

HVAC DRAWING INDEX

DWG.#	DRAWING NAME
M-001	MECHANICAL COVER SHEET
M-101	MECHANICAL FIRST FLOOR PLAN
M-102	MECHANICAL MEZZANINE FLOOR PLAN
M-103	MECHANICAL SECOND THROUGH FOURTH FLOOR PLANS
M-104	MECHANICAL FIFTH FLOOR PLAN
M-105	MECHANICAL ROOF DECK PLAN
M-106	MECHANICAL UPPER ROOF DECK PLAN
M-201	MECHANICAL UNIT PLANS
M-202	MECHANICAL UNIT PLANS
M-203	MECHANICAL UNIT PLANS
M-204	MECHANICAL UNIT PLANS
M-205	MECHANICAL UNIT PLANS
M-301	MECHANICAL SPECIFICATIONS
M-401	MECHANICAL DETAILS
M-402	MECHANICAL DETAILS
M-501	MECHANICAL SCHEDULES
M-502	MECHANICAL SCHEDULES
M-503	MECHANICAL SCHEDULES
M-601	MECHANICAL RISER DIAGRAMS
M-602	MECHANICAL RISER DIAGRAMS

KEY TO SYMBOLS

SYMBOL	DESCRIPTION
	EQUIPMENT IDENTITY (SEE EQUIPMENT ABBREVIATION LIST AND SCHEDULES)
	EQUIPMENT DESIGNATION
	SYSTEM NUMBER (IF APPLICABLE)
	RISER TYPE. REFER TO ABBREVIATIONS
	RISER DESIGNATION
	RISER NUMBER. REFER TO PLANS AND/OR RISER DIAGRAMS
	SECTION NUMBER
	SECTION DESIGNATION
	SECTION DRAWING NUMBER
	REVISION NUMBER
	SHEET NOTE NUMBER
	CONNECT NEW TO EXISTING

ABBREVIATIONS

ACC	AIR COOLED CONDENSING UNIT
ACU	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AL	ACOUSTICAL LINING
ALD	AUTOMATIC LOUVER DAMPER
B	BOILER
BB	BASE BOARD
BATC	BUILDING AUTOMATION AND TEMPERATURE CONTROL
BDD	BACKDRAFT DAMPER
BMS	BUILDING MANAGEMENT SYSTEM
BRD	BAROMETRIC RELIEF DAMPER
BR	BOTTOM REGISTER OR GRILLE
CAV	CONSTANT AIR VOLUME
CC	COOLING COIL
CD	CEILING DIFFUSER, CONDENSATE DRAIN
CH	CABINET HEATER
CDD	CLEAN OUT DOOR
CP	CONDENSATE PUMP
CR(g)	CEILING REGISTER OR GRILLE
CS	CIRCUIT SETTER
DB	DRY BULB TEMPERATURE
DCU	DUCTLESS AC UNIT
DDC	DIRECT DIGITAL CONTROL
DHP	DUCTLESS HEAT PUMP
DN	DOWN
DSD	DUCT SMOKE DETECTOR
E	EXITING
EAT	ENTERING AIR TEMPERATURE
ECH	ELECTRIC CEILING HEATER
EDH	ELECTRIC DUCT HEATER
EF	EXHAUST FAN
EMR	ELEVATOR MACHINE ROOM
EX	EXHAUST
F/A	FRESH AIR INTAKE
FC	FLEXIBLE CONNECTION
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FL	FIRE LIFT
FL	FUSIBLE LINK REGISTER
FSD	COMBINATION FIRE/SMOKE DAMPER
FTR	FINNED TUBE RADIATION
GWS/R	GLYCOL WATER SUPPLY/RETURN
HC	HEATING COIL
HWC	HOT WATER COIL
HWS/R	HOT WATER SUPPLY/RETURN
JD(TD)	JUMP DUCT (TRANSFER DUCT)
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
M	MOTOR
MCC	MOTOR CONTROL CENTER
MER	MECHANICAL EQUIPMENT ROOM
MLWMS	METAL LOUVER WITH WIRE MESH SCREEN
MO	MASONRY OR WALL OPENING (1 SQ. FT U.O.N.)
N	NEW
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NK	NECK SIZE
NO	NORMALLY OPEN
NTS	NOT TO SCALE
O/A	OUTSIDE AIR INTAKE
ODD	OPPOSED BLADE DAMPER
P	PUMP
PC	PUMPED CONDENSATE
PTAC	PACKAGED TERMINAL AC UNIT
R	RELOCATED
R/A	RETURN AIR
RG	RETURN GRILLE
RR	REFRIGERANT RELIEF
R/S	RETURN/SPILL
RTU	ROOFTOP AC UNIT
S	SUPPLY
S/A	SUPPLY AIR
SD	SMOKE DAMPER
SF	SQUARE FEET
SP	STAIR PRESSURIZATION
SPF	STAIR PRESSURIZATION FAN
SR	SIDE REGISTER
S/R	SUPPLY/RETURN
ST	SOUND TRAP
SX	SMOKE EXHAUST
S/S	STAINLESS STEEL
TD	TRANSFER DUCT
TF	TRANSFER FAN
TR(g)	TOP REGISTER OR GRILLE
TRV	TRASH ROOM VENTILATION
TX	TOILET EXHAUST
TXF	TOILET EXHAUST RISER FAN
UAS	UNDER ANOTHER SECTION OF THE SPECIFICATION
UC	UNDERCUT DOOR (1 INCH)
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
VD	VOLUME DAMPER
VI	VIBRATION ISOLATOR
WB	WET BULB TEMPERATURE
WMS	WIRE MESH SCREEN
WP	WEATHER PROOF

DUCTWORK SYMBOLS

	SUPPLY AIR DUCT UP
	EXHAUST OR RETURN AIR DUCT UP
	SUPPLY AIR DUCT DOWN
	EXHAUST OR RETURN AIR DUCT DOWN
	DUCT WITH ACOUSTIC LINING (1" THICK U.O.N.)
	316L STAINLESS STEEL DUCTWORK (WELDED, PAN TYPE CONSTRUCTION)
	FIRE RATED DUCT CONSTRUCTION (1 ½ HOUR U.O.N.)
	CEILING DIFFUSER (2-WAY BLOW)
	CEILING DIFFUSER (3-WAY BLOW)
	CEILING DIFFUSER (4-WAY BLOW)
	CEILING GRILLE (CEILING REGISTER WHERE NOTED AS CR)
	THERMOSTAT, SENSOR (DDC)
	COMBINATION FUSED DISCONNECT SWITCH AND MAGNETIC STARTER. H-O-A WITH PILOT LIGHT
	DOOR LOUVER (SQ. FEET)
	UNDERCUT DOOR (1")
	FLEXIBLE DUCT
	MOTORIZED CONTROL DAMPER
	BAROMETRIC RELIEF DAMPER
	FIRE DAMPER (HORIZONTAL/VERTICAL)
	COMBINATION FIRE/SMOKE DAMPER (HORIZONTAL/VERTICAL)
	VOLUME DAMPER
	ACCESS DOOR
	DUCT SMOKE DETECTOR
	PACKAGED TERMINAL AC UNIT
	UNIT HEATER
	WIRE MESH SCREEN
	CABINET HEATER
	LOUVER

GENERAL NOTES

- ALL LOW PRESSURE BRANCH DUCTWORK (SUPPLY AND RETURN) SHALL BE PROVIDED WITH VOLUME CONTROL SPLITTER DAMPERS AND VOLUME DAMPERS RESPECTIVELY
- PROVIDE FIRE DAMPER AT ALL 1-HOUR OR MORE FIRE RATED WALL PENETRATIONS. SHEET METAL ACCESS DOORS AS WELL AS ACCESS DOORS IN FINISHED CONSTRUCTION SHALL BE PROVIDE FOR ALL DAMPERS.
- BORDER TYPES, COLOR, FINISHES, AND METHOD OF ATTACHMENT FOR ALL DIFFUSERS, GRILLES AND REGISTERS SHALL BE COORDINATED WITH THE ARCHITECTURAL CEILING DETAILS AND SPECIFICATIONS.
- ALL LINEAR DIFFUSERS ARE TO BE COORDINATED WITH ARCHITECTURAL PLANS FOR EXACT LENGTHS AND LOCATIONS. ACTIVE PLENUM SECTIONS SHALL BE OF THE SIZES AS SHOWN ON PLANS. EACH BRANCH TAP SERVING THE LINEAR DIFFUSER SHALL BE THROUGH THE ROOM SIDE FACE OF THE DIFFUSER. ACTIVE SUPPLY SECTIONS OF THE LINEAR DIFFUSERS SHALL BE PROVIDED WITH PATTERN CONTROL DEVICES AND EQUALIZING GRIDS. ACTIVE OR INACTIVE RETURN SECTIONS SHALL NOT BE FURNISHED WITH PATTERN CONTROL OR EQUALIZING GRIDS. REFER TO SPECIFICATIONS FOR MODEL NUMBERS. ALL FINISH COLORS AND TYPES SHALL BE AS PER ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
- THERMOSTAT SHOULD BE LOCATED 4'-0" A.F.F. AND 9" FROM EDGE OF DOOR U.O.N. FINAL LOCATIONS TO BE VERIFIED WITH THE ARCHITECT. FINISHED PAINT COLOR TO BE SELECTED BY THE OWNER. MANUFACTURER'S LOGO SHALL NOT BE EXPOSED.
- WHERE PIPING CONNECTIONS FOR EQUIPMENT SUCH AS PUMPS, UNIT HEATERS, HEAT EXCHANGERS, ETC. DIFFER FROM THE LINE SIZE PIPING, IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO FURNISH AND INSTALL THE NECESSARY REDUCER/EXPANDER FITTINGS TO ENABLE CONNECTION BETWEEN THE PIPING SYSTEM AND THE EQUIPMENT.
- ALL PRESSURE AND TEMPERATURE GAUGES ARE SCHEMATICALLY SHOWN ON THE PLANS. REFER TO SPECIFICATIONS FOR EXACT TYPES.
- REFER TO SCHEDULE SHEETS FOR THE DIFFUSER, GRILLE AND REGISTER SCHEDULES.
- ALL METAL LOUVERS, AND ALL BLANK OFF PANELS (INSULATED OR NOT INSULATED, ACTIVE OR INACTIVE) FOR LOUVERS SHALL BE PROVIDED UNDER THIS SECTION OF THE SPECIFICATIONS. WIRE MESH SCREENS FOR LOUVERS SHALL BE PROVIDED BY THE LOUVER MANUFACTURER. ALL OTHER WIRE MESH SCREENS SHALL BE PROVIDED UNDER THIS SECTION OF THE SPECIFICATIONS.
- THIS CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO PROCEEDING WITH ANY WORK. WHERE DISCREPANCIES OCCUR BETWEEN THESE DOCUMENTS AND EXISTING CONDITIONS, THE DISCREPANCY SHALL BE REPORTED TO THE OWNER AND/OR ENGINEER FOR EXPEDITING AND RESOLVE.
- ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER. CARE SHALL BE EXERCISED TO MINIMIZE ANY INCONVENIENCE OR DISTURBANCE TO OTHER AREAS OF THE BUILDING WHICH ARE TO REMAIN IN OPERATION. ISOLATE WORK AREAS BY MEANS OF TEMPORARY PARTITIONS AND/OR TARPS TO DEEP DUST AND DIRT WITHIN THE CONSTRUCTION AREA.

----	----	----
-----	-----	-----
-----	-----	-----
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architects | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

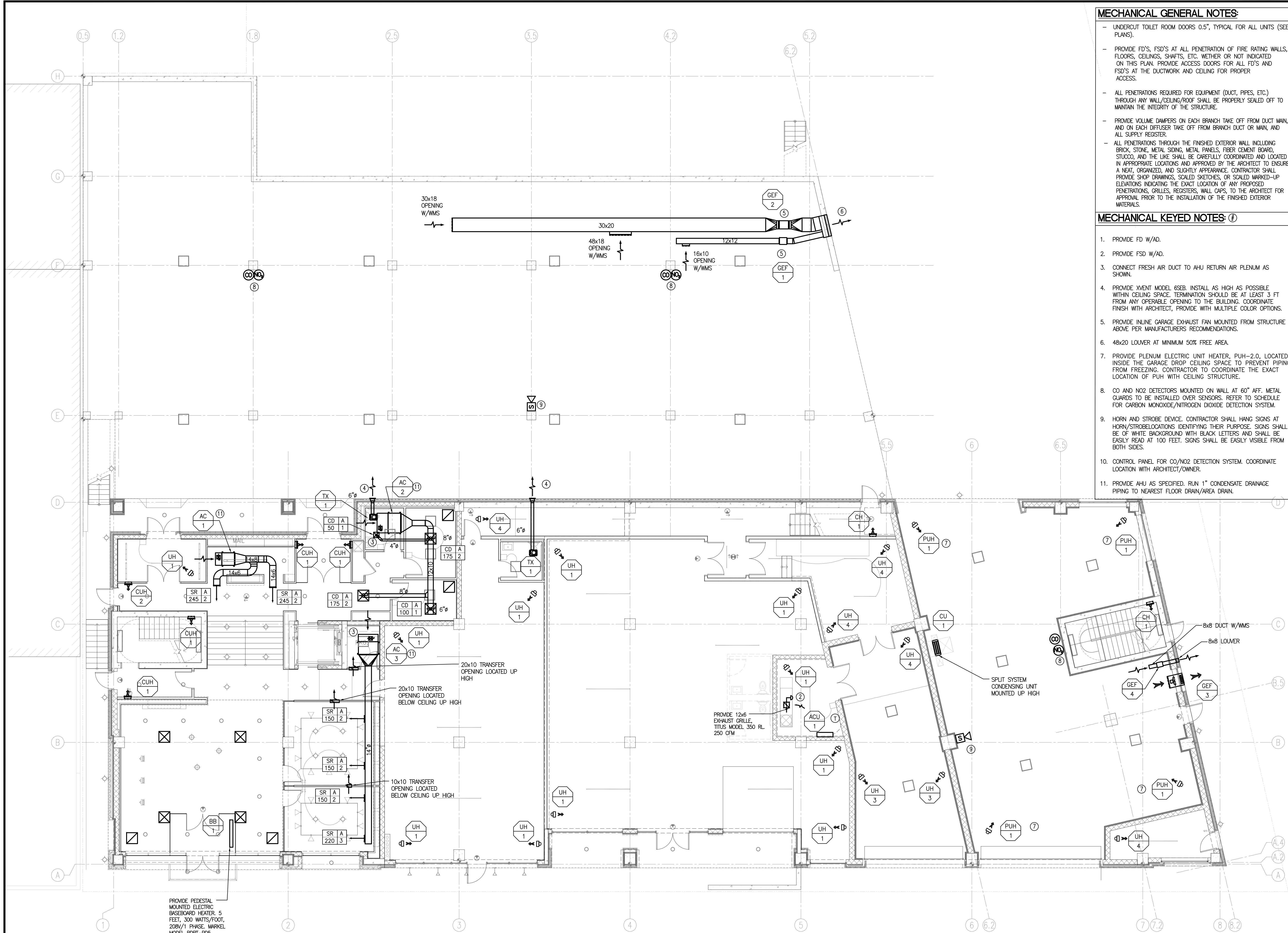
JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title:
MECHANICAL COVER SHEET

Seal & Signature	Date:	07-18-2016
	Scale:	AS NOTED
	Job#:	2011
	Sheet Title:	M-001
KHACHATURIAN, P.A. - NY LICENSE #002261-1 NY CERTIFICATE OF AUTHORIZATION #00171204		Sheet: of



MECHANICAL GENERAL NOTES:

- UNDERCUT TOILET ROOM DOORS 0.5", TYPICAL FOR ALL UNITS (SEE PLANS).
- PROVIDE FD'S, FSD'S AT ALL PENETRATION OF FIRE RATING WALLS, FLOORS, CEILINGS, SHAFTS, ETC. WETHER OR NOT INDICATED ON THIS PLAN. PROVIDE ACCESS DOORS FOR ALL FD'S AND FSD'S AT THE DUCTWORK AND CEILING FOR PROPER ACCESS.
- ALL PENETRATIONS REQUIRED FOR EQUIPMENT (DUCT, PIPES, ETC.) THROUGH ANY WALL/CEILING/ROOF SHALL BE PROPERLY SEALED OFF TO MAINTAIN THE INTEGRITY OF THE STRUCTURE.
- PROVIDE VOLUME DAMPERS ON EACH BRANCH TAKE OFF FROM DUCT MAIN, AND ON EACH DIFFUSER TAKE OFF FROM BRANCH DUCT OR MAIN, AND ALL SUPPLY REGISTER.
- ALL PENETRATIONS THROUGH THE FINISHED EXTERIOR WALL INCLUDING BRICK, STONE, METAL SIDING, METAL PANELS, FIBER CEMENT BOARD, STUCCO, AND THE LIKE SHALL BE CAREFULLY COORDINATED AND LOCATED IN APPROPRIATE LOCATIONS AND APPROVED BY THE ARCHITECT TO ENSURE A NEAT, ORGANIZED, AND SLIGHTLY APPEARANCE. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, SCALED SKETCHES, OR SCALED MARKED-UP ELEVATIONS INDICATING THE EXACT LOCATION OF ANY PROPOSED PENETRATIONS, GRILLES, REGISTERS, WALL CAPS, TO THE ARCHITECT FOR APPROVAL PRIOR TO THE INSTALLATION OF THE FINISHED EXTERIOR MATERIALS.

MECHANICAL KEYED NOTES: ①

- PROVIDE FD W/AD.
- PROVIDE FSD W/AD.
- CONNECT FRESH AIR DUCT TO AHU RETURN AIR PLENUM AS SHOWN.
- PROVIDE XVENT MODEL 6SEB. INSTALL AS HIGH AS POSSIBLE WITHIN CEILING SPACE. TERMINATION SHOULD BE AT LEAST 3 FT FROM ANY OPERABLE OPENING TO THE BUILDING. COORDINATE FINISH WITH ARCHITECT, PROVIDE WITH MULTIPLE COLOR OPTIONS.
- PROVIDE INLINE GARAGE EXHAUST FAN MOUNTED FROM STRUCTURE ABOVE PER MANUFACTURERS RECOMMENDATIONS.
- 48x20 LOUVER AT MINIMUM 50% FREE AREA.
- PROVIDE PLENUM ELECTRIC UNIT HEATER, PUH-2.0, LOCATED INSIDE THE GARAGE DROP CEILING SPACE TO PREVENT PIPING FROM FREEZING. CONTRACTOR TO COORDINATE THE EXACT LOCATION OF PUH WITH CEILING STRUCTURE.
- CO AND NO2 DETECTORS MOUNTED ON WALL AT 60" AFF. METAL GUARDS TO BE INSTALLED OVER SENSORS. REFER TO SCHEDULE FOR CARBON MONOXIDE/NITROGEN DIOXIDE DETECTION SYSTEM.
- HORN AND STROBE DEVICE. CONTRACTOR SHALL HANG SIGNS AT HORN/STROBELOCATIONS IDENTIFYING THEIR PURPOSE. SIGNS SHALL BE OF WHITE BACKGROUND WITH BLACK LETTERS AND SHALL BE EASILY READ AT 100 FEET. SIGNS SHALL BE EASILY VISIBLE FROM BOTH SIDES.
- CONTROL PANEL FOR CO/NO2 DETECTION SYSTEM. COORDINATE LOCATION WITH ARCHITECT/OWNER.
- PROVIDE AHU AS SPECIFIED. RUN 1" CONDENSATE DRAINAGE PIPING TO NEAREST FLOOR DRAIN/AREA DRAIN.

----	----	----
----	----	----
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606
Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architecture | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225
McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300
Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title: MECHANICAL FIRST FLOOR PLAN	
Seal & Signature	Date: 07-18-2016
	Scale: AS NOTED
	Job#: 2011
	Sheet Title: M-101
JARED KHACHATURIAN, P.E. - NY LICENSE #002041-1 NY CERTIFICATE OF AUTHORIZATION #001124	
Sheet:	of



MECHANICAL GENERAL NOTES:

- UNDERCUT TOILET ROOM DOORS 0.5", TYPICAL FOR ALL UNITS (SEE PLANS).
- PROVIDE FD'S, FSD'S AT ALL PENETRATION OF FIRE RATING WALLS, FLOORS, CEILINGS, SHAFTS, ETC. WETHER OR NOT INDICATED ON THIS PLAN. PROVIDE ACCESS DOORS FOR ALL FD'S AND FSD'S AT THE DUCTWORK AND CEILING FOR PROPER ACCESS.
- ALL PENETRATIONS REQUIRED FOR EQUIPMENT (DUCT, PIPES, ETC.) THROUGH ANY WALL/CEILING/ROOF SHALL BE PROPERLY SEALED OFF TO MAINTAIN THE INTEGRITY OF THE STRUCTURE.
- PROVIDE VOLUME DAMPERS ON EACH BRANCH TAKE OFF FROM DUCT MAIN, AND ON EACH DIFFUSER TAKE OFF FROM BRANCH DUCT OR MAIN, AND ALL SUPPLY REGISTER.
- ALL PENETRATIONS THROUGH THE FINISHED EXTERIOR WALL INCLUDING BRICK, STONE, METAL SIDING, METAL PANELS, FIBER CEMENT BOARD, STUCCO, AND THE LIKE SHALL BE CAREFULLY COORDINATED AND LOCATED IN APPROPRIATE LOCATIONS AND APPROVED BY THE ARCHITECT TO ENSURE A NEAT, ORGANIZED, AND SLIGHTLY APPEARANCE. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, SCALED SKETCHES, OR SCALED MARKED-UP ELEVATIONS INDICATING THE EXACT LOCATION OF ANY PROPOSED PENETRATIONS, GRILLES, REGISTERS, WALL CAPS, TO THE ARCHITECT FOR APPROVAL PRIOR TO THE INSTALLATION OF THE FINISHED EXTERIOR MATERIALS.

MECHANICAL KEYED NOTES: ①

- PROVIDE FD W/AD.
- PROVIDE FSD W/AD.
- DROP 8x8 FRESH AIR DUCT DOWN AND CONNECT TO AHU RETURN AIR PLENUM AS SHOWN.
- PROVIDE VERTICAL AHU AS SPECIFIED. MOUNT ON MINIMUM 24" HIGH STAND WITH VIBRATION ISOLATION. RUN 1" CONDENSATE DRAINAGE PIPING TO NEAREST FLOOR DRAIN/AREA DRAIN.
- PROVIDE BRANCH CIRCUIT CONTROLLER AS SPECIFIED.



Engineering Excellence since 1984

186 WOOD AVE. SOUTH, 1ST FLOOR
ISELIN, NJ 08830
TEL (732) 635 0044 • FAX (732) 635 1777

----	----	----
----	----	----
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architecture | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title:
**MECHANICAL MEZZANINE
FLOOR PLAN**

Seal & Signature	Date:	07-18-2016
	Scale:	AS NOTED
	Job#:	2011
	Sheet Title:	M-102

JAMEN KHACHATURIAN, P.E. - NY LICENSE #000001124
NY CERTIFICATE OF AUTHORIZATION #001124
Sheet: of

MECHANICAL GENERAL NOTES:

- UNDERCUT TOILET ROOM DOORS 0.5", TYPICAL FOR ALL UNITS (SEE PLANS).
- PROVIDE FD'S, FSD'S AT ALL PENETRATION OF FIRE RATING WALLS, FLOORS, CEILINGS, SHAFTS, ETC. WHETHER OR NOT INDICATED ON THIS PLAN. PROVIDE ACCESS DOORS FOR ALL FD'S AND FSD'S AT THE DUCTWORK AND CEILING FOR PROPER ACCESS.
- ALL PENETRATIONS REQUIRED FOR EQUIPMENT (DUCT, PIPES, ETC.) THROUGH ANY WALL/CEILING/ROOF SHALL BE PROPERLY SEALED OFF TO MAINTAIN THE INTEGRITY OF THE STRUCTURE.
- PROVIDE VOLUME DAMPERS ON EACH BRANCH TAKE OFF FROM DUCT MAIN, AND ON EACH DIFFUSER TAKE OFF FROM BRANCH DUCT OR MAIN, AND ALL SUPPLY REGISTER.
- ALL PENETRATIONS THROUGH THE FINISHED EXTERIOR WALL INCLUDING BRICK, STONE, METAL SIDING, METAL PANELS, FIBER CEMENT BOARD, STUCCO, AND THE LIKE SHALL BE CAREFULLY COORDINATED AND LOCATED IN APPROPRIATE LOCATIONS AND APPROVED BY THE ARCHITECT TO ENSURE A NEAT, ORGANIZED, AND SLIGHTLY APPEARANCE. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, SCALED SKETCHES, OR SCALED MARKED-UP ELEVATIONS INDICATING THE EXACT LOCATION OF ANY PROPOSED PENETRATIONS, GRILLES, REGISTERS, WALL CAPS, TO THE ARCHITECT FOR APPROVAL PRIOR TO THE INSTALLATION OF THE FINISHED EXTERIOR MATERIALS.

MECHANICAL KEYED NOTES: ①

- PROVIDE FD W/AD.
- PROVIDE FSD W/AD.
- CONNECT FRESH AIR DUCT TO AHU RETURN AIR PLENUM AS SHOWN.
- PROVIDE BRANCH CIRCUIT CONTROLLER AS SPECIFIED.
- 14x14 CORRIDOR S/A DUCT DOWN IN SHAFT.

----	----	----
----	----	----
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606
Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architecture | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

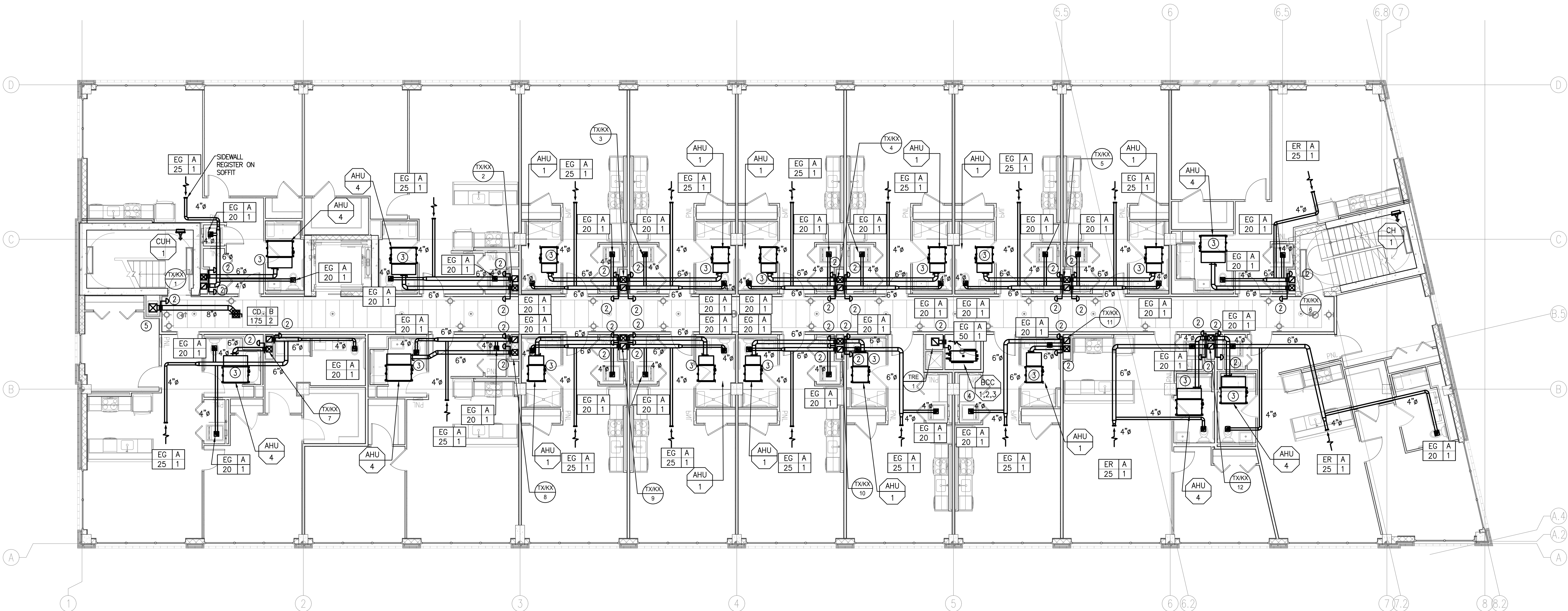
JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title:
**MECHANICAL 2ND THRU 4TH
FLOOR PLANS**

Seal & Signature	Date:	07-18-2016
	Scale:	AS NOTED
	Job#:	2011
	Sheet Title:	M-103
JAMES KHACHATURIAN, P.E. - NY LICENSE #00001124 NY CERTIFICATE OF AUTHORIZATION #001124		Sheet:

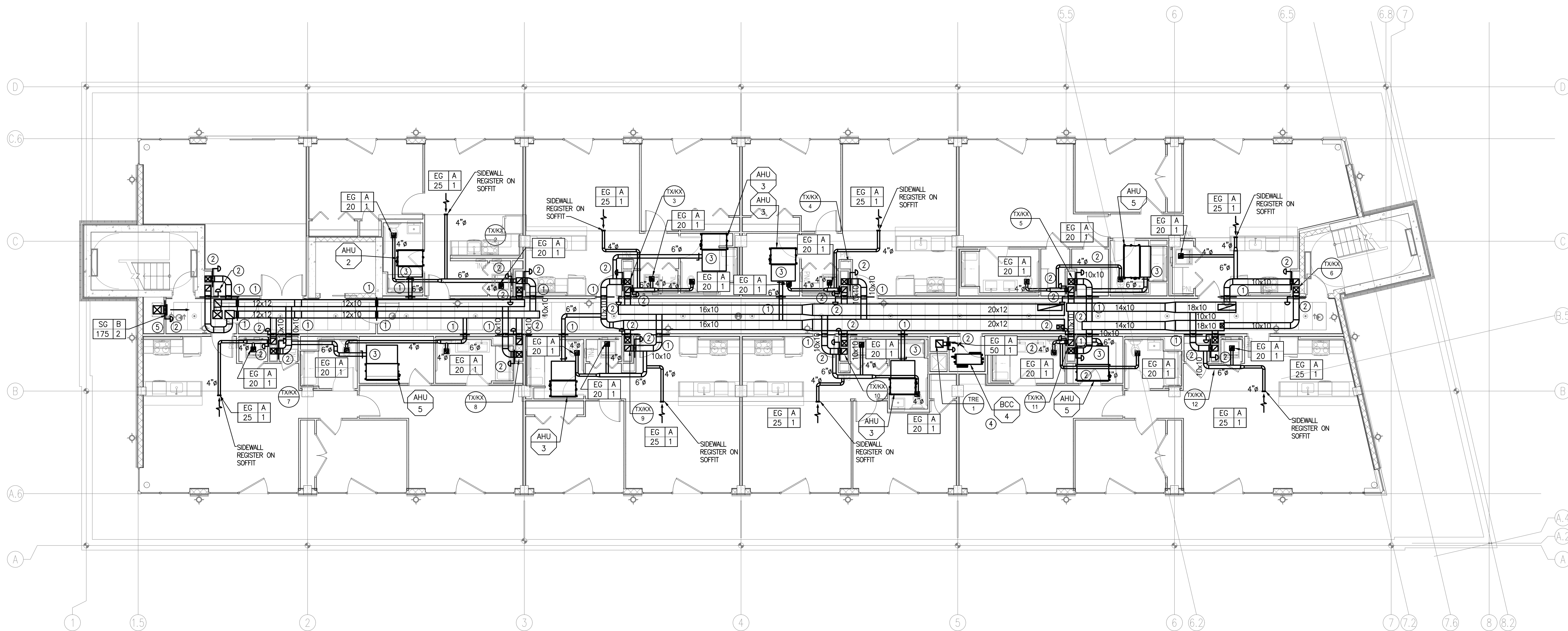


MECHANICAL GENERAL NOTES:

- UNDERCUT TOILET ROOM DOORS 0.5", TYPICAL FOR ALL UNITS (SEE PLANS).
- PROVIDE FD'S, FSD'S AT ALL PENETRATION OF FIRE RATING WALLS, FLOORS, CEILINGS, SHAFTS, ETC. WHETHER OR NOT INDICATED ON THIS PLAN. PROVIDE ACCESS DOORS FOR ALL FD'S AND FSD'S AT THE DUCTWORK AND CEILING FOR PROPER ACCESS.
- ALL PENETRATIONS REQUIRED FOR EQUIPMENT (DUCT, PIPES, ETC.) THROUGH ANY WALL/CEILING/ROOF SHALL BE PROPERLY SEALED OFF TO MAINTAIN THE INTEGRITY OF THE STRUCTURE.
- PROVIDE VOLUME DAMPERS ON EACH BRANCH TAKE OFF FROM DUCT MAIN, AND ON EACH DIFFUSER TAKE OFF FROM BRANCH DUCT OR MAIN, AND ALL SUPPLY REGISTER.
- ALL PENETRATIONS THROUGH THE FINISHED EXTERIOR WALL INCLUDING BRICK, STONE, METAL SIDING, METAL PANELS, FIBER CEMENT BOARD, STUCCO, AND THE LIKE SHALL BE CAREFULLY COORDINATED AND LOCATED IN APPROPRIATE LOCATIONS AND APPROVED BY THE ARCHITECT TO ENSURE A NEAT, ORGANIZED, AND SLIGHTLY APPEARANCE. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, SCALED SKETCHES, OR SCALED MARKED-UP ELEVATIONS INDICATING THE EXACT LOCATION OF ANY PROPOSED PENETRATIONS, GRILLES, REGISTERS, WALL CAPS, TO THE ARCHITECT FOR APPROVAL PRIOR TO THE INSTALLATION OF THE FINISHED EXTERIOR MATERIALS.

