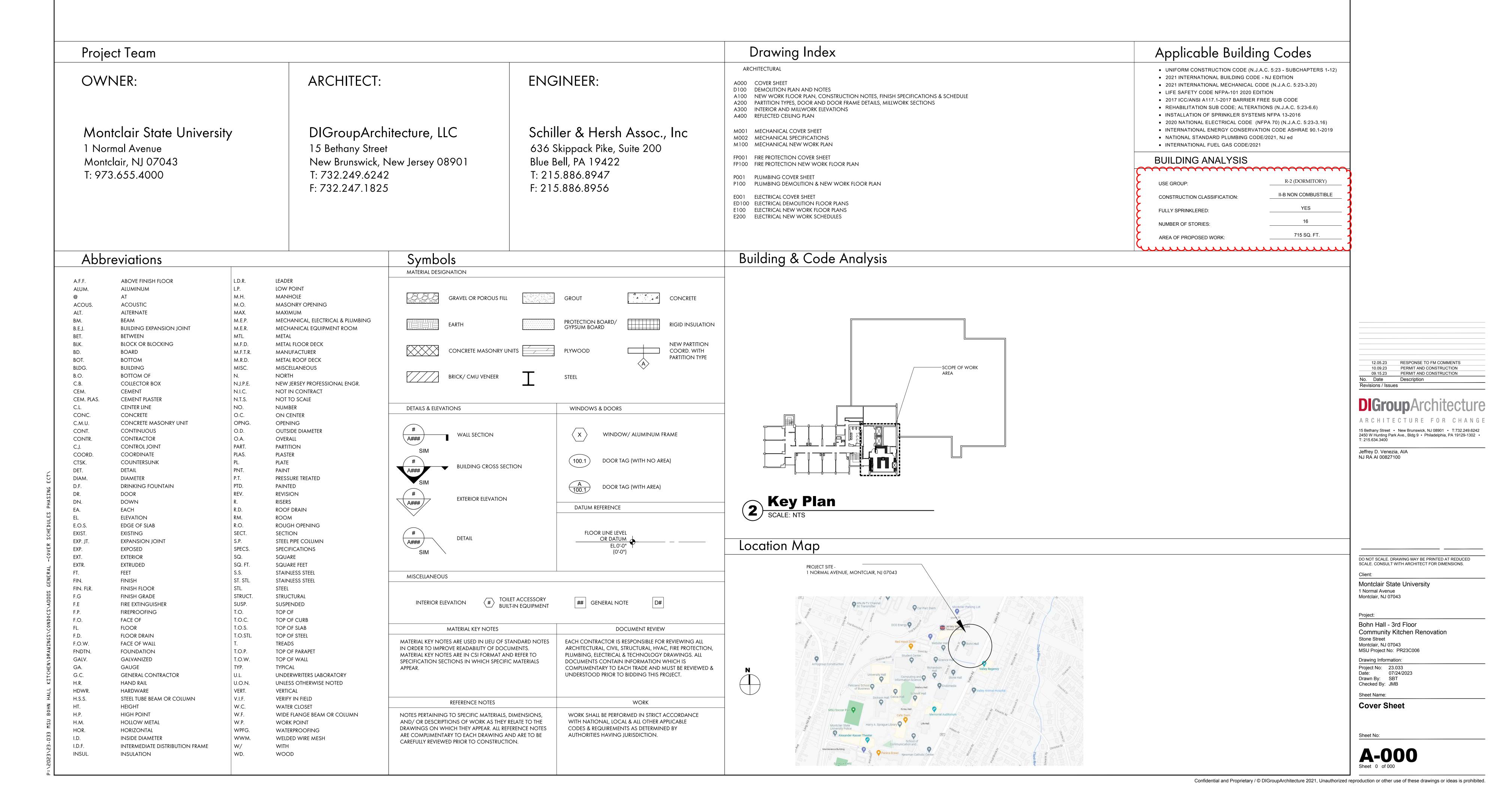
MONTCLAIR STATE UNIVERSITY BOHN HALL - 3RD FLOOR - PR23C006 COMMUNITY KITCHEN RENOVATION 1 NORMAL AVENUE MONTCLAIR, NJ 07043



GENERAL DEMOLITION NOTES

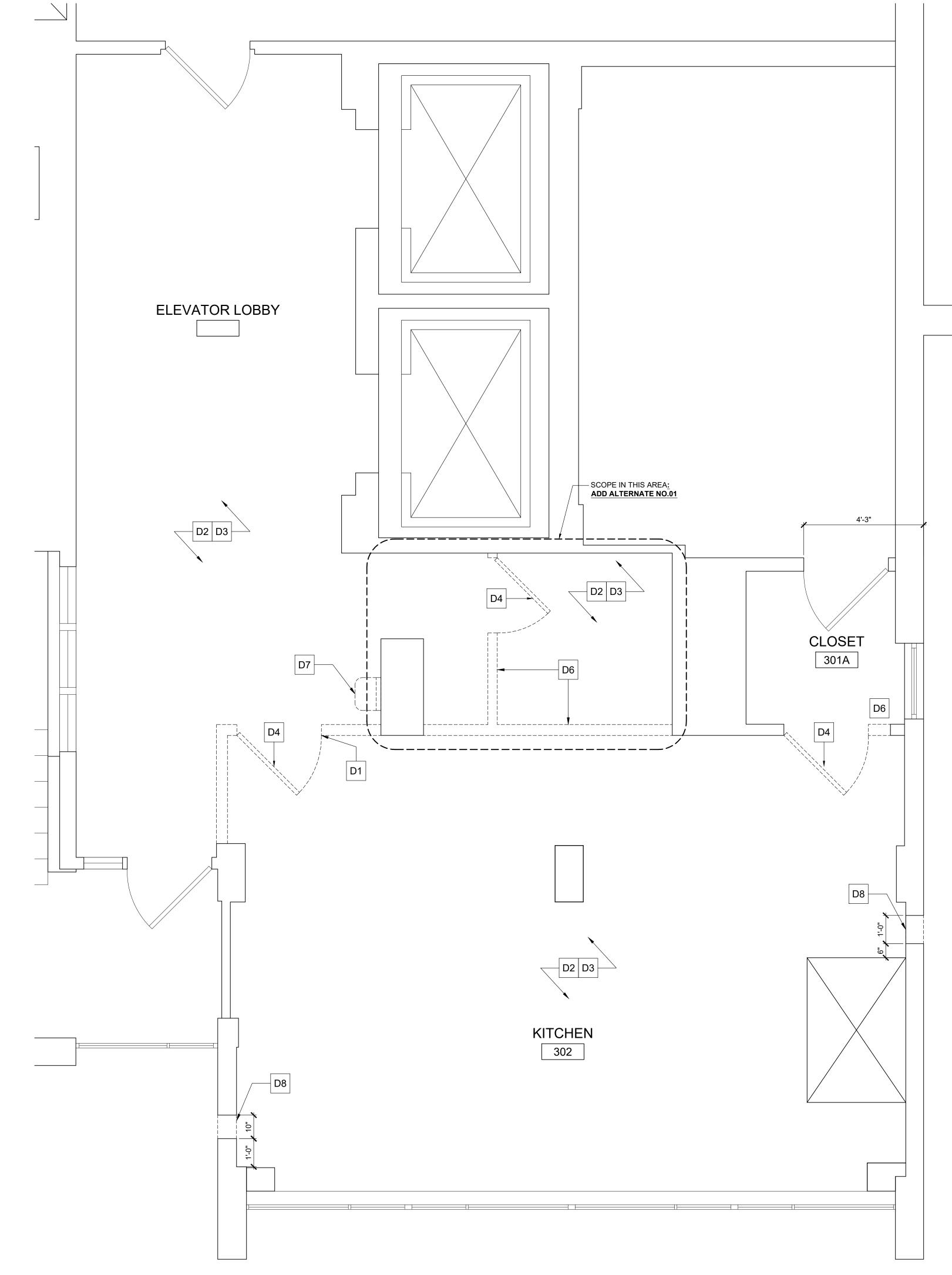
- A. THE FOLLOWING ARE MEANT TO GENERALLY DESCRIBE THE SCOPE OF THE SELECTIVE DEMOLITION ITEMS FOR THIS PROJECT. PRIOR TO BIDDING THIS PROJECT, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY QUANTITIES, MATERIALS, REQUIRED WORKING HEIGHTS (FOR REMOVALS SUCH AS CEILINGS), EXISTING FASTENING METHODS (FOR ACTUAL REMOVAL EFFORT REQUIRED), AND OTHER EXISTING CONSTRUCTION DETAILS RELEVANT TO THE EFFORT REQUIRED FOR THE DEMOLITION DESCRIBED HEREIN. THE CONTRACTOR IS RESPONSIBLE TO CAREFULLY REMOVE AND / OR RELOCATE ALL MATERIAL AND EQUIPMENT REQUIRED TO FACILITATE THE ALTERATIONS AND IMPROVEMENTS DESCRIBED IN THESE DOCUMENTS, WHETHER THE DEMOLITION ITEM OF WORK IS DESCRIBED IN THESE DOCUMENTS, OR NOT.
- B. DEMOLITION WORK, AS SPECIFIED HEREIN, IS TO BE PERFORMED COMPLETELY BY THE CONTRACTOR. "COMPLETELY" SHALL MEAN THE SPECIFIC OBJECT NAMED AND ANY ACCESSORY OR AUXILIARY ITEMS WHICH WOULD REASONABLY BE CONSIDERED AS PART OF THE ITEM NAMED SUCH AS FOUNDATIONS, FOOTINGS, RAILINGS, ELBOWS, BOLTS, NUTS, ETC. "COMPLETELY" SHALL ALSO MEAN ABOVE GRADE AND BELOW GRADE FOR ALL DEMOLITION REMOVAL AND DISPOSAL.
- C. THE DEMOLITION CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGES RESULTING FROM THE CONTRACTORS FAILURE TO DO SO SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTORS EXPENSE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES BY TEST PIT OR OTHER MEANS PRIOR TO DEMOLITION IN THE VICINITY OF THE UTILITIES
- D. THE EXTENT OF ITEMS TO BE REMOVED ON THE DEMOLITION PLAN ARE SHOWN BY BROKEN LINES.
 IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY THE ARCHITECT OF
 ANY CONFLICTS PRIOR TO THE START OF DEMOLITION WORK.
- E. PRIOR TO THE START OF WORK, IN EACH ROOM, THE CONTRACTOR SHALL VERIFY THAT ALL LOOSE FURNITURE, SHELVING, PICTURES, PROJECTION SCREENS, ARTWORK, VENDING MACHINES, TABLES, PLAQUES, DIRECTORIES, ROOM SIGNAGE, OFFICE EQUIPMENT, COMPUTERS, ETC. HAVE BEEN REMOVED FROM EACH ROOM. IF THIS HAS NOT BEEN DONE, NOTIFY THE OWNER IMMEDIATELY. DO NOT PROCEED WITH WORK UNTIL ROOM IS CLEAR AND EMPTY OF ANY/ALL ITEMS DESCRIBED HEREIN.
- F. DIMENSIONS GIVEN AND INFORMATION SHOWN REFLECT EXISTING CONDITIONS TAKEN FROM FORMER ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DOCUMENTS. ALL EXISTING CONDITIONS ARE TO BE FIELD VERIFIED PRIOR TO REMOVAL AND DEMOLITION WORK, FABRICATION AND INSTALLATION OF NEW PARTITIONS AND MECHANICAL/ELECTRICAL COMPONENTS.
- G. THE DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE FOR THE OFFSITE DISPOSAL OF ANY AND ALL EXCESS MATERIAL AND OTHER UNSUITABLE MATERIAL UNABLE TO BE USED ON SITE.
- H. EXISTING FINISHES THAT HAVE BEEN PREVIOUSLY DAMAGED, OR ARE DAMAGED DURING CONSTRUCTION AND CONSTRUCTION WORK SHALL BE REPAIRED TO MATCH ADJACENT EXISTING CONSTRUCTION. ALL EXISTING FINISHES ARE TO BE ALTERED, REMOVED, AND REPAIRED AS
- I. ALL EXISTING WALLS, CEILINGS, TRIM, ETC. TO RECEIVE NEW PAINT FINISH SHALL BE REPAIRED, SCRAPED, SANDED, AND CLEANED AS REQUIRED PRIOR TO APPLICATION OF NEW PAINT.

REQUIRED TO PROVIDE NEW FINISHES AS SCHEDULED.

- J. WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH NATIONAL, STATE, LOCAL, AND ALL OTHER APPLICABLE CODES AND REQUIREMENTS AS DETERMINED BY AUTHORITIES HAVING JURISDICTION.
- K. GENERAL CONTRACTOR SHALL COORDINATE REMOVAL OF ANY EXISTING MECHANICAL, PLUMBING, AND ELECTRICAL OUTLETS, DEVICES OR SWITCHING LOCATED ON WALLS SCHEDULED TO REMAIN AND SHALL BE REMOVE ALL CIRCUITING / WIRING BACK TO THE ELECTRIC PANEL(S) PROVIDING POWER. GENERAL CONTRACTOR TO COORDINATE THE REMOVAL OF ALL PLUMBING, MECHANICAL, AND ELECTRICAL ITEMS WITH RESPECTIVE CONTRACTORS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PATCHING AND REPAIR OF EXISTING WALL WHERE DEVICES ARE REMOVED AND SHALL PREPARE SURFACES AS REQUIRED TO RECEIVE NEW SCHEDULED FINISHES.
- L. THIS BUILDING IS OCCUPIED AND SHALL CONTINUE TO OPERATE THROUGHOUT CONSTRUCTION. ANY WORK REQUIRED THAT MAY REQUIRED 'OFF-HOURS' LABOR SHALL BE ACCOUNTED FOR IN THE PROJECT SCOPE.
- M. CONTRACTOR WILL INSTALL TEMPORARY PROTECTION AROUND PROJECT AREA TO SPREAD OF DUST AND OTHER CONSTRUCTION DEBRIS BEYOND WORK ZONE. PROVIDE WALK-OFF MATS AT ENTRY / EXIT POINTS INTO WORK SPACE. GENERAL CONTRACTOR SHALL PROTECT ALL SURROUNDING FLOORING AND ENTRY INTO SUITE WITH HARDBOARD AND/OR PLASTIC SHEETING.
- N. PROVIDE AND INSTALL ANY AND ALL REQUIRED TEMPORARY SUPPORT, SHORING, BRACING AND/OR NEEDLING TO STABILIZE AND SUPPORT EXISTING BUILDING FRAMING FOR ROOF, FLOORS AND ALL WALLS CONCERNING THE WORK DESCRIBED IN THESE DOCUMENTS.
- O. TO CONDUCT PRE-DEMOLITION INSPECTION TO ASSURE NO ACM'S OR OTHER HAZARDOUS MATERIALS ARE PRESENT. OWNER TO COORDINATE REMOVAL IF REQUIRED.

DEMOLITION LEGEND

- REMOVE PORTION OF EXISTING GYPSUM PARTITION IN ITS ENTIRETY, INCLUDING BUT NOT LIMITED TO VISION PANELS, TRIM, WALL BASE, ETC. PATCH EXISTING ADJACENT AREAS AS REQUIRED THAT HAVE BEEN DISTURBED BY DEMOLITION AND PREPARE SURFACES AS REQUIRED TO RECEIVE NEW SCHEDULED FINISH (REFER TO FINISH SCHEDULE) OR MATCH ADJACENT SURFACES AS REQUIRED IF NOT INCLUDED IN FINISH SCHEDULE. ANY EXISTING ELECTRICAL OUTLETS, DEVICES OR SWITCHING LOCATED IN PORTION OF WALLS SCHEDULED TO BE DEMOLISHED SHALL BE REMOVED AND RELOCATED TO ADJACENT WALL. GENERAL CONTRACTOR TO COORDINATE THE REMOVAL OF ALL PLUMBING, MECHANICAL, AND ELECTRICAL ITEMS WITH RESPECTIVE CONTRACTORS.
- D2 REMOVE EXISTING FLOORING FINISH (CARPETING AND VINYL BASE), BASE AND RELATED TRIM PIECES. PATCH, CLEAN AND PREPARE EXISTING SUB-FLOOR AS REQUIRED TO RECEIVE NEW SCHEDULED FINISH.
- REMOVE ENTIRE EXISTING CEILING SYSTEM INCLUDING BUT NOT LIMITED TO GYPSUM CEILING AND ASSOCIATE FRAMING OR SUSPENDED GRID SYSTEM, HVAC, ELECTRICAL OR FIRE PROTECTION DEVICES, FURRING, WIRE SUPPORTS, HANGERS, WOOD TRIM, COVE MOLDING, EDGE TRIM, SIGNAGE, ETC. TAKE SPECIAL CARE TO MAINTAIN EXISTING ABOVE CEILING FIRE PROTECTION BARRIERS. THOROUGHLY REPAIR WALLS AT EDGE TRIM REMOVAL AND PREPARE ALL DISTURBED SURFACES TO RECEIVE NEW SCHEDULED FINISHES. LIGHTING FIXTURES, FIRE PROTECTIONS DEVICES, AND MECHANICAL REGISTERS SHALL BE SALVAGED FOR REUSE AND REINSTALLATION. GC TO STORE ON-SITE AND PROTECT FOR REUSE.
- REMOVE EXISTING DOOR AND FRAME ASSEMBLY (EXTENT SHOWN BY BROKEN LINES).
 COORDINATE WITH NEW CONSTRUCTION TO PREPARE FOR NEW DOOR & FRAME ASSEMBLY.
 PATCH EXISTING ADJACENT AREAS AS REQUIRED THAT HAVE BEEN DISTURBED BY DEMOLITION
 AND PREPARE SURFACES AS REQUIRED TO RECEIVE NEW SCHEDULED FINISH (REFER TO FINISH
 SCHEDULE) OR MATCH ADJACENT SURFACES AS REQUIRED IF NOT INCLUDED IN FINISH
- D5 FURNITURE AND EQUIPMENT TO BE REMOVED BY OWNER.
- REMOVE PORTION OF EXISTING MASONRY WALL (EXTENT SHOWN BY BROKEN LINES) TO 6" ABOVE UNDERSIDE OF NEW SPECIFIED CEILING. PATCH EXISTING ADJACENT AREAS AS REQUIRED THAT HAVE BEEN DISTURBED BY DEMOLITION AND PREPARE SURFACES AS REQUIRED TO RECEIVE NEW SCHEDULED FINISH (REFER TO FINISH SCHEDULE) OR MATCH ADJACENT SURFACES AS REQUIRED IF NOT INCLUDED IN FINISH SCHEDULE. ANY EXISTING ELECTRICAL OUTLETS, DEVICES OR SWITCHING LOCATED IN PORTION OF WALLS SCHEDULED TO BE DEMOLISHED SHALL BE REMOVED AND RELOCATED TO ADJACENT WALL. GENERAL CONTRACTOR TO COORDINATE THE REMOVAL OF ALL PLUMBING, MECHANICAL, AND ELECTRICAL ITEMS WITH RESPECTIVE CONTRACTORS.
- D7 REMOVE EXISTING DRINKING FOUNTAIN AND RETURN TO OWNER FOR REUSE OR DISPOSAL. CAP ALL PLUMBING AND OR ELECTRIC AS DIRECTED BY MEP DOCUMENTS.
- D8 CAREFULLY SAW CUT AND DEMOLISH PORTION OF EXISTING EXTERIOR MASONRY WALL FOR NEW DUCTWORK. REFER TO MECHANICAL DOCUMENTS FOR DUCT SIZE AND CONFIGURATION.



Demolition Plan

10.09.23 PERMIT & CONSTRUCTION
09.15.23 PERMIT & CONSTRUCTION
No. Date Description
Revisions / Issues

RESPONSE TO FM COMMENTS

DIGroup Architecture

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DO NOT SCALE. DRAWING MAY BE PRINTED AT REDUCED SCALE. CONSULT WITH ARCHITECT FOR DIMENSIONS.

Client:

Montclair State University

1 Normal Avenue

Project:

Sheet Name:

Sheet No:

Montclair, NJ 07043

Bohn Hall - 3rd Floor Community Kitchen Renovation

Stone Street
Montclair, NJ 07043
MSU Project No: PR23C006
Drawing Information:

Project No: 23.033
Date: 07/24/2023
Drawn By: SBT
Checked By: JMB

Demolition Plan and Notes

D-100

EACH CONTRACTOR IS RESPONSIBLE FOR REVIEWING ALL ARCHITECTURAL, HVAC, FIRE PROTECTION, PLUMBING & ELECTRICAL DRAWINGS. ALL DOCUMENTS CONTAIN INFORMATION WHICH IS COMPLIMENTARY TO EACH TRADE AND MUST BE REVIEWED & UNDERSTOOD PRIOR TO CONSTRUCTION OF THIS PROJECT.

GENERAL CONSTRUCTION NOTES

GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS AND CHECK ALL MEASUREMENTS ON THE JOB AND SHALL BE RESPONSIBLE FOR SAME. EACH SUB-CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE SITE AND NOTIFY THE

ARCHITECT IN WRITING OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. WORK SHALL NOT PROCEED UNTIL

SUCH CLARIFICATION HAS BEEN RECEIVED. CLAIMS FOR EXTRA WORK RESULTING FROM FAILURE TO DO SO WILL

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT BUILDING CODE OF ALL GOVERNING AUTHORITIES.

SHOULD UNFORESEEN CONDITIONS OR OTHER CAUSES NECESSITATE CONSTRUCTION DETAILS NOT IN ACCORDANCE WITH THESE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND SUBMIT DETAILS, FOR ARCHITECT'S REVIEW SHOWING THE PROPOSED METHODS TO ACCOMPLISH THE REQUIRED RESULTS, AND AWAIT ARCHITECT'S INSTRUCTIONS.

PROTECT FROM DAMAGE ALL STRUCTURES, FINISHES, UTILITIES, EQUIPMENT, ETC. SCHEDULED TO REMAIN. MAINTAIN THE STRUCTURAL INTEGRITY OF THE BUILDING. PROVIDE TEMPORARY PROTECTIVE DUST AND WATERTIGHT ENCLOSURES WHERE AND WHEN REQUIRED AS PER THE OWNERS DIRECTIVE.

EACH SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, DISTORTIONS AND MISALIGNMENT ACCORDING TO THE APPLICABLE CODES, STANDARDS AND GOOD PRACTICE.

