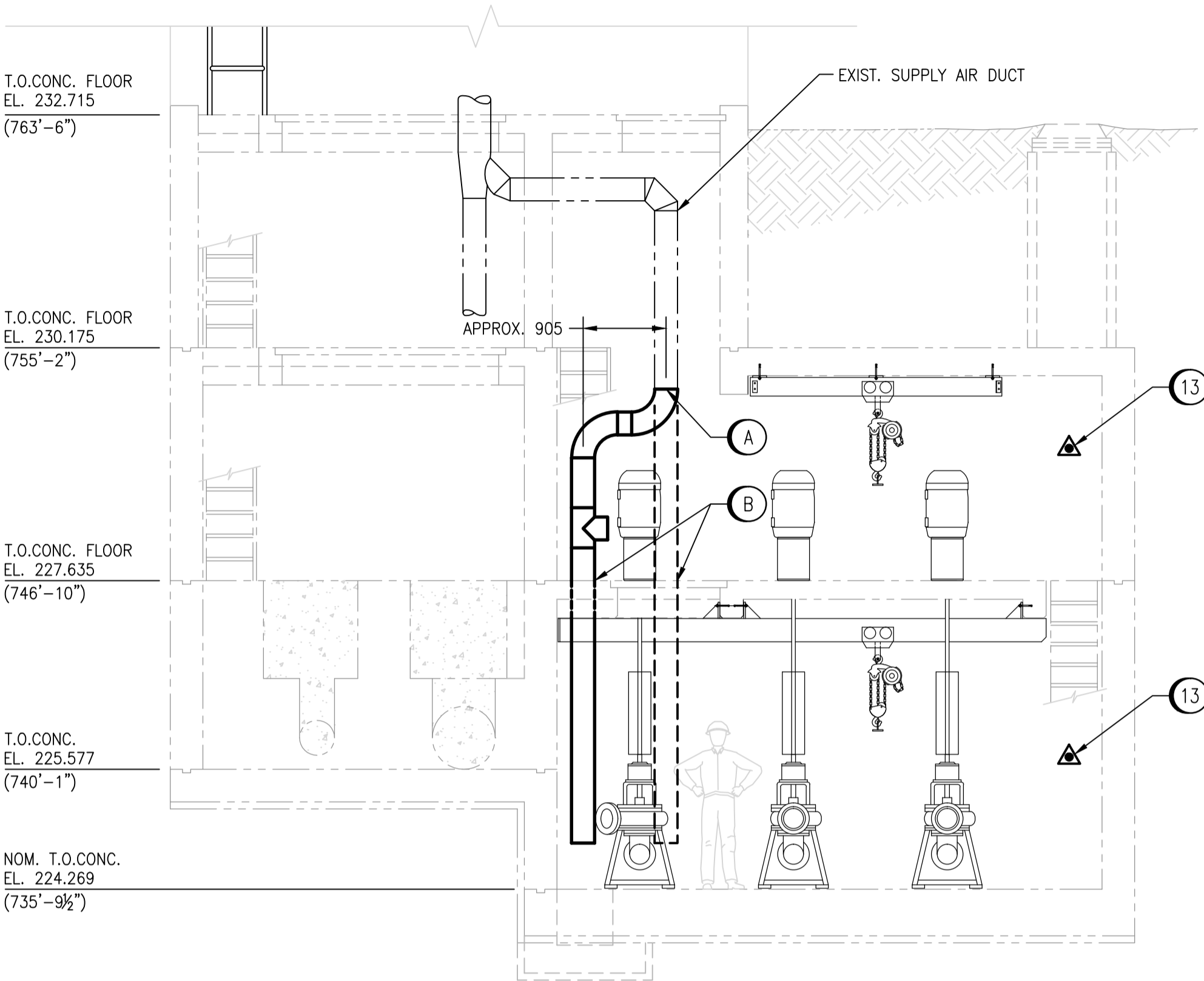


REMOVAL/ NEW WORK NOTES FOR SUPPLY AIR DUCT:

- (A) MODIFY AND RELOCATE EXISTING 250mm SUPPLY AIR DUCT AS SHOWN IN BUILDING SECTION. SUPPLY AND INSTALL NEW ELBOWS AS REQUIRED.
- (B) USE EXISTING FLOOR PENETRATION FOR DUCTWORK.

