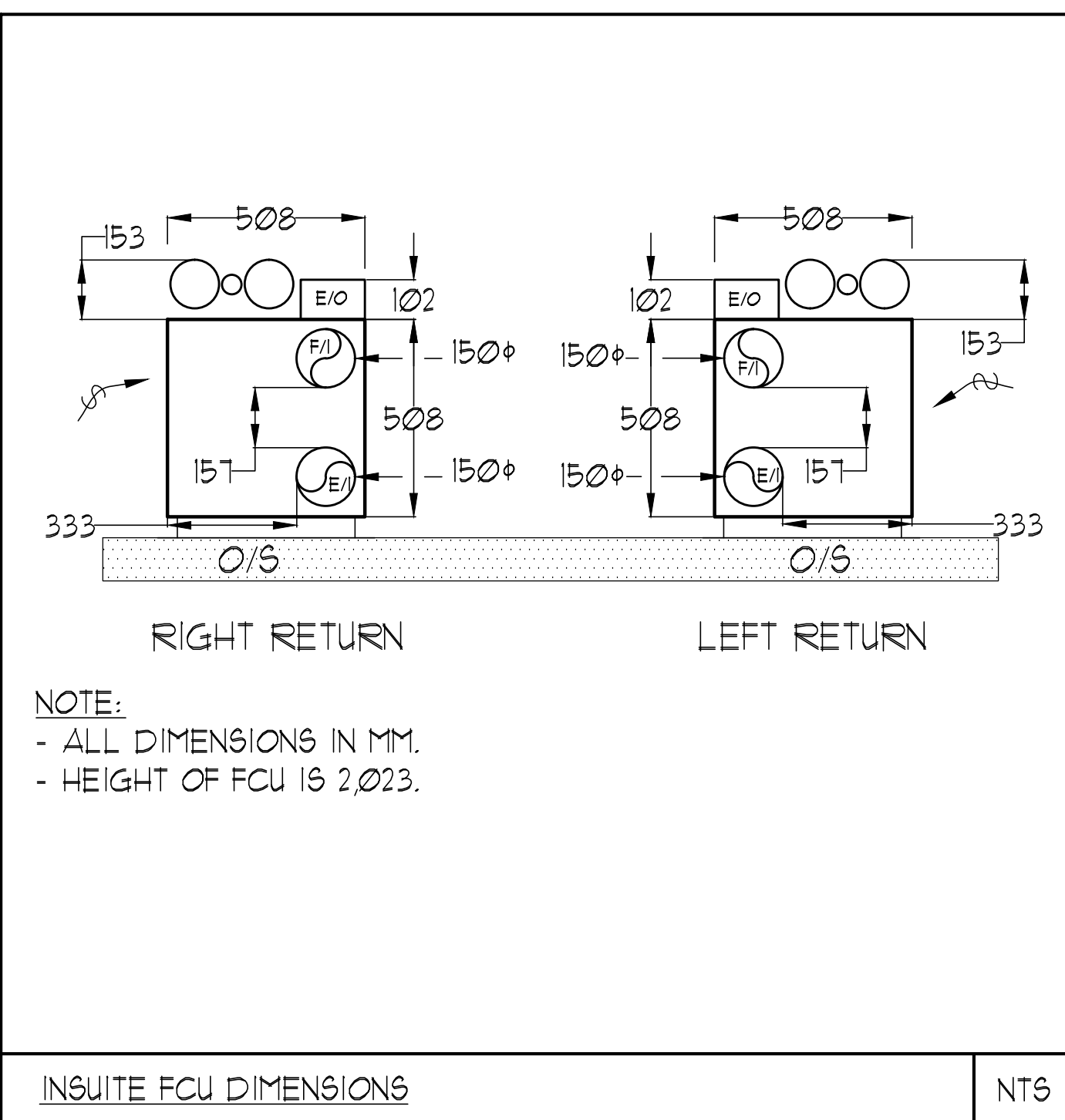
