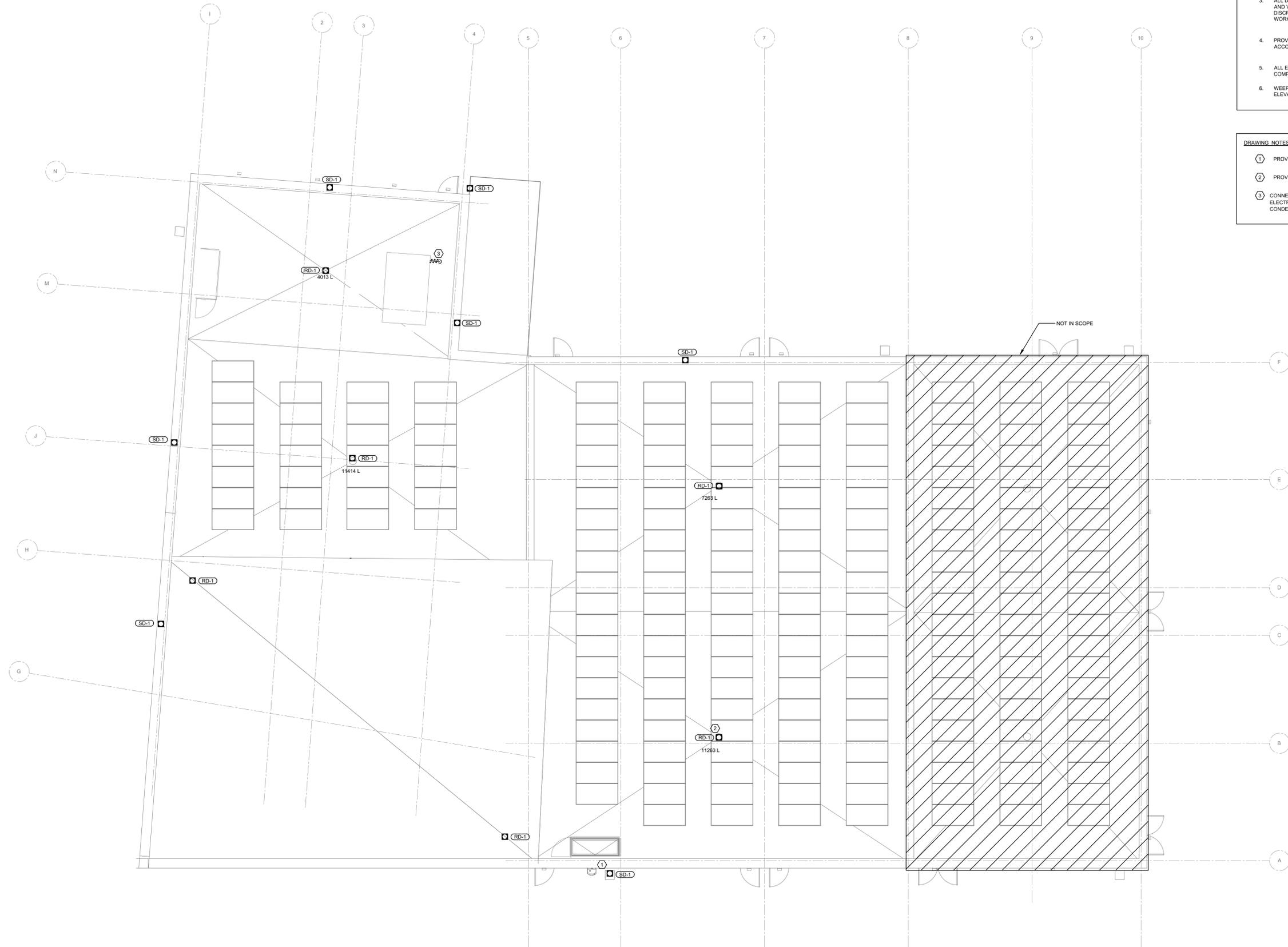
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scale : 1:100  
date :

drawing no. : **M-111.0**

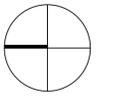


- GENERAL NOTES:**
- SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
  - CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL SERVICE AND DEVICES.
  - ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
  - PROVIDE COMPLETE SANITARY VENT SYSTEM IN ACCORDANCE WITH THE OBC.
  - ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  - WEEPING TILE AND CONSTRUCTION OF WATERTIGHT ELEVATOR SHAFT BY OTHERS. (BELOW GRADE ONLY)

- DRAWING NOTES:**
- PROVIDE SCUPPER DRAIN. (TYPICAL)
  - PROVIDE ROOF DRAIN. (TYPICAL)
  - CONNECT 320 DRAIN TO MUA-1. DRAIN LINES SHALL BE ELECTRICALLY HEAT TRACED ON ROOF. CONFIRM CONDENSATE DRAIN CONNECTION TO MUA-1 ON SITE.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR PROGRESS	2024-11-06
ISSUED FOR PROGRESS	2024-09-02
ISSUED FOR PROGRESS	2024-06-15
Revision	001



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
 Address: 56 Centennial Park Rd. Toronto, ON

**EAST VSTS ROOF GAME**  
**PLUMBING & DRAINAGE -**  
**BASE SCOPE**

project no. : 2024-0112  
 scale : 1:100  
 date :

drawing no. : **M-112.0**

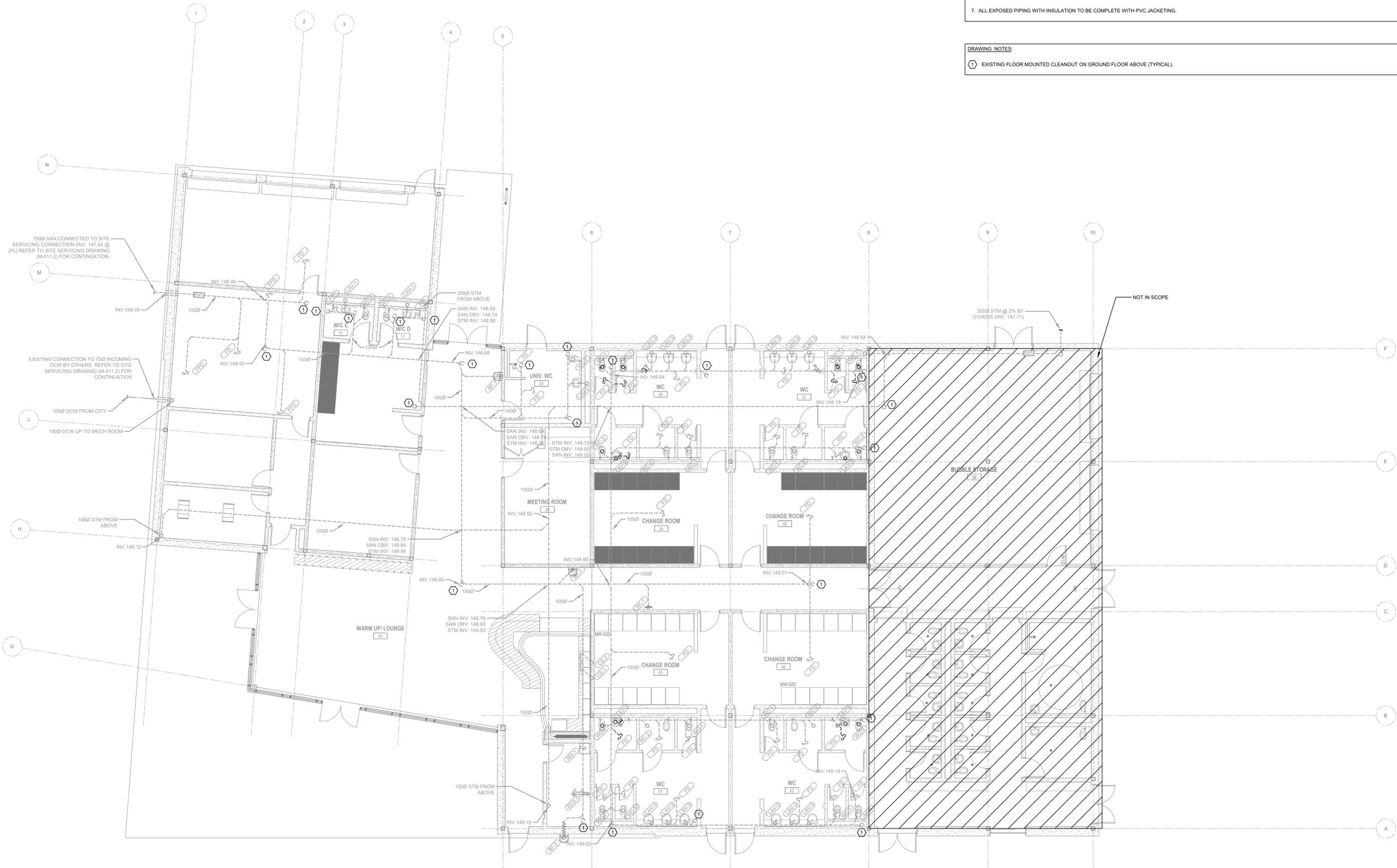


**GENERAL NOTES:**

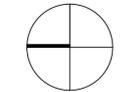
- SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
- ALL FOUNDATION PLUMBING TO BE PVC.
- PROVIDE COMPLETE SANITARY VENT SYSTEM IN ACCORDANCE WITH THE OBC.
- PROVIDE CLEANOUTS ON ALL DRAINAGE AND WASTE SYSTEMS, NOT LIMITED TO CLEANOUTS SHOWN ON THE DRAWINGS.
- ALL FLOOR DRAIN P-TRAPS SHALL BE PRIMED FROM A CENTRAL ELECTRONIC TRAP SEAL PRIMER. DIVISION 22 CONTRACTOR MUST COORDINATE WITH ELECTRICAL TRADE FOR CIRCUIT LOCATIONS DURING SHOP DRAWING STAGE, OTHERWISE DIVISION 22 TRADE WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH CIRCUIT WIRING.
- ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.

**DRAWING NOTES:**

① EXISTING FLOOR MOUNTED CLEANOUT ON GROUND FLOOR ABOVE (TYPICAL).



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-06
ISSUED FOR PROGRESS	2024-08-22
ISSUED FOR PROGRESS	2024-08-15
revision	020



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
Address: 56 Centennial Park Rd, Toronto, ON

**EAST VSTS BELOW GRADE**  
**LEGACY PLUMBING & DRAINAGE - BASE SCOPE**

project no. : 2024-0112  
scale : 1:100  
date :

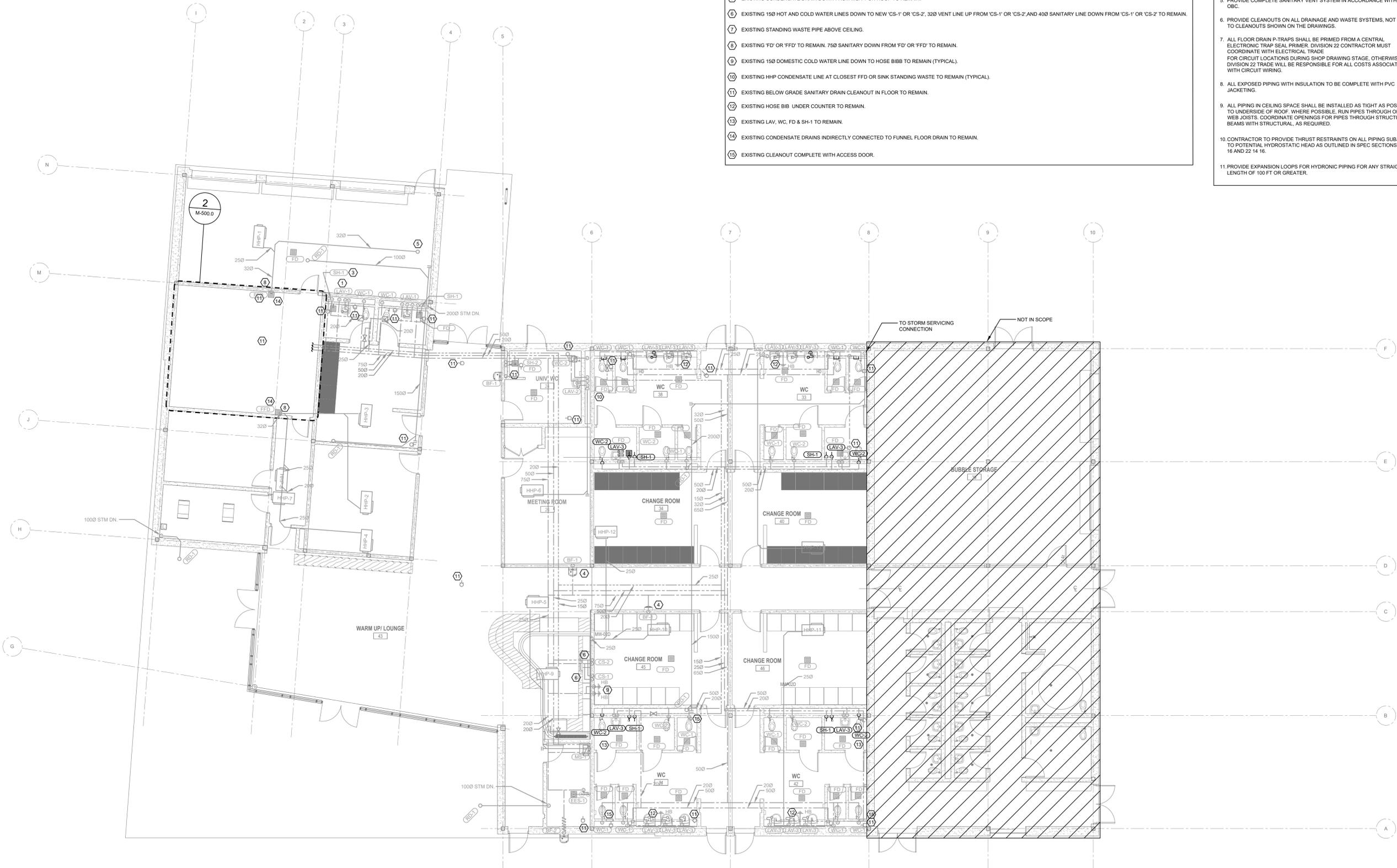
drawing no. :

**M-113.0**



- DRAWING NOTES:**
- EXISTING 150 HOT AND COLD WATER LINES DOWN TO 'LAV-1', 'LAV-2', OR 'LAV-3', 320 VENT LINE UP FROM 'LAV-1', 'LAV-2', OR 'LAV-3', AND 400 SANITARY LINE DOWN FROM 'LAV-1', 'LAV-2', OR 'LAV-3' TO REMAIN (TYPICAL).
  - EXISTING 250 COLD WATER LINE DOWN TO 'WC-1' OR 'WC-2', 500 VENT LINE UP FROM 'WC-1' OR 'WC-2', AND 750 SANITARY LINE DOWN FROM 'WC-1' OR 'WC-2' TO REMAIN (TYPICAL).
  - EXISTING 150 HOT AND COLD WATER LINES DOWN TO 'SH-1' OR 'SH-2' AND 320 VENT LINE UP FROM 'SH-1' OR 'SH-2' TO REMAIN (TYPICAL).
  - EXISTING BOTTLE FILLER, 'BF-1' TO REMAIN. EXISTING 150 COLD WATER LINE TO BOTTLE FILLER 'BF-1', 320 VENT LINE UP FROM 'BF-1', AND 400 SANITARY LINE DOWN FROM 'BF-1' TO REMAIN.
  - EXISTING CONDENSATE DRAIN DOWN FROM MUA-1 ON ROOF TO REMAIN.
  - EXISTING 150 HOT AND COLD WATER LINES DOWN TO NEW 'CS-1' OR 'CS-2', 320 VENT LINE UP FROM 'CS-1' OR 'CS-2', AND 400 SANITARY LINE DOWN FROM 'CS-1' OR 'CS-2' TO REMAIN.
  - EXISTING STANDING WASTE PIPE ABOVE CEILING.
  - EXISTING 'FD' OR 'FFD' TO REMAIN. 750 SANITARY DOWN FROM 'FD' OR 'FFD' TO REMAIN.
  - EXISTING 150 DOMESTIC COLD WATER LINE DOWN TO HOSE BIBB TO REMAIN (TYPICAL).
  - EXISTING HHP CONDENSATE LINE AT CLOSEST FFD OR SINK STANDING WASTE TO REMAIN (TYPICAL).
  - EXISTING BELOW GRADE SANITARY DRAIN CLEANOUT IN FLOOR TO REMAIN.
  - EXISTING HOSE BIB UNDER COUNTER TO REMAIN.
  - EXISTING LAV, WC, FD & SH-1 TO REMAIN.
  - EXISTING CONDENSATE DRAINS INDIRECTLY CONNECTED TO FUNNEL FLOOR DRAIN TO REMAIN.
  - EXISTING CLEANOUT COMPLETE WITH ACCESS DOOR.

- GENERAL NOTES:**
- SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
  - CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL SERVICE AND DEVICES.
  - ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
  - ALL FOUNDATION PLUMBING TO BE PVC.
  - PROVIDE COMPLETE SANITARY VENT SYSTEM IN ACCORDANCE WITH THE OBC.
  - PROVIDE CLEANOUTS ON ALL DRAINAGE AND WASTE SYSTEMS, NOT LIMITED TO CLEANOUTS SHOWN ON THE DRAWINGS.
  - ALL FLOOR DRAIN P-TRAPS SHALL BE PRIMED FROM A CENTRAL ELECTRONIC TRAP SEAL PRIMER. DIVISION 22 CONTRACTOR MUST COORDINATE WITH ELECTRICAL TRADE FOR CIRCUIT LOCATIONS DURING SHOP DRAWING STAGE. OTHERWISE DIVISION 22 TRADE WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH CIRCUIT WIRING.
  - ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  - ALL PIPING IN CEILING SPACE SHALL BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF ROOF. WHERE POSSIBLE, RUN PIPES THROUGH OPEN WEB JOISTS. COORDINATE OPENINGS FOR PIPES THROUGH STRUCTURAL BEAMS WITH STRUCTURAL, AS REQUIRED.
  - CONTRACTOR TO PROVIDE THRUST RESTRAINTS ON ALL PIPING SUBJECT TO POTENTIAL HYDROSTATIC HEAD AS OUTLINED IN SPEC SECTIONS 22.13.16 AND 22.14.16.
  - PROVIDE EXPANSION LOOPS FOR HYDRONIC PIPING FOR ANY STRAIGHT LENGTH OF 100 FT OR GREATER.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-06
ISSUED FOR PROGRESS	2024-08-22
ISSUED FOR PROGRESS	2024-08-15
REVISION	020



**FIFA - EAST VSTS CENTENNIAL PARK**  
Address: 56 Centennial Park Rd, Toronto, ON

**EAST VSTS GROUND FLOOR LEGACY PLUMBING & DRAINAGE - BASE SCOPE**

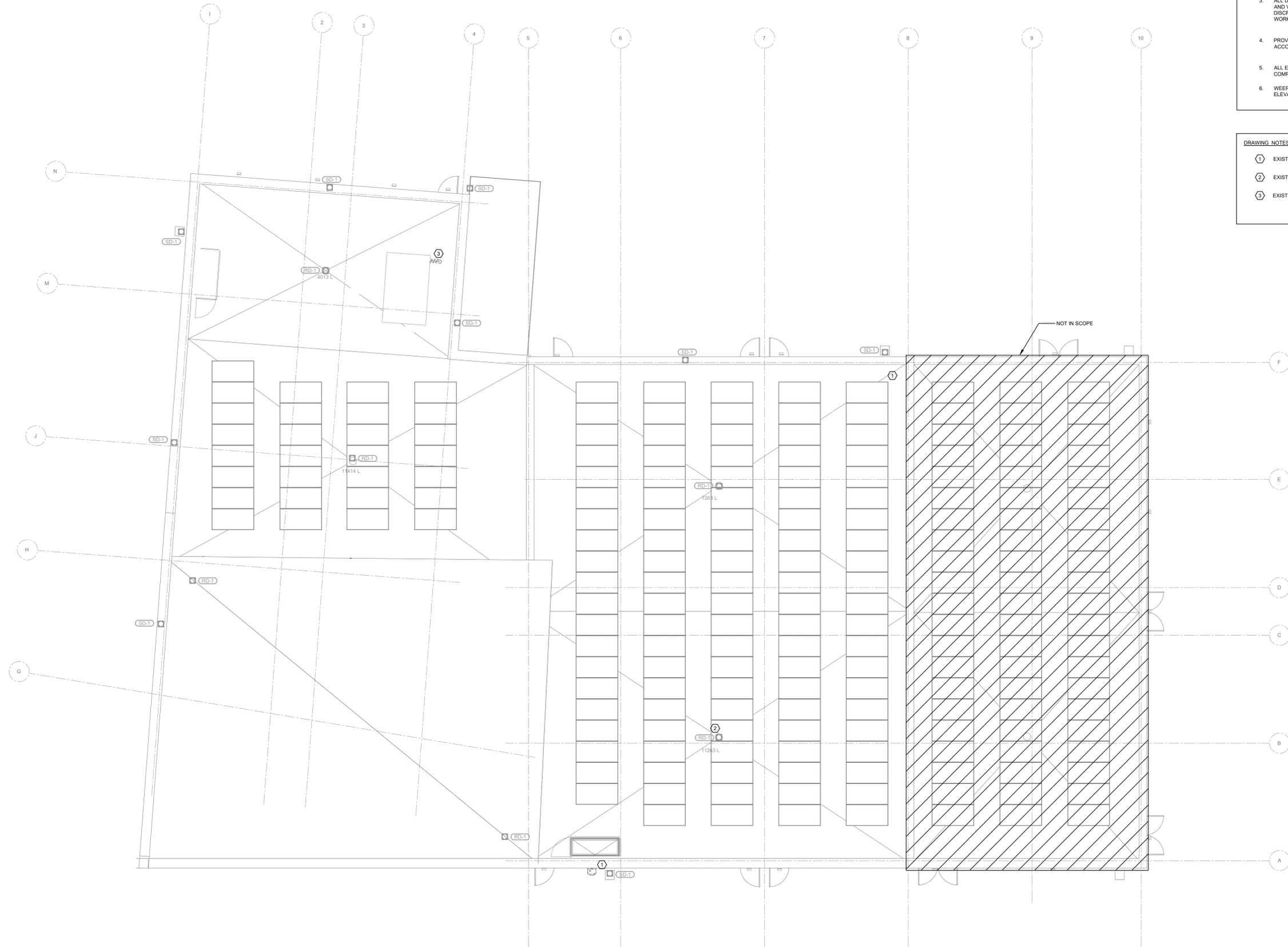
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scale : 1:100  
date :

drawing no. : **M-114.0**

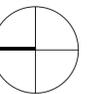


- GENERAL NOTES:**
- SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
  - CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL SERVICE AND DEVICES.
  - ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
  - PROVIDE COMPLETE SANITARY VENT SYSTEM IN ACCORDANCE WITH THE OBC.
  - ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  - WEEPING TILE AND CONSTRUCTION OF WATERTIGHT ELEVATOR SHAFT BY OTHERS. (BELOW GRADE ONLY)

- DRAWING NOTES:**
- EXISTING SCUPPER DRAIN TO REMAIN. (TYPICAL)
  - EXISTING ROOF DRAIN TO REMAIN. (TYPICAL)
  - EXISTING 320 DRAIN TO MUA-1.



ISSUED FOR ADVERTISEMENT NO. 1	2024-12-16
ISSUED FOR TENDER	2024-11-06
ISSUED FOR PROGRESS	2024-09-23
Revision	001



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
 Address: 56 Centennial Park Rd. Toronto, ON

**EAST VSTS ROOF LEGACY**  
**PLUMBING & DRAINAGE -**  
**BASE SCOPE**

project no. : 2024-0112  
 scale : 1:100  
 date :

drawing no. :

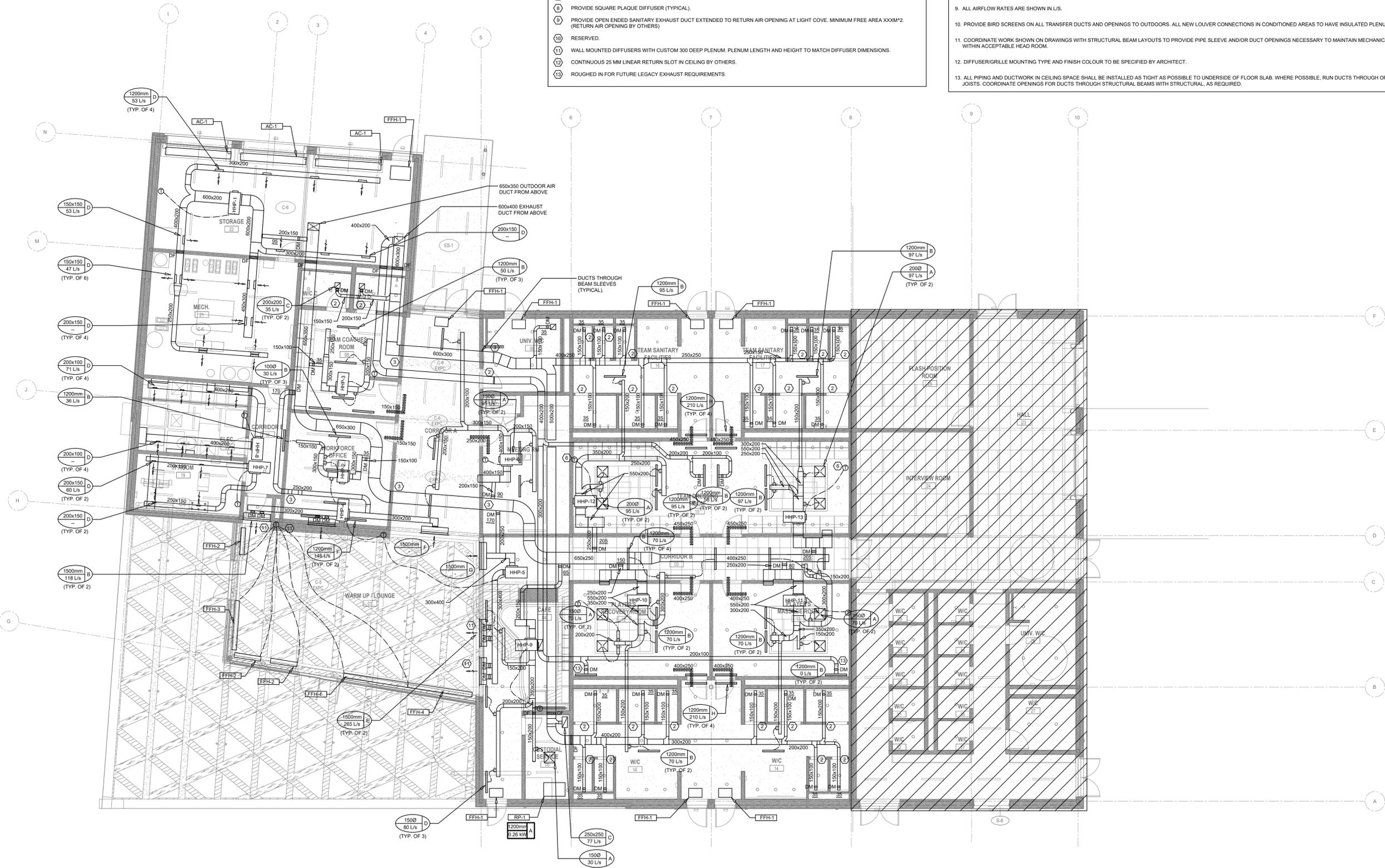
**M-115.0**



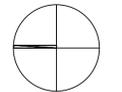


- DRAWING NOTES:**
- 1 PROVIDE 300x250 TYPE 'C' RETURN AIR GRILLES TYPICAL UNLESS NOTED OTHERWISE. (TYPICAL)
  - 2 DOOR SHALL BE UNDERCUT BY 1 IN FOR TRANSFER AIR. NOT BY DIVISION 23.
  - 3 DUCT LEVEL TO CHANGE TO ACCOMMODATE CEILING HEIGHT TRANSITION.
  - 4 PROVIDE NEW HORIZONTAL HEAT PUMP IN CEILING SPACE COMPLETE WITH WATER TIGHT DRIP PAN, ASSOCIATED CONTROLS, SUPPLY AND RETURN WATER LINES, METERS, DUCTWORK, HANGERS AND SUPPORTS. CONTRACTOR TO INSTALL NECESSARY FILTERS AT COMPLETION OF MECHANICAL WORK. (TYPICAL)
  - 5 PROVIDE AND INSTALL NEW ACOUSTICALLY LINED TRANSFER AIR DUCT. FINAL LOCATION AND QUANTITY OF TRANSFER AIR DUCTS TO SUIT SITE CONDITIONS. (TYPICAL)
  - 6 CONTROLS CONTRACTOR TO PROVIDE AND INSTALL NEW TEMPERATURE SENSOR FOR SPACE HEAT PUMPS. ALLOW FOR INTEGRATION OF NEW CONTROLS TO NEW BUILDING AUTOMATION SYSTEM. TEMPERATURE SENSORS ARE LOCATED TO AID IN PRICING ONLY AND ALL REQUIRED SENSORS MAY NOT BE SHOWN. COORDINATED FINAL LOCATION WITH INTERIOR DESIGNER WITHIN 1000MM (40 IN.) OF LOCATION SHOWN. ALL RELOCATIONS OUTSIDE OF THE RANGE SHALL BE REVIEWED WITH THE CONSULTANT. TEMPERATURE SENSORS SHALL BE NOMINALLY 1200MM (48 IN.) ABOVE THE FINISHED FLOOR UNLESS INDICATED OTHERWISE. (TYPICAL)
  - 7 RESERVED.
  - 8 PROVIDE SQUARE PLAQUE DIFFUSER (TYPICAL).
  - 9 PROVIDE OPEN ENDED SANITARY EXHAUST DUCT EXTENDED TO RETURN AIR OPENING AT LIGHT COVE. MINIMUM FREE AREA XXXM<sup>2</sup>. (RETURN AIR OPENING BY OTHERS)
  - 10 RESERVED.
  - 11 WALL MOUNTED DIFFUSERS WITH CUSTOM 300 DEEP PLENUM. PLENUM LENGTH AND HEIGHT TO MATCH DIFFUSER DIMENSIONS.
  - 12 CONTINUOUS 25 MM LINEAR RETURN SLOT IN CEILING BY OTHERS.
  - 13 ROUGHED IN FOR FUTURE LEGACY EXHAUST REQUIREMENTS.

- GENERAL NOTES:**
1. CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL EQUIPMENT.
  2. CONTRACTOR TO CALIBRATE ALL NEW THERMOSTATS AT COMPLETION OF MECHANICAL WORK.
  3. CONTRACTOR TO ENSURE THAT NEW TAKEOFFS ARE EQUIPPED WITH BALANCING DAMPERS. PROVIDE TAKEOFFS WITH BALANCING DAMPERS FOR EXISTING TAKEOFFS.
  4. CONTRACTOR SHALL BALANCE ALL ASSOCIATED DUCT SYSTEMS TO SUIT THE NEW AIR QUANTITIES.
  5. PROVIDE ADEQUATELY SIZED ACCESS PANELS FOR ALL DAMPERS, SENSORS, AND OTHER DEVICES MOUNTED WITHIN DUCTS.
  6. CONTRACTOR TO COORDINATE FIRE DAMPER LOCATIONS WITH ARCHITECT'S FIRE SEPARATION PLAN.
  7. ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  8. PROVIDE ELECTRIC PIPE TRACING ON ALL PIPING SUBJECT TO FREEZING OR IN UNHEATED SPACES.
  9. ALL AIRFLOW RATES ARE SHOWN IN L/S.
  10. PROVIDE BIRD SCREENS ON ALL TRANSFER DUCTS AND OPENINGS TO OUTDOORS. ALL NEW LOUVER CONNECTIONS IN CONDITIONED AREAS TO HAVE INSULATED PLENUMS.
  11. COORDINATE WORK SHOWN ON DRAWINGS WITH STRUCTURAL BEAM LAYOUTS TO PROVIDE PIPE SLEEVE AND/OR DUCT OPENINGS NECESSARY TO MAINTAIN MECHANICAL WORK WITHIN ACCEPTABLE HEAD ROOM.
  12. DIFFUSER/GRILLE MOUNTING TYPE AND FINISH COLOUR TO BE SPECIFIED BY ARCHITECT.
  13. ALL PIPING AND DUCTWORK IN CEILING SPACE SHALL BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF FLOOR SLAB. WHERE POSSIBLE, RUN DUCTS THROUGH OPEN WEB JOISTS. COORDINATE OPENINGS FOR DUCTS THROUGH STRUCTURAL BEAMS WITH STRUCTURAL, AS REQUIRED.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-09-02
ISSUED FOR PROGRESS	2024-06-15
Revision	001



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
Address: 56 Centennial Park Rd. Toronto, ON

**EAST VSTS GROUND FLOOR**  
**GAME HVAC - BASE SCOPE**

project no. : 2024-0112  
scale : 1:100  
date :

drawing no. :

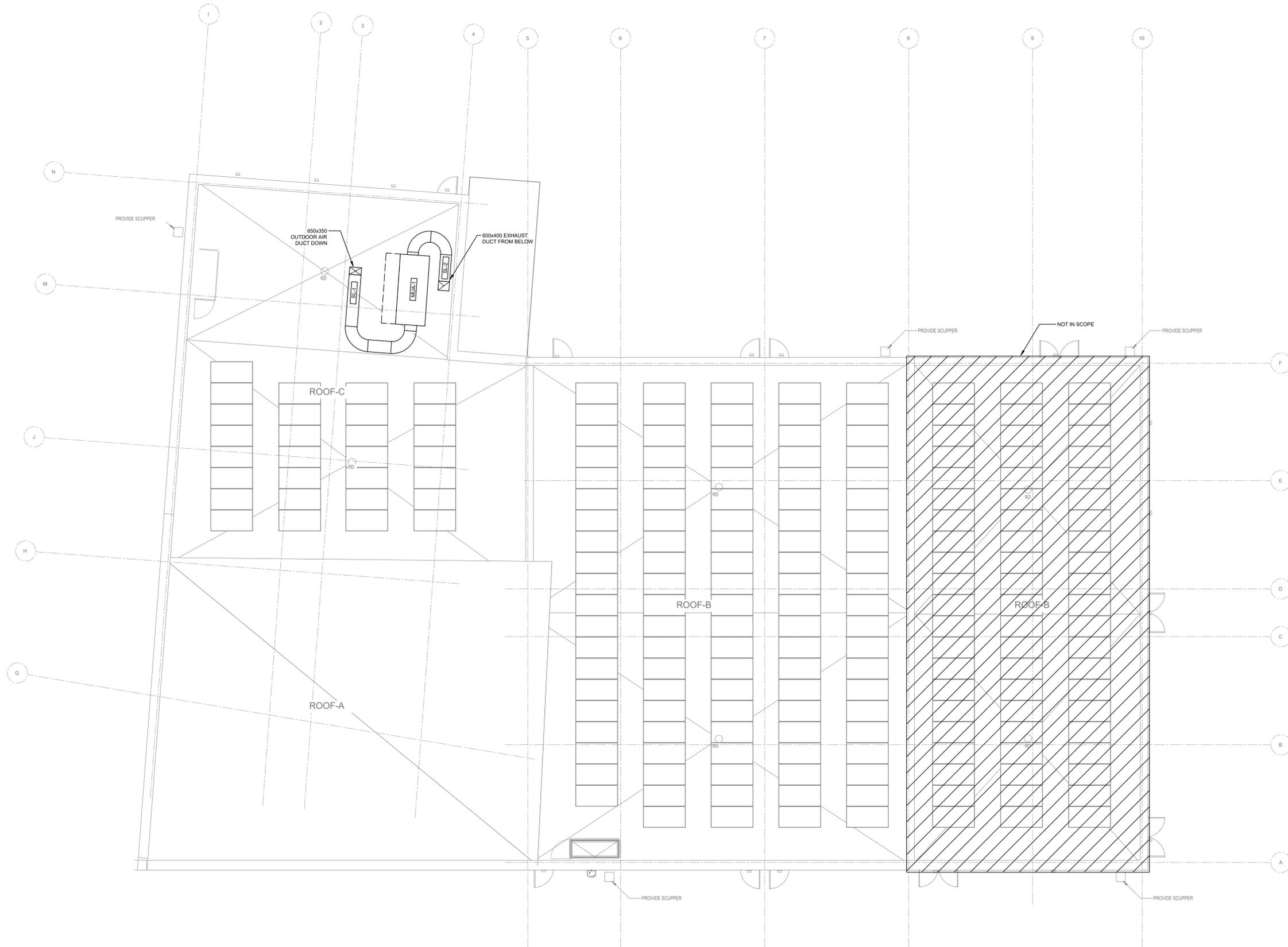
**M-311.0**

**DRAWING NOTES:**

1. PROVIDE NEW MAKE-UP AIR UNIT, COMPLETE WITH ROOF CURB, ALL REQUIRED DUCTWORK, SILENCERS, GRILLES/DIFFUSERS, PIPING AND CONTROLS.
2. PROVIDE NEW ELECTRIC HUMIDIFIER, COMPLETE WITH ROOF CURB, DISPERSION MANIFOLD, PIPING AND CONTROLS.

**GENERAL NOTES:**

1. ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
2. PROVIDE ELECTRIC PIPE TRACING ON ALL PIPING SUBJECT TO FREEZING OR IN UNHEATED SPACES.
3. ALL AIRFLOW RATES ARE SHOWN IN LIS.
4. PROVIDE BIRD SCREENS ON ALL TRANSFER DUCTS AND OPENINGS TO OUTDOORS. ALL NEW LOUVER CONNECTIONS IN CONDITIONED AREAS TO HAVE INSULATED PLENUMS.



ISSUED FOR ACCENDUM NO. 1	2024-12-19
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR PROGRESS	2024-08-15
ISSUED FOR COORDINATION	2024-07-30
ISSUED FOR CLASS C COSTING	2024-06-28
Revision:	000



**FIFA - EAST VSTS CENTENNIAL PARK**  
Address: 56 Centennial Park Rd, Toronto, ON  
**EAST VSTS ROOF GAME HVAC - BASE SCOPE**

project no. : 2024-0112  
scale : 1:100  
date :

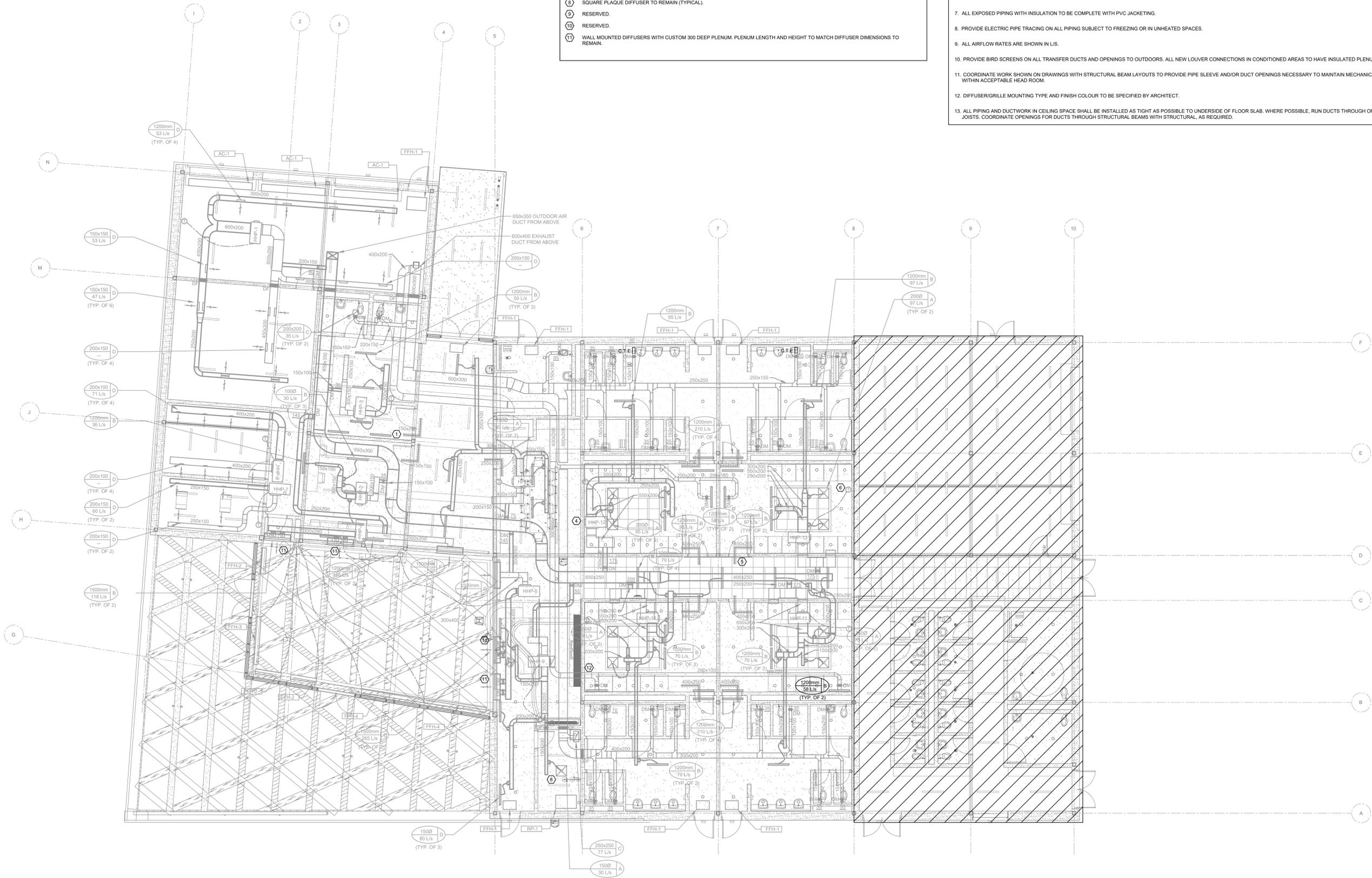
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**M-312.0**

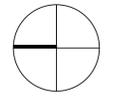


- DRAWING NOTES:**
- 1 RETURN AIR GRILLE TO REMAIN (TYPICAL)
  - 2 RESERVED.
  - 3 RESERVED.
  - 4 HORIZONTAL HEAT PUMP TO REMAIN (TYPICAL)
  - 5 TRANSFER AIR DUCT TO REMAIN (TYPICAL)
  - 6 TEMPERATURE SENSOR TO REMAIN (TYPICAL)
  - 7 RESERVED.
  - 8 RESERVED.
  - 9 RESERVED.
  - 10 RESERVED.
  - 11 WALL MOUNTED DIFFUSERS WITH CUSTOM 300 DEEP PLENUM. PLENUM LENGTH AND HEIGHT TO MATCH DIFFUSER DIMENSIONS TO REMAIN.