THE AREA IMMEDIATE TO THE WORK SITE SHALL BE KEPT CLEAN AT ALL TIMES BY EACH SUB-CONTRACTOR. REMOVE ALL DEBRIS FROM THE SITE TO A POINT OF LEGAL DISPOSAL. THE GENERAL CONTRACTOR WILL SUPPLY A CONTAINER FOR THIS PURPOSE. OWNER TO INSTRUCT OF APPROVED TEMPORARY ON-SITE LOCATION.

NOT BE ALLOWED.

ALIGN PARTITION AND WALL ASSEMBLIES TO A TOLERANCE OF ONE IN 200 HORIZONTALLY AND ONE IN 500 VERTICALLY. SPACE THE STUDS AS REQUIRED FOR COMPLIANCE WITH PERTINENT REGULATIONS TO GIVE PROPER SUPPORT FOR THE COVERING MATERIAL AND AS INDICATED ON THE DRAWINGS.

COORDINATE AND PROVIDE PROPER BACKING AND OTHER SUPPORT FOR ITEMS TO BE MOUNTED ON THE FINISH COVERING.

GYPSUM DRYWALL

SUBJECT TO COMPLIANCE WITH REQUIREMENTS PROVIDE PRODUCTS OF ONE OF THE FOLLOWING MANUFACTURERS GYPSUM BOARDS AND RELATED PRODUCTS:

GEORGIA-PACIFIC CORP. GOLD BOND BUILDING PRODUCTS DIV., NATIONAL GYPSUM CO. UNITED STATES GYPSUM CO.

PROVIDE GYPSUM BOARD OF TYPES INDICATED IN MAXIMUM LENGTHS AVAILABLE TO MINIMIZE END-TO-END JOINTS

CARPENTRY

CONCEALED SPACES WITHIN WALL PARTITIONS SHALL BE FIRESTOPPED PER CODE. PROVIDE ONE LAYER OF 5/8" GYPSUM WALL BOARD ON EACH FACE OF ALL INTERIOR PARTITIONS, PROVIDE CORNER BEAD, CASING BEAD, "J" MOLD, TAPE ETC. AS REQUIRED. PROVIDE THREE COATS OF JOINT COMPOUND SANDED AND READY FOR THE SCHEDULED FINISH. APPLICATION PROCEDURES AND WORKMANSHIP FOR ALL GYPSUM WALL BOARD SHALL BE IN ACCORDANCE WITH ANSI A971. NO EXPOSED EDGE OR CORNER SHALL BE WITHOUT A PROTECTIVE BEAD.

ALL WOOD BLOCKING IN WALLS SHALL BE FIRE RETARDANT TREATED WOOD. mALL PENETRATIONS INCLUDING CEILING, WALL AND FLOOR, SHOULD BE SEALED WITH FM APPROVED PENETRATION SEALS WITH FIRE RATINGS EQUAL TO THOSE OF THE SURROUNDING CONSTRUCTION. Commission of the commission o ALL METAL STRAPPING IN WALLS SHALL BE 18 GAGE STEEL.

• SCREWS: SELECT MATERIAL, TYPE, SIZE, AND FINISH REQUIRED FOR EACH USE. COMPLY WITH FS FF-S-111 FOR APPLICABLE REQUIREMENTS. FOR METAL FRAMING SUPPORTS, PROVIDE SCREWS AS RECOMMENDED BY METAL FRAMING MANUFACTURER.

• NAILS: SELECT MATERIAL, TYPE, SIZE, AND FINISH REQUIRED FOR EACH USE. COMPLY WITH FS FF-N-105 FOR APPLICABLE REQUIREMENTS.

ANCHORS: SELECT MATERIAL, TYPE, SIZE, AND FINISH REQUIRED BY EACH SUBSTRATE FOR SECURE ANCHORAGE. PROVIDE NONFERROUS METAL OR HOT-DIP GALVANIZED ANCHORS AND INSERTS ON INSIDE FACE OF EXTERIOR WALLS AND ELSEWHERE AS REQUIRED FOR CORROSION RESISTANCE. PROVIDE TOOTHED STEEL OR LEAD EXPANSION BOLT DEVICES FOR DRILLED- IN-PLACE ANCHORS.

COORDINATION: FIT CARPENTRY WORK TO OTHER WORK; SCRIBE AND COPE AS REQUIRED FOR ACCURATE FIT. CORRELATE LOCATION OF FURRING, NAILERS, BLOCKING, GROUNDS AND SIMILAR SUPPORTS TO ALLOW ATTACHMENT OF OTHER WORK.

INSTALLER MUST EXAMINE THE SUBSTRATES AND SUPPORTING STRUCTURE AND THE CONDITIONS UNDER WHICH THE CARPENTRY WORKS TO BE INSTALLED AND NOTIFY THE GENERAL CONTRACTOR IN WRITING OF CONDITIONS DETRIMENTAL TO THE WORK. DO NOT PROCEED WITH THE INSTALLATION UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN A MANNER ACCEPTABLE TO THE INSTALLER.

FLOORING

INSTALL RUBBER EDGE STRIPS AT UNPROTECTED OR EXPOSED EDGES, AND WHERE FLOORING TERMINATES. SCRIBE FLOORING TO WALLS, COLUMNS, CABINETS, FLOOR OUTLETS AND OTHER APPURTENANCES TO PRODUCE TIGHT JOINTS. FIT WALL BASE JOINTS TIGHT AND VERTICAL. MAINTAIN MINIMUM MEASUREMENT OF 18 INCHES BETWEEN JOINTS. MITER INTERNAL CORNERS. AT EXTERNAL CORNERS AND EXPOSED ENDS, USE PREMOLDED UNITS. INSTALL BASE ON SOLID BACKING, BOND TIGHT TO WALL AND FLOOR SURFACES. CLEAN FLOOR AND BASE SURFACES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. PROHIBIT TRAFFIC ON FLOOR FINISH FOR 48

\sim INTERIOR FINISHES

INTERIOR WALL AND CEILING FINISH MATERIALS SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM E84 OR UL 723. SUCH INTERIOR FINISH MATERIALS SHALL BE GROUPED IN THE FOLLOWING CLASSES IN ACCORDANCE WITH THEIR FLAME SPREAD AND SMOKE-DEVELOPED INDICES. CLASS A = FLAME SPREAD INDEX 0-25; SMOKE DEVELOPED-INDEX 0-450.

CLASS B = FLAME SPREAD INDEX 26-75; SMOKE DEVELOPED-INDEX 0-450. CLASS C = FLAME SPREAD INDEX 76-200; SMOKE DEVELOPED-INDEX 0-450.

MATERIALS HAVING A THICKNESS LESS THAN 0.036 INCH (0.9 MM) APPLIED DIRECTLY TO THE SURFACE OF WALLS OR CEILINGS SHALL NOT BE REQUIRED TO BE TESTED.

WHERE USED AS INTERIOR WALL FINISH MATERIALS, TEXTILE WALL COVERINGS, INCLUDING MATERIALS HAVING WOVEN OR 🖊 CT-1, REMAINING 1/3 OF TILE TO BE CT-2 - SEE ELEVATION NON-WOVEN. NAPPED. TUFTED, LOOPED OR SIMILAR SURFACE AND CARPET AND SIMILAR TEXTILE MATERIALS, SHALL HAVE () FOR INSTALLATION PATTERN. A CLASS A FLAME SPREAD INDEX AND SHALL BE TESTED IN THE MANNER INTENDED FOR USE, USING THE PRODUCT-MOUNTING SYSTEM, INCLUDING ADHESIVE, COMPLYING WITH THE REQUIREMENTS OF ASTM E84 OR UL 723 AND BE PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM. TEST SPECIMEN PREPARATION AND MOUNTING SHALL BE IN ACCORDANCE WITH ASTM E2404.

PAINTING DO NOT APPLY MATERIALS WHEN SURFACE AND AMBIENT TEMPERATURES ARE OUTSIDE THE TEMPERATURE RANGES REQUIRED BY THE PAINT PRODUCT MANUFACTURER. CONTRACTOR SHALL PRIME ALL SURFACES PREVIOUSLY PAINTED, SANDING DOWN ANY CHIPS OR DEVIATIONS IN SURFACE PRIOR TO APPLYING NEW FINISH.

REMOVE ELECTRICAL PLATES, HARDWARE, LIGHT FIXTURE TRIM, ESCUTCHEONS AND FITTINGS PRIOR TO PREPARING SURFACES FOR FINISHING.

CORRECT DEFECTS AND CLEAN SURFACES THAT AFFECT THIS WORK. REMOVE EXISTING COATINGS THAT EXHIBIT LOOSE SURFACE DEFECTS. SEAL MARKS THAT MAY BLEED THROUGH SURFACE FINISHES.

GYPSUM BOARD SURFACES: FILL MINOR DEFECTS WITH FILLER COMPOUND. SPOT PRIME DEFECTS AFTER REPAIR.

APPLY PAINT IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

PAINT EXPOSED CONDUIT AND ELECTRICAL EQUIPMENT OCCURRING IN FINISHED AREAS.

EXTERIOR SURFACES

STEEL - SHOP PRIMED

STEEL - UNPRIMED ONE COAT OF ALKYD PRIMER TWO COATS OF ALKYD ENAMEL, SEMI-GLOSS

TOUCH-UP WITH ZINC RICH PRIMER TWO COATS OF ALKYD ENAMEL, SEMI-GLOSS

STEEL - GALVANIZED ONE COAT OF GALVANIZE PRIMER TWO COATS OF ALKYD ENAMEL, SEMI-GLOSS

ONE COAT OF PRIMER TWO FINISH COATS

INTERIOR SURFACES CONCRETE MASONRY ONE COAT OF LATEX BLOCK FILLER TWO COATS OF ACRYLIC LATEX, SATIN

STEEL - UNPRIMED ONE COAT OF ALKYDPRIMER TWO COATS OF LATEX ENAMEL, SATIN

STEEL - PRIMED TOUCH-UP WITH ORIGINAL PRIMER TWO COATS OF LATEX ENAMEL, SATIN

> PLASTER, GYPSUM BOARD: ONE COAT OF LATEX PRIMER SEALER TWO COATS OF LATEX EGGSHELL

GENERAL FINISH SCHEDULE NOTES

REFER TO SHEET A901 FOR FINISH SPECIFICATIONS. FINISH PLANS ONLY INDICATE WHERE ACCENT FLOOR AND WALL MATERIALS ARE LOCATED. REFER TO ROOM FINISH SCHEDULE FOR OVERALL FINISHES IN EACH ROOM.

2. ALL WALLS IN SCOPE OF WORK TO BE PAINTED (PNT-1) U.O.N

3. ALL CEILINGS AND SOFFITS IN SCOPE OF WORK TO BE PAINTED (PNT-1) U.O.N.

4. ALL PAINT GRADE DOORS AND FRAMES TO BE PAINTED TO MATCH ADJACENT WALL COLOR (SEMI-GLOSS FINISH)

5. ALL APPLIED MATERIALS SHALL MEET FIRE/FLAME CLASSIFICATION PER IBC 803.1.1 AS DETERMINED BY

OCCUPANCY USE GROUP. REFER TO A001 FOR DETAIL.

6. DECORATIVE MATERIALS AND TRIM SHALL BE RESTRICTED BY PERFORMANCE CRITERIA OF NFPA 101

7. ALL CARPET MATERIAL SHALL MEET DOC FF-1 "PILL TEST" 8. ALL FLOOR TILE MATERIAL SHALL BE PROVIDED WITH A MIN. DYNAMIC COEFFICIENT OF FRICTION (DCOF) VALUE OF 9. CONTRACTOR SHALL INCLUDE IN ITS BID THREE (3) SEPARATE PAINT MOCKUPS (4 FT WIDE X 8 FT HIGH) SO THAT

FINISHED FLOOR AND EXTEND VERTICALLY 8 FT CAPTURING THE BASE, WAINSCOTING, CHAIRRAIL TRIM AND WALL 10. ALL EXTERIOR WINDOWS IN SCOPE OF WORK TO RECEIVE NEW WINDOW SHADES WITH METAL FASCIA COVER (WT-1)

OWNER MAY MAKE FINAL PAINT FINISH SELECTIONS AT THE CARNEGIE WING. MOCKUP LOCATIONS WILL START AT

11.FINISHES IN STAIRCASES 1, 2, AND 3 TO REMAIN UNLESS DISTURBED, DAMAGED DURING CONSTRUCTION. IF DAMAGED, WALL TO BE PAINTED (PNT-2), ALL METAL PORTIONS OF STAIRCASE INCLUDING RAILING TO BE PAINTED (PNT-2) AND STAIR TREADS, RISERS AND LANDINGS TO BE (RB-1) 12. STAIR 4: EXISTING STAIRS ARE WOOD WITH SELF-ADHERING TREAD CARPETING. ONCE CONSTRUCTION IS COMPLETE. REMOVE AND REPLACE SELF-ADHERING TREAD CARPETING AND PATCH/REPAIR OF STAIR 4 WALLS - PAINT (PNT-1)

13. NORTH LOBBY FLOORING: STAIRS AND LANDING TO RECEIVE RUBBER TREADS. CPT-2 WILL BE INSTALLED AT THE LOWER LEVEL THE TRANSITION FROM RB-1 TO CPT-1 WILL OCCUR AT THE INTERIOR DOUBLE DOOR LEADING TO THE CARNEGIE WING.

	FINISH MATERIAL L	EGEND	FINISH PLAN LEGEND
	MATERIAL TYPE	ABBREVIATION	
	FLOORING:		
	LUXURY VINYL TILE	LVT	
	VINYL COMPOSITION TILE	VCT	XX-X GENERAL WALL FINISH
	BASE:		XX-X BASE FINISH
	VINYL BASE	VB	XX-X FLOOR FINISH
	WALL:		
	PAINT	PNT	ACCENT WALL FINISH
	WALL COVERING	WC	
	CERAMIC TILE	CT	
	CEILING:		
	ACOUSTICAL CEILING TILE	ACT	
\	MISC.:		
`)	ACOUSTICAL WALL TILE	AWT	

FINISH SPECIFICATIONS

<u>PAINTS</u>	
(PNT-1) GENERAL W	ALL PAINT
MANUFACTURER:	BENJAMIN MOORE
COLOR:	CHANTILLY LACE 2121-70
FINISH:	EGGSHELL

(PNT-2) ACCENT WALL PAINT MANUFACTURER: BENJAMIN MOORE COLOR: BALTIC SEA FINISH: EGGSHELL (PNT-3) HOLLOW METAL FRAMES

BENJAMIN MOORE MANUFACTURER: COLOR: **ABALONE 2108-60** FINISH: SEMI-GLOSS WALLCOVERING (WC-1)

MANUFACTURER: SURFACE MATERIALS - LEVELS COLLECTION: LEVEL DIGITAL WALLCOVERING DESIGN #: 12503LV AURORA STRIPE COLOR/STYLE: STORM

CERAMIC TILE (CT-1 GARDEN STATE TILE MANUFACTURER: COLLECTION: OUTFIT HEXAGON COLOR: BRIGHT WHITE SIZE: 6"X7" (HEXAGON SHAPE)

2/3 OF TILE IN DESIGNATED INSTALLATION AREA TO BE CT-1, REMAINING 1/3 OF TILE TO BE CT-2 - SEE ELEVATION FOR INSTALLATION PATTERN.

MANUFACTURER: GARDEN STATE TILE COLLECTION: OUTFIT HEXAGON COLOR: SCARLET SIZE: 6"X7" (HEXAGON SHAPE)

2/3 OF TILE IN DESIGNATED INSTALLATION AREA TO BE

ARMSTRONG WORLD INDUSTRIES COLOR: TO MATCH BUILDING STANDARD

12"X12" LUXURY VINYL TILE (LVT-1) MANUFACTURER: SHAW CONTRACT REFRAME 4004V

PERCEPTION 04155 COLOR: 9" X 36" PLANK INSTALL: PARQUET PATTERN MANUFACTURER: **JOHNSONITE**

TIGHTLOCK COLOR: DOVER

PLASTIC LAMINATE (PL-1) MANUFACTURER: WILSONART COLOR/STYLE: BEIGEWOOD PLASTIC LAMINATE (PL-2)

MANUFACTURER: WILSONART COLOR/STYLE: NORTH SEA PLASTIC LAMINATE (PL-3) MANUFACTURER: WILSONART

COLOR/STYLE:

(AWT-2) - 2001

SOLID SURFACE (SS-1) MANUFACTURER: WILSONART COLOR/STYLE: GREY BEOLA

EBONY CHAR

ACOUSTICAL WALL TILE MANUFACTURER: CARNEGIE PRODUCT: XOREL ARTFORM

SHAPE: (LARGE) 20" 3/4 X 24" SUBSTRATE QUIET CORE (NON-TACKABLE) APPLICATION: WALL MOUNTED COLORS: *EQUAL AMOUNT OF EACH* (AWT-1) - 2004

(AWT-2) - 737 (AWT-4) - 2040 ACOUSTICAL CEILING TILE (ACT-1)

ARMSTRONG WORLD INDUSTRIES STYLE: ULTIMA BEVELED TEGULAR ITEM NO #1911 HRC SIZE: 24" X 24" X 7/8" GRID: PRELUDE XL, 15/16" GRID COLOR: WHITE (WH)

FABRIC UPHOLSTERY (UP-1) MANUF.: DESIGNTEX STYLE: MONTREAL CRYPTON COLOR: MARIGOLD

MILLWORK REVEAL (MR-1) MANUF.: FRY REGLET PRODUCT: MILLWORK REVEAL MODEL #: MWR7550

COLOR: CLEAR ANODIZED

WIDTH/WEIGHT: 52" / 22 OZ.

ROOM FINISH SCHEDULE ROOM ROOM REMARKS **FLOOR** BASE WALLS CEILING **NUMBER** NAME NEW STUDENT KITCHEN LVT-1 PNT-1, PNT-2, CT-1/2, WC-1 ACT-1, GYP-1 EXISTING ELEVATOR MACHINE ROOM VCT-1 VB-1 ACT-1, ETR PNT-1, AWT-1/2/3/4 **ELEVATOR LOBBY** LVT-1 VB-1

ELEVATOR - SCOPE IN THIS AREA: ADD ALTERNATE NO.0 _______, **EXISTING ELEVATOR** A300 MACHINE ROOM 301A (200) VCT-1 (201) 4'-8" 3'-1 1/2" 4'-0" +/- 2'-3 1/2" _____ HOLD **KITCHEN** (A300) A300 302 VB-1 LVT-1 CT-1 & CT-2 4'-0" 2'-11 5/8" 2'-11 5/8"

RESPONSE TO FM COMMENTS

FOR PERMIT & CONSTRUCTION

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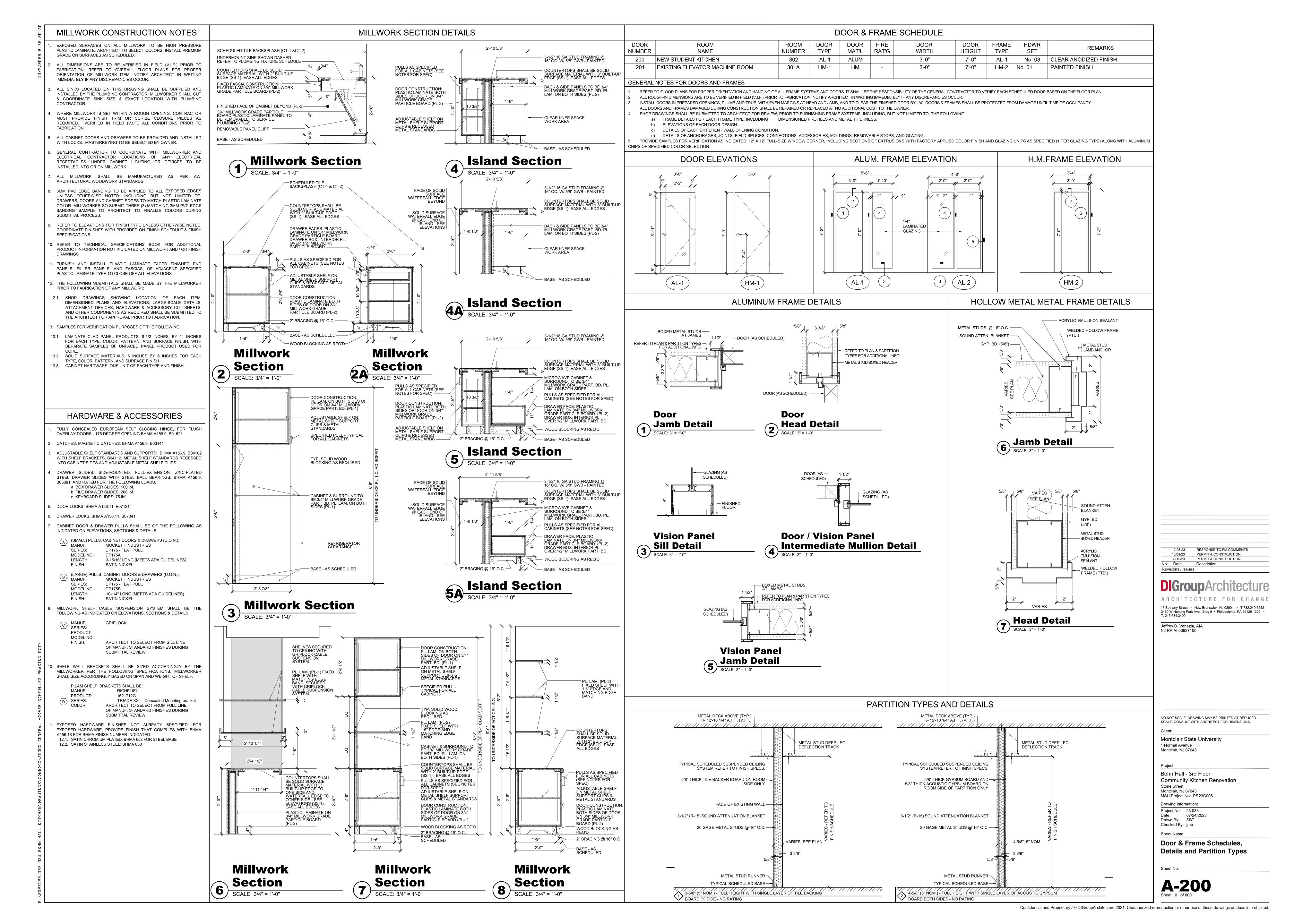
Bohn Hall - 3rd Floor Community Kitchen Renovation Stone Street Montclair, NJ 07043

