

# HVAC GENERAL NOTES (APPLICABLE TO ALL DRAWINGS)

## GENERAL

- THE TERM "CONTRACTOR", "THIS CONTRACTOR", "HVAC CONTRACTOR" OR ANY TEXT AND DRAWINGS INCLUDED IN THIS CONTRACT DOCUMENT (WHICH INCLUDES DRAWINGS AND SPECIFICATIONS) SHALL BE MEANT AND DIRECTED TO THE CONTRACTOR PERFORMING THE HEATING, VENTILATING AND AIR CONDITIONING (HVAC) WORK IN THIS PROJECT.
- THE ARCHITECT/ENGINEER FOR THE PROJECT WHO WILL ALSO BE REFERRED TO AS THE ARCHITECT/ENGINEER OF RECORD WILL BE THE FIRM WHOSE NAME AND ADDRESS IS LISTED IN THE TITLE BLOCK OF THE DESIGN DOCUMENT.
- ALL WORK SHOWN IN THE CONTRACT DRAWINGS AND INCLUDED IN THE SPECIFICATIONS SHALL BE CONSIDERED AS NEW WORK TO BE PROVIDED (DEFINED AS FURNISHED AND INSTALLED) BY THE HVAC CONTRACTOR. ONLY ITEM SPECIFICALLY INDICATED AS "EXISTING" OR "BY OTHERS" OR "BY OTHER TRADES" SHALL BE EXCLUDED FROM THE WORK PROVIDED BY THE HVAC CONTRACTOR. SYMBOL LIST SHOWING DIFFERENT LINE THICKNESS FOR EXISTING AND NEW COMPONENTS ARE MEANT ONLY FOR CLARITY UNLESS SPECIFICALLY INDICATED AS "EXISTING" ALL COMPONENTS SHALL BE CONSIDERED TO BE NEW TO BE PROVIDED BY THE HVAC CONTRACTOR.
- IT SHALL BE EXPRESSLY UNDERSTOOD THAT ALL ITEMS INCLUDED IN THE CONTRACT DOCUMENTS ISSUED BY THE ARCHITECT/ENGINEERS SHALL BE INCLUDED IN THE BID PRICE OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIC ADD ALTERNATES ARE LISTED BY THE ARCHITECT/ENGINEER IN THE DOCUMENTS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN IN WRITING THAT HE HAS ALL THE CONTRACT DOCUMENTS FOR THE PROJECT FROM THE ARCHITECT/ENGINEER. NO CLAIMS FOR ANY MISSING DOCUMENTATION WILL BE ACCEPTABLE.
- WHERE INFORMATION IN DIFFERENT PARTS OF THE CONTRACT DOCUMENTS ARE INTERPRETED BY THE CONTRACTOR TO BE DUPLICATED, THE CONTRACTOR SHALL OBTAIN A WRITTEN APPROVAL OF HIS INTERPRETATION FROM THE OWNER BEFORE DELETING THE SCOPE OF WORK HE INTERPRETS AS BEING A DUPLICATION. IN THE ABSENCE OF SUCH WRITTEN APPROVAL, THE CONTRACTOR SHALL NOT EXCLUDE ANY ITEM SHOWN IN DIFFERENT PARTS OF THE CONTRACT.
- FOR EITHER CONTRACTOR'S INTERPRETATION OF DUPLICATION OR CONTRADICTION AS INDICATED ABOVE, THE OWNER'S DETERMINATION SHALL BE FINAL AND SHALL NOT ENTITLE THE CONTRACTOR TO ANY ADDITIONAL COMPENSATION.