MECHANICAL KEYED NOTES: ①

- PROVIDE FD W/AD.
- PROVIDE FSD W/AD.
- CONNECT FRESH AIR DUCT TO AHU RETURN AIR PLENUM AS SHOWN.
- PROVIDE BRANCH CIRCUIT CONTROLLER AS SPECIFIED.
- 14x14 CORRIDOR S/A DUCT DOWN IN SHAFT.



----	----	----
----	----	----
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architecture | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

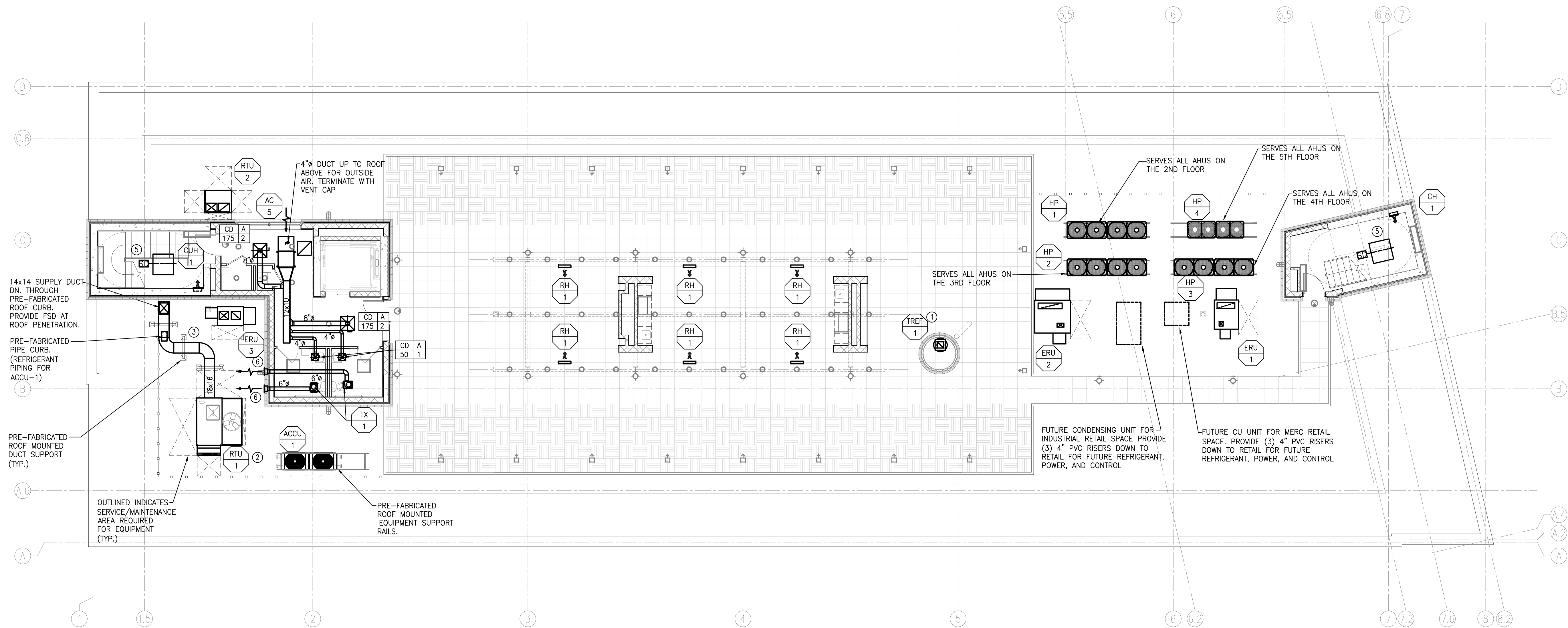
Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title:
**MECHANICAL FIFTH FLOOR
PLAN**

Seal & Signature	Date: 07-18-2016
	Scale: AS NOTED
	Job#: 2011
	Sheet Title: M-104
JAMES KHACHATURIAN, P.E. - NY LICENSE #00001124 NY CERTIFICATE OF AUTHORIZATION #001124	Sheet: of

MECHANICAL KEYED NOTES: ①

1. PROVIDE ROOF MOUNTED TRASH ROOM EXHAUST FAN. RUN 12x10 DUCT DOWN INSIDE SHAFT.
2. PROVIDE 100% OUTSIDE AIR PACKAGED ROOFTOP AC UNIT AS SPECIFIED. RUN 14x14 S/A DUCT DOWN IN SHAFT.
3. PROVIDE 2" WEATHER PROOF INSULATION WITH JACKETING AND DUCT SUPPORTS EVERY 10 FEET/CHANGE IN DIRECTION FOR DUCTWORK ON ROOF.
4. PROVIDE FSD W/AD
5. PROVIDE 3.0 FT² FREE AREA OPENINGS DIRECT TO OUTSIDE. PROVIDE MOTORIZED DAMPERS WHICH SHALL STAY CLOSED. UPON DETECTION OF SMOKE IN THE ELEVATOR LOBBIES, UPON ACTIVATION OF SMOKE DETECTOR PLACED AT THE TOP OF THE STAIRWAY, LOSS OF POWER, AND UPON ACTIVATION OF MANUAL OVERRIDE CONTROL, MOTORIZED DAMPERS SHALL OPEN 100%. THE MANUAL OVERRIDE CONTROL SHALL BE CAPABLE OF OPENING AND CLOSING THE VENTS AND SHALL BE LOCATED IN AN APPROVED LOCATION.
6. PROVIDE XVENT MODEL 6SER. INSTALL AS HIGH AS POSSIBLE WITHIN CEILING SPACE. TERMINATION SHOULD BE AT LEAST 3 FT FROM ANY OPERABLE OPENING TO THE BUILDING. COORDINATE FINISH WITH ARCHITECT, PROVIDE WITH MULTIPLE COLOR OPTIONS.



Rev. #	Revision Description	Date:
1	Issued For Bid	04-12-2021
2	Issued For Bid	04-05-2021

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architecture | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title:
**MECHANICAL ROOF DECK
PLAN**

Seal & Signature	Date: 07-18-2016
	Scale: AS NOTED
	Job#: 2011
	Sheet Title: M-105

JAMES KHACHATURIAN, P.E. - NY LICENSE #00017224
NY CERTIFICATE OF AUTHORIZATION #0017224
Sheet: of

----	----	----
----	----	----
----	----	----
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architecture | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

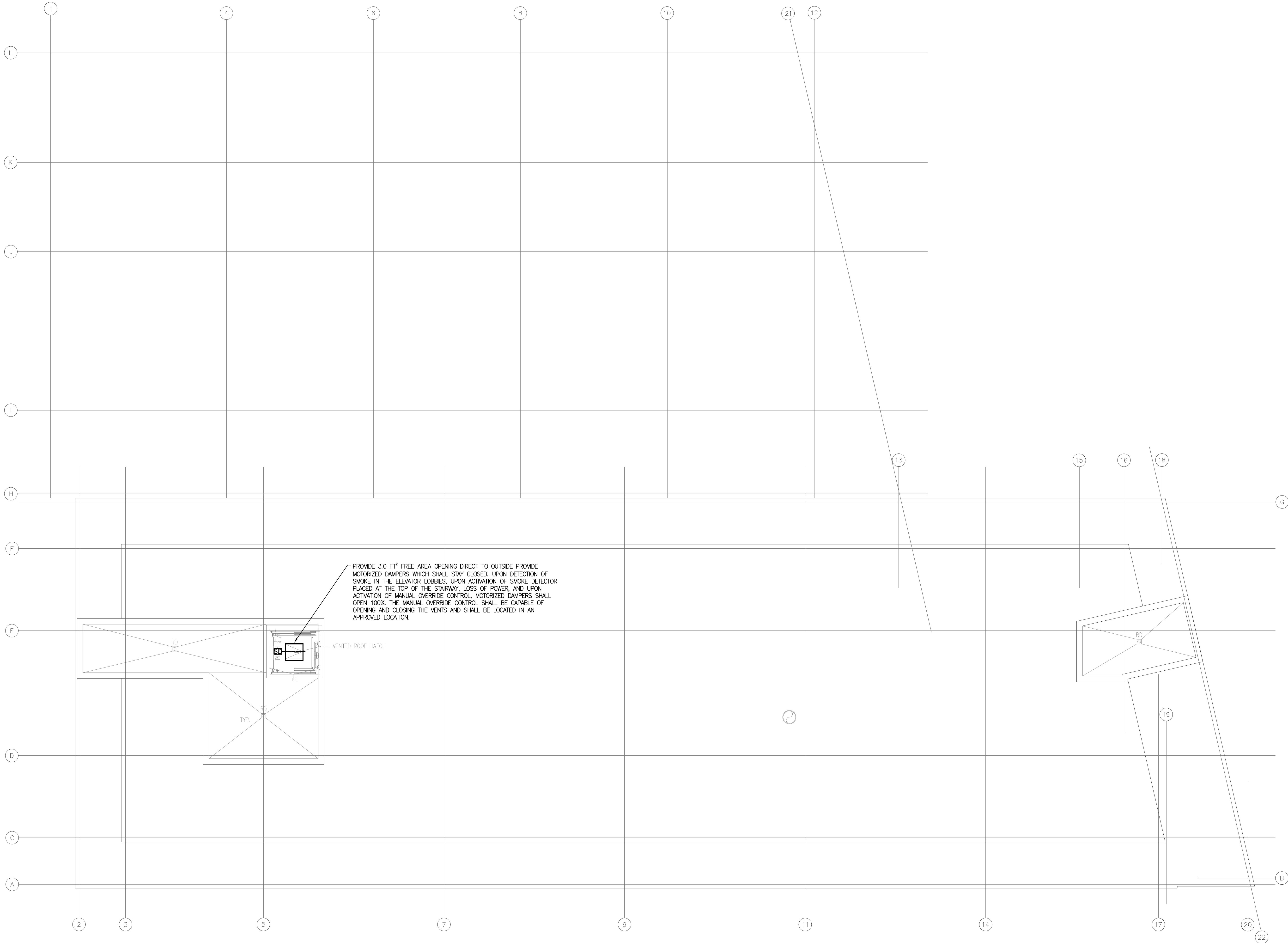
JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

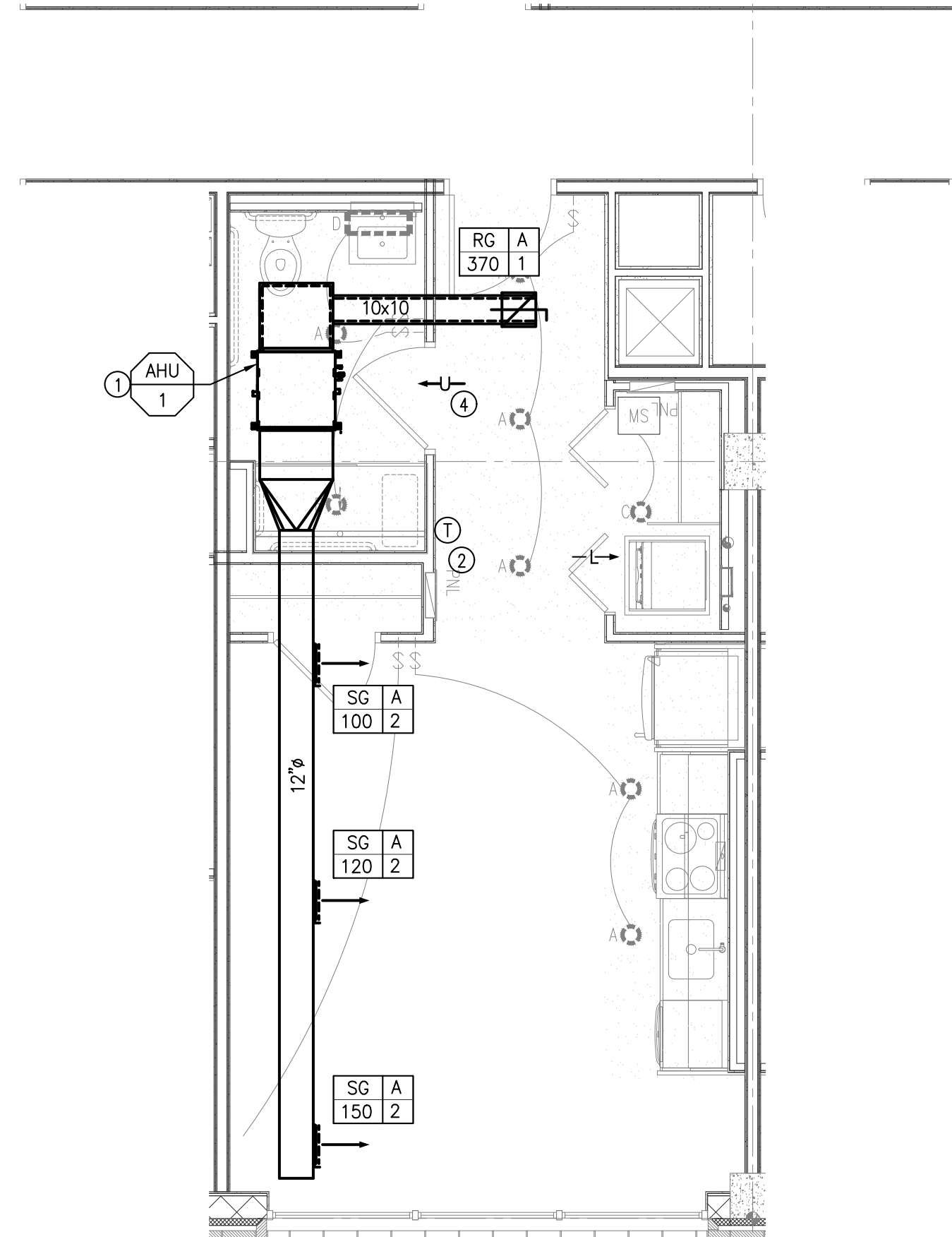
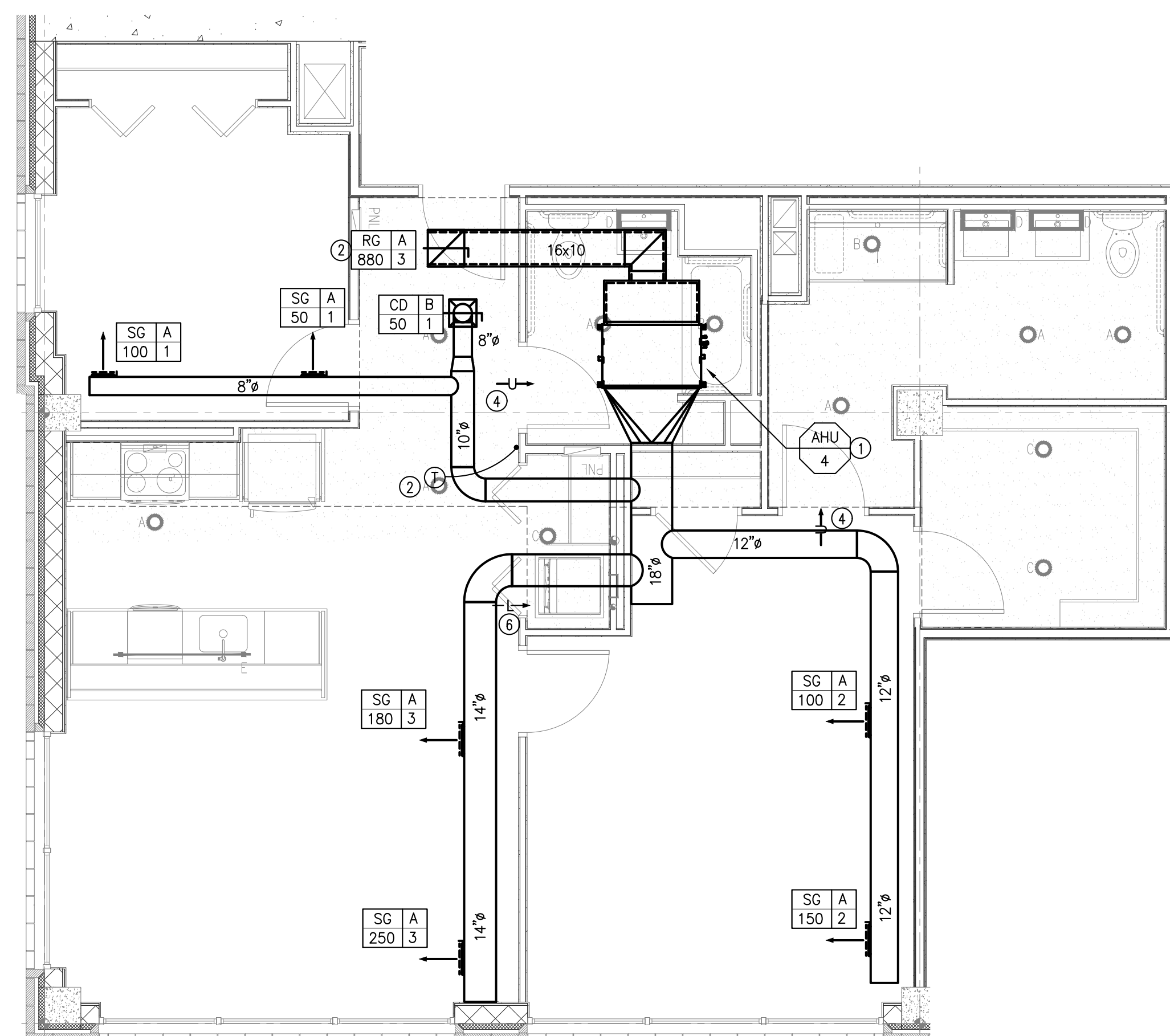
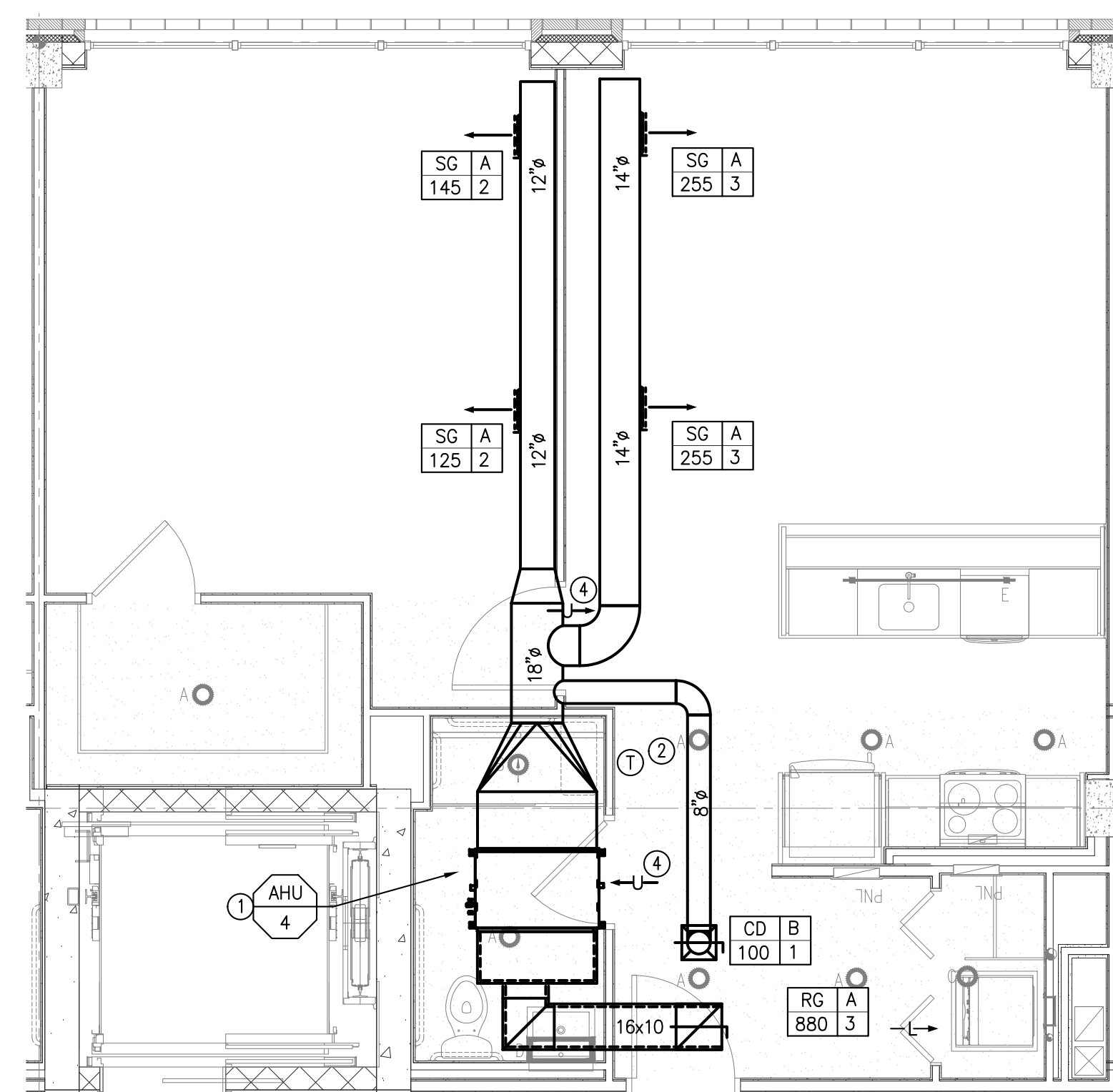
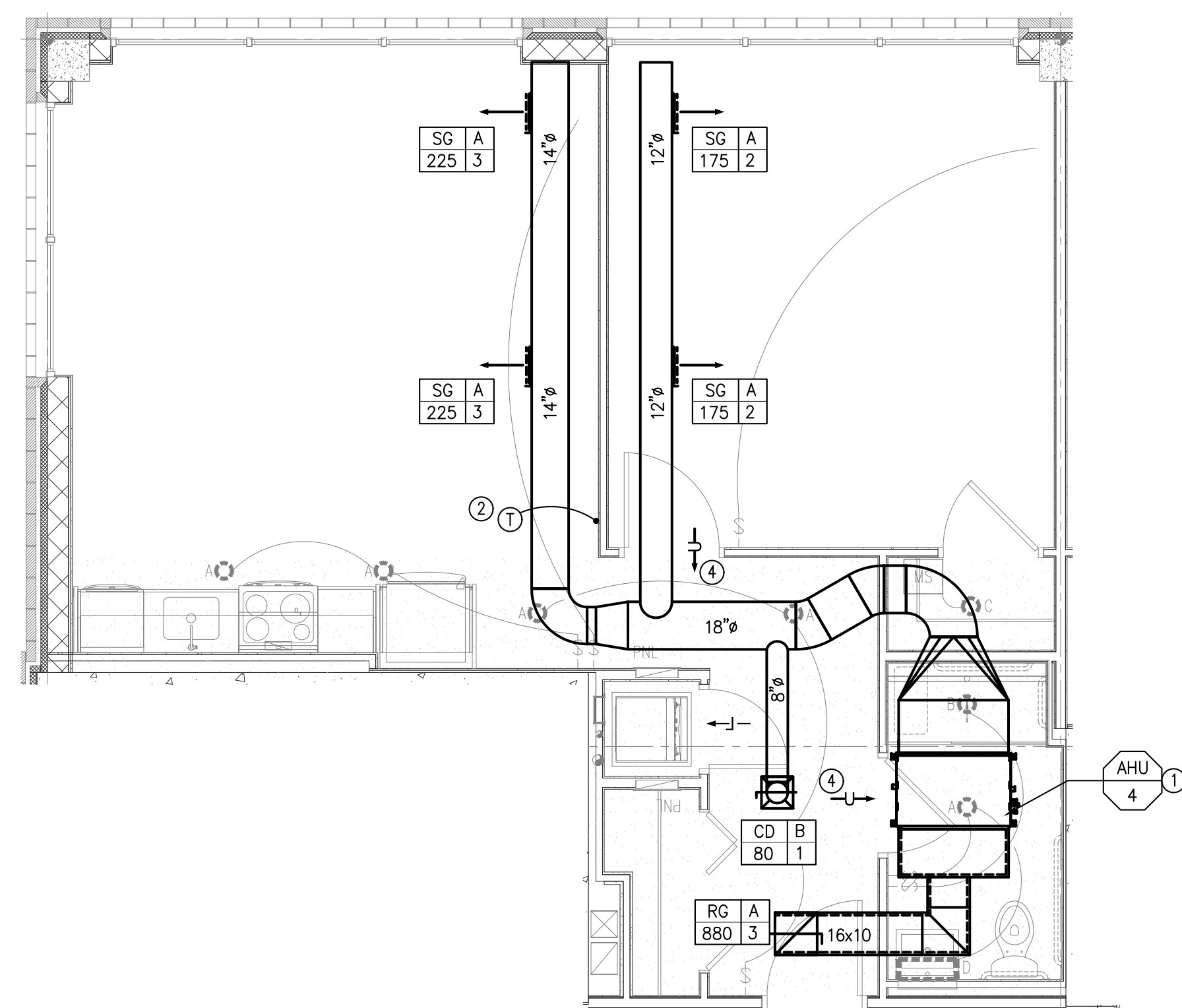
McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title:
**MECHANICAL UPPER ROOF
DECK PLAN**

Seal & Signature	Date:	07-18-2016
	Scale:	AS NOTED
	Job#:	2011
	Sheet Title:	M-106
JAMEN KHACHATURIAN, P.E. - NY LICENSE #0001224 NY CERTIFICATE OF AUTHORIZATION #001224		Sheet: of





- ### GENERAL NOTES:
- WHERE DRYER EXHAUST IS CONCEALED WITHIN THE BUILDING CONSTRUCTION, THE EQUIVALENT LEVEL OF THE EXHAUST DUCT SHALL BE IDENTIFIED ON A PERMANENT LABEL OR TAG LOCATED WITHIN 6' OF THE EXHAUST DUCT CONNECTION.
 - UNDERGO RESTROOM DOORS 1", TYPICAL FOR ALL UNITS.
 - ALL DUCTWORK, DIFFUSERS AND RETURN AIR GRILLS TO BE EQUIPPED WITH CRD'S WHERE PENETRATING FIRE RATED CEILING, COORDINATE WITH ARCHT.
 - PROVIDE DUCT INSULATION ON SUPPLY DUCT WITHOUT ACOUSTICAL LINING. EXTERNALLY WRAP ALL OA SUPPLY DUCTWORK.
 - PROVIDE FD'S/FSD'S AT ALL PENETRATIONS THROUGH FIRE-RATED WALLS, CEILINGS, AND SHAFTS WHERE REQUIRED, WHETHER INDICATED ON THIS PLAN OR NOT.
 - EXHAUSTS SHOULD BE A MINIMUM OF 3' FROM ANY OPERABLE OPENINGS INTO THE BUILDING AND 10' AWAY FROM ANY INTAKES.