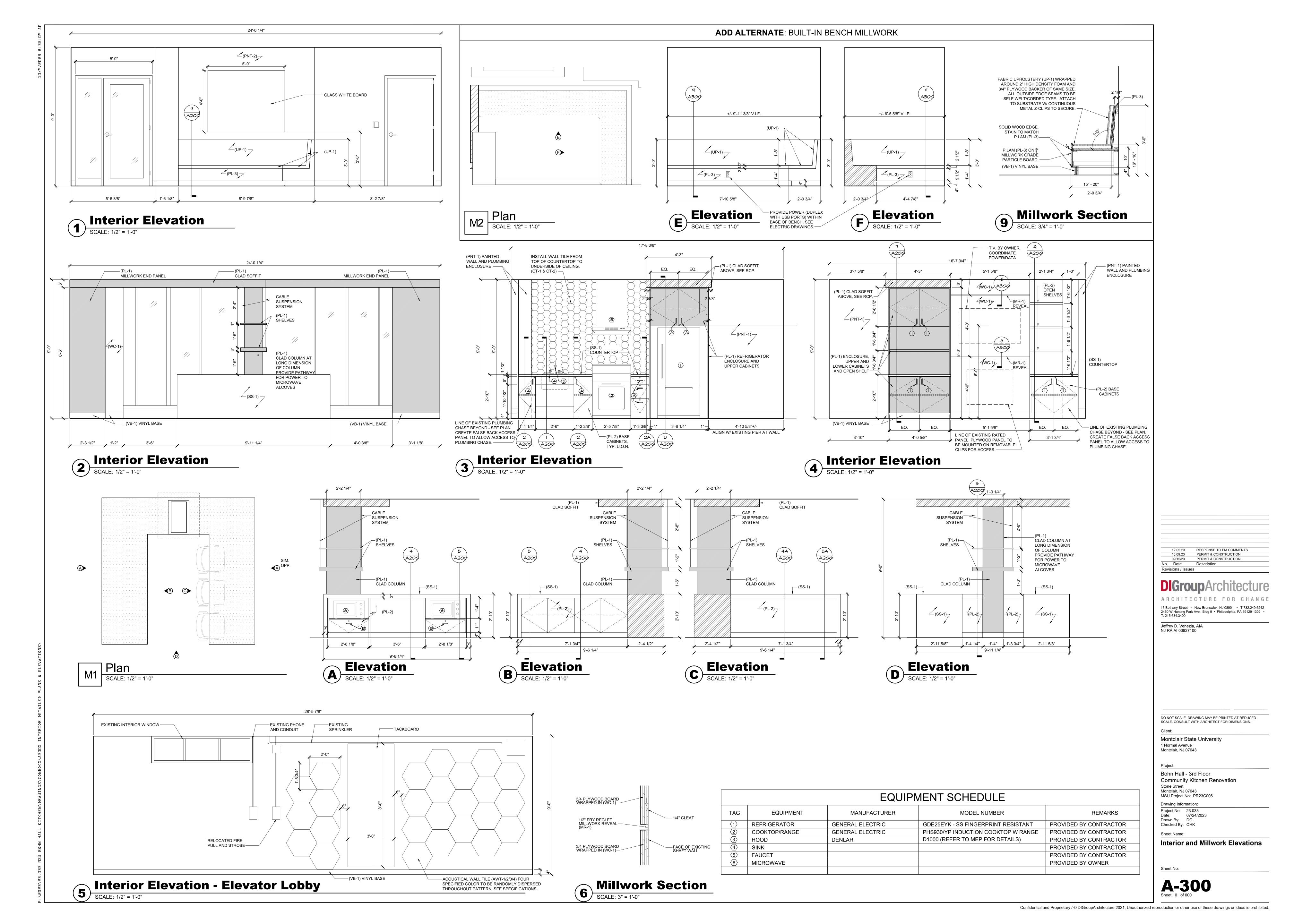
MSU Project No: PR23C006 Drawing Information: Project No: 23.033 Date: 07/24/2023 Drawn By: SBT Checked By: JMB

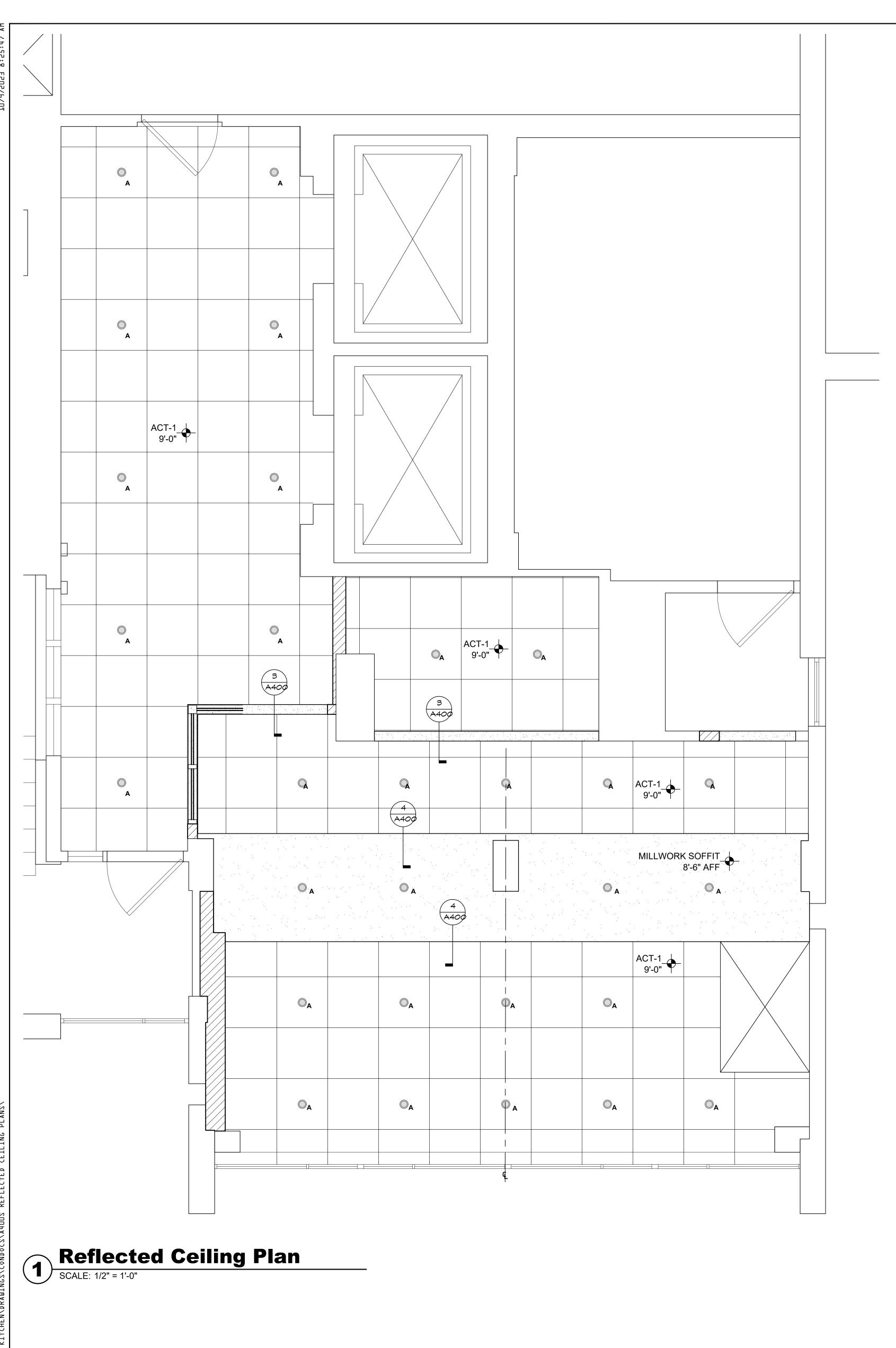
New Work Floor Plan, **Construction Notes, Finish Specifications & Schedule**

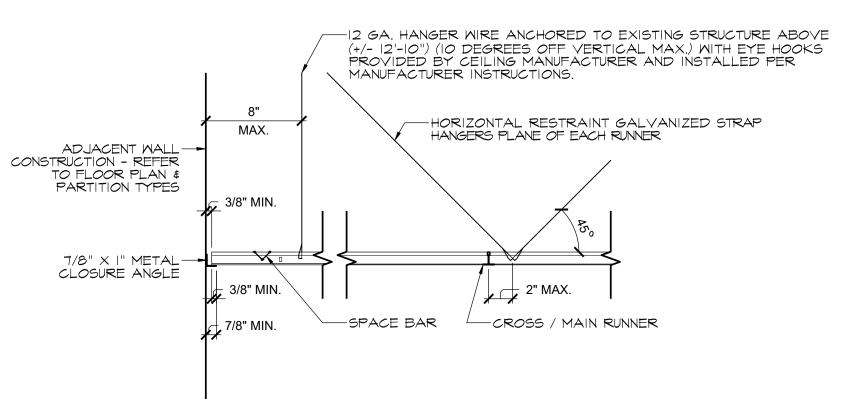
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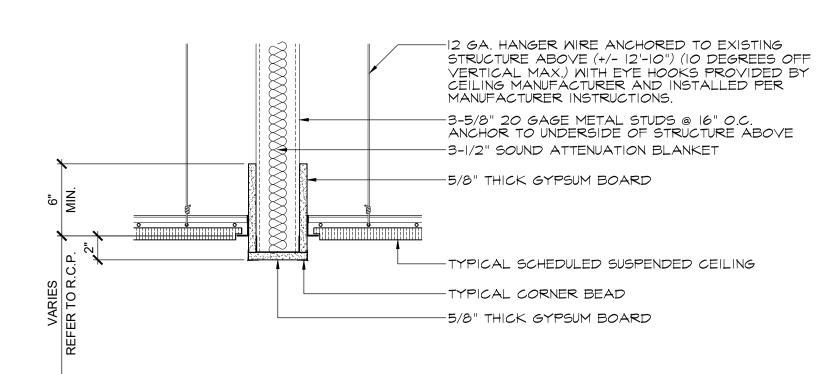




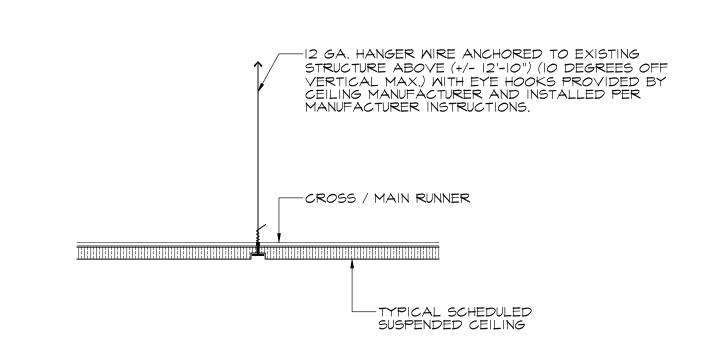
Tyical Suspended
Ceiling Detail

SCALE: 1-1/2" = 1'-0"

TYPICAL DETAIL THROUGHOUT



Large Scale
Ceiling Transition Detail
SCALE: 1-1/2" = 1'-0"

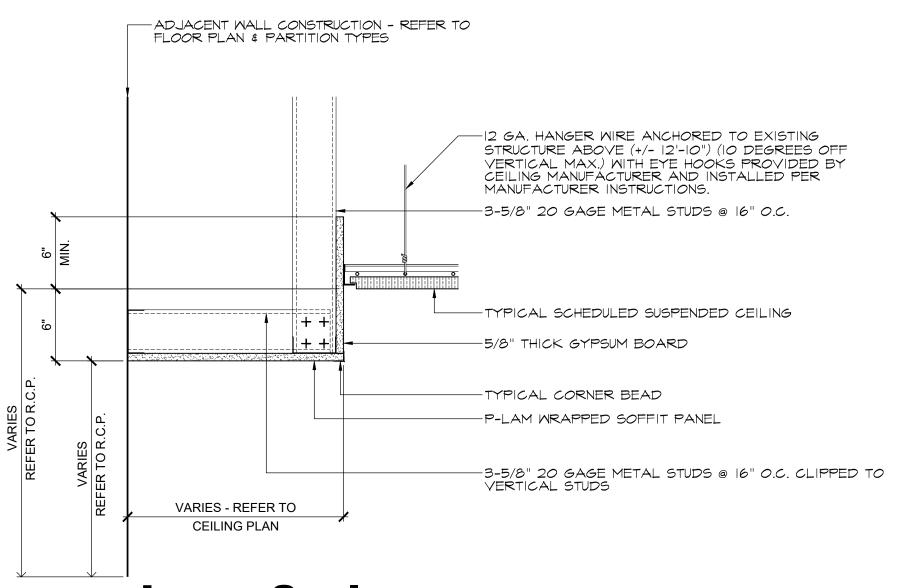


Tyical Suspended

Ceiling Detail

SCALE: 1-1/2" = 1'-0"

TYPICAL DETAIL THROUGHOUT



Large Scale
Ceiling Transition Detail
SCALE: 1-1/2" = 1'-0"

GENERAL REFLECTED CEILING PLAN NOTES

1. WHERE EXISTING CEILINGS ARE INDICATED TO REMAIN, PATCH CEILING AS REQUIRED FOR INSTALLATION OF NEW LIGHT FIXTURES AND CEILING DEVICES. 2. CONTRACTOR SHALL COORDINATE CEILING HEIGHTS WITH ALL STRUCTURE, MEP SYSTEMS, AND DEVICES ABOVE CEILING. CONTRACTOR SHALL REVIEW COORDINATED CEILING HEIGHTS WITH ARCHITECT IN FIELD PRIOR TO INSTALLATION OF CEILINGS.

		LIGHT FIXTURE LE	GEND	
TYPE	SYMBOL	DESCRIPTION	MOUNTING	ADDITIONAL REMARKS
Α		4" CIRCULAR LED DOWNLIGHT	RECESSED	
Х	igotimes	EDGE LIT LED EXIT SIGN (WITH DIRECTIONAL ARROW IF APPLICABLE)	CEILING	CONTRACTOR TO COORDINATE FINAL LOCATIONS AND ARROWS

NOTE: REFER TO ELECTRICAL DRAWINGS FOR LIGHT FIXTURE SPECIFICATIONS, POWER REQUIREMENTS, EMERGENCY POWER FIXTURE LOCATIONS AND EXIT SIGN LOCATIONS. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR PROPER ORIENTATION OF LIGHT FIXTURES

REFLECTED CEILING PLAN LEGEND

NEW SUSPENDED 2' x 2' ACOUSTICAL CEILING GRID SYSTEM SPECIFIED BY OWNER & FURNISHED AND INSTALLED BY CONTRACTOR

NEW METAL STUD AND GYPSUM BOARD SOFFIT. REFER TO CEILING PLAN FOR ADDITIONAL INFORMATION. NEW DOOR HEADER - REFER TO HOLLOW METAL DETAILS FOR ADDITIONAL INFORMATION

EXISTING DOOR AND / OR WINDOW HEADER

GYPSUM WALL BOARD

APC 2'X2' ACOUSTICAL PANEL CEILING

RESPONSE TO FM COMMENTS 10.09.23 PERMIT & CONSTRUCTION PERMIT & CONSTRUCTION 09.15.23 No. Date

ARCHITECTURE FOR CHANGE

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Revisions / Issues

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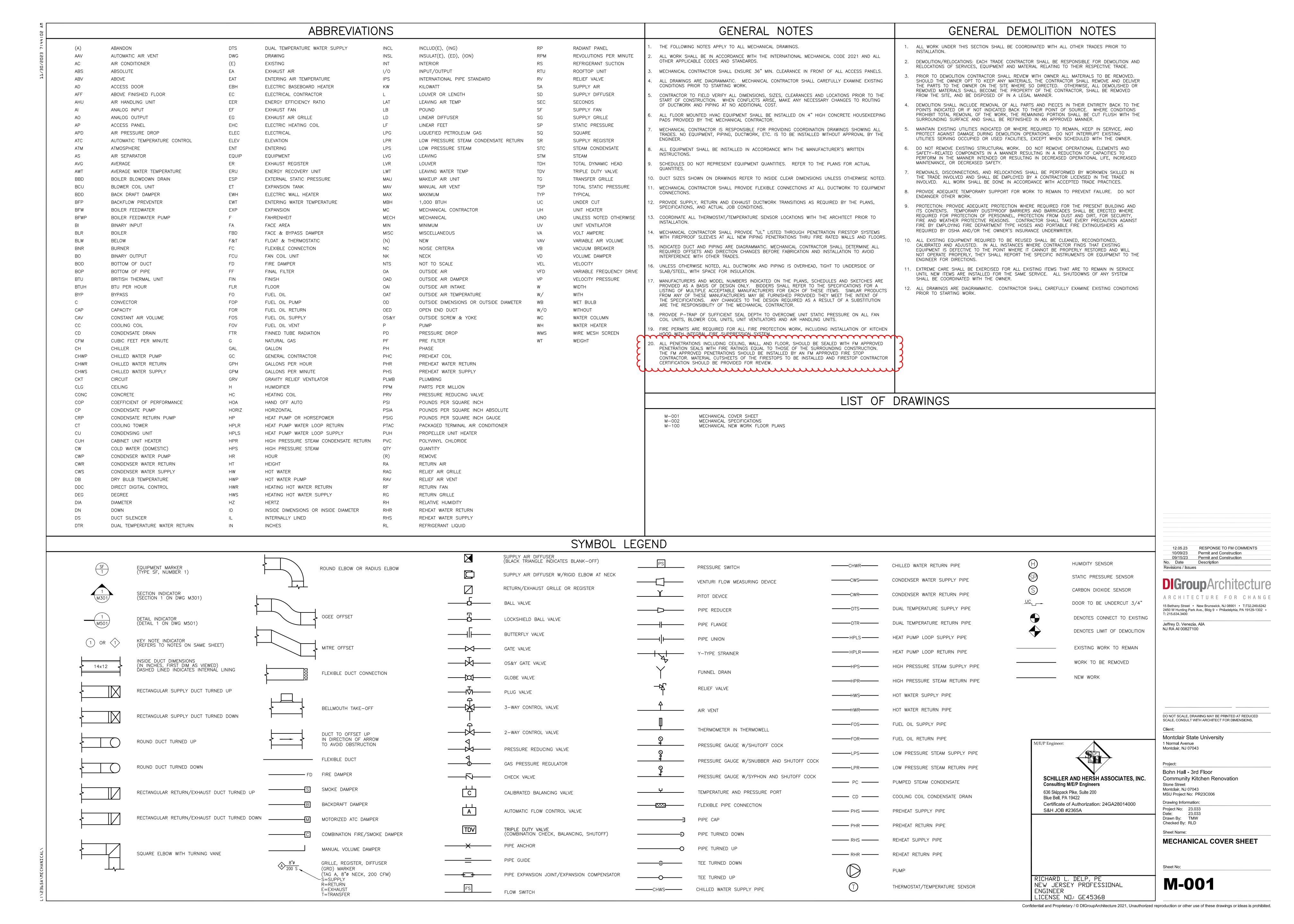
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MSU Project No: PR23C006 Drawing Information: Project No: 23.033
Date: 07/24/2023
Drawn By: SBT Checked By: JMB

Sheet Name: Reflected Ceiling Plan

A-400

Sheet No:



GENERAL MECHANICAL REQUIREMENTS

- a. PROVIDE ALL LABOR, MATERIAL, EQUIPMENT, INCIDENTALS, METHODS AND SERVICES REQUIRED TO INSTALL ALL
- WORK INDICATED COMPLETELY AND IN FULL OPERATION. b. EACH CONTRACTOR SHALL REVIEW "ALL" PROJECT DOCUMENTS OF "ALL" TRADES REVIEWING ALL OF THE PROJECT REQUIREMENTS PRIOR TO BIDDING. DISCREPANCIES BETWEEN DOCUMENTS SHALL BE REPORTED AT TIME OF BID. c. VERIFY ALL FIELD CONDITIONS. ACCESS WAYS. DIMENSIONS. AND DETAILS IN THE FIELD PRIOR TO BID AND PRIOR
- AND COORDINATION WITH OTHER TRADES AND OTHER ONGOING WORK. d. ALL WORK SHALL BE IN CONFORMANCE WITH THE 2021 INTERNATIONAL MECHANICAL CODE AS ADOPTED BY THE

TO FABRICATION. INCLUDE IN BID ALL WORK NECESSARY TO COVER COSTS RESULTING FROM FIELD CONDITIONS

e. CONTRACTOR SHALL APPLY FOR, SECURE, AND PAY FOR ALL PERMITS AND/OR CERTIFICATES OF INSPECTION

REQUIRED IN THE PERFORMANCE OF THE WORK BY ALL AUTHORITIES HAVING JURISDICTION.

- f. THE CONTRACTOR SHALL GUARANTEE THE ENTIRE INSTALLATION FOR A PERIOD OF TWO YEARS (EXCEPT WHERE EXTENSIONS OF THIS PERIOD ARE NOTED) FROM THE DATE OF ACCEPTANCE OF THE SYSTEM AS A WHOLE. ANY DEFECTS IN WORKMANSHIP, MATERIALS, MALFUNCTION OF EQUIPMENT OR UNSATISFACTORY PERFORMANCE, AND ALL OTHER WORK OR PARTS OF THE BUILDING DAMAGED THEREBY, SHALL BE REPAIRED, REPLACED OR OTHERWISE REMEDIED WITHOUT EXPENSE TO THE OWNER. SUCH REPAIRS OR REPLACEMENTS SHALL BE MADE IN A TIMELY
- MANNER AND AT THE CONVENIENCE OF THE OWNER. g. IN ADDITION TO SPECIFICS THAT ARE DEFINED HEREINAFTER, THE CONTRACTOR SHALL PROTECT THE WORK SITE AND ALL HIS OR HER WORK AGAINST DAMAGE FROM ANY SOURCE (INCLUDING BUT NOT LIMITED TO WATER, DUST,
- HEAT, FREEZING ETC.) UNTIL FINAL COMPLETION AND ACCEPTANCE. h. WHERE PRODUCTS ARE SCHEDULED WITH A MANUFACTURER'S NAME AND MODEL NUMBER, IT IS TO ESTABLISH THE
- UNIT'S FEATURES AND STANDARD OF QUALITY. i. ACCESSORIES SCHEDULED SHALL BE PROVIDED BY THE UNIT MANUFACTURER OR, IF NOT A FACTORY STANDARD,
- BY THE CONTRACTOR.
- j. PRODUCTS SUBMITTED AND ACCEPTED FOR USE THAT NECESSITATE CHANGES TO THE WORK OF ANY OR ALL OTHER TRADES' WORK SHALL BE COORDINATED AND PAID FOR BY THE CONTRACTOR MAKING THE CHANGE.
- k. ALL EQUIPMENT SHALL HAVE ITS MANUFACTURER'S NAMEPLATE SECURELY ATTACHED, GIVING DESIGN AND OPERATING CHARACTERISTICS. NAMEPLATES SHALL NOT BE COVERED OR OBSTRUCTED FROM VIEW. I. EACH TRADE CONTRACTOR SHALL PROVIDE AND INSTALL AN APPROVED FIRE STOP SEALANT, TOTALLY ENCLOSING
- ALL PENETRATIONS THROUGH RATED CEILINGS, WALLS, ROOFS OR FLOORS. m.UNLESS OTHERWISE NOTED, ALL PARTS, EQUIPMENT, AND MATERIALS SHALL BE NEW AND SHALL BE ASME AND/OR
- n. CONTRACTOR SHALL COMPLETE ALL CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THE WORK. CUTTING AND PATCHING SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER. PATCHING MATERIALS SHALL MATCH EXISTING MATERIALS TO THE GREATEST EXTENT POSSIBLE. PROVIDE TOUCH UP PAINT TO MATCH
- EXISTING SURROUNDING AREAS OF CUTTING AND PATCHING WORK. o. ALL WORK SHALL BE IN STRICT CONFORMANCE WITH APPLICABLE NFPA, ASHRAE, SMACNA, UL, ASTM, AABC, NEBB, ARI, AND AMCA STANDARDS.