- ALL WORK SHOWN ON THE CONTRACT DOCUMENTS ARE MEANT TO BE THE FINAL INTENT OF THE WORK. ANY WORK REQUIRED TO MEET THE FINAL INTENT OF THE DESIGN DOCUMENTS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING SHALL BE PROVIDED BY THE HVAC CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER:
  - CUTTING AND PATCHING OF WALLS, FLOORS, CEILING, ROOFS, PARTITIONS;
  - REMOVAL AND REPLACEMENT OF SUSPENDED CEILING, ACCESS PANELS, ACCESS DOORS;
  - REMOVAL AND REPLACEMENT OF EXISTING ARCHITECTURAL, STRUCTURAL, PLUMBING, ELECTRICAL, FIRE PROTECTION TRADES AND TELECOMMUNICATION, COMPUTER, SECURITY, PUBLIC ADDRESS, INTERCOM SYSTEMS WHICH INTERFERE WITH THE FINAL INTENT OF THE HVAC WORK.
- DETERMINE LOCATIONS OF SYSTEMS AND COMPONENTS IN FIELD. RELOCATE EXISTING WORK THAT INTERFERES WITH WORK OF THIS CONTRACT. UNLESS AND UNTIL SPECIFIC ITEMS ARE SHOWN IN OTHER TRADE DRAWINGS FOR REMOVAL AND REPLACEMENT FOR THE AREA WHERE THE FINAL HVAC DESIGN INTENT IS SHOWN. ALL WORK REQUIRED FOR OTHER TRADES TO PERFORM THEIR WORK TO ENABLE THE HVAC WORK SHOWN ON THESE DRAWINGS SHALL BE INCLUDED IN THE HVAC CONTRACTOR'S BID.
- ALL WORK SHOWN ON THE CONTRACT PLANS INCLUDING SCALED DRAWINGS ARE SCHEMATIC AND ARE INTENDED TO CONVEY GENERAL INFORMATION ON THE MAGNITUDE OF WORK AND TO PROVIDE GENERAL ARRANGEMENT OF EQUIPMENT. THE CONTRACT DRAWINGS ARE NOT MEANT TO CONVEY ALL THE FIELD CONDITIONS, ALL BENDS, OFFSETS, ELEVATIONS ACCURATELY AND SHALL NOT BE USED AS THE BASIS TO ESTIMATE THE QUANTITY OF HVAC WORK. THE CONTRACTOR MAY MAKE CHANGES IN THE FORM OF SHOP DRAWINGS IF AND WHEN APPROVED IN WRITING BY THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL SEEKING WRITTEN CLARIFICATIONS TO SCOPE OF WORK, VISIT AND CAREFULLY EXAMINE THE SITE OF THE PROPOSED WORK SO AS TO FAMILIARIZE HIMSELF OR HERSELF WITH EXISTING FIELD CONDITIONS, TO VERIFY DIMENSIONS AND TO VERIFY DIFFICULTIES THAT WILL BE ENCOUNTERED DURING THE EXECUTION OF THE WORK AND TO VERIFY EXACT EXTENT OF WORK REQUIRED, PRIOR TO SUBMITTING HIS PROPOSAL. ANY CHANGES RESULTING FROM CONDITIONS ARISING IN THE FIELD ARE TO BE MADE BY THIS CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- GENERAL NOTES, SYMBOL LIST AND DETAILS ARE APPLICABLE TO ALL HVAC MECHANICAL DRAWINGS.
- DIMENSIONS SHOWN ON PLAN ARE HORIZONTAL. DIMENSIONS SHOWN IN ELEVATION ARE VERTICAL EXCEPT IN WAY OF STRUCTURAL STEEL. DIMENSIONS ARE MEASURED PERPENDICULAR TO FLANGE.