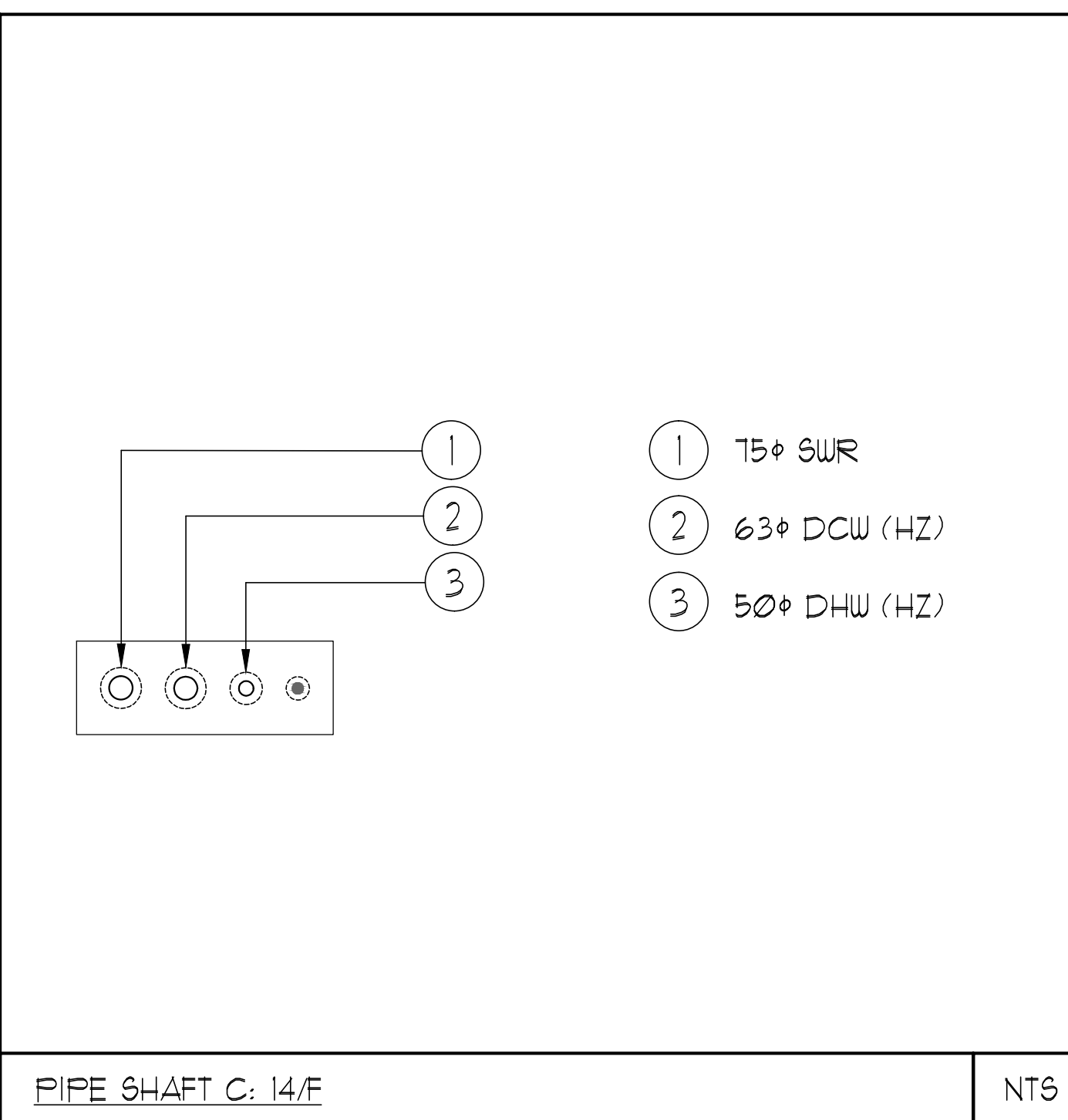