- GENERAL NOTES:**
1. CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL EQUIPMENT.
  2. CONTRACTOR TO CALIBRATE ALL NEW THERMOSTATS AT COMPLETION OF MECHANICAL WORK.
  3. CONTRACTOR TO ENSURE THAT NEW TAKEOFFS ARE EQUIPPED WITH BALANCING DAMPERS. PROVIDE TAKEOFFS WITH BALANCING DAMPERS FOR EXISTING TAKEOFFS.
  4. CONTRACTOR SHALL BALANCE ALL ASSOCIATED DUCT SYSTEMS TO SUIT THE NEW AIR QUANTITIES.
  5. PROVIDE ADEQUATELY SIZED ACCESS PANELS FOR ALL DAMPERS, SENSORS, AND OTHER DEVICES MOUNTED WITHIN DUCTS.
  6. CONTRACTOR TO COORDINATE FIRE DAMPER LOCATIONS WITH ARCHITECT'S FIRE SEPARATION PLAN.
  7. ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  8. PROVIDE ELECTRIC PIPE TRACING ON ALL PIPING SUBJECT TO FREEZING OR IN UNHEATED SPACES.
  9. ALL AIRFLOW RATES ARE SHOWN IN L/S.
  10. PROVIDE BIRD SCREENS ON ALL TRANSFER DUCTS AND OPENINGS TO OUTDOORS. ALL NEW LOUVER CONNECTIONS IN CONDITIONED AREAS TO HAVE INSULATED PLENUMS.
  11. COORDINATE WORK SHOWN ON DRAWINGS WITH STRUCTURAL BEAM LAYOUTS TO PROVIDE PIPE SLEEVE AND/OR DUCT OPENINGS NECESSARY TO MAINTAIN MECHANICAL WORK WITHIN ACCEPTABLE HEAD ROOM.
  12. DIFFUSER/GRILLE MOUNTING TYPE AND FINISH COLOUR TO BE SPECIFIED BY ARCHITECT.
  13. ALL PIPING AND DUCTWORK IN CEILING SPACE SHALL BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF FLOOR SLAB. WHERE POSSIBLE, RUN DUCTS THROUGH OPEN WEB JOISTS. COORDINATE OPENINGS FOR DUCTS THROUGH STRUCTURAL BEAMS WITH STRUCTURAL, AS REQUIRED.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-06
ISSUED FOR PROGRESS	2024-09-02
ISSUED FOR PROGRESS	2024-06-15
revision	000



**FIFA - EAST VSTS  
CENTENNIAL PARK**  
Address: 56 Centennial Park Rd. Toronto, ON  
**EAST VSTS GROUND LEGACY  
FLOOR  
HVAC - BASE SCOPE**

project no. : 2024-0112  
scale : 1:100  
date :

drawing no. : **M-313.0**

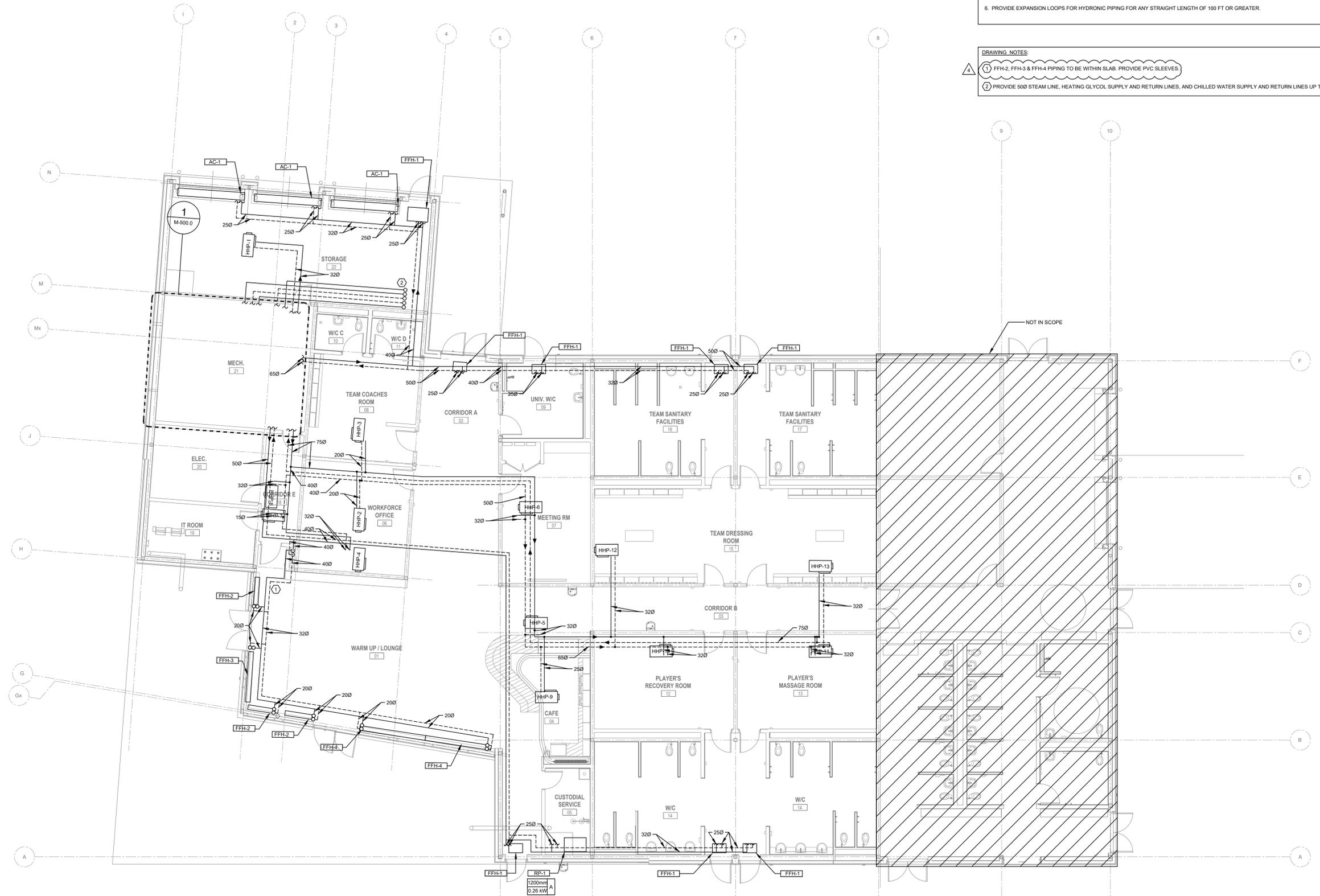


**GENERAL NOTES:**

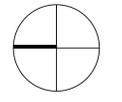
1. CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL EQUIPMENT.
2. ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
3. PROVIDE ELECTRIC PIPE TRACING ON ALL PIPING SUBJECT TO FREEZING OR IN UNHEATED SPACES.
4. COORDINATE WORK SHOWN ON DRAWINGS WITH STRUCTURAL BEAM LAYOUTS TO PROVIDE PIPE SLEEVE AND/OR DUCT OPENINGS NECESSARY TO MAINTAIN MECHANICAL WORK WITHIN ACCEPTABLE HEAD ROOM.
5. ALL PIPING AND DUCTWORK IN CEILING SPACE SHALL BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF FLOOR SLAB. WHERE POSSIBLE, RUN PIPES THROUGH OPEN WEB JOISTS. COORDINATE OPENINGS FOR PIPES THROUGH STRUCTURAL BEAMS WITH STRUCTURAL, AS REQUIRED.
6. PROVIDE EXPANSION LOOPS FOR HYDRONIC PIPING FOR ANY STRAIGHT LENGTH OF 100 FT OR GREATER.

**DRAWING NOTES:**

- 1) FFH-2, FFH-3 & FFH-4 PIPING TO BE WITHIN SLAB. PROVIDE PVC SLEEVES.
- 2) PROVIDE 500 STEAM LINE, HEATING GLYCOL SUPPLY AND RETURN LINES, AND CHILLED WATER SUPPLY AND RETURN LINES UP TO MUA-1 ON ROOF.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-09-02
ISSUED FOR PROGRESS	2024-06-15
Revision	001



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
Address: 56 Centennial Park Rd. Toronto, ON  
**EAST VSTS GROUND FLOOR**  
**GAME HVAC PIPING**  
**- BASE SCOPE**

project no. : 2024-0112  
scale : 1:100  
date :  
drawing no. :

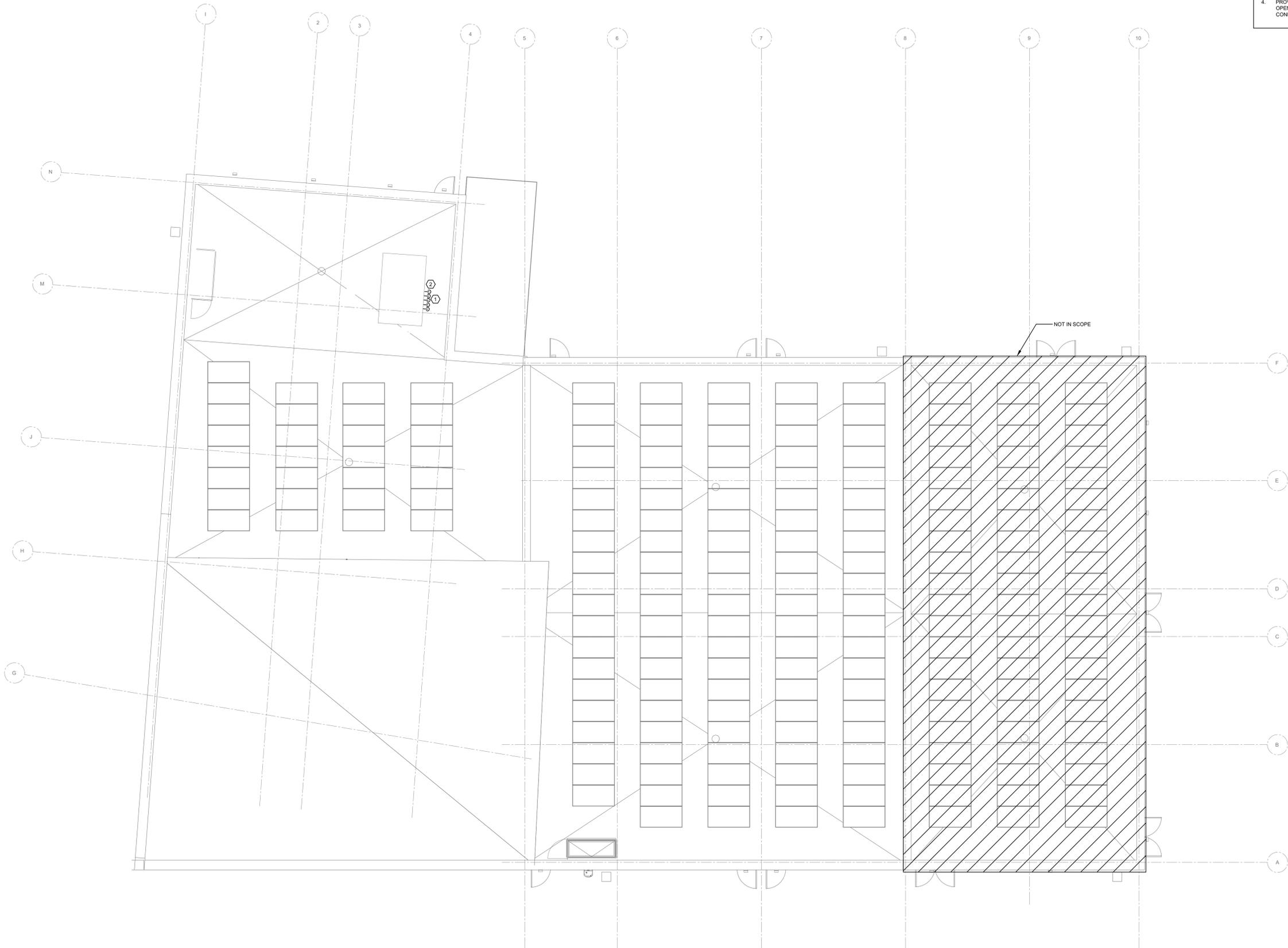
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**DRAWING NOTES:**

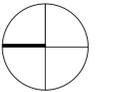
- ① EXTEND HEATING GLYCOL AND COOLING GLYCOL SUPPLY AND RETURN LINES FROM MAKE-UP AIR UNIT, MUA-1, DOWN TO CEILING SPACE BELOW.
- ② EXTEND 500 STEAM LINE TO HUMIDIFIER MANIFOLD WITHIN MUA-1.

**GENERAL NOTES:**

- 1. ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
- 2. PROVIDE ELECTRIC PIPE TRACING ON ALL PIPING SUBJECT TO FREEZING OR IN UNHEATED SPACES.
- 3. ALL AIRFLOW RATES ARE SHOWN IN LIS.
- 4. PROVIDE BIRD SCREENS ON ALL TRANSFER DUCTS AND OPENINGS TO OUTDOORS. ALL NEW LOUVER CONNECTIONS IN CONDITIONED AREAS TO HAVE INSULATED PLENUMS.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-09-23
ISSUED FOR PROGRESS	2024-08-15
revision	020



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
 Address: 56 Centennial Park Rd, Toronto, ON  
**EAST VSTS ROOF GAME**  
**HVAC PIPING - BASE SCOPE**

project no. : 2024-0112  
 scale : 1:100  
 date :

drawing no. : **M-412.0**

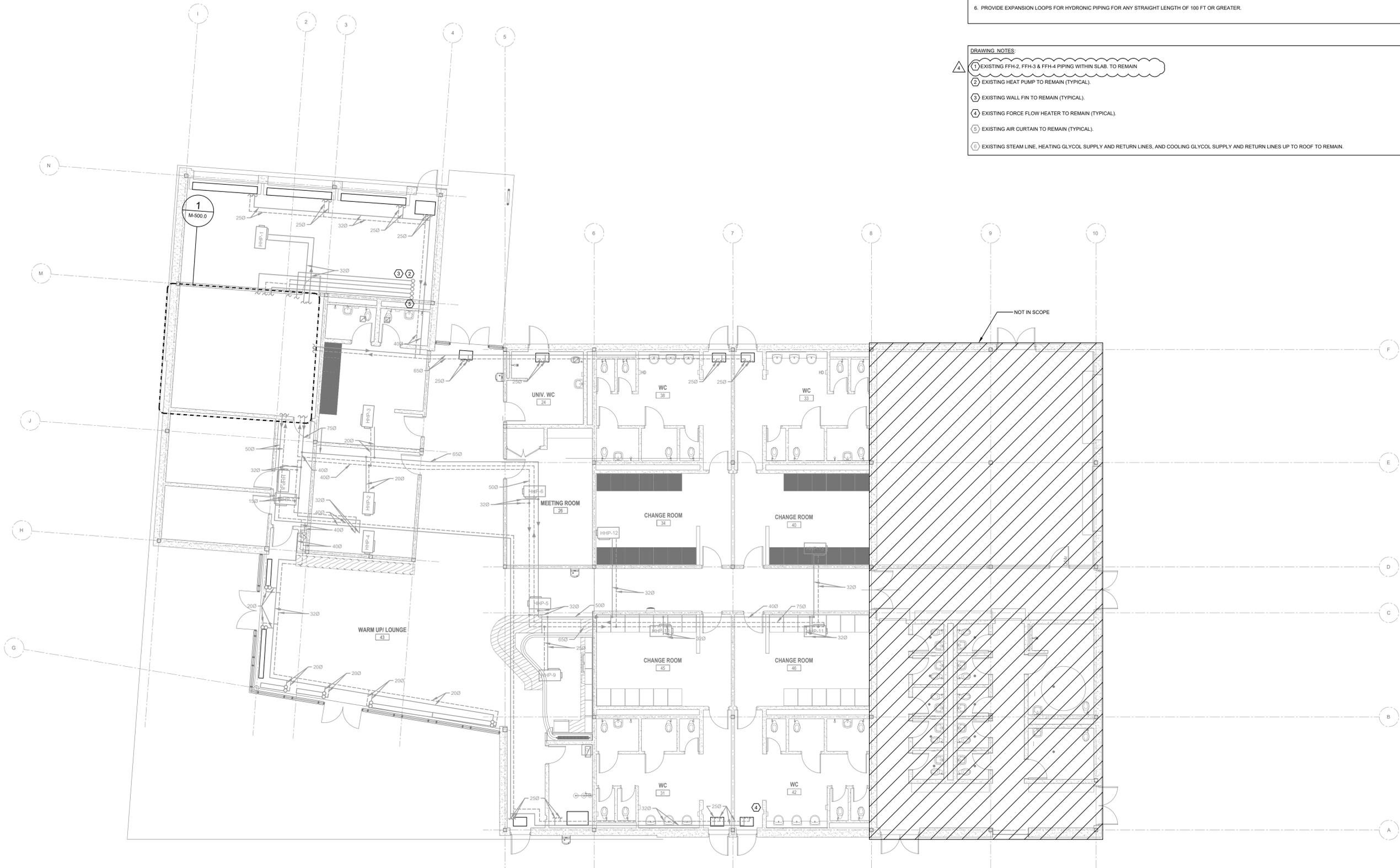


**GENERAL NOTES:**

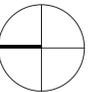
1. CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL EQUIPMENT.
2. ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
3. PROVIDE ELECTRIC PIPE TRACING ON ALL PIPING SUBJECT TO FREEZING OR IN UNHEATED SPACES.
4. COORDINATE WORK SHOWN ON DRAWINGS WITH STRUCTURAL BEAM LAYOUTS TO PROVIDE PIPE SLEEVE AND/OR DUCT OPENINGS NECESSARY TO MAINTAIN MECHANICAL WORK WITHIN ACCEPTABLE HEAD ROOM.
5. ALL PIPING AND DUCTWORK IN CEILING SPACE SHALL BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF FLOOR SLAB. WHERE POSSIBLE, RUN PIPES THROUGH OPEN WEB JOISTS. COORDINATE OPENINGS FOR PIPES THROUGH STRUCTURAL BEAMS WITH STRUCTURAL, AS REQUIRED.
6. PROVIDE EXPANSION LOOPS FOR HYDRONIC PIPING FOR ANY STRAIGHT LENGTH OF 100 FT OR GREATER.

**DRAWING NOTES:**

1. EXISTING FFH-2, FFH-3 & FFH-4 PIPING WITHIN SLAB. TO REMAIN
2. EXISTING HEAT PUMP TO REMAIN (TYPICAL).
3. EXISTING WALL FIN TO REMAIN (TYPICAL).
4. EXISTING FORCE FLOW HEATER TO REMAIN (TYPICAL).
5. EXISTING AIR CURTAIN TO REMAIN (TYPICAL).
6. EXISTING STEAM LINE, HEATING GLYCOL SUPPLY AND RETURN LINES, AND COOLING GLYCOL SUPPLY AND RETURN LINES UP TO ROOF TO REMAIN.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-06
ISSUED FOR PROGRESS	2024-09-02
ISSUED FOR PROGRESS	2024-06-15
Revision	001



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
Address: 56 Centennial Park Rd. Toronto, ON

**EAST VSTS GROUND LEGACY**  
**FLOOR HVAC PIPING**  
**- BASE SCOPE**

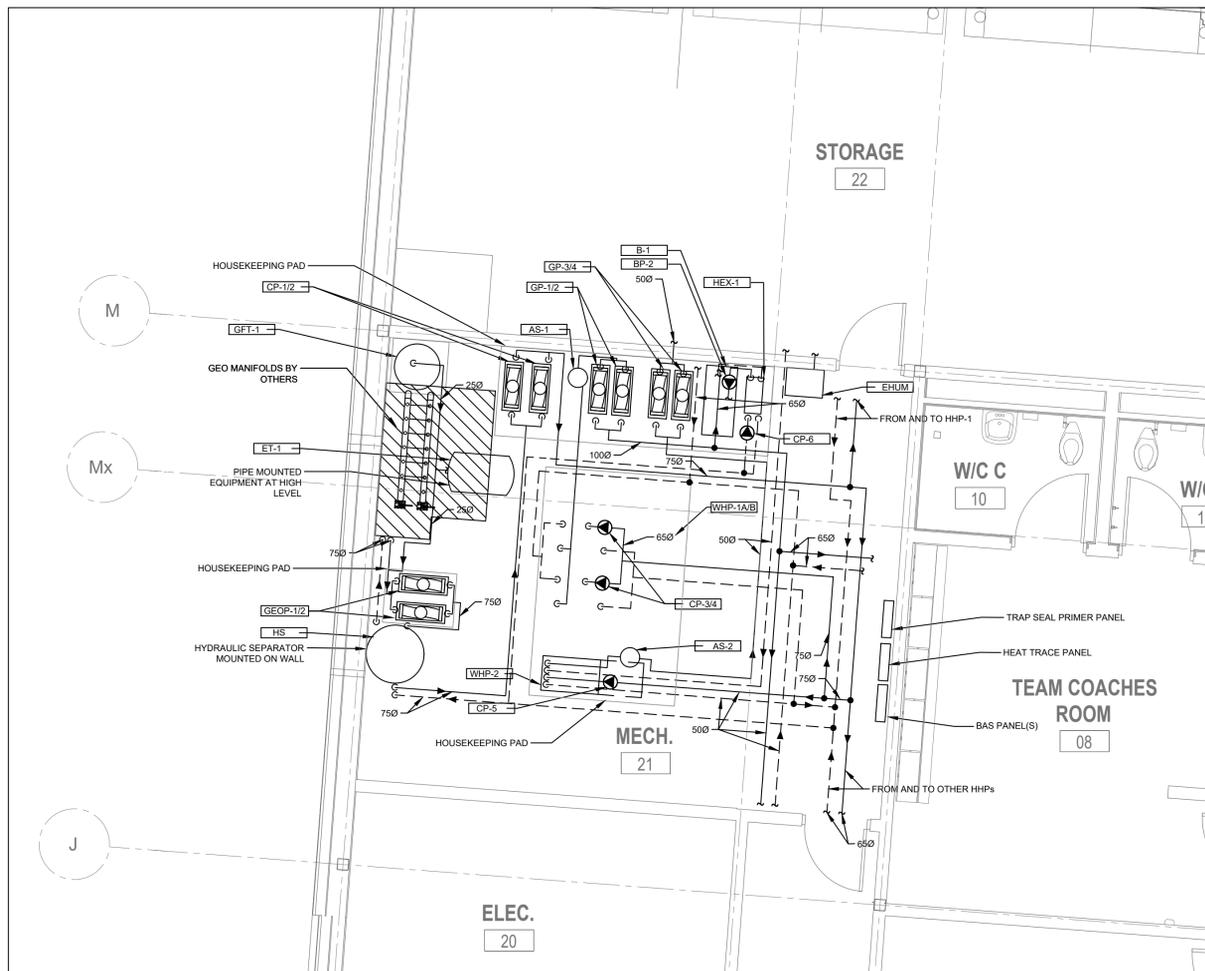
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drawing no. : **M-413.0**

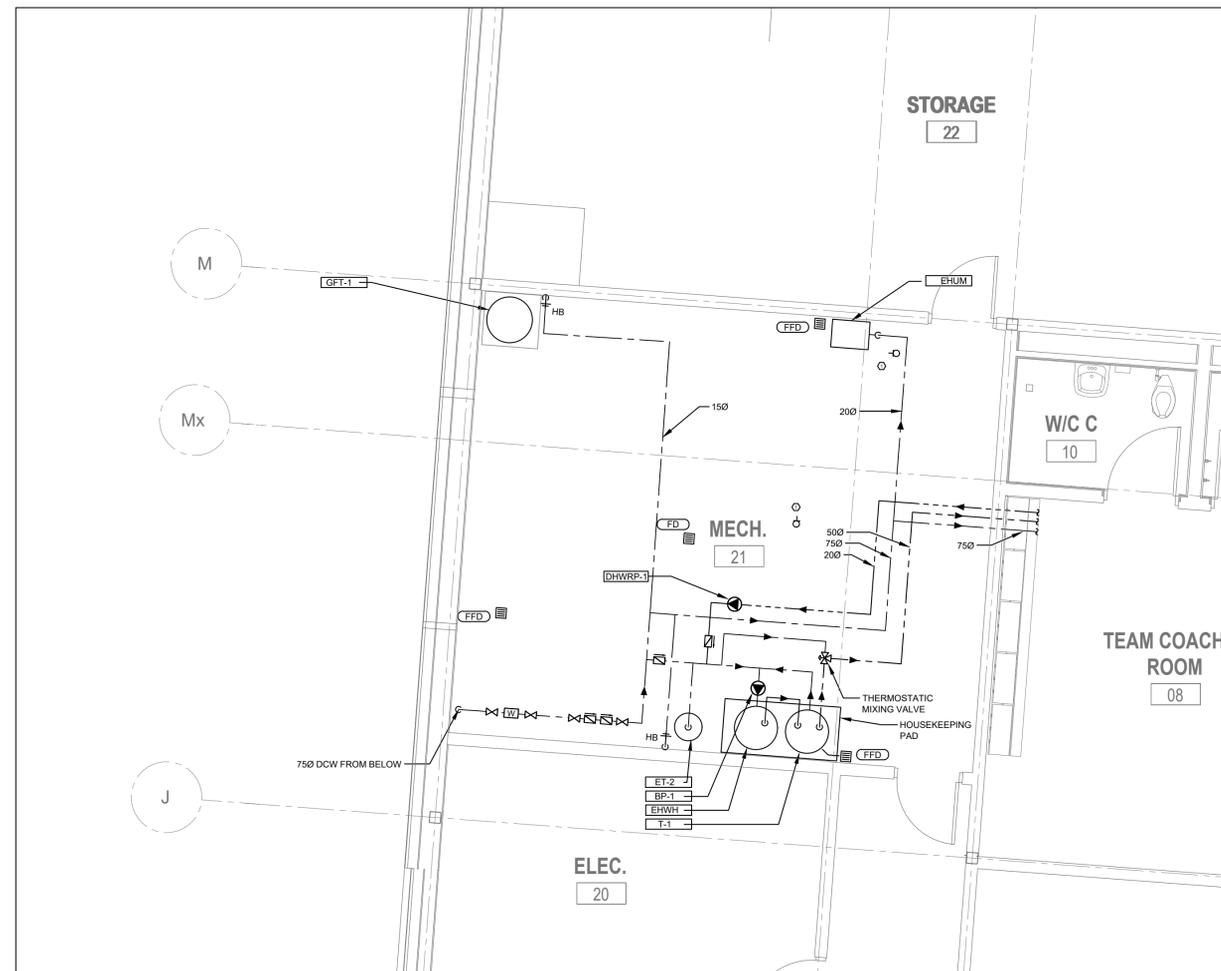


- GENERAL NOTES:**
- SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
  - CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL SERVICE AND DEVICES.
  - ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
  - ALL FOUNDATION PLUMBING TO BE PVC.
  - PROVIDE COMPLETE SANITARY VENT SYSTEM IN ACCORDANCE WITH THE OBC.
  - PROVIDE CLEANOUTS ON ALL DRAINAGE AND WASTE SYSTEMS, NOT LIMITED TO CLEANOUTS SHOWN ON THE DRAWINGS.
  - ALL FLOOR DRAIN P-TRAPS SHALL BE PRIMED FROM A CENTRAL ELECTRONIC TRAP SEAL PRIMER DIVISION 22 CONTRACTOR MUST COORDINATE WITH ELECTRICAL TRADE FOR CIRCUIT LOCATIONS DURING SCOPE DRAWING STAGE, OTHERWISE DIVISION 22 TRADE WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH CIRCUIT WIRING.
  - ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  - ALL PIPING IN CEILING SPACE SHALL BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF ROOF.
  - CONTRACTOR TO PROVIDE THRUST RESTRAINTS ON ALL PIPING SUBJECT TO POTENTIAL HYDROSTATIC HEAD AS OUTLINED IN SPEC SECTIONS 22 13 16 AND 22 14 16.
  - COORDINATE WORK SHOWN ON DRAWINGS WITH STRUCTURAL BEAM LAYOUTS TO PROVIDE PIPE SLEEVE AND/OR DUCT OPENINGS NECESSARY TO MAINTAIN MECHANICAL WORK WITHIN ACCEPTABLE HEAD ROOM.

- DRAWING NOTES:**
- BELOW GRADE SANITARY DRAIN CLEANOUT IN FLOOR.
  - WATER METER TO BE RELOCATED FROM IRRIGATION BUNKER (OUTSIDE OF BUILDING) TO WITHIN BUILDING MECHANICAL ROOM DURING CONSTRUCTION.

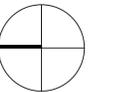


**1 HVAC PIPING MECHANICAL ROOM PART PLAN**  
M-500.0 SCALE: 1:50



**2 PLUMBING & DRAINAGE MECHANICAL ROOM PART PLAN**  
M-500.0 SCALE: 1:50

ISSUED FOR ADJUDICATION NO. 1	2024-12-16
ISSUED FOR TENDER	2024-11-06
ISSUED FOR PROGRESS	2024-06-23
REVISION	001



FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON

EAST VSTS GROUND FLOOR  
MECHANICAL ROOM PART  
PLAN - BASE SCOPE

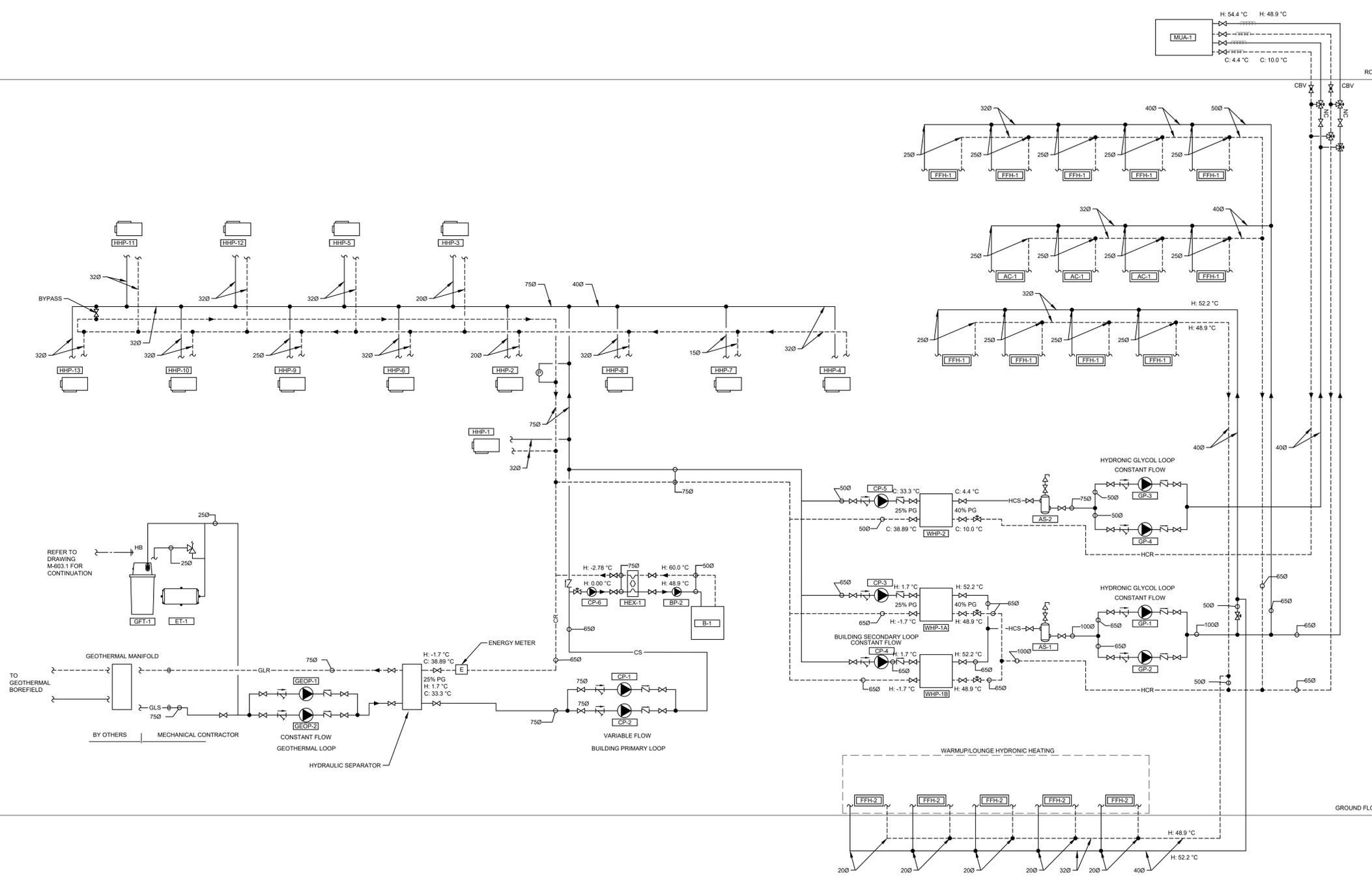
project no.: 2024-0112  
scale: AS SHOWN  
date:

drawing no.:

**M-500.0**



- GENERAL NOTES:**
- ERV MAKE-UP WATER LINE DRAIN AND OVERFLOW TO BE ELECTRICALLY TRACED AND INSULATED, CW WEATHER PROOF JACKET.
  - PROVIDE ISOLATION VALVES ON ALL BRANCH LINES AND AT ALL EQUIPMENT.
  - PROVIDE VIBRATION ISOLATION FOR ALL ROTATING EQUIPMENT.
  - CONDENSER WATER PIPING OUTDOORS TO BE ELECTRICALLY TRACED AND INSULATED, CW WEATHER PROOF JACKET.
  - EXPANSION COMPENSATION AND ANCHORING SYSTEM SHOP DRAWINGS TO BE STAMPED BY A LICENSED PROFESSIONAL ENGINEER. PROVIDE EXPANSION LOOPS AS REQUIRED IN MIDDLE OF 100 FT (OR GREATER) HYDRONIC PIPING SECTIONS.
  - HEAT TRACE ALL PIPING SUBJECT TO FREEZING.
  - CENTRALLY METER PLANT MECHANICAL SERVICES ON DIGITAL METERING SYSTEM (DMS) (OR BAS), REFER TO CONTROL DIAGRAMS AND SEQUENCE OF OPERATIONS FOR METERING SCOPE.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-06
ISSUED FOR PROGRESS	2024-08-22
REVISION	020

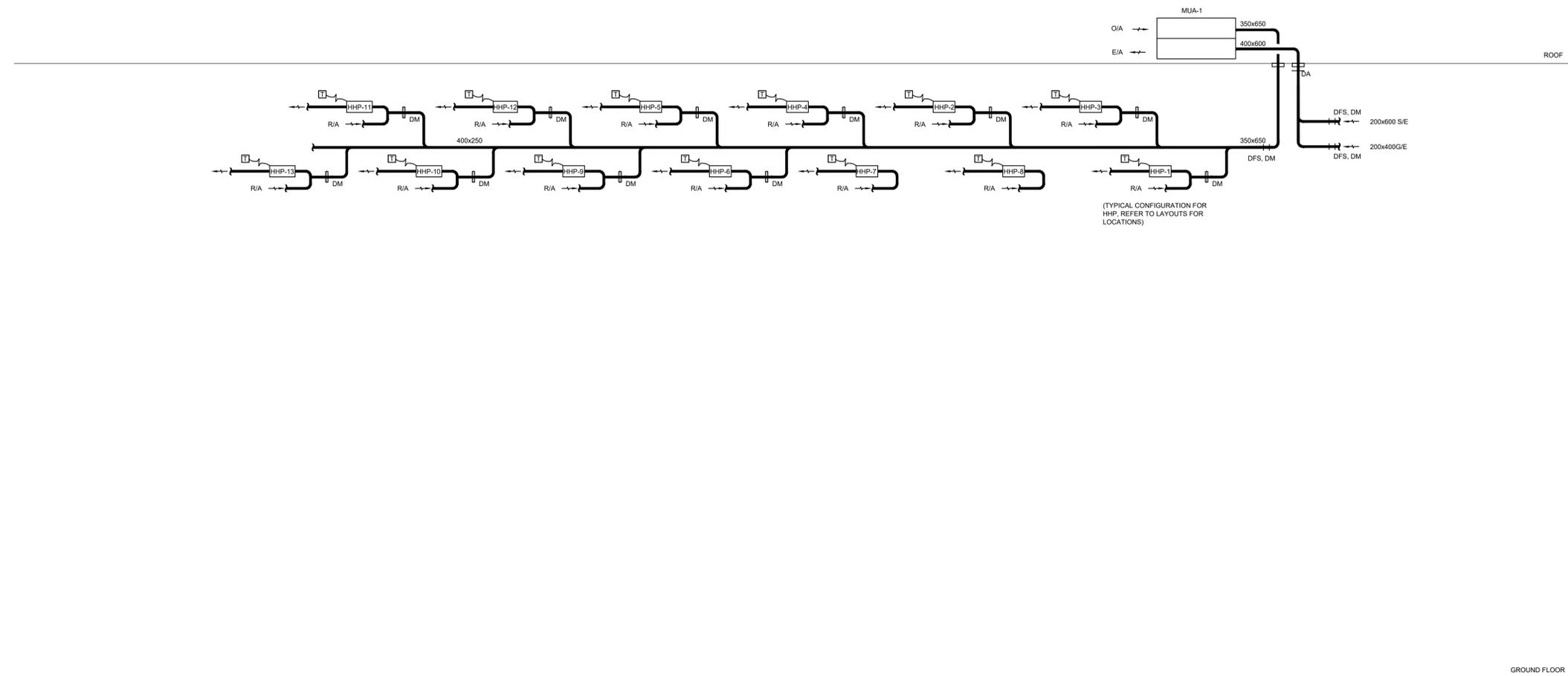
FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON

EAST VSTS HEATING AND  
COOLING SCHEMATIC - BASE  
SCOPE

project no. : 2024-0112  
scale : N.T.S.  
date :  
drawing no. :

**M-600.0**

- GENERAL NOTES:
1. PROVIDE BALANCING DAMPERS ON ALL BRANCH DUCTS AND OUTLETS.
  2. CONTRACTOR TO PROVIDE ACCESS PANELS FOR ALL DAMPERS MOUNTED WITHIN DUCT AND COORDINATE ACCESS PANELS FOR ALL DAMPERS LOCATED BEHIND WALLS/CEILINGS.
  3. DYNAMIC FIRE DAMPERS SHALL BE PROVIDED WHERE DAMPERS ARE POSITIONED HORIZONTALLY OR WHERE AIRSTREAM PRESSURE COULD PREVENT GRAVITY BASED DAMPERS FROM CLOSING.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR REVISION	2024-11-06
ISSUED FOR PROGRESS	2024-08-23
revision	020

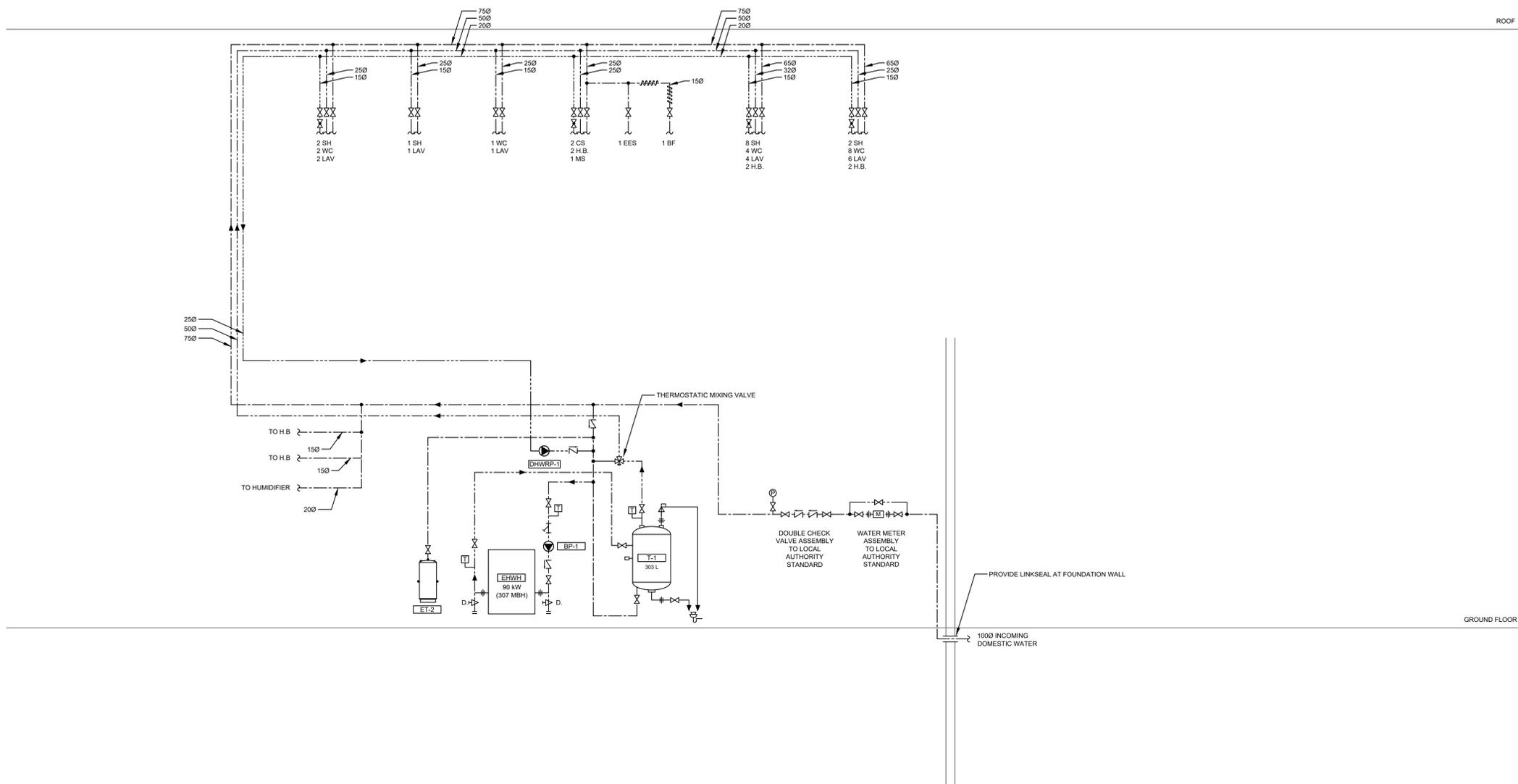
FIFA - EAST VSTS  
 CENTENNIAL PARK  
 Address: 56 Centennial Park Rd. Toronto, ON  
 EAST VSTS HVAC SCHEMATIC  
 - BASE SCOPE

project no. : 2024-0112  
 scale : N.T.S.  
 date :  
 drawing no. :