- WHEREVER THE REQUIREMENTS AND REGULATIONS OF FEDERAL OR MUNICIPAL AUTHORITIES ARE MORE STRINGENT THAN THE REQUIREMENTS INDICATED ON THE DRAWINGS OR SPECIFICATIONS. THEN THESE MORE STRINGENT REQUIREMENTS SHALL TAKE PRECEDENCE OVER THE DRAWINGS OR SPECIFICATIONS AND SHALL BE MADE PART OF THE CONTRACT AT NO ADDITIONAL COST TO THE OWNER. HOWEVER, WHERE THE DRAWING OR SPECIFICATIONS ARE MORE STRINGENT THAN FEDERAL, OF LOCAL AUTHORITY REQUIREMENTS AND REGULATIONS, THE MORE STRINGENT SHALL APPLY AND THE WORK SHALL BE INCLUDED IN THE CONTRACT.
- THE CONTRACTOR SHALL PROVIDE PROTECTION FOR THE GENERAL PUBLIC AND CONSTRUCTION WORKERS IN AND AROUND THE CONSTRUCTION AREA. ADEQUATE BARRIERS SHALL BE PROVIDED TO EXERCISE CONTROL OF SAFE INGRESS AND EGRESS OF PREMISES. FIRE EXITS SHALL AT NO TIME BE BLOCKED.
- ALL EXISTING CONSTRUCTION AND EQUIPMENT SHALL BE PROTECTED BY EACH CONTRACTOR DURING THE ENTIRE PERFORMANCE OF THEIR WORK. EXISTING AREAS DISTURBED OR DAMAGED BY CONTRACTORS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- ALL UNUSED MATERIALS AND DEBRIS SHALL BE LEGALLY DISPOSED OF AWAY FROM THE PREMISES.
- HVAC AND MECHANICAL SYSTEMS SHALL BE MAINTAINED FULLY OPERATIONAL IN AREAS/SPACES OUTSIDE OF AREA OF WORK DURING CONSTRUCTION.
- COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS TO AVOID CONFLICTS.
- WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES INCLUDING THE CURRENT EDITION OF THE NEW YORK CITY CODES AND ALL LOCAL TOWNSHIP REQUIREMENTS.
- SCHEDULE WORK OF THIS SECTION TO AVOID INTERFERING WITH EXISTING OPERATIONS IN THE FACILITY.
- CONTRACTOR TO CONTACT BUILDING MANAGEMENT AND TENANT REGARDING DUCTWORK REMOVAL SCOPE OF WORK TO ENSURE THAT OTHER TENANTS THAT ARE TO STAY OPERATIONAL ARE NOT AFFECTED BY REMOVALS OF THE BASE BUILDING DUCTWORK.
- COORDINATE WITH BUILDING MANAGEMENT FOR ANY SERVICE INTERRUPTION OF EXISTING SYSTEMS AND GIVE NOTICE AS REQUIRED BY BUILDING RULES AND REGULATIONS.
- THE LOCATION AND ELEVATIONS OF ALL PIPING, PANELS, EQUIPMENT AND/OR DUCTWORK THAT IS IN OR PASSING THROUGH BASE BUILDING SPACES AND/OR TENANT SPACES ARE TO BE COORDINATED WITH BUILDING MANAGEMENT AND INDICATED ON SHOP DRAWINGS BEFORE PROCEEDING WITH WORK.