REMOVAL NOTES @ EL. 232.715:

- (1) REMOVE EXISTING FAN AND SUPPORTS.
- (2) REMOVE RETURN AIR DUCTWORK.
- (3) REMOVE SUPPLY DUCTWORK INCLUDING ELBOWS AND BALANCE DAMPERS. LEAVE VERTICAL SECTION OF SUPPLY DUCTWORK EXTENDING APPROXIMATELY 600mm ABOVE FLOOR IN PLACE.
- (4) COORDINATE WITH DIVISION 26 FOR DISCONNECTION/REMOVAL OF ELECTRICAL EQUIPMENT.



3 BUILDING SECTION
SCALE: 1 : 50

LOUVRE SCHEDULE

TAG	SERVICE	SIZE (mm)	NOTES
L01	OUTDOOR AIR	1220 x 380	PRICE ZE439 C/W INSECT SCREEN
L02	EXHAUST AIR	460 x 915	PRICE ZE439 C/W INSECT SCREEN

UNIT HEATER SCHEDULE

TAG	SERVICE	POWER	AIRFLOW (L/s)	CAPACITY (kW)	VOLTS/PH	NOTES
UH-L64	MECHANICAL ROOM	ELECTRIC	328	7.5	575/3	OUELLET OASU07536

ELECTRIC DUCT HEATER SCHEDULE

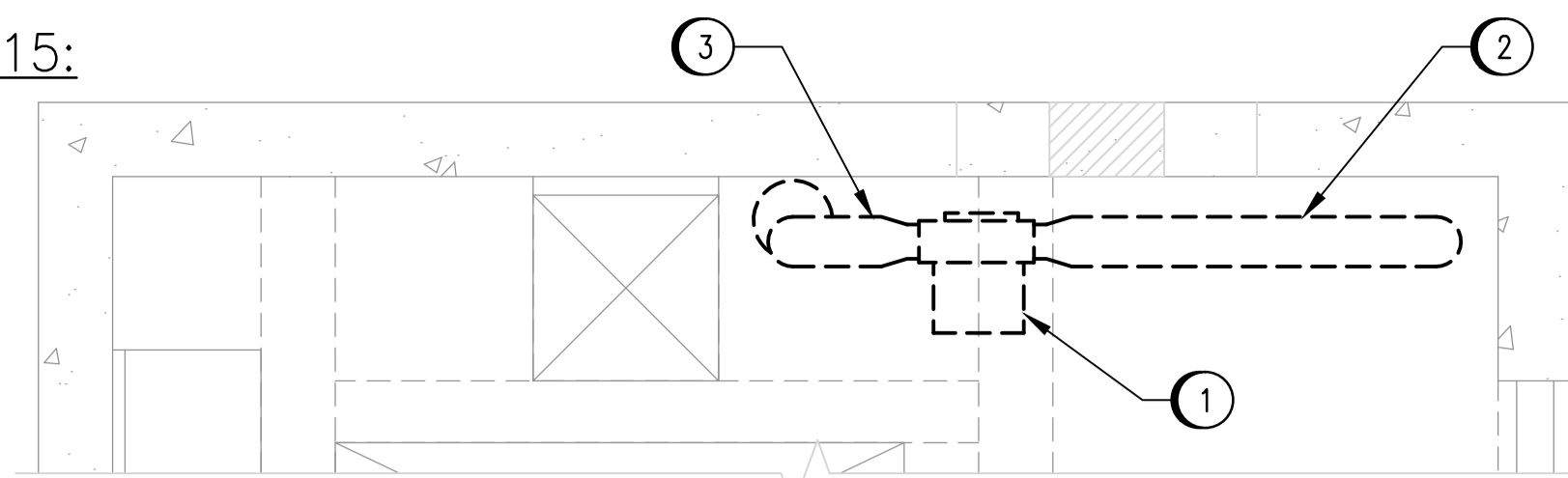
TAG	SERVICE	AIR FLOW (L/s)	SIZE (mm)	CAPACITY (kW)	VOLTS/PH	CONTROL	NOTES
HCE-L63	SUPPLY	493	405 x 405	35.0 kW	575/3ø	0-10V	PRICE, TUBULAR ELEMENTS, SCR