1.1 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF THE FOLLOWING PRODUCTS:
- LINERS AND ADHESIVES.
- 2. SEALANTS AND GASKETS.

B. SHOP DRAWINGS:

- 1. FABRICATION, ASSEMBLY, AND INSTALLATION, INCLUDING PLANS, ELEVATIONS, SECTIONS, COMPONENTS, AND
- ATTACHMENTS TO OTHER WORK. 2. DUCT LAYOUT INDICATING SIZES, CONFIGURATION, LINER MATERIAL, AND STATIC-PRESSURE CLASSES.
- 3. ELEVATION OF TOP OF DUCTS.
- 4. DIMENSIONS OF MAIN DUCT RUNS FROM BUILDING GRID LINES.
- SEAM AND JOINT CONSTRUCTION.
- 6. PENETRATIONS THROUGH FIRE-RATED AND OTHER PARTITIONS.
- 7. EQUIPMENT INSTALLATION BASED ON EQUIPMENT BEING USED ON PROJECT.
- 8. LOCATIONS FOR DUCT ACCESSORIES, INCLUDING DAMPERS, TURNING VANES, AND ACCESS DOORS AND PANELS.
- 9. HANGERS AND SUPPORTS, INCLUDING METHODS FOR ATTACHMENT AND VIBRATION ISOLATION.
- 10.DETAIL DUCT ACCESSORIES FABRICATION AND INSTALLATION IN DUCTS AND OTHER CONSTRUCTION. INCLUDE DIMENSIONS, WEIGHTS, LOADS, AND REQUIRED CLEARANCES; AND METHOD OF FIELD ASSEMBLY INTO DUCT SYSTEMS AND OTHER CONSTRUCTION. INCLUDE THE FOLLOWING:

C. WELDING CERTIFICATES.

- D. FIELD QUALITY—CONTROL REPORTS.
- E. OPERATION AND MAINTENANCE DATA: FOR AIR DUCT ACCESSORIES TO INCLUDE IN OPERATION AND MAINTENANCE
- 2.1 DUCTWORK AND ACCESSORIES
- A.FITTINGS AND DUCTWORK FOR HVAC SYSTEMS SHALL COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE." GALVANIZED SHEET STEEL: COMPLY WITH ASTM A653. GALVANIZED COATING DESIGNATION
- G-90. B. SELECT SEAM TYPES AND FABRICATE ACCORDING TO SMACNA'S HVAC DUCT CONSTRUCTION STANDARDS — METAL AND FLEXIBLE," FIGURE 1-5, "LONGITUDINAL SEAMS - RECTANGULAR DUCTS," FOR THE APPROPRIATE STATIC PRESSURE CLASS. PRESSURE CLASS 2, MINIMUM WITH A VELOCITY NOT TO EXCEED 2500 FPM. SEAL CLASS C, MINIMUM.
- C.ELBOWS, TRANSITIONS, OFFSETS, BRANCH CONNECTIONS AND OTHER DUCT CONSTRUCTION: SELECT TYPES AND FABRICATE ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," CHAPTER 2, FITTINGS AND OTHER CONSTRUCTION," FOR FOR THE APPROPRIATE PRESSURE CLASS FOR APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT SUPPORT INTERVALS AND OTHER PROVISIONS.
- D. TURNING VANES SHALL BE INSTALLED IN ALL 90 DEGREE ELBOWS. TURNING VANES SHALL BE DOUBLE THICKNESS. E. DUCT SEALANT AND GASKETS
- 1. GENERAL SURFACE—BURNING CHARACTERISTICS SHALL BE A MAXIMUM FLAME SPREAD OF 25 AND A MAXIMUM
- SMOKE DEVELOPED INDEX OF 50 WHEN TESTED IN ACCORDANCE WITH U.L. 723, CERTIFIED BY NRTL. 2. SEALANT - WATER BASED JOINT AND SEAM SEALANT. SEALANT SHALL HAVE THE FOLLOWING CHARACTERISTICS: MINIMUM 65% SOLIDS CONTENT, MINIMUM SHORE A HARDNESS OF 20, WATER RESISTANT, MOLD AND MILDEW RESISTANT, VOC MAX OF 75 G/L (LESS WATER), MAXIMUM STATIC PRESSURE CLASS OF 10" WG (POSITIVE AND
- NEGATIVE), SUITABLE FOR INDOOR AND OUTDOOR USE AND COMPATIBLE WITH GALVANIZED SHEET METAL. 3. FLANGED GASKETS: BUTYLE RUBBER, NEOPRENE, OR EPDM POLYMER WITH POLYISOBUTYLENE PLASTIZER.
- F. HANGERS AND SUPPORTS:
- 1. CADMIUM PLATED STEEL RODS AND NUTS. 2. STRAP AND ROD SIZES SHALL COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS — METAL AND FLEXIBLE." TABLE 4-1 "RECTANGULAR DUCT HANGER MINIMUM SIZE. TIE RODS SHALL BE GALVANIZED STEEL,
- 1/4"MINIMUM DIAMETER G. DUCT ATTACHMENTS:
- 1. SHEET METAL SCREWS, BLIND RIVETS, OR SELF TAPPING METAL SCREWS; COMPATIBLE WITH DUCT MATERIAL
- H. INSTALLATION 1. DRAWING PLANS INDICATE GENERAL LOCATION AND ARRANGEMENT OF DUCT SYSTEMS. INSTALL DUCT SYSTEMS
- AS INDICATED UNLESS DEVIATIONS TO LAYOUT ARE APPROVED.
- 3. INSTALL FACTORY- OR SHOP-FABRICATED FITTINGS FOR CHANGES IN DIRECTION, SIZE, AND SHAPE AND FOR
- 2. INSTALL DUCTS WITH FEWEST POSSIBLE JOINTS.

INDEX OF 25 OR LESS. AND SMOKE-DEVELOPED INDEX OF 50 OR LESS.

- BRANCH CONNECTIONS. 4. UNLESS OTHERWISE INDICATED, INSTALL DUCTS VERTICALLY AND HORIZONTALLY, AND PARALLEL AND
- PERPENDICULAR TO BUILDING LINES.
- 5. INSTALL DUCTS CLOSE TO WALLS., OVERHEAD CONSTRUCTION, COLUMNS, AND OTHER STRUCTURAL AND PERMANENT ENCLOSURE ELEMENTS OF THE BUILDING. INSTALL DUCTS WITH A CLEARANCE OF 1" AROUND DUCT OR INSULATION WHERE APPLICABLE.
- 6. WHERE DUCTS PASS THROUGH NON-FIRE-RATED INTERIOR PARTITIONS, COVER THE OPENING BETWEEN THE PARTITION AND DUCT OR DUCT INSULATION WITH SHEET METAL FLANGES OF SAME METAL THICKNESS AS THE DUCT. OVERLAP OPENINGS ON FOUR SIDES BY AT LEAST 1-1/2" INCHES.
- 7. PROTECT DUCT INTERIORS FROM MOISTURE, CONSTRUCTION DEBRIS AND DUST, AND OTHER FOREIGN MATERIALS. PROVIDE FILTER GRILLS OVER THE RETURN AIR INLETS.
- I. BUILDING ATTACHMENTS: 1. INTERNALLY THREADED FLUSH MOUNTED EXPANSION ANCHOR: CARBON STEEL PLATED WITH ZINC, ASTM B633, SC1, TYPE III. BASIS OF DESIGN HILTI HDI DROP-IN ANCHOR.
- 2. INSTALL UPPER ATTACHMENTS TO STRUCTURES. SELECT AND SIZE UPPER ATTACHMENTS WITH PULL-OUT. TENSION, AND SHEAR CAPACITIES APPROPRIATE FOR SUPPORTED LOADS AND BUILDING MATERIALS WHERE USED.
- J. DUCT INSULATION: 2" THICK FIBER GLASS INSULATION, 100 LB/CU.FT. DENSITY, MINIMUM R-VALUE=6.0, BASIS OF DESIGN JOHNS MANVILLE MICROLITE FSK OR APPROVED EQUAL. LINER SHALL BE FORMALDEHYDE-FREE AND HAVE FACTORY APPLIED FSK JACKET. INSULATION SHALL BE MINERAL OR GLASS FIBERS BONDED WITH A THERMOSETTING RESIN AND SHALL COMPLY WITH ASTM C 553 AND ASTM C 1290. INSULATION INSTALLED INDOORS: FLAME-SPREAD
- K.FSK JACKET ADHESIVE: COMPLY WITH MIL-A-3316C, CLASS 2, GRADE A FOR BONDING INSULATION JACKET LAP SEAMS AND JOINTS. FOR INDOOR APPLICATIONS, USE ADHESIVE THAT HAS A VOC CONTENT OF 50 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24.).
- L. FSK TAPE: FOIL—FACE, VAPOR—RETARDER TAPE MATCHING FACTORY—APPLIED JACKET WITH ACRYLIC ADHESIVE; COMPLYING WITH ASTM C 1136.
- M.PINS AND WASHERS COPPER HEAD, CAPACITOR—DISCHARGE—WELD PINS: COPPER OR ZINC—COATED STEEL PIN, FULLY ANNEALED FOR CAPACITOR DISCHARGE WELDING. LENGTH AND SHANK DIAMETER TO SUIT APPLICATION WITH INTEGRAL 1-1/2" GALVANIZED CARBON STEEL WASHER

SPLIT-SYSTEM AIR-CONDITIONERS

B. OPERATION AND MAINTENANCE DATA.

PART 1 - GENERAL

- A. THIS SECTION INCLUDES SPLIT—SYSTEM AIR—CONDITIONING AND HEAT PUMP UNITS CONSISTING OF SEPARATE EVAPORATOR—FAN AND COMPRESSOR-CONDENSER COMPONENTS. UNITS ARE DESIGNED FOR EXPOSED OR CONCEALED MOUNTING, AND MAY BE CONNECTED TO DUCTS.
- 1.2 SUBMITTALS A. PRODUCT DATA: FOR EACH UNIT INDICATED. INCLUDE PERFORMANCE DATA IN TERMS OF CAPACITIES, OUTLET VELOCITIES, STATIC PRESSURES, SOUND POWER CHARACTERISTICS, MOTOR REQUIREMENTS, AND ELECTRICAL CHARACTERISTICS.
- 1.3 QUALITY ASSURANCE
- A. ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES: LISTED AND LABELED AS DEFINED IN NFPA 70, ARTICLE 100, BY A TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, AND MARKED FOR INTENDED USE.
- B. ASHRAE COMPLIANCE: APPLICABLE REQUIREMENTS IN ASHRAE 62.1—2004, SECTION 5 "SYSTEMS AND EQUIPMENT" AND SECTION 7 —
- C. ASHRAE/IESNA 90.1-2004 COMPLIANCE: APPLICABLE REQUIREMENTS IN ASHRAE/IESNA 90.1-2004, SECTION 6 "HEATING, VENTILATING, AND AIR-CONDITIONING."
- A. SPECIAL WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE SPLIT—SYSTEM AIR-CONDITIONING UNITS THAT FAIL IN MATERIALS AND WORKMANSHIP WITHIN 5 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

2.1 MANUFACTURERS

- A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
- TOSHIBA CARRIER. SAMSUNG.

2.2 INDOOR UNITS

- A. CONCEALED EVAPORATOR—FAN COMPONENTS:
- 1. CHASSIS: GALVANIZED STEEL WITH FLANGED EDGES, REMOVABLE PANELS FOR SERVICING, AND INSULATION ON BACK OF PANEL. 2. INSULATION: FACED, GLASS-FIBER DUCT LINER.
- 3. REFRIGERANT COIL: COPPER TUBE, WITH MECHANICALLY BONDED ALUMINUM FINS AND THERMAL-EXPANSION VALVE. COMPLY WITH ARI 206/110.
- 4. FAN: FORWARD—CURVED, DOUBLE—WIDTH WHEEL OF GALVANIZED STEEL; DIRECTLY CONNECTED TO MOTOR.
- a. COMPLY WITH NEMA DESIGNATION, TEMPERATURE RATING, SERVICE FACTOR, ENCLOSURE TYPE, AND EFFICIENCY REQUIREMENTS SPECIFIED IN SECTION 230513 "COMMON MOTOR REQUIREMENTS FOR HVAC EQUIPMENT."
- b. MULTITAPPED, MULTISPEED WITH INTERNAL THERMAL PROTECTION AND PERMANENT LUBRICATION.
- c. WIRING TERMINATIONS: CONNECT MOTOR TO CHASSIS WIRING WITH PLUG CONNECTION. 6. AIRSTREAM SURFACES: SURFACES IN CONTACT WITH THE AIRSTREAM SHALL COMPLY WITH REQUIREMENTS IN ASHRAE 62.1.
- 7. FILTERS: PERMANENT, CLEANABLE. 8. CONDENSATE DRAIN PANS:
- a. FABRICATED WITH ONE PERCENT SLOPE IN AT LEAST TWO PLANES TO COLLECT CONDENSATE FROM COOLING COILS (INCLUDING COIL PIPING CONNECTIONS, COIL HEADERS, AND RETURN BENDS) AND HUMIDIFIERS, AND TO DIRECT WATER TOWARD DRAIN CONNECTION. 1) LENGTH: EXTEND DRAIN PAN DOWNSTREAM FROM LEAVING FACE TO COMPLY WITH ASHRAE 62.1.
- 2) DEPTH: A MINIMUM OF 2 INCHES DEEP.
- b. SINGLE-WALL, GALVANIZED-STEEL SHEET.
- c. DRAIN CONNECTION: LOCATED AT LOWEST POINT OF PAN AND SIZED TO PREVENT OVERFLOW. TERMINATE WITH THREADED NIPPLE ON ONE END OF PAN.
- 1) MINIMUM CONNECTION SIZE: NPS 1. d. PAN-TOP SURFACE COATING: ASPHALTIC WATERPROOFING COMPOUND
- e. UNITS WITH STACKED COILS SHALL HAVE AN INTERMEDIATE DRAIN PAN TO COLLECT CONDENSATE FROM TOP COIL

2.3 AIR-COOLED, COMPRESSOR-CONDENSER COMPONENTS

- A. CASING: STEEL, FINISHED WITH BAKED ENAMEL IN COLOR SELECTED BY ARCHITECT. WITH REMOVABLE PANELS FOR ACCESS TO CONTROLS WEEP HOLES FOR WATER DRAINAGE, AND MOUNTING HOLES IN BASE. PROVIDE BRASS SERVICE VALVES, FITTINGS, AND GAGE PORTS ON
- B. COMPRESSOR: HERMETICALLY SEALED WITH CRANKCASE HEATER AND MOUNTED ON VIBRATION ISOLATION. COMPRESSOR MOTOR SHALL HAVE THERMAL— AND CURRENT—SENSITIVE OVERLOAD DEVICES, START CAPACITOR, RELAY, AND CONTACTOR.
- 1. COMPRESSOR TYPE: DC INVERTER-DRIVEN TWIN ROTARY. 2. INVERTER COMPRESSOR MOTOR WITH MANUAL-RESET HIGH-PRESSURE SWITCH AND AUTOMATIC-RESET LOW-PRESSURE SWITCH.
- 3. REFRIGERANT CHARGE: R-410A. C. HEAT-PUMP COMPONENTS: REVERSING VALVE AND LOW-TEMPERATURE-AIR CUTOFF THERMOSTAT.
- D. REFRIGERANT COIL: COPPER TUBE, WITH MECHANICALLY BONDED ALUMINUM FINS, COMPLYING WITH ARI 210/240, AND WITH LIQUID
- F. MOTOR: PERMANENTLY LUBRICATED, WITH INTEGRAL THERMAL-OVERLOAD PROTECTION
- G. LOW AMBIENT KIT: PERMITS OPERATION DOWN TO 0 DEG F.

E. FAN: ALUMINUM-PROPELLER TYPE, DIRECTLY CONNECTED TO MOTOR.

- H. MOUNTING KIT: MOUNTING KIT FOR WALL HUNG INSTALLATION.
- 2.4 COPPER TUBE AND FITTINGS A. COPPER TUBE: ASTM B 88, TYPE ACR
- B. COPPER TUBE: ASTM B 88, TYPE M.
- C. WROUGHT-COPPER FITTINGS: ASME B16.22. D. WROUGHT-COPPER UNIONS: ASME B16.22.
- E. SOLDER FILLER METALS: ASTM B 32. USE 95-5 TIN ANTIMONY OR ALLOY HB SOLDER TO JOIN COPPER SOCKET FITTINGS ON COPPER PIPE.
- 2.5 PIPE INSULATION
- A. REFRIGERANT SUCTION AND HOT-GAS PIPING:

F. BRAZING FILLER METALS: AWS A5.8.

- 1. ALL PIPE SIZES: INSULATION SHALL BE THE FOLLOWING: a. FLEXIBLE ELASTOMERIC: 1 INCH THICK.

2.5 ACCESSORIES

- A. THERMOSTAT: HARD WIRED INFRARED FUNCTIONING TO CONTROL COMPRESSOR AND EVAPORATOR FAN, WITH THE FOLLOWING FEATURES: COMPRESSOR TIME DELAY.
- 2. 24-HOUR TIME CONTROL OF SYSTEM STOP AND START.
- 3. LIQUID-CRYSTAL DISPLAY INDICATING TEMPERATURE, SET-POINT TEMPERATURE, TIME SETTING, OPERATING MODE, AND FAN SPEED. 4. FAN-SPEED SELECTION, INCLUDING AUTO SETTING.
- B. AUTOMATIC-RESET TIMER TO PREVENT RAPID CYCLING OF COMPRESSOR.

C. INSTALL PIPING ADJACENT TO UNIT TO ALLOW SERVICE AND MAINTENANCE

- PART 3 EXECUTION
- 3.1 INSTALLATION
- A. INSTALL EVAPORATOR—FAN COMPONENTS USING MANUFACTURER'S STANDARD MOUNTING DEVICES SECURELY FASTENED TO BUILDING STRUCTURE.
- B. INSTALL ROOF-MOUNTED, ANCHOR UNITS TO EQUIPMENT SUPPORTS WITH REMOVABLE, CADMIUM-PLATED FASTENERS

3.2 CONNECTIONS

- A. CONNECT PRECHARGED REFRIGERANT TUBING TO COMPONENT'S QUICK-CONNECT FITTINGS. INSTALL TUBING TO ALLOW ACCESS TO UNIT.
- B. CONNECT SUPPLY AND RETURN CONDENSER CONNECTIONS WITH SHUTOFF-DUTY VALVE AND UNION OR FLANGE ON THE SUPPLY CONNECTION AND WITH THROTTLING-DUTY VALVE AND UNION OR FLANGE ON THE RETURN CONNECTION.

- A. SUCTION LINES NPS 1-1/2 AND SMALLER FOR CONVENTIONAL AIR-CONDITIONING APPLICATIONS: COPPER, TYPE ACR, ANNEALED-TEMPER TUBING AND WROUGHT-COPPER FITTINGS WITH BRAZED JOINTS.
- B. HOT-GAS AND LIQUID LINES: COPPER, TYPE ACR, ANNEALED-TEMPER TUBING AND WROUGHT-COPPER FITTINGS WITH BRAZED JOINTS
- 3.4 VALVE AND SPECIALTY APPLICATIONS
- A. INSTALL DIAPHRAGM PACKLESS VALVES IN SUCTION AND DISCHARGE LINES OF COMPRESSOR
- B. INSTALL SERVICE VALVES FOR GAGE TAPS AT STRAINERS IF THEY ARE NOT AN INTEGRAL PART OF STRAINERS. C. EXCEPT AS OTHERWISE INDICATED, INSTALL DIAPHRAGM PACKLESS VALVES ON INLET AND OUTLET SIDE OF FILTER DRYERS.

C. CONDENSATE-DRAIN PIPING: TYPE M, DRAWN-TEMPER COPPER TUBING, WROUGHT-COPPER FITTINGS, AND SOLDERED JOINTS

- D. INSTALL THERMOSTATIC EXPANSION VALVES AS CLOSE AS POSSIBLE TO DISTRIBUTORS ON EVAPORATORS.
- 1. INSTALL VALVE SO DIAPHRAGM CASE IS WARMER THAN BULB. 2. SECURE BULB TO CLEAN, STRAIGHT, HORIZONTAL SECTION OF SUCTION LINE USING TWO BULB STRAPS. DO NOT MOUNT BULB IN A TRAP OR AT BOTTOM OF THE LINE.
- 3. IF EXTERNAL EQUALIZER LINES ARE REQUIRED, MAKE CONNECTION WHERE IT WILL REFLECT SUCTION—LINE PRESSURE AT BULB LOCATION. E. INSTALL MOISTURE/LIQUID INDICATORS IN LIQUID LINE AT THE INLET OF THE THERMOSTATIC EXPANSION VALVE OR AT THE INLET OF THE EVAPORATOR COIL CAPILLARY TUBE.
- F. INSTALL FILTER DRYERS IN LIQUID LINE BETWEEN COMPRESSOR AND THERMOSTATIC EXPANSION VALVE, AND IN THE SUCTION LINE AT THE

3.5 PIPING INSTALLATION

A. DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF PIPING SYSTEMS; INDICATED LOCATIONS AND ARRANGEMENTS WERE USED TO SIZE PIPE AND CALCULATE FRICTION LOSS, EXPANSION, PUMP SIZING, AND OTHER DESIGN CONSIDERATIONS. INSTALL PIPING AS INDICATED UNLESS DEVIATIONS TO LAYOUT ARE APPROVED ON SHOP DRAWINGS.