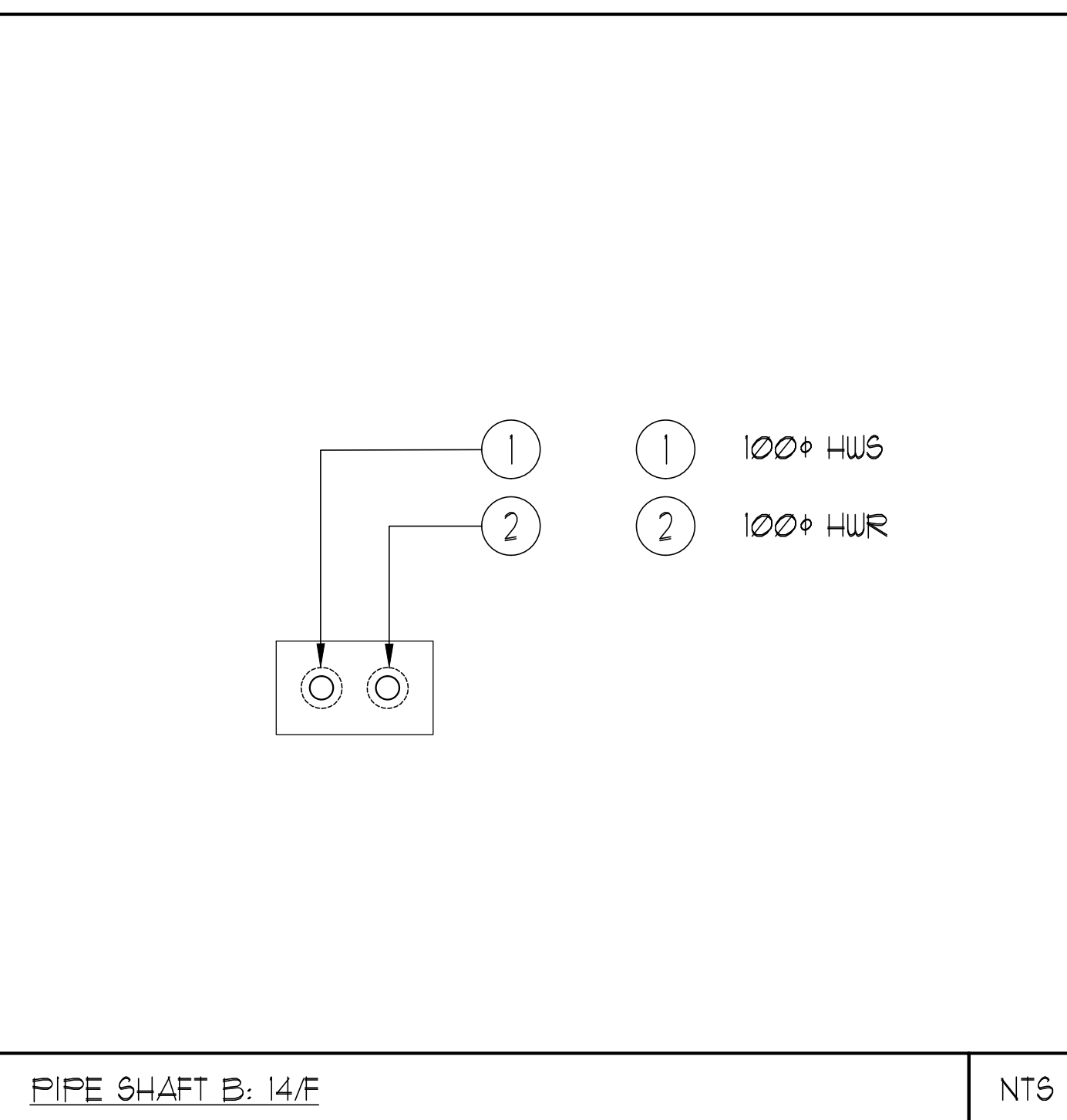