## DEMOLITION NOTES

- ALL DEMOLITION WORK SHALL BE SCHEDULED AND PHASED SO AS NOT TO INTERFERE WITH THE OPERATION OF THE FACILITY.
- WHEN DEMOLITION WORK REQUIRES TEMPORARY SHUT DOWN OF AN EXISTING OPERATING SYSTEM, THE DEMOLITION SHALL BE PERFORMED AT SUCH REGULAR TIME OR ON OVERTIME, WHEN DESIGNATED BY THE OWNER, AT NO ADDITIONAL COST.
- THE OWNER SHALL BE NOTIFIED OF THE ESTIMATED DURATION OF THE SHUTDOWN PERIOD AT LEAST TEN (10) DAYS IN ADVANCE OF THE DATE THE WORK IS TO BE PERFORMED.
- WORK SHALL BE ARRANGED FOR CONTINUOUS PERFORMANCE, INCLUDING OVERTIME, WHEN APPROVED BY THE OWNER, IF REQUIRED TO ENSURE EXISTING OPERATING SERVICES WILL BE SHUT DOWN ONLY IF ESSENTIAL AND NECESSARY FOR THE WORK.
- PROVIDE ALL SCAFFOLDING, RIGGING, HOISTING AND SERVICES NECESSARY FOR REMOVAL OF ALL DEMOLISHED EQUIPMENT AND MATERIALS FROM THE PREMISES.
- THE CONTRACTOR SHALL NOT PERFORM ANY DEMOLITION AND REMOVAL WORK UNLESS A SCHEDULE HAS BEEN SUBMITTED AND APPROVED.
- ALL DIMENSIONS SHOWN ON THE DRAWING SHALL BE VERIFIED IN FIELD BY THE CONTRACTOR.
- CONTRACTOR SHALL ASSURE THAT DEMOLITION AND INSTALLATION WORK WILL NOT CAUSE ANY DAMAGE TO EQUIPMENT, DUCTWORK, PIPING, ELECTRICAL, PLUMBING OR ANY OTHER EXISTING SERVICES TO REMAIN.
- CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITH NEW CONSTRUCTION DRAWINGS TO DETERMINE DIMENSIONS AND SCOPE OF WORK TO INSURE THAT NO ITEMS OR SERVICES TO REMAIN ARE DISTURBED OR DAMAGED.
- CONTRACTOR SHALL PATCH TO MATCH CONSTRUCTION IN ALL AREAS WHERE REMOVALS ARE MADE.

# NYC BUILDING DEPARTMENT NOTES

- ALL WORK SHALL COMPLY WITH THE APPLICABLE SECTIONS OF THE 2014 BUILDING CODE, CITY OF NEW YORK, AND ALL AMENDMENTS AND RULES AND REGULATIONS OF THE DEPARTMENT OF BUILDINGS.
- SPECIAL INSPECTIONS ARE REQUIRED FOR MECHANICAL SYSTEMS IN ACCORDANCE WITH THE FOLLOWING CODE SECTIONS:
  - MECHANICAL SYSTEMS BC 1704.16
  - MECHANICAL DEMOLITION BC 1704.20.4
  - FIRE-RESISTANT PENETRATIONS AND JOINTS BC 1704.27, BC 1704.25
- IN ADDITION TO SPECIAL INSPECTIONS, THE FOLLOWINGS PROGRESS INSPECTIONS ARE REQUIRED FOR MECHANICAL SYSTEMS IN ACCORDANCE WITH THE FOLLOWING SECTIONS:
  - ENERGY CODE COMPLIANCE INSPECTIONS BC 110.3.5
  - SHUTOFF DAMPERS IB2, IB2
  - HVAC AND SERVICE WATER HEATING EQUIPMENT IB3, IB3
  - HVAC AND SERVICE WATER HEATING SYSTEM CONTROLS IB4, IB4
  - HVAC INSULATION AND SEALING IB5, IB5
  - DUCT LEAKAGE TESTING IB6, IB6
  - ELECTRICAL MOTORS IIC6
- ALL INSPECTIONS AND TESTS SHALL BE MADE IN COMPLIANCE WITH BC 1704.
- VENTILATION FOR ALL AREAS COMPLIES WITH THE MINIMUM CODE REQUIREMENTS OF MC 401 AND MC 402.
- CERTIFICATES OF COMPLIANCE (28-116.4) SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR.
- ALL HVAC SYSTEMS AND EQUIPMENT COMPLY WITH THE REQUIREMENTS OF THE ENERGY CONSERVATION CONSTRUCTION CODE OF THE STATE OF NEW YORK (MC 301.2).
- THE FOLLOWING WORK ITEMS, COMPONENTS, MATERIALS, CAPACITIES, ETC. SHALL COMPLY WITH THE FOLLOWING CODE REFERENCES:
  - DUCT CONSTRUCTION MC 603
  - AIR INTAKES AND OUTLETS MC 401
  - FILTERS MC 605
  - FANS MC 503
  - ELECTRIC WIRING & EQUIPMENT MC 301.7
  - CONTROLS MC 405
  - HEATING CAPACITY MC 312
  - NOISE CRITERIA LEVELS BC 1207
  - PIPING INSULATION MC 604
  - INTAKE, EXHAUSTS, RELIEFS MC 401
  - PLENUMS AND CORRIDORS MC 602, MC 601
- MINIMUM TEMPERATURE TO BE MAINTAINED DURING HEATING SEASON: BC 1204 - WHEN 13 DEG F OUTSIDE.
- EQUIPMENT SHALL BE LISTED AND APPROVED AS REQUIRED BY MC 107, MC 102.
- ALL BUILDING DEPARTMENT FORMS REQUIRED, INCLUDING THOSE REQUIRED FOR SPECIAL INSPECTIONS, PROGRESS INSPECTIONS, CERTIFICATE OF COMPLIANCE, SERVICE EQUIPMENT PERMIT, EQUIPMENT USE PERMIT OR OTHER REASONS WITH REGARD TO THIS PROJECT SHALL BE COMPLETED AND FILED WITH THE NYC BUILDING DEPARTMENT BY THE CONTRACTOR.
- THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER PROVIDED SPECIAL INSPECTORS.
- CONTRACTOR SHALL OBTAIN AND PROVIDE SERVICE EQUIPMENT PERMITS IN ACCORDANCE WITH SECTION 28-105.2 OF THE BUILDING CODE. SERVICE EQUIPMENT PERMITS SHALL BE REQUIRED FOR THE USE AND OPERATION OF THE EXHAUST FANS.
- THESE PLANS ARE APPROVED ONLY FOR THE WORK INDICATED ON THE APPLICATION DRAWING. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