- B. INSTALL REFRIGERANT PIPING ACCORDING TO ASHRAE 15.
- C. INSTALL PIPING IN CONCEALED LOCATIONS UNLESS OTHERWISE INDICATED AND EXCEPT IN EQUIPMENT ROOMS AND SERVICE AREAS
- D. INSTALL PIPING INDICATED TO BE EXPOSED AND PIPING IN EQUIPMENT ROOMS AND SERVICE AREAS AT RIGHT ANGLES OR PARALLEL TO BUILDING WALLS. DIAGONAL RUNS ARE PROHIBITED UNLESS SPECIFICALLY INDICATED OTHERWISE.
- E. INSTALL PIPING ABOVE ACCESSIBLE CEILINGS TO ALLOW SUFFICIENT SPACE FOR CEILING PANEL REMOVAL.
- F. INSTALL PIPING ADJACENT TO MACHINES TO ALLOW SERVICE AND MAINTENANCE.
- G. INSTALL PIPING FREE OF SAGS AND BENDS.
- H. INSTALL FITTINGS FOR CHANGES IN DIRECTION AND BRANCH CONNECTIONS.
- I. SELECT SYSTEM COMPONENTS WITH PRESSURE RATING EQUAL TO OR GREATER THAN SYSTEM OPERATING PRESSURE J. INSTALL PIPING AS SHORT AND DIRECT AS POSSIBLE, WITH A MINIMUM NUMBER OF JOINTS, ELBOWS, AND FITTINGS.
- K. ARRANGE PIPING TO ALLOW INSPECTION AND SERVICE OF REFRIGERATION EQUIPMENT. INSTALL VALVES AND SPECIALTIES IN ACCESSIBLE LOCATIONS TO ALLOW FOR SERVICE AND INSPECTION.
- L. INSTALL REFRIGERANT PIPING IN RIGID OR FLEXIBLE CONDUIT IN LOCATIONS WHERE EXPOSED TO MECHANICAL INJURY.
- M. SLOPE REFRIGERANT PIPING AS FOLLOWS: 1. INSTALL HORIZONTAL HOT-GAS DISCHARGE PIPING WITH A UNIFORM SLOPE DOWNWARD AWAY FROM COMPRESSOR.
- 2. INSTALL HORIZONTAL SUCTION LINES WITH A UNIFORM SLOPE DOWNWARD TO COMPRESSOR 3. INSTALL TRAPS AND DOUBLE RISERS TO ENTRAIN OIL IN VERTICAL RUNS.
- 4. LIQUID LINES MAY BE INSTALLED LEVEL. N. WHEN BRAZING OR SOLDERING, REMOVE SOLENOID-VALVE COILS AND SIGHT GLASSES; ALSO REMOVE VALVE STEMS, SEATS, AND PACKING, AND
- ACCESSIBLE INTERNAL PARTS OF REFRIGERANT SPECIALTIES. DO NOT APPLY HEAT NEAR EXPANSION-VALVE BULB.
- P. SEAL PENETRATIONS THROUGH FIRE AND SMOKE BARRIERS ACCORDING TO DIVISION 07 SECTION "PENETRATION FIRESTOPPING."

Q. INSTALL PIPING WITH ADEQUATE CLEARANCE BETWEEN PIPE AND ADJACENT WALLS AND HANGERS OR BETWEEN PIPES FOR INSULATION

R. INSTALL SLEEVES THROUGH FLOORS, WALLS, OR CEILINGS, SIZED TO PERMIT INSTALLATION OF FULL—THICKNESS INSULATION.

3.6 PIPE JOINT CONSTRUCTION

A. SOLDERED JOINTS: CONSTRUCT JOINTS ACCORDING TO ASTM B 828 OR CDA'S "COPPER TUBE HANDBOOK."

2. USE TYPE BAG, CADMIUM—FREE SILVER ALLOY FOR JOINING COPPER WITH BRONZE OR STEEL.

- B. BRAZED JOINTS: CONSTRUCT JOINTS ACCORDING TO AWS'S "BRAZING HANDBOOK," CHAPTER "PIPE AND TUBE." 1. USE TYPE BCUP, COPPER-PHOSPHORUS ALLOY FOR JOINING COPPER SOCKET FITTINGS WITH COPPER PIPE.
- 3.7 FLEXIBLE ELASTOMERIC INSULATION INSTALLATION

O. INSTALL PIPE SLEEVES AT PENETRATIONS IN EXTERIOR WALLS AND FLOOR ASSEMBLIES.

- A. SEAL LONGITUDINAL SEAMS AND END JOINTS WITH MANUFACTURER'S RECOMMENDED ADHESIVE TO ELIMINATE OPENINGS IN INSULATION THAT ALLOW PASSAGE OF AIR TO SURFACE BEING INSULATED.
- B. INSULATION INSTALLATION ON PIPE FLANGES: 1. INSTALL PIPE INSULATION TO OUTER DIAMETER OF PIPE FLANGE. 2. MAKE WIDTH OF INSULATION SECTION SAME AS OVERALL WIDTH OF FLANGE AND BOLTS, PLUS TWICE THE THICKNESS OF PIPE
- 3. FILL VOIDS BETWEEN INNER CIRCUMFERENCE OF FLANGE INSULATION AND OUTER CIRCUMFERENCE OF ADJACENT STRAIGHT PIPE SEGMENTS WITH CUT SECTIONS OF SHEET INSULATION OF SAME THICKNESS AS PIPE INSULATION.
- 4. SECURE INSULATION TO FLANGES AND SEAL SEAMS WITH MANUFACTURER'S RECOMMENDED ADHESIVE TO ELIMINATE OPENINGS IN INSULATION THAT ALLOW PASSAGE OF AIR TO SURFACE BEING INSULATED.
- 1. INSTALL MITERED SECTIONS OF PIPE INSULATION. 2. SECURE INSULATION MATERIALS AND SEAL SEAMS WITH MANUFACTURER'S RECOMMENDED ADHESIVE TO ELIMINATE OPENINGS IN INSULATION THAT ALLOW PASSAGE OF AIR TO SURFACE BEING INSULATED.
- D. INSULATION INSTALLATION ON VALVES AND PIPE SPECIALTIES: 1. INSTALL PREFORMED VALVE COVERS MANUFACTURED OF SAME MATERIAL AS PIPE INSULATION WHEN AVAILABLE
- 2. WHEN PREFORMED VALVE COVERS ARE NOT AVAILABLE, INSTALL CUT SECTIONS OF PIPE AND SHEET INSULATION TO VALVE BODY. ARRANGE INSULATION TO PERMIT ACCESS TO PACKING AND TO ALLOW VALVE OPERATION WITHOUT DISTURBING INSULATION. 3. INSTALL INSULATION TO FLANGES AS SPECIFIED FOR FLANGE INSULATION APPLICATION.

4. SECURE INSULATION TO VALVES AND SPECIALTIES AND SEAL SEAMS WITH MANUFACTURER'S RECOMMENDED ADHESIVE TO

ELIMINATE OPENINGS IN INSULATION THAT ALLOW PASSAGE OF AIR TO SURFACE BEING INSULATED.

C. INSULATION INSTALLATION ON PIPE FITTINGS AND ELBOWS:

- 3.8 MINERAL-FIBER INSULATION INSTALLATION A. INSULATION INSTALLATION ON STRAIGHT PIPES AND TUBES: 1. SECURE EACH LAYER OF PREFORMED PIPE INSULATION TO PIPE WITH WIRE OR BANDS AND TIGHTEN BANDS WITHOUT DEFORMING
- INSULATION MATERIALS. 2. WHERE VAPOR BARRIERS ARE INDICATED, SEAL LONGITUDINAL SEAMS, END JOINTS, AND PROTRUSIONS WITH VAPOR-BARRIER MASTIC AND JOINT SEALANT
- 3. FOR INSULATION WITH FACTORY-APPLIED JACKETS ON ABOVE AMBIENT SURFACES, SECURE LAPS WITH OUTWARD CLINCHED STAPLES AT 6 INCHES O.C. 4. FOR INSULATION WITH FACTORY-APPLIED JACKETS ON BELOW AMBIENT SURFACES, DO NOT STAPLE LONGITUDINAL TABS BUT

SECURE TABS WITH ADDITIONAL ADHESIVE AS RECOMMENDED BY INSULATION MATERIAL MANUFACTURER AND SEAL WITH

3. WHEN PREFORMED INSULATION ELBOWS AND FITTINGS ARE NOT AVAILABLE, INSTALL MITERED SECTIONS OF PIPE INSULATION. TO

B. INSULATION INSTALLATION ON PIPE FITTINGS AND ELBOWS: 2. INSTALL PREFORMED SECTIONS OF SAME MATERIAL AS STRAIGHT SEGMENTS OF PIPE INSULATION WHEN AVAILABLE.

VAPOR-BARRIER MASTIC AND FLASHING SEALANT

- A THICKNESS EQUAL TO ADJOINING PIPE INSULATION. SECURE INSULATION MATERIALS WITH WIRE OR BANDS. 3.9 INDOOR PIPING INSULATION SCHEDULE
- C. CONDENSATE AND EQUIPMENT DRAIN WATER BELOW 60 DEG F: 1. ALL PIPE SIZES: INSULATION SHALL BE ONE OF THE FOLLOWING:
- a. MINERAL-FIBER, PREFORMED PIPE INSULATION, TYPE I: 1 INCH THICK. C. REFRIGERANT SUCTION, LIQUID, AND HOT-GAS FLEXIBLE TUBING:
- 1. ALL PIPE SIZES: INSULATION SHALL BE THE FOLLOWING: b. FLEXIBLE ELASTOMERIC: 1 INCH THICK.
- 3.10 OUTDOOR PIPING INSULATION SCHEDULE
- A. REFRIGERANT SUCTION, LIQUID, AND HOT-GAS FLEXIBLE TUBING: 1. ALL PIPE SIZES: INSULATION SHALL BE THE FOLLOWING:

c. FLEXIBLE ELASTOMERIC: 1 INCH THICK SUITABLE FOR OUTDOOR USE: ARMACELL AC ACCOFLEX OR ENGINEER APPROVED

- 3.11 HANGERS AND SUPPORTS
- A. INSTALL THE FOLLOWING PIPE ATTACHMENTS:
- 1. ADJUSTABLE STEEL CLEVIS HANGERS FOR INDIVIDUAL HORIZONTAL RUNS LESS THAN 20 FEET (6 M) LONG 2. ROLLER HANGERS AND SPRING HANGERS FOR INDIVIDUAL HORIZONTAL RUNS 20 FEET (6 M) OR LONGER.
- 3. PIPE ROLLER: MSS SP-58, TYPE 44 FOR MULTIPLE HORIZONTAL PIPING 20 FEET (6 M) OR LONGER, SUPPORTED ON A TRAPEZE. 4. SPRING HANGERS TO SUPPORT VERTICAL RUNS.
- 5. COPPER-CLAD HANGERS AND SUPPORTS FOR HANGERS AND SUPPORTS IN DIRECT CONTACT WITH COPPER PIPE. C. INSTALL HANGERS FOR COPPER TUBING WITH THE FOLLOWING MAXIMUM SPACING AND MINIMUM ROD SIZES:

1. NPS 1/2: MAXIMUM SPAN, 60 INCHES; MINIMUM ROD SIZE, 1/4 INCH.

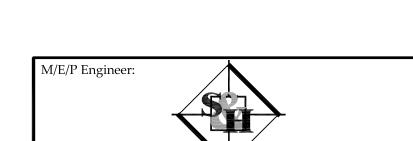
2. NPS 5/8: MAXIMUM SPAN, 60 INCHES; MINIMUM ROD SIZE, 1/4 INCH.

- 3.12 FIELD QUALITY CONTROL A. MANUFACTURER'S FIELD SERVICE: ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO INSPECT, TEST, AND ADJUST FIELD-ASSEMBLED COMPONENTS AND EQUIPMENT INSTALLATION, INCLUDING CONNECTIONS, AND TO ASSIST IN FIELD TESTING. REPORT RESULTS
- B. LEAK TEST: AFTER INSTALLATION, CHARGE SYSTEM AND TEST FOR LEAKS. REPAIR LEAKS AND RETEST UNTIL NO LEAKS EXIST.
- C. OPERATIONAL TEST: AFTER ELECTRICAL CIRCUITRY HAS BEEN ENERGIZED, START UNITS TO CONFIRM PROPER MOTOR ROTATION AND UNIT OPERATION. REMOVE MALFUNCTIONING UNITS, REPLACE WITH NEW COMPONENTS, AND RETEST.

D. TEST AND ADJUST CONTROLS AND SAFETIES. REPLACE DAMAGED AND MALFUNCTIONING CONTROLS AND EQUIPMENT.

E. CONTRACTOR TO PROVIDE OPERATION AND MAINTENANCE MANUALS AND RECORD AS=BUILD DRAWINGS FOR EVERYTHING INSTALLED IN THIS CONTRACT.

END OF SECTION 238126



Certificate of Authorization: 24GA28014000

Blue Bell, PA 19422

S&H JOB #2365A

RESPONSE TO FM COMMENTS

Permit and Construction

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ARCHITECTURE FOR CHANGI

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2450 W Hunting Park Ave., Bldg 9 Philadelphia, PA 19129-1302

Description

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SCALE. CONSULT WITH ARCHITECT FOR DIMENSIONS.

Montclair State University 1 Normal Avenue

Montclair, NJ 07043

Project

09/15/23

Revisions / Issues

No. Date

T: 215.634.3400

Jeffrev D. Venezia. AIA

NJ RA AI 00827100

Bohn Hall - 3rd Floor SCHILLER AND HERSH ASSOCIATES, INC. Community Kitchen Renovation **Consulting M/E/P Engineers** Stone Street Montclair, NJ 07043 636 Skippack Pike. Suite 200

> Project No. 23.033 Drawn By: TMW Checked By RLD

MSU Project No: PR23C006

Drawing Information:

Sheet Name:

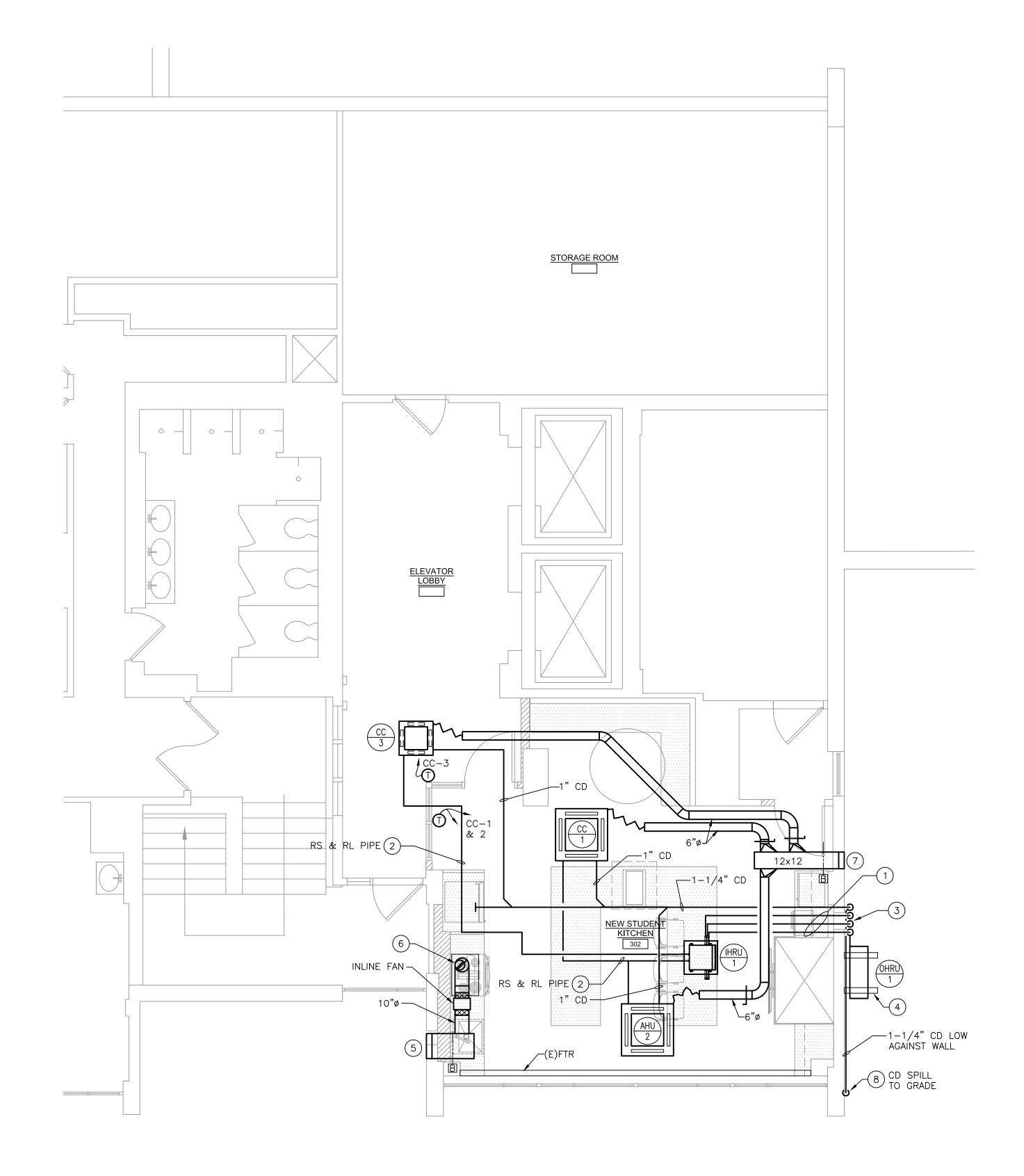
Sheet No:

MECHANICAL SPECIFICATIONS

M-002

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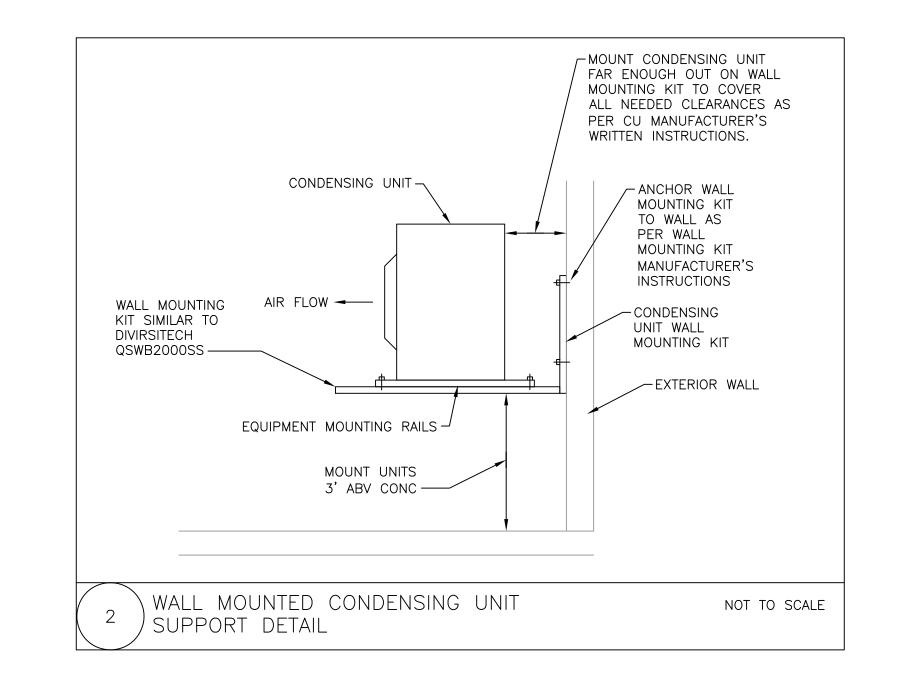
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MECHANICAL NEW WORK FLOOR PLAN SCALE: 1/4"=1'-0"

NEW WORK KEY NOTES:

- 1) REFRIGERANT SUCTION, LIQUID & HEAT RECOVERY PIPING FROM OUTDOOR HEAT RECOVERY UNIT TO INDOOR HEAT RECOVERY UNIT. SIZE ALL LINES PER MANUFACTURERS RECOMMENDATIONS.
- 2 REFRIGERANT SUCTION & LIQUID PIPING FROM INDOOR HEAT RECOVERY UNIT TO CEILING CASSETTE UNIT SIZED PER MANUFACTURERS RECOMMENDATIONS.
- 3 REFRIGERANT SUCTION, REFRIGERANT LIQUID, REFRIGERANT HEAT RECOVERY, & 1-1/4" CONDENSATE DRAIN DOWN EXTERIOR OF BUILDING. PROVIDE ALL PIPING DOWN IN LINEHIDE SIMILAR TO DIVERSITECH EASYGUARD.
- 4 CONDENSING UNIT TO BE WALL HUNG ON EXTERIOR WALL DOWN BY CONCRETE PLATFORM ON FIRST FLOOR BELOW. WALL HANG BRACKET KIT SHALL BE SIMILAR TO DIVERSITECH QSWB2000SS.
- 5) 18x12 LOUVER SIMILAR TO GREENHECK ESD-435 MIN 0.50 SQ. FT. FREE AREA.
- 6 10" EXHAUST DUCT DOWN TO KITCHEN HOOD. EXHAUST DUCT TO TRANSITION TO 7" DURING DROP TO MATCH HOOD CONNECTION. PROVIDE DENLER D1030-D-IF 30" WIDE HOOD WITH INLINE FAN. PROVIDE HOOD WITH ADA HANDICAPPED ACCESSIBLE CONTROL BOX, INTEGRATED FIRE SUPPRESSION SYSTEM, & D1000-E ELECTRIC RANGE ELEMENT DISCONNECT. COORDINATE WITH EC FOR WIRING.
- 7) 12x12 LOUVER SIMILAR TO GREENHECK ESD-435 MIN 0.30 SQ. FT. FREE AREA.
- 8 1-1/4" CONDENSATE DRAIN TO RUN
 ON WALL TO CLEAR CONCRETE
 PLATFORM AND SHALL TERMINATE BY
 SPILLING TO GRADE. PROVIDE
 CONDENSATE DRAIN WITH PREFORMED
 CONCRETE SPLASH BLOCK AT
 TERMINATION.