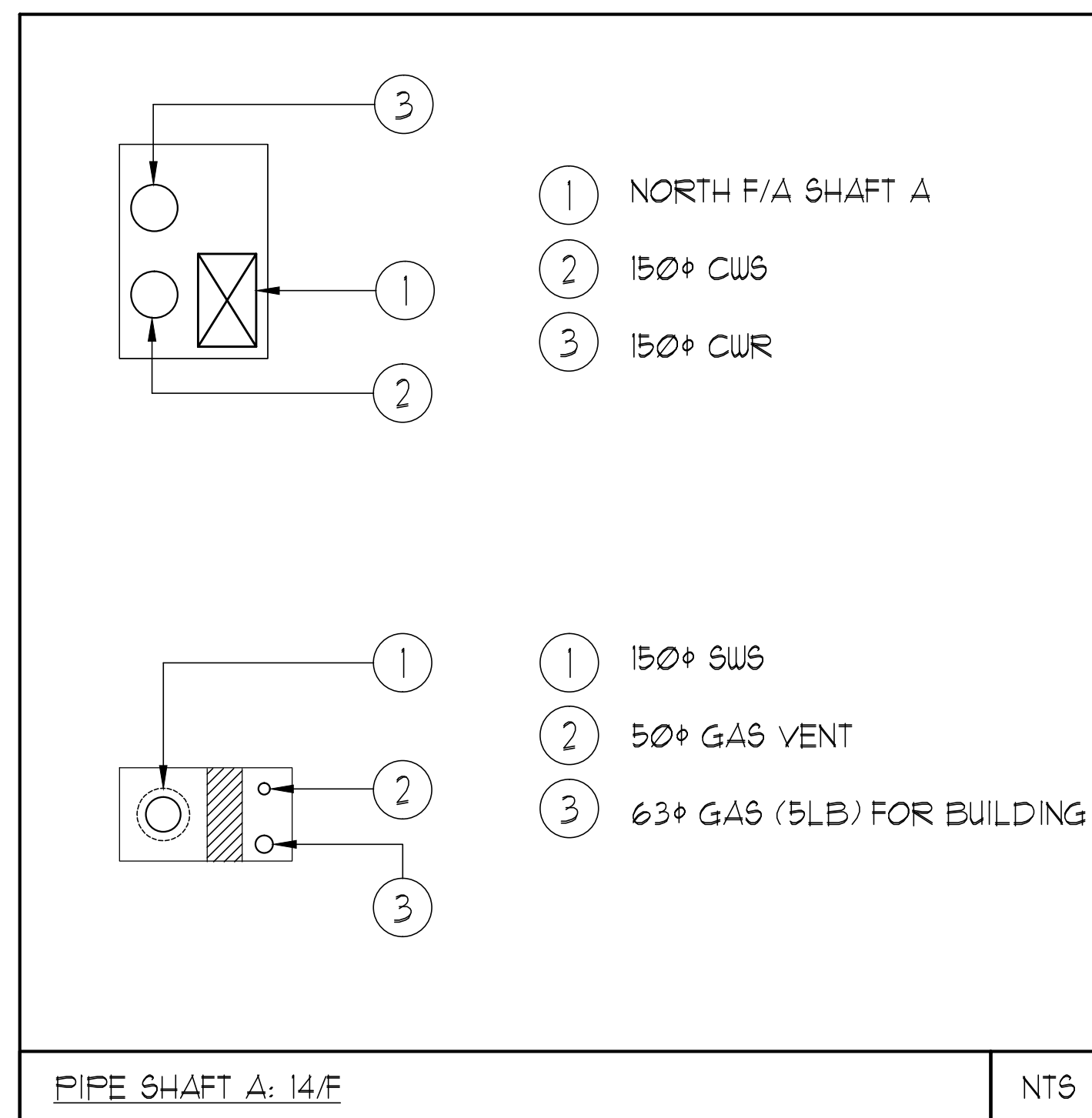