## SYMBOL LIST AND ABBREVIATIONS

	SMOKE DETECTOR		SUPPLY DUCT GOING UP
	THERMOSTAT		SUPPLY DUCT GOING DOWN
	NEW PIPE WITH DIRECTION OF FLOW		RETURN DUCT GOING UP
	ECCENTRIC REDUCER		RETURN DUCT GOING DOWN
	PIPE DROP		3-WAY, 2-WAY CEILING SUPPLY DIFFUSER
	PIPE RISE		FLEXIBLE CONNECTION
	PITCH UP IN DIRECTION OF FLOW		LOCK SHIELD VALVE
	PITCH DOWN IN DIRECTION OF FLOW		CHECK VALVE, SWING OR LIFT
	UNION		BALL VALVE
	CONCENTRIC REDUCER		THREE-WAY AUTOMATIC CONTROL VALVE
	FLANGED CONNECTION		Y-TYPE STRAINER W. BLOW OFF VALVE AND CAP
	GATE VALVE		MANUAL AIR VENT
	ANGLE GATE VALVE		VIBRATION ISOLATOR IN HANGAR
	GLOBE VALVE		THERMOMETER WELL
	DRAIN VALVE (TYPE AS SPECIFIED)		THERMOMETER END WELL
	LOCK SHIELD VALVE		PRESSURE GAUGE WITH SIPHON
	CHECK VALVE, SWING OR LIFT		PRESSURE GAUGE ON TEE
	BALL VALVE		HOSE BIB AND CAP
	THREE-WAY AUTOMATIC CONTROL VALVE		
	Y-TYPE STRAINER W. BLOW OFF VALVE AND CAP		
	MANUAL AIR VENT		
	VIBRATION ISOLATOR IN HANGAR		
	THERMOMETER WELL		
	THERMOMETER END WELL		
	PRESSURE GAUGE WITH SIPHON		
	PRESSURE GAUGE ON TEE		
	HOSE BIB AND CAP		