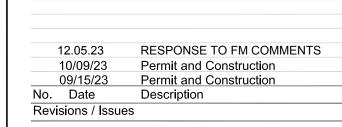
	CEILING CASSETTE AIR HANDLING UNIT SCHEDULE													
UNIT TAG	AREA SERVED	TOTAL SUPPLY CFM @ LOW	OUTDOOR AIR CFM	RATED TOTAL COOLING BTU/HR	RATED TOTAL HEATING BTU/HR		ELECTRICAL CHARACTERIS		MAXIMUM DIMENSIONS, IN. LxWxH	MAXIMUM WEIGHT LBS.	TYPE	BASIS OF DESIGN MANUFACTURER & MODEL NO.	SERVED BY	
CC-1	LOUNGE	670	60	24,200	27,300	208	1 60	1.67	38x38x12	60	CEILING CASSETTE	LG ARNU243TAA4	CU-1	
CC-2	LOUNGE	670	60	24,200	27,300	208	1 60	1.67	38×38×12	60	CEILING CASSETTE	LG ARNU243TAA4	CU-1	
CC-3	ELEVATOR LOBBY	247	25	12,300	13,600	208	1 60	0.20	24×24×10	32	CEILING CASSETTE	LG ARNU123TRD4	CU-1	

- 1. PROVIDE ALL UNITS WITH WALL MOUNTED HARD-WIRED THERMOSTAT. CC-1 & CC-2 SHALL RUN OFF ONE THERMOSTAT. 2. PROVIDE ALL UNITS WITH INTEGRAL CONDENSATE PUMP.
- 3. PROVIDE ALL UNITS COMPLETE WITH GRILLE.
 4. PROVIDE ALL UNITS WITH CONDENSATE OVERFLOW SWITCH AND INTERLOCK WITH UNIT FOR SHUTDOWN.

					VRF OUTDO	OR HEAT I	RECOV	ERY U	NIT SCHE	DULE							
UNIT TAG		NOMINAL COOLING	NOMINAL HEATING		COMPRESSOR		SER FOR		ELECTRICAL CHARACTERISTICS			MAX. AMBIENT	MAXIMUM	OPERATING	BASIS OF DESIGN		
	TONS	CAPACITY BTUH	CAPACITY BTUH	QTY. H.P. EA.	RLA, COMP.# 1/2/3/4/5	QTY.	KW EA.	FLA	VOLTS	PHASE	CYCLE	MCA	TEMP.	DIMENSIONS, IN. LxWxH	WEIGHT LBS.	MANUFACTURER AND MODEL NO.	
OHRU-1	5	60,000	64,000	1 –	19.5	2	_	0.5	208	3	60	25.4	122	38x13x55	260	LG ARUB060GSS4	

PROVIDE UNIT WITH LOW AMBIENT WIND BAFFLE.
 PROVIDE UNIT WITH EC PROVIDED NON-FUSED DISCONNECT SWITCH.
 PROVIDE UNIT WITH WALL HANG BRACKET KIT SIMILAR TO DIVERSITECH QSWB2000SS.

	VRF INDOOR HEAT RECOVERY UNIT SCHEDULE												
UNIT		NO. OF	MAX PORT	MAX UNIT			TRICAL TERISTICS		MAXIMUM	OPERATING	BASIS OF DESIGN		
TAG	UNITS SERVED			CAPACITY BTUH	VOLTS	PHASE	CYCLE	AMPS	DIMENSIONS, IN. LxWxH	WEIGHT LBS.	MANUFACTURER AND MODEL NO.		
IHRU-1	CC-1/CC-2/CC-3	2	60,000	120,000	208	1	60	0.06	31x26x9	33	LG PRHR023A		

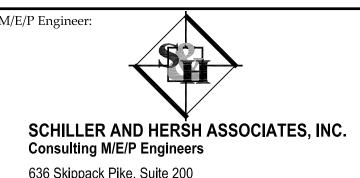


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Jeffrey D. Venezia, AIA NJ RA AI 00827100



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Certificate of Authorization: 24GA28014000
S&H JOB #2365A

Project:

Bohn Hall - 3rd Floor

Community Kitchen Renovation

Stone Street

Montclair, NJ 07043

MSU Project No: PR23C006

Montclair State University

1 Normal Avenue Montclair, NJ 07043

Drawing Information:
Project No: 23.033
Date: 23.033
Drawn By: TMW
Checked By: RLD

Sheet Name:

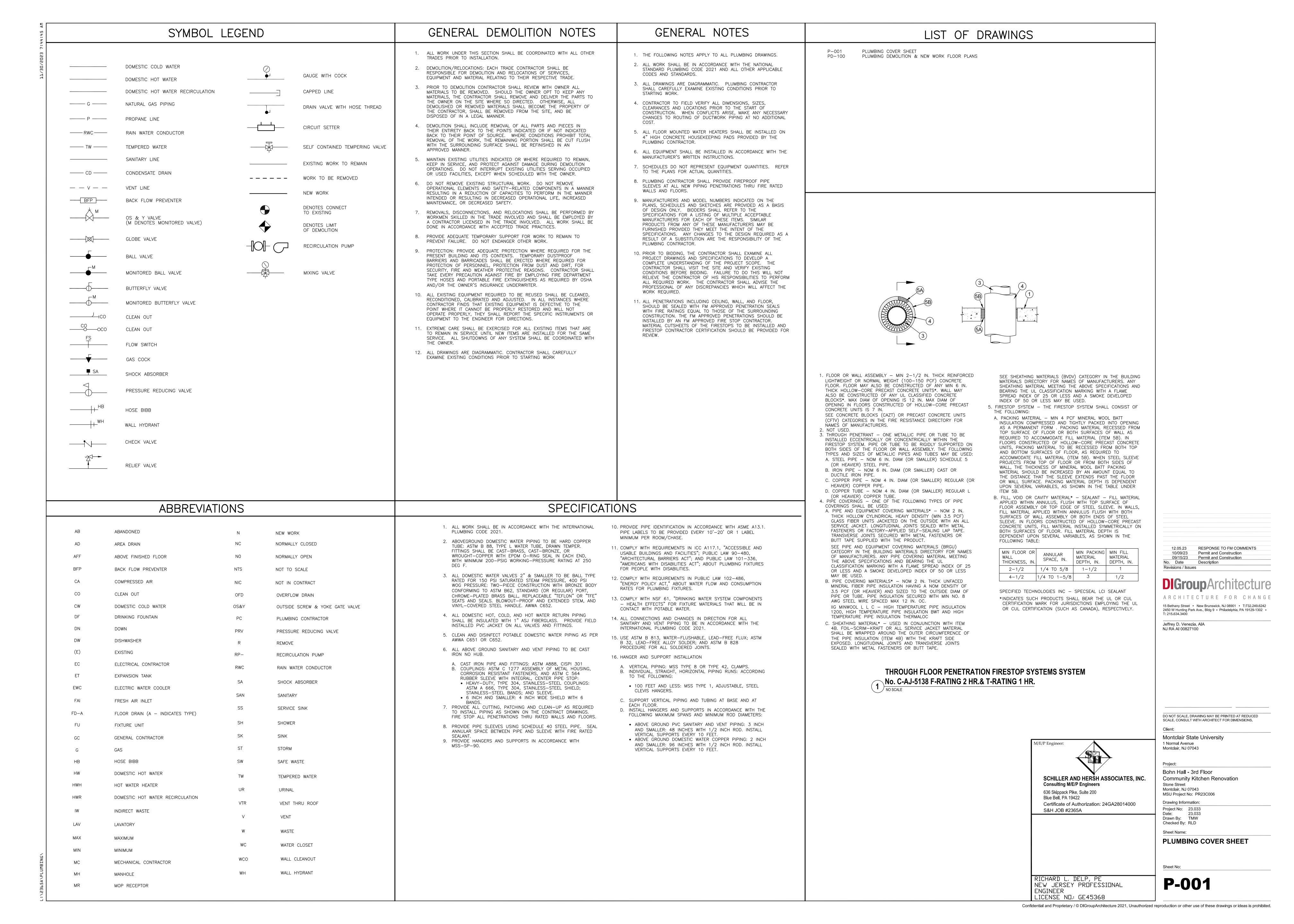
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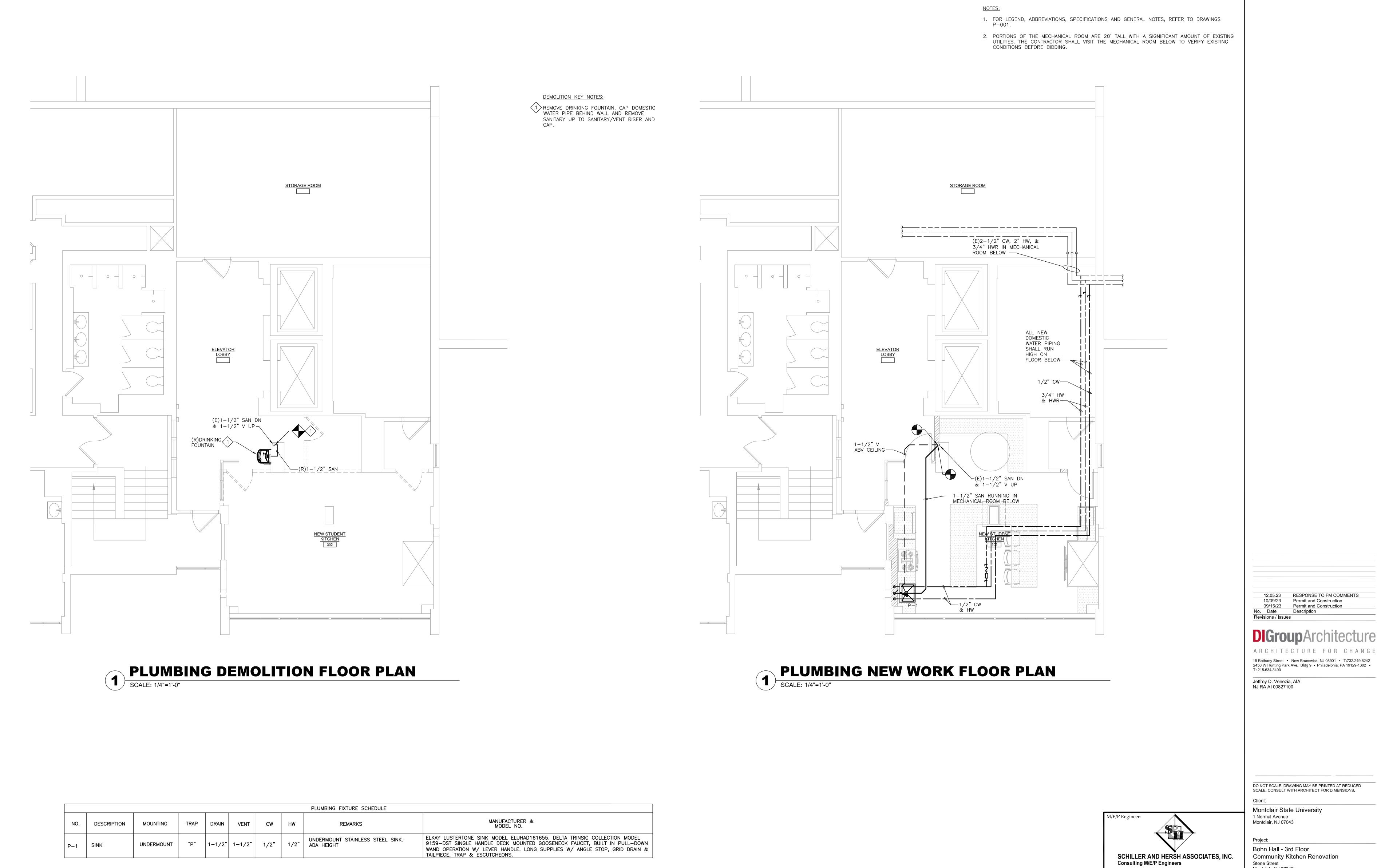
MECHANICAL NEW WORK FLOOR PLAN

Sheet No:

M-100

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Permit and Construction

09/15/23 Permit and Construction

lo. Date Description

No. Date Revisions / Issues

Montclair State University 1 Normal Avenue Montclair, NJ 07043

Bohn Hall - 3rd Floor Community Kitchen Renovation

Stone Street Montclair, NJ 07043 MSU Project No: PR23C006 Drawing Information:

Project No: 23.033
Date: 23.033
Drawn By: TMW
Checked By: RLD Sheet Name:

PLUMBING DEMOLITION & **NEW WORK FLOOR PLANS**

Sheet No: P-100

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PRV

PRESSURE REDUCING VALVE

12.05.23 RESPONSE TO FM COMMENTS 10/09/23 Permit and Construction 09/15/23 Permit and Construction No. Date Description Revisions / Issues

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Montclair State University

Montclair, NJ 07043 Project

1 Normal Avenue

Bohn Hall - 3rd Floor Community Kitchen Renovation

Stone Street Montclair, NJ 07043 MSU Project No: PR23C006 Drawing Information:

Project No. 23.033 Drawn Bv: TW Checked By: RLD

Sheet Name: FIRE PROTECTION

COVER SHEET

Sheet No: **FP-001**

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M/E/P Engineer:

SCHILLER AND HERSH ASSOCIATES, INC.

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636 Skippack Pike, Suite 200

RICHARD L. DELP, PE

ENGINEER

NEW JERSEY PROFESSIONAL

Blue Bell, PA 19422

S&H JOB #2365A

SPRINKLER NOTES: 1. PIPING 2" AND SMALLER SHALL BE THREADED BLACK STEEL SCH. 40. 2-1/2" AND LARGER SHALL BE SCH. 40 GROOVED BLACK STEEL WITH VICTAULIC FITTINGS. 2. CONTRACTOR TO REMOVE SPRINKLER HEADS AND REMOVE, EXTEND AND MODIFY SPRINKLER MAIN AND BRANCH PIPING AS REQUIRED TO ACCOMMODATE NEW CEILING GRID, WALL LAYOUTS, AND DUCTWORK IN AREA INDICATED. 3. COORDINATE LOCATION OF PIPING AND SPRINKLER HEADS WITH ALL LIGHTING, EQUIPMENT DUCTWORK, STRUCTURAL, ETC. 4. SPRINKLER HEADS TO BE CONCEALED PENDENT QUICK RESPONSE TYPE. 5. ALL SPRINKLER HEADS INSTALLED IN CEILING TILES ARE TO BE CENTERED. 6. CONTRACTOR SHALL COMPLETE SPRINKLER REPLACEMENT IN ALL AREAS SHOWN AS HATCHED ON THE DRAWINGS. THE UNIVERSITY WILL NOT PROVIDE A FIRE WATCH FOR THIS PROJECT. THE EXISTING AND NEW SPRINKLER SYSTEMS SHALL REMAIN ACTIVE DURING CONSTRUCTION. THE SPRINKLER SYSTEM SHALL BE DRAINED ON A DAILY BASIS TO PERFORM THE DEMOLITION AND NEW SPRINKLER WORK, AS REQUIRED AND THE SPRINKLER SYSTEM SHALL BE RE-FILLED EACH NIGHT, PRIOR TO THE CONTRACTOR LEAVING THE SITE, SO THE SYSTEM IS ACTIVE OVERNIGHT. COVERAGE LEGEND REMOVE SPRINKLER HEADS AND PIPING AND REPLACE WITH NEW LIGHT HAZARD COVERAGE AS REQUIRED TO ACCOMMODATE NEW LAYOUT IN THIS AREA. ALL NEW PIPING AND HEADS ARE TO BE PROVIDED AND INSTALLED IN ACCORDANCE WITH NFPA 13-2019. 12.05.23 RESPONSE TO FM COMMENTS 10/09/23 Permit and Construction 09/15/23 Permit and Construction No. Date Description Revisions / Issues 2450 W Hunting Park Ave., Bldg 9 • Philadelphia, PA 19129-1302 • T: 215.634.3400 Jeffrey D. Venezia, AIA NJ RA AI 00827100 DO NOT SCALE. DRAWING MAY BE PRINTED AT REDUCED SCALE. CONSULT WITH ARCHITECT FOR DIMENSIONS. Montclair State University 1 Normal Avenue Montclair, NJ 07043 Bohn Hall - 3rd Floor SCHILLER AND HERSH ASSOCIATES, INC. Consulting M/E/P Engineers Community Kitchen Renovation Stone Street Montclair, NJ 07043 636 Skippack Pike, Suite 200 MSU Project No: PR23C006 Blue Bell, PA 19422 Drawing Information: Certificate of Authorization: 24GA28014000 Project No: 23.033
Date: 23.033
Drawn By: TW
Checked By: RLD S&H JOB #2365A Sheet Name: FIRE PROTECTION DEMOLITION AND NEW WORK FLOOR PLAN
SCALE: 1/4"=1'-0" FIRE PROTECTION **NEW WORK FLOOR PLAN** Sheet No: RICHARD L. DELP, PE NEW JERSEY PROFESSIONAL **FP-100** ENGINEER LICENSE ND.: GE45368 Confidential and Proprietary / © DIGroupArchitecture 2021, Unauthorized reproduction or other use of these drawings or ideas is prohibited.

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SYMBOL LEGEND

- LIGHTING CIRCUITING INFORMATION. IN THIS EXAMPLE, FIXTURE SHALL BE CONTROLLED BY CONTROL LEG "e". ALL FIXTURES SHALL BE WIRED WITH 2#16AWG WIRING FOR 0-10V DIMMING WITH BRANCH CIRCUIT CONDUCTORS, OR USE OF METAL-CLAD LUMINARY CABLE MAY BE USED WHERE WIRING
- LUMINAIRE PROVIDING NORMAL/EMERGENCY ILLUMINATION, WIRED TO EMERGENCY GENERATOR BACKED POWER, VIA UL924 RELAY WHERE SHOWN TO BE CONTROLLED BY LIGHTING CONTROLS. THREE BUTTON DIGITAL DIMMER SWITCH, CONTROLLING SWITCH LEG "a" WITH ON/OFF AND RAISE/LOWER FUNCTIONS.
- lacktriangledown Exit signs (contractor to coordinate # of faces and the final mounting requirements).
- CEILING MOUNTED VACANCY/OCCUPANCY SENSOR AND ASSOCIATED DIGITAL ROOM CONTROLLER. IN THIS EXAMPLE, SENSOR SHALL CONTROL FIXTURES ON CONTROL LEG "a", "b" AND "c". EXISTING ELECTRICAL PANEL
- DD1;12 ELECTRICAL CIRCUITING INFORMATION. IN THIS EXAMPLE, EC SHALL WIRE DEVICE TO CIRCUIT #12 IN PANEL "DD1".
- STANDARD 20A DUPLEX CONVENIENCE RECEPTACLE WALL MOUNTED AT 18" AFF, UNLESS OTHERWISE NOTED. RECEPTACLE TO BE INSTALLED IN NEW OR EXISTING DRYWALL SHALL HAVE RECESSED SINGLE GANG BACKBOX WITH SINGLE GANG FACEPLATE MC-CABLE CONCEALED/FISHED IN DRYWALL.
- STANDARD 20A QUAD CONVENIENCE RECEPTACLE WALL MOUNTED AT 18" AFF, UNLESS OTHERWISE NOTED. RECEPTACLE TO BE INSTALLED IN NEW OR EXISTING DRYWALL SHALL HAVE RECESSED DOUBLE GANG BACKBOX WITH MC-CABLE CONCEALED/FISHED IN DRYWALL
- CEILING MOUNTED JUNCTION BOX
- WALL MOUNTED JUNCTION BOX
- FIX FIRE ALARM HORN AND STROBE. WALL MOUNT AT MIN 80" AFF TO BOTTOM OF STROBE LENS OR MAX 96"AFF TO TOP OF STROBE LENS OF DEVICE.
- FIRE ALARM STROBE. WALL MOUNT AT MIN 80" AFF TO BOTTOM OF STROBE LENS OR MAX 96"AFF TO TOP OF STROBE LENS OF DEVICE.
- FIRE ALARM MANUAL PULL STATION. WALL MOUNT AT 48" AFF TO TOP OF DEVICE.
- FIRE ALARM SMOKE DETECTOR
- FIRE ALARM HEAT DETECTOR
- FIRE ALARM MULTI-CRITERIA DETECTOR (SMOKE, HEAT, CARBON MONOXIDE) WITH SOUNDER BASE AND MONITOR MODULE WIRED TO FIRE ALARM PANEL.
- FIRE ALARM ADDRESSABLE INTERFACE MONITOR MODULE
- FIRE FIGHTER PHONE LOCATION
- WIRELESS ACCESS POINT LOCATION. DATA CABLING AND JACKS TO BE FURNISHED AND INSTALLED BY OTHERS
- $X \triangleright EXISTING(X)$ DATA JACKS.
- RECESSED EMPTY DOUBLE GANG BACKBOX WITH 1" CONDUIT TO ABOVE CEILING, FOR LOW-VOLTAGE WIRING BY OTHERS. INSTALL BACKBOX AT 18"AFF. UNLESS OTHERWISE NOTED ON DRAWINGS. PROVIDE FIBER BUSHINGS ON BOTH ENDS OF CONDUITS. PROVIDE WITH SINGLE-GANG MUD-RING, FACEPLATE BY OTHERS.
- DENOTES LIMIT OF DEMOLITION
- DENOTES CONNECT TO EXISTING

SPECIFICATIONS

SPECIFICATIONS:

- A. BASIC ELECTRICAL MATERIALS AND METHODS
- 1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2020 NATIONAL ELECTRICAL CODE AS ADOPTED BY THE NJUCC, ANY
- 2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE BEFORE PROCEEDING WITH THE WORK.
- 3. ALL ELECTRICAL COMPONENTS SHALL BE UL LISTED.

B. CONDUCTORS AND CABLE

- -1. ALL WIRING SHALL BE A MINIMUM 2#12 \pm 1#12GND. ALL CONDUIT SHALL BE IN MINIMUM 3/4" EMT OR RIGID.
- 2. PROVIDE THHN/THWN-2 WITH COPPER CONDUCTORS FOR ALL WIRING UNLESS OTHERWISE NOTED.

APPLICABLE LOCAL CODES, IBC, NFPA AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

- 3. MULTICONDUCTOR (MC) CABLE: COMPLY WITH NEMA WC 70 FOR ALUMINUM METAL—CLAD CABLE, TYPE MC WITH GROUND WIRE. INSTALL LUMINARY CABLE WITH INTEGRAL 2#16AWG 0-10V DIMMING CONDUCTORS FOR LIGHTING FIXTURES.
- 4. ALL CONDUCTORS SHALL BE COPPER.
- 5. ALL WIRING SHALL BE CONCEALED IN THE WALLS INCLUDING FISHING IN EXISTING WALLS. EXPOSED WIRING ON WALLS IS NOT ACCEPTABLE.