FAN SCHEDULE

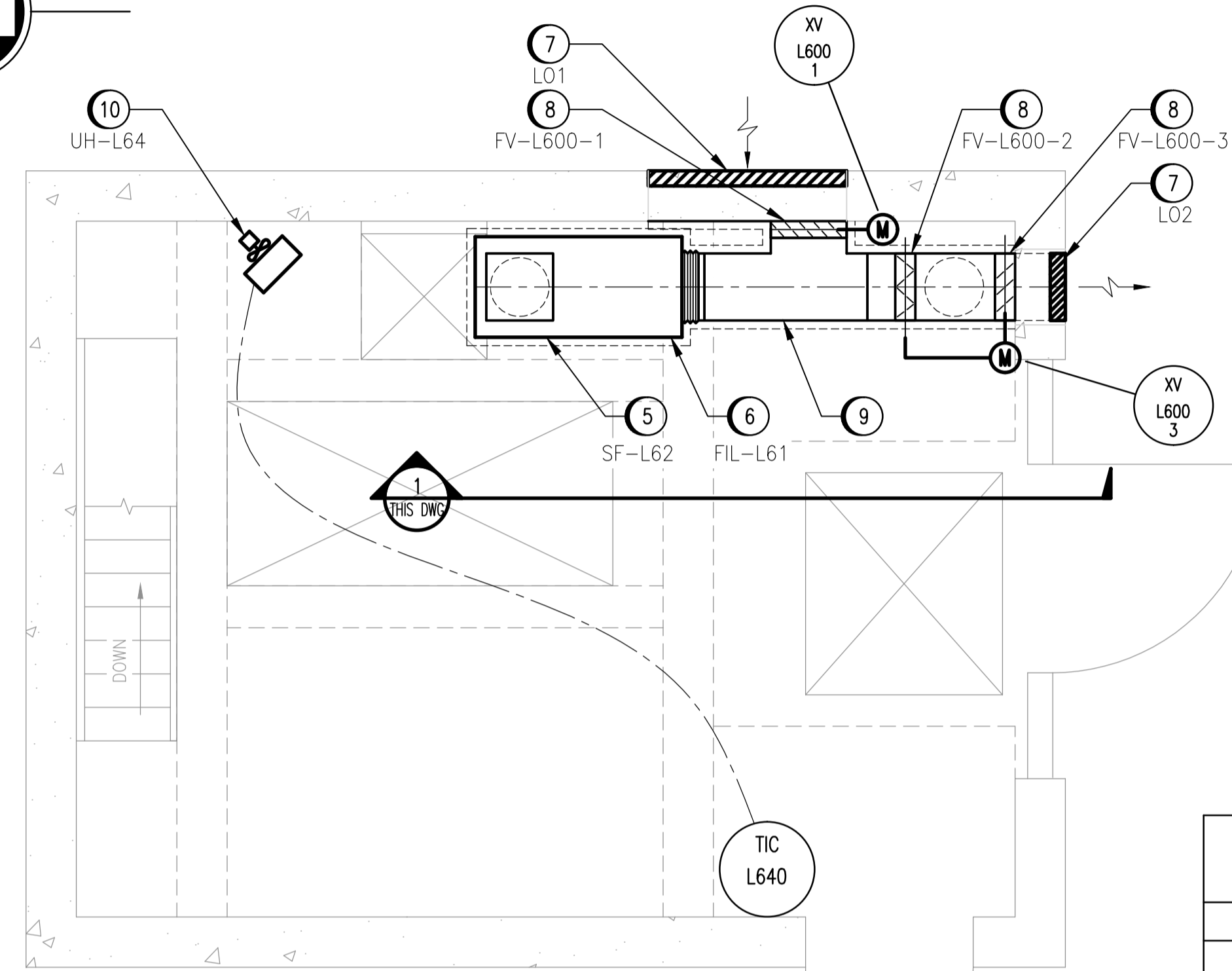
TAG	SERVICE	FLOW (L/s)	ESP (PA)	MOTOR (kW)	VOLTS/PH	DESCRIPTION	NOTES
SF-L62/FIL-L61	MECHANICAL ROOM COOLING	493	311	0.37	120/1	GREENHECK SQ-120-VG C/W FILTER	C/W SPEED ADJUSTING POTENTIOMETER, DIV 26 TO PROVIDE DISCONNECT

