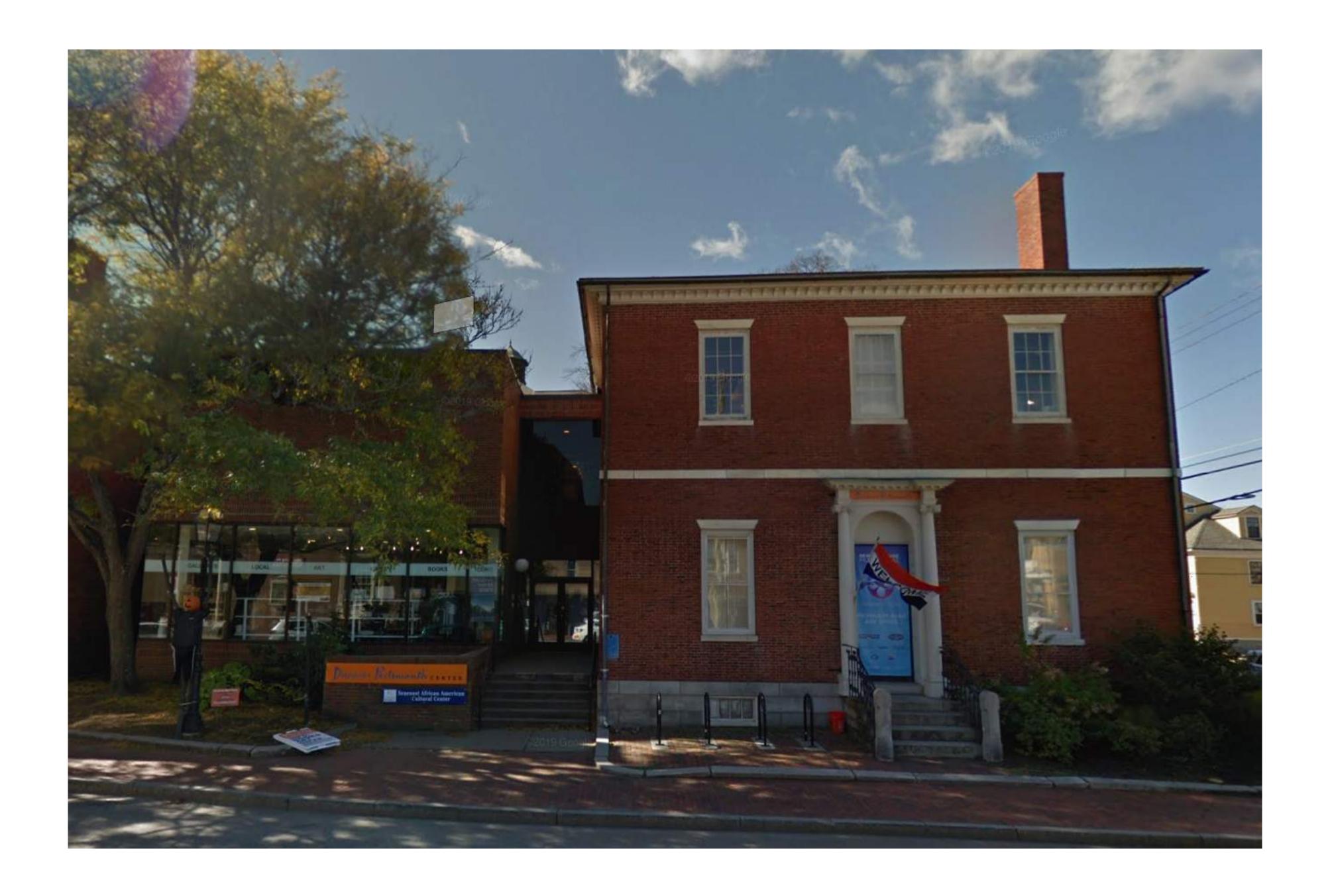
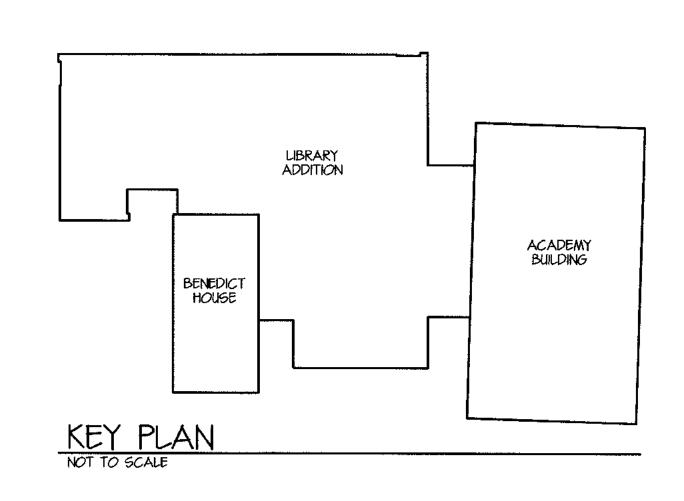
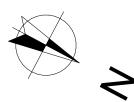
DISCOVER PORTSMOUTH CENTER