C. RACEWAYS

- 1. MC CABLE SHALL BE USED FOR CONCEALED WIRING. FOR CONNECTIONS TO VIBRATING EQUIPMENT CONDUIT SHALL BE LIQUIDTIGHT FLEXIBLE
- 2. ELECTRICAL METALLIC TUBING: ANSI C80.3. ONLY COMPRESSION FITTINGS ARE ALLOWED WITH EMT CONDUIT.
- FLEXIBLE METALLIC CONDUIT (STEEL) CONDUIT SHALL CONFORM TO THE LATEST REVISION OF FEDERAL SPECIFICATION WWC-566C. FLEXIBLE METAL CONDUIT: UL 1, ZINC-COATED STEEL. FLEXIBLE METAL CONDUIT: UL 1, ALUMINUM.
- 4. LIQUIDTIGHT FLEXIBLE NONMETALLIC TUBING: UL 1660.
- FITTINGS FOR CONDUIT (INCLUDING ALL TYPES AND FLEXIBLE AND LIQUIDTIGHT), EMT, AND CABLE: NEMA FB 1; LISTED FOR TYPE AND SIZE RACEWAY WITH WHICH USED, AND FOR APPLICATION AND ENVIRONMENT IN WHICH INSTALLED.
- a. FITTINGS FOR EMT: DIE-CAST, COMPRESSION TYPE.
- 6. JOINT COMPOUND FOR RIGID STEEL CONDUIT OR IMC: LISTED FOR USE IN CABLE CONNECTOR ASSEMBLIES, AND COMPOUNDED FOR USE TO
- 7. FIRE—STOP ALL WALL PENETRATIONS IN EXISTING OR NEW FIRE—RATED WALLS..

DAMPNESS - NEMA TYPE 3R AND WET LOCATIONS - NEMA TYPE 4.

D. CABINETS, BOXES AND FITTINGS

- 1. JUNCTION BOXES SHALL BE INSTALLED IN CONFORMANCE WITH THE NEC AND SHALL MEET THE REQUIREMENTS OF THE NEC AND UL 50.
- PROVIDE NEMA ENCLOSURES AS FOLLOWS, INDOOR DRY LOCATIONS NEMA TYPE 1 SHEET STEEL, LOCATIONS EXPOSED TO WEATHER OR
- 3. MOUNTING HEIGHT OF INSTALLED EQUIPMENT SHALL BE AS FOLLOWS, EXCEPT AS OTHERWISE NOTED ON THE DRAWINGS:

LUBRICATE AND PROTECT THREADED RACEWAY JOINTS FROM CORROSION AND ENHANCE THEIR CONDUCTIVITY.

SWITCH OUTLETS: 48" TO TOP OF BOX RECEPTACLE OUTLETS: 18" FROM FLOOR TO CENTERLINE

E. ELECTRICAL IDENTIFICATION

- IDENTIFICATION LABELING FOR RACEWAYS, CABLES, CONNECTORS, AND JUNCTION BOXES.
- 2. SIGNS FOR OPERATIONAL INSTRUCTION, WARNING AND CAUTION, EQUIPMENT LABELS.
- ALL RECEPTACLES AND SWITCHES SHALL BE LABELED ON A CLEAR SELF ADHESIVE LABEL WITH PANEL SOURCE AND CIRCUIT NUMBER IN 1/8"
- 4. ALL EQUIPMENT SHALL BE LABELED WITH PANEL SOURCE AND CIRCUIT NUMBER(S)

F. GROUNDING

1. ALL EQUIPMENT, WIRING, CONDUIT, ETC SHALL BE BONDED TO THE BUILDING GROUNDING SYSTEM ELECTRODE AND SHALL CONFORM TO NEC ARTICLE 250.

G. WIRING DEVICES

- 1. GENERAL: PROVIDE WIRING DEVICES, IN TYPES, CHARACTERISTICS, GRADES, COLORS, AND ELECTRICAL RATINGS FOR APPLICATIONS INDICATED WHICH ARE UL LISTED AND WHICH COMPLY WITH NEMA WD 1 AND OTHER APPLICABLE UL AND NEMA STANDARDS. PROVIDE IVORY COLOR DEVICES EXCEPT AS OTHERWISE INDICATED. VERIFY COLOR SELECTIONS WITH ARCHITECT.
- RECEPTACLES: PROVIDE 20A HEAVY-DUTY RECEPTACLES EQUAL TO HUBBELL WIRING DEVICES 5362. VERIFY COLOR SELECTIONS WITH ARCHITECT.
- GROUND-FAULT INTERRUPTER (GFI) RECEPTACLES: PROVIDE WEATHER-RESISTANT, TAMPER-RESISTANT, "FEED-THRU" TYPE GROUND-FAULT CIRCUIT INTERRUPTER, WITH INTEGRAL COMMERCIAL HEAVY-DUTY NEMA 5-20R DUPLEX RECEPTACLES ARRANGED TO PROTECT CONNECTED DOWNSTREAM RECEPTACLES ON SAME CIRCUIT. PROVIDE UNIT DESIGNED FOR INSTALLATION IN A 2-3/4 INCH DEEP OUTLET BOX WITHOUT ADAPTER, GROUNDING TYPE, CLASS A, GROUP 1, PER UL STANDARD 943. PROVIDE RECEPTACLES EQUAL TO HUBBELL WIRING DEVICES GFTWRST20 SERIES, WHICH COMPLY WITH 2015 UL 943 FOR SELF-TESTING REQUIREMENTS. VERIFY COLOR SELECTIONS WITH ARCHITECT.
- USB RECEPTACLES: PROVIDE 20A RECEPTACLES WITH (2) USB PORTS, (1) USB-A AND (1) USB-C CONNECTION TYPES. RECEPTACLE SHALL BE EQUAL TO HUBBELL WIRING DEVICES ISB20AC5W. VERIFY COLOR SELECTIONS WITH ARCHITECT.
- TOGGLE SWITCHES: QUITE TYPE AC SWITCHES RATED FOR 20A (COLOR AS SELECTED BY ARCHITECT).
- WALL PLATES: SINGLE AND COMBINATION, OF TYPES, SIZES, AND WITH GANGING AND CUTOUTS AS INDICATED. PROVIDE PLATES WHICH MATE AND MATCH WITH WIRING DEVICES TO WHICH ATTACHED. PROVIDE METAL SCREWS FOR SECURING PLATES TO DEVICES WITH SCREW HEADS COLORED TO MATCH FINISH OF PLATES. PROVIDE WALL PLATE COLOR TO MATCH WIRING DEVICES EXCEPT AS OTHERWISE INDICATED. PROVIDE WALL PLATES WITH ENGRAVED LEGEND WHERE INDICATED. CONFORM TO REQUIREMENTS OF SECTION "ELECTRICAL IDENTIFICATION." PROVIDE PLATES POSSESSING THE FOLLOWING ADDITIONAL CONSTRUCTION FEATURES:
- MATERIAL AND FINISH: PLASTIC, WHITE DEVICE PLATES TO MATCH EXISTING IN SPACE.
- OUTDOOR COVERS & MATERIAL FOR WET LOCATIONS: CAST ALUMINUM WITH SPRING-LOADED LIFT COVER, AND LISTED AND LABELED FOR USE. IN "WET LOCATIONS." PROVIDE GRAY WHILE—IN—USE COVER WP26E BY HUBBELL WIRING DEVICES OR APPROVED EQUAL.

H. LIGHTING FIXTURES

1. REFER TO LIGHTING FIXTURE SCHEDULE ON DWG E-100 FOR LIGHTING SPECIFICATIONS

I. LIGHTING CONTROL SYSTEMS

- 1. BASIS OF DESIGN LIGHTING CONTROLS ARE SHOWN AS ACUITY ILIGHT. ALTERNATE APPROVED EQUAL LIGHTING CONTROL SYSTEMS MAY BE SUBMITTED FOR REVIEW. ALL NECESSARY COMPONENTS, DEVICES, WIRING, PROGRAMMING, AND COMMISSIONING SHALL BE INCLUDED FOR A COMPLETE OPERATIONAL LIGHTING CONTROL SYSTEM.
- REFER TO DRAWING E-100 NEW WORK LIGHTING PLAN WITH SWITCH DEVICE LOCATIONS AND QUANTITIES. PROVIDE REQUIRED CONTROLLERS, AS NECESSARY FOR QUANTITY OF LIGHTING CONTROL LEGS AS SHOWN.
- REFER TO DRAWING E-200 FOR TYPICAL WIRING DETAIL ON THE LIGHTING CONTROL SYSTEM.

J. DATA AND STRUCTURED CABLING SYSTEM:

1. WIRING AND DEVICES TO BE FURNISHED AND INSTALLED BY OTHERS.

K. FIRE ALARM

- 1. CONTRACTOR SHALL HIRE UNIVERSITY'S FIRE ALARM VENDOR, AUTOMATIC SUPPRESSION & ALARM SYSTEMS FOR PRICING RELATED TO NEW FIRE ALARM DEVICES, PROGRAMMING, AND TESTING OF THE EXISTING NOTIFIER FIRE ALARM SYSTEM. CONTACT BRIAN ZIEMBA AT 201-825-8855.
- NEW FIRE ALARM DEVICE SHALL BE FULLY COMPATIBLE WITH EXISTING FIRE ALARM SYSTEM AND MATCH EXISTING FIRE ALARM DEVICES IN THE
- 3. WIRE ALL NEW NOTIFICATION APPLIANCES WITH METALCLAD MC-FPLP FIRE ALARM CABLE, SIZING AS DETERMINED BY FIRE ALARM MANUFACTURER.
- 4. ALL NEW AND RELOCATED DEVICES SHALL BE TESTED PER NFPA 72 AT COMPLETION OF PROJECT.

P. PANELBOARDS

1. PANEL "P1A" SHALL BE EATON/CUTLER HAMMER POW-R-LINE 1A PANEL OR EQUAL

- PANEL SHALL BE/HAVE: a. $3\phi - 208/120V - 4W$
- b. 225A MLO c. 42 POLES
- d. 22,000A RMS AIC RATING
- e. 225A COPPER BUSSING f. BOLT ON BREAKERS
- q. PIANO HINGE FRONT ENCLOSURE WITH DOOR-IN-DOOR CONSTRUCTION h. NEMA 1 ENCLOSURE

GENERAL NOTES

- PRIOR TO BIDDING, THE CONTRACTOR SHALL EXAMINE ALL PROJECT DRAWINGS AND SPECIFICATIONS TO DEVELOP A COMPLETE UNDERSTANDING OF THE PROJECT SCOPE. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY EXISTING CONDITIONS BEFORE BIDDING. FAILURE TO DO THIS WILL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES TO PERFORM ALL REQUIRED WORK. THE CONTRACTOR SHALL ADVISE THE PROFESSIONAL OF ANY DISCREPANCIES WHICH WILL AFFECT THE WORK REQUIRED.
- FOR LOCATIONS OF ALL MECHANICAL EQUIPMENT REFER TO THE RESPECTIVE MECHANICAL DRAWINGS. REFER TO POWER WIRING SCHEDULE FOR MECHANICAL EQUIPMENT.
- ALL DEVICE LOCATIONS SUCH AS RECEPTACLE, DATA JACK, TV JACK, AND FLOOR OUTLETS, ETC., ARE APPROXIMATE. FINAL LOCATIONS AND MOUNTING HEIGHTS SHALL BE FIELD LOCATED BY THE ARCHITECT. THE CONTRACTOR SHALL INSTALL ALL DEVICES AT LOCATIONS AS DIRECTED BY THE ARCHITECT WITHOUT ADDITIONAL COMPENSATION.
- EXACT LOCATIONS OF ALL ELECTRICAL EQUIPMENT SHALL BE COORDINATED IN THE FIELD WITH THE MECHANICAL CONTRACTOR. ALL CLEARANCES AS REQUIRED BY ARTICLE 110 OF THE NEC SHALL BE MAINTAINED.
- RECEPTACLES, DATA JACKS AND OTHER FLUSH MOUNTED DEVICES MOUNTED ON OPPOSITE SIDE OF SAME WALL MUST BE STAGGERED IN SEPARATE JOISTS FOR ACOUSTICS. USE OF BACK TO BACK BOXES IS NOT ACCEPTABLE.
- DEVICES LOCATED IN FIRE RATED WALLS THAT ARE GREATER THAN 16 SQ/IN SHALL BE PROVIDED WITH SPECSEAL SSP PUTTY PADS OR EQUAL ON EACH BACKBOX.
- COORDINATE SPEAKER, OCCUPANCY SENSOR, AND FIRE ALARM DEVICE LOCATIONS WITH LIGHTING FIXTURES, SPRINKLERS, AIR DIFFUSERS, AND OTHER CEILING MOUNTED EQUIPMENT. COORDINATE WITH THE REFLECTED CEILING PLAN.
- ALL EQUIPMENT ON FIRE ALARM DRAWINGS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT SHOWN, AT LOCATIONS AS DIRECTED BY THE ARCHITECT WITHOUT ADDITIONAL COMPENSATION.
- 9. FOLLOW DIMENSIONS. WHERE INDICATED ON DRAWINGS. DO NOT SCALE DRAWINGS.
- 10. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2020 NATIONAL ELECTRICAL CODE AND OTHER APPLICABLE CODES AND STANDARDS.
- 11. FIRE STOPPING: WHERE CONDUITS PENETRATE FIRE AND SMOKE BARRIERS INCLUDING WALLS, PARTITIONS, FLOORS, AND CEILINGS, INSTALL FIRE-STOPPING AT PENETRATIONS AFTER CABLES ARE INSTALLED.
- 12. MATERIALS FOR FIRE STOPPING SHALL BE UL LISTED AND LABELED AND FM APPROVED FOR FIRE RATINGS CONSISTENT WITH PENETRATED BARRIERS. SLEEVES SHALL BE SCHEDULE 40, WELDED, BLACK STEEL PIPE SLEEVES. SIZES AS REQUIRED FOR EQUIVALENT AREA AS THE WIREWAYS. SEALING FITTINGS SHALL BE SUITABLE FOR SEALING CABLES IN SLEEVES OR CORE DRILLED HOLES. TWO-PART SEALANT: FORMED-IN-PLACE SEALANT FIRE-RESISTANT JOINT SEALERS.
- ELECTRICAL CONTRACTOR SHALL EXAMINE THE DRAWINGS OF ALL TRADES AND COORDINATE THEIR WORK TO AVOID

INTERFERENCE WITH STRUCTURE, AND ALL EQUIPMENT ABOVE AND BELOW THE CEILING.

- 14. THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE BEFORE PROCEEDING WITH THE
- 15. WIRE ALL FIRE ALARM AUXILIARY PANELS TO A 1P-20A C/B AS INDICATED ON THE PANEL SCHEDULES, INSTALL BREAKER LOCK ON FIRE ALARM CIRCUIT BREAKER.
- 16. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE MOUNTINGS AND NUMBER OF FACES FOR THE EXIT SIGNS. THE LIGHTING FIXTURE SHOP DRAWING SUBMISSION SHALL REFLECT THIS COORDINATION.
- 17. CONTRACTOR MUST COORDINATE ROOMS NAMES ON THE PANEL SCHEDULES WITH THE FINAL ROOM NAMES, IN THE FIELD. ALL PANELS SHALL BE PROVIDED WITH TYPED PANEL SCHEDULE.
- 18. PROVIDE FIBER BUSHINGS ON THE ENDS OF ALL CONDUIT STUBS. 19. ALL SWITCHES, RECEPTACLES, PANELBOARDS, FIRE ALARM PANELS, POWER SUPPLIES AND DISCONNECTS SHALL BE LABELED
- WITH SOURCE PANEL AND CIRCUIT.
- 20. ALL SPARE CONDUITS SHALL BE PROVIDED WITH A PULL STRING. 21. ALL PANELS THAT HAVE NEW CIRCUITS OR REMOVED CIRCUITS SHALL HAVE NEW TYPED UPDATED PANEL SCHEDULES.
- 22. ALL SWITCHES, RECEPTACLES, PANELBOARDS, DISCONNECTS AND EQUIPMENT SHALL BE LABELED WITH SOURCE PANEL AND
- 23. FIRE PERMITS ARE REQUIRED FOR ALL FIRE ALARM WORK. 24. ALL PENETRATIONS INCLUDING CEILING, WALL, AND FLOOR, SHOULD BE SEALED WITH FM APPROVED PENETRATION SEALS WITH FIRE RATINGS EQUAL TO THOSE OF THE SURROUNDING CONSTRUCTION. THE FM APPROVED PENETRATIONS SHOULD BE INSTALLED BY AN FM APPROVED FIRE STOP CONTRACTOR. MATERIAL CUTSHEETS OF THE FIRESTOPS TO BE INSTALLED AND FIRESTOP CONTRACTOR CERTIFICATION SHOULD BE PROVIDED FOR REVIEW.
- 25. ALL OF THE NOTES UNDER THE "GENERAL NOTES" SHALL APPLY TO ALL OF THE ELECTRICAL DRAWINGS.

DEMOLITION NOTES

1. ALL WORK UNDER THIS SECTION SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO DEMOLITION.

SERVICES, EQUIPMENT AND MATERIAL RELATING TO THEIR RESPECTIVE TRADE.

- 2. DEMOLITION/RELOCATIONS: EACH TRADE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND RELOCATIONS OF
- 3. PRIOR TO DEMOLITION CONTRACTOR SHALL REVIEW WITH OWNER ALL MATERIALS TO BE REMOVED. SHOULD THE OWNER OPT TO KEEP ANY MATERIALS, THE CONTRACTOR SHALL REMOVE AND DELIVER THE PARTS TO THE OWNER ON THE SITE WHERE SO DIRECTED. OTHERWISE, ALL DEMOLISHED OR REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR,
- SHALL BE REMOVED FROM THE SITE, AND BE DISPOSED OF IN A LEGAL MANNER. 4. DEMOLITION SHALL INCLUDE REMOVAL OF ALL PARTS AND PIECES IN THEIR ENTIRETY BACK TO THE POINTS INDICATED OR IF NOT INDICATED BACK TO THEIR POINT OF SOURCE. WHERE CONDITIONS PROHIBIT TOTAL REMOVAL OF THE WORK, THE
- REMAINING PORTION SHALL BE CUT FLUSH WITH THE SURROUNDING SURFACE SHALL BE REFINISHED IN AN APPROVED
- MAINTAIN EXISTING UTILITIES INDICATED OR WHERE REQUIRED TO REMAIN, KEEP IN SERVICE, AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OCCUPIED OR USED FACILITIES, EXCEPT WHEN SCHEDULED WITH THE OWNER.

6. DO NOT REMOVE EXISTING STRUCTURAL WORK. DO NOT REMOVE OPERATIONAL ELEMENTS AND SAFETY-RELATED

COMPONENTS IN A MANNER RESULTING IN A REDUCTION OF CAPACITIES TO PERFORM IN THE MANNER INTENDED OR RESULTING IN DECREASED OPERATIONAL LIFE, INCREASED MAINTENANCE, OR DECREASED SAFETY. REMOVALS, DISCONNECTIONS, AND RELOCATIONS SHALL BE PERFORMED BY WORKMEN SKILLED IN THE TRADE INVOLVED AND

SHALL BE EMPLOYED BY A CONTRACTOR LICENSED IN THE TRADE INVOLVED. ALL WORK SHALL BE DONE IN ACCORDANCE

CONTRACTOR SHALL TAKE EVERY PRECAUTION AGAINST FIRE BY EMPLOYING FIRE DEPARTMENT TYPE HOSES AND PORTABLE

WITH ACCEPTED TRADE PRACTICES. 8. PROVIDE ADEQUATE TEMPORARY SUPPORT FOR WORK TO REMAIN TO PREVENT FAILURE. DO NOT ENDANGER OTHER WORK.

9. PROTECTION: PROVIDE ADEQUATE PROTECTION WHERE REQUIRED FOR THE PRESENT BUILDING AND ITS CONTENTS.

FIRE EXTINGUISHERS AS REQUIRED BY OSHA AND/OR THE OWNER'S INSURANCE UNDERWRITER.

- 10. ALL EXISTING EQUIPMENT REQUIRED TO BE REUSED SHALL BE CLEANED, RECONDITIONED, CALIBRATED AND ADJUSTED. IN ALL INSTANCES WHERE CONTRACTOR FINDS THAT EXISTING EQUIPMENT IS DEFECTIVE TO THE POINT WHERE IT CANNOT BE PROPERLY RESTORED AND WILL NOT OPERATE PROPERLY, THEY SHALL REPORT THE SPECIFIC INSTRUMENTS OR EQUIPMENT
- 11. ALL DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL CAREFULLY EXAMINE EXISTING CONDITIONS PRIOR TO STARTING
- 12. DEMOLITION SHALL INCLUDE REMOVAL OF ALL PARTS AND PIECES IN THEIR ENTIRETY BACK TO THE POINTS INDICATED OR IF NOT INDICATED BACK TO THEIR POINT OF SOURCE. MAINTAIN (E) CIRCUIT INTEGRITY.

Montclair State University 1/E/P Engineer: SCHILLER AND HERSH ASSOCIATES, INC. **Consulting M/E/P Engineers**

Certificate of Authorization: 24GA28014000

LIST OF DRAWINGS

TO THE ENGINEER FOR DIRECTIONS.

ELECTRICAL COVER SHEET ELECTRICAL DEMOLITION FLOOR PLANS ED-100 E-100 ELECTRICAL NEW WORK FLOOR PLANS ELECTRICAL NEW WORK SCHEDULES

ARCHITECTURE FOR CHANGI

RESPONSE TO FM COMMENTS

Permit and Construction

Permit and Construction

5 Bethany Street - New Brunswick, NJ 08901 - T:732.249.6242

2450 W Hunting Park Ave., Bldg 9 Philadelphia, PA 19129-1302

Description

Jeffrev D. Venezia. AIA NJ RA AI 00827100

T: 215.634.3400

09/15/23

Revisions / Issues

No. Date

O NOT SCALE. DRAWING MAY BE PRINTED AT REDUCED

SCALE, CONSULT WITH ARCHITECT FOR DIMENSIONS.