- KEYED NOTES:
1. FURNISH AND INSTALL AC UNIT AS REQUIRED BY MANUFACTURER. PROVIDE REQUIRED CLEARANCE FOR SERVICE. RUN CONDENSATE TO WASHER STANDPIPE.
 2. FURNISH AND INSTALL PROGRAMMABLE THERMOSTAT. CONFIRM INSTALLATION LOCATION WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION.
 3. 1" ACOUSTICAL LINING IN S/R DUCTS WITHIN MIN 10 FT. OF UNIT.
 4. UNDERCUT DOOR 1".

---	---	---
---	---	---
---	---	---
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:	
PROPOSED MIXED USE BUILDING:	
WESTMORELAND LOFTS	
136-158 WESTMORELAND AVE.	
WHITE PLAINS, NY 10606	

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architecture | planning | interior

188 East Post Road, White Plains, NY 10601
914.949-1851 | www.papparchitects.com

JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title:
MECHANICAL TYPICAL UNIT
PLANS 1

Seal & Signature	Date:	07-18-2016
	Scale:	AS NOTED
	Job#:	2011
	Sheet Title:	M-201
	Sheet:	of

ARMON KHACHATURIAN, P.E. - NY LICENSE #068281-1
 NY CERTIFICATE OF AUTHORIZATION #0017124



- KEYED NOTES:**
1. FURNISH AND INSTALL AC UNIT AS REQUIRED BY MANUFACTURER. PROVIDE REQUIRED CLEARANCE FOR SERVICE. RUN CONDENSATE TO WASHER STANDPIPE.
2. FURNISH AND INSTALL PROGRAMMABLE THERMOSTAT. CONFIRM INSTALLATION LOCATION WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION.
3. 1" ACOUSTICAL LINING IN S/R DUCTS WITHIN MIN 10 FT. OF UNIT.
4. UNDERCUT DOOR 1".

---	---	---
---	---	---
---	---	---
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architecture | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

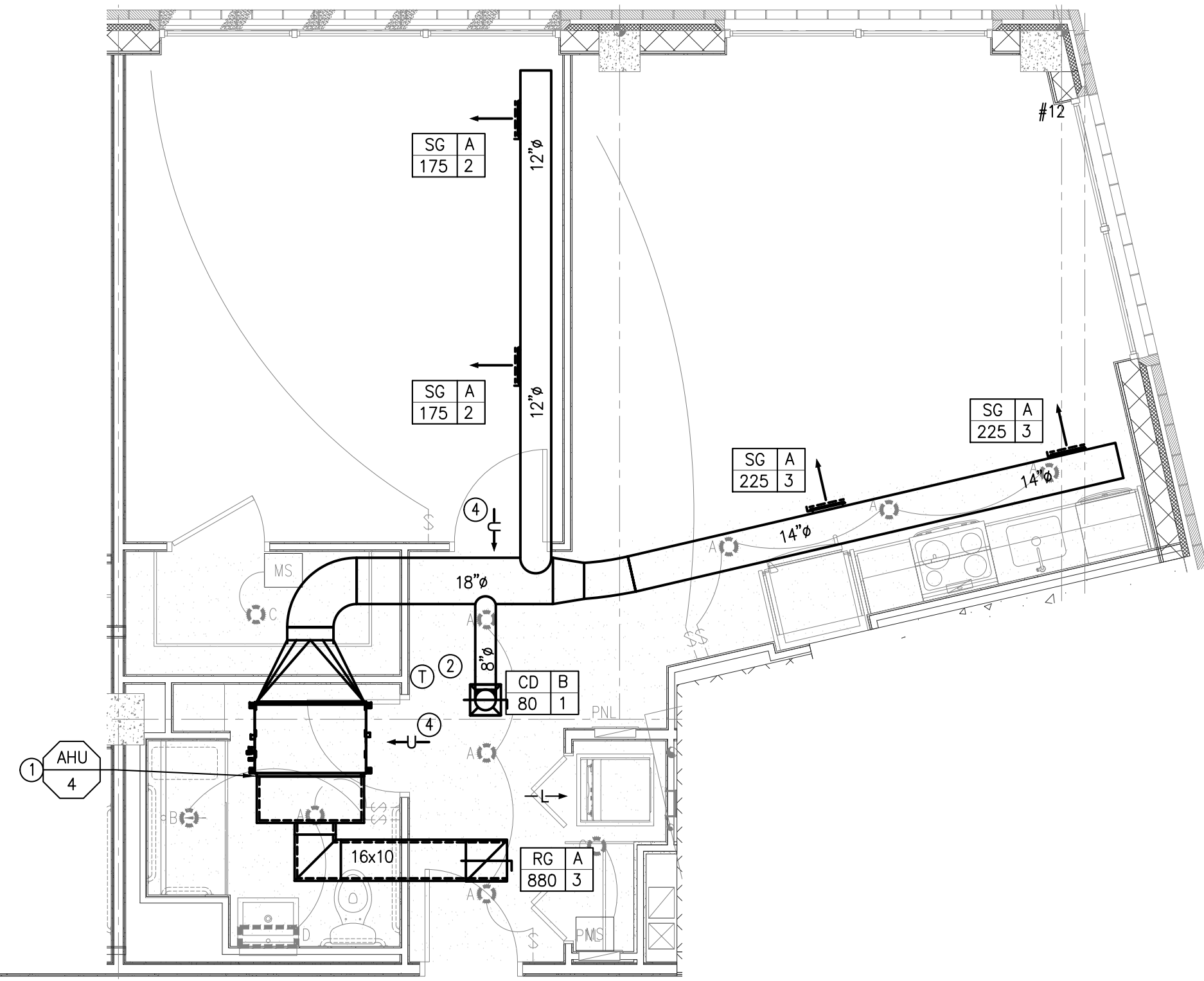
McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

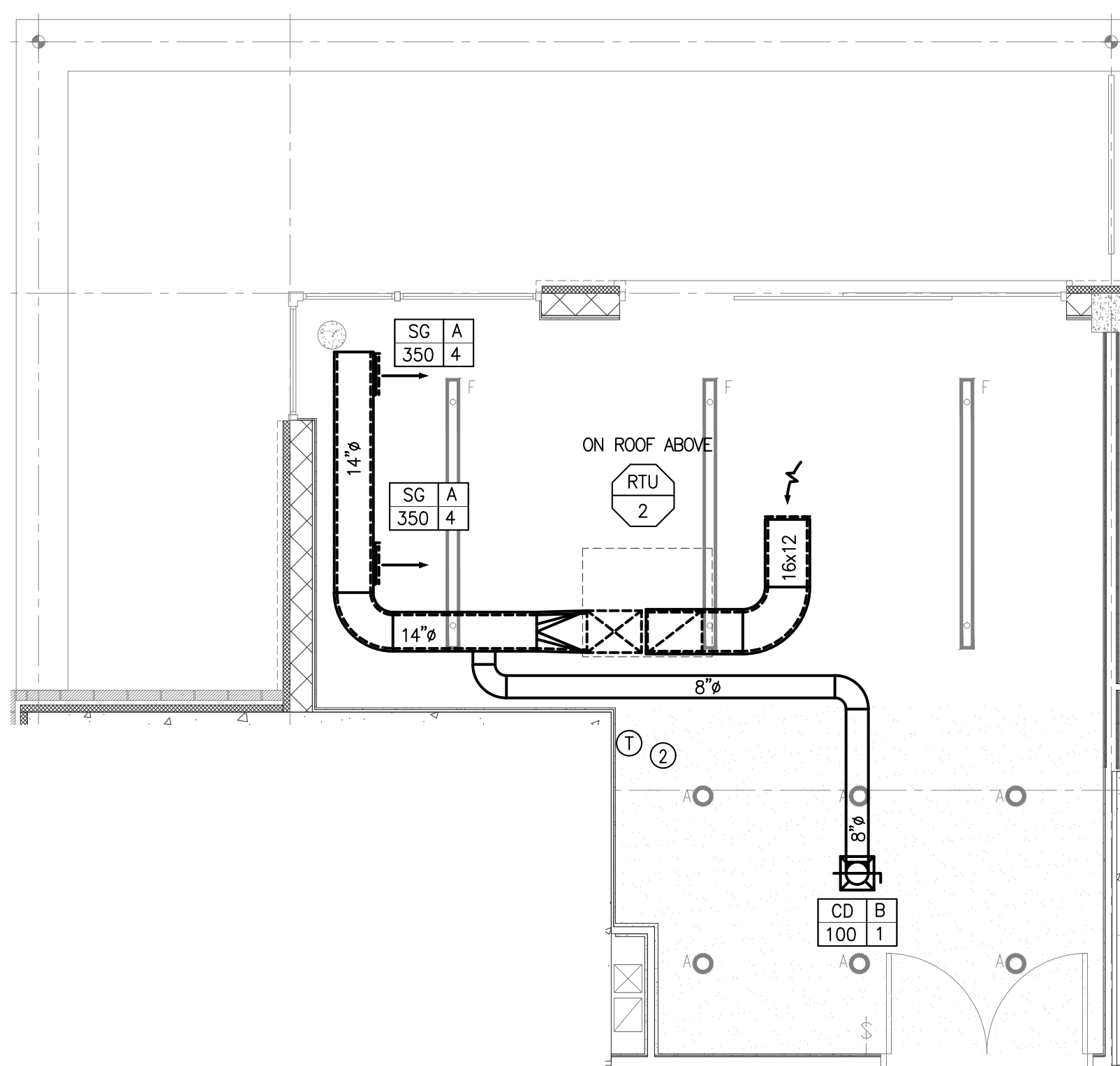
Sheet Title:
MECHANICAL TYPICAL UNIT
PLANS 2

Seal & Signature	Date:	07-18-2016
	Scale:	AS NOTED
	Job#:	2011
	Sheet Title:	M-202
	Sheet:	of

ARMED RECRUITMENT, P.R. - NY LICENSE #002281 -
NY CERTIFICATE OF AUTHORIZATION #001124



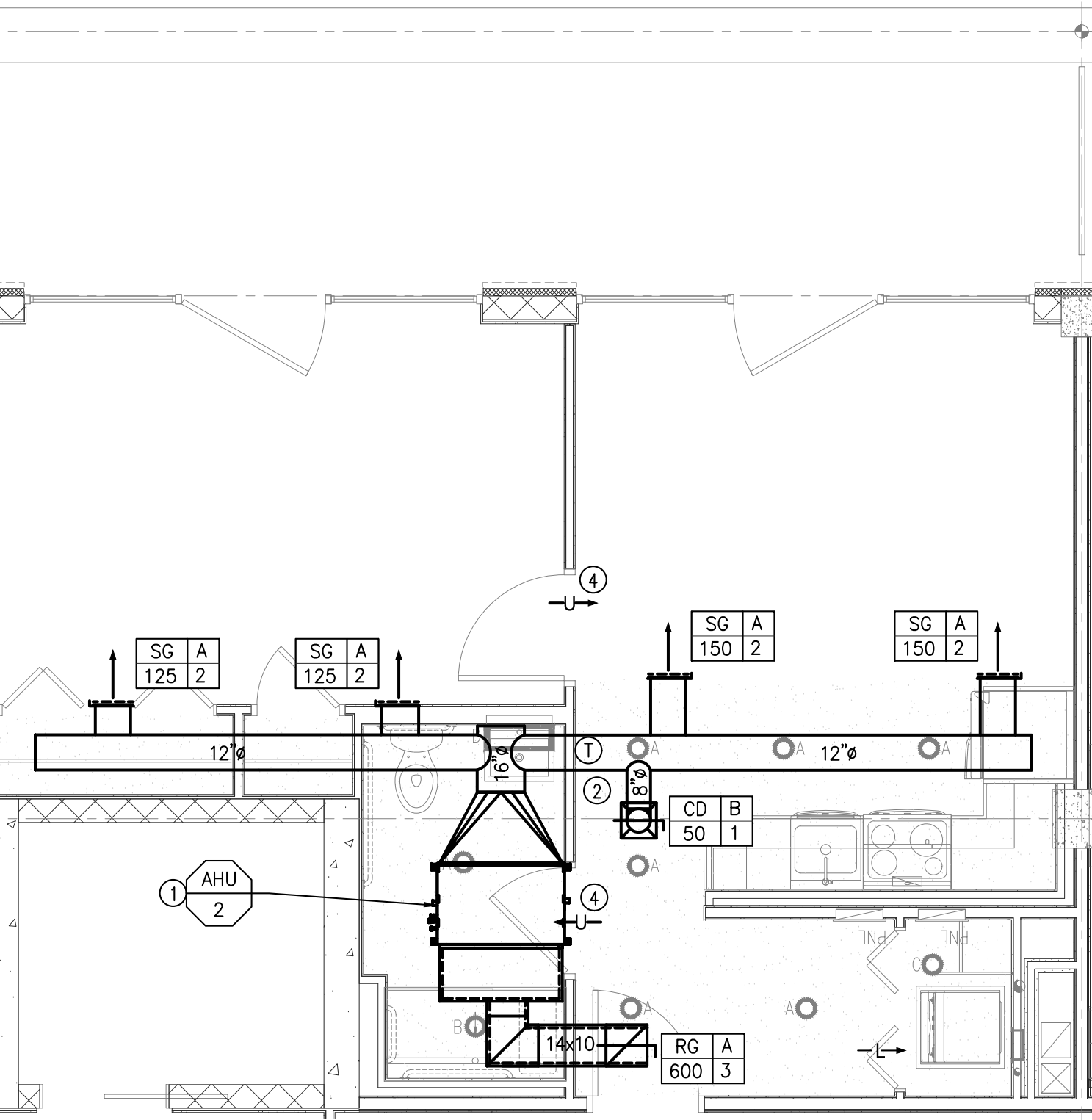
UNIT 217 TYPICAL MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"



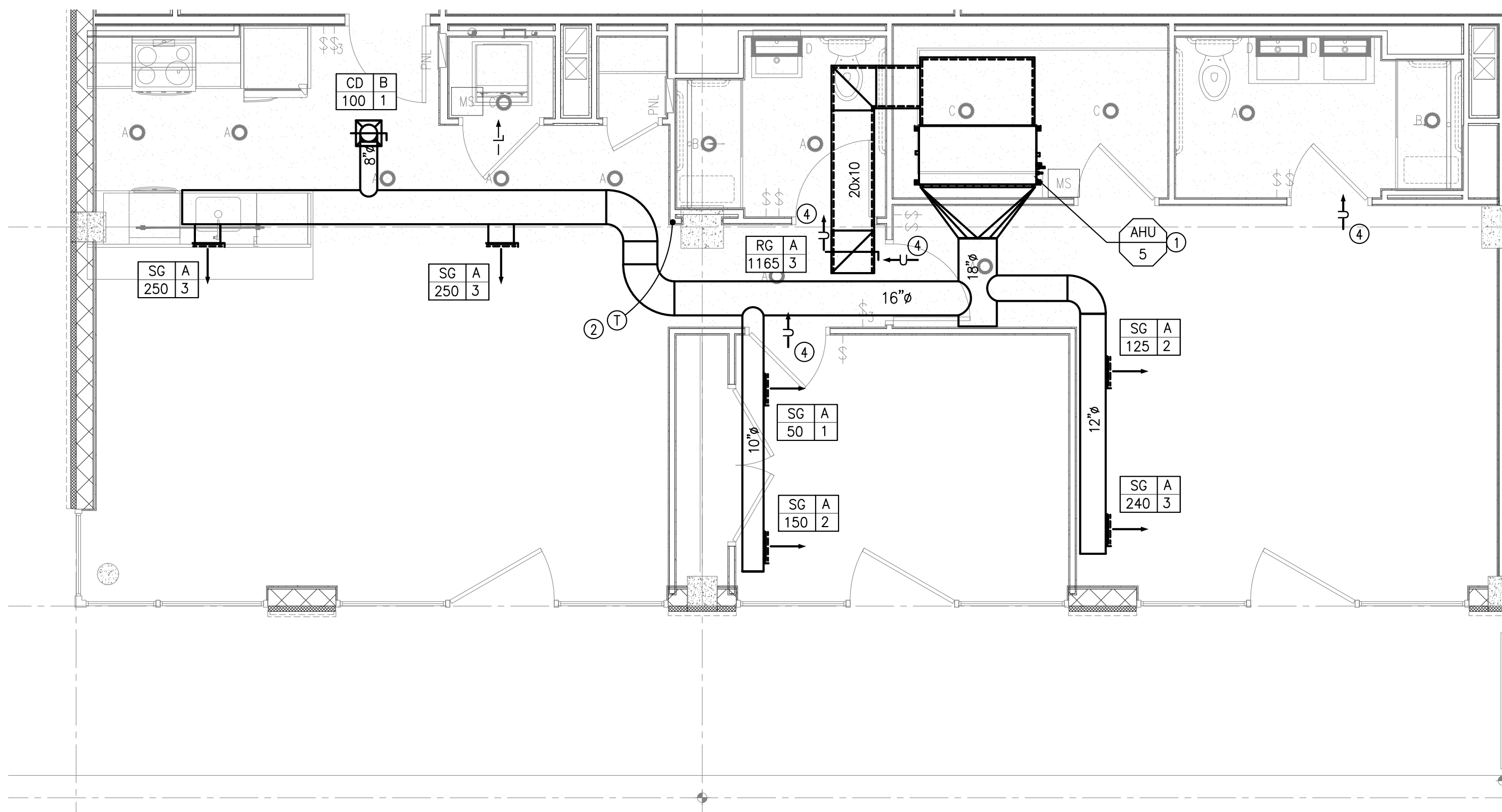
FITNESS MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

- GENERAL NOTES:**
- WHERE DRYER EXHAUST IS CONCEALED WITHIN THE BUILDING CONSTRUCTION, THE EQUIVALENT LENGTH OF THE EXHAUST DUCT SHALL BE IDENTIFIED ON A PERMANENT LABEL OR TAG, LOCATED WITHIN 6" OF THE EXHAUST DUCT CONNECTION.
 - UNDERCUT RESTROOM DOORS 1", TYPICAL FOR ALL UNITS.
 - ALL DUCTWORK, DIFFUSERS AND RETURN AIR GRILLS TO BE EQUIPPED WITH CRD'S WHERE PENETRATING FIRE RATED CEILING, COORDINATE WITH ARCH.
 - PROVIDE DUCT INSULATION ON SUPPLY DUCT WITHOUT ACOUSTICAL LINING. EXTERNALLY WRAP ALL OA SUPPLY DUCTWORK.
 - PROVIDE FD'S/FSD'S AT ALL PENETRATIONS THROUGH FIRE-RATED WALLS, CEILINGS, AND SHAFTS WHERE REQUIRED, WHETHER INDICATED ON THIS PLAN OR NOT.
 - EXHAUSTS SHOULD BE A MINIMUM OF 3' FROM ANY OPERABLE OPENINGS INTO THE BUILDING AND 10' AWAY FROM ANY INTAKES.

- KEYED NOTES:**
- FURNISH AND INSTALL AC UNIT AS REQUIRED BY MANUFACTURER. PROVIDE REQUIRED CLEARANCE FOR SERVICE. RUN CONDENSATE TO WASHER STANDPIPE.
 - FURNISH AND INSTALL PROGRAMMABLE THERMOSTAT. CONFIRM INSTALLATION LOCATION WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION.
 - 1" ACOUSTICAL LINING IN S/R DUCTS WITHIN MIN 10 FT. OF UNIT.
 - UNDERCUT DOOR 1".



UNIT 503 TYPICAL MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"



UNIT 502 TYPICAL MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

Rev. #	Revision Description	Date:
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architecture | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

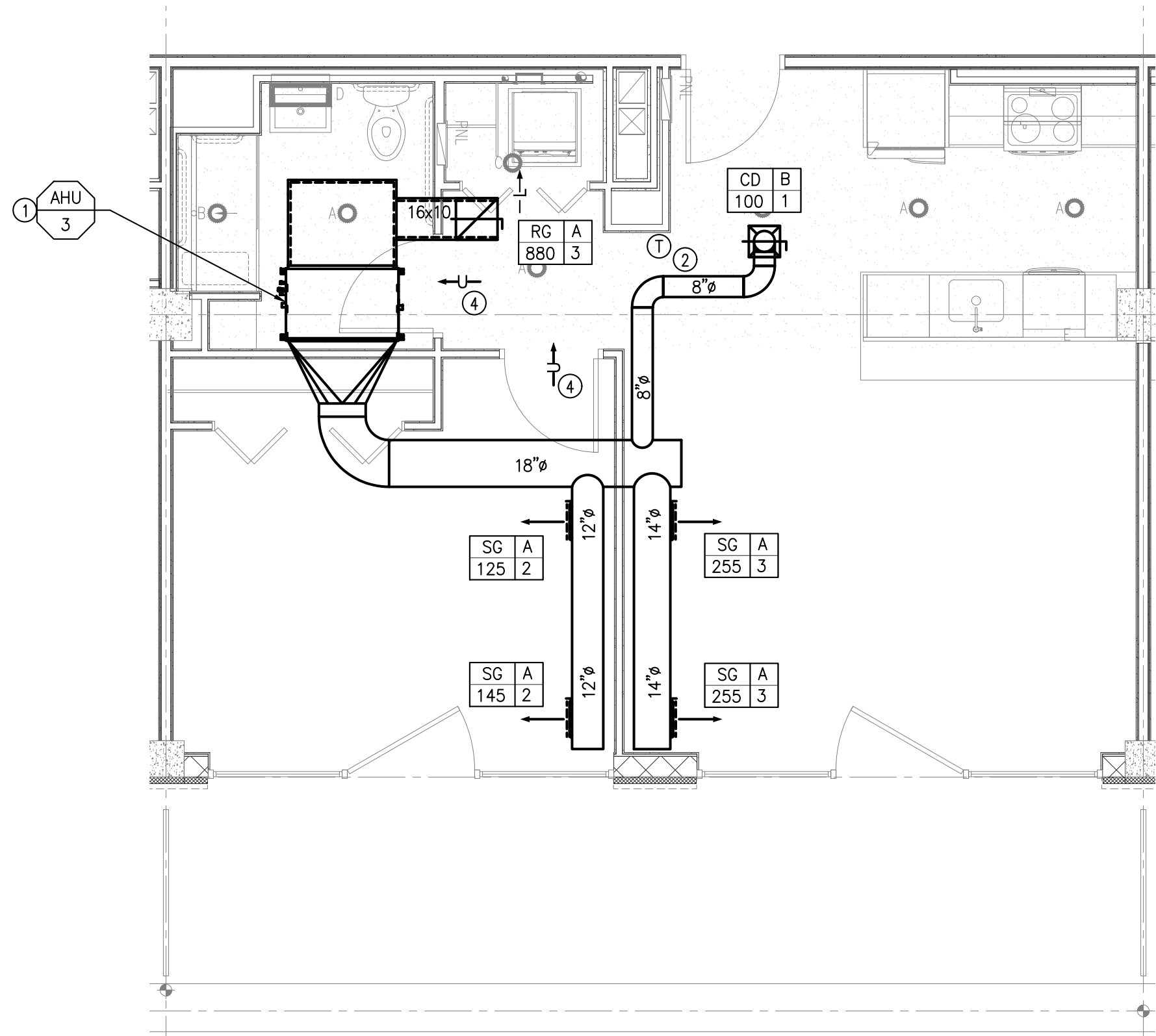
JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

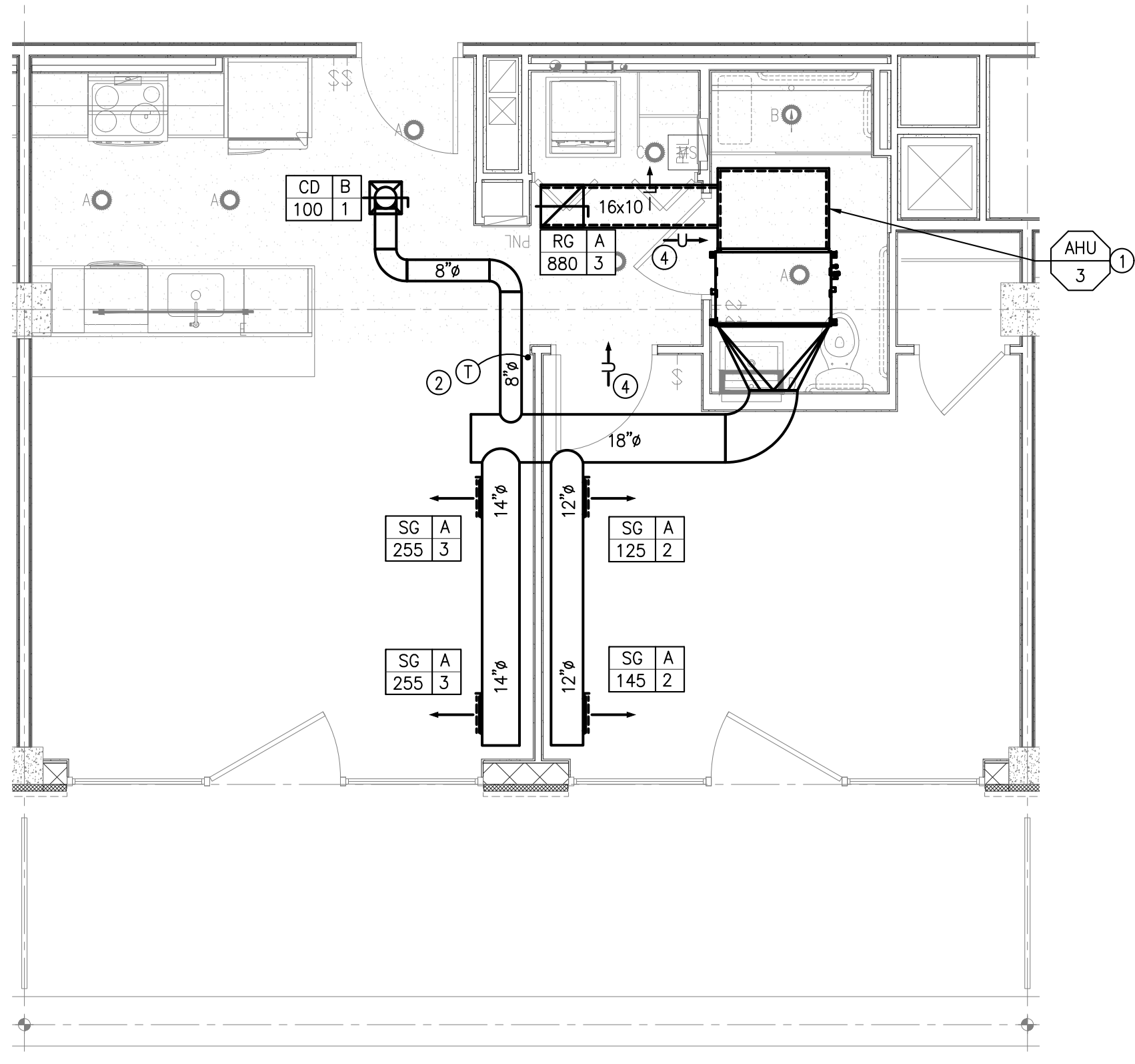
Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title:
**MECHANICAL TYPICAL UNIT
PLANS 3**

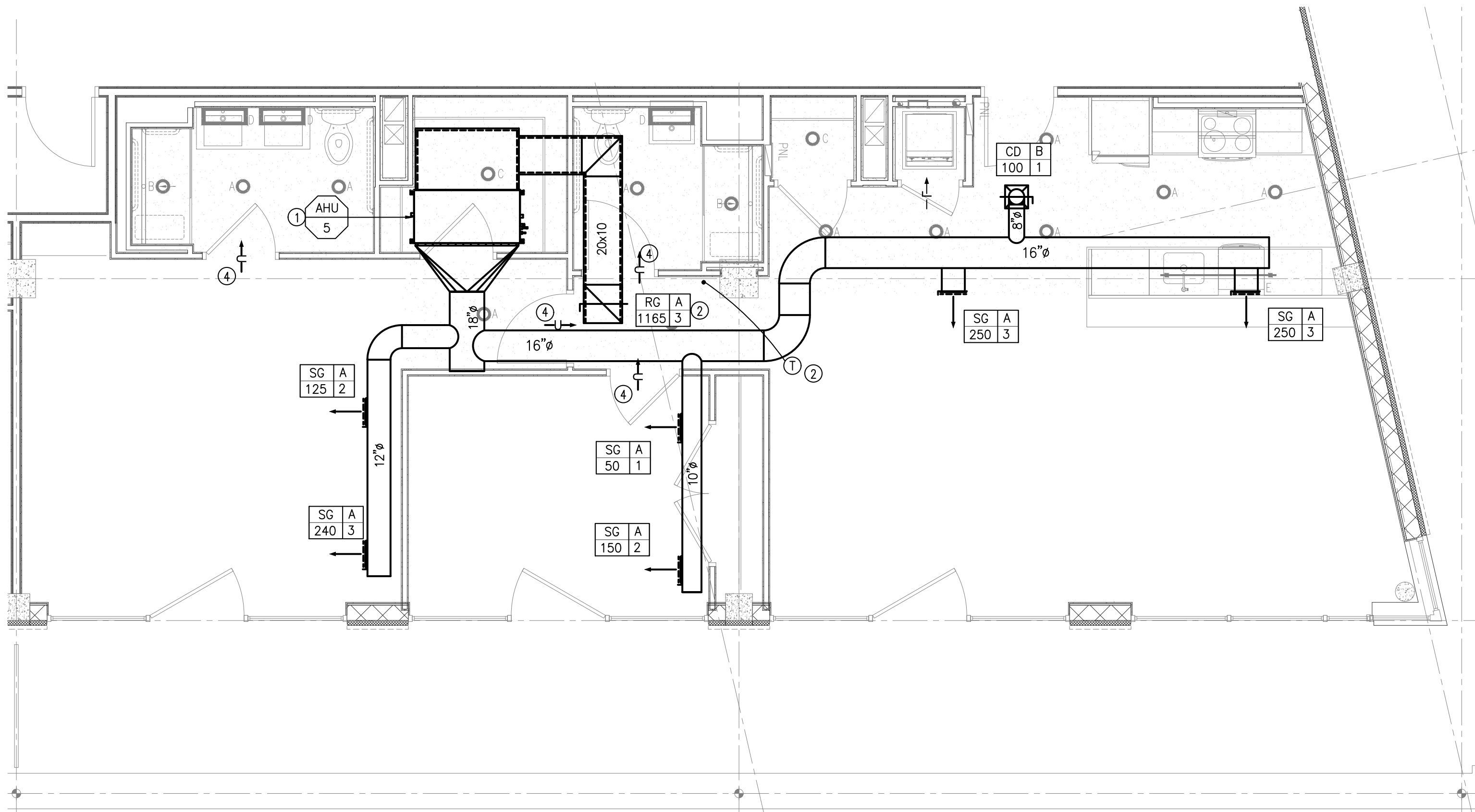
Seal & Signature	Date: 07-18-2016
	Scale: AS NOTED
	Job#: 2011
	Sheet Title: M-203



UNIT 504 MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"



UNIT 506 MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"



UNIT 508 MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

- WHERE DRYER EXHAUST IS CONCEALED WITHIN THE BUILDING CONSTRUCTION, THE EQUIVALENT LENGTH OF THE EXHAUST DUCT SHALL BE IDENTIFIED ON A PERMANENT LABEL OR TAG, LOCATED WITHIN 6" OF THE EXHAUST DUCT CONNECTION.
- UNDERCUT RESTROOM DOORS 1", TYPICAL FOR ALL UNITS.
- ALL DUCTWORK, DIFFUSERS AND RETURN AIR GRILLS TO BE EQUIPPED WITH CRD'S WHERE PENETRATING FIRE RATED CEILING, COORDINATE WITH ARCH.
- PROVIDE DUCT INSULATION ON SUPPLY DUCT WITHOUT ACOUSTICAL LINING. EXTERNALLY WRAP ALL OA SUPPLY DUCTWORK.
- PROVIDE FD'S/FSD'S AT ALL PENETRATIONS THROUGH FIRE-RATED WALLS, CEILINGS, AND SHAFTS WHERE REQUIRED, WHETHER INDICATED ON THIS PLAN OR NOT.
- EXHAUSTS SHOULD BE A MINIMUM OF 3' FROM ANY OPERABLE OPENINGS INTO THE BUILDING AND 10' AWAY FROM ANY INTAKES.