UNIT	NAME	AREA (SQ. FT.)	* OF UR	* OF POWDER	SIZE (T)	FIXTURE UNITS	BR	SQ. FT./T
PH05	3C	990	2	0	2	16	3	495
PH11	1C+D1	590	2	0	1	16	1	590
PH12	1C+D1	590	2	0	1	16	1	590
PH19	2L	755	2	0	15	16	2	503
PH20	2H	740	2	0	15	16	2	493
PH21	2L+R2	755	2	0	15	16	2	503
PH29	1A+M3	580	1	0	1	10	1	580

GRILLE SIZING TABLE			
DESIGNATION	SIZE	L/S	(UNLESS SPECIFIED OTHERWISE)
SG-A	300x100	47-70	
SG-B	300x150	71-93	
SG-C	400x150	94-140	
SG-D	450x150	141-188	
EG-A	150x150	35	
W-1	225x200	210mm (L)	
W-2	425x200	INSULATED	
W-3	625x200	WALL BOX	

VERTICAL FAN COIL SIZE		
DESIGNATION	MODEL	W x D
FCU-1T	450	508x660
FCU-15T	600	508x660
FCU-2T	800	508x660
FCU-25T	1000	559x660
FCU-3T	1200	559x660

NOTE:
A MIN. OF 125mm IS REQUIRED ON THE SIDE OF PIPE RISER.

DUCT SIZING TABLE (406 m/s, 800 FPM)					
DESIGNATION	L/s	DUCT SIZE	DESIGNATION	L/s	DUCT SIZE
(A)	47	100x150	(G)	189	350x150
(B)	71	150x150	(H)	236	450x150
(C)	94	200x150	(J)	283	500x150
(D)	118	200x150	(K)	330	600x150
(E)	141	250x150	(L)	377	500x200
(F)	165	300x150			

GENERAL NOTES:

- CONTRACTOR SHALL CO-ORDINATE ARCHITECTURAL, STRUCTURAL, LIGHTING, HVAC, SPRINKLER DRAWINGS TO AVOID AREAS OF CONFLICT AND TO MAINTAIN CEILING HEIGHTS.
- CONTRACTOR SHALL REPORT ALL DISCREPANCIES AND AREA OF CONFLICTS TO THE ENGINEER PRIOR TO WORK BEGINS.
- PROVIDE EXPANSION CHAMBERS FOR ALL KITCHEN SINKS.
- SEE INSTALLATION DETAILS DRAWING FOR WASHER DOM. HAC WATER, SANITARY CONNECTION DETAILS.
- SUPPLY AND INSTALL COMPLETE DOMESTIC HOT AND COLD WATER LINES, SANITARY AND VENT LINES TO EACH FIXTURE /EQUIPMENT INCLUDING WATER CLOSETS, LAVATORIES, BATHS, SHOWERS, KITCHEN SINK, WASHING MACHINES, DISHWASHERS, AND FLOOR DRAINS. KITCHEN SINK, LAVATORIES, WATER CLOSETS AND WASHING MACHINE TO BE C/W LOCALIZED SHUT-OFF VALVES.
- ALL VENT PIPE INSTALLATION TO COMPLY WITH PLUMBING CODES.
- FOR D.H.A.C. W. RISER SIZES, REFER TO RISER DIAGRAM
- FIRE DAMPERS ARE REQUIRED TO BE LISTED AND ARE TO HAVE FIRE PROTECTION RATING OF THE PENETRATED FIRE SEPARATION.
- THE PIPING PENETRATING THE VARIOUS FIRE SEPARATION IS REQUIRED TO BE FIRESTOPPED WITH A LISTED FIRESTOPPING MATERIAL IN ACCORDANCE WITH CBC ARTICLE 3.13.1
- THE FIRE HOSE CABINET THAT ARE RECESSED INTO THE EXIT STAIR SHAFTS ARE REQUIRED TO BE SEPARATED FROM THE EXIT STAIR BY A 2 HR FIRE SEPARATION.
- NO FLEXIBLE DUCT SHALL BE USED FOR ANY IN-SUITE DUCTWORK.
- PROVIDE 25MM EXTERNAL INSULATION TO ENTIRE FRESH AIR DUCT FROM EXTERIOR WALL TO ERY FAN COIL UNIT.
- DRYER EXHAUST DUCT SHALL BE SMOOTH AND CORROSION-RESISTANT MATERIAL (FLEXIBLE CONNECTION IS NOT ACCEPTABLE).