	EXISTING WORK TO REMAIN	MAX	MAXIMUM
	EXISTING WORK TO BE REMOVED	MBH	THOUSAND BTU PER HOUR
	12" W x 6" H DUCT SIZE	MC	MECHANICAL CODE
	CONDENSATE DRAIN	MCA	MINIMUM CIRCUIT AMPACITY
	EXISTING PIPING GOING DOWN	MER	MECHANICAL EQUIPMENT ROOM
	POINT OF CONNECTION	MFS	MAXIMUM FUSE SIZE
	POINT OF DISCONNECTION	MIN	MINIMUM
	CEILING SUPPLY DIFFUSER	MOP	MAXIMUM OVERCURRENT PROTECTION
	CEILING RETURN / EXHAUST - GRILLE/REGISTER	NC	NOISE CRITERIA
	THERMOSTAT	NO	NUMBER
	SECTION DESIGNATION SHEET NO. WHERE SECTION IS SHOWN	OA	OUTSIDE AIR
	AMPERAGE	OAT	OUTSIDE AIR TEMP
	AIR CONDITIONING	OD	OUTSIDE DIAMETER
	AIR CONDITIONER	PD	PRESSURE DROP
	AIR COOLED CONDENSING UNIT	PH	PHASE
	AIR CONDITIONING UNIT	PSI	POUNDS PER SQUARE INCH
	ACCESS DOOR	QTY	QUANTITY
	ADJUSTABLE FLOW DEVICE	RD	ROOF DRAIN
	AIR SYSTEM CLEANING SPECIALIST	RG	RETURN GRILLE
	BUILDING CODE	RH	RELATIVE HUMIDITY
	BRITISH THERMAL UNIT	RLA	RUNNING LOAD AMPS
	CEILING DIFFUSER	RPM	REVOLUTIONS PER MINUTE
	CUBIC FEET PER MINUTE	RR	RETURN REGISTER
	CEILING	SR	SUPPLY REGISTER
	DEPTH	SQFT	SQUARE FEET
	DECIBELS	TYP	TYPICAL
	DIRECT CURRENT	V	VOLTAGE
	DEHUMIDIFICATION UNIT	VD	VOLUME DAMPER
	DOWN	VFD	VARIABLE FREQUENCY DRIVE
	DEDICATED OUTDOOR AIR SUPPLY	W	WIDTH
	DEDICATED OUTDOOR AIR UNIT	W.M.S.	WIRE MESH SCREEN
	DIRECT EXPANSION	YR	YEAR
	EXHAUST AIR	Ø	DIAMETER
	ENTERING AIR TEMPERATURE	<	LESS THAN
	ELECTRONICALLY COMMUTATED	>	GREATER THAN
	EXHAUST FAN	#	NUMBER
	EXTERNAL STATIC PRESSURE	%	PERCENT
	EXISTING	°F	DEGREES FAHRENHEIT
	FLEXIBLE CONNECTION		
	FLEXIBLE		
	FULL LOAD AMPERAGE		
	FEET PER MINUTE		
	FEET		
	GAUGE		
	GALLON		
	GLYCOL CHILLED WATER SUPPLY & RETURN		
	GALLONS PER MINUTE		
	HORSEPOWER		
	HEATING AND VENTILATING		
	KILOWATT		
	HEIGHT		
	HOUR		
	HEATING, VENTILATION AND AIR CONDITIONING		
	HOT WATER SUPPLY AND RETURN		
	HERTZ		
	INSIDE DIAMETER		
	INCH OR INCHES		
	INCHES OF WATER GAUGE		
	LENGTH		
	LEAVING AIR TEMPERATURE		
	POUNDS		
	LINEAR FEET		
	LOCKED ROTOR AMPS		
	NATIONAL AIR DUCT CLEANERS ASSOCIATION		

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NO.	DATE	DESCRIPTION
5	02.16.21	ADDENDUM 1 Δ
4	01.29.21	ISSUED FOR 100% CD
3	04.03.20	BID SET
2	10.07.19	100% SUBMISSION - ISSUED FOR BID
1	09.20.19	90% SUBMISSION - ISSUED FOR BID