KEYED NOTES:

- FURNISH AND INSTALL AC UNIT AS REQUIRED BY MANUFACTURER. PROVIDE REQUIRED CLEARANCE FOR SERVICE. RUN CONDENSATE TO WASHER STANDPIPE.
- FURNISH AND INSTALL PROGRAMMABLE THERMOSTAT. CONFIRM INSTALLATION LOCATION WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION.
- 1" ACOUSTICAL LINING IN S/R DUCTS WITHIN MIN 10 FT. OF UNIT.
- UNDERCUT DOOR 1".

2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architecture | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1651 | www.papparchitects.com

JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title:
**MECHANICAL TYPICAL UNIT
PLANS 4**

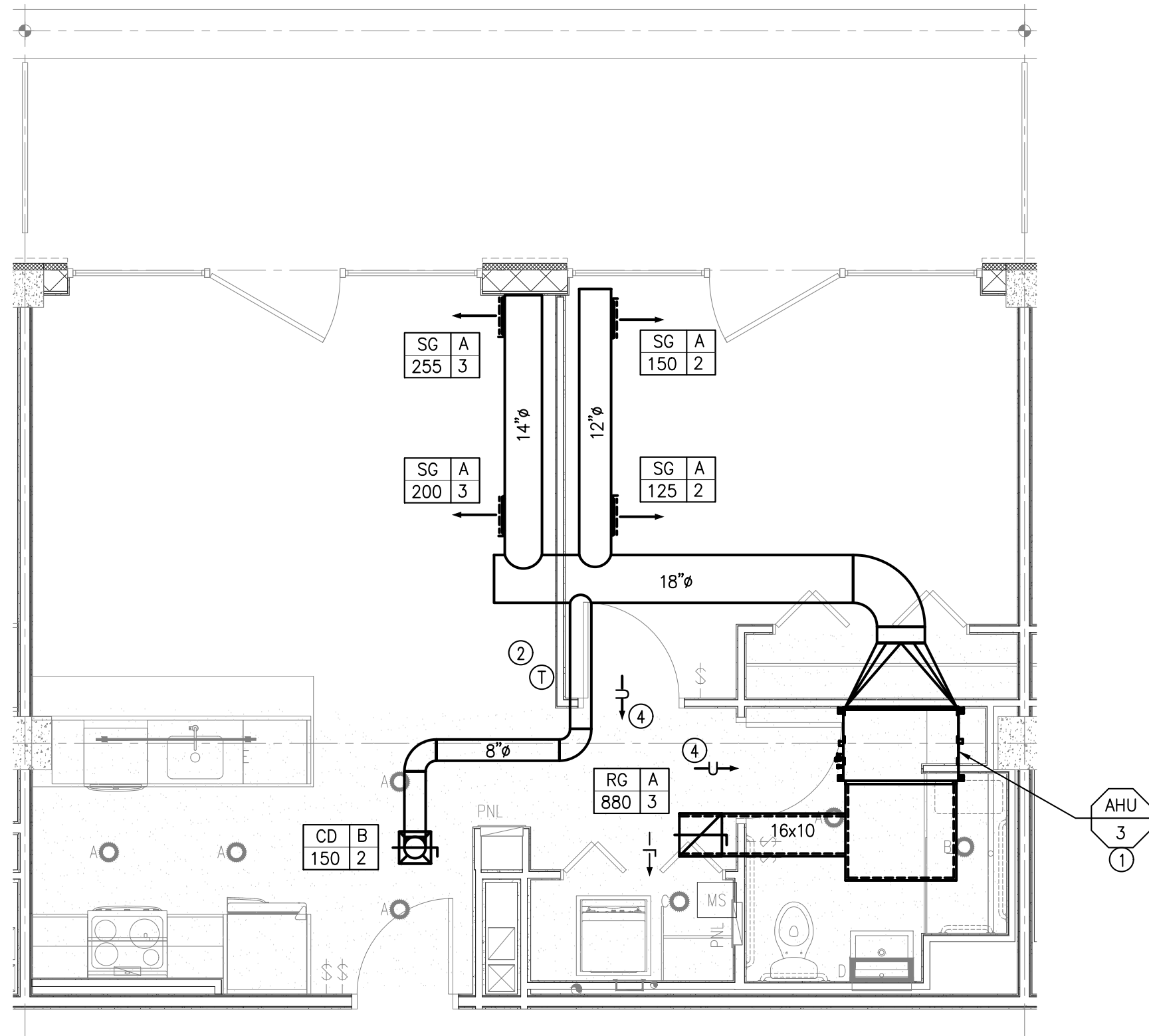
Seal & Signature	Date:	07-18-2016
	Scale:	AS NOTED
	Job#:	2011
	Sheet Title:	M-204
JAMES KHACHATURIAN, P.E. - NY LICENSE #000011224 NY CERTIFICATE OF AUTHORIZATION #0011224		Sheet: of

GENERAL NOTES:

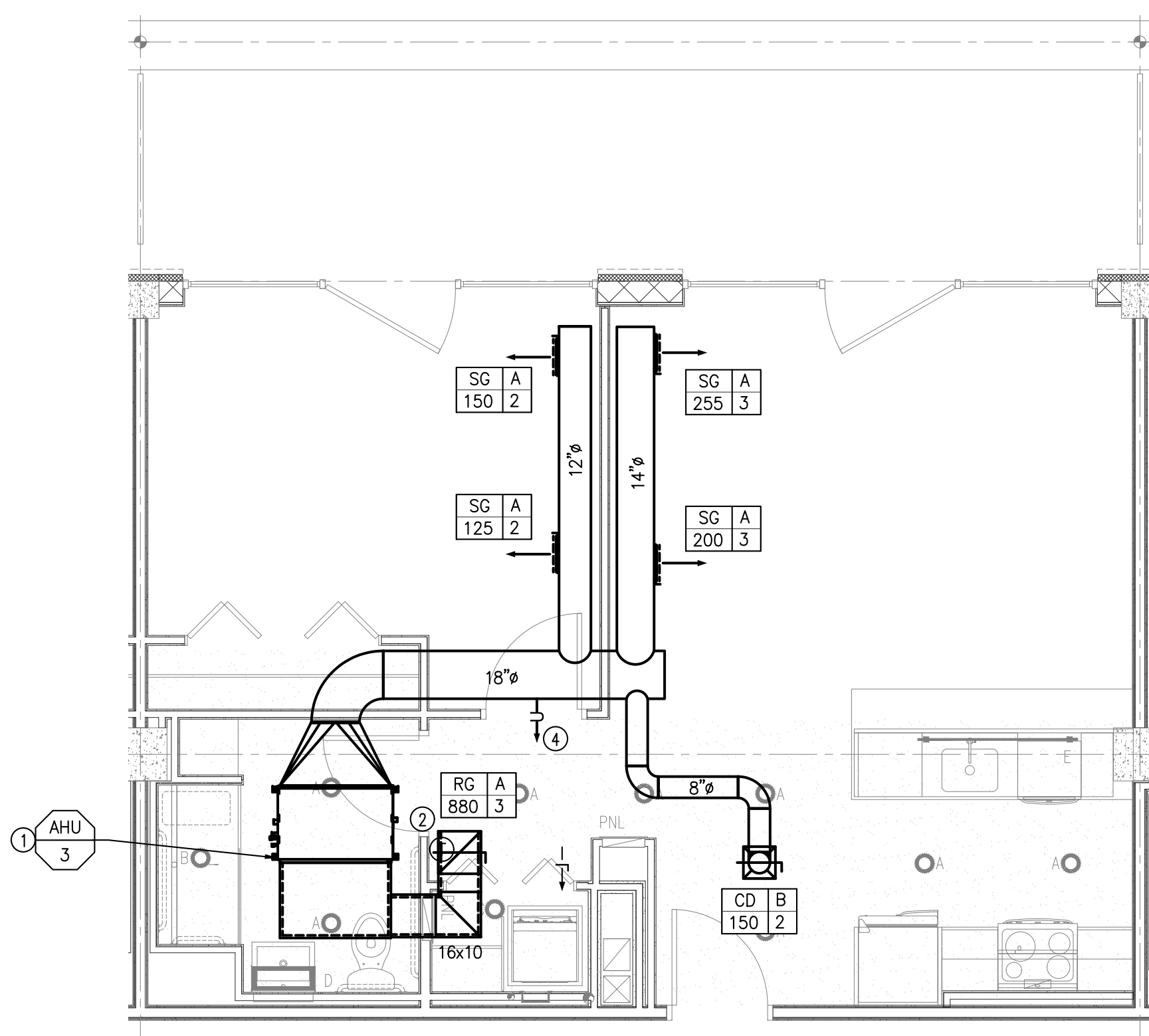
- WHERE DRYER EXHAUST IS CONCEALED WITHIN THE BUILDING CONSTRUCTION, THE EQUIVALENT LENGTH OF THE EXHAUST DUCT SHALL BE IDENTIFIED ON A PERMANENT LABEL OR TAG, LOCATED WITHIN 6" OF THE EXHAUST DUCT CONNECTION.
- UNDERCUT RESTROOM DOORS 1", TYPICAL FOR ALL UNITS.
- ALL DUCTWORK, DIFFUSERS AND RETURN AIR GRILLS TO BE EQUIPPED WITH CRD'S WHERE PENETRATING FIRE RATED CEILING, COORDINATE WITH ARCH.
- PROVIDE DUCT INSULATION ON SUPPLY DUCT WITHOUT ACOUSTICAL LINING. EXTERNALLY WRAP ALL OA SUPPLY DUCTWORK.
- PROVIDE FD'S/FSD'S AT ALL PENETRATIONS THROUGH FIRE-RATED WALLS, CEILINGS, AND SHAFTS WHERE REQUIRED, WHETHER INDICATED ON THIS PLAN OR NOT.
- EXHAUSTS SHOULD BE A MINIMUM OF 3' FROM ANY OPERABLE OPENINGS INTO THE BUILDING AND 10' AWAY FROM ANY INTAKES.

KEYED NOTES:

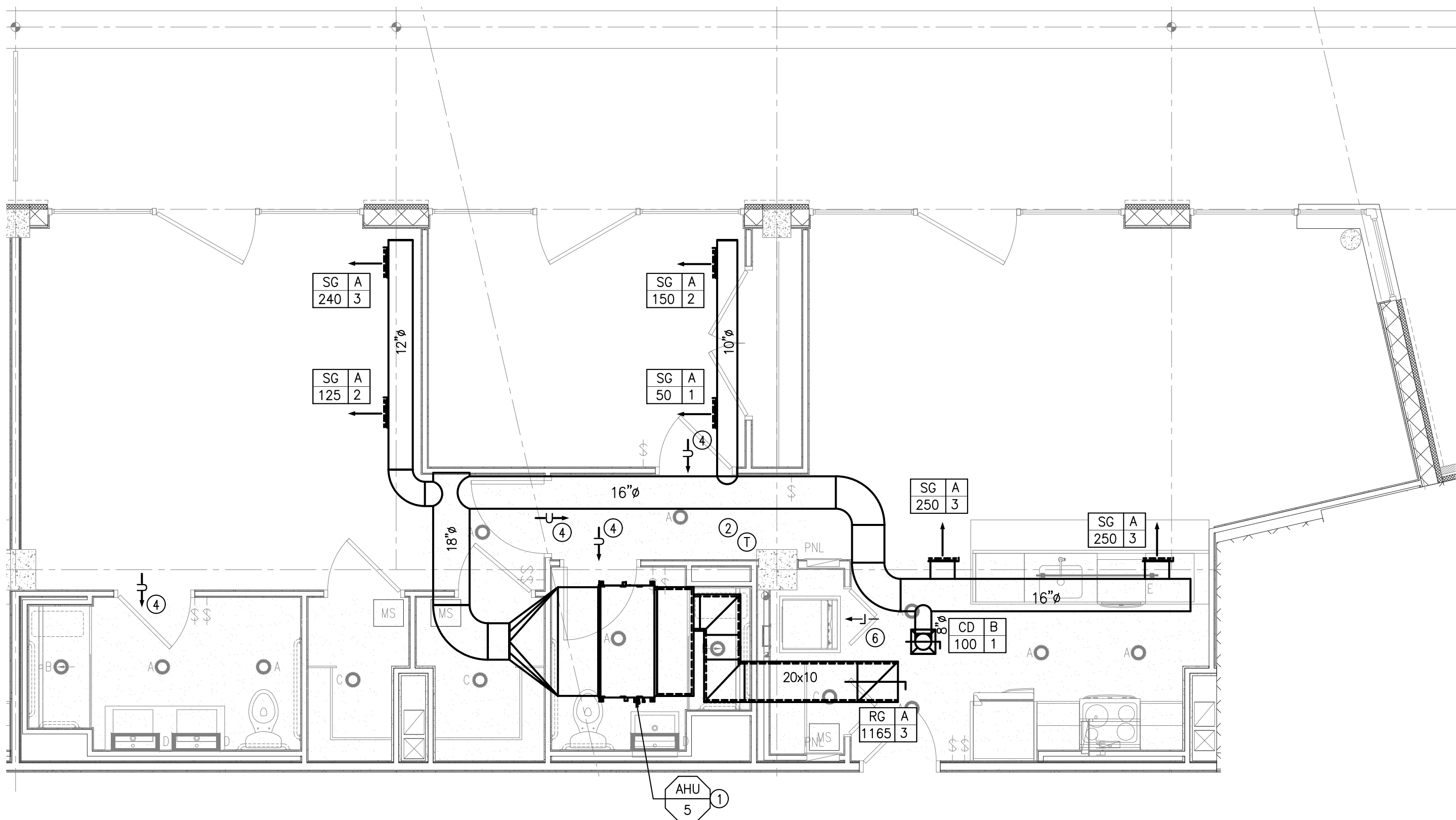
- FURNISH AND INSTALL AC UNIT AS REQUIRED BY MANUFACTURER. PROVIDE REQUIRED CLEARANCE FOR SERVICE. RUN CONDENSATE TO WASHER STANDPIPE.
- FURNISH AND INSTALL PROGRAMMABLE THERMOSTAT. CONFIRM INSTALLATION LOCATION WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION.
- 1" ACOUSTICAL LINING IN S/R DUCTS WITHIN MIN 10 FT. OF UNIT.
- UNDERCUT DOOR 1".



UNIT 505 MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"



UNIT 507 MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"



UNIT 509 MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architecture | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title: MECHANICAL TYPICAL UNIT PLANS 5	
Seal & Signature	Date: 07-18-2016
	Scale: AS NOTED
	Job#: 2011
	Sheet Title: M-205
JAMON KHACHATURIAN, P.E. - NY LICENSE #00000001 NY CERTIFICATE OF AUTHORIZATION #001724	Sheet: of

1 SCOPE OF WORK

- 1.1. THE WORK UNDER THIS SECTION SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, HOISTING, SCAFFOLDING, SUPPORT, SUPERVISION,, SERVICES AND OPERATIONS NECESSARY TO COMPLETE THE INSTALLATION OF THE HEATING, VENTILATING AND AIR CONDITIONING WORK SHOWN IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE SCOPE OF WORK SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING.

2 GENERAL CONDITIONS - HVAC

- 2.1. THE GENERAL CONDITIONS AND THE SUPPLEMENTARY CONDITIONS OF THE CONTRACT FOR CONSTRUCTION AND THE ARCHITECTS AND ENGINEER'S SPECIFICATIONS AS APPLICABLE ARE PART OF THIS CONTRACT.
- 2.2. THE ENTIRE INSTALLATION SHALL CONFORM WITH THE MOST RECENTLY REVISED VERSION OF ALL APPLICABLE LAWS, RULES, REGULATIONS, CODES, ORDINANCES OF FEDERAL, STATE AND LOCAL AUTHORITIES HAVING JURISDICTION, INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING: THE STATE ENERGY CONSERVATION CODE, IBC CODE, NATIONAL ELECTRIC CODE, INDUSTRIAL RISK INSURERS, ELECTRIC TESTING LABORATORY, ASHRAE, ASME, NFPA, AND UL.
- 2.3. REMOVAL AND DISPOSAL OF EXISTING EQUIPMENT AND CONSTRUCTION DEBRIS FROM THE SITE IS THE RESPONSIBILITY OF THIS CONTRACTOR, WITH THE EXCEPTION OF SPECIFIC EQUIPMENT AND APPARATUS WHICH MAY BE REQUIRED TO BE TURNED OVER TO THE OWNER/TENANT OR THE BUILDING REPRESENTATIVE.
- 2.4. ALL WORK AND MATERIALS SHALL BE GUARANTEED AS TO QUALITY AND WORKMANSHIP, AND GUARANTEED AGAINST ALL DEFECTS, FOR A PERIOD OF ONE YEAR.
- 2.5. PROVIDE ALL-RISK BUILDERS' INSURANCE IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING AND/OR THE OWNER, NAMING THE OWNER, ARCHITECT AND ENGINEER AS ADDITIONAL INSUREDS AND CONTAINING A PROVISION THAT THE INSURANCE IS NOT CANCELABLE UNTIL 30 DAYS AFTER THE CONTRACTOR, OWNER, ARCHITECT AND ENGINEER HAVE RECEIVED WRITTEN NOTICE OF INTENTION TO CANCEL. IN THE EVENT OF CANCELLATION, THE OWNER HAS THE OPTION TO REPLACE SUCH INSURANCE AT THE CONTRACTOR'S EXPENSE.
- 2.6. THE CONTRACTOR AND SUBCONTRACTORS, IF ANY, COVENANT AND AGREE:
- 2.6.1. TO INDEMNIFY, DEFEND AND HOLD HARMLESS THE OWNER, ARCHITECT AND CONSULTING ENGINEERS AGAINST ANY LIABILITY, LOSS, DAMAGE OR EXPENSE, INCLUDING ATTORNEYS' FEES, ARISING FROM A FAILURE OR ALLEGED FAILURE ON THE PART OF THE CONTRACTOR, HIS SUBCONTRACTORS OR HIS OR THEIR AGENTS, SERVANTS AND EMPLOYEES PROPERLY TO DISCHARGE THE OBLIGATIONS ASSUMED BY HIM OR THEM IN PERFORMANCE OF THE WORK, INCLUDING ANY ACT OR OMISSION ALLEGEDLY RESULTING IN DEATH OR PERSONAL INJURY OR PROPERTY DAMAGE OR IMPROPER CONSTRUCTION, CONSTRUCTION TECHNIQUES, OR THE USE OF IMPROPER OR INAPPROPRIATE MATERIALS, METHODS OR TOOLS.
- 2.6.2. TO EXECUTE THE WORK IN THE BEST AND MOST THOROUGH MANNER AND TO THE SATISFACTION OF THE OWNER, ARCHITECT AND CONSULTING ENGINEERS, WHO WILL JOINTLY INTERPRET THE MEANING OF THE DRAWINGS AND SPECIFICATIONS AND SHALL HAVE THE POWER TO REJECT ANY WORK AND MATERIALS WHICH, IN THEIR JUDGMENT, ARE NOT IN FULL ACCORDANCE THEREWITH.
- 2.6.3. TO BE RESPONSIBLE FOR ALL MATERIAL UNTIL COMPLETION AND FINAL ACCEPTANCE. REPLACE ANY MATERIAL AND/OR EQUIPMENT WHICH MAY BE DAMAGED, LOST OR STOLEN AND TO DO OVER ANY REJECTED WORK WITHOUT ADDITIONAL COST TO THE OWNER. GUARD THE BUILDING AND ITS CONTENTS AGAINST DAMAGE BY THE CONTRACTOR OR HIS EMPLOYEES, AND MAKE GOOD ANY DAMAGE FREE OF CHARGE.
- 2.6.4. THAT HE WILL PROVIDE AND MAINTAIN A SAFE PLACE TO WORK AND THAT HE WILL COMPLY WITH ALL LAWS AND REGULATIONS OF ANY GOVERNMENTAL AUTHORITY HAVING JURISDICTION THEREOF, AND THAT HE AGREES TO INDEMNIFY, DEFEND AND HOLD HARMLESS THE OWNER, ARCHITECT AND CONSULTING ENGINEERS FROM AND AGAINST ANY LIABILITY, LOSS, DAMAGE OR EXPENSE, INCLUDING ATTORNEY'S FEES, ARISING FROM A FAILURE OR ALLEGED FAILURE ON HIS PART PROPERLY TO DISCHARGE THE OBLIGATIONS ASSUMED BY HIM OR THEM IN THE PERFORMANCE OF THE WORK, INCLUDING ANY ACT, ERROR OR OMISSION ALLEGEDLY RESULTING IN THE DEATH OR PERSONAL INJURY OR PROPERTY DAMAGE OR IMPROPER CONSTRUCTION, CONSTRUCTION TECHNIQUES, OR THE USE OF IMPROPER OR INAPPROPRIATE MATERIAL OR TOOLS.
- 2.6.5. THAT ANY CONTROVERSY OR DISPUTE TO WHICH THE CONTRACTOR, OWNER, ARCHITECT OR CONSULTING ENGINEERS ARE PARTIES SHALL BE SUBMITTED TO ARBITRATION BEFORE THE AMERICAN ARBITRATION ASSOCIATION FOR DECISION IN ACCORDANCE WITH THE RULES OF SUCH ASSOCIATION FOR CONSTRUCTION INDUSTRY DISPUTES. THE CONTRACTOR AGREES TO MAKE AVAILABLE TO THE CONSULTING
- 2.6.6. ENGINEERS, ON DEMAND, SIGNED COPIES OF THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR AND BETWEEN THE CONTRACTOR AND HIS SUBCONTRACTORS. THE CONTRACTOR AGREES THAT BY SUBMITTING A BID WHICH IS ACCEPTED, THIS PARAGRAPH SHALL BE DEEMED A WRITTEN AGREEMENT TO SUBMIT TO ARBITRATION ANY CONTROVERSY THEREAFTER ARISING.
- 2.6.7. PUT WORK IN PLACE AS FAST AS REASONABLY POSSIBLE; AT ALL TIMES, KEEP A COMPETENT FOREMAN IN CHARGE OF THE WORK AND FACILITATE ITS INSPECTION BY THE CONTRACTOR, ARCHITECT AND CONSULTING ENGINEERS.
- 2.6.8. EXCEPT FOR SUCH CHANGES AS MAY BE SPECIFICALLY APPROVED BY THE OWNER, ARCHITECT AND CONSULTING ENGINEERS, IN ACCORDANCE WITH ALTERNATES OR OPTIONS STATED HEREAFTER, ALL WORK MUST BE IN FULL ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, COMPLETE IN EVERY WAY FOR EFFICIENT AND SATISFACTORY OPERATION WHEN DELIVERED TO THE OWNER.
- 2.6.9. THAT THE MATERIALS WILL BE NEW AND THE WORKMANSHIP SUPPLIED UNDER THESE SPECIFICATIONS WILL BE OF THE BEST GRADE, THE APPARATUS WILL BE ERECTED IN A PRACTICAL AND FIRST CLASS MANNER, IT WILL BE COMPLETE AND READY FOR OPERATION, NOTHING OMITTED IN THE WAY OF LABOR AND MATERIAL REQUIRED TO MAKE IT SO, ALTHOUGH NOT SPECIFICALLY SHOWN IN DETAIL OR MENTIONED HEREIN, AND THAT IT WILL BE DELIVERED IN GOOD WORKING ORDER, COMPLETE AND PERFECT IN EVERY RESPECT WITHOUT ADDITIONAL COST.