ACOUSTIC NOTES:

- ALL HORIZONTAL SUPPLY AIR DUCTWORK SHALL BE C/W 25MM INTERNAL ACOUSTIC LINING AND SHALL BE SUSPENDED ON RUBBER PADS IN THE HANGERS. ELBOWS SHALL BE COMPLETE WITH TURNING VANES.
- ALL SYSTEM/DOMESTIC PIPE LOOPS OR OFFSETS WHICH ARE 50MM DIA. AND LARGER SHALL BE ISOLATED USING NEOPRENE-IN-SHEAR HANGERS, AND ADDITIONAL 25 MM THICK RIBBED OR WAFFLED NEOPRENE PADS IN THE SADDLES OF CLEVIS HANGERS.
- ALL PIPES SMALLER THAN 50MM DIA. SHALL BE ISOLATED WITH 5MM THICK RIBBED OR WAFFLED RUBBER PADS IN HANGER SADDLES.

CLEAR FLOOR TO UNDERSLAB = 3270mm
CLEAR PRODUCT = 2100mm
COMPLETE DROP CEILING = 570mm

NOTES:

- NORTH F/A SHAFT B FROM G/F TO 14/F DUCT SERVING CORRIDOR FROM G/F TO 14/F. SEE VENTILATION RISER DIAGRAM FOR DETAILS.
- NORTH SHAFT B F/A SERVING FROM G/F TO 14/F. F/A DUCT SERVING CORRIDOR FROM G/F TO 14/F. SEE VENTILATION RISER DIAGRAM FOR DETAILS.
- PIPE SHAFT - REFER TO PIPE DIAGRAM FOR DETAILS.
- 150# KITCHEN / DRYER / W/R / FCU INTAKE / FCU EXHAUST DUCT. (TYPICAL UNLESS OTHERWISE NOTED)
- SEE DUG. M-33 FOR PIPING CONNECTION DETAIL.
- 50# SUR.
- 32# SUR.
- 100# SUR.
- 150# SUR.
- 75# SUR.
- 800# GARBAGE CHUTE c/w 19# DCW WITH BACKFLOW PREVENTOR AND ISOLATING VALVE FOR GARBAGE CHUTE WASH-DOWN RING.
- 19# DHUR.
- 25# DHUR.
- 32# DHUR.
- 38# DHUR.
- 50# DHUR.
- 150# CUS & R.
- 250# COMBUSTION AIR INTAKE AND 250# EXHAUST UP THROUGH ROOF C/W TERMINATION FITTING, AS PER MANUFACTURER'S INSTALLATION MANUAL AND TSSA REQUIREMENTS.
- 300# COMBUSTION AIR INTAKE AND 225# EXHAUST UP THROUGH ROOF C/W TERMINATION FITTING, AS PER MANUFACTURER'S INSTALLATION MANUAL AND TSSA REQUIREMENTS.
- 100# STM @1%.
- 100# RUL DOWN.
- 100# RUL FROM ABOVE.
- 400x200 INTAKE LOUVRE c/w MOTORIZED DAMPER, FIRE DAMPER & WIRE MESH.
- REFRIGERANT PIPES FROM SPLIT COOLING INDOOR UNIT (SAC-IT) TO CONDENSING UNIT (SCU-IT) PIPE SIZING AND INSTALLATION AS PER MANUFACTURER'S RECOMMENDATIONS (TYPICAL).