**M-601.0**



- GENERAL NOTES:**
1. MAXIMUM DHW DISTRIBUTION TEMPERATURE NOT TO EXCEED 48.9°C (120°F).
  2. ALL DOMESTIC HOT WATER RECIRCULATION LINES TO HAVE CIRCUIT BALANCING VALVES.
  3. HEAT TRACE ALL PIPING SUBJECT TO FREEZING.
  4. PROVIDE AUTOMATIC AIR VENTS THROUGHOUT THE SYSTEM AT HIGH POINTS ON DOMESTIC HOT WATER RECIRCULATION PIPING.
  5. PROVIDE INDIVIDUAL TEMPERATURE MIXING VALVES FOR EVERY ELECTRONIC LAVATORY FAUCET IN ALL PUBLIC AREAS.
  6. PROVIDE ELECTRONIC TRAP SEAL PRIMERS FOR ALL FLOOR DRAINS.
  7. EXPANSION COMPENSATION AND ANCHORING SYSTEM SHOP DRAWINGS TO BE STAMPED BY A LICENSED PROFESSIONAL ENGINEER.
  8. PROVIDE ISOLATION AND DRAIN VALVES FOR ALL DCW/DHW/DHWR RISERS.
  9. PROVIDE EXPANSION LOOPS FOR HYDRONIC PIPING FOR ANY STRAIGHT LENGTH 100 FT OR GREATER.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR REVISION	2024-11-06
ISSUED FOR PROGRESS	2024-08-23
revision	020

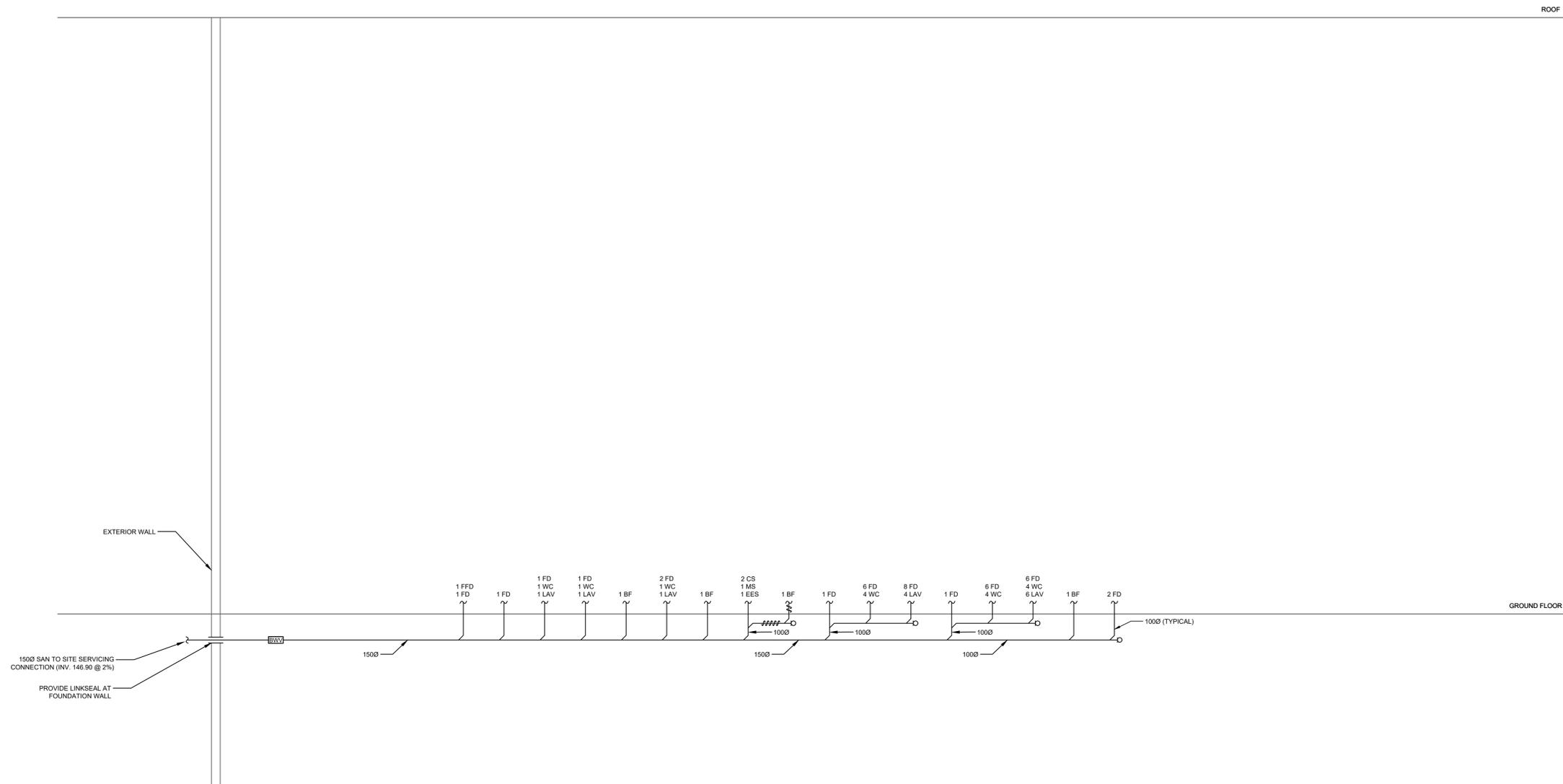
FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON  
EAST VSTS DOMESTIC WATER  
GAME SCHEMATIC - BASE  
SCOPE

project no.: 2024-0112  
scale: N.T.S.  
date:

drawing no.: **M-602.0**



- GENERAL NOTES:**
1. DRAIN PIPING SHALL BE AT MINIMUM 1% SLOPE AT ALL OFFSETS UNLESS OTHERWISE SPECIFIED.
  2. PROVIDE CLEANOUTS IN ACCORDANCE WITH PART 7 OF THE OBC. CLEANOUTS SHALL BE PROVIDED AT EVERY CHANGE IN DIRECTION AND AT 15M (50FT) INTERVALS ON STRAIGHT RUNS BELOW-GRADE. CLEANOUTS IN OCCUPIED SPACES SHALL BE PROVIDED WITH ACCESS PANEL IN LOCATION COORDINATED WITH THE INTERIOR DESIGN TO BE ACCESSIBLE ONCE FULLY FURNISHED.
  3. HEAT TRACE ALL PIPING SUBJECT TO FREEZING.
  4. PROVIDE ELECTRONIC TRAP SEAL PRIMERS FOR ALL FLOOR DRAIN 'P' TRAPS.
  5. CONTRACTOR TO PROVIDE COMPLETE SANITARY VENTING SYSTEM IN ACCORDANCE WITH PART 7 OF THE OBC. ALL VENT STACKS TO TERMINATE OUTDOORS. SYSTEM SHALL BE VENTED IN SUCH A WAY AS TO MINIMIZE NUMBER OF VENTS THROUGH ROOF.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR REVISION	2024-11-06
ISSUED FOR PROGRESS	2024-08-23
REVISION	0202

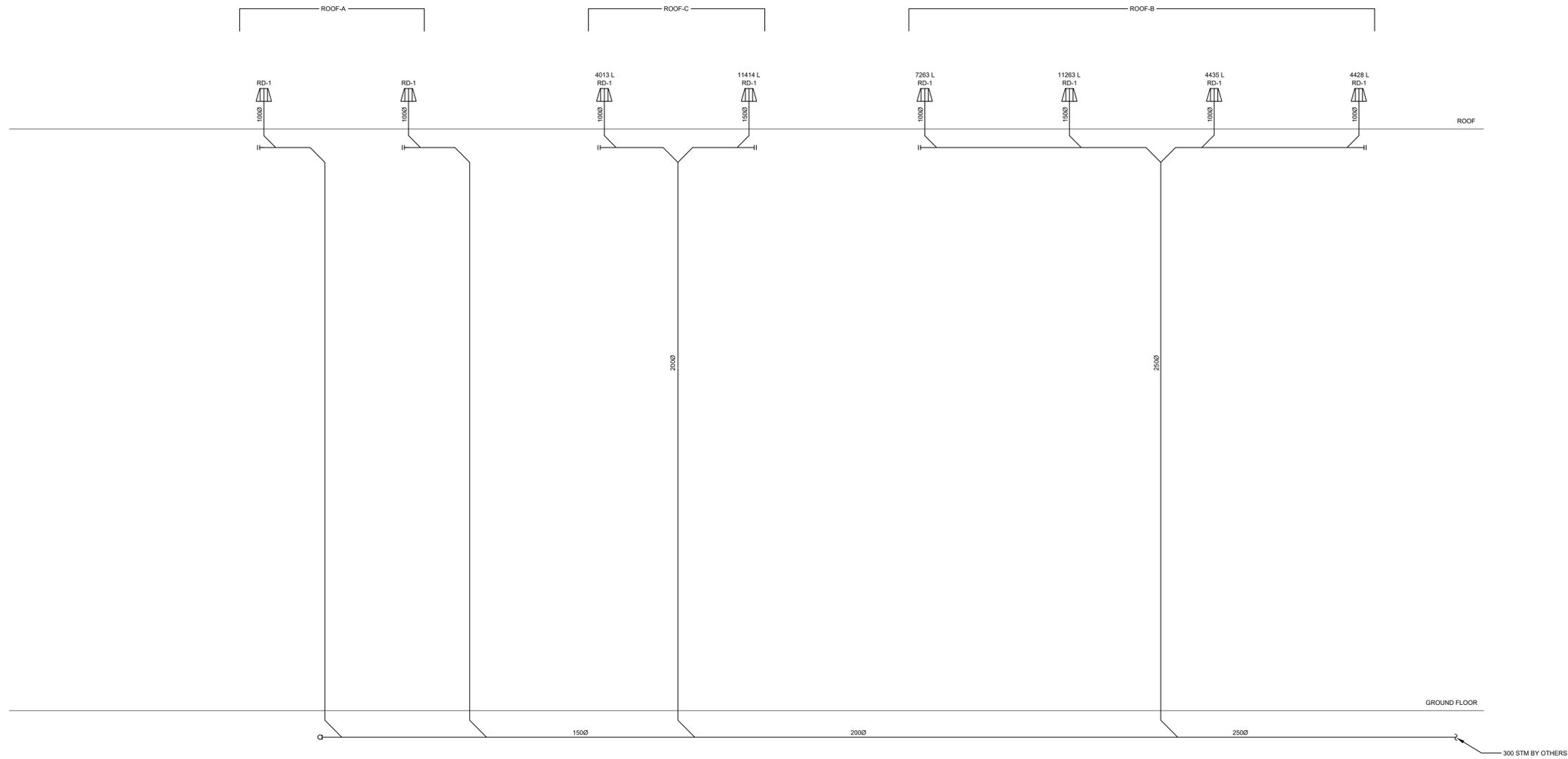
FIFA - EAST VSTS  
 CENTENNIAL PARK  
 Address: 56 Centennial Park Rd, Toronto, ON  
 EAST VSTS SANITARY GAME  
 SCHEMATIC - BASE SCOPE

project no. : 2024-0112  
 scale : N.T.S.  
 date :  
 drawing no. :

**M-603.0**



- GENERAL NOTES:**
1. DRAIN PIPING SHALL BE AT MINIMUM 1% SLOPE AT ALL OFFSETS UNLESS OTHERWISE SPECIFIED.
  2. PROVIDE CLEANOUTS IN ACCORDANCE WITH PART 7 OF THE OBC. CLEANOUTS SHALL BE PROVIDED AT EVERY CHANGE IN DIRECTION AND AT 15M (50FT) INTERVALS ON STRAIGHT RUNS BELOW-GRADE. CLEANOUTS IN OCCUPIED SPACES SHALL BE PROVIDED WITH ACCESS PANEL IN LOCATION COORDINATED WITH THE INTERIOR DESIGN TO BE ACCESSIBLE ONCE FULLY FURNISHED.
  3. HEAT TRACE ALL PIPING SUBJECT TO FREEZING.
  4. CONTRACTOR TO PROVIDE COMPLETE SANITARY VENTING SYSTEM IN ACCORDANCE WITH PART 7 OF THE OBC. ALL VENT STACKS TO TERMINATE OUTDOORS, SYSTEM SHALL BE VENTED IN SUCH A WAY AS TO MINIMIZE NUMBER OF VENTS THROUGH ROOF.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-06
ISSUED FOR PROGRESS	2024-08-23
REVISION	020

FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON

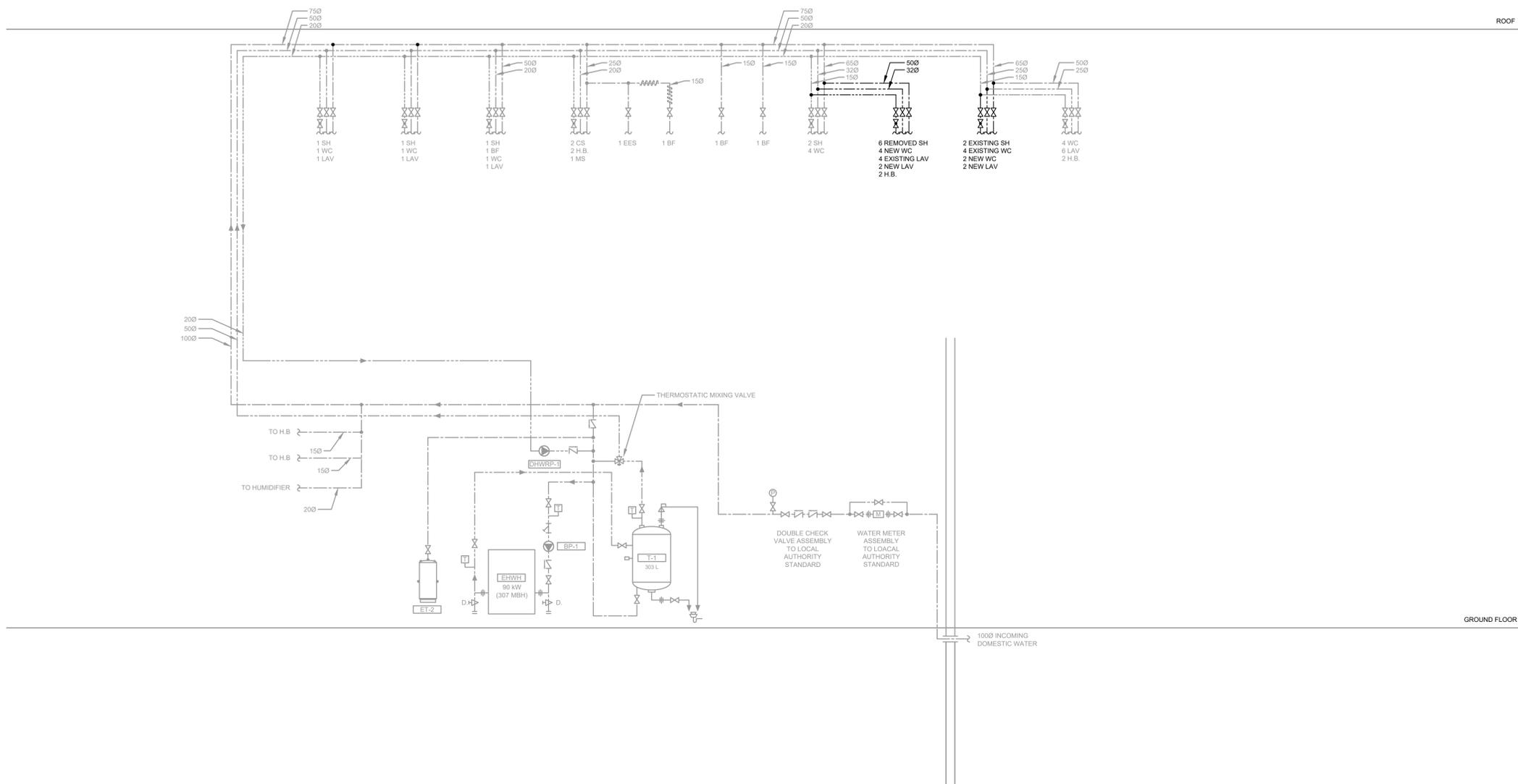
EAST VSTS STORM  
SCHEMATIC - BASE SCOPE

project no. : 2024-0112  
scale : N.T.S.  
date :

drawing no. :  
**M-604.0**



- GENERAL NOTES:**
1. MAXIMUM DHW DISTRIBUTION TEMPERATURE NOT TO EXCEED 48.9°C (120°F).
  2. ALL DOMESTIC HOT WATER RECIRCULATION LINES TO HAVE CIRCUIT BALANCING VALVES.
  3. HEAT TRACE ALL PIPING SUBJECT TO FREEZING.
  4. PROVIDE AUTOMATIC AIR VENTS THROUGHOUT THE SYSTEM AT HIGH POINTS ON DOMESTIC HOT WATER RECIRCULATION PIPING.
  5. PROVIDE INDIVIDUAL TEMPERATURE MIXING VALVES FOR EVERY ELECTRONIC LAVATORY FAUCET IN ALL PUBLIC AREAS.
  6. PROVIDE ELECTRONIC TRAP SEAL PRIMERS FOR ALL FLOOR DRAINS.
  7. EXPANSION COMPENSATION AND ANCHORING SYSTEM SHOP DRAWINGS TO BE STAMPED BY A LICENSED PROFESSIONAL ENGINEER.
  8. PROVIDE ISOLATION AND DRAIN VALVES FOR ALL DCW/DHW/DHWR RISERS.
  9. PROVIDE EXPANSION LOOPS FOR HYDRONIC PIPING FOR ANY STRAIGHT LENGTH 100 FT OR GREATER.



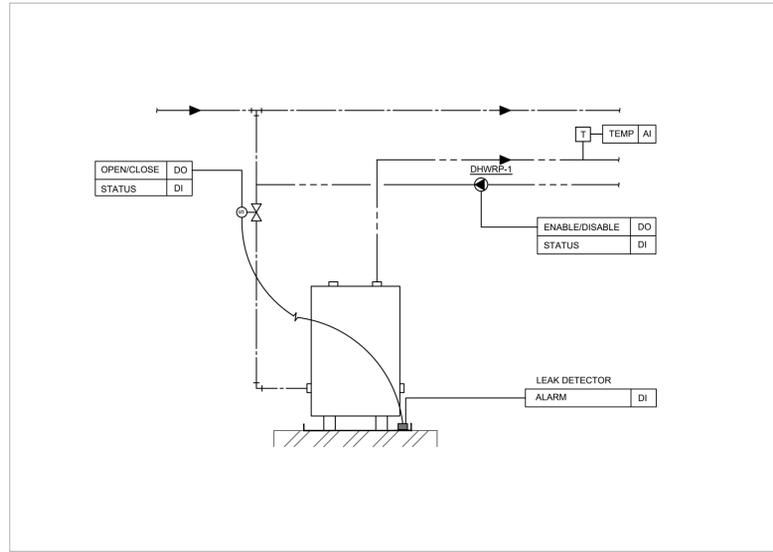
ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-06
ISSUED FOR PROGRESS	2024-08-23
revision	020

FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON  
EAST VSTS DOMESTIC WATER  
LEGACY SCHEMATIC - BASE  
SCOPE

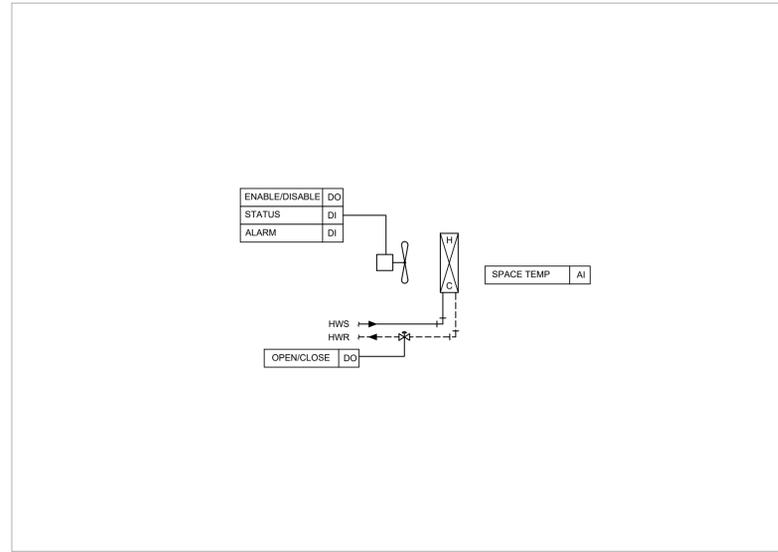
project no. : 2024-0112  
scale : N.T.S.  
date :

drawing no. : **M-605.0**

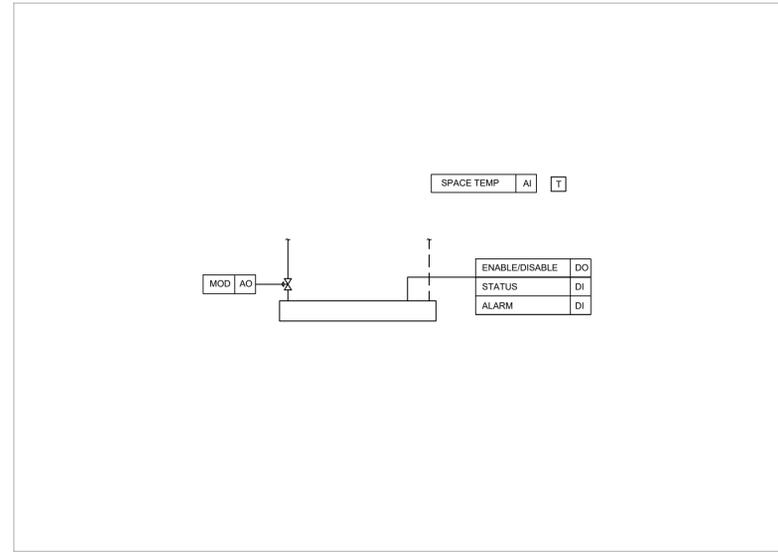




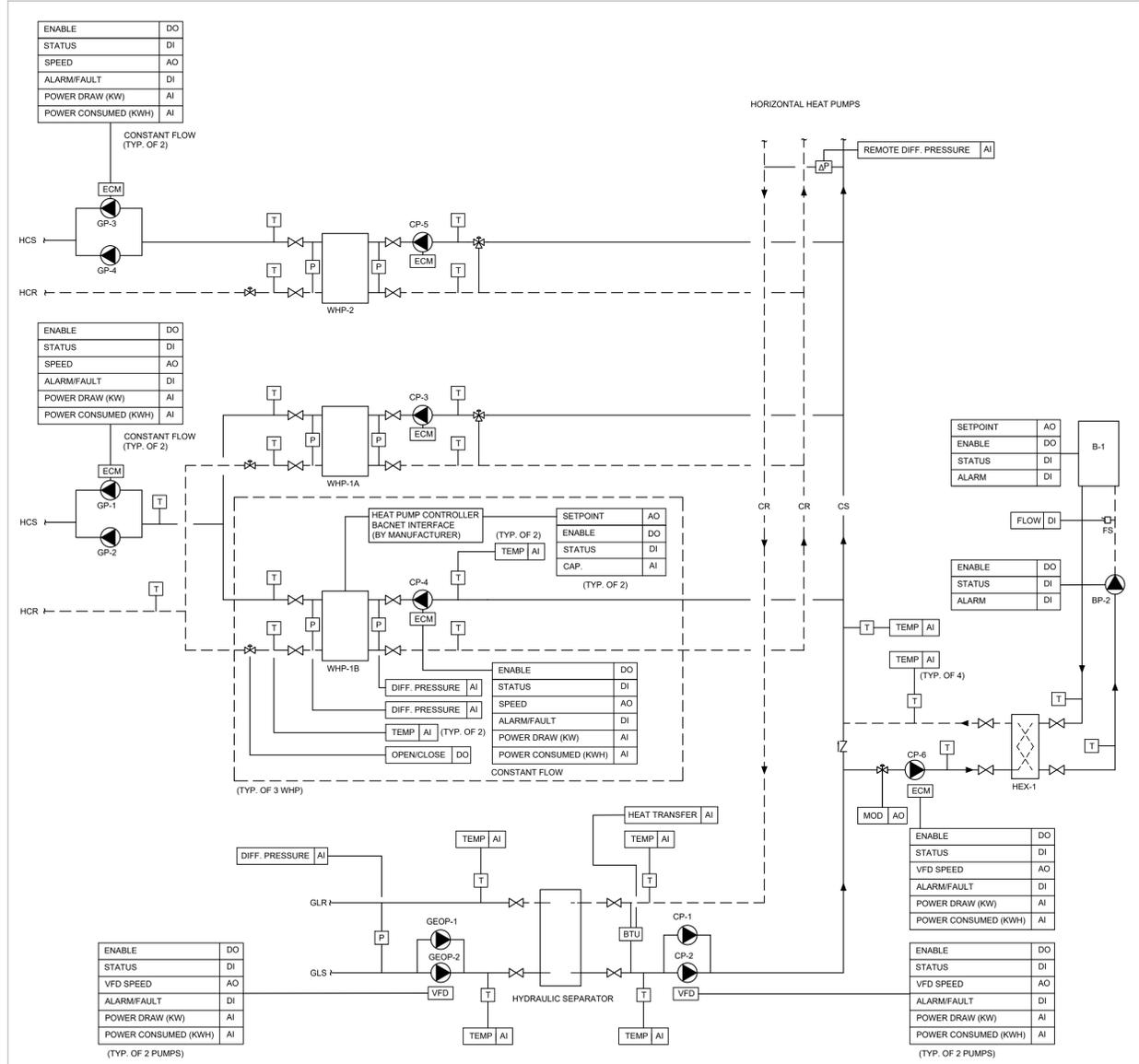
**3 HWT W/ SOLENOID VALVE AND LEAK DETECTOR**  
M-700.0 SCALE: N.T.S.



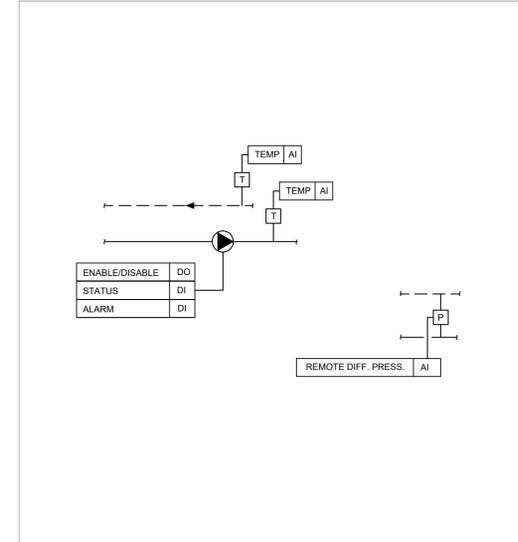
**2 UNIT HEATER, FORCE FLOW HEATER**  
M-700.0 SCALE: N.T.S.



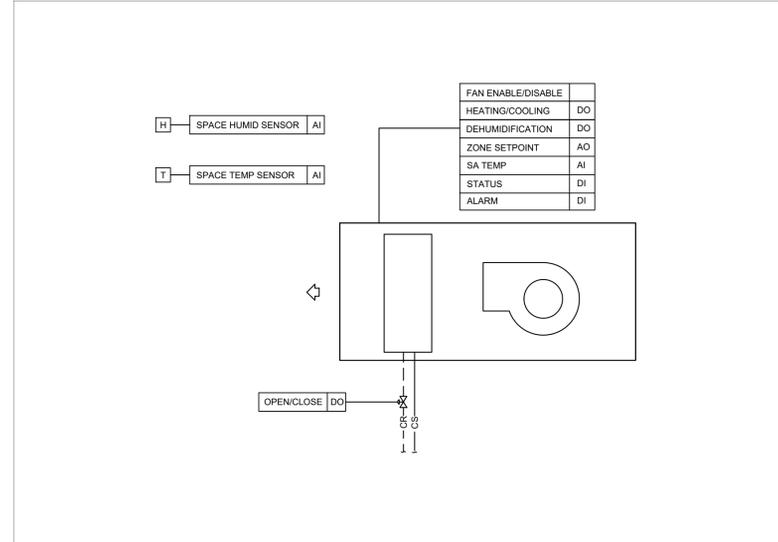
**1 RADIANT PANEL HEATING**  
M-700.0 SCALE: N.T.S.



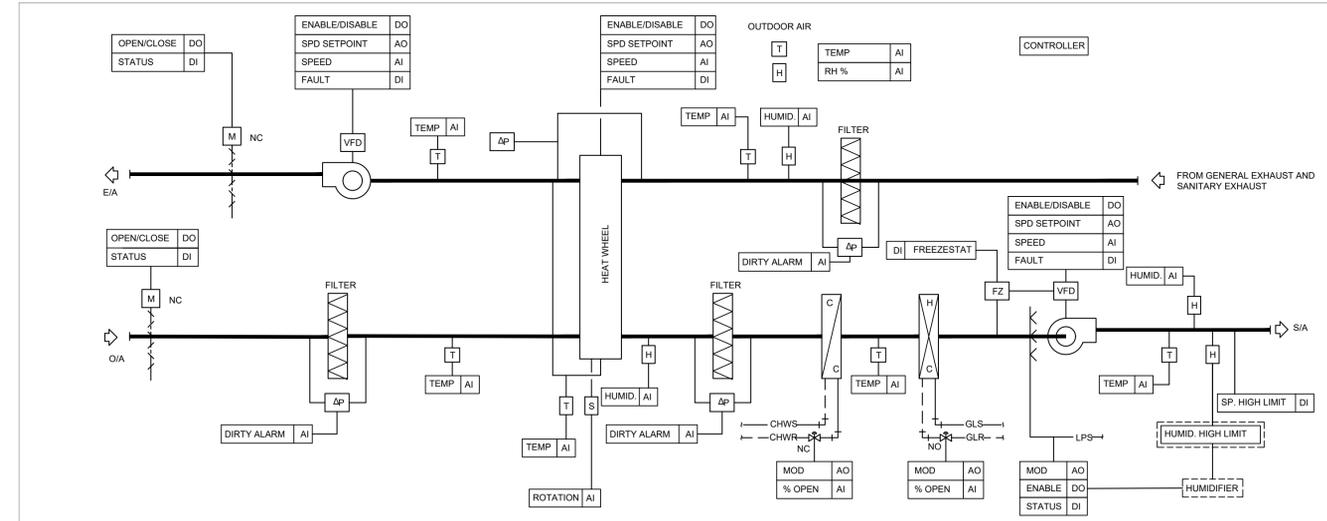
**7 GEOTHERMAL HEATING AND COOLING PLANT CONTROLS**  
M-700.1 SCALE: N.T.S.



**5 MISC HEAT CIRCULATING PUMP**  
M-700.1 SCALE: N.T.S.



**4 HEAT PUMPS - HORIZONTAL**  
M-700.0 SCALE: N.T.S.



**6 MAKE UP AIR UNIT**  
M-700.1 SCALE: N.T.S.

**PUMP SCHEDULE**

TAG	SERVICE	LOCATION	MANUFACTURER	MODEL NO.	PUMP SPECIFICATIONS					ELEC. (V/PH/Hz)	EMERGENCY POWER	PRESSURE RATING (kPa)	FLUID	VFD/ STARTER	WEIGHT (KG)	REMARKS
					FLOW (L/S)	HEAD (kPa)	SPEED (RPM)	MOTOR POWER (HP)	BHP (HP)							
GEOP-1/2	GEOHERMAL GROUND LOOP	MECH ROOM	BELL & GOSSETT	1.25AAB	6.94	209.23	3,600	5.00	3.19	208-230/1/60	-	-	25% PG	VFD	32	DUTY/STANDY
CP-1/2	BUILDING PRIMARY LOOP	MECH ROOM	BELL & GOSSETT	2AAB	8.96	188.31	3,600	5.00	3.39	575/3/60	-	-	25% PG	-	39	PUMPS TO OPERATE IN PARALLEL EACH SIZED FOR 75% OF SYSTEM FLOW.
CP-3/4	HEATING WWHP SOURCE PUMPS	MECH ROOM	BELL & GOSSETT	PL-100	2.91	41.85	3,250	0.40	0.45	575/3/60	-	-	25% PG	-	7	DUTY/DUTY
GP-1/2	HEATING GLYCOL LOOP	MECH ROOM	BELL & GOSSETT	1.25AAB	3.79	170.38	3,600	2.00	1.52	575/3/60	-	-	40% PG	-	-	-
BP-1	DOMESTIC HOT WATER	MECH ROOM	BELL & GOSSETT	NBF-25	0.38	44.84	2,950	-	-	115/1/60	-	-	25% PG	-	-	-
DHWRP-1	DHW RECIRCULATION	MECH ROOM	BELL & GOSSETT	PL-30B	0.32	62.77	2,650	0.08	-	115/1/60	-	-	DOMESTIC WATER	-	5	-
GP-3/4	COOLING GLYCOL LOOP	MECH ROOM	BELL & GOSSETT	PL-55	1.14	95.65	3,250	0.40	-	115/1/60	-	-	WATER	-	6	DUTY/STANDBY
CP-5	COOLING WWHP SOURCE PUMP	MECH ROOM	BELL & GOSSETT	1.5AB	2.27	67.85	1,725	0.75	0.43	575/3/60	-	-	25% PG	-	34	-
BP-2	SUPPLEMENTAL BOILER PUMP	MECH ROOM	-	-	1.51	80.70	-	-	-	-	-	-	WATER	-	-	-
CP-6	SUPPLEMENTAL BOILER LOOP	MECH ROOM	-	-	6.31	80.70	-	-	-	-	-	-	25% PG	-	-	-

NOTES:

**ELECTRIC DOMESTIC WATER HEATER SCHEDULE**

TAG	SERVICE	LOCATION	MANUFACTURER	MODEL NO.	CAPACITY (L)	RECOVERY RATE (L/H)	HEATER ELEMENT (kW)	WEIGHT (KG)	ELEC. (V/PH/Hz)	MCA (A)	REMARKS
EHW1	DHW	MECH ROOM	AO SMITH	DSE-65A-90	246	84.490	90	-	600/3/60	-	-

**DOMESTIC STORAGE TANK SCHEDULE**

TAG	SERVICE	LOCATION	MANUFACTURER	MODEL NO.	CAPACITY (L)	DIMENSIONS (MM)		REMARKS
						DIAMETER	LENGTH	
T-1	DHW	MECH ROOM	AO SMITH	TJ-80A	303	673	1,397	-

**MAKE-UP (VENTILATION) AIR UNIT SCHEDULE**

TAG	SERVICE	LOCATION	MANUFACTURER	MODEL No.	SUPPLY FAN								EXHAUST FAN								HEATING COIL PERFORMANCE								COOLING COIL PERFORMANCE									
					AIR FLOW (L/S)	ESP (Pa)	SPEED (RPM)	MOTOR POWER (HP)	BHP (HP)	ELEC. (V/PH/Hz)	VFD/ STARTER	AIR FLOW (L/S)	ESP (Pa)	SPEED (RPM)	MOTOR POWER (HP)	BHP (HP)	ELEC. (V/PH/Hz)	VFD/ STARTER	HEATING CAPACITY (kW)	AIR SIDE				WATER SIDE				HEATING CAPACITY (kW)	AIR SIDE				WATER SIDE					
																				AIR FLOW (L/S)	EAT DB (°C)	LAT DB (°C)	PRESSURE DROP (PA)	EWT (°C)	LWT (°C)	FLOW RATE (L/S)	PRESS DROP (KPA)		AIR FLOW (L/S)	EAT DB (°C)	LAT DB (°C)	PRESSURE DROP (PA)	EWT (°C)	LWT (°C)	FLOW RATE (L/S)	PRESS DROP (KPA)		
MUA-1	BUILDING OA	ROOF	SWEGON	AD-1000191237/2	1,274	394	1,614	5	2	600/3/60	-	1,274	394	1,614	5	2	600/3/60	-	22	1,274	-22	-	7	53	49	2	31	7	1,274	31	25	26	20	10	6	12		
ENERGY RECOVERY PERFORMANCE																																						
WINTER														SUMMER														FILTERS	WEIGHT (KG)	FULL CURRENT LOAD (A)	EMERGENCY OR NORMAL POWER	REMARKS						
OA TEMP. DB (°C)	OA TEMP. WB (°C)	EA TEMP. DB (°C)	EA TEMP. WB (°C)	SENSIBLE EFFICIENCY (%)	LATENT EFFICIENCY (%)	SA TEMP. DB (°C)	SA TEMP. WB (°C)	OA TEMP. DB (°C)	OA TEMP. WB (°C)	EA TEMP. DB (°C)	EA TEMP. WB (°C)	SENSIBLE EFFICIENCY (%)	LATENT EFFICIENCY (%)	SA TEMP. DB (°C)	SA TEMP. WB (°C)	63	125	250	500	1000	2000	4000	8000	63	125	250	500						1000	2000	4000	8000		
-22	-17	22	-	80	78	13	-	31	-	24	-	75	61	26	-	-	-	-	-	-	-	-	-	-	-	-	-						-	-	-	-	-	-

**EXPANSION TANK SCHEDULE**

TAG	SERVICE	LOCATION	MANUFACTURER	MODEL No.	SYSTEM	ACCEPTANCE VOLUME (L)	MIN. TEMPERATURE (C)	MAX. TEMPERATURE (C)	FILL PRESSURE (kPa)	FLUID	DIMENSIONS (MM)	PRESSURE RATING (kPa)	WEIGHT (KG)
ET-1	GEO LOOP	MECH ROOM	AMTROL	AX-120	-	129	-	116	862	25% PG	610	1,041	-
ET-2	DOMESTIC LOOP	MECH ROOM	-	-	-	-	-18	116	-	-	-	-	-

NOTES:

**HYDRAULIC SEPARATOR SCHEDULE**

TAG	SERVICE	LOCATION	MANUFACTURER	MODEL No.	FLUID	FLOW (L/S)	PRESS. DROP (kPa)	FLOODED VOLUME (M³)	PRESSURE RATING (kPa)	WEIGHT (KG)	REMARKS
HS	GEO LOOP (COOLING)	MECH ROOM	CALEFFI	SEP4 NA549082AM	25% PG	7.20	-	-	1724	50	-

NOTES:

**DIFFUSER & GRILLE SCHEDULE**

TAG	UNIT				DAMPER		MATERIAL	FINISH	REMARKS
	MANUFACTURER	MODEL No.	APPLICATION	DUTY	PART OF UNIT	REMOTE IN DUCT			
A	PRICE	SPD	SUPPLY	SUPPLY	-	YES	-	-	-
B	PRICE	SDS100	LINEAR SLOT DIFFUSER	SUPPLY	-	YES	-	-	1" SLOT, 2 SLOTS
C	PRICE	SDR100	LOUVRED RETURN	EXHAUST	-	YES	-	-	-
D	PRICE	500	SUPPLY/RETURN	SUPPLY/RETURN	YES	-	-	-	C/W BALANCING DAMPER
E	PRICE	SDS150	LINEAR SLOT DIFFUSER	SUPPLY	-	YES	-	-	1.5" SLOT, 4 SLOTS
F	PRICE	SDR100	LINEAR SLOT RETURN	RETURN	-	YES	-	-	1" SLOT, 2 SLOTS
G	PRICE	SDR150	LINEAR SLOT RETURN	RETURN	-	YES	-	-	1.5" SLOT, 4 SLOTS
H	PRICE	SDR100	LINEAR SLOT RETURN	RETURN	-	YES	-	-	1" SLOT, 2 SLOTS

NOTES:





### AIR CURTAIN SCHEDULE

	SERVICE	MANUFACTURER	MODEL No.	ARRANGEMENT	DIMENSIONS (L X W X H) (MM)	AIR FLOW (L/S)	EWT (°C)	LWT (°C)	EAT (°C)	WPD (kPa)	HEATING CAPACITY (kW)	WATER FLOW (L/s)	MOTOR (kW)	ELEC. (V/PHz)	MCA (A)	REMARKS
AC-1	OVERHEAD DOORS	BERNER	ARD12-3144W	HORIZONTAL DOWN DISCHARGE	3556 X 381 X 660	1783	52	41	65	0.30	13.72	0.32	3 @ 0.5	208/160		-

### RADIANT CEILING PANEL SCHEDULE

	SERVICE	MANUFACTURER	HEATER TYPE	LENGTH (MM)	HEATING CAPACITY (kW)	EWT (°C)	LWT (°C)	REMARKS
RP-1	WASHROOM	SIGMA	BOTTOM RETURN CEILING MOUNTED RADIANT PANEL	REFER TO FLOORPLAN	REFER TO FLOORPLAN	52	48.89	9000mm WIDTH, 10 TUBE PASSES

### HYDRONIC FORCE FLOW HEATER SCHEDULE

	SERVICE	MANUFACTURER	MODEL No.	ARRANGEMENT	DIMENSIONS (L X W X H) (MM)	AIR FLOW (L/S)	EWT (°C)	LWT (°C)	EAT (°C)	WPD (kPa)	HEATING CAPACITY (kW)	WATER FLOW (L/s)	MOTOR (W)	ELEC. (V/PHz)	MCA (A)	REMARKS
FFH-1	EXIT VESTIBULE HEATING	JAGA	BRIZA-22	FAN COIL CEILING MOUNTED CABINET	950 X 625 X 270		52	48.89	18.0		5	0.38		115/160	2	-
FFH-2	WARMUP LOUNGE HEATING	JAGA	SLCM02014411/BNA	CURB MOUNTED	1440 X 180 X 200	59	52	48.89	18.3	61.6	2.26	0.16	8.60	120/160		1440 MM CABINET WITH STANDARD INTERNAL COMPONENT
FFH-3	WARMUP LOUNGE HEATING	JAGA	SLCM02010811/BNA	CURB MOUNTED	2160 X 180 X 200	130	52	48.89	18.3	143.4	3.10	0.22	12	120/160		2 x 1080 MM CABINETS WITH 1800 MM INTERNAL SECTION
FFH-4	WARMUP LOUNGE HEATING	JAGA	SLCM02010811/BNA	CURB MOUNTED	2880 X 180 X 200	130	52	48.89	18.3	143.4	3.10	0.22	12	120/160		2 x 1440 MM CABINETS WITH 1800 MM INTERNAL SECTION

### ELECTRIC HEATING BOILER SCHEDULE

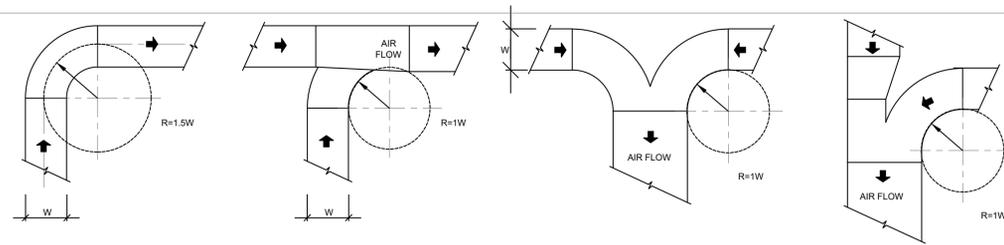
	SERVICE	MANUFACTURER	MODEL No.	INPUT (kW)	MIN FLOW RATE (L/s)	MAX FLOW RATE (L/s)	MAX PRESSURE DROP (kPa)	EWT (°C)	LWT (°C)	WEIGHT (KG)	ELEC. (V/PHz)	MCA (A)	MOP (A)	EFF. (%)	REMARKS
B-1	SUPPLEMENTAL HEAT	LOCHINVAR	KEB0075	75	0.39	6.620000	1			-	115/160	2	2		-