- 2.6.10. THAT SUBMISSION OF A BID IS A REPRESENTATION THAT THEY HAVE BECOME THOROUGHLY ACQUAINTED WITH THE WORK INVOLVED AND HAVE OBTAINED AND VERIFIED AT THE BUILDING ALL MEASUREMENTS NECESSARY FOR THE PROPER INSTALLATION OF WORK. FURNISH TO ALL SECTIONS ANY INFORMATION RELATING TO WORK OF THIS SECTION NECESSARY FOR THE PROPER INSTALLATION OF THEIR SECTIONS. THE CONTRACTOR SHALL COORDINATE FOR FINISHES ADJACENT TO WORK OF THIS SECTION AND TO ARRANGE TO HAVE VISIBLE PORTIONS OF WORK FIT IN AND HARMONIZE WITH THE FINISH IN A MANNER SATISFACTORY TO THE ARCHITECT.
- 2.6.11. TO MAKE EVERY EFFORT TO FURNISH ALL EQUIPMENT OF ANY GENERIC TYPE FROM ONE MANUFACTURER.
- 2.6.12. WHERE INCONSISTENCIES OCCUR BETWEEN THE PLANS AND SPECIFICATIONS, OR WITHIN EITHER DOCUMENT ITSELF, THE ITEM OR ARRANGEMENT OF BETTER QUALITY, GREATER QUANTITY OR HIGHER COST HAS BEEN INCLUDED IN THE BASE BID.
- 2.7. DELIVERY AND STORAGE OF MATERIALS SHALL BE PERFORMED AS DIRECTED BY THE TENANT REPRESENTATIVE AND COORDINATED WITH THE BUILDING OWNER'S REPRESENTATIVE.
- 2.8. ALL WORK SHALL COMPLY WITH BUILDING RULES AND REGULATIONS GOVERNING TENANT ALTERATIONS.
- 2.9. THE CONTRACTOR SHALL PREPARE AND SUBMIT ALL APPLICATIONS TO AUTHORITIES AND OBTAIN ALL NECESSARY BUILDING PERMITS, EQUIPMENT USE PERMITS, COMPLETE ALL TESTS AND PAY ALL NECESSARY FEES.
- 2.10. THE CONTRACTOR SHALL PROTECT ALL EXISTING SURFACES, UTILITIES, MECHANICAL SYSTEMS, ETC., AND REPAIR ALL DAMAGES TO SAME DURING THE COURSE OF THIS CONTRACTOR'S WORK, AT HIS EXPENSE.
- 2.11. THE WORK SHALL BE PERFORMED IN PHASES IN ACCORDANCE WITH THE TENANTS, ARCHITECTS AND/OR ENGINEER'S SCHEDULE. ANY REQUIRED SHUTDOWN OF EXISTING EQUIPMENT OR SERVICES WHICH NEW EQUIPMENT SERVES AND/OR IS CONNECTED THERETO MUST BE SCHEDULED THROUGH THE BUILDING OWNER'S REPRESENTATIVE.
- 2.12. SUBMIT SHEET METAL SHOP STANDARDS, EQUIPMENT CUTS, DETAILED COORDINATED SHOP DRAWINGS OF ALL PIPING AND DUCT LAYOUTS FOR APPROVAL. PREPARE AND SUBMIT DRAWINGS SHOWING THE METHOD OF SUPPORT AND WEIGHT OF ALL EQUIPMENT, PIPING AND DUCTWORK FOR REVIEW BY THE ARCHITECT, ENGINEER AND BUILDING STRUCTURAL ENGINEER. PROMPTLY REVISE SHOP DRAWINGS AS REQUIRED BY THE OWNER, ARCHITECT OR ENGINEER AND RESUBMIT FOR FINAL APPROVAL. NO WORK SHALL START UNTIL EQUIPMENT CUTS, SHOP STANDARDS AND SHOP DRAWINGS ARE SUBMITTED AND APPROVED BY ARCHITECT AND/OR ENGINEER. COORDINATED DRAWINGS SHALL INCLUDE ALL MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION AND GENERAL CONSTRUCTION DRAWINGS.
- 2.13. THE ARCHITECT AND/OR ENGINEER WILL REVIEW SHOP DRAWINGS AND/OR SAMPLES WITH REASONABLE PROMPTNESS AND WILL RETURN THEM TO THE CONTRACTOR STAMPED TO INDICATE THE APPROPRIATE ACTION AS FOLLOWS:
- 2.13.1. "NO EXCEPTION TAKEN" MEANS THAT FABRICATION, MANUFACTURE OR CONSTRUCTION MAY PROCEED PROVIDING THE SUBMITTAL COMPLIES WITH THE CONTRACT DOCUMENTS.
- 2.13.2. "MAKE CORRECTIONS NOTED" MEANS THAT FABRICATION, MANUFACTURE OR CONSTRUCTION MAY PROCEED PROVIDING THE SUBMITTAL COMPLIES WITH THE ARCHITECT'S AND/OR ENGINEERS NOTATIONS AND THE CONTRACT DOCUMENTS. A COPY OF THE CORRECTED SUBMITTAL MUST BE RETURNED TO THE ARCHITECT AND/OR ENGINEER FOR RECORD. IF, FOR ANY REASON, THE CONTRACTOR CANNOT COMPLY WITH THE NOTATIONS, THE CONTRACTOR MUST RESUBMIT AS DESCRIBED FOR SUBMITTALS STAMPED "REVISE AND RESUBMIT"
- 2.13.3. "REVISE AND RESUBMIT" MEANS THAT THE CONTRACTOR MUST COMPLY WITH THE ARCHITECT'S AND/OR ENGINEER'S NOTATIONS AND RESUBMIT BEFORE FABRICATION, MANUFACTURE OR CONSTRUCTION MAY PROCEED SUBMITTALS STAMPED IN THIS MANNER ARE NOT PERMITTED ON THE PROJECT SITE.
- 2.13.4. "REJECTED" MEANS THAT THE SUBMITTAL DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS AND THAT FABRICATION, MANUFACTURE OR CONSTRUCTION SHALL NOT PROCEED. SUBMITTALS STAMPED IN THIS MANNER ARE NOT PERMITTED ON THE PROJECT SITE.
- 2.14. FIRE DAMPERS SHALL BE DYNAMIC TYPE, RATED TO CLOSE AGAINST AIR FLOW WITH A MINIMUM 6.0 INCHES W.G. PRESSURE DIFFERENTIAL ACROSS THE CLOSED DAMPER, UL LISTED AND BE APPROVED FOR USE AND BEAR THE LABEL OF THE LOCAL GOVERNING AGENCY WHERE REQUIRED.
- 2.15. REFER TO ARCHITECT'S DRAWINGS FOR LOCATION OF FIRE-RATED PARTITIONS. INSTALL FIRE DAMPERS WITH ACCESS DOORS IN ALL EXISTING AND NEW DUCTWORK, ALL RETURN AIR OPENINGS AND/OR MASONRY OPENINGS WHICH CROSS FIRE- RATED PARTITIONS.
- 2.16. FIRE DAMPERS MUST BE INSTALLED IN ACCORDANCE WITH UL555 AND MANUFACTURER'S INSTRUCTIONS. EXISTING FIRE DAMPERS MUST BE PROVIDED WITH ANGLE IRON FRAMES WHERE REQUIRED.
- 2.17. ALL NEW AND EXISTING FULL-HEIGHT PARTITIONS (I.E., TO UNDERSIDE OF SLAB ABOVE) EXCEPT ROOMS WHERE HUMIDIFICATION OR INTEGRITY OF SOUNDPROOFING IS REQUIRED, SHALL BE PROVIDED WITH A TRANSFER OPENING IN WALL ABOVE CEILING. MECHANICAL CONTRACTOR TO CO-ORDINATE THIS REQUIREMENT WITH THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR. TRANSFER OPENINGS (T.O.) SHALL BE SIZED FOR A VELOCITY OF 400 FT./MIN. AND PROVIDED WITH FIRE DAMPERS UNLESS OTHERWISE NOTED.
- 2.18. REMOVABLE ACCESS TILES OR ACCESS DOORS ARE REQUIRED IN HUNG CEILING FOR VOLUME DAMPERS, FIRE DAMPERS, AUTOMATIC LOUVER DAMPERS, SMOKE DETECTORS, VALVES, AND ALL OTHER MECHANICAL EQUIPMENT WHICH REQUIRES SERVICE. FURNISH ACCESS LOCATION REQUIREMENTS TO CONSTRUCTION MANAGER/GENERAL CONTRACTOR.
- 2.19. PREPARE AND FURNISH TO THE OWNER "AS-BUILT" DRAWINGS UTILIZING THE LATEST VERSION OF AUTOCAD EMPLOYING THE BUILDING OWNER'S LAYERING SYSTEM FOR ALL WORK INSTALLED. PROVIDE OPERATING AND MAINTENANCE MANUALS (3 COPIES), INCLUDING WIRING DIAGRAMS, LUBRICATION CHARTS AND RECOMMENDED PREVENTATIVE MAINTENANCE PROCEDURES, FOR EACH SYSTEM OR PIECE OF EQUIPMENT.

3 GRILLES, REGISTERS, DIFFUSERS

- 3.1. CEILING DIFFUSERS, RETURN GRILLES AND REGISTERS SHALL BE SIZED IN ACCORDANCE WITH THE TABLES ON THE DRAWING. SUPPLY REGISTERS SHALL BE FURNISHED WITH O.B.D.'S AND PATTERN CONTROLLERS. RETURN REGISTERS SHALL BE PROVIDED WITH O.B.D.'S. FRAME AND BORDER TYPES ARE TO BE COMPATIBLE WITH CEILING CONSTRUCTION. THE COLOR OF ALL AIR DEVICES IS SUBJECT TO THE TENANTS APPROVAL. PROVIDE BLANK- OFF BAFFLES IN CEILING DIFFUSERS AS SHOWN ON DRAWINGS. FOR EXACT LOCATIONS OF DIFFUSERS, GRILLES AND REGISTERS, REFER TO ARCHITECTURAL DRAWINGS.
- 3.2. AIR DISTRIBUTION DEVICES (DIFFUSERS, REGISTERS, LINEARS, AIR SLOTS, ETC.) INSTALLED IN INACCESSIBLE CEILINGS SHALL BE PROVIDED WITH REMOTE DUCT MOUNTED OBD'S OPERABLE THROUGH THE FACE OF THE AIR DISTRIBUTION DEVICE.
- 3.3. AS PART OF THIS WORK, ALL AIR OUTLETS SHOWN ON DESIGN DRAWINGS SHALL BE BALANCED BY AN INDEPENDENT BALANCER. SUBMIT BALANCING REPORTS FOR APPROVAL TO ARCHITECT AND ENGINEER.

4 SHEETMETAL AND DUCTWORK

- 4.1. DUCT LAYOUT SHOWN IS A SCHEMATIC REPRESENTATION OF DESIGN INTENT, NO ADDED COMPENSATION SHALL BE PERMITTED FOR VARIATIONS DUE TO FIELD CONDITIONS. COORDINATION WITH BOTH NEW AND EXISTING SERVICES, INCLUDING THOSE OF OTHER TRADES, IS REQUIRED. ANY MAJOR VARIANCES OR DISCREPANCIES ARE TO BE INDICATED ON THE SHOP DRAWINGS AND REPORTED TO THE ARCHITECT AND/OR ENGINEER.
- 4.2. SHEET METAL DUCT AND PLENUM CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF SMACNA , "HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE" LATEST EDITION, WITH THE EXCEPTIONS HEREIN NOTED.
- 4.3. SHOP STANDARDS FOR SHEET METAL AND DUCT CONSTRUCTION MUST BE SUBMITTED AND APPROVED PRIOR TO FABRICATION.
- 4.4. NEW SUPPLY DUCTWORK FROM A/C UNIT AND DUCTWORK UPSTREAM OF VAV BOXES SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH TABLE 1-5 FOR 2 INCH STATIC PRESSURE, EXCEPT THAT ALL LONGITUDINAL SEAMS, TAPS AND TRANSVERSE JOINTS SHALL BE SEALED CLASS "A"
- 4.5. TOILET EXHAUST DUCTS SHALL BE CLASS "A" SEALED.
- 4.6. ALL BRANCH DUCTWORK (SUPPLY AND RETURN) SHALL BE PROVIDED WITH VOLUME CONTROL DAMPERS. VOLUME CONTROL DAMPERS SHALL BE OF THE QUADRANT TYPE CONSTRUCTED IN ACCORDANCE WITH FIGURES 2-12 AND 2-13 OF THE SMACNA STANDARDS.
- 4.7. WHEREVER REINFORCING IS REQUIRED ON 2 SIDES, THE ENDS OF THE REINFORCING MUST BE CONNECTED TOGETHER BY MEANS OF RODS OR ANGLES AS SHOWN IN FIGURE 1-11 OF THE SMACNA STANDARDS.
- 4.8. THE USE OF BUTTON PUNCH, SNAP-LOCK (L-2), STANDING SEAM (L-4) AND SINGLE CORNER SEAM (L0-5) LONGITUDINAL SEAMS IS PROHIBITED.
- 4.9. THE FOLLOWING TRANSVERSE JOINTS ARE NOT PERMITTED: LAP (T-4), REINFORCED S SLIP (T-7), STANDING SEAMS (T-15 AND T-16), POCKET LOCK (T-17, T-18 AND T-19) AND CAPPED FLANGE (T-20).
- 4.10. WHERE MANUFACTURED TRANSVERSE JOINTS ARE USED (SMACNA T-25A, T- 25B, I.E. DUCT MATE, TDC, TDF ETC.), THEY SHALL BE SUBMITTED WITH AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S STANDARDS FOR CONSTRUCTION AND INSTALLATION.
- 4.11. EXHAUST DUCTS FROM WET AREAS SUCH AS DISHWASHERS, DRYERS OR SHOWER AREAS SHALL BE MADE OF MINIMUM 20 GAUGE TYPE 304 STAINLESS STEEL HAVING PAN TYPE CONSTRUCTION AND CONTINUOUSLY WELDED TRANSVERSE JOINTS.
- 4.12. ALL SMOKE PURGE SYSTEM DUCTS SHALL BE GALVANIZED STEEL WITH MINIMUM THICKNESS OF 22 GA. CONSTRUCTED IN ACCORDANCE WITH ASHRAE AND SMACNA SHEETMETAL DUCTWORK CONSTRUCTION DETAILS. FLEXIBLE DUCTWORK IS NOT PERMITTED IN DUCT SYSTEMS THAT ARE PART OF A SMOKE PURGE SYSTEM (RETURN OR EXHAUST DUCTWORK). FLEXIBLE DUCT IS PERMITTED AT SUPPLY DIFFUSER CONNECTIONS AND AT AIR HANDLING EQUIPMENT FOR VIBRATION ISOLATION(MAXIMUM 3 FT. LENGTH).
- 4.13. DESIGN AND SPACING OF DUCT HANGERS SHALL BE IN ACCORDANCE WITH SMACNA DUCT CONSTRUCTION DETAILS BUT HANGERS TO BE MINIMUM OF 20 GA. STEEL AND BE OF THE TRAPEZEE TYPE.
- 4.14. ALL SMOKE PURGE SYSTEM COMPONENTS (INCLUDING DUCTWORK) SHALL BE CLEARLY IDENTIFIED AS SUCH BY STENCILING THE FUNCTION AND ZONE ON THE COMPONENTS, E.G. SMOKE PURGE SUPPLY- ZONE 2; SMOKE PURGE EXHAUST - ZONE 3; SMOKE DAMPER NO. 5; ETC. STENCILING SHALL BE 6" HIGH RED LETTERS LOCATED (EVERY 10 FEET ALONG DUCT).

5 INSULATION AND ACOUSTIC TREATMENT

- 5.1. THERMAL AND ACOUSTICAL INSULATION AND ACCESSORY MATERIALS SHALL BE LISTED AND LABELED BY UNDERWRITERS LABORATORIES, INC., FOR A FIRE HAZARD CLASSIFICATION NOT TO EXCEED THE FOLLOWING: FLAME SPREAD, 25; FUEL CONTRIBUTION, 50; SMOKE DEVELOPED, 50, AS TESTED UNDER ASTM E-84, NFPA 255 OR UL 723 PROCEDURES.
- 5.2. WHERE INDICATED, DUCTWORK SHALL BE ACOUSTICALLY LINED WITH 1 INCH THICK, 1-1/2 POUND DENSITY, MATTE-FACE DUCT-LINER FORMULATED WITH AN IMMOBILIZED EPA REGISTERED ANTI-MICROBIAL AGENT. DIMENSIONS OF LINED DUCTS ARE CLEAR INSIDE WITH LINING INSTALLED. DUCT LINER SHALL BE ADHERED BY A FIRE RETARDANT ADHESIVE. MECHANICAL FASTENERS SUCH AS GRIP NAILS, WHICH DO NOT PIERCE THE SHEET METAL SHALL BE INSTALLED ON 16 INCH CENTERS ON TOP SECTIONS (WHEN WIDTH EXCEEDS 16 INCHES), AND ON SIDES (WHEN HEIGHT EXCEEDS 24 INCHES). ALL ADJUTING EDGES OF ACOUSTIC LINING SHALL BE CAULKED, AND EXPOSED EDGES OF ACOUSTIC LINING SHALL BE PROVIDED WITH SHEET METAL NOSINGS.
- 5.3. ALL RECTANGULAR SUPPLY DUCTWORK WITHIN 15 FEET AND RETURN DUCTWORK WITHIN 10 FEET OF THE HVAC UNIT SHALL BE INTERNALLY LINED. INTERNAL LINING SHALL BE 1 INCH THICK, 1-1/2 LB DENSITY LINER. LINER SHALL HAVE A COATED SURFACE EXPOSED TO AIRSTREAM TO PREVENT EROSION. APPLY ADHESIVES AND MECHANICAL FASTENERS AS RECOMMENDED BY SMACNA AND THE MANUFACTURER TO PREVENT LINER SEPARATION FROM THE DUCT. ALL TRANSVERSE EDGES SHALL BE COATED WITH ADHESIVE.
- 5.4. CONCEALED NEW AND EXISTING SUPPLY AND RETURN DUCTWORK SHALL BE INSULATED WITH A MINIMUM R-8 INCH THICK, 3/4 POUND DENSITY FIBER GLASS BLANKET WITH FACTORY-APPLIED SCORIM REINFORCED, FOIL FACED VAPOR BARRIER (FSK) WITH 2 INCH FLANGE. WRAP INSULATION TIGHTLY ON DUCT AND FIRMLY BUTT ALL JOINTS WITH 2 INCH FLANGE OVERLAP AT ALL SEAMS. ADHERE TO DUCT WITH 2/3 COVERAGE OF ADHESIVE APPLIED 4 INCH WIDE BANDS, 8 INCHES ON CENTERS. SEAL ALL JOINTS AND SEAMS WITH MINIMUM 3 INCH WIDE FSK TAPE. SUPPORT INSULATION ON THE BOTTOM OF RECTANGULAR DUCTS OVER 36 INCHES WIDE WITH A SINGLE ROW OF WELD PINS AND SPEED WASHERS. WIRE WRAPPING IS NOT PERMITTED. CUT WELD PINS OFF FLUSH WITH TOP OF SPEED WASHERS AND COVER WITH FSK TAPE TO MAINTAIN VAPOR BARRIER. WHERE ACOUSTICAL LINING IS INDICATED, NO THERMAL INSULATION IS REQUIRED.

6 CLEANING, TESTING AND ADJUSTING

- 6.1. DURING CONSTRUCTION, PROPERLY PROTECT ALL OPEN ENDS OF DUCTWORK TO PREVENT THE ENTRANCE OF SAND, DIRT AND OTHER FOREIGN MATTER IN ACCORDANCE WITH SMACNA STANDARDS.
- 6.2. ALL AC UNITS, FANS, REGISTERS AND DIFFUSERS ARE TO BE BALANCED WITHIN PLUS 10%, MINUS 5% OF THE QUANTITIES SHOWN ON THE PLANS. BALANCING IS TO BE PERFORMED BY AN INDEPENDENT BALANCING AGENCY IN ACCORDANCE WITH A.A.B.C. OR N.A.A.B. NATIONAL STANDARDS.

7 CONTROLS

- 7.1. ALL CONTROL DEVICES, PNEUMATIC TUBING, AUTOMATIC DAMPERS, VALVES, THERMOSTATS, POWER AND CONTROL WIRING, CONDUIT AND WIRING FOR INTERLOCKS, START/STOPS, POWER WIRING OF CONTROL DEVICES AND PANELS, AND INTERCONNECTION OF ALL SAFETIES, ETC., FOR ALL HVAC EQUIPMENT SHALL BE PROVIDED AND INSTALLED BY THIS CONTRACTOR. SUBMIT DETAILED SHOP DRAWINGS AND CUTS OF ALL CONTROL EQUIPMENT AS WELL AS A SEQUENCE OF OPERATION FOR APPROVAL BY ENGINEER.

8 SEQUENCE OF OPERATION

- 8.1. POSTFIRE SMOKE PURGE.
- 8.1.1. FLOORS 1 THROUGH 6 WILL BE SERVICED BY SMOKE PURGE FAN SEF-1 WITH MOTORIZED DAMPER, LOCATED ON ROOF. FAN WILL BE CONTROLLED BY FIRE MARSHAL FROM FIRE ALARM PANEL. WHEN SEF-1 IS ACTIVATED, THE MOTORIZED DAMPER CONNECTED TO THE FAN SHALL BE FULLY OPEN. THE SMOKE PURGE SYSTEM SHALL REMOVE SMOKE FROM EACH FLOOR THROUGH GRILLES EQUIPPED WITH AUTOMATIC COMBINATION FIRE/SMOKE DAMPERS. THE FIRE/SMOKE DAMPERS SHALL REMAIN NORMALLY CLOSED UNTIL ACTIVATION OF THE SMOKE EXHAUST SYSTEM, WHERE THEY WILL REMAIN FULLY OPEN. EACH FLOOR WILL BE PURGED INDIVIDUALLY STARTING WITH THE FIRST FLOOR AND THE SMOKE SHALL BE REMOVED FROM EACH FLOOR WITHIN 3 MINUTES. AFTER A FLOOR IS PURGED, THE FIRE/SMOKE DAMPER SHALL RETURN TO ITS NORMALLY CLOSED POSITION. MAKE-UP AIR WILL BE THROUGH THE ROOFTOP AC UNIT VIA NEGATIVE PRESSURE AND DISTRIBUTED THROUGH THE CORRIDOR SUPPLY AIR SYSTEM.
- 8.1.2. THE BASEMENT WILL BE SERVICED BY SMOKE PURGE FAN SEF-2 WITH MOTORIZED DAMPER, LOCATED IN THE BASEMENT. THE FAN WILL BE CONTROLLED BY THE FIRE MARSHAL FROM FIRE ALARM PANEL. THE MOTORIZED DAMPER CONNECTED TO THE FAN SHALL BE FULLY OPEN DURING SMOKE EXHAUST MODE. THE SMOKE SHALL BE REMOVED WITHIN 3 MINUTES. MAKE-UP AIR WILL BE THROUGH THE AC UNIT, SERVING THE BASEMENT VIA NEGATIVE PRESSURE AND DISTRIBUTED THROUGH THE CORRIDOR SUPPLY AIR SYSTEM. THE MOTORIZED DAMPER ON THE OM LOUVER SHALL BE FULLY OPEN DURING SMOKE EXHAUST OPERATION.
- 8.1.3. THE ACTIVATION OF ONE (1) AUTOMATIC INITIATION DEVICE (E.G. SMOKE DETECTOR) OR PULLSTATION SHALL CAUSE THE CENTRAL FIRE ALARM SYSTEM TO GO INTO ALARM ACTIVATION IN ACCORDANCE WITH THE SEQUENCE REQUIRED FOR THE PARTICULAR EXISTING BUILDING. IN ADDITION, ANY COMBINATION FIRE/SMOKE DAMPERS ON THE FLOOR IN ALARM SHALL CLOSE. IF THE LOW LIMIT TEMPERATURE FIRESTAT (285°F) ACTIVATES THE COMBINATION FIRE/SMOKE DAMPERS SHALL CLOSE.
- 8.1.4. THE SIMULTANEOUS ACTIVATION OF ANY TWO (2) AUTOMATIC INITIATION DEVICES (E.G. SMOKE DETECTORS) OR ONE (1) HEAT DETECTOR OR THE ACTIVATION OF A SINGLE WATERFLOW SWITCH SHALL CAUSE THE CENTRAL FIRE ALARM SYSTEM TO GO INTO ALARM ACTIVATION IN ACCORDANCE WITH THE SEQUENCE OF OPERATION REQUIRED FOR THE PARTICULAR EXISTING BUILDING. IN ADDITION, THE SMOKE PURGE SYSTEM SHALL AUTOMATICALLY INITIATE AND THE FOLLOWING SHALL OCCUR:
- (I) INDEX ALL SMOKE DAMPERS ON THE PARTICULAR FLOOR IN ALARM TO AN "OPEN" POSITION (SUPPLY AND RETURN) AND INDEX ALL OTHER BUILDING SMOKE DAMPERS (SUPPLY AND RETURN) TO A "CLOSED" POSITION.
- (II) INDEX SUPPLY AIR HANDLING UNIT(S) AIR HANDLING UNIT(S) OR FANS TO 100% OUTSIDE AIR AND RETURN AIR HANDLING UNIT(S) OR FANS TO 100% SPILL. THE RETURN DAMPER (BETWEEN THE SUPPLY AND RETURN SYSTEMS) SHALL BE FULLY CLOSED.
- 8.1.6. THE SMOKE PURGE SYSTEM SHALL OVERRIDE THE LOW LIMIT TEMPERATURE SENSOR ON THE FIRE SMOKE DAMPER IF IT WAS ACTIVATED. IF THE HIGH LIMIT TEMPERATURE FIRESTAT (450°F) IS ACTIVATED DURING THE PURGE PROCESS THE FIRE/SMOKE DAMPER SHALL CLOSE PERMANENTLY AND SMOKE PURGE WILL BE HALTED.
- 8.1.7. PURGE MANUAL CONTROL SHALL BE PROVIDED AT THE FIRE ALARM PANEL OR FIRE COMMAND STATION IN THE MAIN LOBBY. THIS CONTROL SHALL CONSIST OF THE FOLLOWING:
- (I) A SWITCH SHALL BE PROVIDED FOR EACH FLOOR OR AREA THAT IS PART OF THE SMOKE PURGE SYSTEM. THE SWITCH SHALL HAVE THREE POSITIONS "ON" "OFF" AND "AUTOMATIC".
- (II) THE SWITCH WHEN INDEXED TO THE "ON" POSITION SHALL:
- I. INDEX ALL SMOKE DAMPERS ON THE PARTICULAR FLOOR TO AN OPEN POSITION (SUPPLY AND RETURN) AND INDEX ALL OTHER BUILDING SMOKE DAMPERS (SUPPLY AND RETURN) TO A "CLOSED" POSITION.
- II. INDEX THE APPROPRIATE SUPPLY AIR HANDLING UNIT(S)OR FANS TO 100% OUTSIDE AIR AND THE APPROPRIATE RETURN AIR HANDLING UNIT(S) OR FANS TO 100% SPILL. THE RETURN DAMPER (BETWEEN THE SUPPLY AND RETURN SYSTEMS) SHALL BE FULLY CLOSED.
- 8.1.8. THE SWITCH WHEN INDEXED TO THE "OFF" POSITION SHALL:
- I. INDEX ALL SMOKE DAMPERS ON THE PARTICULAR FLOOR OR ZONE TO "CLOSED" POSITION (SUPPLY AND RETURN).
- II. INDEX THE APPROPRIATE SUPPLY AND RETURN AIR HANDLING UNITS OR FANS TO THEIR NORMAL MODE OF OPERATION.

THE SWITCH WHEN INDEXED TO THE "AUTOMATIC" POSITION SHALL:

I. CAUSE THE SMOKE PURGE SYSTEM TO BE CONTROLLED AUTOMATICALLY VIA THE FIRE ALARM SYSTEM. ALARM INITIATION DEVICES SHALL CAUSE THE PURGE SYSTEM TO AUTOMATICALLY ACTIVATE. DURING NON-ALARM CONDITIONS THE H.V.A.C. SYSTEMS AND FIRE/SMOKE DAMPERS THAT ARE PART OF THE SMOKE PURGE SYSTEM CAN BE CONTROLLED BY A BUILDING MANAGEMENT OR SIMILAR CONTROL SYSTEM(IF ONE EXISTS) AS LONG AS THE FIRE ALARM SYSTEM HAS OVERRIDE PRIORITY. THE CONTROL SWITCHES SHALL NOT BE ABLE TO OVERRIDE THE FIRE/SMOKE DAMPER IF THE HIGH LIMIT TEMPERATURE (450°) IS ACTIVATED.

KEAO

ENGINEERS

Engineering Excellence since 1984

186 WOOD AVE. SOUTH, 1ST FLOOR
ISELIN, NJ 08830
TEL (732) 635 0044 • FAX (732) 635 1777

Rev. #

Revision Description

Date:

----	-----	-----
-----	-----	-----
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021

Project Description:

PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:

136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects

architecture | planning | interiors

188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

JMC Site Development Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering Associates
Mechanical/Electrical/Plumbing Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title:

MECHANICAL SPECIFICATIONS

Seal & Signature

Date:

07-18-2016

Scale:

AS NOTED

Job#:

2011

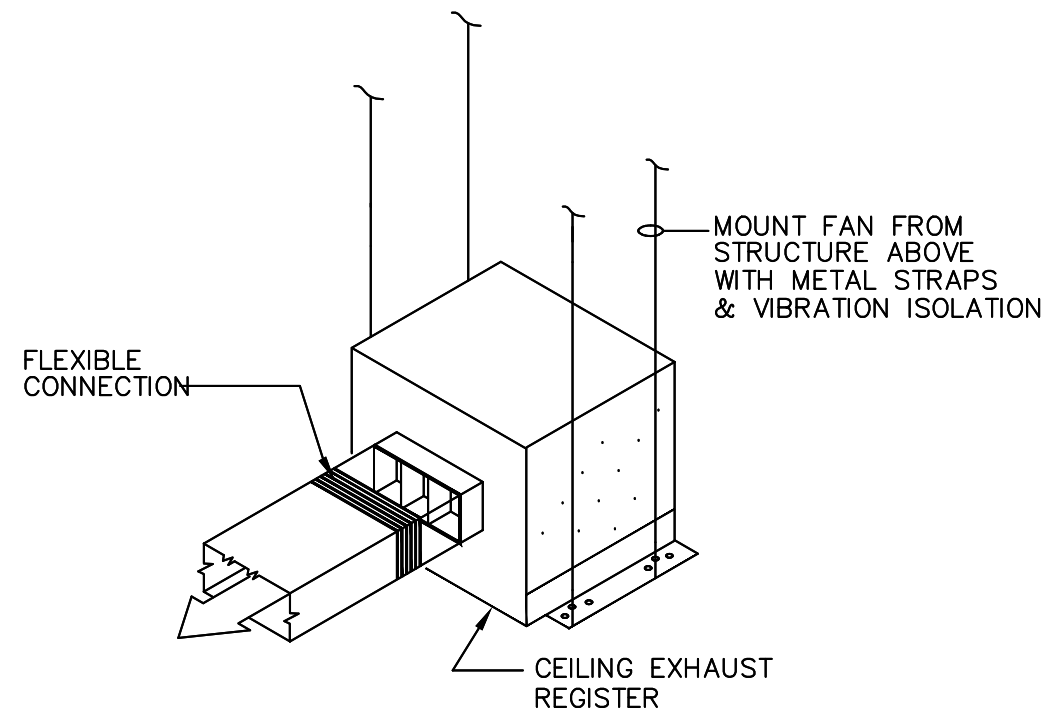
Sheet Title:

M-301

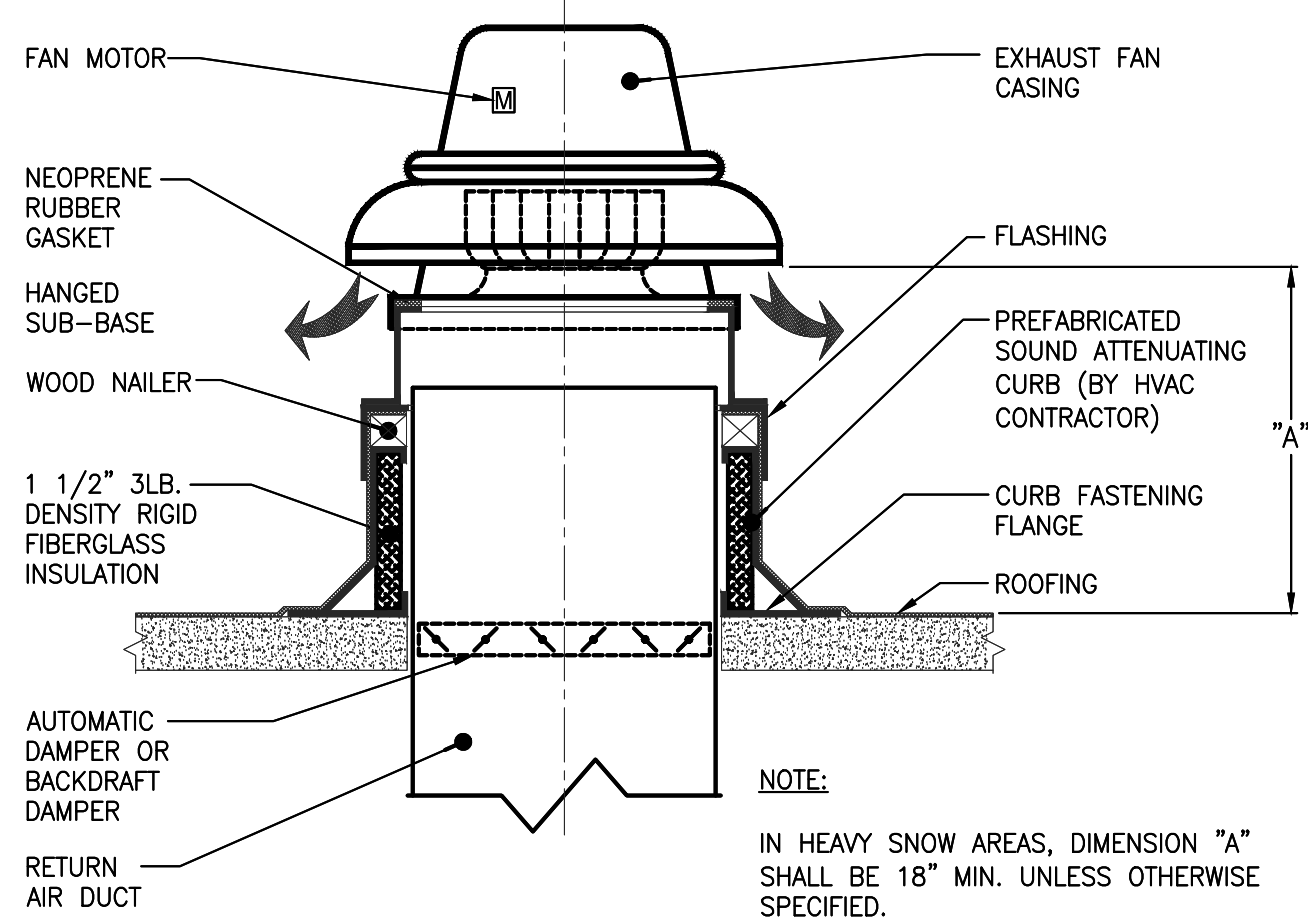
Sheet:

of

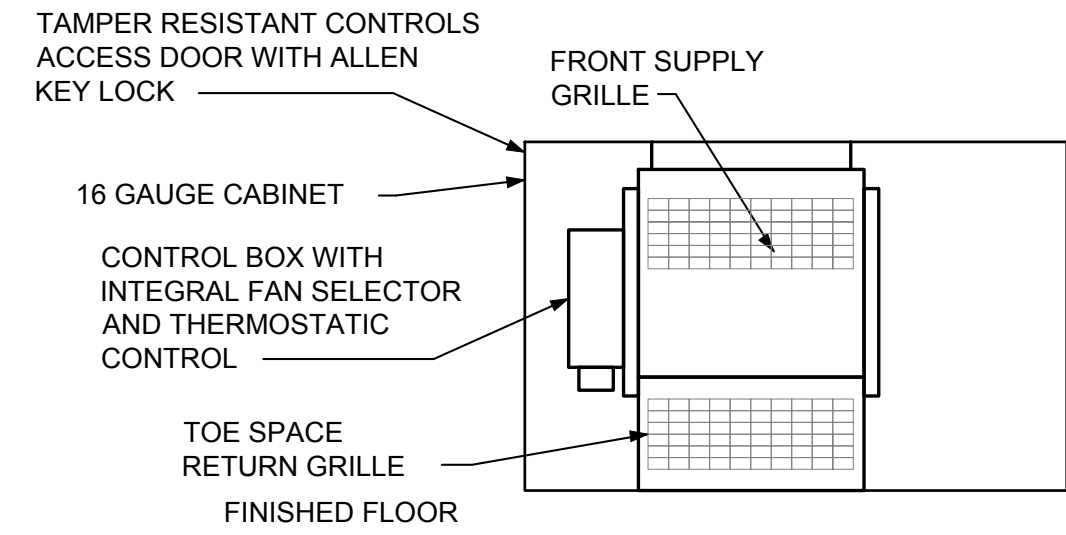
ARMEN KHACHATURIAN, P.E. - NY LICENSE #0022614
NY CERTIFICATE OF AUTHORIZATION #0011294



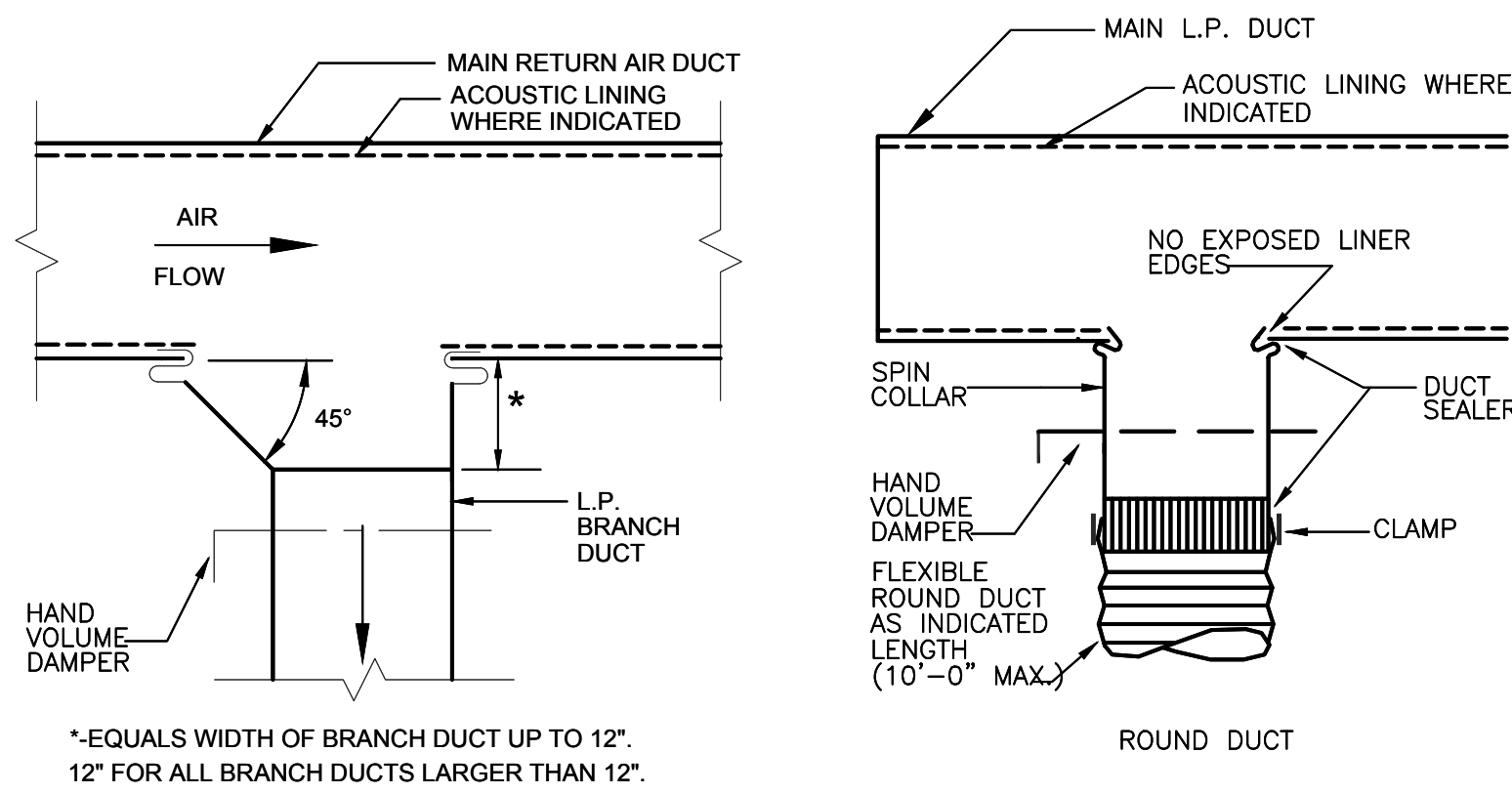
TOILET EXHAUST FAN INSTALLATION DETAIL
NOT TO SCALE



ROOF MOUNTED EXHAUST FAN DETAIL
NOT TO SCALE

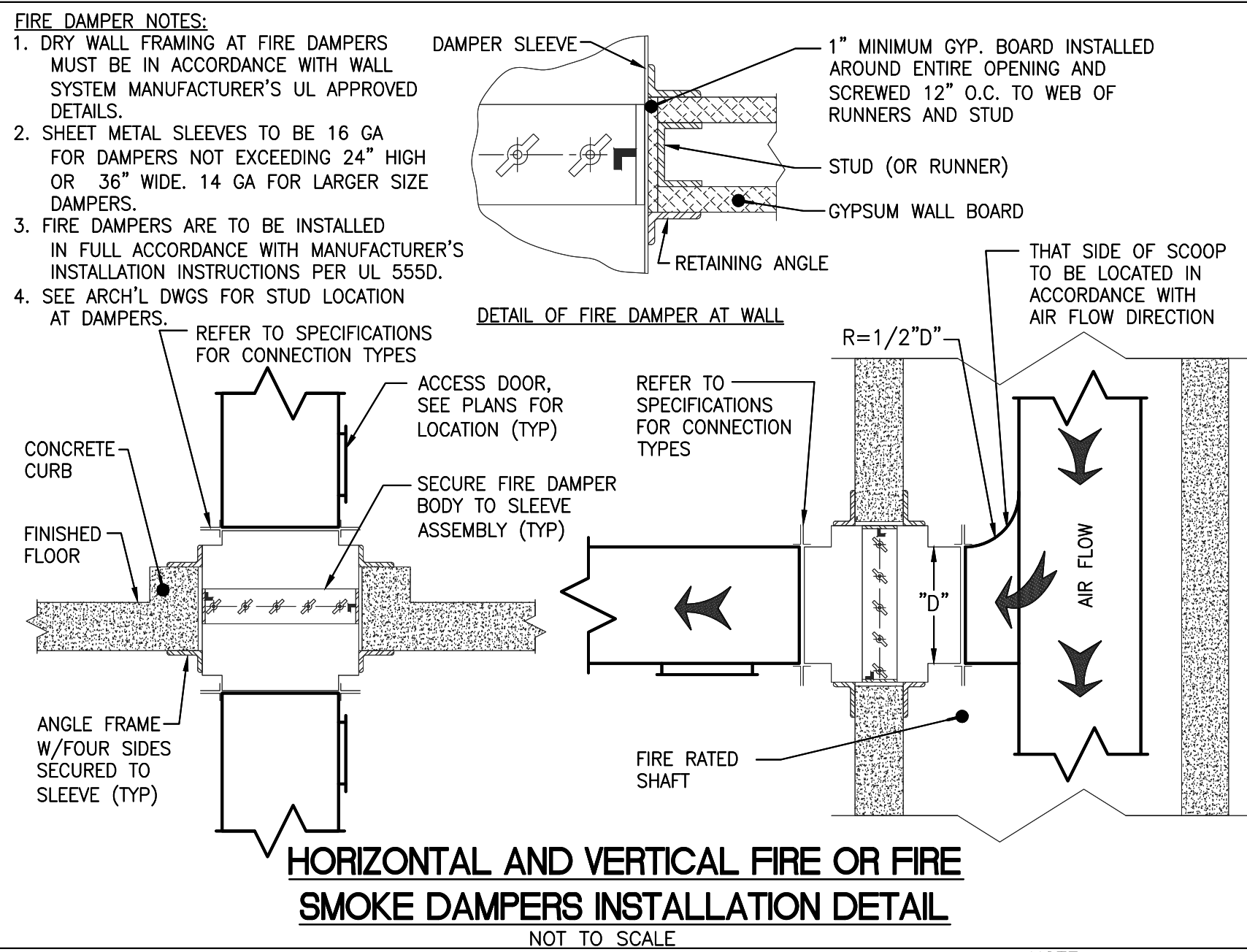


ELECTRIC CABINET UNIT HEATER
N.T.S.

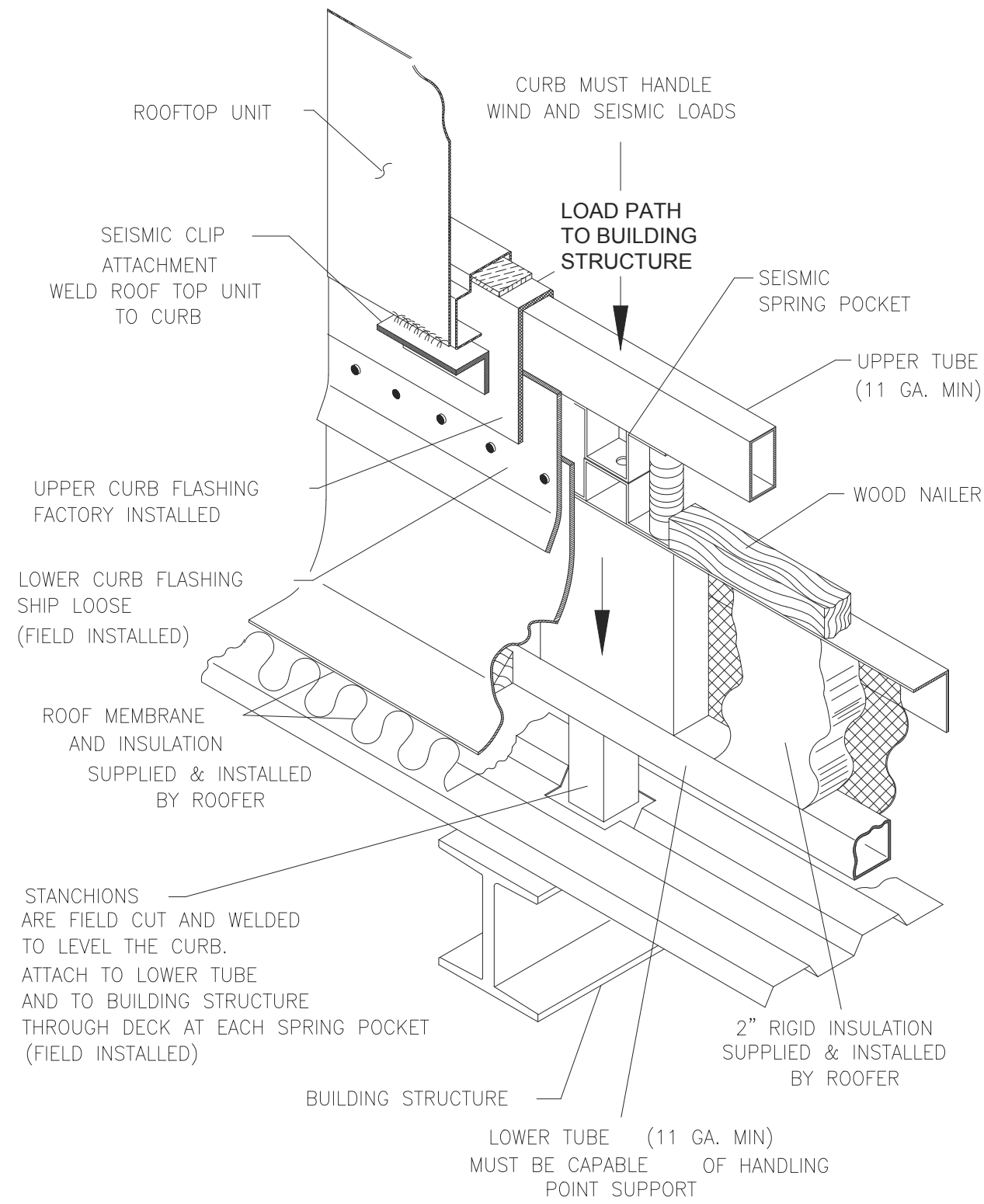


**TYPICAL SUPPLY AIR
BRANCH DUCT TAKE-OFF**
NOT TO SCALE

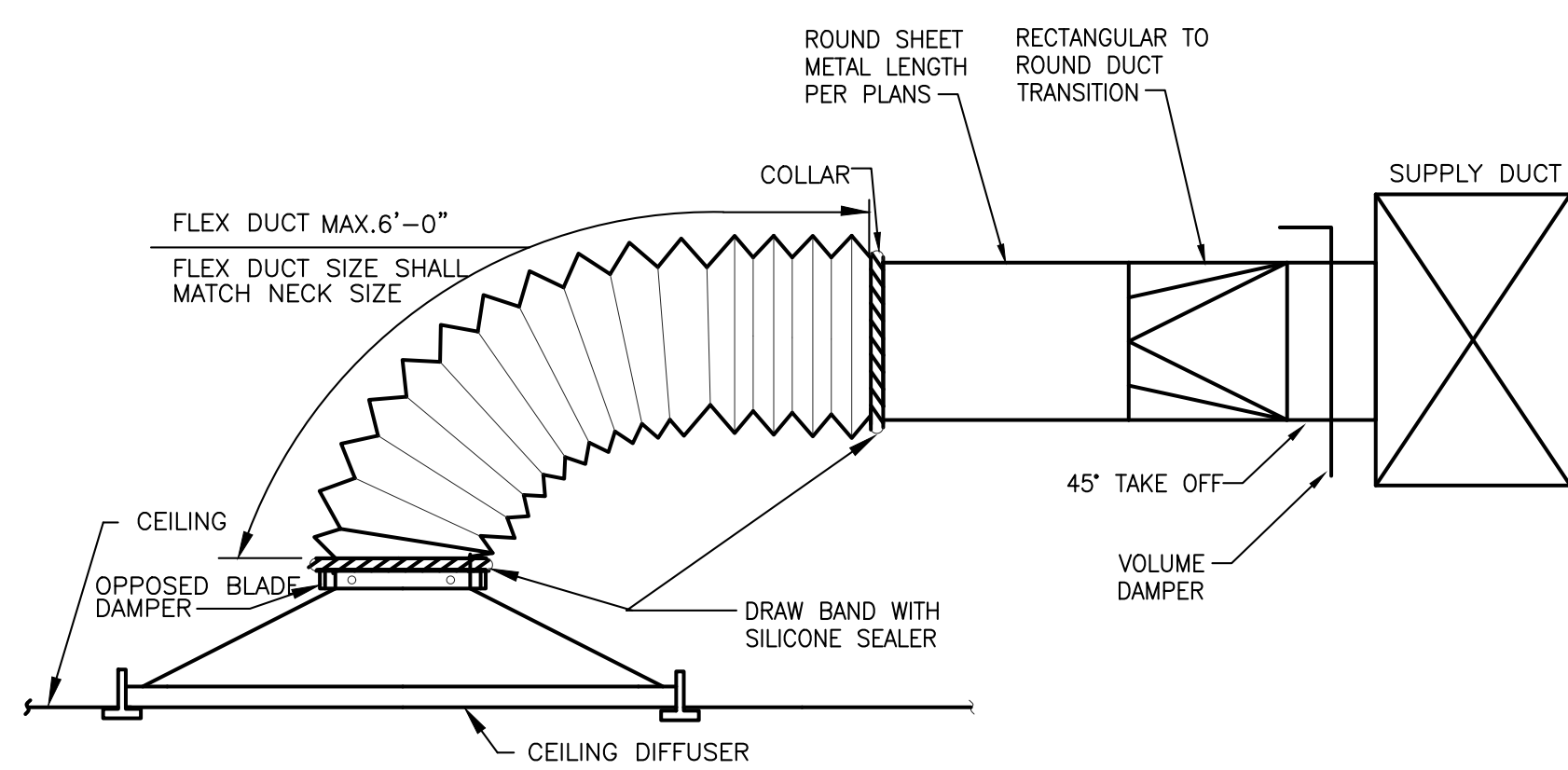
**TYPICAL LOW PRESSURE
BRANCH DUCT TAKE-OFF**
NOT TO SCALE



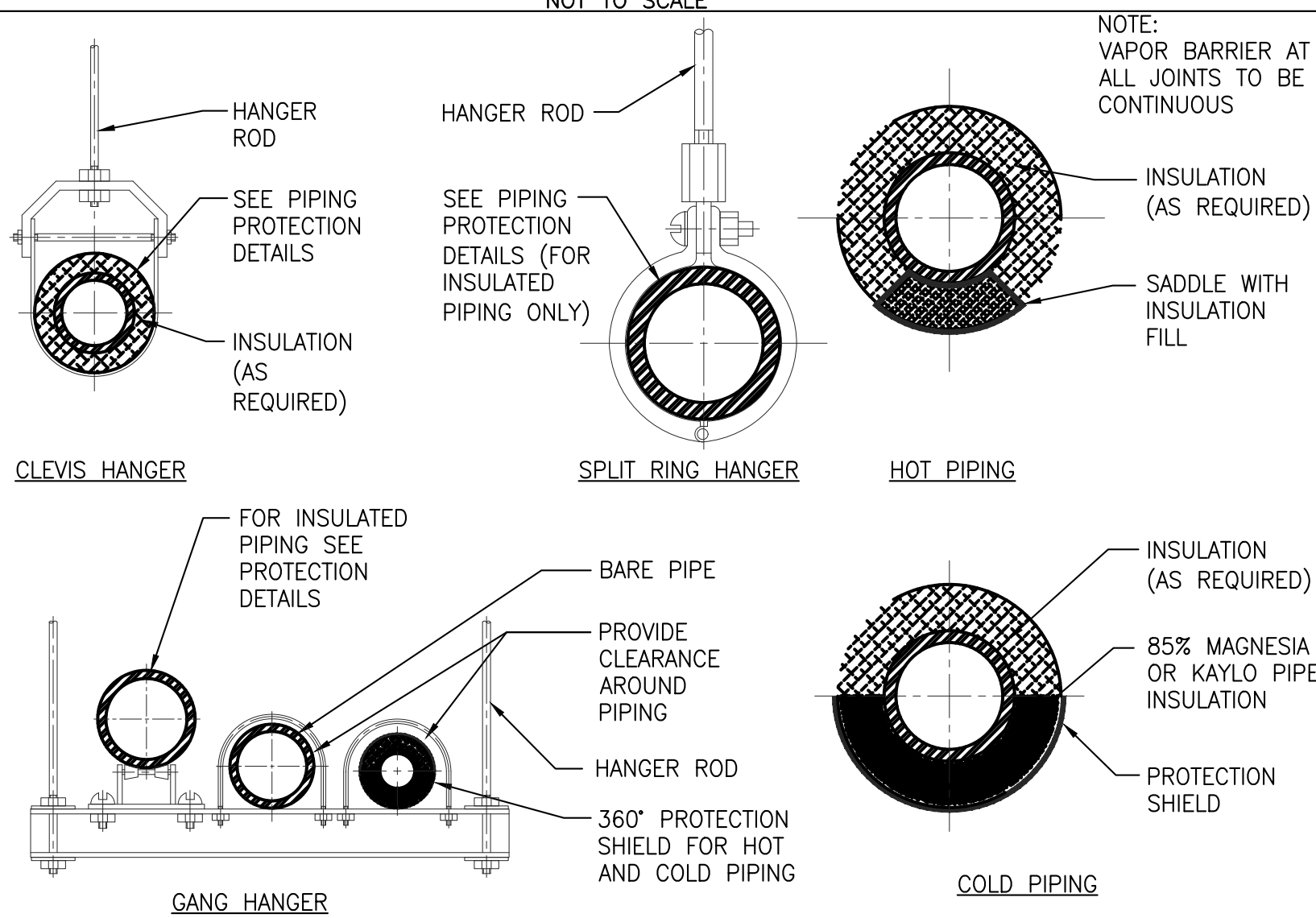
**HORIZONTAL AND VERTICAL FIRE OR FIRE
SMOKE DAMPERS INSTALLATION DETAIL**
NOT TO SCALE



**INSTALLATION DETAIL OF ROOF CURB OR
EQUIPMENT SUPPORTS TO STRUCTURE**
SCALE: NTS



TYPICAL DIFFUSER CONNECTION
(SIDE OF DUCT CONNECTION)
NOT TO SCALE



2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architects | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

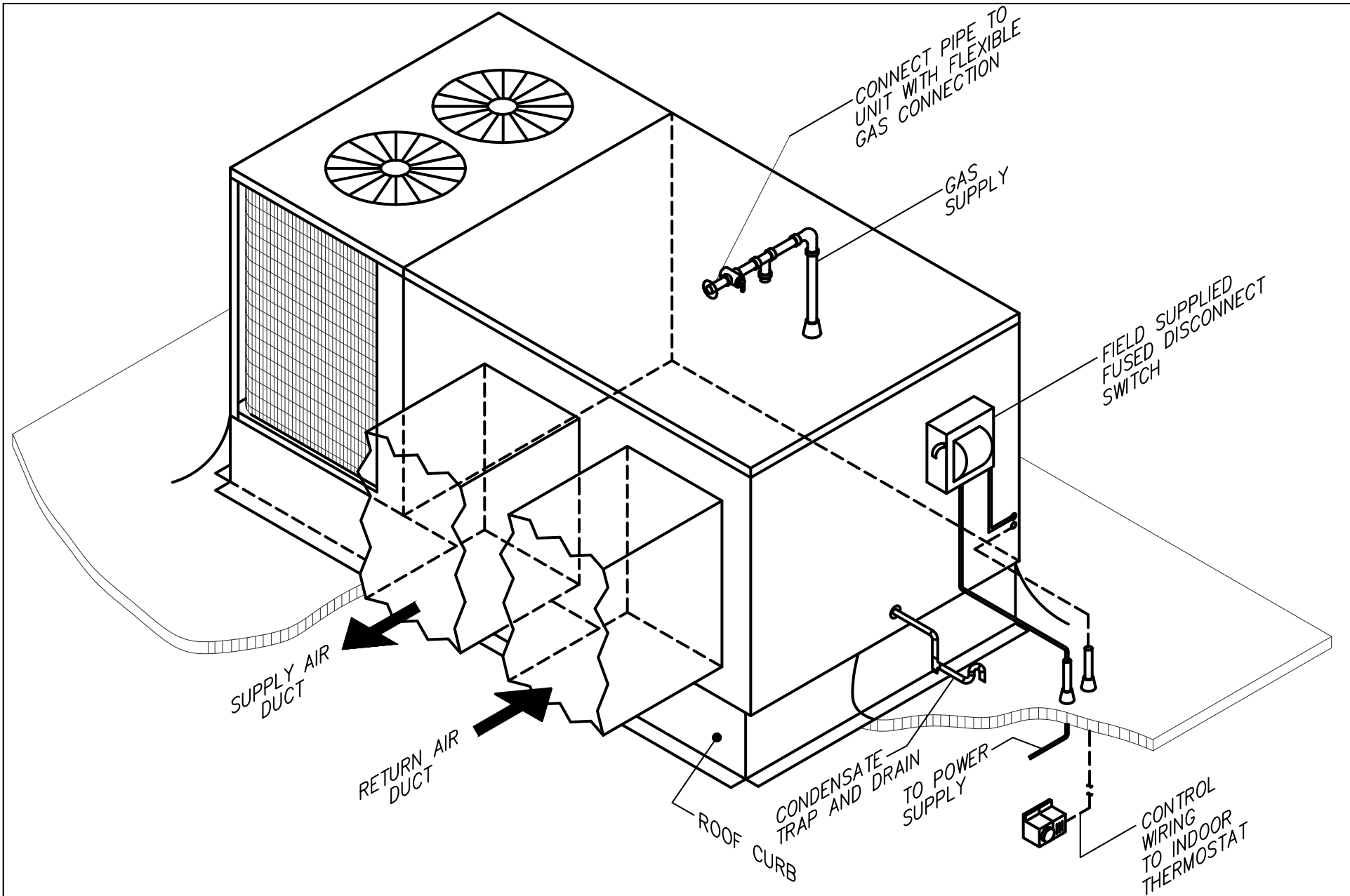
JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

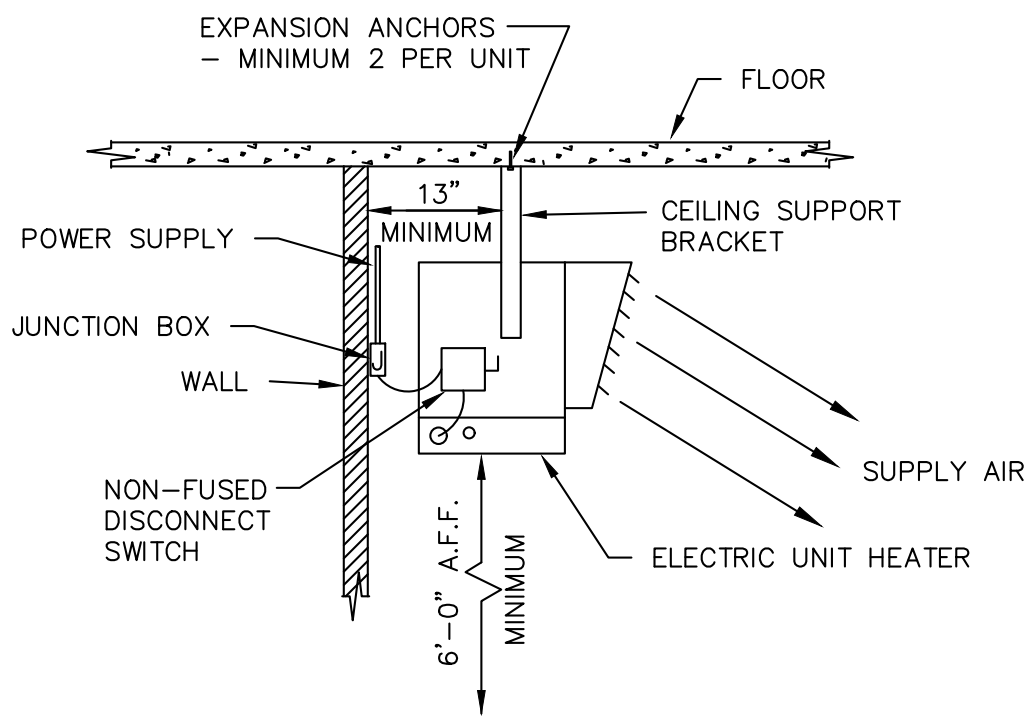
Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title:
MECHANICAL DETAILS

Seal & Signature	Date: 07-18-2016
	Scale: AS NOTED
	Job#: 2011
	Sheet Title: M-401
ADAM KHACHATURIAN, P.E. - NY LICENSE #00286-1 NY CERTIFICATE OF AUTHORIZATION #001124	Sheet: of



PACKAGED ROOFTOP UNIT WITH HORIZONTAL
SUPPLY AND RETURN DUCT CONNECTIONS



ELECTRIC UNIT HEATER
MOUNTING DETAIL
N.T.S.