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PROJECT

**ROOSEVELT ISLAND-SPORTSPARK RENOVATIONS**

250 Main St.  
Roosevelt Island, NY  
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DRAWING

**MECHANICAL NOTES, SYMBOLS AND ABBREVIATIONS**

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PROJECT

**ROOSEVELT ISLAND-SPORTSPARK RENOVATIONS**

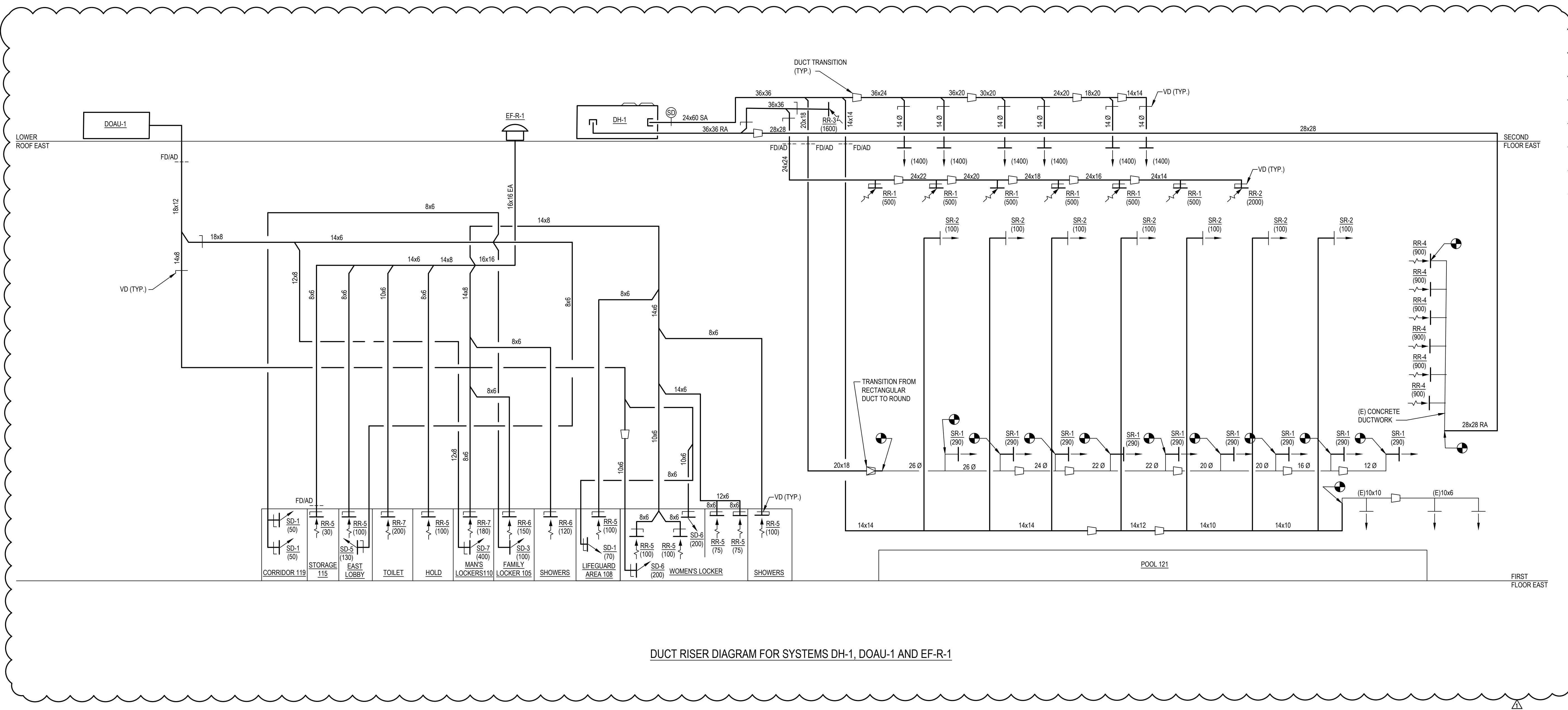
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DRAWING

**MECHANICAL DUCT RISER DIAGRAM**

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DUCT RISER DIAGRAM FOR SYSTEMS DH-1, DOAU-1 AND EF-R-1

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