10 MIDDLE STREET - PORTSMOUTH - NEW HAMPSHIRE - RESTROOM AND ADA REMODEL



LOCUS MAP





DRAMING LIST

AX 102 EXISTING UPPER FLOOR PLANS

PROPOSED RENOVATION STAFF ROOM PLANS

RESTROOM PLANS

REFLECTED CEILING PLAN

WALL SECTIONS AND DETAILS

FINISH PLANS AND SCHEDULES

MECHANICAL & PLUMBING

TOILET AND STAFF ROOM HVAC PLANS MP201

SPECIFICATIONS

ELECTRICAL

LEGEND AND NOTES ELECTRICAL SPECIFICATIONS, LIGHT FIXTURE SCHEDULE AND NOTES

FLOOR LIGHTING & POWER DEMOLITION PLANS FLOOR LIGHTING PLAN & POWER PLAN

> PERMIT DOCUMENTS 12/2/19

| ARCHITECT | CIVIL | STRUCTURAL | CONSTRUCTION MANAGER | DISCOVER PORTSMOUTH CENTER |
|---|------------|------------|----------------------|---|
| Dennis Mires, P.A., The Architects 697 Union St Manchester, NH Tel: (603)625-4548 Fax: (603)625-1067 e-mail: info@thearchitects.net | | | | 10 MIDDLE STREET PORTSMOUTH NH date: 11/22/19 proj. no.: 2019.072 |
| PLUMBING | MECHANICAL | ELECTRICAL | | The material contained in these drawings and the design |

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Electrical Systems Engineering 22 Manchester Road Suite 8-A Derry, NH 03038 (603)870-9009

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DENNIS MRES, P.A.
THE ARCHITECTS

697 Union Street, Manchester N H 603-625-4548 FAX 603-625-1067

2. THE CONTRACTOR SHALL REVIEW AND COORDINATE THE SCHEDULING OF ALL CONSTRUCTION PHASING WITH THE OWNER.

3. ALL WORK SHALL CONFORM TO ALL LOCAL BUILDING CODES AND ORDINANCES, AND ALL OTHER AGENCIES HAVING JURISDICTION. THE RULES AND REGULATIONS OF OSHA SHALL BE ADHERED TO FOR THIS PROJECT.