----	----	----
----	----	----
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architects | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title:
MECHANICAL DETAILS

Seal & Signature	Date:	07-18-2016
	Scale:	AS NOTED
	Job#:	2011
	Sheet Title:	M-402

AIR COOLED PACKAGED ROOFTOP AIR CONDITIONING UNITS 100% OUTSIDE AIR (ELECTRIC HEATING)																													RTU #		
UNIT No.	LOCATION	TONS	SERVICE	COOLING CAPACITY		HEATING CAPACITY	ENTER. AIR TEMP. (°F) (COOLING)		EVAPORATOR FAN SECTION		EVAPORATOR COIL			ELECTRIC HEAT CAPACITY				LEAVING AIR TEMP. (°F)		COMPRESSOR		FILTER	ELECTRICAL				WEIGHT (LBS)	OUTSIDE AIR QUANTITY (CFM)	MANUFACTURER MODEL NUMBER	NOTES	
				SENSIBLE NET CAPACITY (MBH)	TOTAL NET CAPACITY (MBH)																										
							DB	WB	RPM	EXT. S.P. (IN.)	HP	FACE AREA (SQ. FT.)	ROWS/ FPI	FACE VELOCITY (FPM)	HEATING CFM	TOTAL CAPACITY (MBH)	QUANTITY	INPUT (KW)	DB	WB	No.	REFRIG.	SIZE	FULL LOAD AMPS (FLA)	VOLTS/ PHASE	MIN. CIRCUIT AMPACITY (A)	MAX OVER-CURRENT				
RTU-1	ROOF	5	2ND FLOOR THRU 5TH FLOOR COMMON CORRIDORS	65.49	41.96	76.8	95	75	1,760	1.0	2	5.3	6/14	235.1	1000	76.8	3	22.5	87.7	53.6	1	R-410A	PROVIDE	67	208/3	84	90	863	1,000	AAON RQ-005-8-0-EB09-13A; M000-U0B-KQC-B0A- 00EAHBF-00-00A0000VB	1-2

- NOTES:
- PROVIDE THE FOLLOWING: UNIT MOUNTED DISCONNECT SWITCH, 7-DAY PROGRAMMABLE LOCKABLE THERMOSTAT, 2" THROWAWAY FILTER, HOT GAS REHEAT COILS, AND WATTMASTER MAKE-UP AIR CONTROLLER.
 - PROVIDE 24" SEISMIC ROOFCURB.

AMENITY AREA DUCTED INDOOR AC/HEAT PUMP UNIT-MITSUBISHI OR EQUAL															AC
TAG	LOCATION	TYPE	COOLING CAPACITY	HEATING CAPACITY	ESP	CFM (LOW-HIGH)	ELECTRICAL				REF. LINE SIZE (IN)		WEIGHT (LBS)	MANUFACTURER & MODEL NUMBER	REMARKS
			TOTAL CAPACITY (BTU/HR)	TOTAL CAPACITY (BTU/HR)			VOLTS	PHASE	MCA (A)	MOCP (A)	LIQUID	GAS			
AC-1	MAIL/PACKAGE ROOM	CEILING CONCEALED	15,000	17,000	0.50	494	208	1	1.33	15	1/4	1/2	98	MITSUBISHI PEFY-P15NMHU-E3	NOTES 1-7
AC-2	THEATER	CEILING CONCEALED	24,000	27,000	0.50	671	208	1	1.73	15	3/8	5/8	100	MITSUBISHI PEFY-P24NMHU-E3	NOTES 1-7
AC-3	COMMUNITY ROOM	CEILING CONCEALED	24,000	27,000	0.50	671	208	1	1.73	15	3/8	5/8	100	MITSUBISHI PEFY-P24NMHU-E3	NOTES 1-7
AC-4	RESIDENTIAL LOBBY	VERTICAL FLOOR MOUNTED	48,000	54,000	0.50	980-1,400	208	1	5.63	15	3/8	5/8	172	MITSUBISHI PVFY-P48NAMU-E	NOTES 1-8
AC-5	ROOFTOP LOBBY	CEILING CONCEALED	15,000	17,000	0.50	353-494	208	1	1.33	15	1/4	1/2	98	MITSUBISHI PEFY-P15NMHU-E3	NOTES 1-7

- NOTES:
- PROVIDE UNIT MOUNTED DISCONNECT SWITCH.
 - PROVIDE WALL MOUNTED THERMOSTAT.
 - PROVIDE FILTER.
 - PROVIDE DPLS1 CONDENSATE OVERFLOW SENSOR.
 - COORDINATE WITH MANUFACTURER METERING OF REFRIGERANT PIPING.
 - REFER TO MANUFACTURER RECOMMENDATION FOR PIPE SIZING AND LENGTHS, INSTALL AS PER MANUFACTURER RECOMMENDATION.
 - PROVIDE SS DRIP PAN.
 - PROVIDE MINIMUM 24" STAND WITH VIBRATION ISOLATION.

AMENITY AREA AIR COOLED HYPERHEAT CONDENSING UNIT (HEAT PUMP) MITSUBISHI OR EQUAL (TWO MODULES)																		ACCU -			
TAG	SERVICE AC UNIT	RATED CAPACITY (BY INDOOR UNIT)		FAN		ELECTRICAL								REFRIGERANT	REF. LINE SIZE FROM TWINNING KIT		WEIGHT (LBS)	MANUFACTURER MODEL NUMBER	MODULES	SEER (Btu/h/W)	REMARKS
		COOLING	HEATING	MODULE 1 AIRFLOW (CFM)	MODULE 2 AIRFLOW (CFM)	TWO (2) MODULES COMBINED TOGETHER. EACH INDIVIDUAL MODULE REQUIRES A SEPARATE ELECTRICAL CONNECTION.									HIGH PRESSURE	LOW PRESSURE					
						MODULE 1&2 VOLTS	MODULE 1&2 PHASE	MODULE 1 MCA	MODULE 1 RECOMMENDED BREAKER SIZE (A)	MODULE 1 MOCP	MODULE 2 MCA	MODULE 2 RECOMMENDED BREAKER SIZE (A)	MODULE 2 MOCP								
ACCU-1	AC-1 TO AC-5	144,000	160,000	6,200	6,200	208	3	44	60	60	44	60	60	R-410A	7/8	1-1/8	1,160	MITSUBISHI PURY-HP144TSKMU-A-H	HP72,HP72	-	1-6

- NOTES:
- PROVIDE UNIT MOUNTED DISCONNECT SWITCH, TWINNING KIT. FIELD INSTALLED SUPPORTS WITH SEISMIC ROOF INSTALLATION. UNITS SHALL BE ELEVATED 18" OFF THE GROUND. SUPPORTS SHOULD BE PROVIDED WITH NEOPRENE PADS.
 - ADDED FIELD CHARGE MUST BE UPDATED BASED UPON FINAL AS-BUILD PIPING LAYOUT.
 - INCLUDE LOW AMBIENT HOOD KIT WITH ASSOCIATED WIND BAFFLES FOR 100% LOW AMBIENT COOLING DOWN TO MINUS (-) 10 DEG F.
 - REFER TO MANUFACTURER RECOMMENDATION FOR PIPE SIZING AND LENGTHS, INSTALL AS PER MANUFACTURER RECOMMENDATION.

SPIRAL DUCT MOUNTED SUPPLY GRILLES							SG XXX		A X
(TITUS S300FS DOUBLE DEFLECTION)									
TAG	CFM RANGE	NC LEVEL	NOM. FACE SIZE (IN)	NECK VEL. (FPM)	THROW (FT) 150-100-50 FPM				
					0"	22.5'	45'		
SG-1	0-100	-	12 x 4	350	7-9-13	6-7-10	2-4-5		
SG-2	101-200	-	12 x 6	350	9-11-16	7-9-12	4-5-7		
SG-3	201-250	14	12 x 8	400	12-15-21	9-11-16	5-7-9		
SG-4	251-350	18	18 x 6	550	14-18-25	11-14-19	7-8-11		
SG-5	351-450	17	18 x 8	450	16-19-27	12-15-21	7-9-12		
SG-6	451-550	17	18 x 10	450	16-19-27	12-15-21	7-9-12		

- NOTE:
- COLOR AND FINISH TO BE SUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL.
 - PROVIDE AIR SCOOP PER MANUFACTURE'S RECOMMENDATION

CONDENSING UNITS (MITSUBISHI)														CU -
TAG	SERVICE	COOLING CAPACITY	HEATING CAPACITY	ELECTRICAL				REF. LINE SIZE		WEIGHT (LBS)	MANUFACTURER & MODEL NUMBER	SEER (Btu/h/W)	HSPF (Btu/h/W)	REMARKS
		TOTAL CAPACITY (BTU/HR)	HEAT PUMP CAPACITY (BTU/HR)	VOLTS	PHASE	MCA	MOCP	GAS (IN)	LIQUID (IN)					
CU-1	ACU-1	24,000	26,000	208	1	19	26	5/8	3/8	153	MITSUBISHI PUZ-A24NHA7	21.4	11.0	NOTE 1-2

- NOTES:
- PROVIDE AIR OUTLET GUIDE FOR LOW AMBIENT CONTROL (COOLING DOWN TO 20°F)
 - PROVIDE WALL MOUNTING BRACKETS (CWMB1) WITH ISOLATORS.
 - DISCONNECT SWITCH PROVIDED BY ELECTRICAL CONTRACTOR.

WALL-MOUNTED AC UNIT											WHP -	
TAG	SERVICE EQUIPMENT UNIT	COOLING CAPACITY	HEATING CAPACITY	CFM	ELECTRICAL					WEIGHT (LBS)	MANUFACTURER & MODEL NUMBER	REMARKS
		TOTAL CAPACITY (BTU/HR)	HEAT PUMP CAPACITY (BTU/HR)		VOLTS	PHASE	MCA (A)	FLA	MOCP			
ACU-1	TRASH COMPACTOR ROOM	24,000	26,000	775	208	1	1.0	0.36	15	46	MITSUBISHI PKA-A24KA7	NOTES 1-8

- NOTES:
- PROVIDE WIRELESS REMOTE CONTROLLER KIT (Mhk1) 7-DAY PROGRAMMABLE REMOTE CONTROLLER WITH REMOTE ACCESS CAPABILITY.
 - PROVIDE DRAIN PAN LEVEL SENSOR (DPLS2)
 - PROVIDE 3-POLE DISCONNECT SWITCH (TAZ-MS303)
 - REFER TO MANUFACTURER RECOMMENDATION FOR PIPE SIZING AND LENGTHS, INSTALL AS PER MANUFACTURER RECOMMENDATION.
 - INDOOR UNITS POWERED BY OUTDOOR UNIT.
 - PROVIDE MAXI-BLUE DIAMOND CONDENSATE PUMP WITH LINE HIDE INCLUDED.
 - PROVIDE WASHABLE FILTER.
 - PROVIDE BAGNET GATEWAY (PAC-UKPRC001-CN-1)

CABINET UNIT HEATERS											CUH X
NO.	MAKE	MODEL	KW	VOLTS	PHASE	AMPS	CB SIZE AMPS	THERMOSTAT	DISC. SW.	MOUNTING	REMARKS
CUH-1	BERKO	FRA4024F	3.0	208	1	14.5	20	FRONT-MOUNTED	YES	WALL MOUNTED	NOTES 1-4
CUH-2	BERKO	FRA4824F	4.0	208	1	20	25	FRONT-MOUNTED	YES	WALL MOUNTED	NOTES 1-4

- NOTES:
- PROVIDE FRONT MOUNTED THERMOSTAT.
 - PROVIDE UNIT MOUNTED DISCONNECT SWITCH.
 - PROVIDE THERMOSTAT SECURITY COVER FOR HEATERS IN PUBLIC AREAS.
 - HEATERS SHALL INCLUDE A THERMAL OVERLOAD PROTECTOR WITH MANUAL RESET.

UNIT HEATERS														UH X
NO.	MAKE	MODEL	KW	VOLTS	PHASE	AMPS	CB SIZE AMPS	CFM	THROW	WEIGHT	THERMOSTAT	DISC. SW.	MOUNTING	REMARKS
UH-1	MARKEL	G1GUH03003	3.3	208	1	15.9	20	400	26'-0"	36 LBS.	T5100	DCS202	HUNG	NOTE: 1-5
UH-2	QMARK	MSPH1758324	7.5	208	3	23	35	1000	26'-0"	36 LBS.	-	-	PLENUM	NOTE: 1-5
UH-3	MARKEL	P3PUH10CA1	10	208	3	27.8	35	575	36'-0"	51 LBS.	T5100	DCS403	HUNG	NOTE: 1-5
UH-4	MARKEL	G1GUH05003	5.0	208	1	18.1	20	400	26'-0"	36 LBS.	T5100	DCS202	HUNG	NOTE: 1-5
PUH-1	QMARK	CHPR25	1.9	208	1	9.42	20	400	26'-0"	36 LBS.	-	YES	PLENUM	NOTE: 1-5

- NOTES:
- PROVIDE FRONT MOUNTED THERMOSTAT.
 - PROVIDE UNIT MOUNTED DISCONNECT SWITCH.
 - PROVIDE MOUNTING BRACKETS
 - COORDINATE THERMOSTAT AND DISCONNECT SWITCH WITH MANUFACTURER.
 - HEATERS SHALL INCLUDE A THERMAL OVERLOAD PROTECTOR WITH MANUAL RESET.

SIDEWALL SUPPLY GRILLES							SG B XXX X	
(TITUS 300RL DOUBLE DEFLECTION)								
TAG	CFM RANGE	NC LEVEL	NOM. FACE SIZE (IN)	NECK VEL. (FPM)	THROW (FT)	150-100-50 FPM		
					0'	22.5'	45'	
SG-1	0-150	17	8 x 6	600	12-16-23	9-13-18	5-7-10	
SG-2	151-250	15	14 x 6	550	13-20-28	10-15-22	6-9-13	
SG-3	251-315	15	18 x 6	500	15-23-33	12-18-25	7-10-15	

- NOTE:
- BORDER TYPE TO BE COMPATIBLE WITH WALL.
 - COLOR AND FINISH TO BE REVIEWED AND APPROVED BY THE ARCHITECT.
 - PROVIDE VOLUME BRANCH DAMPER. WHERE LOCATED IN INACCESSIBLE AREAS, PROVIDE CABLE OPERATED DAMPER LOCATED IN THE BRANCH, OPERABLE THROUGH THE FACE OF THE DIFFUSER (KEY OPERATED).

RETURN GRILLES						RG XXX	A X
<TITUS MODEL 350RL>							
TAG	CFM RANGE	NECK SIZE	NOMINAL FACE SIZE	CORE VELOCITY (FPM)	NC LEVEL		
RG-1	300-650	18 x 10	20 x 12	600	15		
RG-2	651-850	24 x 10	26 X 12	550	16		
RG-3	851-1000	24 x 14	26 x 16	500	14		
RG-4	1001-1400	30 x 16	32 x 18	450	15		

- NOTE:
- BORDER TYPE TO BE COMPATIBLE WITH WALL.
 - COLOR AND FINISH TO BE REVIEWED AND APPROVED BY THE ARCHITECT.
 - PROVIDE VOLUME BRANCH DAMPER. WHERE LOCATED IN INACCESSIBLE AREAS, PROVIDE CABLE OPERATED DAMPER LOCATED IN THE BRANCH, OPERABLE THROUGH THE FACE OF THE DIFFUSER (KEY OPERATED).

----	----	----
----	----	----
----	----	----
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architecture | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title: MECHANICAL SCHEDULES	
Seal & Signature	Date: 07-18-2016
	Scale: AS NOTED
	Job#: 2011
	Sheet Title: M-501
JAMES KHACHATURIAN, P.E. - NY LICENSE #08081-1 NY CERTIFICATE OF AUTHORIZATION #001724	Sheet: of

TAG	SERVICE AC UNIT	RATED CAPACITY BTU/HR		FAN		ELECTRICAL								REFRIGERANT	REF. LINE SIZE FROM TWINNING KIT		WEIGHT (LBS)	MANUFACTURER & MODEL NUMBER	MODULES	EER (Btu/h/W)	REMARKS
						TWO (2) MODULES COMBINED TOGETHER. EACH INDIVIDUAL MODULE REQUIRES A SEPARATE ELECTRICAL CONNECTION.									HIGH PRESSURE	LOW PRESSURE					
		COOLING	HEATING	MODULE 1 AIRFLOW (CFM)	MODULE 2 AIRFLOW (CFM)	MODULE 1&2 VOLTS	MODULE 1&2 PHASE	MODULE 1 MCA	MODULE 1 RECOMMENDED BREAKER SIZE (A)	MODULE 2 MOCp	MODULE 2 MCA	MODULE 2 RECOMMENDED BREAKER SIZE (A)	MODULE 2 MOCp								
HP-1,2,3	AHU-1 THRU AHU-5	432,000	287,000	11,300	11,300	208	3	73	100	125	73	100	125	R-410A	1½	1½	1,836	DAIKIN PURY-EP432TSNU-A	EP216, EP216	9.9	1-6
HP-4	AHU-1 THRU AHU-5	240,000	233,000	8,300	8,300	208	3	41	50	60	41	50	60	R-410A	¾	1½	1,244	DAIKIN PURY-EP240TSNU-A	EP120, EP120	11.7	1-6

1. PROVIDE UNIT MOUNTED DISCONNECT SWITCH.
2. PROVIDE TWINNING KIT.
3. PROVIDE FIELD INSTALLED SUPPORTS WITH SEISMIC ROOF INSTALLATION. UNITS SHALL BE ELEVATED 18" OFF THE GROUND. SUPPORTS SHOULD BE PROVIDED WITH NEOPRENE PADS.
4. ADDED FIELD CHARGE MUST BE UPDATED BASED UPON FINAL AS-BUILD PIPING LAYOUT.
5. INCLUDE LOW AMBIENT HOOD KIT WITH ASSOCIATED WIND BAFFLES FOR 100% LOW AMBIENT COOLING DOWN TO MINUS (-) 10 DEG F.
6. REFER TO MANUFACTURER RECOMMENDATION FOR PIPE SIZING AND LENGTHS. INSTALL AS PER MANUFACTURER RECOMMENDATION.

TAG	LOCATION	TYPE	COOLING CAPACITY	HEATING CAPACITY	Btu/hr	CFM (LOW-MED-HI)	ELECTRICAL				REF. LINE SIZE (IN)		WEIGHT (LBS)	MANUFACTURER & MODEL NUMBER	REMARKS
			TOTAL CAPACITY (BTU/HR)	TOTAL CAPACITY (BTU/HR)			VOLTS	PHASE	MCA (A)	MOCp (A)	LIQUID	GAS			
AHU-1	REFER TO PLANS	CEILING CONCEALED (DUCTED)	12,000	13,500	0.6"	265-318-371	208/230	1	1.20	15	¾	½	49	MITSUBISHI PEFY-P12NMAU-E3	1-7
AHU-2	REFER TO PLANS	CEILING CONCEALED (DUCTED)	18,000	20,000	0.6"	424-512-600	208/230	1	1.56	15	¾	½	58	MITSUBISHI PEFY-P18NMAU-E3	1-7
AHU-3	REFER TO PLANS	CEILING CONCEALED (DUCTED)	24,000	27,000	0.6"	618-742-883	208/230	1	2.73	15	¾	¾	67	MITSUBISHI PEFY-P24NMAU-E3	1-7
AHU-4	REFER TO PLANS	CEILING CONCEALED (DUCTED)	30,000	34,000	0.6"	618-742-883	208/230	1	2.73	15	¾	¾	67	MITSUBISHI PEFY-P30NMAU-E3	1-7
AHU-5	REFER TO PLANS	CEILING CONCEALED (DUCTED)	36,000	40,000	0.6"	812-989-1165	208/230	1	3.32	15	¾	¾	86	MITSUBISHI PEFY-P36NMAU-E3	1-7

1. PROVIDE UNIT MOUNTED DISCONNECT SWITCH.
2. PROVIDE WALL MOUNTED THERMOSTAT.
3. PROVIDE FILTER.
4. PROVIDE DRLS1 CONDENSATE OVERFLOW SENSOR.
5. COORDINATE WITH MANUFACTURER METERING OF REFRIGERANT PIPING.
6. REFER TO MANUFACTURER RECOMMENDATION FOR PIPE SIZING AND LENGTHS, INSTALL AS PER MANUFACTURER RECOMMENDATION
7. PROVIDE SS DRIP PAN.

FAN No.	LOCATION	SERVICE	FAN			MOTOR		POWER			WEIGHT (LBS)	MANUFACTURER MODEL NUMBER	REMARKS
			CFM	STATIC PRESS. (IN WTR)	R.P.M.	HP	R.P.M.	VOLTS	PHASE	Hz			
TREF-1	ROOF	TRASH ROOM EXHAUST	450	0.625	1490	$\frac{1}{2}$	1750	115	1	60	60	GREENHECK G-098-B	NOTES 1-5

1. PROVIDE UNIT MOUNTED DISCONNECT SWITCH.
2. PROVIDE 24" HIGH ROOF CURB.
3. PROVIDE ALUMINUM BIRDSCREEN
4. PROVIDE BACKDRAFT DAMPER.
5. FAN SHALL RUN 24/7.

FAN No.	LOCATION	SERVICE	FAN					MOTOR		POWER			WEIGHT (LBS)	MANUFACTURER MODEL NUMBER	REMARKS
			CFM	STATIC PRESS. (IN WTR)	R.P.M.	UNIT		AMPS	R.P.M.	VOLTS	PHASE	Hz			
						TYPE	SIZE								
TX-1	CEILING	BATHROOM	70	0.25	700	SP-B	90	.18	700	115	1	60	10	GREENHECK SP-B-80	NOTES 1-4

1. SHALL BE CONTROLLED VIA WALL SWITCH. REFER TO ELECTRICAL DRAWINGS.
2. PROVIDE XVENT AT TERMINATION.
3. PROVIDE TRANSITION DUCT REDUCER WHERE REQUIRED, SEE PLANS.
4. PROVIDE BACK DRAFT DAMPER.

ERU
X

UNIT No.	MANUF.	MODEL	SERVICE	SUPPLY					ENERGY RECOVERY/EXHAUST					OA MIN FLOW (CFM)	ENERGY WHEEL SUMMER SUPPLY				ENERGY WHEEL SUMMER EXHAUST				ENERGY WHEEL WINTER SUPPLY				ENERGY WHEEL WINTER EXHAUST				SUMMER						HEATING						FILTER TYPE	ELECTRICAL					WT. (LB)	NOTES
				FLOW (CFM)	ESP (IN)	MOTOR			FLOW (CFM)	ESP (IN)	MOTOR				O.A.T D.B. (°F)	O.A.T W.B. (°F)	L.A.T. D.B. (°F)	L.A.T W.B. (°F)	R.A.T D.B. (°F)	R.A.T W.B. (°F)	EX.A.T D.B. (°F)	EX.A.T W.B. (°F)	O.A.T D.B. (°F)	O.A.T W.B. (°F)	L.A.T D.B. (°F)	L.A.T W.B. (°F)	L.A.T D.B. (°F)	L.A.T W.B. (°F)	EX.A.T D.B. (°F)	EX.A.T W.B. (°F)	ORIGINAL LOAD (SENSIBLE MBH)	ORIGINAL LOAD WITH ERU (LATENT MBH)	ORIGINAL LOAD WITH ERU (TOTAL MBH)	LOAD WITH ERU (SENSIBLE MBH)	LOAD WITH ERU (LATENT MBH)	LOAD WITH ERU (TOTAL MBH)	ORIGINAL LOAD (SENSIBLE MBH)	ORIGINAL LOAD WITH ERU (LATENT MBH)	ORIGINAL LOAD WITH ERU (TOTAL MBH)	LOAD WITH ERU (SENSIBLE MBH)	LOAD WITH ERU (LATENT MBH)	LOAD WITH ERU (TOTAL MBH)		VOLTAGE	FLA	MCA	MAX FUSE			
						BHP	HP	RPM			BHP	HP	RPM																																			BHP		
ERU-1	RENEWAIRE	HE-2XJRTV-S1SUU --DANT---L	CORRIDORS	1,400	1.0	0.9	1.5	1,460	1,400	1.0	0.94	1.5	1,460	1,400	95.00	75.00	80.67	68.8	75.00	62.00	87.24	70.36	10.00	9.00	53.0	44.3	70.00	55.00	34.23	32.67	30.2	36.6	66.9	8.7	24.9	33.6	90.7	32.7	123.4	26.3	11.3	37.3	2"	208/1/60	14.7	18.4	25	689	1-5	
ERU-2	RENEWAIRE	HE-3XJRTV-S1SW --DVNT---L	CORRIDORS	1,820	1.0	1.42	2.0	1,600	1,820	1.0	1.48	2.0	1,600	1,820	95.00	75.00	80.4	68.5	75.00	62.00	87.24	70.36	10.00	9.00	53.8	44.9	70.00	55.00	34.23	32.67	39.3	47.6	86.9	10.6	30.3	40.9	117.9	42.5	160.5	31.7	13.5	45.4	2"	208/1/60	22.6	28.3	30	972	1-5	
ERU-3	RENEWAIRE	HE1.5JRTV-S1SEE --DGNT---L	CORRIDORS	990	1.0	0.8	1.0	1,600	990	1.0	0.8	1.0	1,600	990	95.00	75.00	80.7	68.8	75.00	62.00	87.24	70.36	10.00	9.00	53.0	44.3	70.00	55.00	34.23	32.67	21.4	25.9	47.3	6.1	17.3	23.3	64.2	23.1	87.3	18.2	7.8	26.0	2"	208/1/60	7.9	9.9	15	548	1-5	

1. PROVIDE MOTORIZED DAMPER FOR BOTH AIRSTREAMS
2. NON-FUSED DISCONNECT
3. FACTORY AUTHORIZED START UP
4. VIBRATION ISOLATED CURB
5. FILTERS SHALL BE MERV 13 WITH MERV 8 PREFILTERS.

KEA
ENGINEERS

Engineering Excellence since 1984

186 WOOD AVE. SOUTH, 1ST FLOOR
ISELIN, NJ 08830
TEL (732) 635 0044 • FAX (732) 635 1777

----	----	----
----	----	----
----	----	----
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:

PROPOSED MIXED USE BUILDING:

WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:

136-158 WESTMORELAND, LLC

1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architecture | planning | interior

188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title

MECHANICAL SCHEDULES

Seal & Signature	Date:	07-18-2016
	Scale:	AS NOTED
	Job#:	2011
	Sheet Title:	M-502
	ASHWIN KUMARATHURAN, P.E. - NY LICENSE #008286-1 NY CERTIFICATE OF AUTHORIZATION #0017124	
Sheet:		of

ARMEN KHACHATURIAN, P.R. - NY LICENSE #062281-
NY CERTIFICATE OF AUTHORIZATION #0017124

EXHAUST GRILLES (TITUS MODEL 350RL)							EG XXX	A X
TAG	NON-DUCTED			DUCTED				
	CFM RANGE	NECK SIZE	NOMINAL FACE SIZE	CFM RANGE	NECK SIZE	NOMINAL FACE SIZE		
EG-1	0-150	6 x 6	8 x 8	0-300	6 x 6	8 x 8		
EG-2	151-300	10 x 22	12 x 24	301-600	10 x 22	12 x 24		
EG-3	301-700	22 x 22	24 x 24	601-1500	22 x 22	24 x 24		

NOTE:

- BORDER TYPE TO BE COMPATIBLE WITH CEILING TYPE.
- COLOR AND FINISH TO BE REVIEWED AND APPROVED BY THE ARCHITECT.
- PROVIDE VOLUME BRANCH DAMPER. WHERE LOCATED IN INACCESSIBLE AREAS, PROVIDE CABLE OPERATED DAMPER LOCATED IN THE BRANCH, OPERABLE THROUGH THE FACE OF THE DIFFUSER (KEY OPERATED).

RETURN GRILLES (AMENITIES) (TITUS 350R)				RG XXX	B X
TAG	DUCTED				
	CFM RANGE	NOMINAL DUCT SIZE	FACE SIZE		
RG-1	0-400	12 x 12	14 x 14		
RG-2	405-900	24 x 12	26 x 14		
RG-3	905-1,875	24 x 24	26 x 26		

NOTE:

- BORDER TYPE TO BE COMPATIBLE WITH CEILING TYPE.
- COLOR AND FINISH TO BE REVIEWED AND APPROVED BY THE ARCHITECT.
- PROVIDE VOLUME BRANCH DAMPER. WHERE LOCATED IN INACCESSIBLE AREAS, PROVIDE CABLE OPERATED DAMPER LOCATED IN THE BRANCH, OPERABLE THROUGH THE FACE OF THE DIFFUSER (KEY OPERATED).

CEILING SUPPLY DIFFUSERS (AMENITIES) (TITUS MODEL OMNI)					CD XXX	A X
TAG	CFM RANGE	NECK SIZE (IN)	NOM. FACE SIZE (IN)	BRANCH SIZE		
CD-1	1 - 100	6"ø	24 x 24	6"ø		
CD-2	101 - 200	8"ø	24 x 24	8"ø		
CD-3	201 - 325	10"ø	24 x 24	10"ø		
CD-4	326 - 450	12"ø	24 x 24	12"ø		

NOTE:

- BORDER TYPE TO BE COMPATIBLE WITH CEILING TYPE.
- COLOR AND FINISH TO BE REVIEWED AND APPROVED BY THE ARCHITECT.
- PROVIDE VOLUME BRANCH DAMPER. WHERE LOCATED IN INACCESSIBLE AREAS, PROVIDE CABLE OPERATED DAMPER LOCATED IN THE BRANCH, OPERABLE THROUGH THE FACE OF THE DIFFUSER (KEY OPERATED).