### HEAT EXCHANGER SCHEDULE

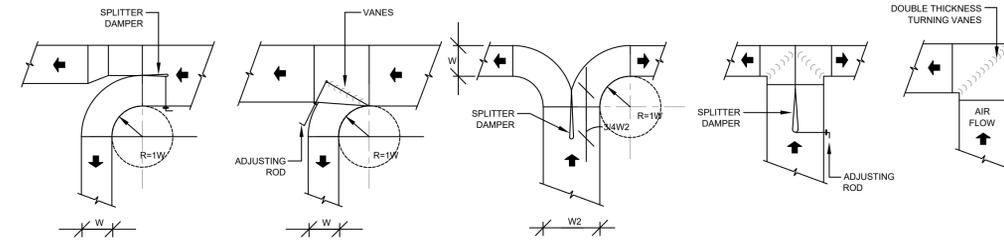
TAG	SERVICE	LOCATION	TYPE (SHELL & TUBE OR PLATE & FRAME)	MANUFACTURER	MODEL No.	MINIMUM HEAT TRANSFER (kW)	POWER INPUT (kW)	SOURCE SIDE					LOAD SIDE					MINIMUM PRESSURE RATING (KPA)	WEIGHT (KG)	REMARKS
								EWT (°C)	LWT (°C)	FLOW RATE (L/s)	PRESSURE DROP (kPa)	FLUID	EWT (°C)	LWT (°C)	FLOW RATE (L/s)	PRESSURE DROP (kPa)	FLUID			
HEX-1	SUPPLEMENTAL BOILER	MECH ROOM																		

NOTES:

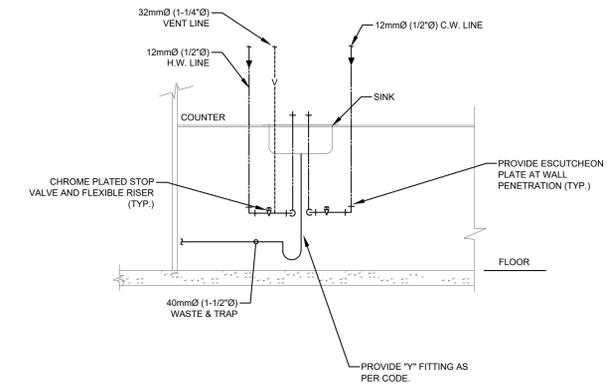




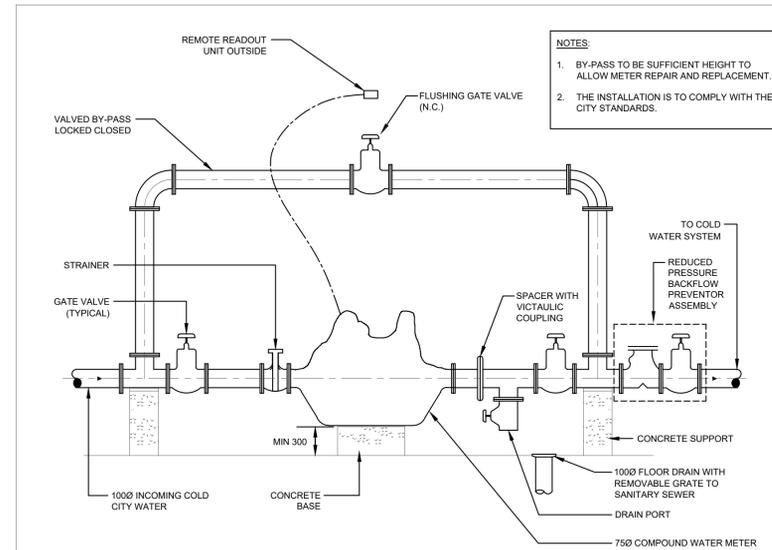
TYPICAL EXHAUST AIR & RETURN AIR DUCT BRANCHES



**2 DUCT BRANCHES**  
M-900.0 SCALE: N.T.S.

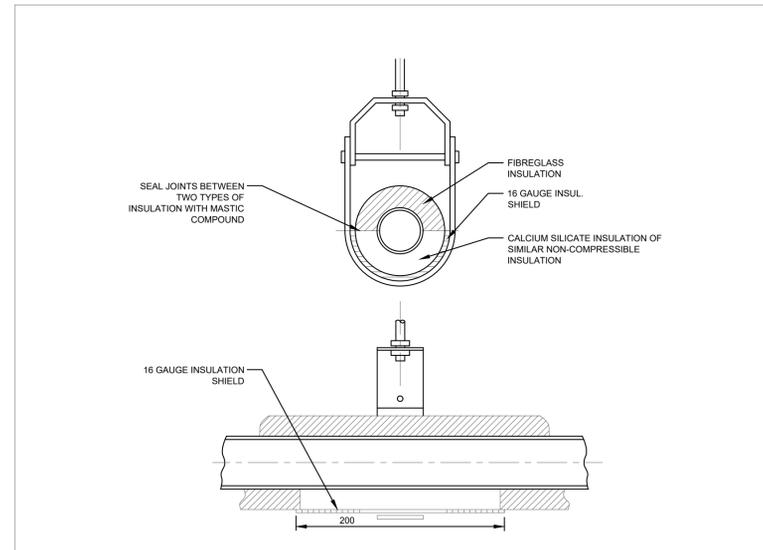


**1 SINK PIPING CONNECTION**  
M-900.0 SCALE: N.T.S.

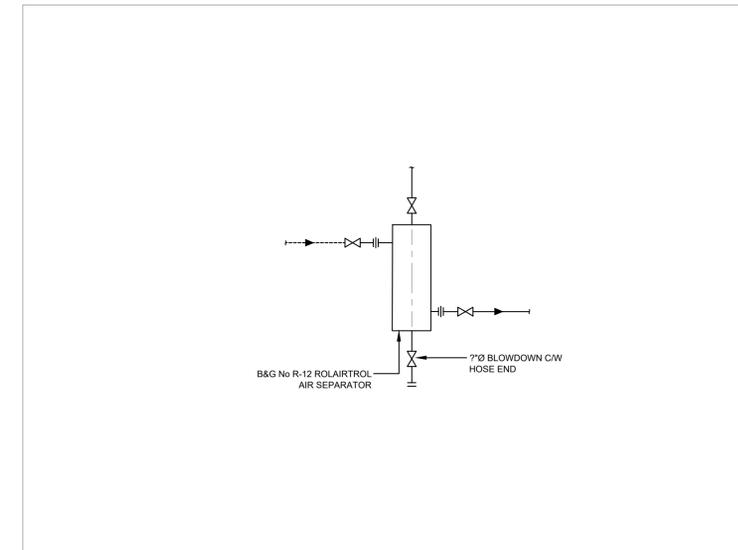


**5 WATER METER AND ASSEMBLY**  
M-900.0 SCALE: N.T.S.

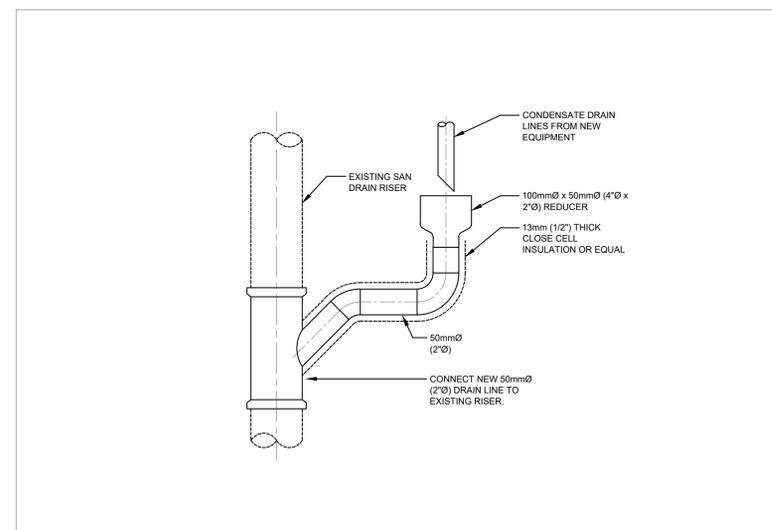
**NOTES:**  
1. BY-PASS TO BE SUFFICIENT HEIGHT TO ALLOW METER REPAIR AND REPLACEMENT.  
2. THE INSTALLATION IS TO COMPLY WITH THE CITY STANDARDS.



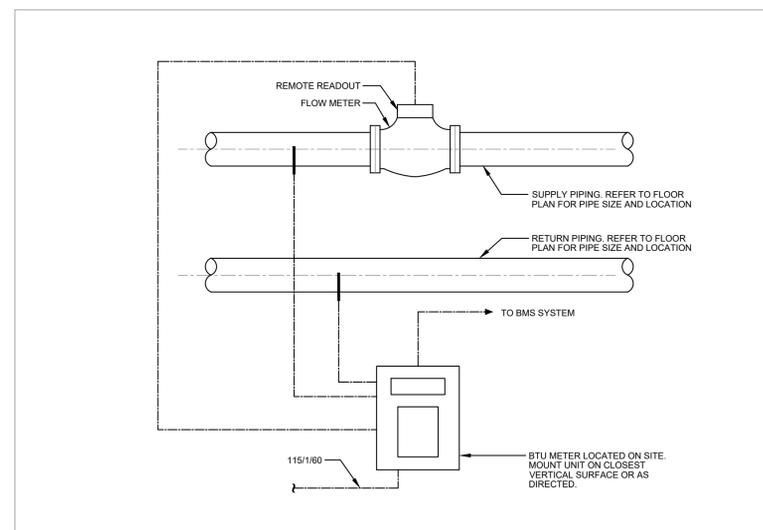
**4 PIPE HANGER (CHILLED & COLD WATER)**  
M-900.0 SCALE: N.T.S.



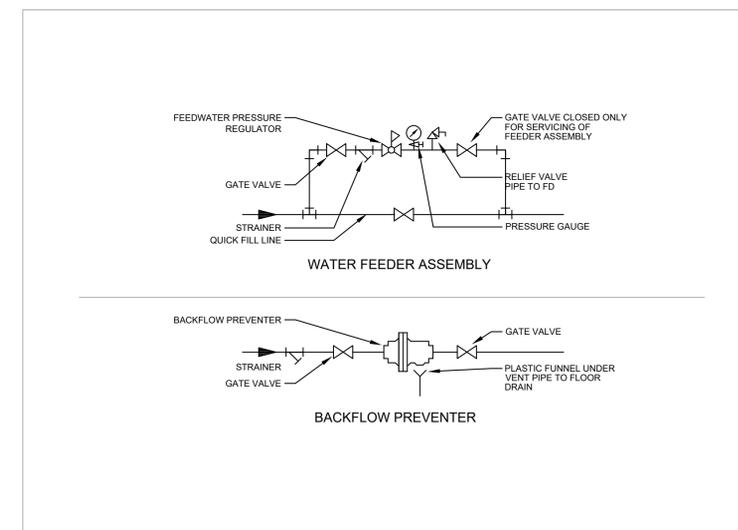
**3 AIR SEPARATOR**  
M-900.0 SCALE: N.T.S.



**8 CONDENSATE DRAIN TERMINATION**  
M-900.0 SCALE: N.T.S.



**7 ENERGY METER CONNECTION**  
M-900.0 SCALE: N.T.S.



**6 PRESSURE REDUCING VALVE, WATER FEEDER & BACKFLOW PREVENTER**  
M-900.0 SCALE: N.T.S.

ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR REVISION	2024-11-06
ISSUED FOR PROGRESS	2024-08-23
REVISION	020

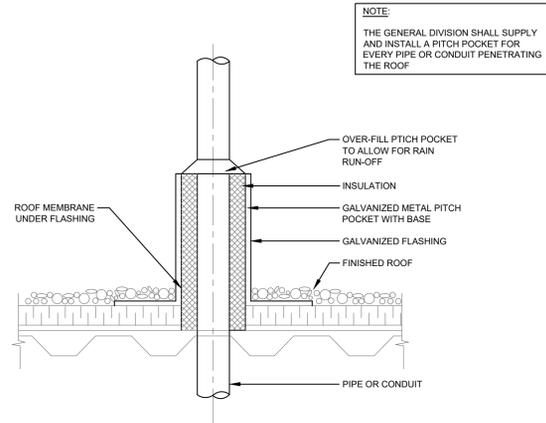
FIFA - EAST VSTS CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON

MECHANICAL DETAILS I - BASE SCOPE

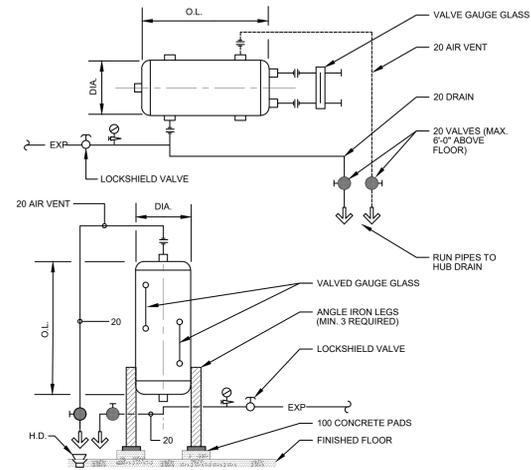
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scale: N.T.S.  
date:

drawing no.:

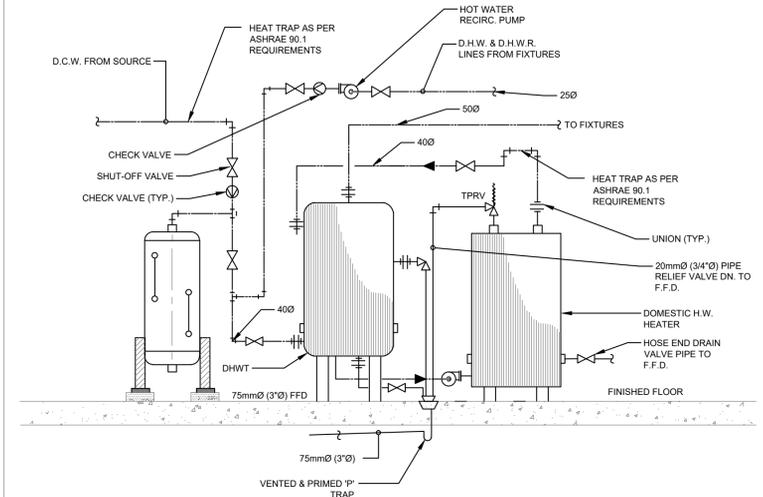
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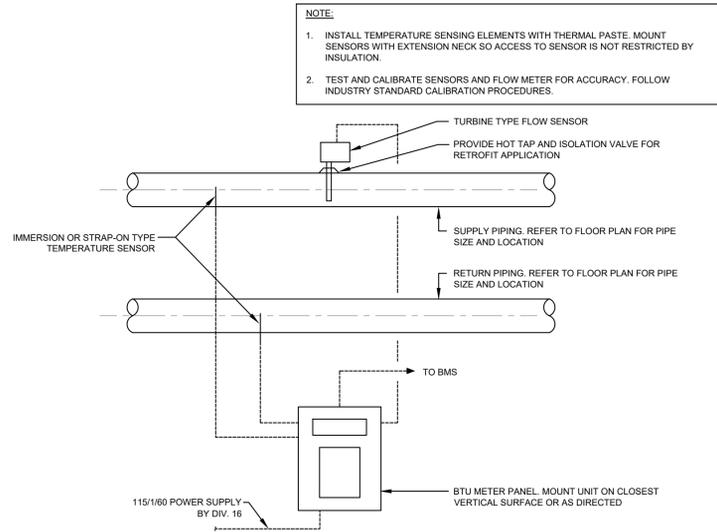
**3 PITCH POCKET**  
SCALE: N.T.S.  
M-901.0



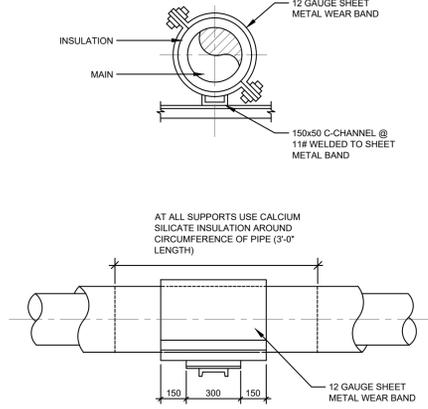
**2 EXPANSION TANK**  
SCALE: N.T.S.  
M-901.0



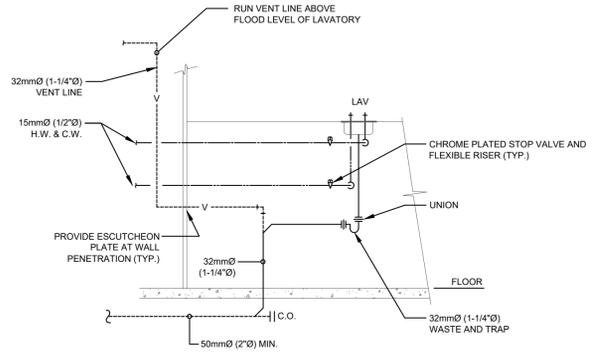
**1 D.H.W. TANK - ELECTRIC FLOOR MOUNT W/ RECIRC PUMP**  
SCALE: N.T.S.  
M-901.0



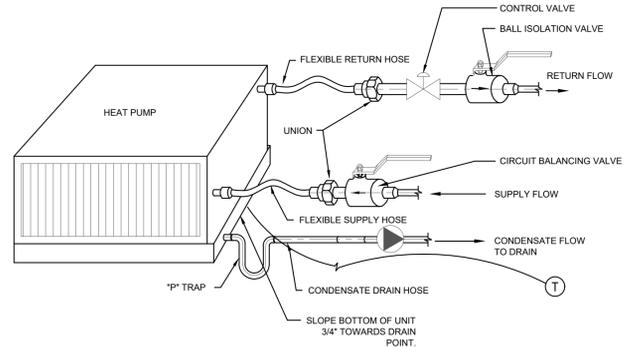
**6 BTU METER CONNECTION**  
SCALE: N.T.S.  
M-901.0



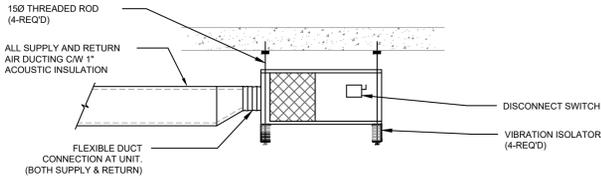
**5 PIPE SUPPORT (COLD SYSTEMS)**  
SCALE: N.T.S.  
M-901.0



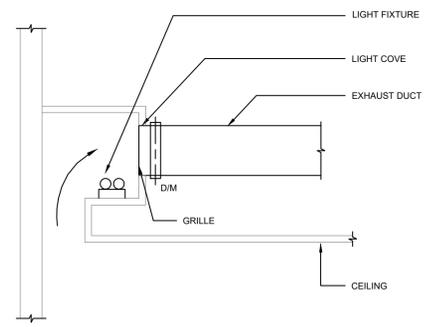
**4 LAVATORY PIPING CONNECTION**  
SCALE: N.T.S.  
M-901.0



**9 HORIZONTAL HEAT PUMP PIPING DETAIL**  
SCALE: N.T.S.  
M-902.0



**8 HORIZONTAL HEAT PUMP MOUNTING DETAIL**  
SCALE: N.T.S.  
M-901.0



**7 LIGHT COVE EXHAUST**  
SCALE: N.T.S.  
M-901.0

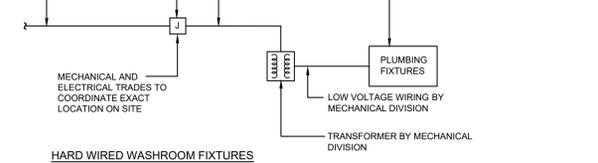
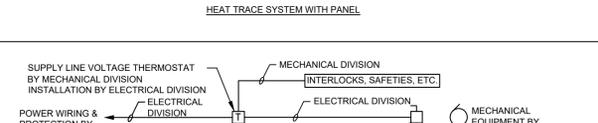
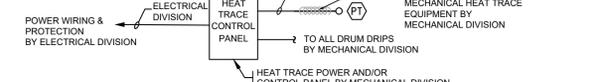
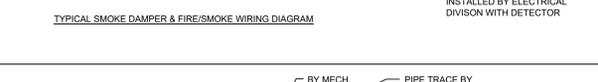
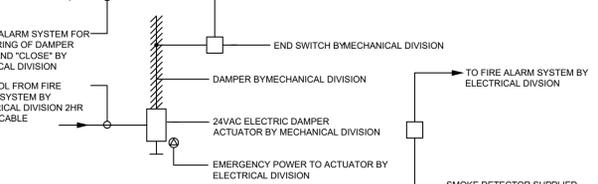
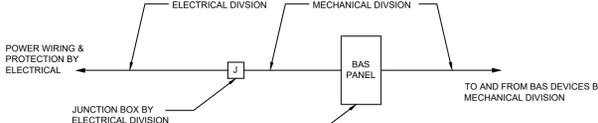
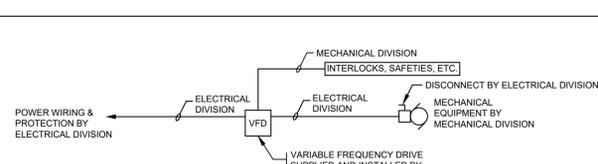
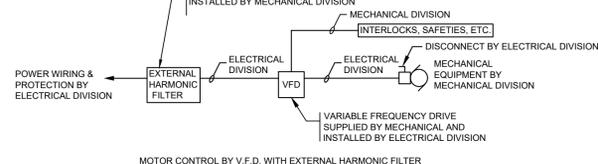
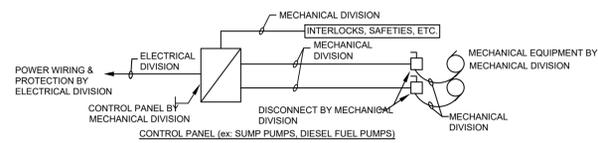
ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR REVISION	2024-11-06
ISSUED FOR PROGRESS	2024-08-23
REVISION	0202

FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON  
MECHANICAL DETAILS II -  
BASE SCOPE

project no.: 2024-0112  
scale: N.T.S.  
date:

drawing no.: **M-901.0**

**SCOPE OF WORK FOR MECHANICAL EQUIPMENT**



**MECHANICAL LEGEND**

MECHANICAL LEGEND		EXISTING DEVICES ARE TONED:
	SUPPLY OR OUTSIDE AIR DUCT (UP / DOWN)	
	RETURN AIR DUCT (UP / DOWN)	
	EXHAUST AIR DUCT (UP / DOWN)	
	DAMPER DF - FIRE DG - GRAVITY BACKDRAFT DA - AUTOMATIC W/ OPERATOR DFS - FIRE/SMOKE DM - MANUAL BALANCING DS - SMOKE	
	DOUBLE LINE DUCT - SINGLE LINE DUCT	
	DOUBLE LINE DUCT - SINGLE LINE DUCT WITH LINING AS NOTED	
	DOUBLE LINE DUCT - SINGLE LINE DUCT WITH ACOUSTIC INSULATION	
	DOUBLE LINE DUCT - SINGLE LINE DUCT WITH SILENCER	
	DOUBLE LINE DUCT - SINGLE LINE DUCT WITH FIRE WRAP	
	FLEX DUCT WITH TAKE-OFF C/W MANUAL BALANCING DAMPER	
	RETURN AIR GRILLE	
	EXHAUST GRILLE	
	TRANSFER GRILLE	
	SQUARE DIFFUSER	
	ROUND DIFFUSER	
	LINEAR DIFFUSER	
	VAV BOX	
	VAV BOX WITH ATTENUATOR	
	MECHANICAL EQUIPMENT AS INDICATED (REVIT)	
	THERMOSTAT	
	TEMPERATURE SENSOR - (DIGITAL)	
	HUMIDITY SENSOR	
	LEAK DETECTOR	
	SPEED CONTROLLER	
	ON/OFF SWITCH - CONTROL SWITCH	
	FD - FLOOR FLOOR FFD - FUNNEL FLOOR GD - GARAGE HD - HUB AD - AREA	
	ROOF DRAIN (SIZE)	
	CATCH BASIN MAN HOLE AS INDICATED	
	RUNNING TRAP	
	TD - TRENCH GTD - GARAGE	
	BACKWATER VALVE	
	CLEANOUT - SUSPENDED / CLEANOUT - BURIED	
	HB - HOSE BIB NFB - NON-FREEZE HOSE BIB WH - WALL HYDRANT	
	NON-FREEZE GROUND HYDRANT	
	CAP	
	FIRE EXTINGUISHER	
	FIRE EXTINGUISHER WITH CABINET	

**MECHANICAL LEGEND**

MECHANICAL LEGEND		EXISTING DEVICES ARE TONED:
	ISOLATION VALVE	
	CIRCUIT BALANCING VALVE	
	AUTOMATIC FLOW CONTROL VALVE	
	BALANCING VALVE	
	CHECK VALVE	
	PRESSURE REDUCING VALVE	
	SUPERVISED VALVE	
	(SAFETY) RELIEF VALVE	
	2 OR 3 WAY CONTROL VALVE	
	SOLENOID VALVE	
	SHUT OFF FIRE SAFE VALVE	
	DRAIN VALVE	
	STRAINER	
	UNION	
	AIR VENT	
	FLOW SWITCH	
	PRESSURE GAUGE PRESSURE WELL	
	THERMOMETER THERMOMETER WELL	
	TEMPERATURE GAUGE	
	WATER METER / GAS METER / METER AS NOTED	
	BACKFLOW PREVENTOR	
	PIPE GUIDE / PIPE ANCHOR	
	WALL SLEEVE	
	EXPANSION JOINT	
	ELBOW TURNING ON / TEE OUTLET TURNING DN.	
	ELBOW TURNING UP / TEE OUTLET TURNING UP	
	PIPE END CAPPED	
	RUNNING TRAP	
	HEAT TRACE	
	FLOW ARROW	
	LINE BREAK	
	SAN - SANITARY DRAIN IN CEILING SPACE	
	SAN - SANITARY DRAIN BELOW SLAB	
	SAN.P - SANITARY DRAIN - PUMPED	
	D - INDIRECT DRAIN	
	V - SANITARY VENT	
	ST - STORM DRAIN - SUSPENDED FROM CEILING	
	ST - STORM DRAIN - BURIED (BELOW FLOOR)	
	ST.P - STORM DRAIN - PUMPED	
	DOMESTIC COLD WATER	
	DOMESTIC HOT WATER	
	DOMESTIC HOT WATER RECIRCULATION	
	DOMESTIC HOT WATER - HIGH TEMPERATURE	
	DOMESTIC HOT WATER RECIRC - HIGH TEMPERATURE	
	CWS - CONDENSER WATER - SUPPLY	
	CWR - CONDENSER WATER - RETURN	
	DOMESTIC COLD WATER - HIGH PRESSURE	
	DOMESTIC HOT WATER - HIGH PRESSURE	
	DOMESTIC HOT WATER RECIRC - HIGH PRESSURE	
	CONDENSATE DRAIN	
	CONDENSATE - LOW PRESSURE	
	CONDENSATE - PUMPED	
	MAKEUP WATER	
	STEAM - HIGH PRESSURE	
	STEAM - MEDIUM PRESSURE	
	STEAM - LOW PRESSURE	

**MECHANICAL LEGEND**

MECHANICAL LEGEND		EXISTING DEVICES ARE TONED:
	MAX. AIR (CFM or l/s)	00 A
	MIN. AIR (CFM or l/s)	00 A
	HTG. AIR (CFM or l/s)	00 A
	HTG. CAP (MBH or kW)	00.00
	PRIMARY MAX (CFM or l/s)	00 A
	PRIMARY MIN (CFM or l/s)	00 A
	HTG. AIR (CFM or l/s)	00 A
	HTG. CAP (MBH or kW)	00.00
	SIZE LENGTH OR NECK DIAMETER (mm X mm)	00x00 A
	AIR FLOW (l/s)	0000 A
	LENGTH (in or mm)	IN A
	HTG. CAP (MBH or kW)	000 A
	CONNECT TO EXISTING	
	EQUIPMENT TAG (REFER TO SCHEDULE)	
	PLUMBING FIXTURE TAG	
	RISER TAG	
	'REFER TO KEYNOTE' NUMBER	
	'REFER TO DETAIL NOTE' NUMBER	
	DENOTES MATCHLINE	
	DENOTES CROSS SECTION DETAIL CALL OUT	
	DENOTES DETAIL CALL OUT	
<b>DEMOLITION</b>		
	R - REMOVE	
	RL - RELOCATE	
	DENOTES EXISTING EQUIPMENT, PIPE, DUCT TO BE 'REMOVED'	
	DENOTES EXISTING EQUIPMENT TO BE 'REMOVED'	
	DENOTES EXISTING EQUIPMENT, PIPE, DUCT TO BE 'RELOCATED'	
<b>EXISTING</b>		
	EXISTING TO REMAIN (TONED)	
	DOMESTIC COLD WATER - HIGH PRESSURE	
	DOMESTIC HOT WATER - HIGH PRESSURE	
	DOMESTIC HOT WATER RECIRC - HIGH PRESSURE	
	CONDENSATE DRAIN	
	CONDENSATE - LOW PRESSURE	
	CONDENSATE - PUMPED	
	MAKEUP WATER	
	STEAM - HIGH PRESSURE	
	STEAM - MEDIUM PRESSURE	
	STEAM - LOW PRESSURE	

**MECHANICAL LEGEND**

MECHANICAL LEGEND		EXISTING DEVICES ARE TONED:
	OPEN/CLOSE	
	AIR FLOW SENSOR	
	MODULATING	
	FIRE ALARM SYSTEM	
	END SWITCH	
	START/STOP	
	ENABLE/DISABLE	
	HIGH HUMIDITY SENSOR	
	PRESSURE DIFFERENTIAL	
	SMOKE DETECTOR	
	FIRE STAT	
	FREEZE STAT	
	DIGITAL INPUT	
	DIGITAL OUTPUT	
	ANALOGUE INPUT	
	ANALOGUE OUTPUT	
	TEMPERATURE SENSOR	
	FLOW SENSOR	
	PRESSURE SENSOR	
	HUMIDITY SENSOR	

**MECHANICAL DRAWING LIST**

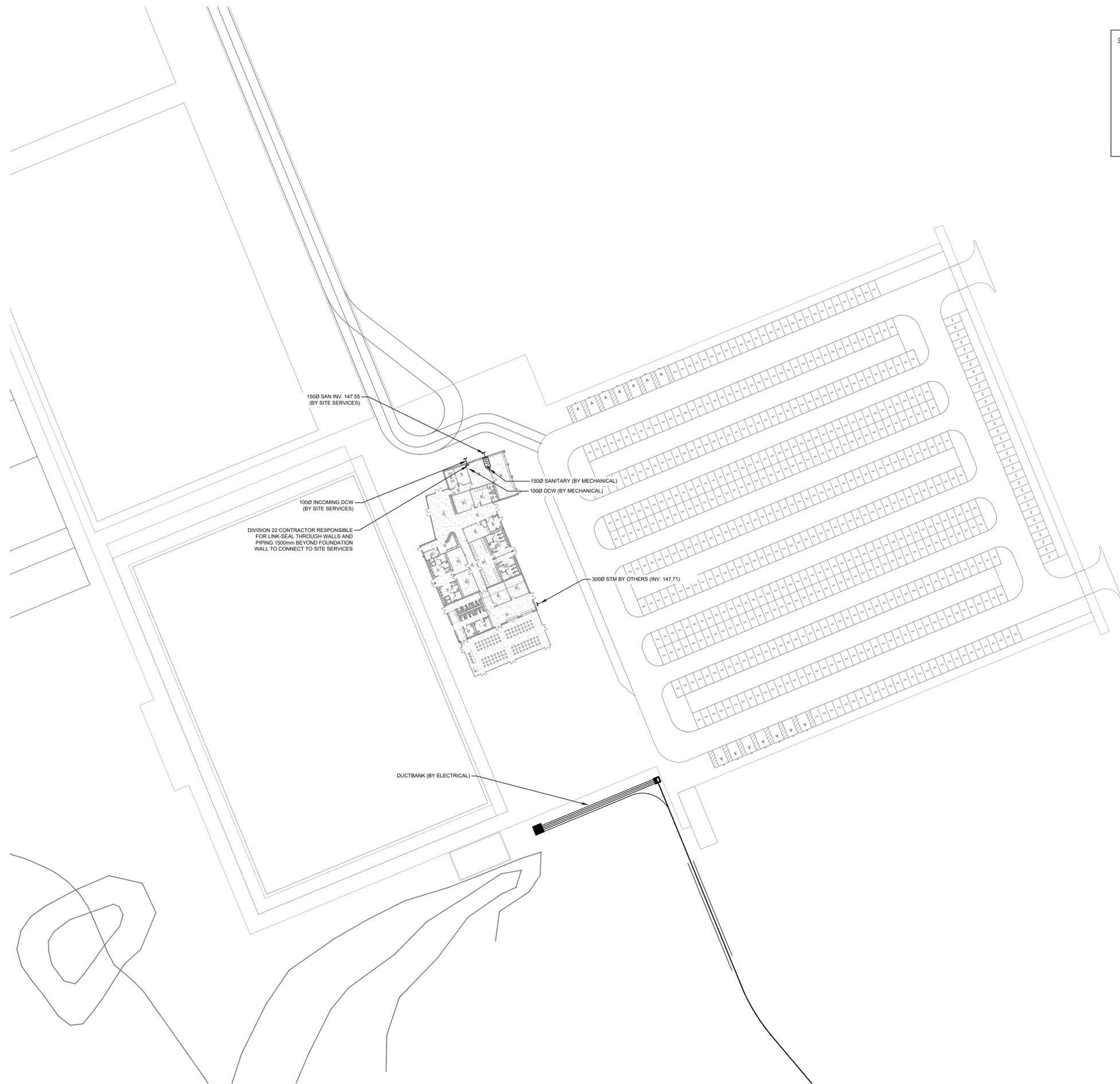
DWG. No.	DRAWING TITLE
M-000.1	MECHANICAL LEGEND AND DRAWING LIST - SEPARATE PRICE 1
M-011.1	SITE PLAN - SEPARATE PRICE 1
M-110.1	EAST VSTS BELOW GRADE GAME PLUMBING & DRAINAGE - SEPARATE PRICE 1
M-111.1	EAST VSTS GROUND FLOOR GAME PLUMBING & DRAINAGE - SEPARATE PRICE 1
M-112.1	EAST VSTS ROOF GAME PLUMBING & DRAINAGE - SEPARATE PRICE 1
M-113.1	EAST VSTS BELOW GRADE LEGACY PLUMBING & DRAINAGE - SEPARATE PRICE 1
M-114.1	EAST VSTS GROUND FLOOR LEGACY PLUMBING & DRAINAGE - SEPARATE PRICE 1
M-115.1	EAST VSTS ROOF LEGACY PLUMBING & DRAINAGE - SEPARATE PRICE 1
M-211.1	EAST VSTS GROUND FLOOR GAME FIRE PROTECTION - SEPARATE PRICE 1
M-311.1	EAST VSTS GROUND FLOOR GAME HVAC - SEPARATE PRICE 1
M-312.1	EAST VSTS ROOF GAME HVAC - SEPARATE PRICE 1
M-313.1	EAST VSTS GROUND LEGACY FLOOR HVAC - SEPARATE PRICE 1
M-411.1	EAST VSTS GROUND FLOOR GAME HVAC PIPING - SEPARATE PRICE 1
M-412.1	EAST VSTS ROOF GAME HVAC PIPING - SEPARATE PRICE 1
M-413.1	EAST VSTS GROUND LEGACY FLOOR HVAC PIPING - SEPARATE PRICE 1
M-500.1	EAST VSTS MECHANICAL PART PLAN - SEPARATE PRICE 1
M-600.1	EAST VSTS HEATING AND COOLING SCHEMATIC - SEPARATE PRICE 1
M-601.1	EAST VSTS HVAC AIRSIDE SCHEMATIC - SEPARATE PRICE 1
M-602.1	EAST VSTS DOMESTIC WATER GAME SCHEMATIC - SEPARATE PRICE 1
M-603.1	EAST VSTS HVAC SANITARY GAME SCHEMATIC - SEPARATE PRICE 1
M-604.1	EAST VSTS HVAC STORM SCHEMATIC - SEPARATE PRICE 1
M-605.1	EAST VSTS DOMESTIC WATER LEGACY SCHEMATIC - SEPARATE PRICE 1
M-606.1	EAST VSTS HVAC SANITARY LEGACY SCHEMATIC - SEPARATE PRICE 1
M-700.1	CONTROLS SCHEMATICS - SEPARATE PRICE 1
M-800.1	MECHANICAL SCHEDULES I - SEPARATE PRICE 1
M-801.1	MECHANICAL SCHEDULES II - SEPARATE PRICE 1
M-802.1	MECHANICAL SCHEDULES III - SEPARATE PRICE 1
M-900.1	MECHANICAL DETAILS I - SEPARATE PRICE 1
M-901.1	MECHANICAL DETAILS II - SEPARATE PRICE 1



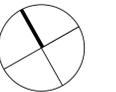
ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR PROGRESS	2024-08-15
ISSUED FOR COORDINATION	2024-07-30
ISSUED FOR CLASS C COSTING	2024-06-28
Revision	001



- GENERAL NOTES:**
1. NEW SERVICE CONNECTION LOCATIONS AND INVERTS SHALL BE AS SPECIFIED BY THE CIVIL ENGINEER, REFER TO CIVIL DRAWINGS FOR COORDINATION. MECHANICAL SCOPE OF WORK TO BEGIN 1500MM OUT FROM THE FOUNDATION WALL.
  2. SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
  3. ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
  4. MECHANICAL CONTRACTOR SHALL PROVIDE SCHEDULE 40 SLEEVES AND LINK SEALS FOR ALL SITE SERVICES.
  5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INVERTS AND COORDINATION WITH SITE SERVICES AND STRUCTURAL ELEMENTS.
  6. PROVIDE ELECTRIC PIPE TRACING ON ALL PIPING SUBJECT TO FREEZING OR IN UNHEATED SPACES.
  7. WATER METER WILL BE RELOCATED FROM THE BUNKER INTO THE BUILDING DURING CONSTRUCTION.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR PROGRESS	2024-08-15
ISSUED FOR COORDINATION	2024-07-30
ISSUED FOR CLASS C COSTING	2024-06-26
Revision	001



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
 Address: 56 Centennial Park Rd, Toronto, ON  
**SITE PLAN - SEPARATE PRICE 1**

project no. : 2024-0112  
 scale : 1:600  
 date :

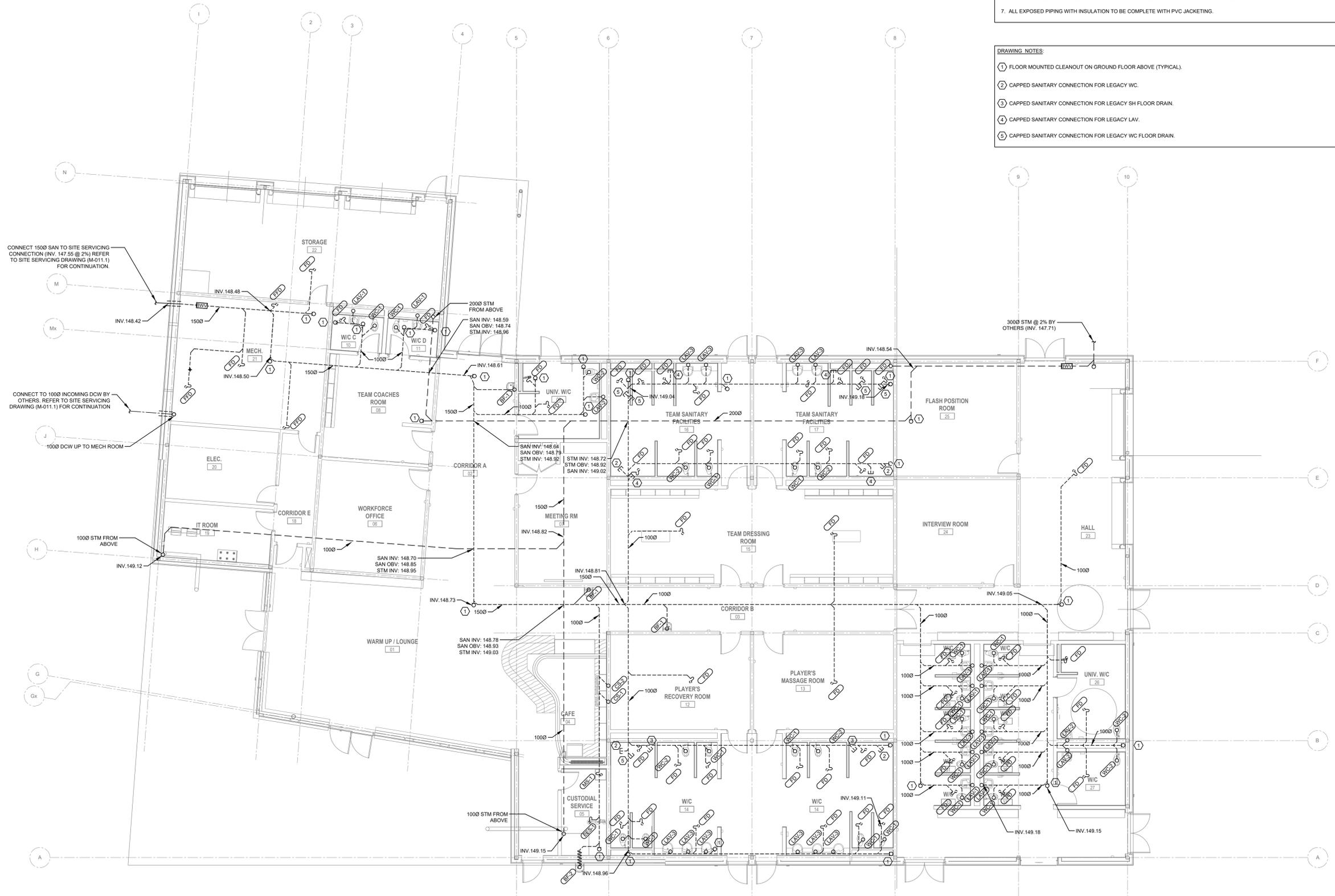
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**M-011.1**

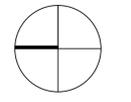


- GENERAL NOTES:**
- SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
  - ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
  - ALL FOUNDATION PLUMBING TO BE PVC.
  - PROVIDE COMPLETE SANITARY VENT SYSTEM IN ACCORDANCE WITH THE OBC.
  - PROVIDE CLEANOUTS ON ALL DRAINAGE AND WASTE SYSTEMS, NOT LIMITED TO CLEANOUTS SHOWN ON THE DRAWINGS.
  - ALL FLOOR DRAIN P-TRAPS SHALL BE PRIMED FROM A CENTRAL ELECTRONIC TRAP SEAL PRIMER. DIVISION 22 CONTRACTOR MUST COORDINATE WITH ELECTRICAL TRADE FOR CIRCUIT LOCATIONS DURING SHOP DRAWING STAGE, OTHERWISE DIVISION 22 TRADE WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH CIRCUIT WIRING.
  - ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.