LEGEND MECHANICAL

SYMBOL	DESCRIPTION
	SUPPLY AIR DIFFUSER
	LINEAR SUPPLY DIFFUSER
	THERMOSTAT
	FAN SWITCH
	RETURN AIR GRILLE
	EXHAUST AIR GRILLE
	SUPPLY DUCT UP
	SUPPLY DUCT DOWN
	RETURN DUCT UP
	RETURN DUCT DOWN
	EXHAUST DUCT UP
	EXHAUST DUCT DOWN
	FIRE DAMPER
	BALANCING DAMPER
	MOTORIZED DAMPER
	MOTORIZED FIRE DAMPER
	BACKDRAFT DAMPER
	OFFROAD BLADE VOLUME CONTROL DAMPER
	CUL LOCKING DAMPER
	TURNING VANES
	FLEXIBLE CONNECTION
	ACOUSTIC INSULATION
	TYPE OF EQUIPMENT
	EQUIPMENT CONFIGURATION
	TYPE OF DIFFUSER OR GRILLE
	GRILLE SIZE OR DIFFUSER NECK SIZE
	AIRFLOW (CFM OR L/S)
	IN-SUITE DRY MATTER RATIO
	STARTERS / 3 PHASE / PHASE
	FAN SWITCH / N/A FIRE OVERRIDE BUTTON
	CO SENSOR
	GAS LINE
	GAS METER
	GAS VALVE
	PRESSURE REDUCING VALVE
	SANITARY ABOVE GRADE
	SANITARY BELOW GRADE
	STORM ABOVE GRADE
	STORM BELOW GRADE
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RECIRCULATION
	SANITARY VENT
	WATER PUMPER
	FLOOR DRAIN
	FLOOD FLOOR DRAIN
	HOSE DRAIN
	ROOF DRAIN
	SLAB DRAIN
	AREA DRAIN
	BILGE LEVEL AREA DRAIN
	CATCH BASIN
	SANITARY TRAP
	ELBOW UP
	ELBOW DOWN
	WALL CLEANOUT
	FLOOR CLEANOUT
	HOSE BIBB
	NON-FREEZE HOSE BIBB
	GATE VALVE
	BALL VALVE
	BUTTERFLY VALVE
	PRESSURE REDUCING VALVE
	CHECK VALVE
	CAP
	COMPRESSED AIR OUTLET
	BACKFLOW PREVENTER
	CIRCUIT BALANCING VALVE
	MULTIPLE PIPES
	DENOTES NO. OF PIPES
	TEMPERATURE SENSOR
	THERMOMETER
	2-WAY MODULATING VALVE
	3-WAY MODULATING VALVE
	C/W 1/2" BUSHING 1/2" PLUG
	FLOOR ELEVATION ABOVE LEVEL
	FLOOR ELEVATION THIS LEVEL
	HEADROOM FLOOR TO US LEVEL

REVISIONS

NO.	DATE	DESCRIPTION
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CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB AND REPORT DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS THE PROPERTY OF THE ENGINEER AND NOT BE REPRODUCED FOR COMPLETION OF THE WORK.

DRAWINGS ARE NOT TO BE SCALED



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DRAWING TITLE:
14/F
MECHANICAL LAYOUT

PROJECT TITLE:
60 ALEXANDRA PARK
BLOCK II
38 CAMERON STREET
TORONTO

DRAWN BY: G.S. CHECKED BY: E.P. SCALE: 1:50
PROJECT NUMBER: 1313 DRAWING NUMBER: M-32 OF 43
DATE: FEB, 13