RESIDENTIAL CEILING SUPPLY DIFFUSERS							CD XXX	B X
	CFM RANGE	NECK SIZE (IN)	NOM. FACE SIZE (IN)	MAX. BRANCH SIZE	MANUFACTURER MODEL NUMBER	NOTES		
CD-1	0 - 250	9 x 9	12 x 12	10"ø	TUTLE&BAILEY MA	NOTES 1,2,3,4		

NOTE:

- BORDER TYPE TO BE COMPATIBLE WITH CEILING TYPE.
- COLOR AND FINISH TO BE REVIEWED AND APPROVED BY THE ARCHITECT.
- PROVIDE VOLUME DAMPER OPERATED THROUGH FACE OF THE DIFFUSER, OR OPPOSED BLADE DAMPER.
- PROVIDE SQUARE TO ROUND ADAPTER WITH 8"ø ROUND NECK.

CARBON MONOXIDE NITROGEN DIOXIDE DETECTION SYSTEM				
TAG	MSA MODEL	ALARM LEVEL FOR NO2	ALARM LEVEL FOR CO	STROBE/HORN
GDS (GAS DETECTION SYSTEM)	ONE (1) A-ZGARD C CONTROLLER TWO (2) A-ZGARD SENSORS SENSORS TO MONITOR GARAGE CO AND NO2.	LEVEL ONE, 3.5 PPM LEVEL 2, 5.0 PPM	LEVEL ONE, 50 PPM LEVEL 2, 75 PPM	MOUNT WHERE SHOWN ON PLANS. MOUNT AT LEVEL TO BE SEEN EASILY BY OCCUPANTS. MOUNT SIGNS AS NOTED BELOW IN SAME LOCATIONS.

NOTES:

- MOUNT COMBINATION CARBON MONOXIDE/NITROGEN DIOXIDE SENSORS AT 5 FEET AFF.
- ELECTRICAL CONTRACTOR TO SUPPLY 120 VOLT POWER TO CONTROLLER (SENSORS POWERED BY CONTROLLER) EACH CAN MANAGE UP TO 8 SENSORS.
- ELECTRICAL CONTRACTOR TO SUPPLY 120 VOLT POWER TO EACH HORN/STROBE.
- ELECTRICAL CONTRACTOR TO SUPPLY AND RUN TWISTED/SHIELDED FOUR PAIR CABLE FROM EACH SENSOR TO MAIN CONTROLLER FOR RS 485 COMMUNICATION.
- CONTROLLER LOCATED ON PLANS. CONTRACTOR RESPONSIBLE FOR COMM CABLE BACK TO MAIN SECURITY OFFICE AS REQUIRED.
- OUTPUT AT ALARM LEVEL ONE ENERGIZES ALL EXHAUST FANS AND SENDS SUPPLY FANS TO 100% AIRFLOW.
- OUTPUT AT ALARM LEVEL 2 ENERGIZES ALL EXHAUST FANS AND STROBE AND HORN.
- CONTRACTOR SHALL HANG SIGNS AT STROBE/HORN LOCATIONS IDENTIFYING THEIR PURPOSE. SIGNS SHALL BE OF WHITE BACKGROUND WITH BLACK LETTERS AND SHALL BE EASILY READ AT 100 FEET. SIGNS SHALL BE EASILY VISIBLE FROM BOTH SIDES.
- CONTROLLER SHALL HAVE 4-20 OUTPUT AND/OR DRY CONTACT.
- METAL GUARDS TO BE INSTALLED OVER CARBON MONOXIDE SENSORS.
- CO/NO2 SENSORS SHALL BE ELECTROMECHANICAL TYPE AS MANUFACTURED BY MSA, SENSOR SHALL HAVE A 50 FOOT RADIUS COVERAGE AT A MINIMUM.

RADIANT HEATERS										RH X
FAN No.	LOCATION	SERVICE	WATTS	POWER				WEIGHT (LBS)	MANUFACTURER MODEL NUMBER	REMARKS
				AMPS	VOLTS	PHASE	Hz			
RH-1	ROOF	ROOF DECK	1,500	6.3	208	1	60	8	SOLAIRA SLOSXYLAW15240B	NOTE 1

NOTES:

- PROVIDE SOLAIRA SMgRT WATERPROOF OCCUPANCY CONTROLLER.

AIR COOLED PACKAGED ROOFTOP AIR CONDITIONING UNITS (ELECTRIC HEATING)																												RTU #			
UNIT No.	LOCATION	TONS	SERVICE	COOLING CAPACITY		HEATING CAPACITY	ENTER. AIR TEMP. (°F) (COOLING)		EVAPORATOR FAN SECTION			EVAPORATOR COIL			ELECTRIC HEAT CAPACITY				LEAVING AIR TEMP. (°F)		COMPRESSOR		FILTER	ELECTRICAL				WEIGHT (LBS)	OUTSIDE AIR QUANTITY (CFM)	MANUFACTURER MODEL NUMBER	NOTES
				SENSIBLE NET CAPACITY (BTU/HR)	TOTAL NET CAPACITY (BTU/HR)	TOTAL CAPACITY (MBH)	DB	WB	RPM	EXT. S.P. (IN.)	HP	FACE AREA (SQ. FT.)	ROWS/ FPI	FACE VELOCITY (FPM)	HEATING CFM	TOTAL CAPACITY (KW)	STAGES	HEATER MODEL	DB	WB	No.	REFRIG.	SIZE	FULL LOAD AMPS (FLA)	VOLTS/ PHASE	MIN. CIRCUIT AMPACITY (A)	MAX OVER-CURRENT				
RTU-2	ROOF	2	5TH FLOOR FITNESS	19,680	24,600	25.6	95	75	1,050	1.0	1/3	2.7	2/16	298.1	800	7.5	1	BAYHTRV110	87.7	53.6	1	R-410A	PROVIDE	46.9	208/1	54.7	85	358	200	TRANE 4TCC4024A1000A	1-2

NOTES:

- PROVIDE THE FOLLOWING: UNIT MOUNTED DISCONNECT SWITCH, 7-DAY PROGRAMMABLE LOCKABLE THERMOSTAT, 2" THROWAWAY FILTER, HOT GAS REHEAT COILS, AND CONTROLLER.
- PROVIDE 24" SEISMIC ROOFCURB.
- PROVIDE MANUAL FRESH AIR DAMPER
- PROVIDE SINGLE POWER ENTRY KIT

BRANCH CIRCUIT CONTROLLER										BCC -
TAG	SERVICE CONDENSING UNIT	ELECTRICAL					CONNECTED CAPACITY (BTUH)	WEIGHT (LBS)	MANUFACTURER & MODEL NUMBER	REMARKS
		VOLTS	PHASE	MCA	MOCP	TOTAL INPUT (W)				
BCC-1	HP-1	208	1	1.65	15	-	432,000	172	MITSUBISHI CMB-P1016NU-HA1	NOTE 1-3
BCC-2	HP-2	208	1	1.65	15	-	432,000	172	MITSUBISHI CMB-P1016NU-HA1	NOTE 1-3
BCC-3	HP-3	208	1	1.65	15	-	432,000	172	MITSUBISHI CMB-P1016NU-HA1	NOTE 1-3
BCC-4	HP-4	208	1	1.45	15	-	240,000	124	MITSUBISHI CMB-P108NU-HA1	NOTE 1-2
BCC-5	ACCU-1	208	1	1.45	15	-	160,000	124	MITSUBISHI CMB-P106NU-HA1	NOTE 1-2

NOTES:

- INCLUDE DIAMONDBACK BALL VALVES BV-SERIES, 700 PSIG WORKING PRESSURE, FULL PORT, 410A RATED FOR EACH PORT.
- PROVIDE CONDENSATE PUMP.
- PROVIDE SUB BC CONTROLLER MODEL CMB-104NU-GB1.

GARAGE EXHAUST FANS													GEF X
FAN No.	LOCATION	SERVICE	FAN			MOTOR		POWER			WEIGHT (LBS)	MANUFACTURER MODEL NUMBER	REMARKS
			CFM	STATIC PRESS. (IN WTR)	R.P.M.	HP (AMPS)	R.P.M.	VOLTS	PHASE	Hz			
GEF-1	GARAGE	GARAGE	450	0.375	1550	1/10	1750	115	1	60	41	GREENHECK SQ-90-D	NOTES 3,4,5,6
GEF-2	GARAGE	GARAGE	6,725	0.5	1550	7.5	1750	208	3	60	163	GREENHECK AX-41-160-0432-M75	NOTES 3,4,5,6,7
GEF-3	GARAGE	GARAGE	1,860	0.25	1160	1/6	1750	115	1	60	87	GREENHECK AER-E20C-414-B6	NOTES 1,4,5,6,7
GEF-4	GARAGE	GARAGE	125	0.125	980	(.19)	1750	115	1	60	16	GREENHECK CSP-A125	NOTES 3,4,5,6

NOTES:

- PROVIDE WALL HOUSING WITH DAMPER GUARD.
- PROVIDE 90 DEGREE WEATHER HOOD KIT.
- FAN SHOULD OPERATE 24/7.
- PROVIDE ALUMINUM BIRDSCREEN
- PROVIDE UNIT MOUNTED DISCONNECT SWITCH.
- PROVIDE INTEGRAL BACKDRAFT DAMPER.
- FAN SHALL ACTIVATE WHEN CO/NO2 DETECTION SYSTEM DETECTS HIGH LEVELS OF GASSES. REFER TO ELECTRICAL DRAWINGS.

----	-----	-----
----	-----	-----
----	-----	-----
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:

PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:

136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

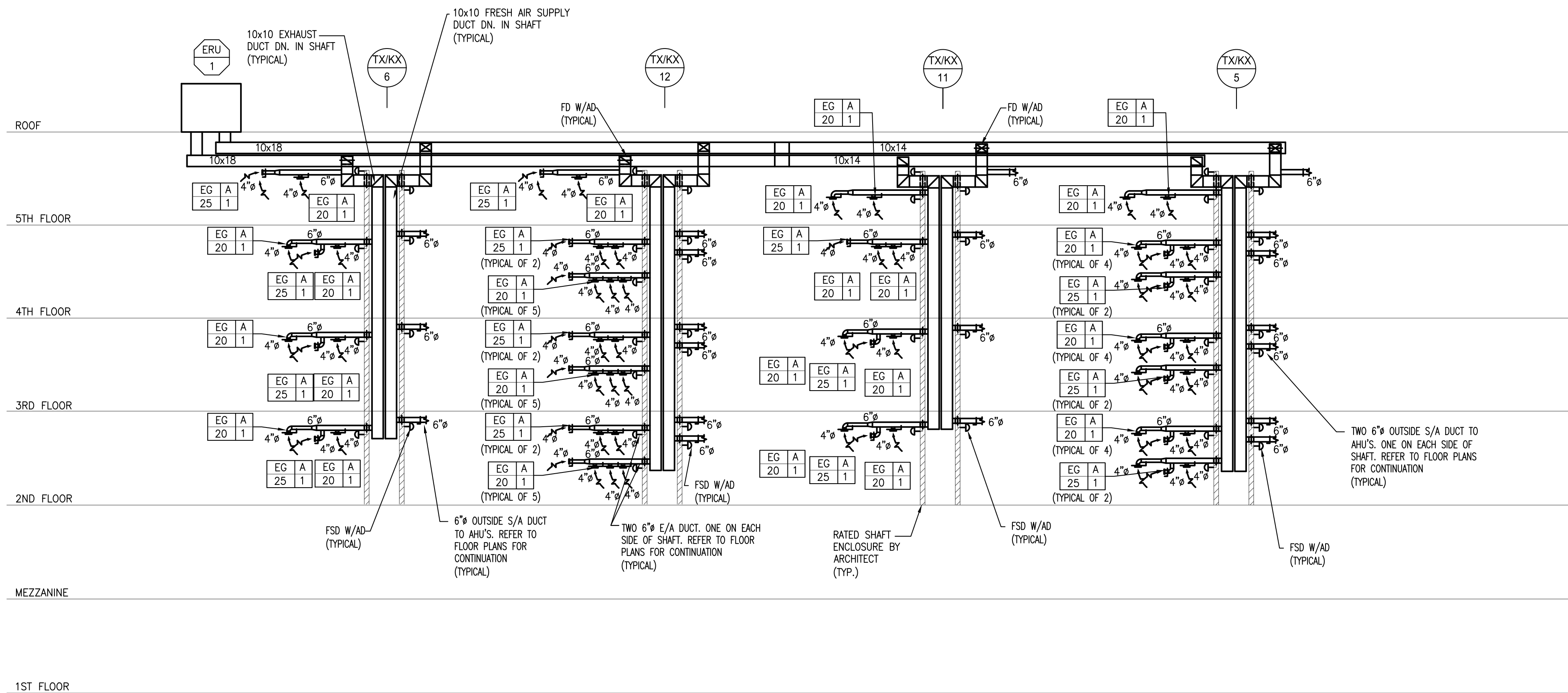
McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

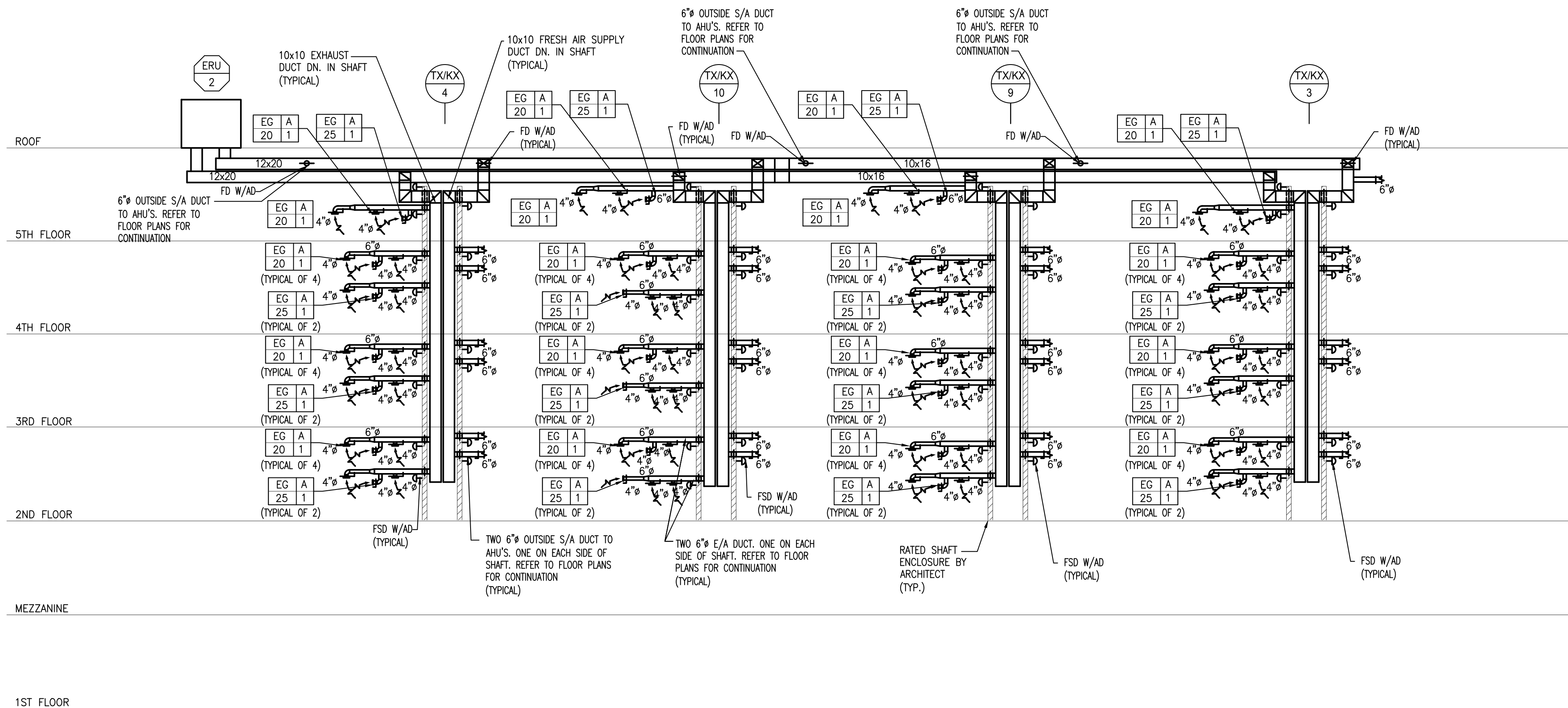
Sheet Title:

MECHANICAL SCHEDULES

Seal & Signature	Date:	07-18-2016
	Scale:	AS NOTED
	Job#:	2011
	Sheet Title:	M-503
JAMES KHACHATURIAN, P.E. - NY LICENSE #080301-1 NY CERTIFICATE OF AUTHORIZATION #001724		Sheet: of



TOILET/KITCHEN/DRYER EXHAUST AND OUTSIDE AIR SUPPLY RISER DIAGRAM (ERU-1)
NOT TO SCALE



TOILET/KITCHEN/DRYER EXHAUST AND OUTSIDE AIR SUPPLY RISER DIAGRAM (ERU-2)
NOT TO SCALE

----	----	----
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

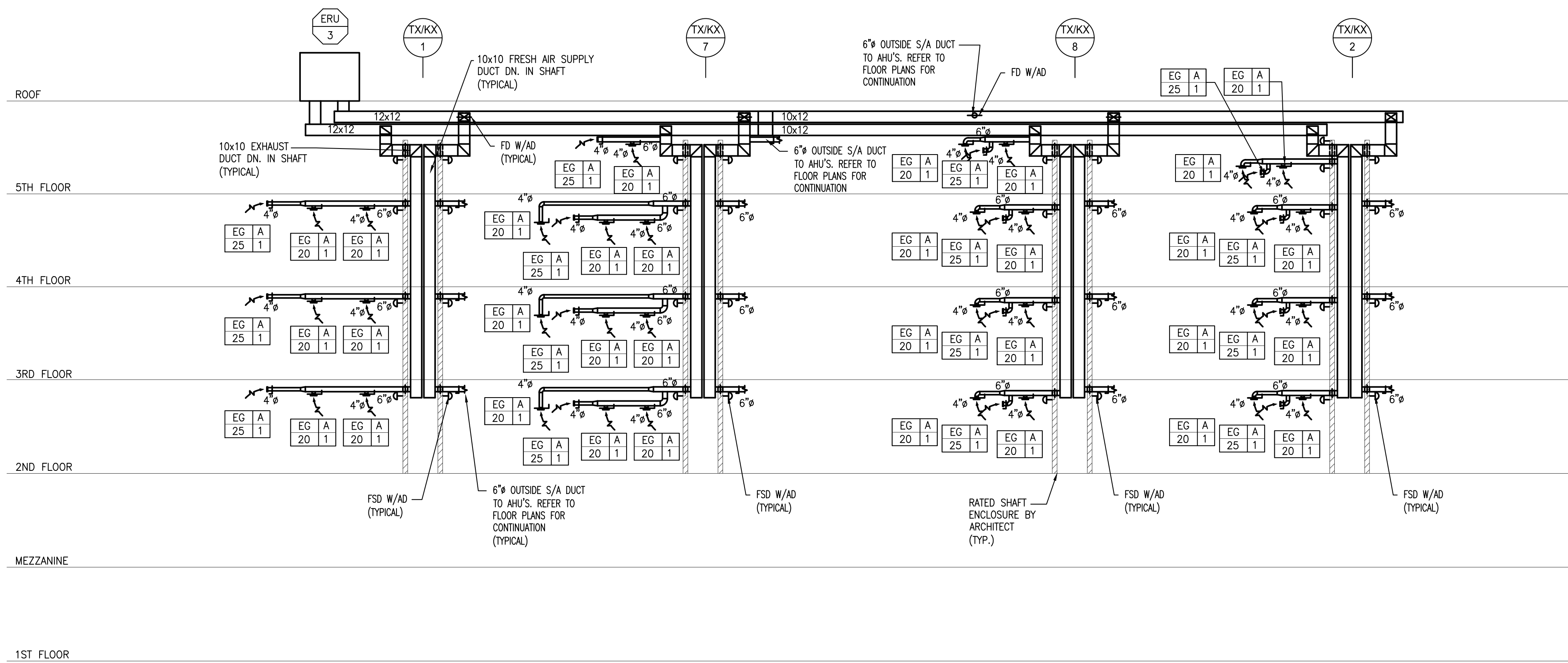
Papp Architects
architecture | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

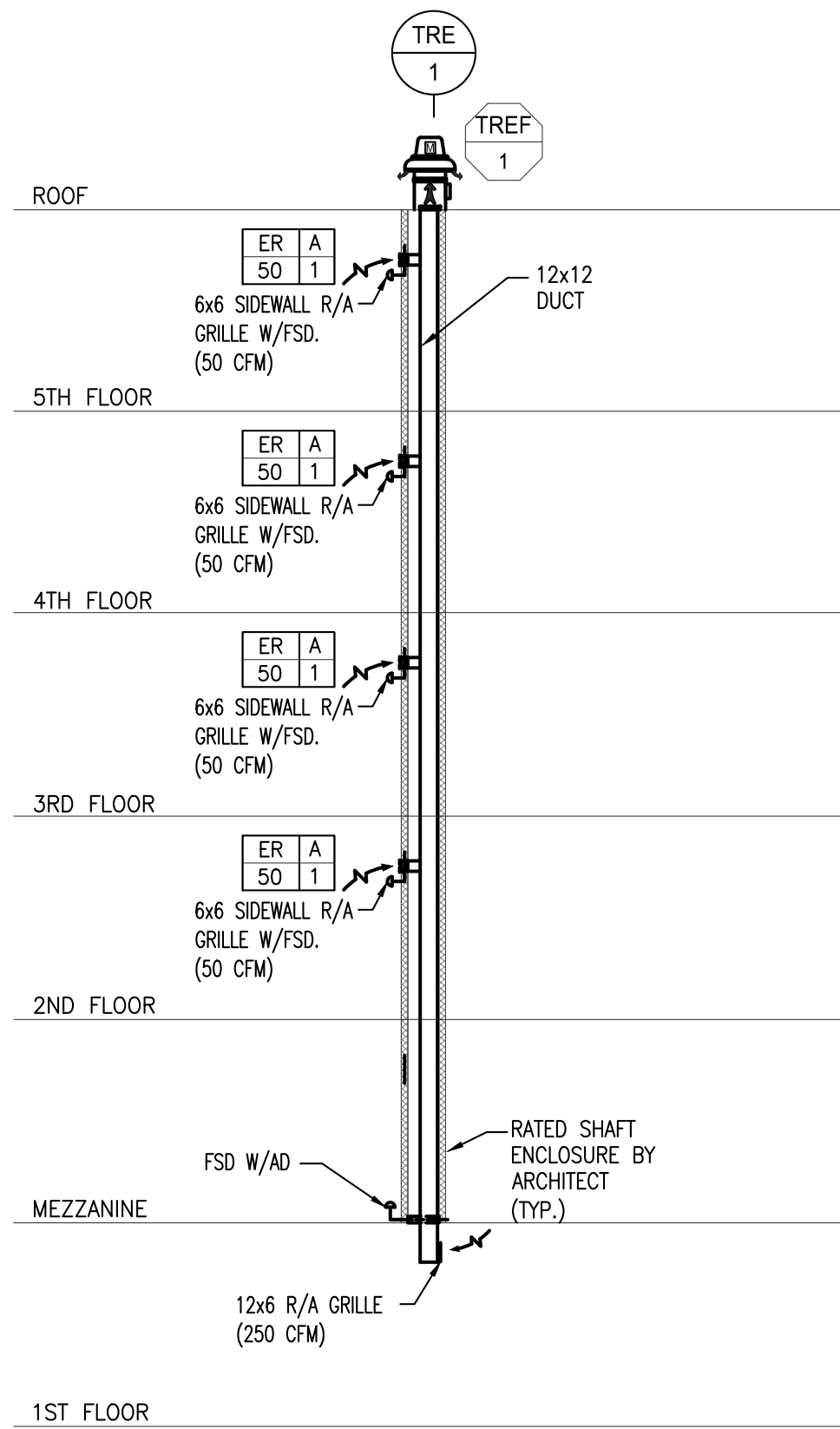
Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title: MECHANICAL RISER DIAGRAMS		
Seal & Signature	Date:	07-18-2016
	Scale:	AS NOTED
	Job#:	2011
	Sheet Title:	M-601
KHACHATURIAN, P.A. - NY LICENSE #002281-1 NY CERTIFICATE OF AUTHORIZATION #0012124		



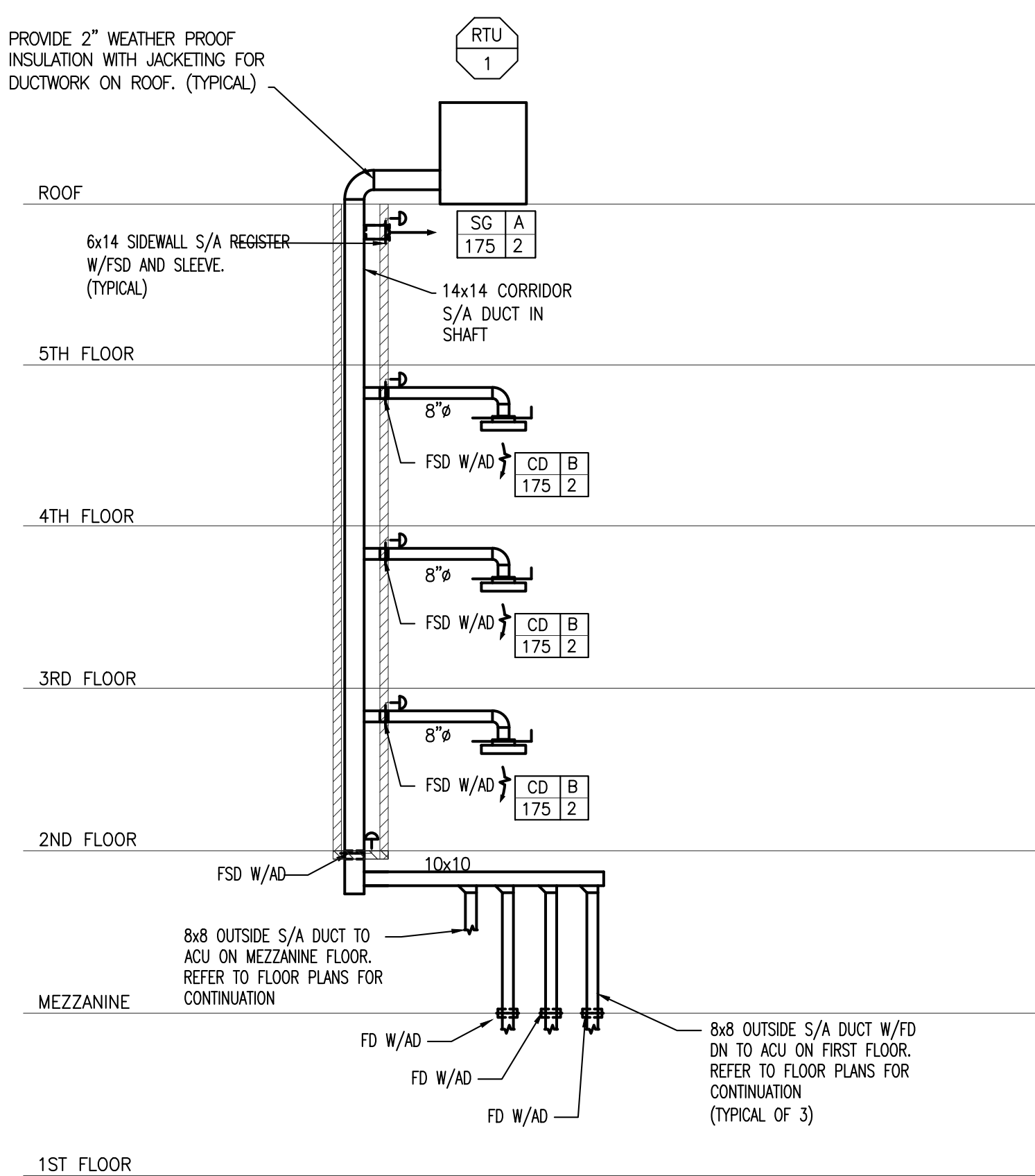
TOILET/KITCHEN/DRYER EXHAUST AND OUTSIDE AIR SUPPLY RISER DIAGRAM (ERU-3)

NOT TO SCALE



TRASH EXHAUST RISER DIAGRAM - TRE-1

NOT TO SCALE



CORRIDOR SUPPLY RISER DIAGRAM (RTU-1)

NOT TO SCALE

---	---	---
2	Issued For Bid	04-12-2021
1	Issued For Bid	04-05-2021
Rev. #	Revision Description	Date:

Project Description:
PROPOSED MIXED USE BUILDING:
WESTMORELAND LOFTS
136-158 WESTMORELAND AVE.
WHITE PLAINS, NY 10606

Owner/Developer:
136-158 WESTMORELAND, LLC
1485 5TH AVENUE, 24F
NEW YORK, NY 10035

Papp Architects
architecture | planning | interiors
188 East Post Road, White Plains, NY 10601
914 949-1851 | www.papparchitects.com

JMC Site Development
Consultants
Civil Engineer
120 Bedford Road
Armonk, NY 10504
914 273-5225

McLaren Engineering Group
Structural Engineer
131 West 35th Street,
4th Floor
New York, NY 10001
212 324-6300

Khachaturian Engineering
Associates
Mechanical/Electrical/Plumbing
Engineers
186 Wood Avenue South, First Floor
Iselin, NJ 08830
732 635-0044

Sheet Title: MECHANICAL RISER DIAGRAMS		
Seal & Signature	Date:	07-18-2016
	Scale:	AS NOTED
	Job#:	2011
	Sheet Title:	M-602
KHACHATURIAN, P.A. - NY LICENSE #002261-1 NY CERTIFICATE OF AUTHORIZATION #001124		