- DRAWING NOTES:**
- FLOOR MOUNTED CLEANOUT ON GROUND FLOOR ABOVE (TYPICAL).
  - CAPPED SANITARY CONNECTION FOR LEGACY WC.
  - CAPPED SANITARY CONNECTION FOR LEGACY SH FLOOR DRAIN.
  - CAPPED SANITARY CONNECTION FOR LEGACY LAV.
  - CAPPED SANITARY CONNECTION FOR LEGACY WC FLOOR DRAIN.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR PROGRESS	2024-08-15
ISSUED FOR COORDINATION	2024-07-30
ISSUED FOR CLASS C COSTING	2024-06-08
REVISION	02/2



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
Address: 56 Centennial Park Rd. Toronto, ON

**EAST VSTS BELOW GRADE**  
**GAME**  
**PLUMBING & DRAINAGE -**  
**SEPARATE PRICE 1**

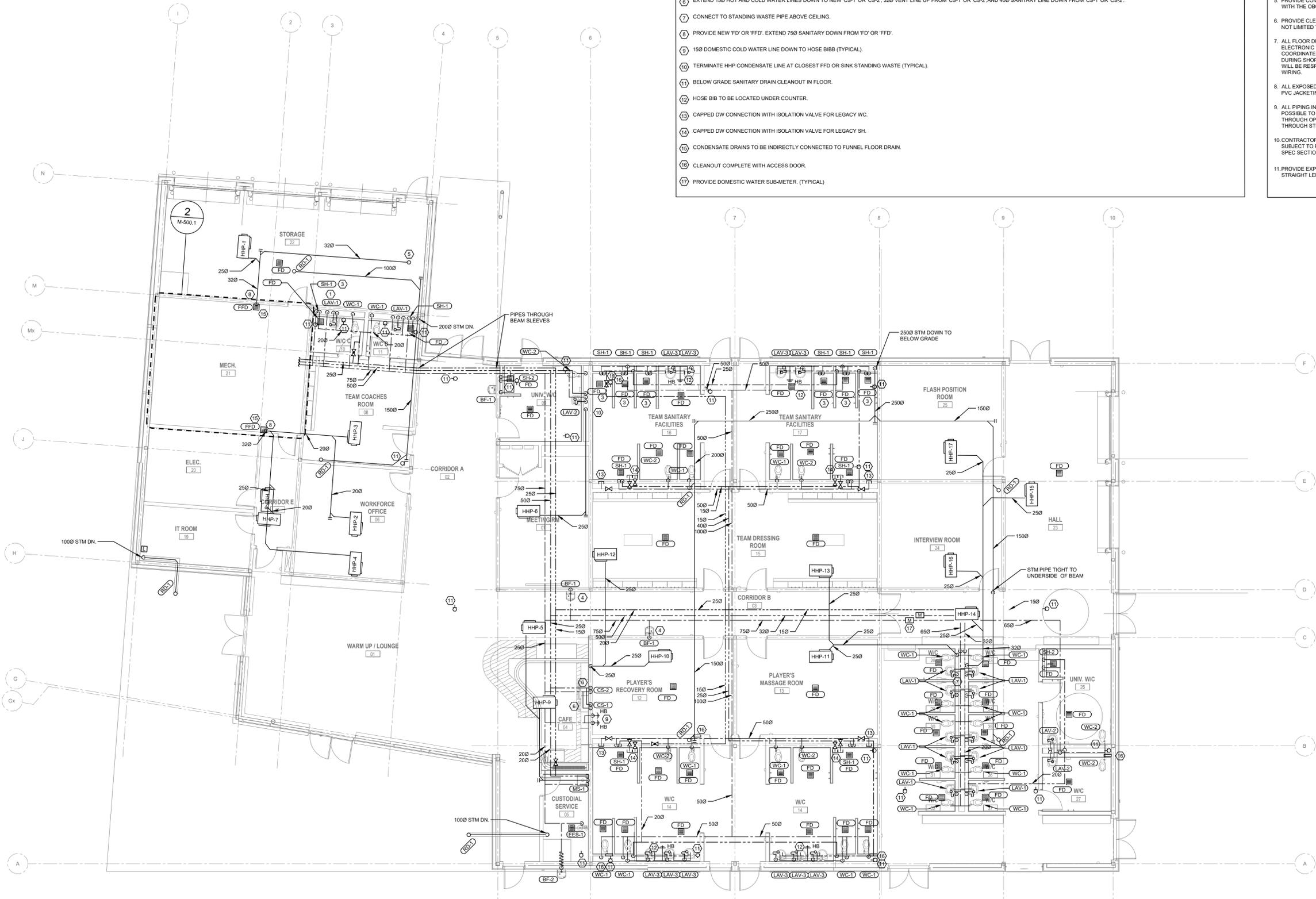
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drawing no.: **M-110.1**

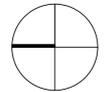


- DRAWING NOTES:**
- 1 EXTEND 150 HOT AND COLD WATER LINES DOWN TO NEW 'LAV-1', 'LAV-2', OR 'LAV-3'. 320 VENT LINE UP FROM 'LAV-1', 'LAV-2', OR 'LAV-3'. AND 400 SANITARY LINE DOWN FROM 'LAV-1', 'LAV-2', OR 'LAV-3' (TYPICAL).
  - 2 EXTEND 250 COLD WATER LINE DOWN TO NEW 'WC-1' OR 'WC-2'. 500 VENT LINE UP FROM 'WC-1' OR 'WC-2'. AND 750 SANITARY LINE DOWN FROM 'WC-1' OR 'WC-2'. (TYPICAL)
  - 3 EXTEND 150 HOT AND COLD WATER LINES DOWN TO NEW 'SH-1' OR 'SH-2' AND 320 VENT LINE UP FROM 'SH-1' OR 'SH-2' (TYPICAL).
  - 4 PROVIDE NEW BOTTLE FILLER, 'BF-1' AS SPECIFIED. EXTEND NEW 150 COLD WATER LINE TO NEW BOTTLE FILLER 'BF-1'. 320 VENT LINE UP FROM 'BF-1'. AND 400 SANITARY LINE DOWN FROM 'BF-1'. (TYPICAL)
  - 5 CONDENSATE DRAIN DOWN FROM MUA-1 ON ROOF.
  - 6 EXTEND 150 HOT AND COLD WATER LINES DOWN TO NEW 'CS-1' OR 'CS-2'. 320 VENT LINE UP FROM 'CS-1' OR 'CS-2'. AND 400 SANITARY LINE DOWN FROM 'CS-1' OR 'CS-2'.
  - 7 CONNECT TO STANDING WASTE PIPE ABOVE CEILING.
  - 8 PROVIDE NEW 'FD' OR 'FFD'. EXTEND 750 SANITARY DOWN FROM 'FD' OR 'FFD'.
  - 9 150 DOMESTIC COLD WATER LINE DOWN TO HOSE BIBB (TYPICAL).
  - 10 TERMINATE HHP CONDENSATE LINE AT CLOSEST FFD OR SINK STANDING WASTE (TYPICAL).
  - 11 BELOW GRADE SANITARY DRAIN CLEANOUT IN FLOOR.
  - 12 HOSE BIB TO BE LOCATED UNDER COUNTER.
  - 13 CAPPED DW CONNECTION WITH ISOLATION VALVE FOR LEGACY WC.
  - 14 CAPPED DW CONNECTION WITH ISOLATION VALVE FOR LEGACY SH.
  - 15 CONDENSATE DRAINS TO BE INDIRECTLY CONNECTED TO FUNNEL FLOOR DRAIN.
  - 16 CLEANOUT COMPLETE WITH ACCESS DOOR.
  - 17 PROVIDE DOMESTIC WATER SUB-METER. (TYPICAL)

- GENERAL NOTES:**
1. SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
  2. CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL SERVICE AND DEVICES.
  3. ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
  4. ALL FOUNDATION PLUMBING TO BE PVC.
  5. PROVIDE COMPLETE SANITARY VENT SYSTEM IN ACCORDANCE WITH THE OBC.
  6. PROVIDE CLEANOUTS ON ALL DRAINAGE AND WASTE SYSTEMS, NOT LIMITED TO CLEANOUTS SHOWN ON THE DRAWINGS.
  7. ALL FLOOR DRAIN P-TRAPS SHALL BE PRIMED FROM A CENTRAL ELECTRONIC TRAP SEAL PRIMER. DIVISION 22 CONTRACTOR MUST COORDINATE WITH ELECTRICAL TRADE FOR CIRCUIT LOCATIONS DURING SHOP DRAWING STAGE. OTHERWISE DIVISION 22 TRADE WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH CIRCUIT WIRING.
  8. ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  9. ALL PIPING IN CEILING SPACE SHALL BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF ROOF. WHERE POSSIBLE, RUN PIPES THROUGH OPEN WEB JOISTS. COORDINATE OPENINGS FOR PIPES THROUGH STRUCTURAL BEAMS WITH STRUCTURAL, AS REQUIRED.
  10. CONTRACTOR TO PROVIDE THRUST RESTRAINTS ON ALL PIPING SUBJECT TO POTENTIAL HYDROSTATIC HEAD AS OUTLINED IN SPEC SECTIONS 22 13 16 AND 22 14 16.
  11. PROVIDE EXPANSION LOOPS FOR HYDRONIC PIPING FOR ANY STRAIGHT LENGTH OF 100 FT OR GREATER.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR COORDINATION	2024-07-30
ISSUED FOR CLASS C COSTING	2024-06-28
Revision	000



**FIFA - EAST VSTS  
CENTENNIAL PARK**  
Address: 56 Centennial Park Rd, Toronto, ON

**EAST VSTS GROUND FLOOR  
GAME PLAN  
PLUMBING & DRAINAGE -  
SEPARATE PRICE 1**

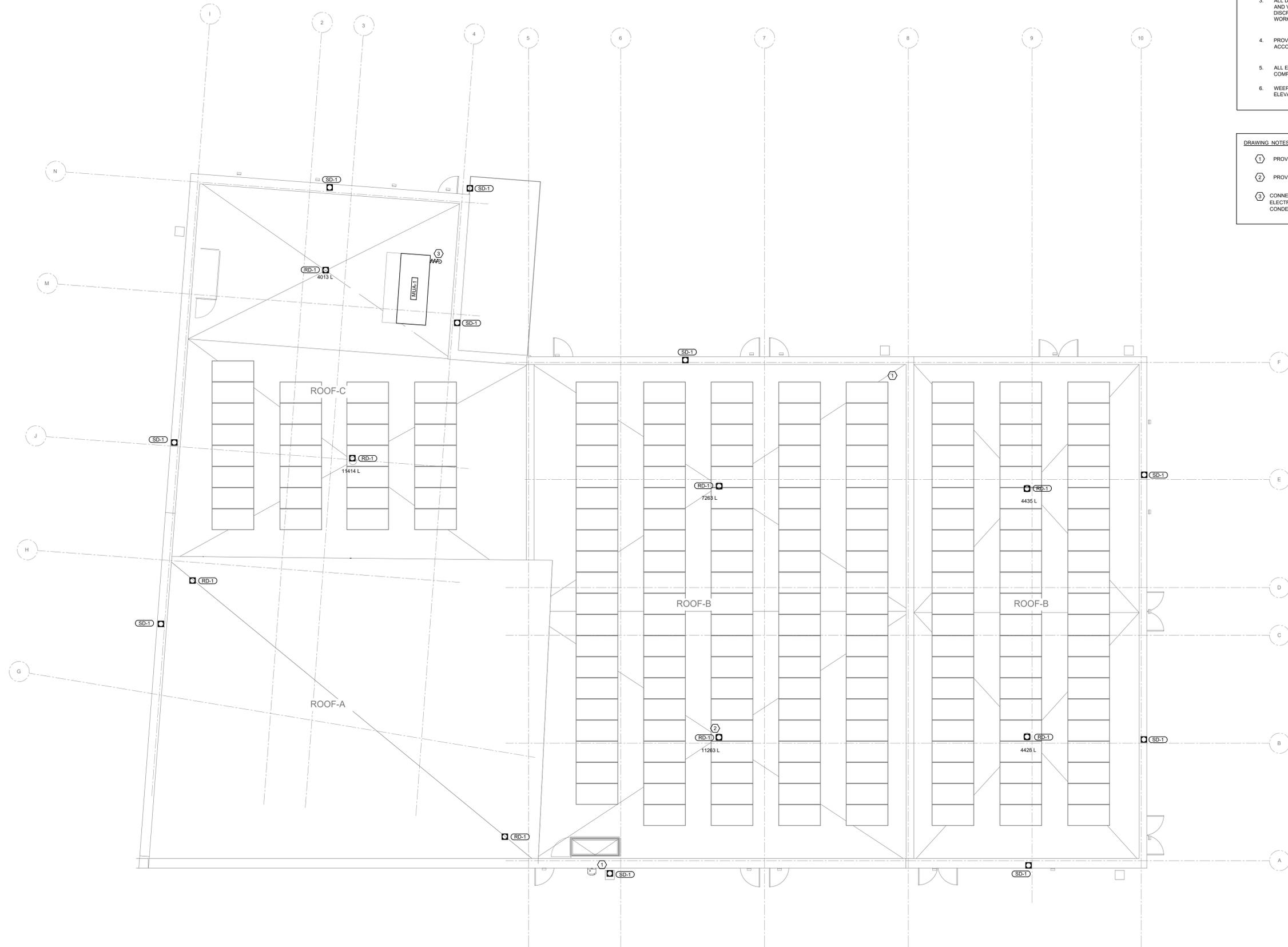
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drawing no. : **M-111.1**

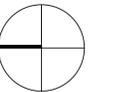


- GENERAL NOTES:**
- SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
  - CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL SERVICE AND DEVICES.
  - ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
  - PROVIDE COMPLETE SANITARY VENT SYSTEM IN ACCORDANCE WITH THE OBC.
  - ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  - WEEPING TILE AND CONSTRUCTION OF WATERTIGHT ELEVATOR SHAFT BY OTHERS. (BELOW GRADE ONLY).

- DRAWING NOTES:**
- PROVIDE SCUPPER DRAIN. (TYPICAL)
  - PROVIDE ROOF DRAIN. (TYPICAL)
  - CONNECT 320 DRAIN TO MUA-1. DRAIN LINES SHALL BE ELECTRICALLY HEAT TRACED ON ROOF. COORDINATE CONDENSATE DRAIN ROOF PENETRATION LOCATION SUIT.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR PROGRESS	2024-08-15
ISSUED FOR COORDINATION	2024-07-30
ISSUED FOR CLASS C COSTING	2024-06-26
Revision	001



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
Address: 56 Centennial Park Rd. Toronto, ON

**EAST VSTS ROOF GAME**  
**PLUMBING & DRAINAGE -**  
**SEPARATE PRICE 1**

project no. : 2024-0112  
scale : 1:100  
date :

drawing no. :

**M-112.1**

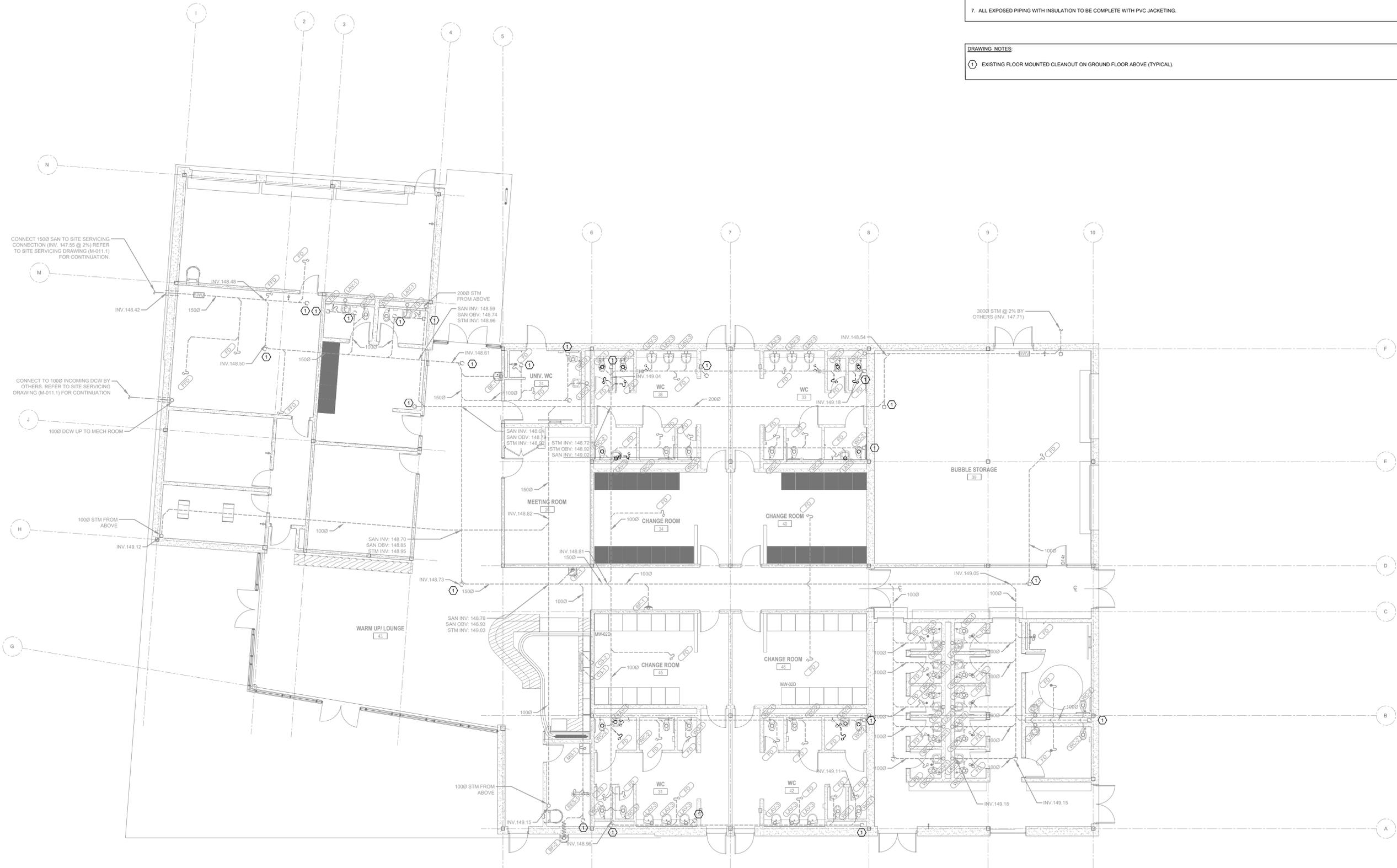


**GENERAL NOTES:**

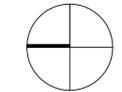
- SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
- ALL FOUNDATION PLUMBING TO BE PVC.
- PROVIDE COMPLETE SANITARY VENT SYSTEM IN ACCORDANCE WITH THE OBC.
- PROVIDE CLEANOUTS ON ALL DRAINAGE AND WASTE SYSTEMS, NOT LIMITED TO CLEANOUTS SHOWN ON THE DRAWINGS.
- ALL FLOOR DRAIN P-TRAPS SHALL BE PRIMED FROM A CENTRAL ELECTRONIC TRAP SEAL PRIMER. DIVISION 22 CONTRACTOR MUST COORDINATE WITH ELECTRICAL TRADE FOR CIRCUIT LOCATIONS DURING SHOP DRAWING STAGE, OTHERWISE DIVISION 22 TRADE WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH CIRCUIT WIRING.
- ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.

**DRAWING NOTES:**

① EXISTING FLOOR MOUNTED CLEANOUT ON GROUND FLOOR ABOVE (TYPICAL).



ISSUED FOR	DATE
ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-06
ISSUED FOR PROGRESS	2024-08-22
ISSUED FOR PROGRESS	2024-08-15
revision	020



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
Address: 56 Centennial Park Rd, Toronto, ON

**EAST VSTS BELOW GRADE**  
**LEGACY PLUMBING & DRAINAGE - SEPARATE PRICE 1**

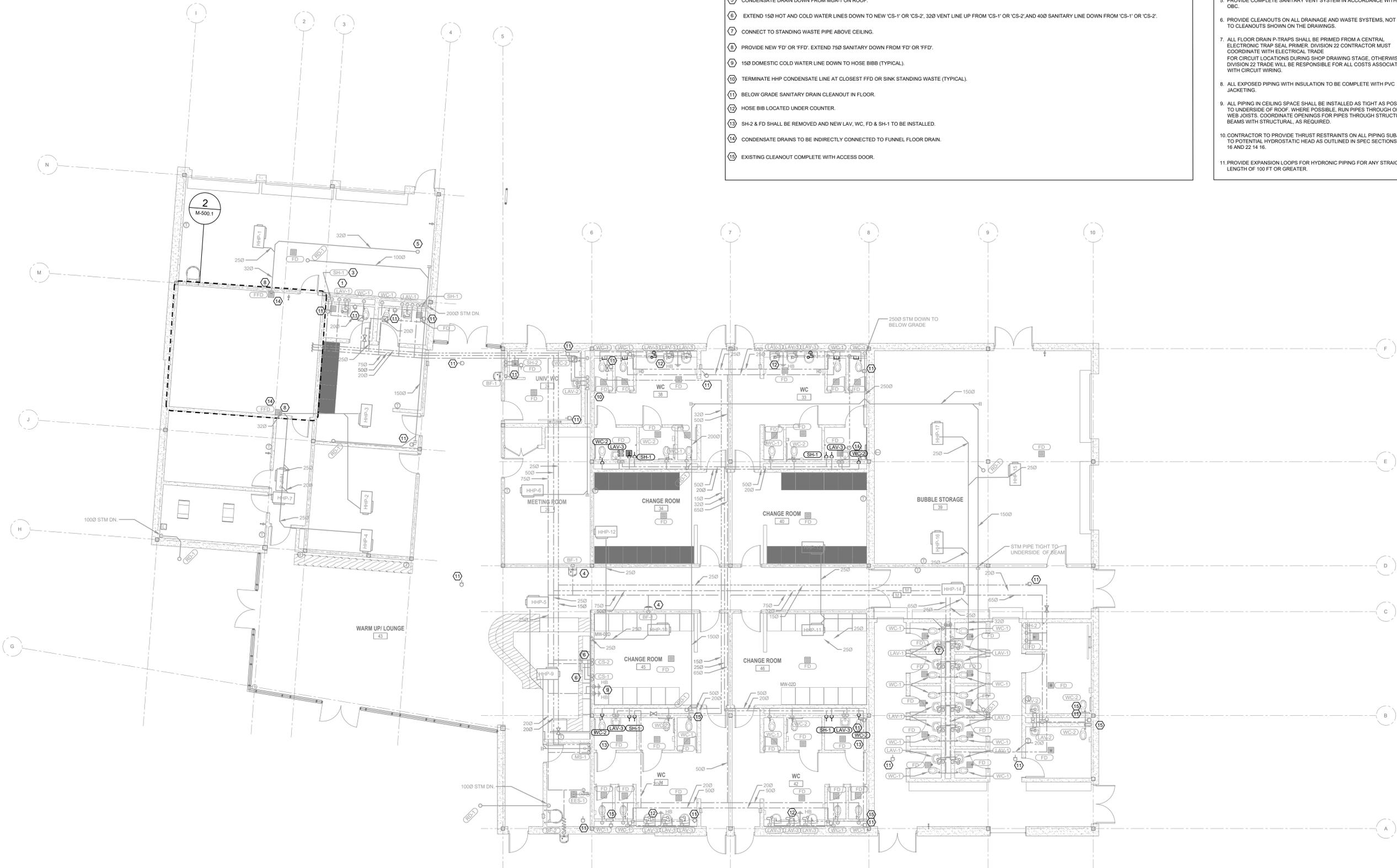
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scale : 1:100  
date :

drawing no. : **M-113.1**

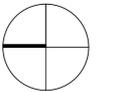


- DRAWING NOTES:**
- 1 EXTEND 150 HOT AND COLD WATER LINES DOWN TO NEW 'LAV-1', 'LAV-2', OR 'LAV-3', 320 VENT LINE UP FROM 'LAV-1', 'LAV-2', OR 'LAV-3', AND 400 SANITARY LINE DOWN FROM 'LAV-1', 'LAV-2', OR 'LAV-3' (TYPICAL).
  - 2 EXTEND 250 COLD WATER LINE DOWN TO NEW 'WC-1' OR 'WC-2', 500 VENT LINE UP FROM 'WC-1' OR 'WC-2', AND 750 SANITARY LINE DOWN FROM 'WC-1' OR 'WC-2' (TYPICAL).
  - 3 EXTEND 150 HOT AND COLD WATER LINES DOWN TO NEW 'SH-1' OR 'SH-2' AND 320 VENT LINE UP FROM 'SH-1' OR 'SH-2' (TYPICAL).
  - 4 PROVIDE NEW BOTTLE FILLER, 'BF-1' AS SPECIFIED. EXTEND NEW 150 COLD WATER LINE TO NEW BOTTLE FILLER 'BF-1', 320 VENT LINE UP FROM 'BF-1', AND 400 SANITARY LINE DOWN FROM 'BF-1' (TYPICAL).
  - 5 CONDENSATE DRAIN DOWN FROM MUA-1 ON ROOF.
  - 6 EXTEND 150 HOT AND COLD WATER LINES DOWN TO NEW 'CS-1' OR 'CS-2', 320 VENT LINE UP FROM 'CS-1' OR 'CS-2' AND 400 SANITARY LINE DOWN FROM 'CS-1' OR 'CS-2'.
  - 7 CONNECT TO STANDING WASTE PIPE ABOVE CEILING.
  - 8 PROVIDE NEW 'FD' OR 'FFD'. EXTEND 750 SANITARY DOWN FROM 'FD' OR 'FFD'.
  - 9 150 DOMESTIC COLD WATER LINE DOWN TO HOSE BIBB (TYPICAL).
  - 10 TERMINATE HHP CONDENSATE LINE AT CLOSEST FFD OR SINK STANDING WASTE (TYPICAL).
  - 11 BELOW GRADE SANITARY DRAIN CLEANOUT IN FLOOR.
  - 12 HOSE BIB LOCATED UNDER COUNTER.
  - 13 SH-2 & FD SHALL BE REMOVED AND NEW LAV, WC, FD & SH-1 TO BE INSTALLED.
  - 14 CONDENSATE DRAINS TO BE INDIRECTLY CONNECTED TO FUNNEL FLOOR DRAIN.
  - 15 EXISTING CLEANOUT COMPLETE WITH ACCESS DOOR.

- GENERAL NOTES:**
1. SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
  2. CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL SERVICE AND DEVICES.
  3. ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
  4. ALL FOUNDATION PLUMBING TO BE PVC.
  5. PROVIDE COMPLETE SANITARY VENT SYSTEM IN ACCORDANCE WITH THE OBC.
  6. PROVIDE CLEANOUTS ON ALL DRAINAGE AND WASTE SYSTEMS, NOT LIMITED TO CLEANOUTS SHOWN ON THE DRAWINGS.
  7. ALL FLOOR DRAIN P-TRAPS SHALL BE PRIMED FROM A CENTRAL ELECTRONIC TRAP SEAL PRIMER. DIVISION 22 CONTRACTOR MUST COORDINATE WITH ELECTRICAL TRADE FOR CIRCUIT LOCATIONS DURING SHOP DRAWING STAGE. OTHERWISE DIVISION 22 TRADE WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH CIRCUIT WIRING.
  8. ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  9. ALL PIPING IN CEILING SPACE SHALL BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF ROOF. WHERE POSSIBLE, RUN PIPES THROUGH OPEN WEB JOISTS. COORDINATE OPENINGS FOR PIPES THROUGH STRUCTURAL BEAMS WITH STRUCTURAL, AS REQUIRED.
  10. CONTRACTOR TO PROVIDE THRUST RESTRAINTS ON ALL PIPING SUBJECT TO POTENTIAL HYDROSTATIC HEAD AS OUTLINED IN SPEC SECTIONS 22.13.16 AND 22.14.16.
  11. PROVIDE EXPANSION LOOPS FOR HYDRONIC PIPING FOR ANY STRAIGHT LENGTH OF 100 FT OR GREATER.



ISSUED FOR ADVERTISEMENT NO. 1	2024-12-16
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-09-23
Revision	001



**FIFA - EAST VSTS  
CENTENNIAL PARK**  
Address: 56 Centennial Park Rd, Toronto, ON

**EAST VSTS GROUND FLOOR  
LEGACY PLAN  
PLUMBING & DRAINAGE -  
SEPARATE PRICE 1**

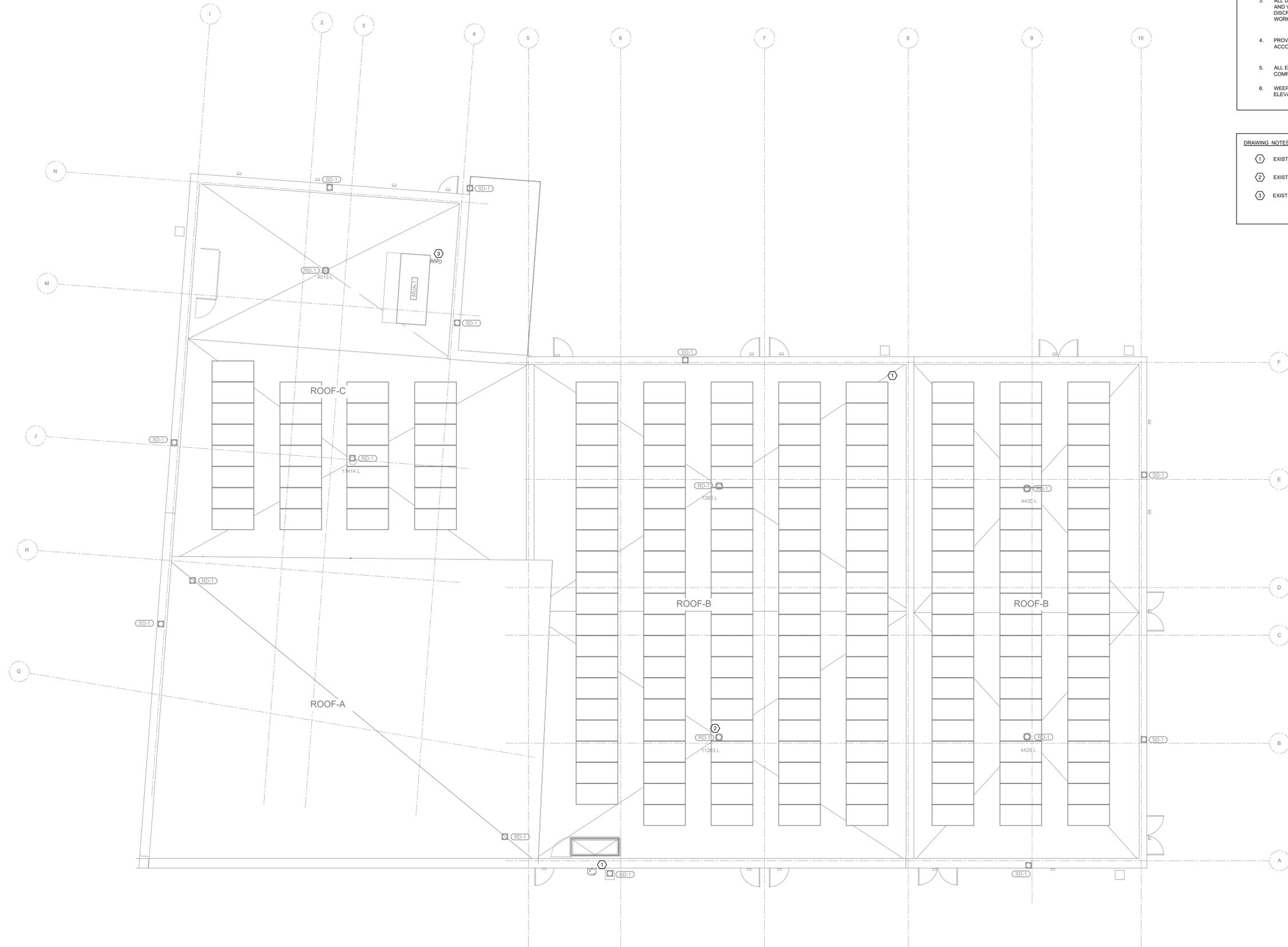
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drawing no. : **M-114.1**

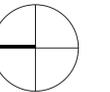


- GENERAL NOTES:**
- SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
  - CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL SERVICE AND DEVICES.
  - ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
  - PROVIDE COMPLETE SANITARY VENT SYSTEM IN ACCORDANCE WITH THE OBC.
  - ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  - WEEPING TILE AND CONSTRUCTION OF WATERTIGHT ELEVATOR SHAFT BY OTHERS. (BELOW GRADE ONLY)

- DRAWING NOTES:**
- EXISTING SCUPPER DRAIN. (TYPICAL)
  - EXISTING ROOF DRAIN TO REMAIN. (TYPICAL)
  - EXISTING MUA-1 DRAIN TO BELOW.



ISSUED FOR ADJUDICUM NO. 1	2024-12-16
ISSUED FOR TENDER	2024-11-06
ISSUED FOR PROGRESS	2024-09-23
Revision	001



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
 Address: 56 Centennial Park Rd. Toronto, ON

**EAST VSTS ROOF LEGACY**  
**PLUMBING & DRAINAGE -**  
**SEPARATE PRICE 1**

Project no. : 2024-0112  
 Scale : 1:100  
 Date :

drawing no. : **M-115.1**

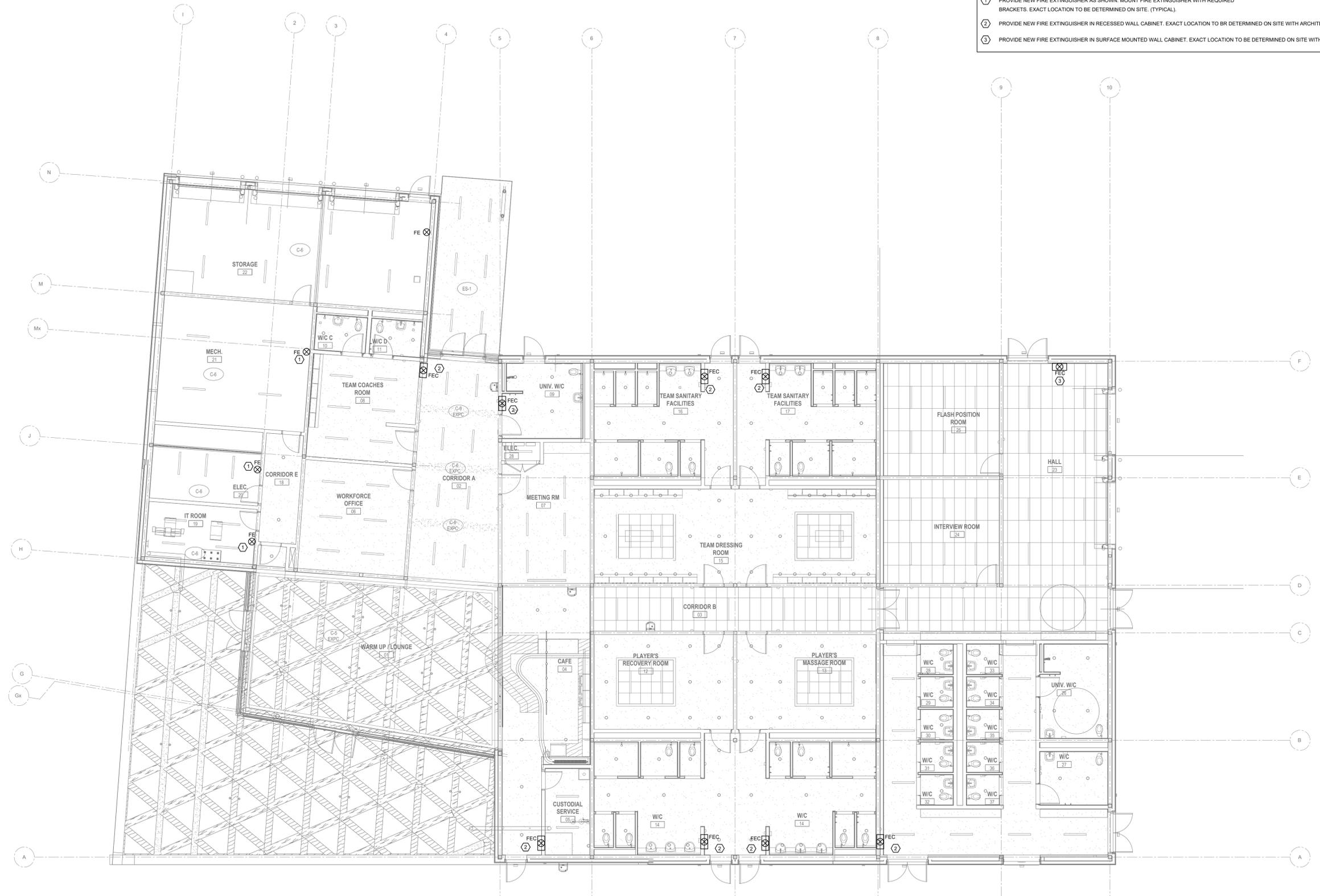


**GENERAL NOTES:**

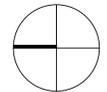
1. SPRINKLER HEAD LAYOUTS INDICATED SHOW GENERAL INTENT AND ARE FOR COORDINATION PURPOSES. COORDINATE EXACT LAYOUT WITH REFLECTED CEILING AND WORK OF OTHER TRADES.
2. CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL SERVICE AND DEVICES.

**DRAWING NOTES:**

1. PROVIDE NEW FIRE EXTINGUISHER AS SHOWN. MOUNT FIRE EXTINGUISHER WITH REQUIRED BRACKETS. EXACT LOCATION TO BE DETERMINED ON SITE. (TYPICAL).
2. PROVIDE NEW FIRE EXTINGUISHER IN RECESSED WALL CABINET. EXACT LOCATION TO BE DETERMINED ON SITE WITH ARCHITECT. (TYPICAL).
3. PROVIDE NEW FIRE EXTINGUISHER IN SURFACE MOUNTED WALL CABINET. EXACT LOCATION TO BE DETERMINED ON SITE WITH ARCHITECT. (TYPICAL).



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR PROGRESS	2024-08-15
ISSUED FOR COORDINATION	2024-07-30
ISSUED FOR CLASS C COSTING	2024-06-26
Revision	001



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
Address: 56 Centennial Park Rd. Toronto, ON

**EAST VSTS GROUND GAME**  
**FLOOR PLAN**  
**FIRE PROTECTION -**  
**SEPARATE PRICE 1**

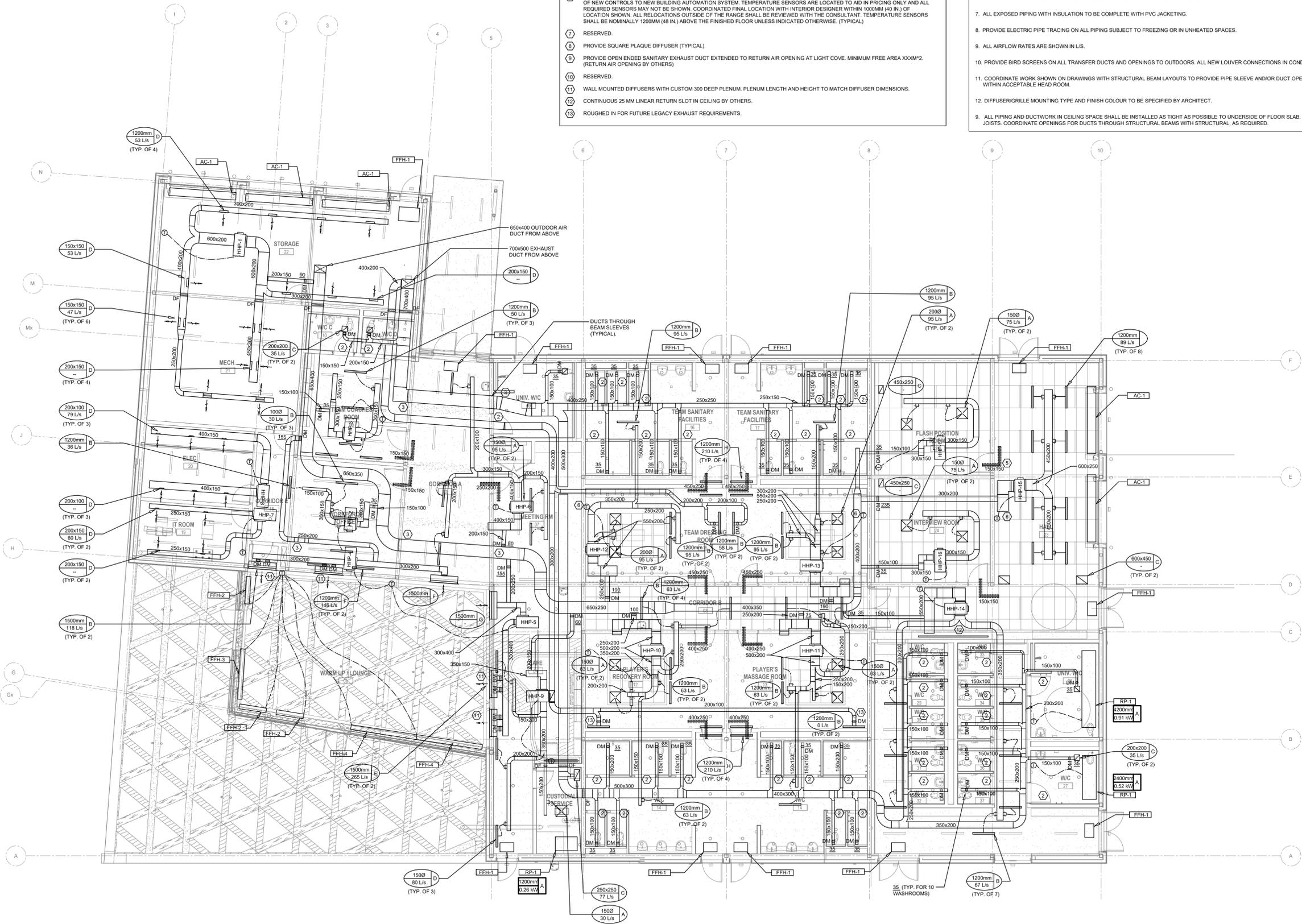
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scale : 1:100  
date :

drawing no. : **M-211.1**

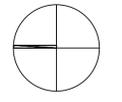


- DRAWING NOTES:**
- PROVIDE 300x250 TYPE 'C' RETURN AIR GRILLES TYPICAL UNLESS NOTED OTHERWISE. (TYPICAL)
  - DOOR SHALL BE UNDERCUT BY 1 IN FOR TRANSFER AIR. NOT BY DIVISION 23.
  - DUCT LEVEL TO CHANGE TO ACCOMMODATE CEILING HEIGHT TRANSITION.
  - PROVIDE NEW HORIZONTAL HEAT PUMP IN CEILING SPACE COMPLETE WITH WATER TIGHT DRIP PAN, ASSOCIATED CONTROLS, SUPPLY AND RETURN WATER LINES, METERS, DUCTWORK, HANGERS AND SUPPORTS. CONTRACTOR TO INSTALL NECESSARY FILTERS AT COMPLETION OF MECHANICAL WORK. (TYPICAL)
  - PROVIDE AND INSTALL NEW ACOUSTICALLY LINED TRANSFER AIR DUCT. FINAL LOCATION AND QUANTITY OF TRANSFER AIR DUCTS TO SUIT SITE CONDITIONS. (TYPICAL)
  - CONTROLS CONTRACTOR TO PROVIDE AND INSTALL NEW TEMPERATURE SENSOR FOR SPACE HEAT PUMPS. ALLOW FOR INTEGRATION OF NEW CONTROLS TO NEW BUILDING AUTOMATION SYSTEM. TEMPERATURE SENSORS ARE LOCATED TO AID IN PRICING ONLY AND ALL REQUIRED SENSORS MAY NOT BE SHOWN. COORDINATED FINAL LOCATION WITH INTERIOR DESIGNER WITHIN 1000MM (40 IN.) OF LOCATION SHOWN. ALL RELOCATIONS OUTSIDE OF THE RANGE SHALL BE REVIEWED WITH THE CONSULTANT. TEMPERATURE SENSORS SHALL BE NOMINALLY 1200MM (48 IN.) ABOVE THE FINISHED FLOOR UNLESS INDICATED OTHERWISE. (TYPICAL)
  - RESERVED.
  - PROVIDE SQUARE PLAQUE DIFFUSER (TYPICAL)
  - PROVIDE OPEN ENDED SANITARY EXHAUST DUCT EXTENDED TO RETURN AIR OPENING AT LIGHT COVE. MINIMUM FREE AREA XXXX"2. (RETURN AIR OPENING BY OTHERS)
  - RESERVED.
  - WALL MOUNTED DIFFUSERS WITH CUSTOM 300 DEEP PLENUM. PLENUM LENGTH AND HEIGHT TO MATCH DIFFUSER DIMENSIONS.
  - CONTINUOUS 25 MM LINEAR RETURN SLOT IN CEILING BY OTHERS.
  - ROUGHED IN FOR FUTURE LEGACY EXHAUST REQUIREMENTS.