DAMPER SCHEDULE

TAG	SERVICE	AIRFLOW (L/s)	SIZE (mm)	BLADE TYPE	MOUNT	ACTUATOR	FAIL POSITION	DESCRIPTION
FV-L600-1	OUTDOOR AIR	493	460 x 380	PB	FLANGE TO DUCT	0 - 10VDC, 24VAC, SPRING RETURN	CLOSED	TAMCO 9000SC C/W BELIMO ACTUATOR
FV-L600-2	MIXED AIR	493	405 x 405	OB	FLANGE TO DUCT	LINKED TO FV-L600-3	OPEN	OPPOSITE ACTING TO FV-L600-3
FV-L600-3	EXHAUST AIR	493	405 x 405	PB	FLANGE TO DUCT	0 - 10VDC, 24VAC, SPRING RETURN	CLOSED	TAMCO 9000SC C/W BELIMO ACTUATOR



EL. 232.715 FLOOR PLAN - DEMOLITION
SCALE: 1 : 30



EL. 232.715 FLOOR PLAN - NEW WORK
SCALE: 1 : 30

LEGEND

- FIRE EXTINGUISHER
- MOTORIZED DAMPER ACTUATOR
- INSULATED DUCTWORK

CONSTRUCTION NOTES:

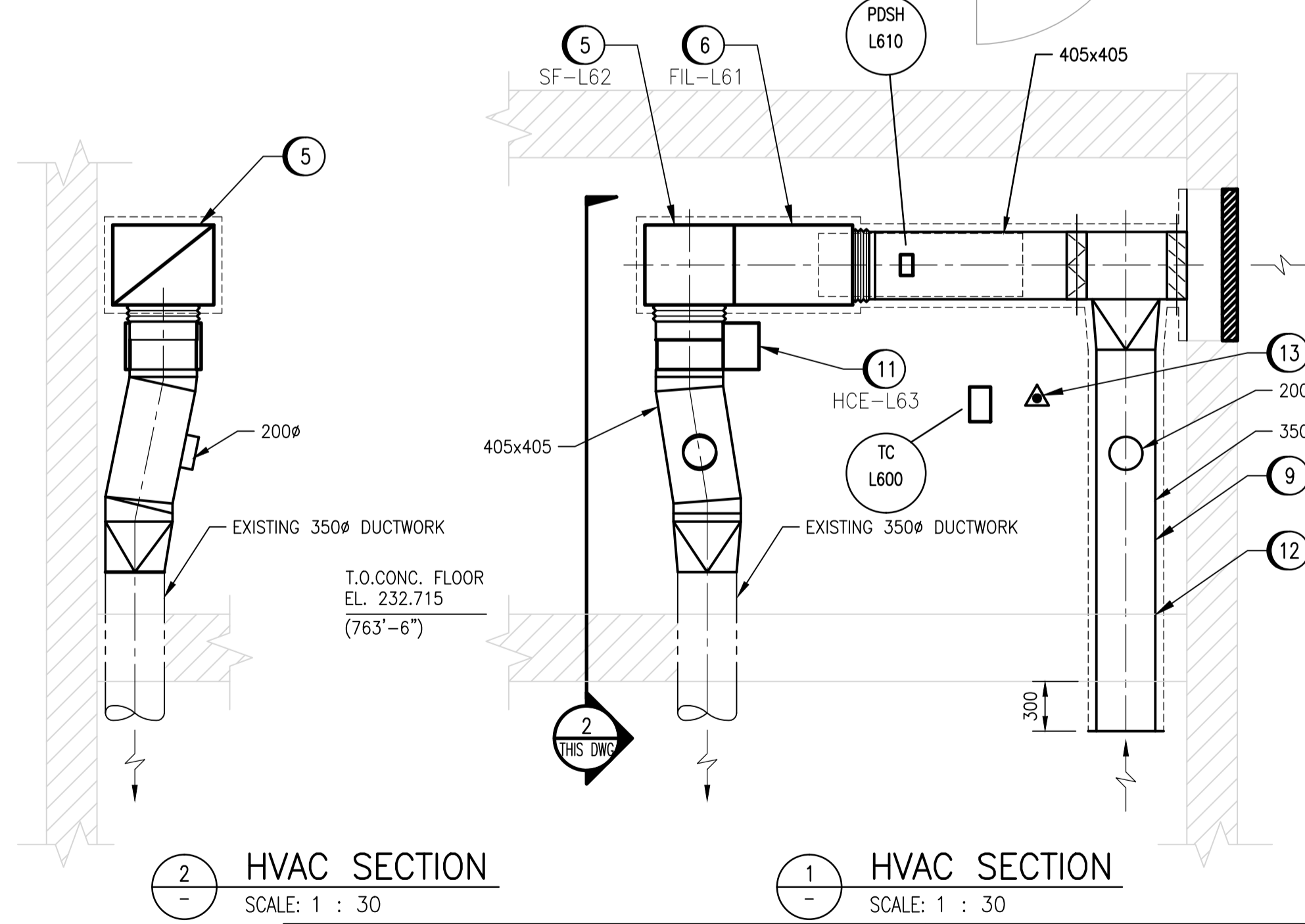
- (5) SUPPLY AND INSTALL SUPPLY FAN.
- (6) SUPPLY AND INSTALL FILTER.
- (7) SUPPLY AND INSTALL LOUVERS.
- (8) SUPPLY AND INSTALL DAMPERS. COORDINATE WITH CONTROLS CONTRACTOR FOR INSTALLATION OF ACTUATORS.
- (9) SUPPLY AND INSTALL DUCTWORK. INSULATE WITH 50mm INSULATION WHERE SHOWN.
- (10) SUPPLY AND INSTALL UNIT HEATER.
- (11) SUPPLY AND INSTALL ELECTRIC DUCT HEATER.
- (12) COORDINATE WITH CIVIL CONTRACTOR TO INCREASE SIZE OF FLOOR PENETRATION TO ACCOMMODATE NEW DUCTWORK. TERMINATE DUCT 300mm BELOW CEILING.
- (13) SUPPLY AND INSTALL NEW PORTABLE FIRE EXTINGUISHERS ON WALL IN LOCATIONS SHOWN.