Montclair, NJ 07043 Project

1 Normal Avenue

Bohn Hall - 3rd Floor Community Kitchen Renovation Stone Street Montclair, NJ 07043

MSU Project No: PR23C006 **Drawing Information:** Project No. 23.033 Drawn By: JDB Checked By: RLD

Sheet Name: **ELECTRICAL COVER SHEET**

Sheet No:

E-001

NEW JERSEY PROFESSIONAL ENGINEER LICENSE ND.: GE45368

RICHARD L. DELP. PE

636 Skippack Pike, Suite 200

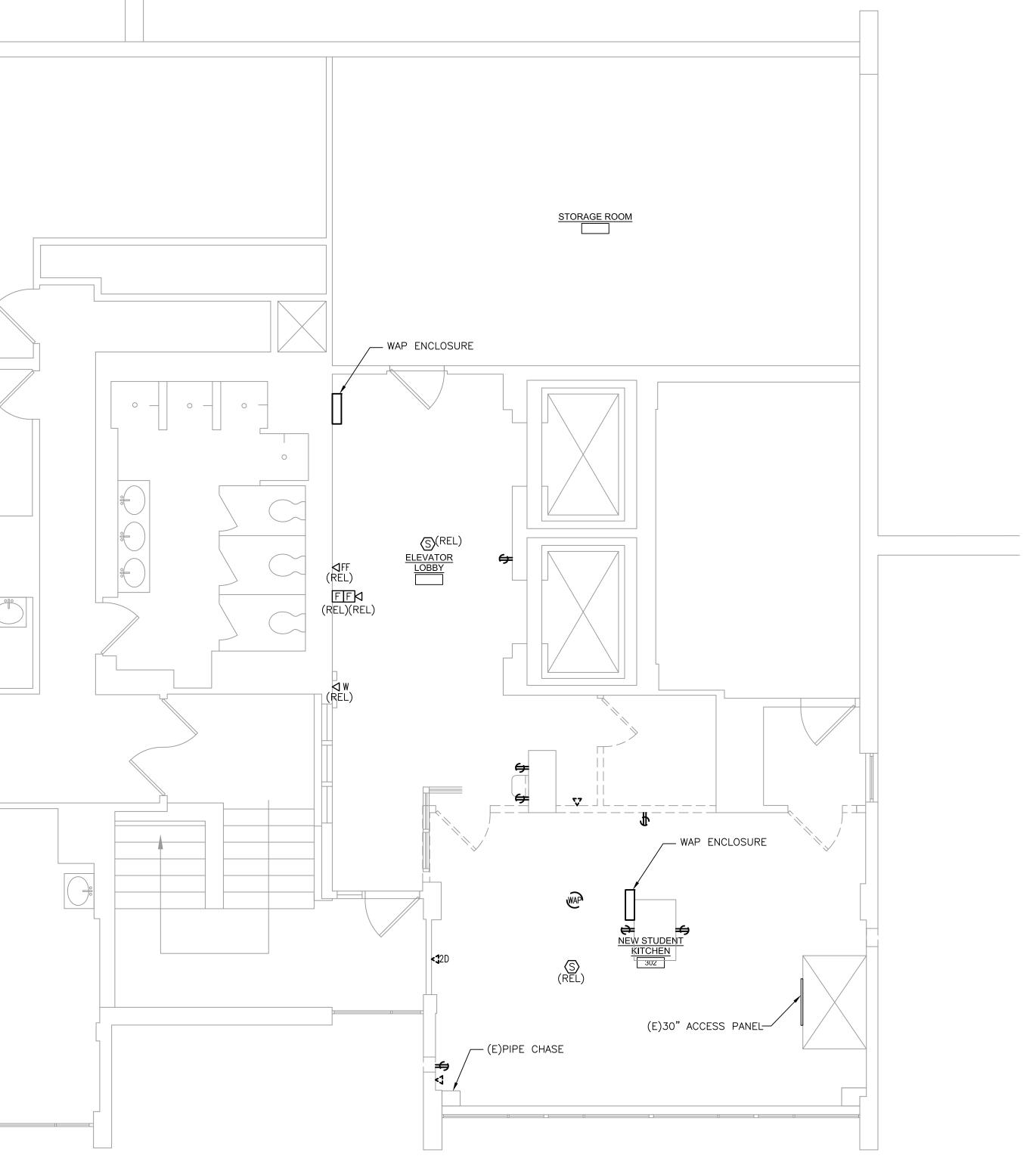
Blue Bell, PA 19422

S&H JOB #2365A

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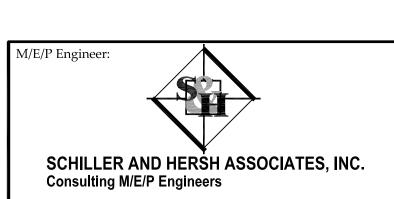


- 1. FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES, REFER TO DRAWINGS E-001 & E-002.
- 2. ALL WORK SHOWN ON THIS DRAWING IS TO BE DEMOLISHED, UNLESS OTHERWISE NOTED AS EXISTING (E), REMOVE AND REINSTALL (RAR), OR RELOCATED (REL).
- 3. ALL DEVICES SHOWN TO BE REMOVED AND REINSTALLED (RAR) OR TO BE RELOCATED (REL), SHALL BE PROTECTED AND STORED BY THE CONTRACTOR DURING CONSTRUCTION, AND THEN SHALL BE REINSTALLED AFTER CEILING OR ABOVE CEILING WORK IS COMPLETED.
- 4. ALL DEVICES SHOWN TO BE DEMOLISHED SHALL HAVE ASSOCIATED WIRING REMOVED BACK TO SOURCE PANEL, UNLESS CONNECTED TO EXISTING-TO-REMAIN DEVICES/EQUIPMENT (NOT ALL DEVICES ARE SHOWN). AS NEEDED, MAINTAIN CIRCUIT INTEGRITY BY RE-WIRING OR MAINTAINING EXISTING WIRING TO KEEP EXISTING DEVICE(S) ACTIVE.
- 5. CONTRACTOR IS RESPONSIBLE TO REPLACE ANY WIRING NOTED ABOVE, THAT IS DAMAGED OR REMOVED BY THE CONTRACTOR.
- 6. CONTRACTOR IS RESPONSIBLE TO PATCH ALL HOLES OR OPENINGS IN EXISTING WALLS AFTER DEMOLITION, INCLUDING EXISTING FIRE RATED WALLS, ABOVE AND BELOW CEILING, TO MAINTAIN INTEGRITY OF THE FIRE RATED WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE RATED WALLS.



ELECTRICAL DEMOLITION WORK FLOOR PLAN

ELECTRICAL DEMOLITION WORK FLOOR PLAN 2 ELECTF
SCALE: 1/4"=1'-0"



636 Skippack Pike, Suite 200 Blue Bell, PA 19422

Certificate of Authorization: 24GA28014000 S&H JOB #2365A

MSU Project No: PR23C006 Drawing Information: Project No: 23.033
Date: 23.033
Drawn By: JDB
Checked By: RLD Sheet Name:

Community Kitchen Renovation

Montclair State University

1 Normal Avenue Montclair, NJ 07043

Stone Street Montclair, NJ 07043

Bohn Hall - 3rd Floor

12.05.23 RESPONSE TO FM COMMENTS
10/09/23 Permit and Construction
09/15/23 Permit and Construction
No. Date Description

ARCHITECTURE FOR CHANGE

15 Bethany Street • New Brunswick, NJ 08901 • T:732.249.6242 2450 W Hunting Park Ave., Bldg 9 • Philadelphia, PA 19129-1302 • T: 215.634.3400

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No. Date Revisions / Issues

Jeffrey D. Venezia, AIA NJ RA AI 00827100

ELECTRICAL DEMOLITION FLOOR PLANS

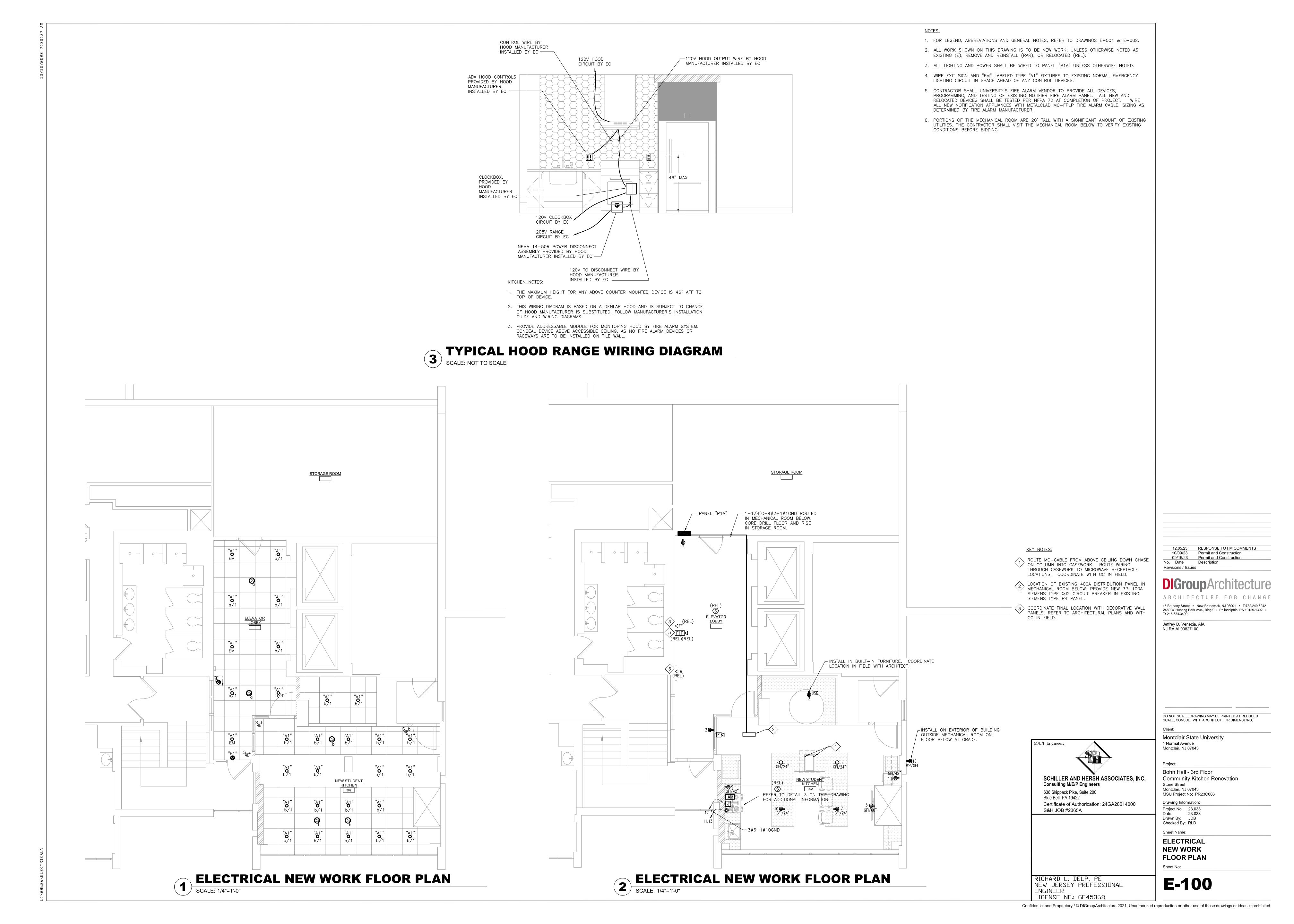
RICHARD L. DELP, PE NEW JERSEY PROFESSIONAL ENGINEER

ED-100

Sheet No:

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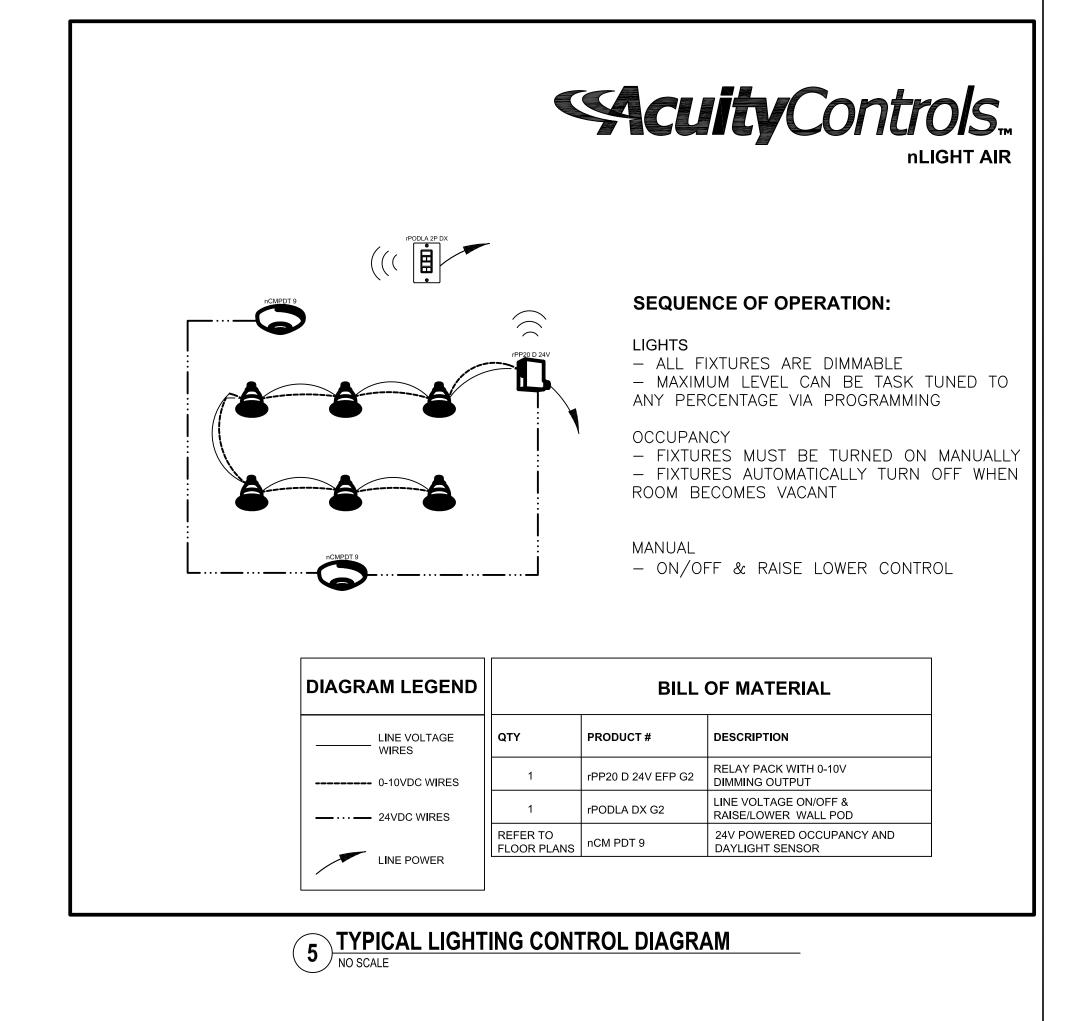


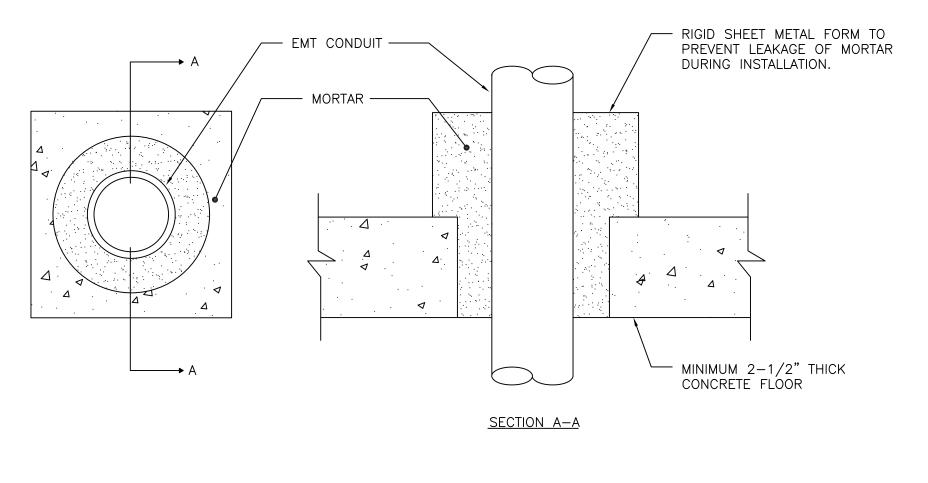
3 MECHANICAL EQUIPMENT WIRING SCHEDULE NO SCALE

	LIGHTING FIXTURE SCHEDULE													
FIX T	TURE MANUFACTURER	CATALOG NUMBER	ALTERNATE MANUFACTURERS	VOLTS	LUMENS		GHT ENGINE COLOR HOURS@L70	TYPE	DRIVER	MOUNTING	WARRANTY	REMARKS		
	LENDRA BRANDS	NU4-RD-XTM19-13LM-35K-98-HE60-NL-UNV- DIM10-NC-MC-MC	OR APPROVED EQUAL	120V	1130	15	3500K 60,000	LED	DIMMING 0-10V	RECESSED	5 YEARS	4" ROUND LED RECESSED DOWNLIGHT		
	E1 EMERGI-LITE	LX-1/2-N-R-M-UA-C	OR APPROVED EQUAL	120/277	V -	1.5	-	LED	-	WALL/CEILING	5 YEARS	LED EDGE-LIT EXIT SIGN, AC-ONLY RECESSED AND UNIVERSAL MOUNT WITH UNIVERSAL FIELD INSTALLED ARROWS. CONTRACTOR SHALL DETERMINE THE NUMBER OF 1 AND 2 FACE SIGNS ON THE PROJECT AND SHALL DETERMINE THE ARROWS BASED ON THE CONTRACT DRAWINGS.		

					SUF	RFACE MOU	NTED																				
CKT NO	CIRCUIT POLE	AMP	REMARKS		REMARKS		REMARKS		REMARKS		REMARKS		, REMARKS		REMARKS		REMARKS		В	С	А	В	С	REMARKS	AMP	CIRCUIT POLE	CKT NO
1	1	20	LOBBY & STUDENT KITCHEN LIGHTING	506			360			RECEPTACLES, ELEVATOR LOBBY	20	1	2														
3	1	20	RECEPTACLES, STUDENT KITCHEN 302		360			1600		RECEPTACLE, QUAD, STUDENT KITCHEN 302	20	1	4														
5	1	20	MICROWAVE RECEPTACLE, STUDENT KITCHEN 302			1600			1600	RECEPTACLE, QUAD, STUDENT KITCHEN 303	20	1	6														
7	1	20	MICROWAVE RECEPTACLE, STUDENT KITCHEN 302	1600			1600			MICROWAVE RECEPTACLE, STUDENT KITCHEN 302	20	1	8														
9	1	20	REFRIGERATOR RECEPTACLE, STUDENT KITCHEN 302		1600			1600		MICROWAVE RECEPTACLE STUDENT KITCHEN 302	20	1	10														
11	2	50	RANGE RECETPACLE, NEW STUDENT KITCHEN ROOM 302			4800			500	RANGE HOOD & CONTROLS, STUDENT KITCHEN	20	1	12														
13		30	TRANSE RECEIFACLE, NEW STODENT RITCHEN ROOM 302	4800			480			CC-1,CC-2,CC-3, IHRU-1	15	2	14														
15	2	40	CU-1		3048			480		-00-1,00-2,00-0, II INO-1	13	2	16														
17		40	100-1			3048			480	RECEPTACLE, OUTDOOR GFI BY CU-1	20	1	18														
19	1	20	SPARE	0			0			SPARE	20	1	20														
21	1	20	SPARE		0			0		SPARE	20	1	22														
23	1	20	SPARE			0			0	SPARE	20	1	24														
25	1	20	SPARE	0			0			SPACE	-	1	26														
27	1	-	SPACE		0			0		SPACE	-	1	28														
29	1	-	SPACE			0			0	SPACE	-	1	30														
31	1	-	SPACE	0			0			SPACE	-	1	32														
33	1	-	SPACE		0			0		SPACE	-	1	34														
35	1	-	SPACE			0			0	SPACE	-	1	36														
37	1	-	SPACE	0			0			SPACE	-	1	38														
39	1	-	SPACE		0			0		SPACE	-	1	40														
41	1	-	SPACE			0			0	SPACE	-	1	42														
				6906	5008	9448	2440	3680	2580																		
										PHASE A:	9.35	kVA															
										PHASE B:	8.69	kVA															
										PHASE C:	12.03	kVA															
										TOTAL:	30.06	kVA															

1 ELECTRICAL PANEL SCHEDULE
NO SCALE





MAXIMUM DIAMETER MINIMUM PACKING MINIMUM FILL (MORTAR)
OF CONDUIT MATERIAL THICKNESS MATERIAL THICKNESS 3-1/2" 1-1/2" 9-1/2"

* REFER TO UL FIRE RESISTANCE DIRECTORY FOR FURTHER REQUIREMENTS.

THROUGH FLOOR PENETRATION FIRESTOP SYSTEMS SYSTEM No. C-AJ-1303 F-RATING 2 HR.& T-RATING 2 HR.

No scale

SCHILLER AND HERSH ASSOCIATES, INC. Consulting M/E/P Engineers 636 Skippack Pike, Suite 200 Blue Bell, PA 19422

S&H JOB #2365A

Certificate of Authorization: 24GA28014000

Montclair State University 1 Normal Avenue Montclair, NJ 07043 Project:

Bohn Hall - 3rd Floor Community Kitchen Renovation Stone Street Montclair, NJ 07043 MSU Project No: PR23C006 Drawing Information:

DO NOT SCALE. DRAWING MAY BE PRINTED AT REDUCED SCALE. CONSULT WITH ARCHITECT FOR DIMENSIONS.

12.05.23 RESPONSE TO FM COMMENTS 10/09/23 Permit and Construction 09/15/23 Permit and Construction

ARCHITECTURE FOR CHANGE 15 Bethany Street • New Brunswick, NJ 08901 • T:732.249.6242 2450 W Hunting Park Ave., Bldg 9 Philadelphia, PA 19129-1302

No. Date Description

Revisions / Issues

T: 215.634.3400

Jeffrey D. Venezia, AIA NJ RA AI 00827100

Project No: 23.033
Date: 23.033
Drawn By: JDB Checked By: RLD

Sheet Name: **ELECTRICAL NEW WORK SCHEDULES**

Sheet No:

RICHARD L. DELP, PE NEW JERSEY PROFESSIONAL ENGINEER

E-200

LICENSE NO.: GE45368

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