- GENERAL NOTES:**
- CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL EQUIPMENT.
  - CONTRACTOR TO CALIBRATE ALL NEW THERMOSTATS AT COMPLETION OF MECHANICAL WORK.
  - CONTRACTOR TO ENSURE THAT NEW TAKEOFFS ARE EQUIPPED WITH BALANCING DAMPERS. PROVIDE TAKEOFFS WITH BALANCING DAMPERS FOR EXISTING TAKEOFFS.
  - CONTRACTOR SHALL BALANCE ALL ASSOCIATED DUCT SYSTEMS TO SUIT THE NEW AIR QUANTITIES.
  - PROVIDE ADEQUATELY SIZED ACCESS PANELS FOR ALL DAMPERS, SENSORS, AND OTHER DEVICES MOUNTED WITHIN DUCTS.
  - CONTRACTOR TO COORDINATE FIRE DAMPER LOCATIONS WITH ARCHITECT'S FIRE SEPARATION PLAN.
  - ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  - PROVIDE ELECTRIC PIPE TRACING ON ALL PIPING SUBJECT TO FREEZING OR IN UNHEATED SPACES.
  - ALL AIRFLOW RATES ARE SHOWN IN L/S.
  - PROVIDE BIRD SCREENS ON ALL TRANSFER DUCTS AND OPENINGS TO OUTDOORS. ALL NEW LOUVER CONNECTIONS IN CONDITIONED AREAS TO HAVE INSULATED PLENUMS.
  - COORDINATE WORK SHOWN ON DRAWINGS WITH STRUCTURAL BEAM LAYOUTS TO PROVIDE PIPE SLEEVE AND/OR DUCT OPENINGS NECESSARY TO MAINTAIN MECHANICAL WORK WITHIN ACCEPTABLE HEAD ROOM.
  - DIFFUSER/GRILLE MOUNTING TYPE AND FINISH COLOUR TO BE SPECIFIED BY ARCHITECT.
  - ALL PIPING AND DUCTWORK IN CEILING SPACE SHALL BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF FLOOR SLAB. WHERE POSSIBLE, RUN DUCTS THROUGH OPEN WEB JOISTS. COORDINATE OPENINGS FOR DUCTS THROUGH STRUCTURAL BEAMS WITH STRUCTURAL, AS REQUIRED.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR PROGRESS	2024-08-15
ISSUED FOR COORDINATION	2024-07-30
ISSUED FOR CLASS C COSTING	2024-06-28
Revision	001



**FIFA - EAST VSTS CENTENNIAL PARK**  
Address: 56 Centennial Park Rd. Toronto, ON

**EAST VSTS GROUND FLOOR HVAC - SEPARATE PRICE 1**

project no.: 2024-0112  
scale: 1:100  
date:

drawing no.:

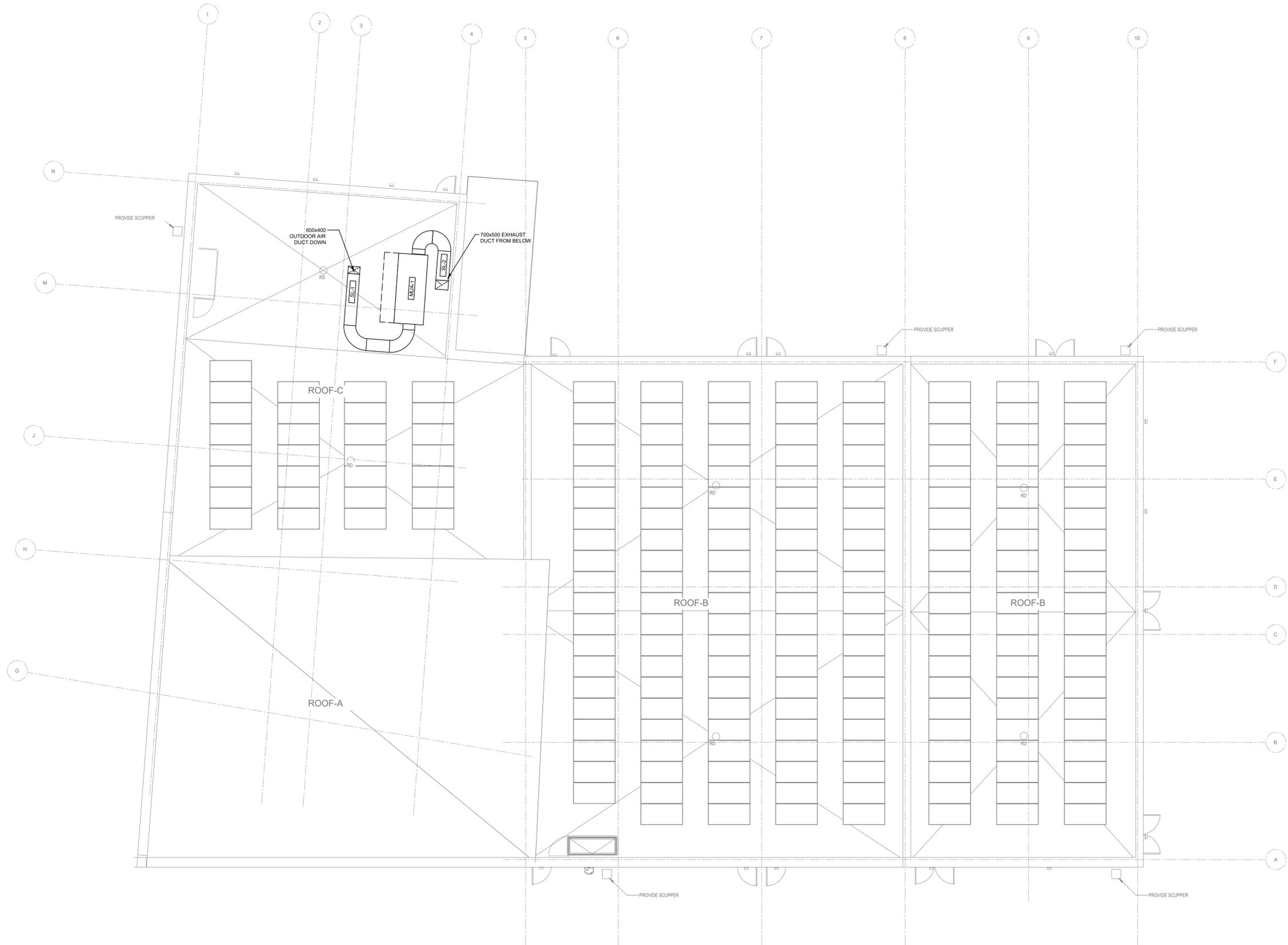
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**DRAWING NOTES:**

1. PROVIDE NEW MAKE-UP AIR UNIT, COMPLETE WITH ROOF CURB, ALL REQUIRED DUCTWORK, SILENCERS, GRILLES/DIFFUSERS, PIPING AND CONTROLS.
2. PROVIDE NEW ELECTRIC HUMIDIFIER, COMPLETE WITH ROOF CURB, DISPERSION MANIFOLD, PIPING AND CONTROLS.

**GENERAL NOTES:**

1. ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
2. PROVIDE ELECTRIC PIPE TRACING ON ALL PIPING SUBJECT TO FREEZING OR IN UNHEATED SPACES.
3. ALL AIRFLOW RATES ARE SHOWN IN L/S.
4. PROVIDE BIRD SCREENS ON ALL TRANSFER DUCTS AND OPENINGS TO OUTDOORS. ALL NEW LOUVER CONNECTIONS IN CONDITIONED AREAS TO HAVE INSULATED PLENUMS.



ISSUED FOR ACCENDUM NO. 1	2024-12-19
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR PROGRESS	2024-08-15
ISSUED FOR COORDINATION	2024-07-30
ISSUED FOR CLASS C COSTING	2024-06-28
Revision:	000



**FIFA - EAST VSTS CENTENNIAL PARK**  
Address: 56 Centennial Park Rd, Toronto, ON  
**EAST VSTS ROOF GAME PLAN HVAC - SEPARATE PRICE 1**

project no. : 2024-0112  
scale : 1:100  
date :

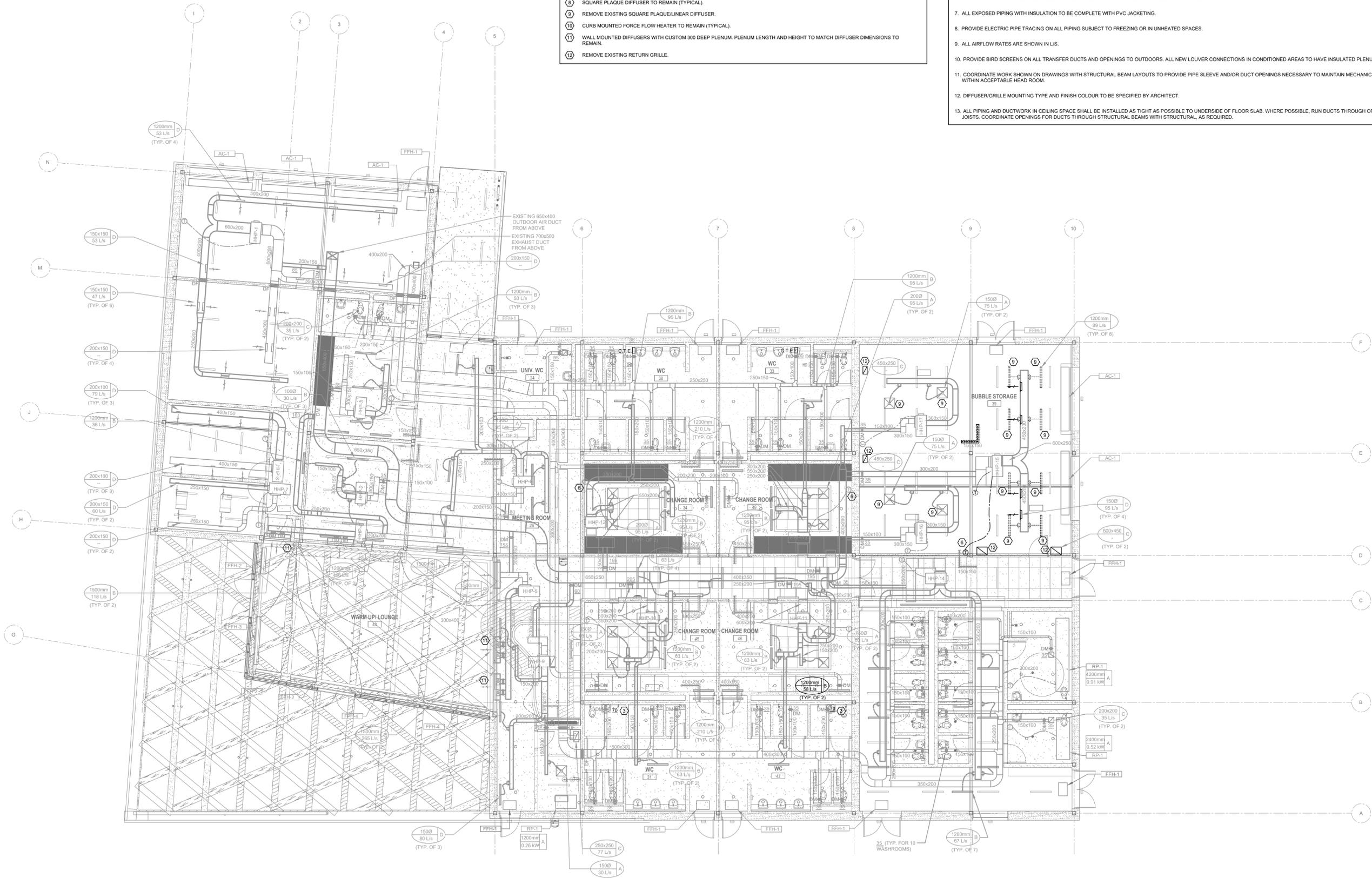
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**M-312.1**

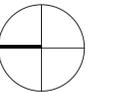


- DRAWING NOTES:**
- 1 RETURN AIR GRILLE TO REMAIN (TYPICAL)
  - 2 RESERVED.
  - 3 BALANCE GRILLE TO AIRFLOW SHOWN (TYPICAL)
  - 4 HORIZONTAL HEAT PUMP TO REMAIN (TYPICAL)
  - 5 TRANSFER AIR DUCT TO REMAIN (TYPICAL)
  - 6 TEMPERATURE SENSOR TO REMAIN (TYPICAL)
  - 7 PROVIDE NEW TEMPERATURE SENSOR (TYPICAL).
  - 8 SQUARE PLAQUE DIFFUSER TO REMAIN (TYPICAL).
  - 9 REMOVE EXISTING SQUARE PLAQUE/LINEAR DIFFUSER.
  - 10 CURB MOUNTED FORCE FLOW HEATER TO REMAIN (TYPICAL).
  - 11 WALL MOUNTED DIFFUSERS WITH CUSTOM 300 DEEP PLENUM. PLENUM LENGTH AND HEIGHT TO MATCH DIFFUSER DIMENSIONS TO REMAIN.
  - 12 REMOVE EXISTING RETURN GRILLE.

- GENERAL NOTES:**
1. CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL EQUIPMENT.
  2. CONTRACTOR TO CALIBRATE ALL NEW THERMOSTATS AT COMPLETION OF MECHANICAL WORK.
  3. CONTRACTOR TO ENSURE THAT NEW TAKEOFFS ARE EQUIPPED WITH BALANCING DAMPERS. PROVIDE TAKEOFFS WITH BALANCING DAMPERS FOR EXISTING TAKEOFFS.
  4. CONTRACTOR SHALL BALANCE ALL ASSOCIATED DUCT SYSTEMS TO SUIT THE NEW AIR QUANTITIES.
  5. PROVIDE ADEQUATELY SIZED ACCESS PANELS FOR ALL DAMPERS, SENSORS, AND OTHER DEVICES MOUNTED WITHIN DUCTS.
  6. CONTRACTOR TO COORDINATE FIRE DAMPER LOCATIONS WITH ARCHITECT'S FIRE SEPARATION PLAN.
  7. ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  8. PROVIDE ELECTRIC PIPE TRACING ON ALL PIPING SUBJECT TO FREEZING OR IN UNHEATED SPACES.
  9. ALL AIRFLOW RATES ARE SHOWN IN L/S.
  10. PROVIDE BIRD SCREENS ON ALL TRANSFER DUCTS AND OPENINGS TO OUTDOORS. ALL NEW LOUVER CONNECTIONS IN CONDITIONED AREAS TO HAVE INSULATED PLENUMS.
  11. COORDINATE WORK SHOWN ON DRAWINGS WITH STRUCTURAL BEAM LAYOUTS TO PROVIDE PIPE SLEEVE AND/OR DUCT OPENINGS NECESSARY TO MAINTAIN MECHANICAL WORK WITHIN ACCEPTABLE HEAD ROOM.
  12. DIFFUSER/GRILLE MOUNTING TYPE AND FINISH COLOUR TO BE SPECIFIED BY ARCHITECT.
  13. ALL PIPING AND DUCTWORK IN CEILING SPACE SHALL BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF FLOOR SLAB. WHERE POSSIBLE, RUN DUCTS THROUGH OPEN WEB JOISTS. COORDINATE OPENINGS FOR DUCTS THROUGH STRUCTURAL BEAMS WITH STRUCTURAL, AS REQUIRED.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-22
ISSUED FOR PROGRESS	2024-08-14
ISSUED FOR COORDINATION	2024-07-30
revision	000



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
Address: 56 Centennial Park Rd. Toronto, ON  
**EAST VSTS GROUND LEGACY**  
**FLOOR HVAC - SEPARATE**  
**PRICE 1**

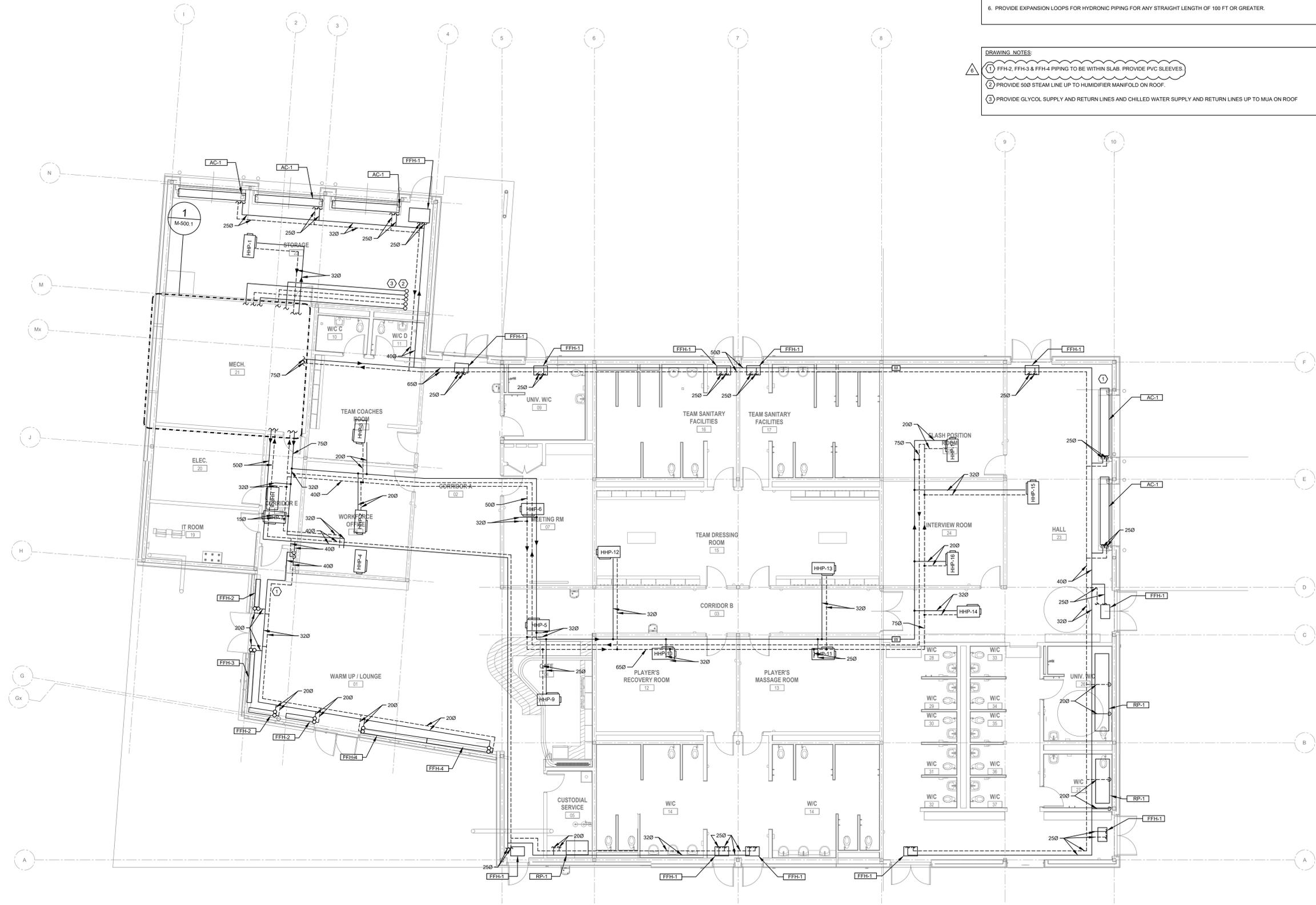
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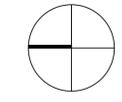


- GENERAL NOTES:**
1. CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL EQUIPMENT.
  2. ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  3. PROVIDE ELECTRIC PIPE TRACING ON ALL PIPING SUBJECT TO FREEZING OR IN UNHEATED SPACES.
  4. COORDINATE WORK SHOWN ON DRAWINGS WITH STRUCTURAL BEAM LAYOUTS TO PROVIDE PIPE SLEEVE AND/OR DUCT OPENINGS NECESSARY TO MAINTAIN MECHANICAL WORK WITHIN ACCEPTABLE HEAD ROOM.
  5. ALL PIPING AND DUCTWORK IN CEILING SPACE SHALL BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF FLOOR SLAB. WHERE POSSIBLE, RUN PIPES THROUGH OPEN WEB JOISTS. COORDINATE OPENINGS FOR PIPES THROUGH STRUCTURAL BEAMS WITH STRUCTURAL, AS REQUIRED.
  6. PROVIDE EXPANSION LOOPS FOR HYDRONIC PIPING FOR ANY STRAIGHT LENGTH OF 100 FT OR GREATER.

- DRAWING NOTES:**
- 1) FFH-2, FFH-3 & FFH-4 PIPING TO BE WITHIN SLAB. PROVIDE PVC SLEEVES.
  - 2) PROVIDE 500 STEAM LINE UP TO HUMIDIFIER MANIFOLD ON ROOF.
  - 3) PROVIDE GLYCOL SUPPLY AND RETURN LINES AND CHILLED WATER SUPPLY AND RETURN LINES UP TO MUA ON ROOF.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR PROGRESS	2024-08-15
ISSUED FOR COORDINATION	2024-07-30
ISSUED FOR CLASS C COSTING	2024-06-28
Revision	001



**FIFA - EAST VSTS  
CENTENNIAL PARK**  
Address: 56 Centennial Park Rd. Toronto, ON

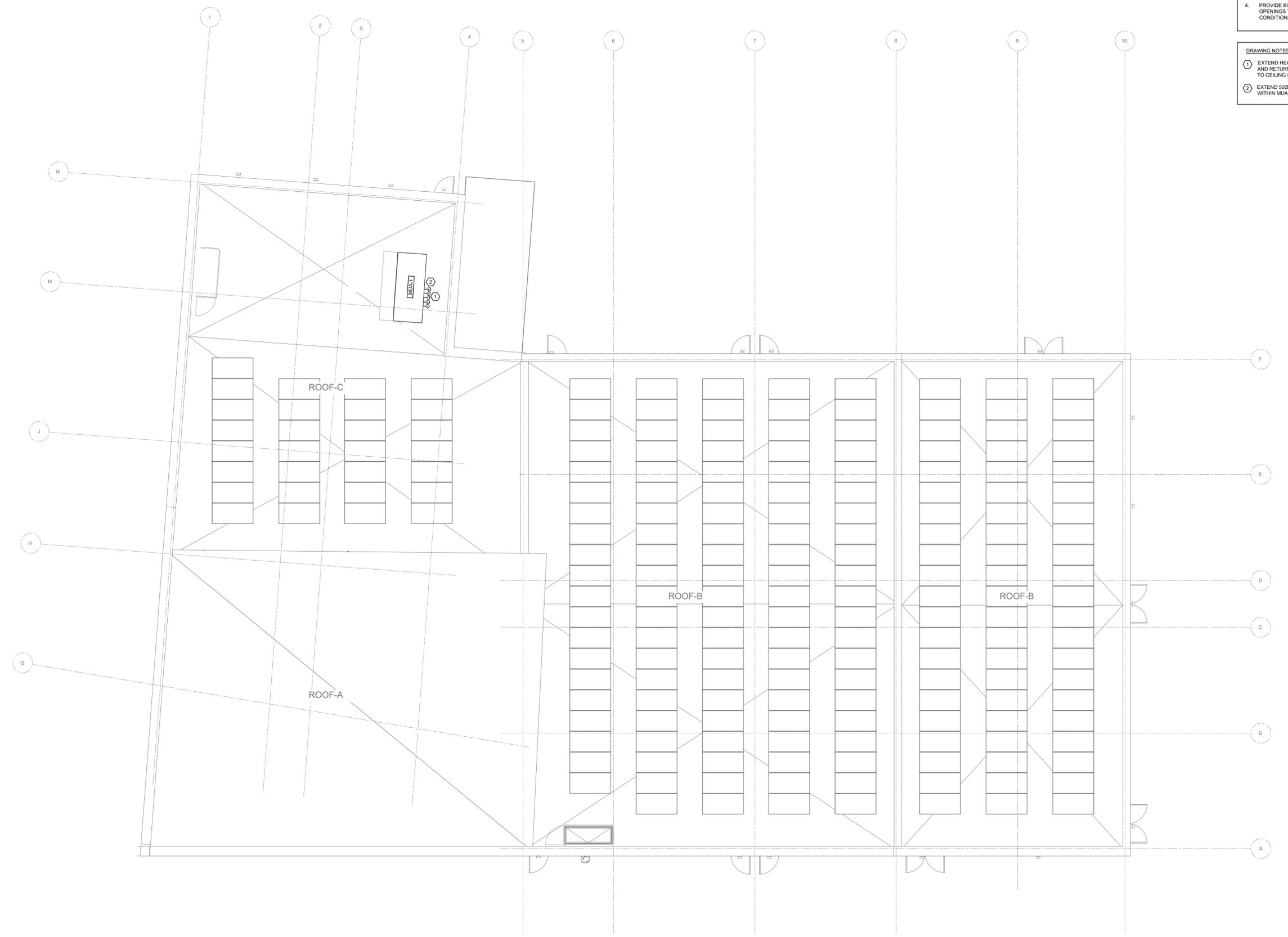
**EAST VSTS GROUND FLOOR  
GAME  
HVAC PIPING - SEPARATE  
PRICE 1**

project no. : 2024-0112  
scale : 1:100  
date :

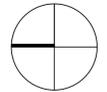
drawing no. : **M-411.1**

- GENERAL NOTES:**
1. ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  2. PROVIDE ELECTRIC PIPE TRACING ON ALL PIPING SUBJECT TO FREEZING OR IN UNHEATED SPACES.
  3. ALL AIRFLOW RATES ARE SHOWN IN L/S.
  4. PROVIDE BIRD SCREENS ON ALL TRANSFER DUCTS AND OPENINGS TO OUTDOORS. ALL NEW LOUVER CONNECTIONS IN CONDITIONED AREAS TO HAVE INSULATED PLENUMS.

- DRAWING NOTES:**
- ① EXTEND HEATING GLYCOL AND CHILLED WATER SUPPLY AND RETURN LINES FROM MAKE-UP AIR UNIT, MUA-1, DOWN TO CEILING SPACE BELOW.
  - ② EXTEND 500 STEAM LINE TO HUMIDIFIER MANIFOLD WITHIN MUA-1.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-09-27
ISSUED FOR PROGRESS	2024-08-15
ISSUED FOR COORDINATION	2024-07-30
Revision:	000



**FIFA - EAST VSTS  
CENTENNIAL PARK**  
Address: 56 Centennial Park Rd, Toronto, ON

**EAST VSTS ROOF GAME PLAN  
HVAC PIPING - SEPARATE  
PRICE 1**

project no. : 2024-0112  
scale : 1:100  
date :

drawing no. : **M-412.1**

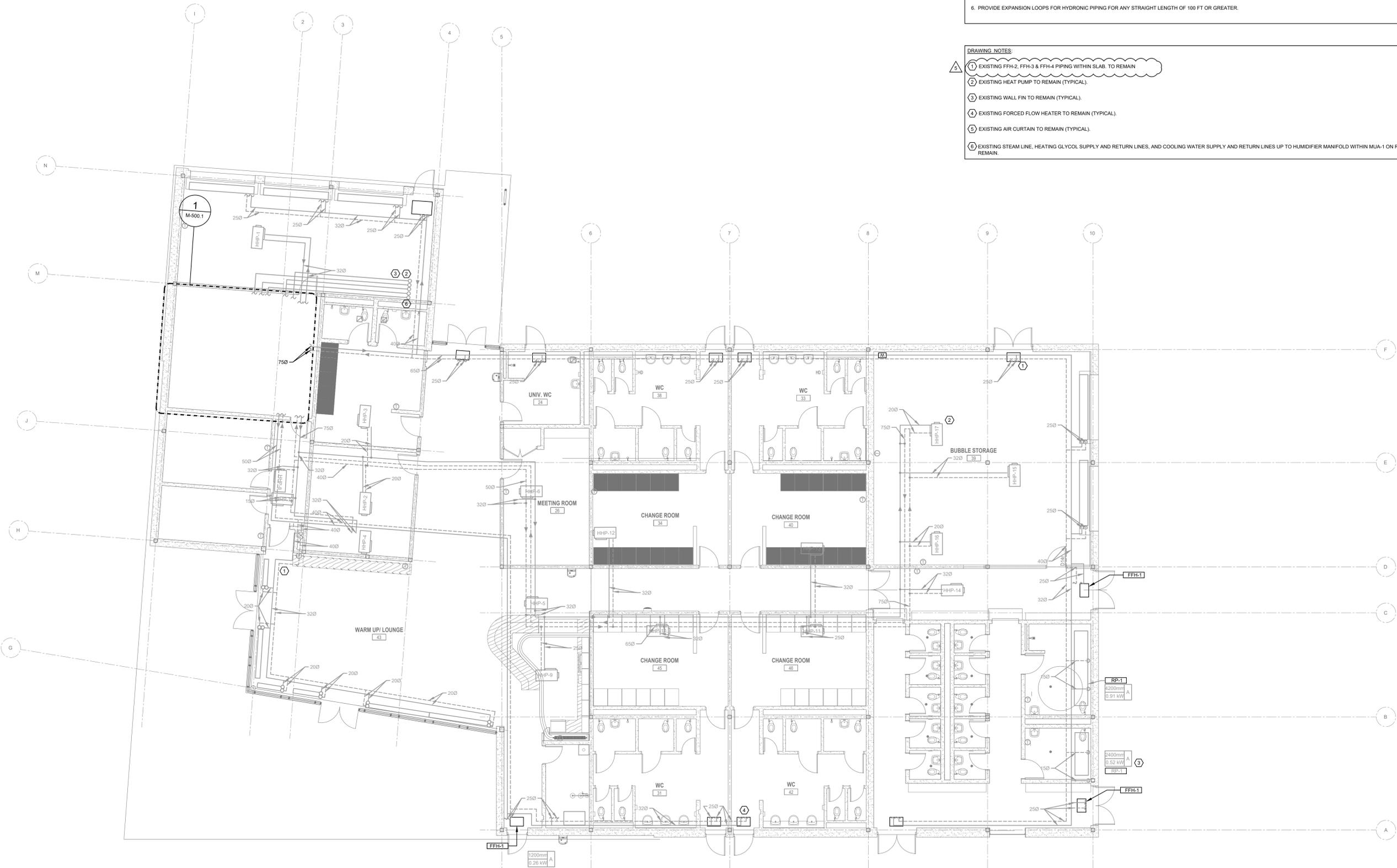


**GENERAL NOTES:**

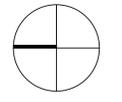
1. CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL EQUIPMENT.
2. ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
3. PROVIDE ELECTRIC PIPE TRACING ON ALL PIPING SUBJECT TO FREEZING OR IN UNHEATED SPACES.
4. COORDINATE WORK SHOWN ON DRAWINGS WITH STRUCTURAL BEAM LAYOUTS TO PROVIDE PIPE SLEEVE AND/OR DUCT OPENINGS NECESSARY TO MAINTAIN MECHANICAL WORK WITHIN ACCEPTABLE HEAD ROOM.
5. ALL PIPING AND DUCTWORK IN CEILING SPACE SHALL BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF FLOOR SLAB. WHERE POSSIBLE, RUN PIPES THROUGH OPEN WEB JOISTS. COORDINATE OPENINGS FOR PIPES THROUGH STRUCTURAL BEAMS WITH STRUCTURAL, AS REQUIRED.
6. PROVIDE EXPANSION LOOPS FOR HYDRONIC PIPING FOR ANY STRAIGHT LENGTH OF 100 FT OR GREATER.

**DRAWING NOTES:**

1. EXISTING FFH-2, FFH-3 & FFH-4 PIPING WITHIN SLAB. TO REMAIN
2. EXISTING HEAT PUMP TO REMAIN (TYPICAL).
3. EXISTING WALL FIN TO REMAIN (TYPICAL).
4. EXISTING FORCED FLOW HEATER TO REMAIN (TYPICAL).
5. EXISTING AIR CURTAIN TO REMAIN (TYPICAL).
6. EXISTING STEAM LINE, HEATING GLYCOL SUPPLY AND RETURN LINES, AND COOLING WATER SUPPLY AND RETURN LINES UP TO HUMIDIFIER MANIFOLD WITHIN MUA-1 ON ROOF TO REMAIN.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-22
ISSUED FOR PROGRESS	2024-08-14
ISSUED FOR COORDINATION	2024-07-30
Revision	001



**FIFA - EAST VSTS**  
**CENTENNIAL PARK**  
Address: 56 Centennial Park Rd. Toronto, ON

**EAST VSTS GROUND LEGACY**  
**FLOOR HVAC PIPING -**  
**SEPARATE PRICE 1**

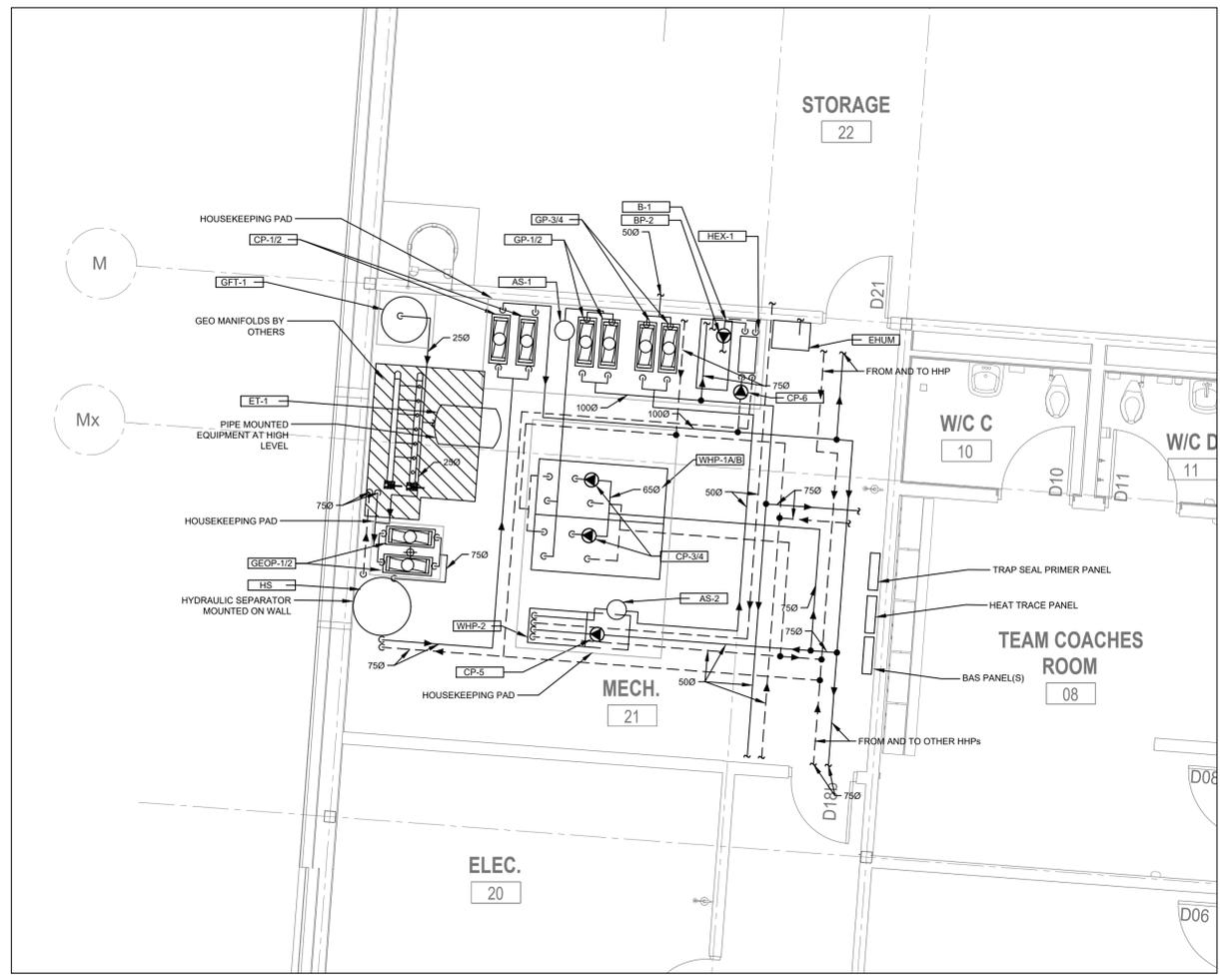
project no. : 2024-0112  
scale : 1:100  
date :

drawing no. : **M-413.1**

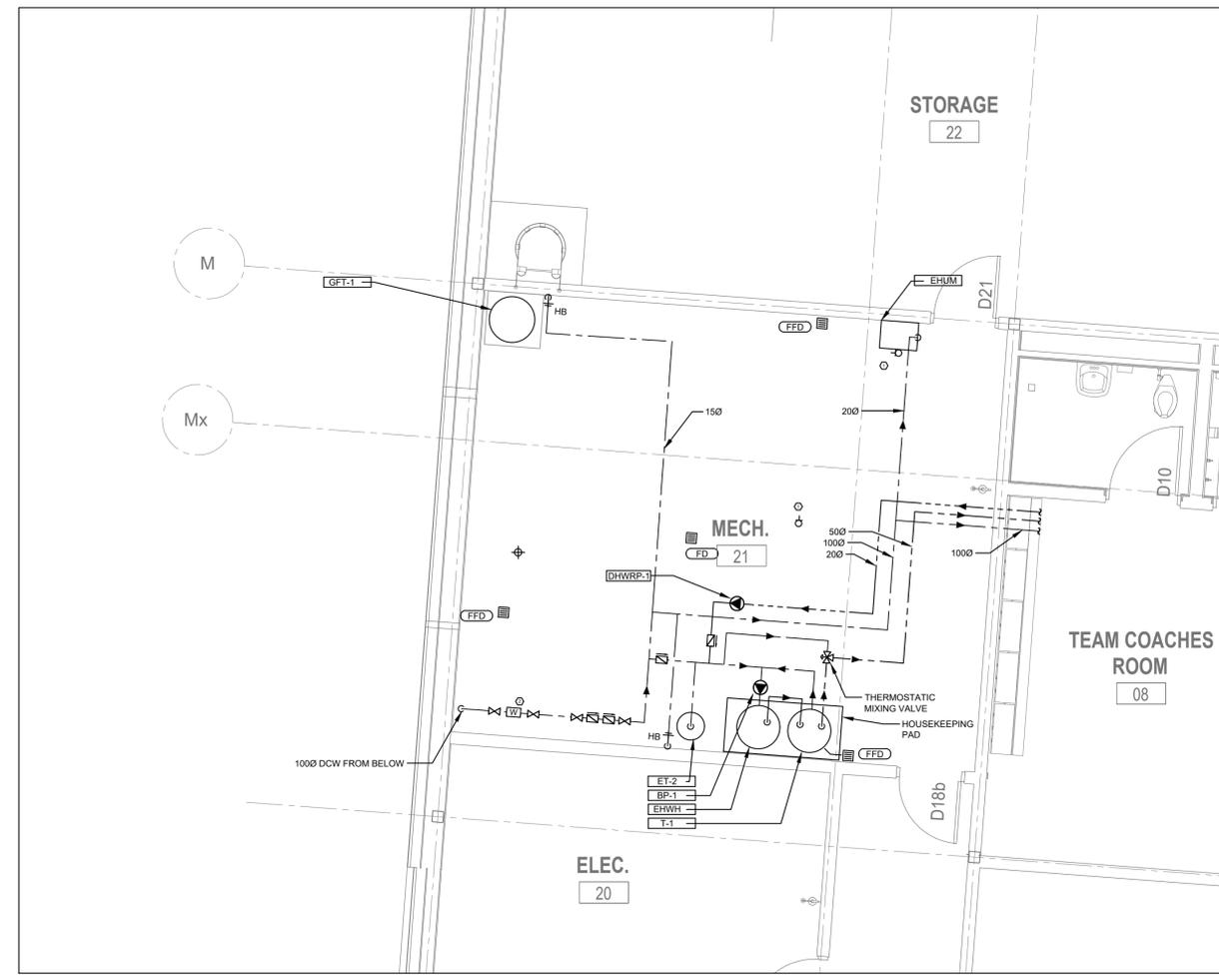


- GENERAL NOTES:**
- SANITARY DRAIN PIPING TO BE AT MINIMUM 1% SLOPE, UNLESS OTHERWISE NOTED.
  - CONTRACTOR SHOULD REFER TO REFLECTED CEILING PLAN FOR COORDINATION WITH MECHANICAL SERVICE AND DEVICES.
  - ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND DISCREPANCIES REPORTED PRIOR TO THE START OF WORK.
  - ALL FOUNDATION PLUMBING TO BE PVC.
  - PROVIDE COMPLETE SANITARY VENT SYSTEM IN ACCORDANCE WITH THE OBC.
  - PROVIDE CLEANOUTS ON ALL DRAINAGE AND WASTE SYSTEMS, NOT LIMITED TO CLEANOUTS SHOWN ON THE DRAWINGS.
  - ALL FLOOR DRAIN P-TRAPS SHALL BE PRIMED FROM A CENTRAL ELECTRONIC TRAP SEAL PRIMER DIVISION 22 CONTRACTOR MUST COORDINATE WITH ELECTRICAL TRADE FOR CIRCUIT LOCATIONS DURING SCOPE DRAWING STAGE, OTHERWISE DIVISION 22 TRADE WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH CIRCUIT WIRING.
  - ALL EXPOSED PIPING WITH INSULATION TO BE COMPLETE WITH PVC JACKETING.
  - ALL PIPING IN CEILING SPACE SHALL BE INSTALLED AS TIGHT AS POSSIBLE TO UNDERSIDE OF ROOF.
  - CONTRACTOR TO PROVIDE THRUST RESTRAINTS ON ALL PIPING SUBJECT TO POTENTIAL HYDROSTATIC HEAD AS OUTLINED IN SPEC SECTIONS 22 13 16 AND 22 14 16.
  - COORDINATE WORK SHOWN ON DRAWINGS WITH STRUCTURAL BEAM LAYOUTS TO PROVIDE PIPE SLEEVE AND/OR DUCT OPENINGS NECESSARY TO MAINTAIN MECHANICAL WORK WITHIN ACCEPTABLE HEAD ROOM.