DESIGN CRITERIA:

THE BUILDING ENVIRONMENTAL CONTROL SYSTEMS SHOWN ON THESE DRAWINGS HAVE BEEN DESIGNATED TO THE REQUIREMENTS OF THE MANITOBA BUILDING CODE AND VENTILATED AT A MINIMUM OF 6 AIR CHANGES PER HOUR CONTINUOUS. WHEN THE STATION IS UNOCCUPIED, THE SYSTEM WILL CONTINUE TO PROVIDE 6 AIR CHANGES PER HOUR WITH 75% RECIRCULATED AIR. MORE SPECIFICALLY AS FOLLOWS:

- OUTDOOR CONDITIONS OF -33°C IN WINTER.
- INDOOR CONDITIONS OF 15°C IN WINTER.

AREA	VOLUME (M ³)	MIN. AIR CHANGES PER HOUR	MIN. AIRFLOW (L/s)
MAIN FLOOR	65.8	6	110
MOTOR ROOM	54.6	6	135
PUMP ROOM	77.5	6	130
COMMUNOTOR MOTOR ROOM	61.6	6	58
COMMUNOTOR CHAMBER	33.9	6	56
TOTAL	293.4	6	489



2 HVAC SECTION
SCALE: 1 : 30

1 HVAC SECTION
SCALE: 1 : 30



NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR TENDER	2015/09/17	TS	SSN

		SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080
DESIGNED BY: T. SCHICK	CHECKED BY: S. NORSWORTHY	ENGINEER'S SEAL
DRAWN BY: Y. KONIG	APPROVED BY:	PRELIMINARY NOT TO BE USED FOR CONSTRUCTION
SCALE: AS NOTED	ISSUED FOR CONSTRUCTION BY:	
DATE: 2015/08/12	DATE:	CITY DRAWING NUMBER 1-0169L-M0001
CONSULTANT NO.:		SHEET 001
		REV. 00
		SIZE A1

		THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT
OLIVE WASTEWATER PUMPING STATION 2015 UPGRADES HVAC PLAN AND SECTIONS		
CITY DRAWING NUMBER 1-0169L-M0001	SHEET 001	REV. 00
		SIZE A1