- DRAWING NOTES:**
- BELOW GRADE SANITARY DRAIN CLEANOUT IN FLOOR.
  - WATER METER TO BE RELOCATED FROM IRRIGATION BUNKER (OUTSIDE OF BUILDING) TO WITHIN BUILDING MECHANICAL ROOM DURING CONSTRUCTION.

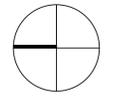


**1 HVAC PIPING MECHANICAL ROOM PART PLAN**  
M-500.1 SCALE: 1:50



**2 PLUMBING & DRAINAGE MECHANICAL ROOM PART PLAN**  
M-500.1 SCALE: 1:50

ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR PROGRESS	2024-11-08
ISSUED FOR PROGRESS	2024-09-02
ISSUED FOR PROGRESS	2024-06-15
Revision	001



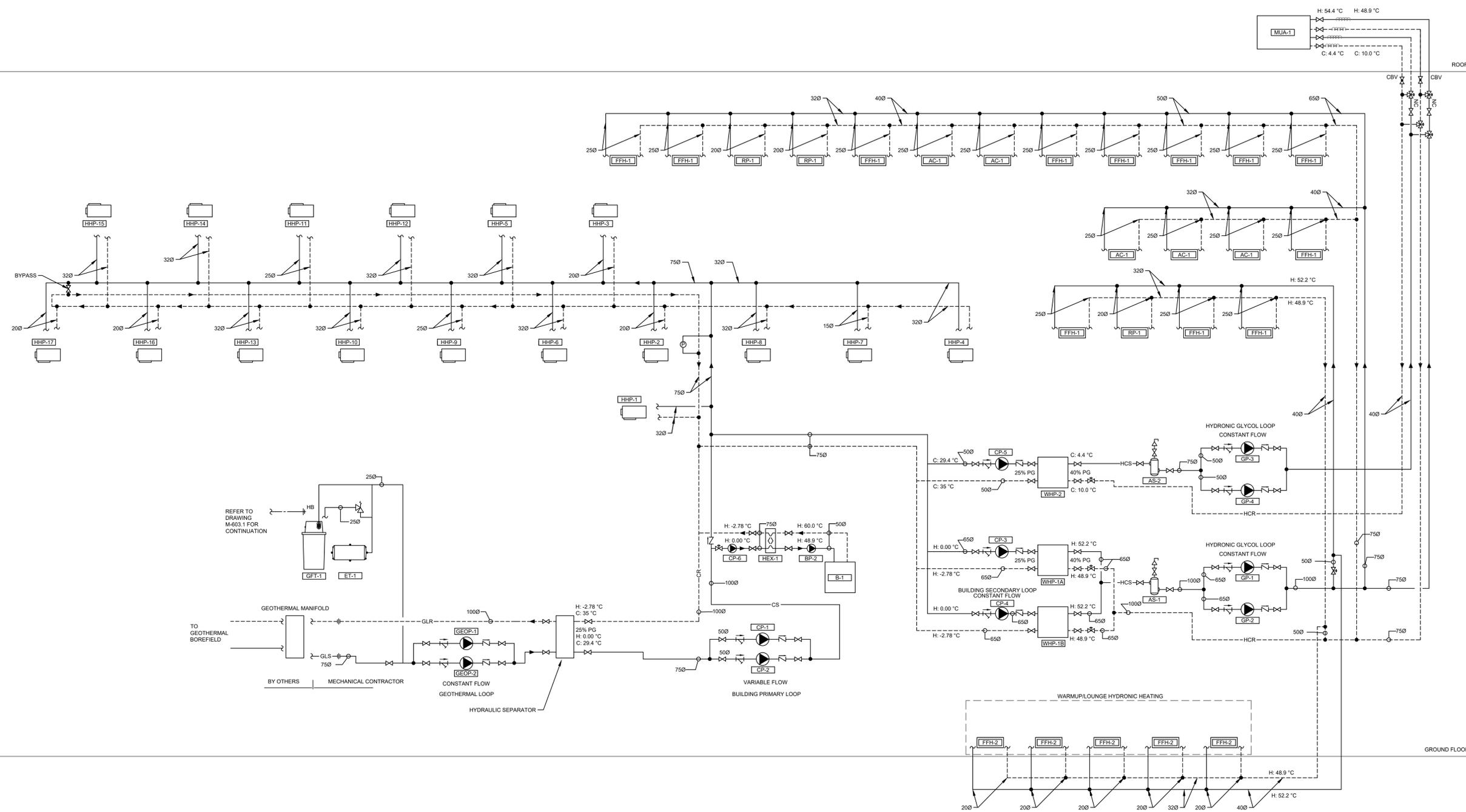
FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON  
EAST VSTS GROUND FLOOR  
MECHANICAL ROOM PART  
PLAN - SEPARATE PRICE 1

project no.: 2024-0112  
scale: AS SHOWN  
date:

drawing no.: **M-500.1**



- GENERAL NOTES:**
- ERV MAKE-UP WATER LINE DRAIN AND OVERFLOW TO BE ELECTRICALLY TRACED AND INSULATED, CW WEATHER PROOF JACKET.
  - PROVIDE ISOLATION VALVES ON ALL BRANCH LINES AND AT ALL EQUIPMENT.
  - PROVIDE VIBRATION ISOLATION FOR ALL ROTATING EQUIPMENT.
  - CONDENSER WATER PIPING OUTDOORS TO BE ELECTRICALLY TRACED AND INSULATED, CW WEATHER PROOF JACKET.
  - EXPANSION COMPENSATION AND ANCHORING SYSTEM SHOP DRAWINGS TO BE STAMPED BY A LICENSED PROFESSIONAL ENGINEER. PROVIDE EXPANSION LOOPS AS REQUIRED IN MIDDLE OF 100 FT (OR GREATER) HYDRONIC PIPING SECTIONS.
  - HEAT TRACE ALL PIPING SUBJECT TO FREEZING.
  - CENTRALLY METER PLANT MECHANICAL SERVICES ON DIGITAL METERING SYSTEM (DMS) (OR BAS), REFER TO CONTROL DIAGRAMS AND SEQUENCE OF OPERATIONS FOR METERING SCOPE.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR PROGRESS	2024-08-15
ISSUED FOR COORDINATION	2024-07-30
ISSUED FOR CLASS C COSTING	2024-06-08
REVISION	002

FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd, Toronto, ON

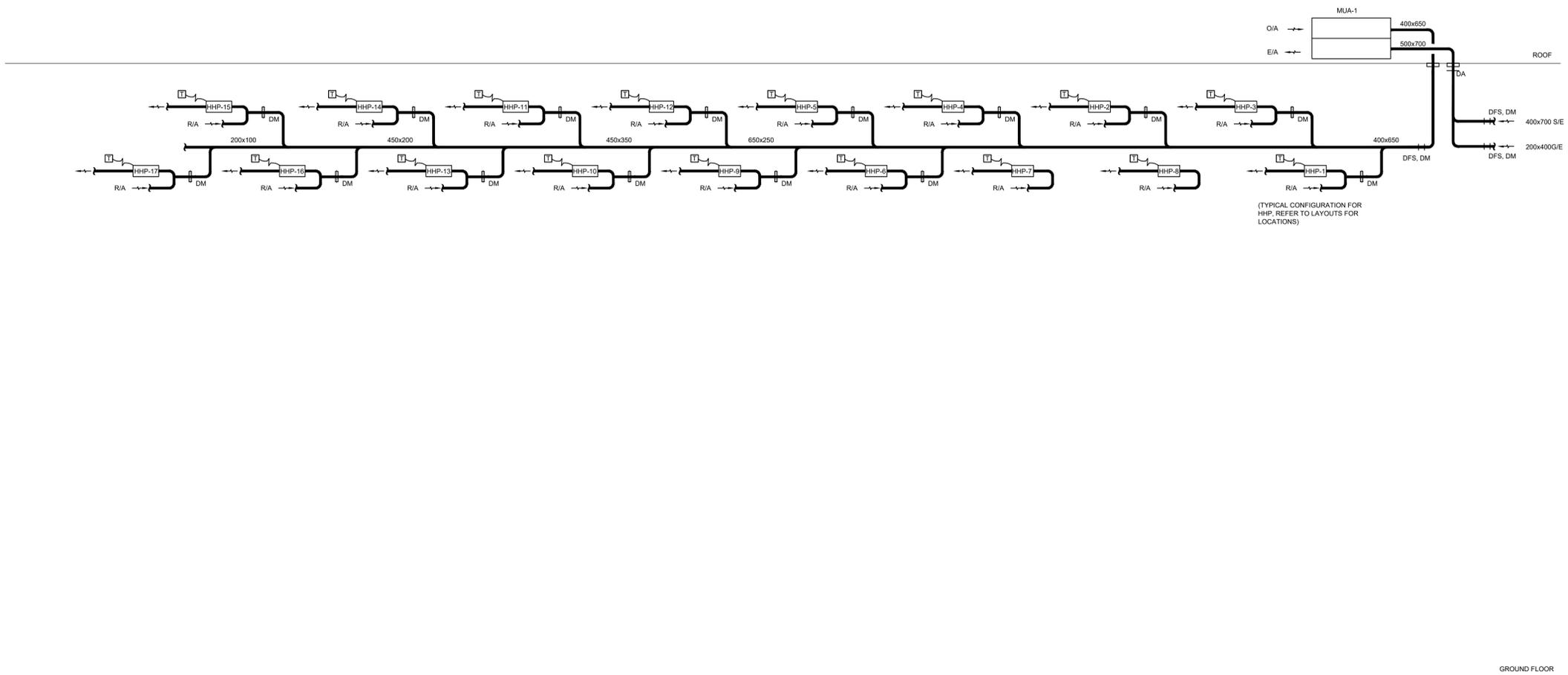
EAST VSTS HEATING AND  
COOLING SCHEMATIC -  
SEPARATE PRICE 1

project no.: 2024-0112  
scale: N.T.S.  
date:

drawing no.:

**M-600.1**

- GENERAL NOTES:
1. PROVIDE BALANCING DAMPERS ON ALL BRANCH DUCTS AND OUTLETS.
  2. CONTRACTOR TO PROVIDE ACCESS PANELS FOR ALL DAMPERS MOUNTED WITHIN DUCT AND COORDINATE ACCESS PANELS FOR ALL DAMPERS LOCATED BEHIND WALLS/CEILINGS.
  3. DYNAMIC FIRE DAMPERS SHALL BE PROVIDED WHERE DAMPERS ARE POSITIONED HORIZONTALLY OR WHERE AIRSTREAM PRESSURE COULD PREVENT GRAVITY BASED DAMPERS FROM CLOSING.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-06
ISSUED FOR PROGRESS	2024-08-23
revision	020

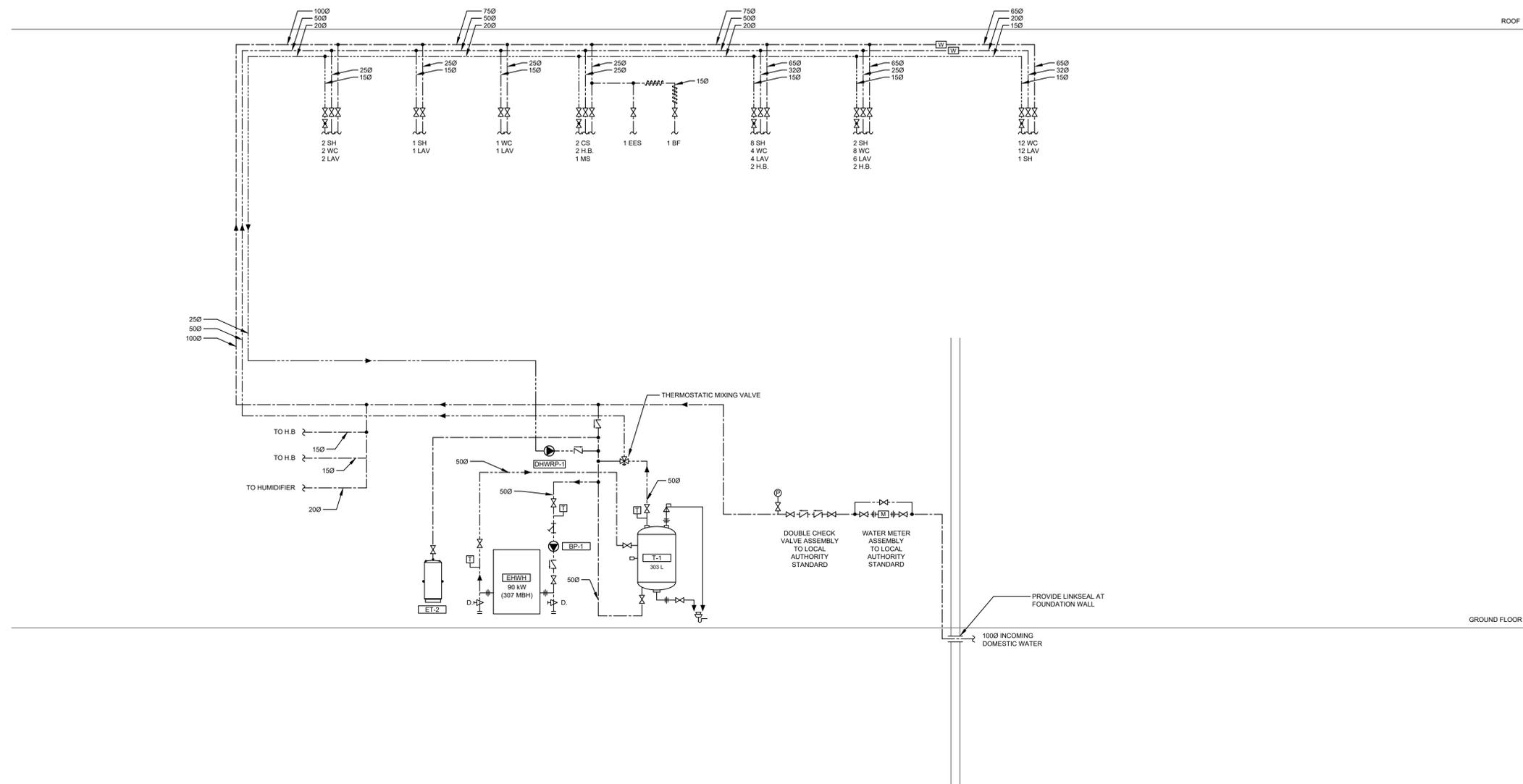
FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON  
EAST VSTS HVAC SCHEMATIC  
- SEPARATE PRICE 1

project no. : 2024-0112  
scale : N.T.S.  
date :

drawing no. : **M-601.1**



- GENERAL NOTES:**
1. MAXIMUM DHW DISTRIBUTION TEMPERATURE NOT TO EXCEED 48.9°C (120°F).
  2. ALL DOMESTIC HOT WATER RECIRCULATION LINES TO HAVE CIRCUIT BALANCING VALVES.
  3. HEAT TRACE ALL PIPING SUBJECT TO FREEZING.
  4. PROVIDE AUTOMATIC AIR VENTS THROUGHOUT THE SYSTEM AT HIGH POINTS ON DOMESTIC HOT WATER RECIRCULATION PIPING.
  5. PROVIDE INDIVIDUAL TEMPERATURE MIXING VALVES FOR EVERY ELECTRONIC LAVATORY FAUCET IN ALL PUBLIC AREAS.
  6. PROVIDE ELECTRONIC TRAP SEAL PRIMERS FOR ALL FLOOR DRAINS.
  7. EXPANSION COMPENSATION AND ANCHORING SYSTEM SHOP DRAWINGS TO BE STAMPED BY A LICENSED PROFESSIONAL ENGINEER.
  8. PROVIDE ISOLATION AND DRAIN VALVES FOR ALL DC/DH/DHWR RISERS.
  9. PROVIDE EXPANSION LOOPS FOR HYDRONIC PIPING FOR ANY STRAIGHT LENGTH OF 100 FT OR GREATER.



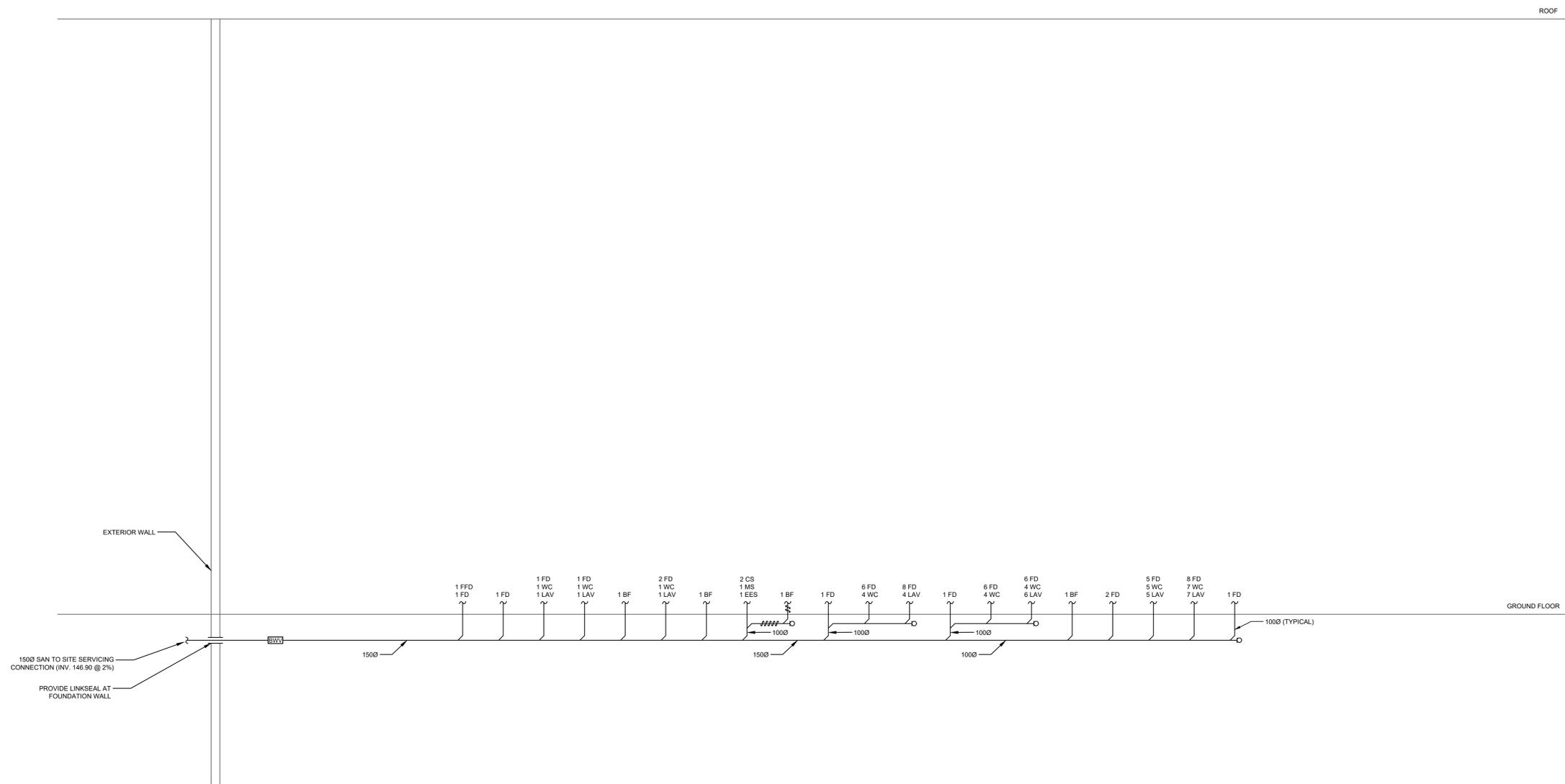
ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR REVISION	2024-11-06
ISSUED FOR PROGRESS	2024-08-23
revision	020

FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON

EAST VSTS DOMESTIC WATER  
GAME  
SCHEMATIC - SEPARATE  
PRICE 1

project no. : 2024-0112  
scale : N.T.S.  
date :  
drawing no. : **M-602.1**

- GENERAL NOTES:
1. DRAIN PIPING SHALL BE AT MINIMUM 1% SLOPE AT ALL OFFSETS UNLESS OTHERWISE SPECIFIED.
  2. PROVIDE CLEANOUTS IN ACCORDANCE WITH PART 7 OF THE OBC. CLEANOUTS SHALL BE PROVIDED AT EVERY CHANGE IN DIRECTION AND AT 15M (50FT) INTERVALS ON STRAIGHT RUNS BELOW-GRADE. CLEANOUTS IN OCCUPIED SPACES SHALL BE PROVIDED WITH ACCESS PANEL IN LOCATION COORDINATED WITH THE INTERIOR DESIGN TO BE ACCESSIBLE ONCE FULLY FURNISHED.
  3. HEAT TRACE ALL PIPING SUBJECT TO FREEZING.
  4. PROVIDE ELECTRONIC TRAP SEAL PRIMERS FOR ALL FLOOR DRAIN 'P' TRAPS.
  5. CONTRACTOR TO PROVIDE COMPLETE SANITARY VENTING SYSTEM IN ACCORDANCE WITH PART 7 OF THE OBC. ALL VENT STACKS TO TERMINATE OUTDOORS. SYSTEM SHALL BE VENTED IN SUCH A WAY AS TO MINIMIZE NUMBER OF VENTS THROUGH ROOF.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR REVISION	2024-11-06
ISSUED FOR PROGRESS	2024-08-23
revision	002

FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON

EAST VSTS SANITARY GAME  
SCHEMATIC - SEPARATE  
PRICE 1

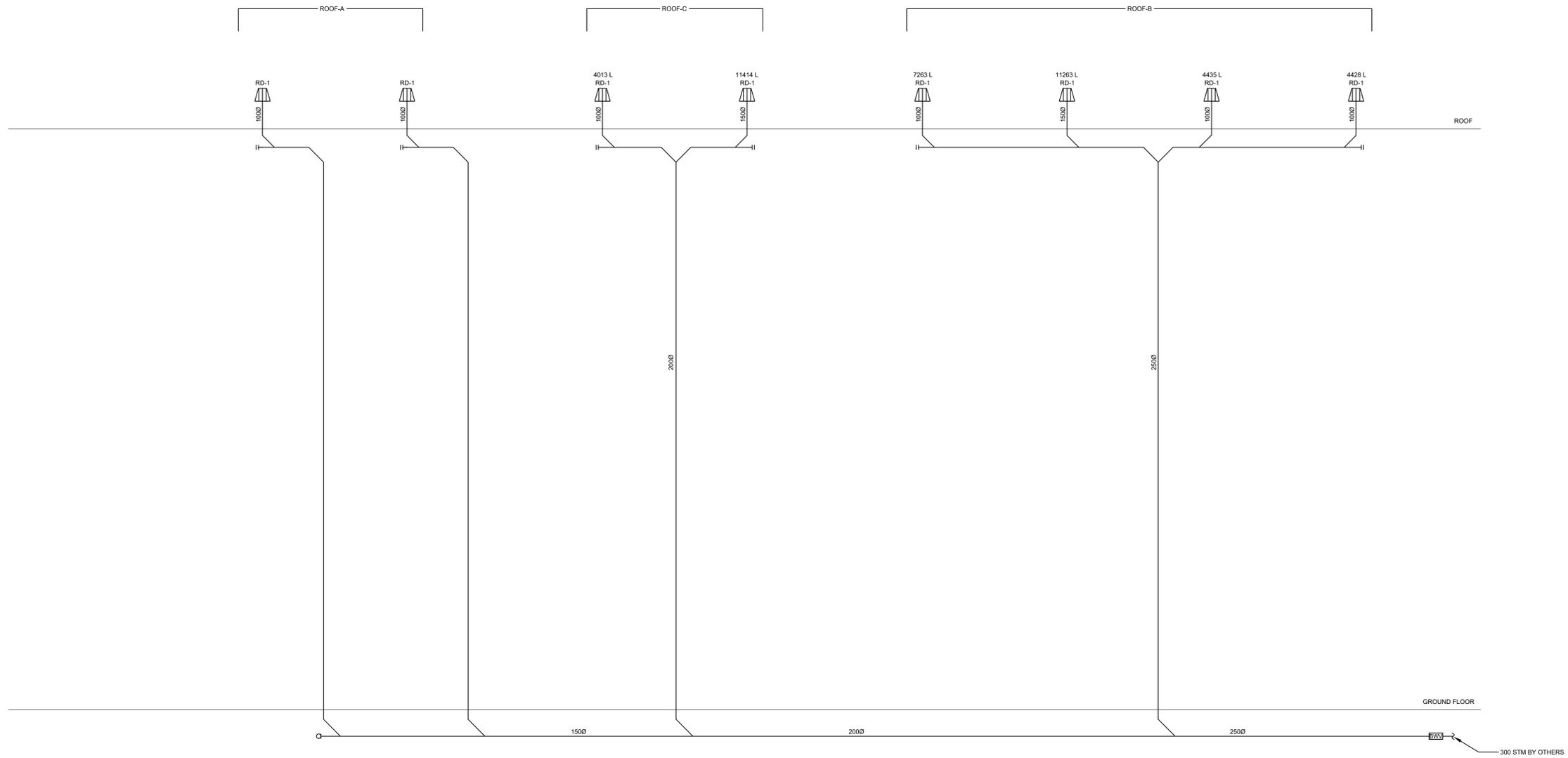
project no. : 2024-0112  
scale : N.T.S.  
date :

drawing no. :

**M-603.1**



- GENERAL NOTES:**
1. DRAIN PIPING SHALL BE AT MINIMUM 1% SLOPE AT ALL OFFSETS UNLESS OTHERWISE SPECIFIED.
  2. PROVIDE CLEANOUTS IN ACCORDANCE WITH PART 7 OF THE OBC. CLEANOUTS SHALL BE PROVIDED AT EVERY CHANGE IN DIRECTION AND AT 15M (50FT) INTERVALS ON STRAIGHT RUNS BELOW-GRADE. CLEANOUTS IN OCCUPIED SPACES SHALL BE PROVIDED WITH ACCESS PANEL IN LOCATION COORDINATED WITH THE INTERIOR DESIGN TO BE ACCESSIBLE ONCE FULLY FURNISHED.
  3. HEAT TRACE ALL PIPING SUBJECT TO FREEZING.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-06
ISSUED FOR PROGRESS	2024-08-23
REVISION	020

FIFA - EAST VSTS  
 CENTENNIAL PARK  
 Address: 56 Centennial Park Rd. Toronto, ON

EAST VSTS STORM  
 SCHEMATIC - SEPARATE  
 PRICE 1

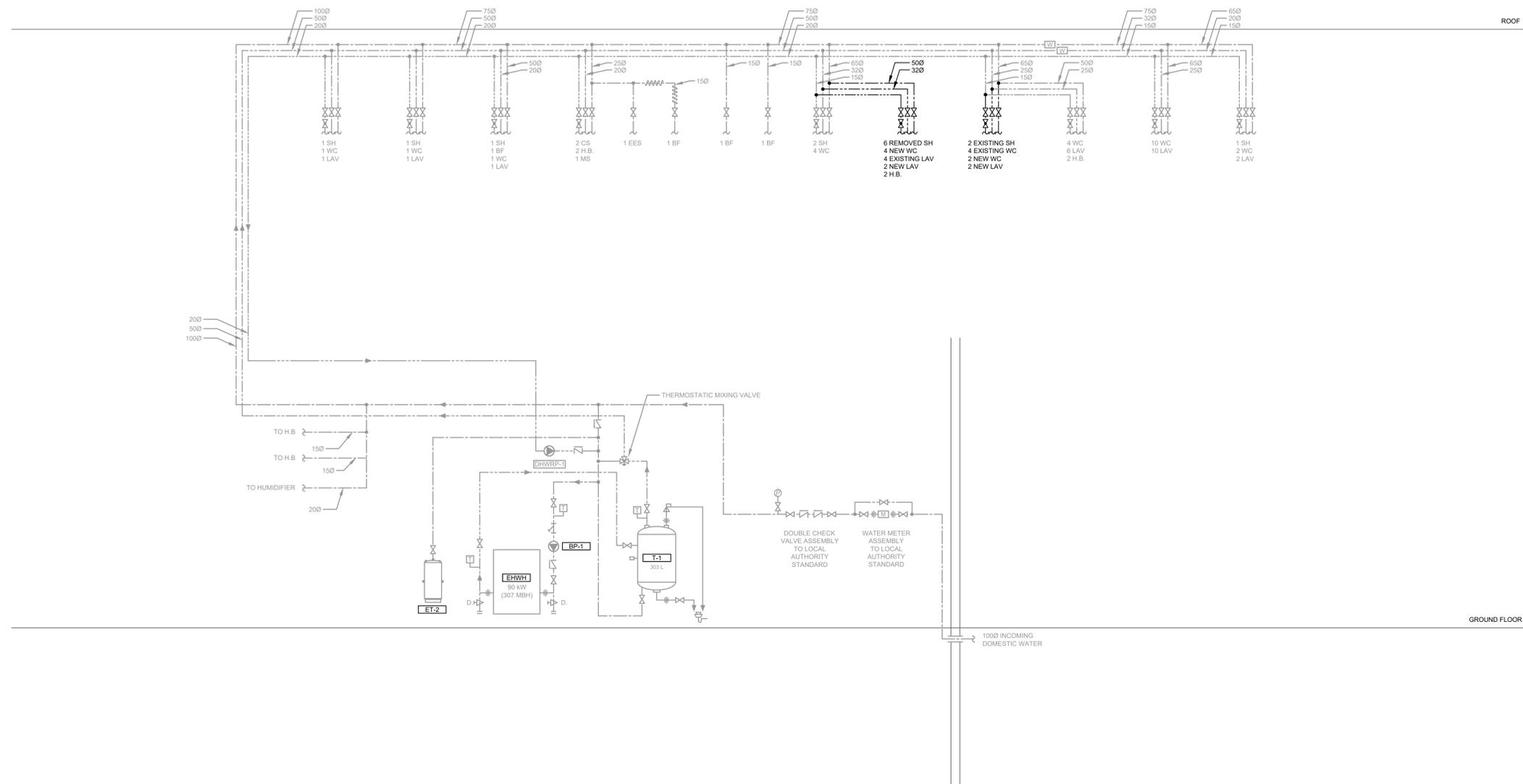
project no. : 2024-0112  
 scale : N.T.S.  
 date :

drawing no. :

**M-604.1**



- GENERAL NOTES:**
1. MAXIMUM DHW DISTRIBUTION TEMPERATURE NOT TO EXCEED 48.9°C (120°F).
  2. ALL DOMESTIC HOT WATER RECIRCULATION LINES TO HAVE CIRCUIT BALANCING VALVES.
  3. HEAT TRACE ALL PIPING SUBJECT TO FREEZING.
  4. PROVIDE AUTOMATIC AIR VENTS THROUGHOUT THE SYSTEM AT HIGH POINTS ON DOMESTIC HOT WATER RECIRCULATION PIPING.
  5. PROVIDE INDIVIDUAL TEMPERATURE MIXING VALVES FOR EVERY ELECTRONIC LAVATORY FAUCET IN ALL PUBLIC AREAS.
  6. PROVIDE ELECTRONIC TRAP SEAL PRIMERS FOR ALL FLOOR DRAINS.
  7. EXPANSION COMPENSATION AND ANCHORING SYSTEM SHOP DRAWINGS TO BE STAMPED BY A LICENSED PROFESSIONAL ENGINEER.
  8. PROVIDE ISOLATION AND DRAIN VALVES FOR ALL DCW/DHW/DHWR RISERS.
  9. PROVIDE EXPANSION LOOPS FOR HYDRONIC PIPING FOR ANY STRAIGHT LENGTH 100 FT OR GREATER.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR REVISION	2024-11-06
ISSUED FOR PROGRESS	2024-08-23
revision	020

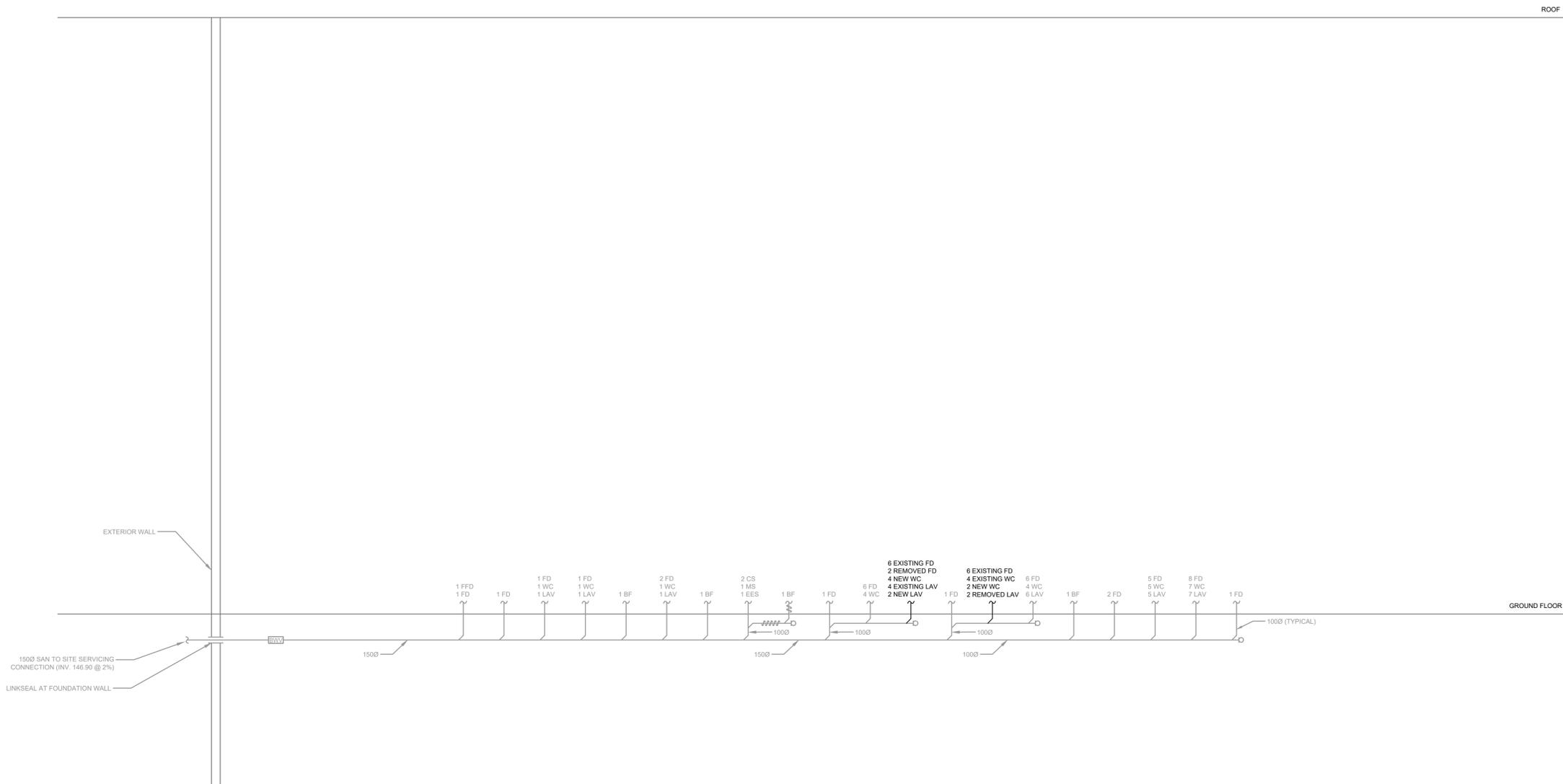
FIFA - EAST VSTS  
 CENTENNIAL PARK  
 Address: 56 Centennial Park Rd. Toronto, ON  
 EAST VSTS DOMESTIC WATER  
 LEGACY SCHEMATIC - SEPARATE  
 PRICE 1

project no. : 2024-0112  
 scale : N.T.S.  
 date :

drawing no. : **M-605.1**



- GENERAL NOTES:**
1. DRAIN PIPING SHALL BE AT MINIMUM 1% SLOPE AT ALL OFFSETS UNLESS OTHERWISE SPECIFIED.
  2. PROVIDE CLEANOUTS IN ACCORDANCE WITH PART 7 OF THE OBC. CLEANOUTS SHALL BE PROVIDED AT EVERY CHANGE IN DIRECTION AND AT 15M (50FT) INTERVALS ON STRAIGHT RUNS BELOW-GRADE. CLEANOUTS IN OCCUPIED SPACES SHALL BE PROVIDED WITH ACCESS PANEL IN LOCATION COORDINATED WITH THE INTERIOR DESIGN TO BE ACCESSIBLE ONCE FULLY FURNISHED.
  3. HEAT TRACE ALL PIPING SUBJECT TO FREEZING.
  4. PROVIDE ELECTRONIC TRAP SEAL PRIMERS FOR ALL FLOOR DRAIN 'P' TRAPS.
  5. CONTRACTOR TO PROVIDE COMPLETE SANITARY VENTING SYSTEM IN ACCORDANCE WITH PART 7 OF THE OBC. ALL VENT STACKS TO TERMINATE OUTDOORS. SYSTEM SHALL BE VENTED IN SUCH A WAY AS TO MINIMIZE NUMBER OF VENTS THROUGH ROOF.



ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR REVISION	2024-11-06
ISSUED FOR PROGRESS	2024-08-23
REVISION	020

FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON  
EAST VSTS SANITARY LEGACY  
SCHEMATIC - SEPARATE  
PRICE 1

project no. : 2024-0112  
scale : N.T.S.  
date :

drawing no. :  
**M-606.1**

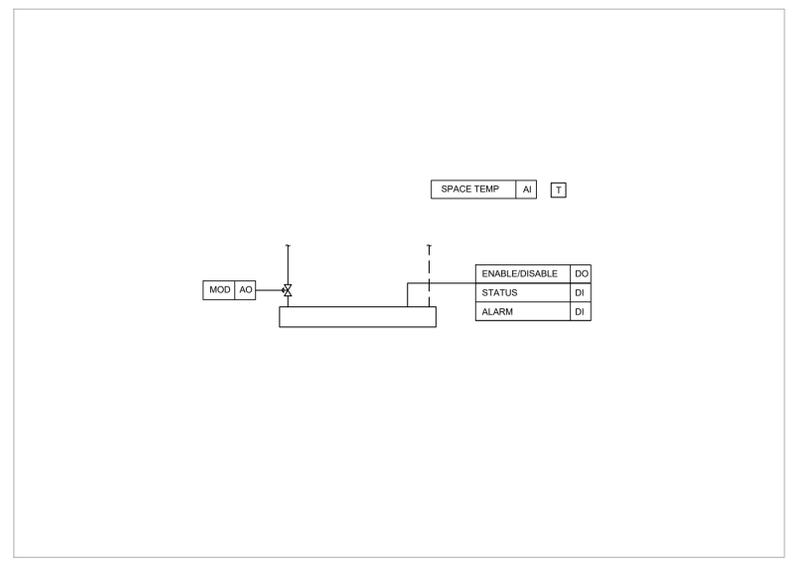


ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR PROGRESS	2024-08-15
ISSUED FOR COORDINATION	2024-07-30
ISSUED FOR CLASS C COSTING	2024-06-08
REVISION	002

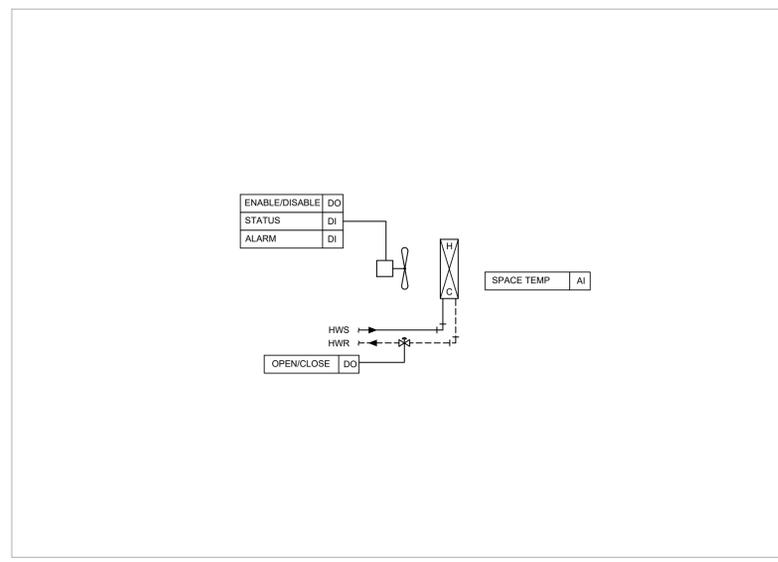
FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON  
CONTROL SCHEMATICS - SEPARATE  
PRICE 1

project no.: 2024-0112  
scale: N.T.S.  
date:  
drawing no.:

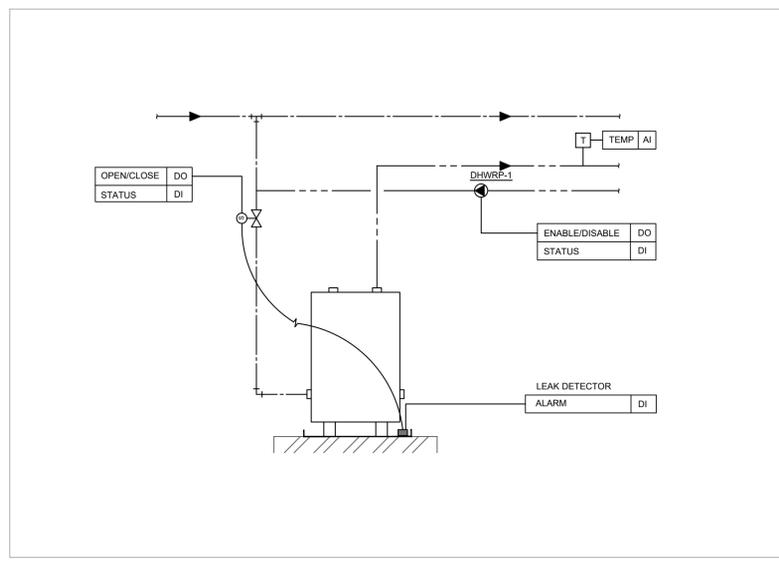
**M-700.1**



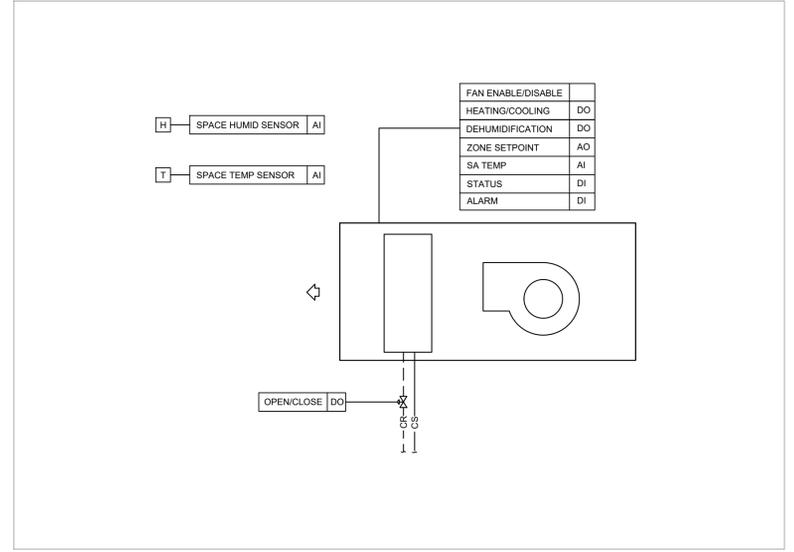
**1 RADIANT PANEL HEATING**  
M-700.1 SCALE: N.T.S.



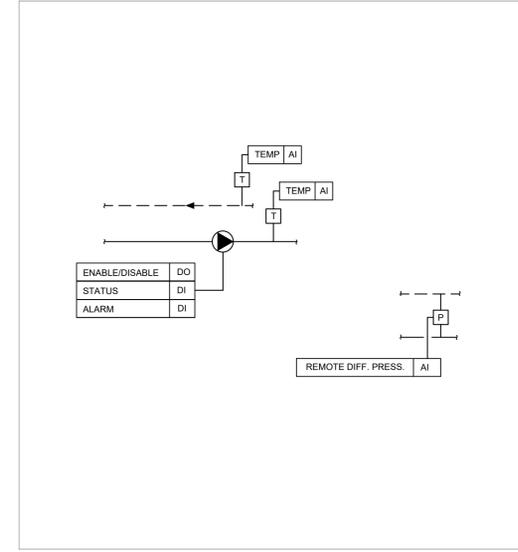
**2 UNIT HEATER, FORCE FLOW HEATER**  
M-700.1 SCALE: N.T.S.



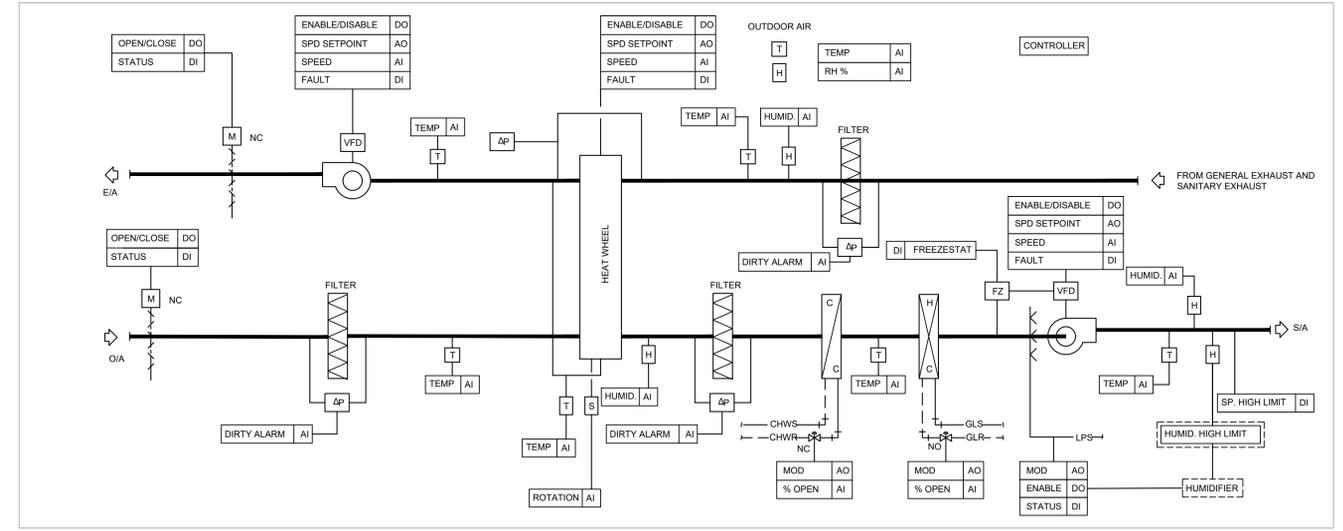
**3 HWT W/ SOLENOID VALVE AND LEAK DETECTOR**  
M-700.1 SCALE: N.T.S.



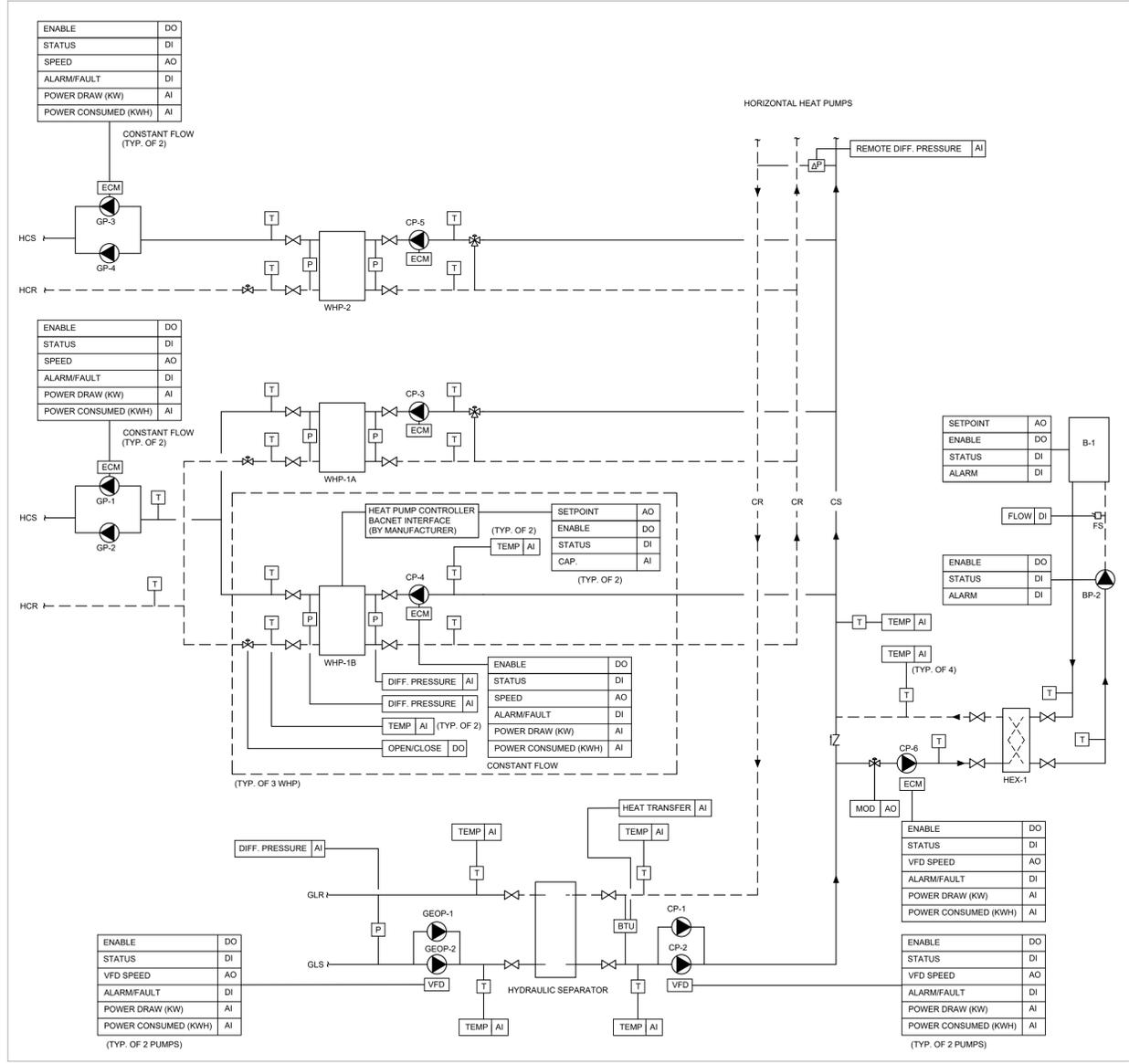
**4 HEAT PUMPS - HORIZONTAL**  
M-700.1 SCALE: N.T.S.



**5 MISC HEAT CIRCULATING PUMP**  
M-700.1 SCALE: N.T.S.



**6 MAKE UP AIR UNIT**  
M-700.1 SCALE: N.T.S.



**7 GEOTHERMAL HEATING AND COOLING PLANT CONTROLS**  
M-700.1 SCALE: N.T.S.

**PUMP SCHEDULE**

TAG	SERVICE	LOCATION	MANUFACTURER	MODEL NO.	PUMP SPECIFICATIONS					ELEC. (V/PH/Hz)	EMERGENCY POWER	PRESSURE RATING (kPa)	FLUID	VFD/ STARTER	WEIGHT (KG)	REMARKS
					FLOW (L/S)	HEAD (kPa)	SPEED (RPM)	MOTOR POWER (HP)	BHP (HP)							
GEOP-1/2	GEOTHERMAL GROUND LOOP	MECH ROOM	BELL & GOSSETT	1.25AAB	6.94	209.23	3,600	5.00	3.19	208-230/1/60	-	-	25% PG	VFD	32	DUTY/STANDY
CP-1/2	BUILDING PRIMARY LOOP	MECH ROOM	BELL & GOSSETT	2AAB	8.96	188.31	3,600	5.00	3.39	575/3/60	-	-	25% PG	-	39	PUMPS TO OPERATE IN PARALLEL EACH SIZED FOR 75% OF SYSTEM FLOW.
CP-3/4	HEATING WWHP SOURCE PUMPS	MECH ROOM	BELL & GOSSETT	PL-100	2.91	41.85	3,250	0.40	0.45	575/3/60	-	-	25% PG	-	7	DUTY/DUTY
GP-1/2	HEATING GLYCOL LOOP	MECH ROOM	BELL & GOSSETT	1.25AAB	4.50	170.38	3,450	3.00	1.79	575/3/60	-	-	40% PG	-	30	-
BP-1	DOMESTIC HOT WATER	MECH ROOM	BELL & GOSSETT	NBF-25	0.38	44.84	2,950	-	-	115/1/60	-	-	25% PG	-	-	-
DHWRP-1	DHW RECIRCULATION	MECH ROOM	BELL & GOSSETT	PL-30B	0.32	62.77	2,650	0.08	-	115/1/60	-	-	DOMESTIC WATER	-	5	-
GP-3/4	COOLING GLYCOL LOOP	MECH ROOM	BELL & GOSSETT	PL-55	1.36	95.65	3,250	0.40	-	115/1/60	-	-	WATER	-	6	DUTY/STANDBY
CP-5	COOLING WWHP SOURCE PUMP	MECH ROOM	BELL & GOSSETT	1.5AB	2.27	67.85	1,725	0.75	0.43	575/3/60	-	-	25% PG	-	34	-
BP-2	SUPPLEMENTAL BOILER PUMP	MECH ROOM	BELL & GOSSETT	PL-55	1.51	80.70	3,250	0.40	-	115/1/60	-	-	WATER	-	6	-
CP-6	SUPPLEMENTAL BOILER LOOP	MECH ROOM	BELL & GOSSETT	1.5AAB	6.31	80.70	3,600	1.50	-	575/3/60	-	-	25% PG	-	29	-

NOTES:

**ELECTRIC DOMESTIC WATER HEATER SCHEDULE**

TAG	SERVICE	LOCATION	MANUFACTURER	MODEL NO.	CAPACITY (L)	RECOVERY RATE (L/H)	HEATER ELEMENT (kW)	WEIGHT (KG)	ELEC. (V/PH/Hz)	MCA (A)	REMARKS
EHW1	DHW	MECH ROOM	AO SMITH	DSE-65A-90	246	84.490	90	-	600/3/60	-	-

**DOMESTIC STORAGE TANK SCHEDULE**

TAG	SERVICE	LOCATION	MANUFACTURER	MODEL NO.	CAPACITY (L)	DIMENSIONS (MM)		REMARKS
						DIAMETER	LENGTH	
T-1	DHW	MECH ROOM	AO SMITH	TJ-80A	303	673	1,397	-

**MAKE-UP (VENTILATION) AIR UNIT SCHEDULE**

TAG	SERVICE	LOCATION	MANUFACTURER	MODEL No.	SUPPLY FAN								EXHAUST FAN								HEATING COIL PERFORMANCE								COOLING COIL PERFORMANCE								REMARKS			
					AIR FLOW (L/S)	ESP (Pa)	SPEED (RPM)	MOTOR POWER (HP)	BHP (HP)	ELEC. (V/PH/Hz)	VFD/ STARTER	AIR FLOW (L/S)	ESP (Pa)	SPEED (RPM)	MOTOR POWER (HP)	BHP (HP)	ELEC. (V/PH/Hz)	VFD/ STARTER	HEATING CAPACITY (kW)	AIR SIDE				WATER SIDE				HEATING CAPACITY (kW)	AIR SIDE				WATER SIDE							
																				AIR FLOW (L/S)	EAT DB (°C)	LAT DB (°C)	PRESSURE DROP (PA)	EWT (°C)	LWT (°C)	FLOW RATE (L/S)	PRESS DROP (KPA)		AIR FLOW (L/S)	EAT DB (°C)	LAT DB (°C)	PRESSURE DROP (PA)	EWT (°C)	LWT (°C)	FLOW RATE (L/S)	PRESS DROP (KPA)				
MUA-1	BUILDING OA	ROOF	SWEGON	AD-100019112707	1,534	416	1,682	5	3	600/3/60	-	1,699	448	1,833	5	3	600/3/60	-	19	1,534	-22	22	7	53	49	1	53	7	1,534	31	24	24	17	12	6	12	-	-	-	-
ENERGY RECOVERY PERFORMANCE																																								
WINTER														SUMMER														FILTERS	WEIGHT (KG)	FULL CURRENT LOAD (A)	EMERGENCY OR NORMAL POWER	REMARKS								
OA TEMP. DB (°C)	OA TEMP. WB (°C)	EA TEMP. DB (°C)	EA TEMP. WB (°C)	SENSIBLE EFFICIENCY (%)	LATENT EFFICIENCY (%)	SA TEMP. DB (°C)	SA TEMP. WB (°C)	OA TEMP. DB (°C)	OA TEMP. WB (°C)	EA TEMP. DB (°C)	EA TEMP. WB (°C)	SENSIBLE EFFICIENCY (%)	LATENT EFFICIENCY (%)	SA TEMP. DB (°C)	SA TEMP. WB (°C)	63	125	250	500	1000	2000	4000	8000	63	125	250	500						1000	2000	4000	8000	-	1,447	9	-
-22	-	22	14	84	83	15	10	31	25	24	-	75	61	26	-	75/80	73/74	74/76	60/76	52/73	50/72	47/68	52/70	77/73	76/65	77/58	65/62	57/47	55/46	54/43	57/46	-	1,447	9	-	-				

**EXPANSION TANK SCHEDULE**

TAG	SERVICE	LOCATION	MANUFACTURER	MODEL No.	SYSTEM	ACCEPTANCE VOLUME (L)	MIN. TEMPERATURE (C)	MAX. TEMPERATURE (C)	FILL PRESSURE (kPa)	FLUID	DIMENSIONS (MM)	PRESSURE RATING (kPa)	WEIGHT (KG)
ET-1	GEO LOOP	MECH ROOM	AMTROL	AX-120	-	129	-	116	862	25% PG	610	1,041	-
ET-2	DOMESTIC LOOP	MECH ROOM	-	-	-	-	-18	116	-	-	-	-	-

NOTES:

**HYDRAULIC SEPARATOR SCHEDULE**

TAG	SERVICE	LOCATION	MANUFACTURER	MODEL No.	FLUID	FLOW (L/S)	PRESS. DROP (kPa)	FLOODED VOLUME (M³)	PRESSURE RATING (kPa)	WEIGHT (KG)	REMARKS
HS	GEO LOOP (COOLING)	MECH ROOM	CALEFFI	SEP4 NA549082AM	25% PG	7.20	-	-	1724	50	-

NOTES:

**DIFFUSER & GRILLE SCHEDULE**

TAG	UNIT				DAMPER		MATERIAL	FINISH	REMARKS
	MANUFACTURER	MODEL No.	APPLICATION	DUTY	PART OF UNIT	REMOTE IN DUCT			
A	PRICE	SPD	SUPPLY	SUPPLY	-	YES	-	-	-
B	PRICE	SDS100	LINEAR SLOT DIFFUSER	SUPPLY	-	YES	-	-	1" SLOT, 2 SLOTS
C	PRICE	SDR100	LOUVRED RETURN	EXHAUST	-	YES	-	-	-
D	PRICE	500	SUPPLY/RETURN	SUPPLY/RETURN	YES	-	-	-	C/W BALANCING DAMPER
E	PRICE	SDS150	LINEAR SLOT DIFFUSER	SUPPLY	-	YES	-	-	1.5" SLOT, 4 SLOTS
F	PRICE	SDR100	LINEAR SLOT RETURN	RETURN	-	YES	-	-	1" SLOT, 2 SLOTS
G	PRICE	SDR150	LINEAR SLOT RETURN	RETURN	-	YES	-	-	1.5" SLOT, 4 SLOTS
H	PRICE	SDR100	LINEAR SLOT RETURN	RETURN	-	YES	-	-	1" SLOT, 2 SLOTS

NOTES:





### AIR CURTAIN SCHEDULE

	SERVICE	MANUFACTURER	MODEL No.	ARRANGEMENT	DIMENSIONS (L X W X H) (MM)	AIR FLOW (L/S)	EWT (°C)	LWT (°C)	EAT (°C)	WPD (kPa)	HEATING CAPACITY (kW)	WATER FLOW (L/s)	MOTOR (kW)	ELEC. (V/PHz)	MCA (A)	REMARKS
AC-1	OVERHEAD DOORS	BERNER	ARD12-3144W	HORIZONTAL DOWN DISCHARGE	3556 X 381 X 660	1783	52	41	65	0.30	13.72	0.32	3 @ 0.5	208/1/60		-

### RADIANT CEILING PANEL SCHEDULE

	SERVICE	MANUFACTURER	HEATER TYPE	LENGTH (MM)	HEATING CAPACITY (kW)	EWT (°C)	LWT (°C)	REMARKS
RP-1	WASHROOM	SIGMA	BOTTOM RETURN CEILING MOUNTED RADIANT PANEL	REFER TO FLOORPLAN	REFER TO FLOORPLAN	52	48.89	9000mm WIDTH, 10 TUBE PASSES

### HYDRONIC FORCE FLOW HEATER SCHEDULE

	SERVICE	MANUFACTURER	MODEL No.	ARRANGEMENT	DIMENSIONS (L X W X H) (MM)	AIR FLOW (L/S)	EWT (°C)	LWT (°C)	EAT (°C)	WPD (kPa)	HEATING CAPACITY (kW)	WATER FLOW (L/s)	MOTOR (W)	ELEC. (V/PHz)	MCA (A)	REMARKS
FFH-1	EXIT VESTIBULE HEATING	JAGA	BRIZA-22	FAN COIL, CEILING MOUNTED CABINET	950 X 625 X 270		52	48.89	18.0		5	0.38		115/1/60	2	-
FFH-2	WARMUP LOUNGE HEATING	JAGA	SLCM02014411/BNA	CURB MOUNTED	1440 X 180 X 200	59	52	48.89	18.3	61.6	2.26	0.16	8.60	120/1/60		1440 MM CABINET WITH STANDARD INTERNAL COMPONENT
FFH-3	WARMUP LOUNGE HEATING	JAGA	SLCM02010811/BNA	CURB MOUNTED	2160 X 180 X 200	130	52	48.89	18.3	143.4	3.10	0.22	12	120/1/60		2 x 1080 MM CABINETS WITH 1800 MM INTERNAL SECTION
FFH-4	WARMUP LOUNGE HEATING	JAGA	SLCM02010811/BNA	CURB MOUNTED	2880 X 180 X 200	130	52	48.89	18.3	143.4	3.10	0.22	12	120/1/60		2 x 1440 MM CABINETS WITH 1800 MM INTERNAL SECTION

### ELECTRIC HEATING BOILER SCHEDULE

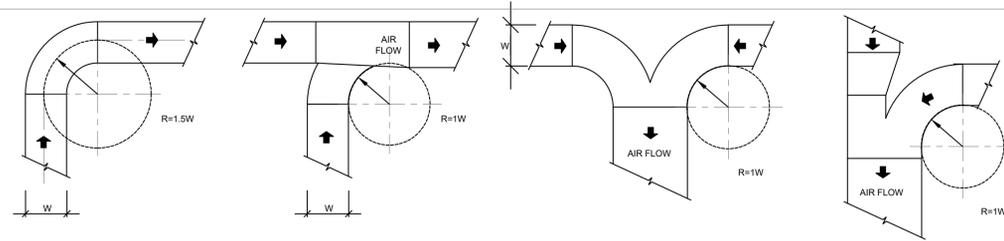
	SERVICE	MANUFACTURER	MODEL No.	INPUT (kW)	MIN FLOW RATE (L/s)	MAX FLOW RATE (L/s)	MAX PRESSURE DROP (kPa)	EWT (°C)	LWT (°C)	WEIGHT (KG)	ELEC. (V/PHz)	MCA (A)	MOP (A)	EFF. (%)	REMARKS
B-1	SUPPLEMENTAL HEAT	LOCHINVAR	KEB0075	75	0.39	6.620000	1			-	115/1/60	2	2		-

### HEAT EXCHANGER SCHEDULE

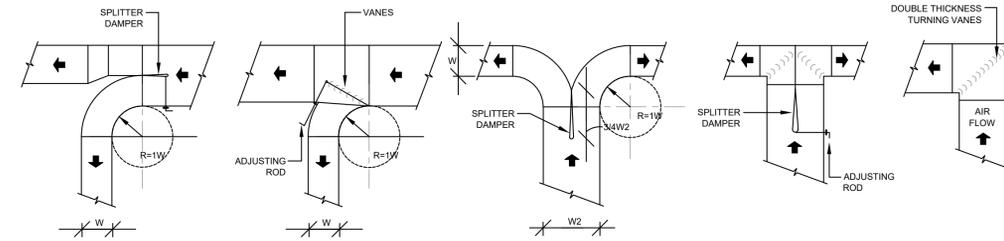
TAG	SERVICE	LOCATION	TYPE (SHELL & TUBE OR PLATE & FRAME)	MANU-FACTURER	MODEL No.	MINIMUM HEAT TRANSFER (kW)	POWER INPUT (kW)	SOURCE SIDE					LOAD SIDE					MINIMUM PRESSURE RATING (KPA)	WEIGHT (KG)	REMARKS
								EWT (°C)	LWT (°C)	FLOW RATE (L/s)	PRESSURE DROP (kPa)	FLUID	EWT (°C)	LWT (°C)	FLOW RATE (L/s)	PRESSURE DROP (kPa)	FLUID			
HEX-1	SUPPLEMENTAL BOILER	MECH ROOM																		

NOTES:

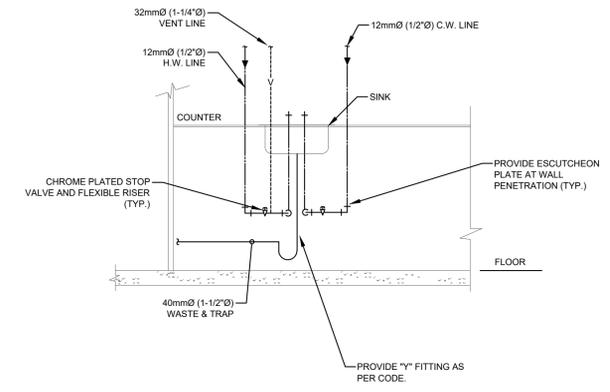




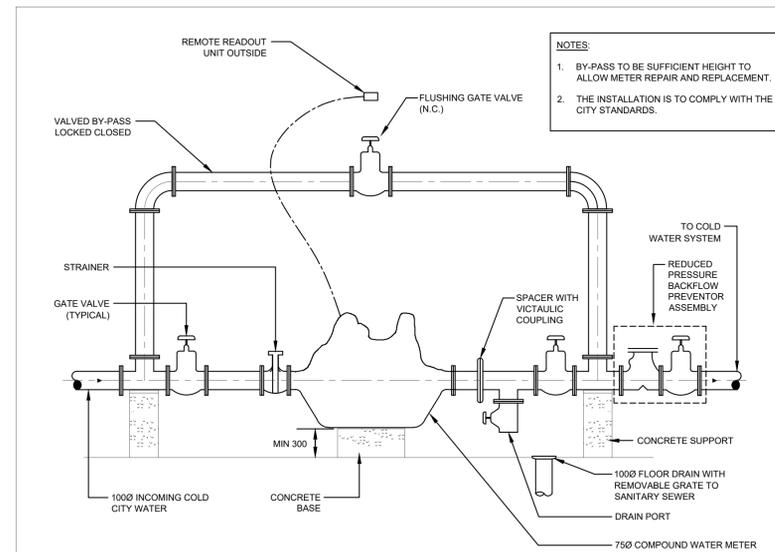
TYPICAL EXHAUST AIR & RETURN AIR DUCT BRANCHES



**2 DUCT BRANCHES**  
M-900.1 SCALE: N.T.S.

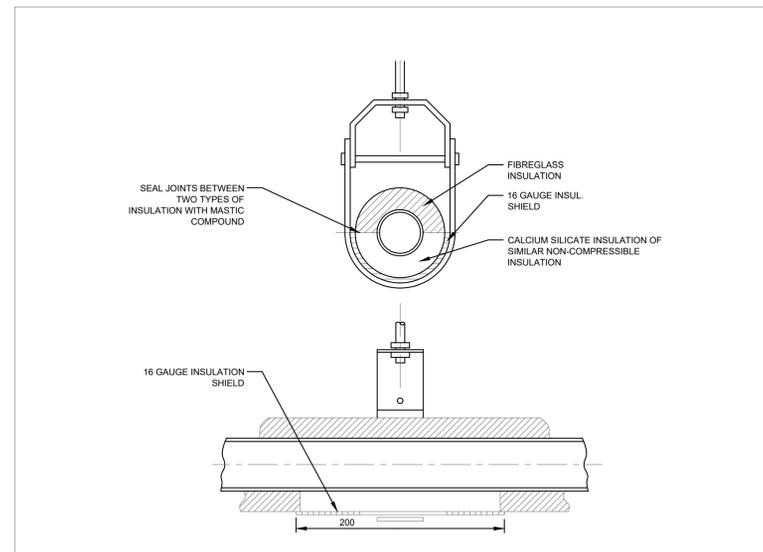


**1 SINK PIPING CONNECTION**  
M-900.1 SCALE: N.T.S.

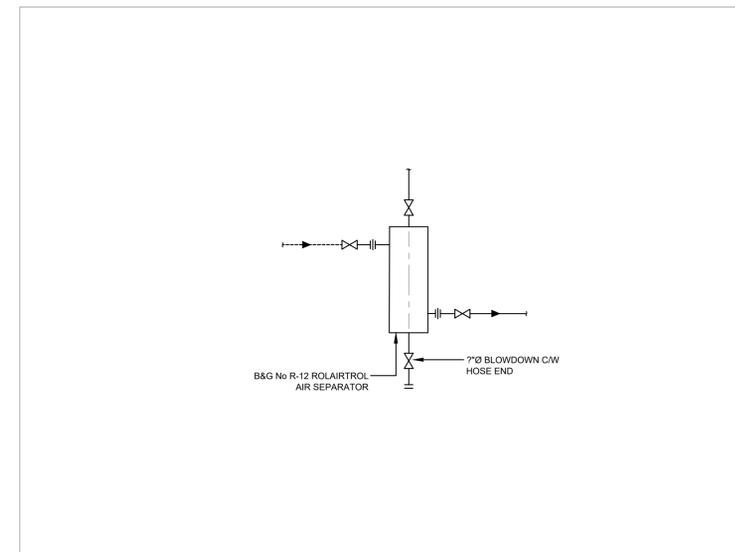


**5 WATER METER AND ASSEMBLY**  
M-900.1 SCALE: N.T.S.

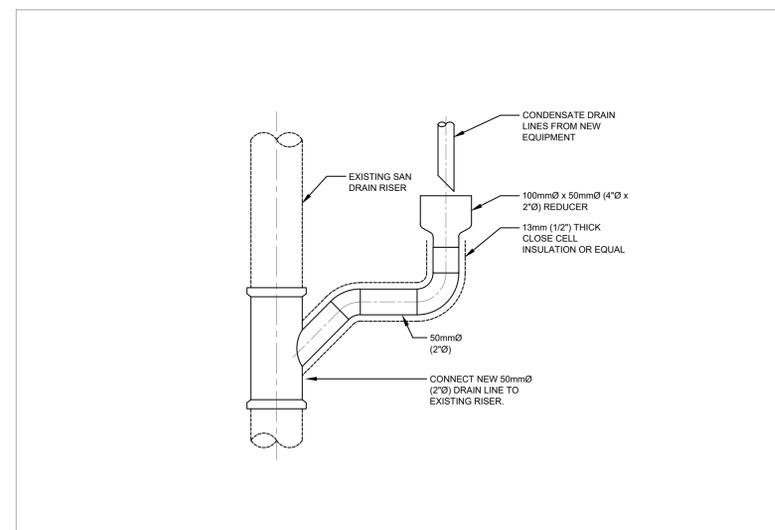
**NOTES:**  
1. BY-PASS TO BE SUFFICIENT HEIGHT TO ALLOW METER REPAIR AND REPLACEMENT.  
2. THE INSTALLATION IS TO COMPLY WITH THE CITY STANDARDS.



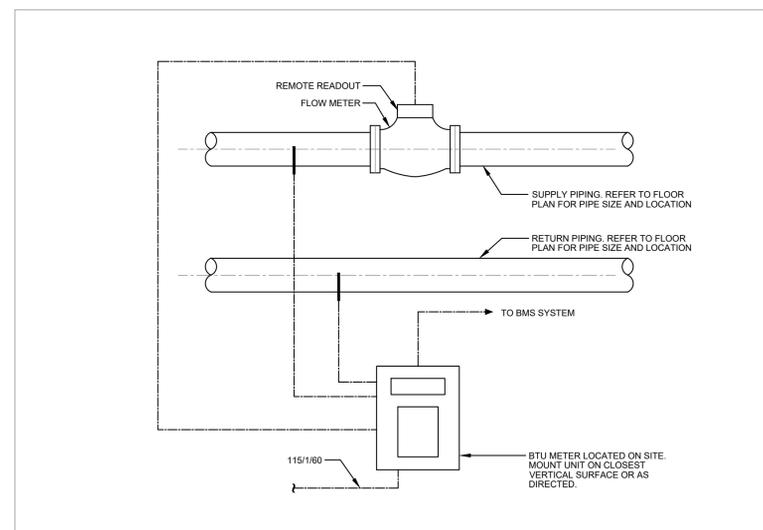
**4 PIPE HANGER (CHILLED & COLD WATER)**  
M-900.1 SCALE: N.T.S.



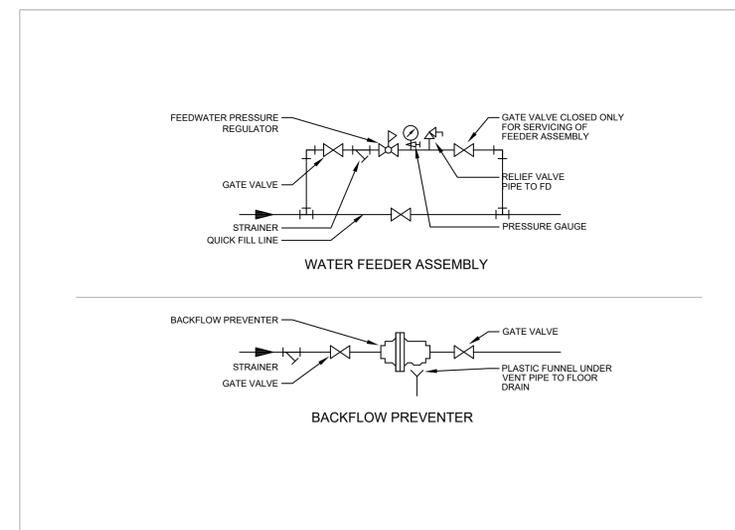
**3 AIR SEPARATOR**  
M-900.1 SCALE: N.T.S.



**8 CONDENSATE DRAIN TERMINATION**  
M-900.1 SCALE: N.T.S.



**7 ENERGY METER CONNECTION**  
M-900.1 SCALE: N.T.S.



**6 PRESSURE REDUCING VALVE, WATER FEEDER & BACKFLOW PREVENTER**  
M-900.1 SCALE: N.T.S.

ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR PROGRESS	2024-08-15
ISSUED FOR COORDINATION	2024-07-30
ISSUED FOR CLASS C COSTING	2024-06-08
revision	002

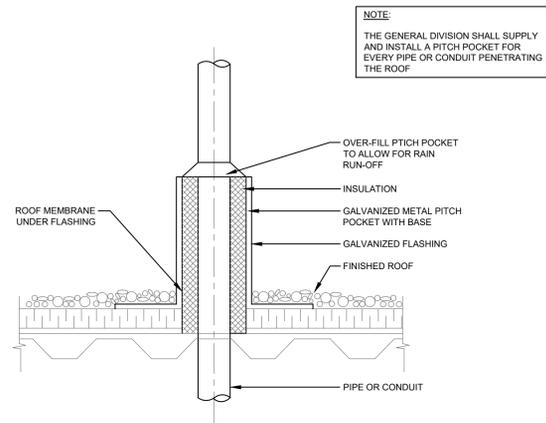
FIFA - EAST VSTS CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON

MECHANICAL DETAILS I - SEPARATE PRICE 1

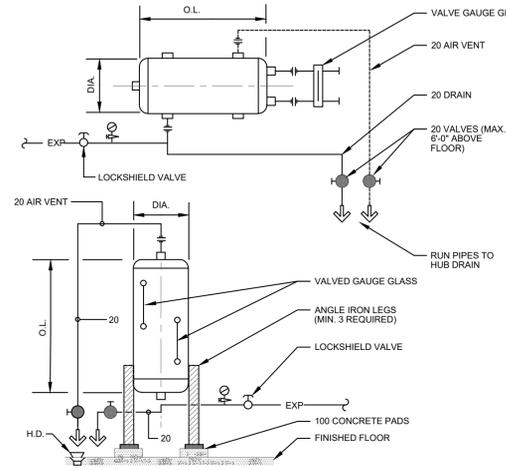
project no.: 2024-0112  
scale: N.T.S.  
date:

drawing no.:

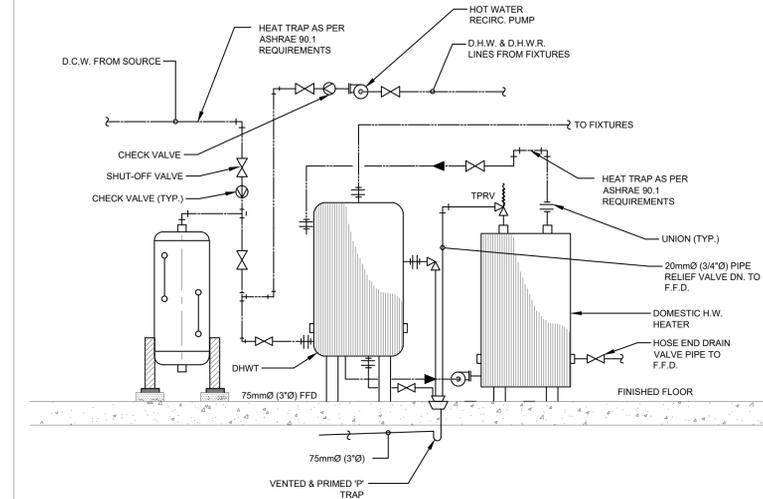
**M-900.1**



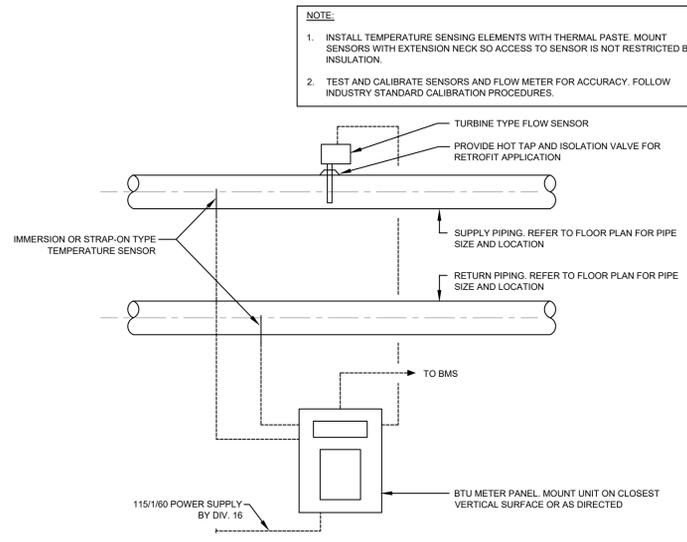
**3 PITCH POCKET**  
M-901.1 SCALE: N.T.S.



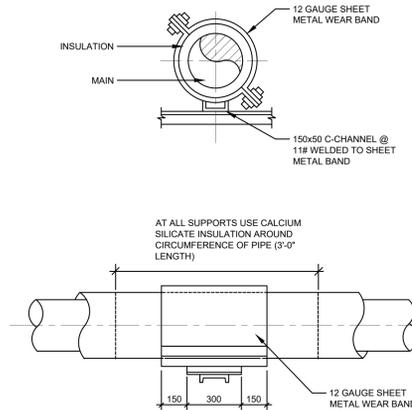
**2 EXPANSION TANK**  
M-901.1 SCALE: N.T.S.



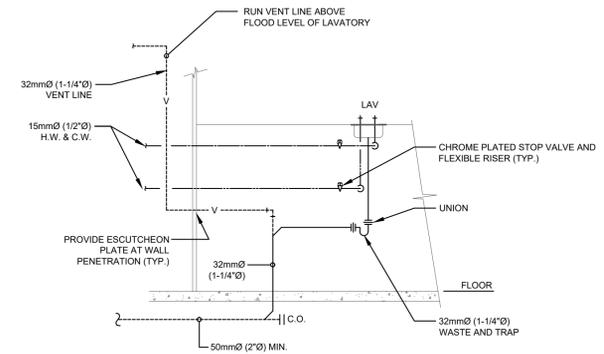
**1 D.H.W. TANK - ELECTRIC FLOOR MOUNT W/ RECIRC PUMP**  
M-901.1 SCALE: N.T.S.



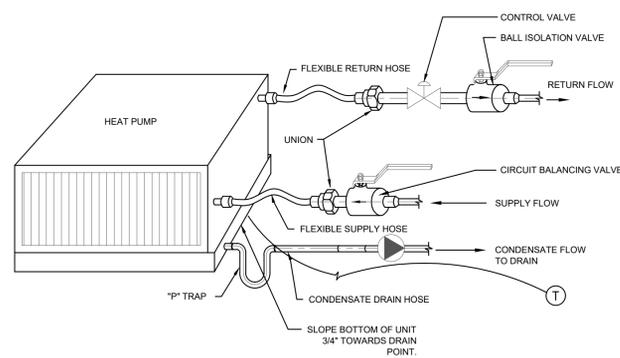
**6 BTU METER CONNECTION**  
M-901.1 SCALE: N.T.S.



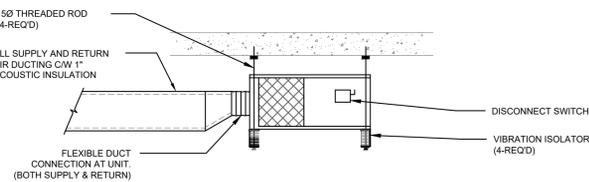
**5 PIPE SUPPORT (COLD SYSTEMS)**  
M-901.1 SCALE: N.T.S.



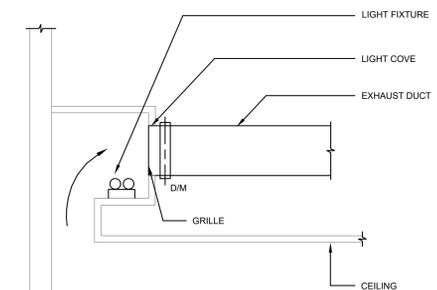
**4 LAVATORY PIPING CONNECTION**  
M-901.1 SCALE: N.T.S.



**9 HORIZONTAL HEAT PUMP PIPING DETAIL**  
M-901.1 SCALE: N.T.S.



**8 HORIZONTAL HEAT PUMP MOUNTING DETAIL**  
M-901.1 SCALE: N.T.S.



**7 LIGHT COVE EXHAUST**  
M-901.1 SCALE: N.T.S.

ISSUED FOR ADDENDUM NO. 1	2024-12-18
ISSUED FOR TENDER	2024-11-08
ISSUED FOR PROGRESS	2024-08-23
ISSUED FOR PROGRESS	2024-08-15
ISSUED FOR COORDINATION	2024-07-30
ISSUED FOR CLASS C COSTING	2024-06-08
REVISION	002

FIFA - EAST VSTS  
CENTENNIAL PARK  
Address: 56 Centennial Park Rd. Toronto, ON

MECHANICAL DETAILS II -  
SEPARATE PRICE 1

project no.: 2024-0112  
scale: N.T.S.  
date:

drawing no.:

**M-901.1**