4.THE CONTRACTOR SHALL OBTAIN AND PAY ALL FEES FOR BUILDING DEPARTMENT APPROVALS AND PERMITS, CONTROLLED INSPECTIONS, OTHER AGENCY APPROVALS AND PERMITS WHERE REQUIRED, AND FINAL INSPECTION SIGN-OFFS FOR PROJECT COMPLETION. COPIES OF ALL INSPECTION REPORTS TO BE FORWARDED TO THE OWNER AND ARCHITECT. THE BUILDING IS OWNED BY THE CITY OF PORTSMOUTH. CITY OF PORTSMOUTH FEES WILL NOT BE REQUIRED OR WILL BE THE RESPONSIBILITY OF THE OWNER. ALL OTHER FEES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

5. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES, AND FOR THE COORDINATION OF ALL PORTIONS OF WORK.

6. THE CONTRACTOR SHALL DO ALL CUTTING, FITTING AND PATCHING THAT MAY BE REQUIRED TO MAKE THE VARIOUS PARTS OF THE WORK READY TO RECEIVE OR BE RECEIVED BY THE WORK OF OTHERS OR OUTSIDE VENDORS AS SHOWN UPON REASONABLY IMPLIED BY THE DRAWINGS.

7. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS, MAINTAIN AND PAY ALL COSTS FOR TEMPORARY WATER AND PLUMBING, POWER AND LIGHTING AND HEATING OR VENTILATION AS HE MAY REQUIRE TO PROPERLY CONDUCT THE WORK OF THE CONTRACT. ALL HOISTING CHARGES, IF ANY, SHALL BE INCLUDED IN HIS BID.

8. THE CONTRACTOR SHALL THOROUGHLY VERIFY ALL DIMENSIONS PRIOR TO THE BID SUBMISSION. TO THE EXTENT PRACTICABLE, HE SHALL ALSO VERIFY FIELD CONDITIONS AT THE SITE. ANY AND ALL DISCREPANCIES SHALL BE REPORTED TO THE OWNER PRIOR TO HIS BID SUBMISSION, OTHERWISE THE CONTRACTOR SHALL BEAR ALL COSTS TO COMPLETE THE WORK AS INTENDED ON THE CONTRACT DOCUMENTS.

9. NOT USED

10. THE CONTRACTOR SHALL PATCH TO MATCH OR AS OTHERWISE DIRECTED, ALL AREAS WHICH ARE AFFECTED BY THE DEMOLITION AND/OR NEW CONSTRUCTION.

11. THE CONTRACTOR SHALL BE RESPONSIBLE, AT HIS OWN COSTS, FOR WAREHOUSING OF ALL MATERIALS TO BE INSTALLED UNDER THIS CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECEIVING, PROTECTING OWNER FURNISHED ITEMS.

12. THE CONTRACTOR SHALL PROTECT THE BUILDING PREMISES AND ALL OCCUPANTS ON THE PROJECT SITE. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY COVERINGS, BOARDS, TEMPORARY PARTITIONS AND DOORS AS REQUIRED TO PROTECT THE EXISTING WORK AND FINISHES TO REMAIN AT THE JOB SITE AND ALL AREAS OF THE BUILDING AFFECTED BY CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES CAUSED BY IMPROPER PROTECTION AND SHALL MAKE ALL NECESSARY REPLACEMENTS OR REPAIRS WITHOUT ANY ADDITIONAL CHARGE TO THE OWNER OR THE PARTY AFFECTED. THE CONTRACTOR SHALL TAKE CARE TO NOT OVERLOAD THE EXISTING FLOOR SLABS BEYOND THERE DESIGN CAPACITY WITH MATERIALS.

13. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK WHICH HE EXPECTS ADDITIONAL COMPENSATION BEYOND THE CONTRACT AMOUNT WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER AND/OR ARCHITECT. FAILURE TO OBTAIN SUCH AUTHORIZATION SHALL JEOPARDIZE CLAIM FOR EXTRA COMPENSATION.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL APPLICABLE MANUFACTURER'S PRODUCTS GUARANTEES AND/OR WARRANTIES; AND SHALL SUBMIT COPIES OF EACH TO THE ARCHITECT PRIOR TO PURCHASE OF MATERIALS AND INSTALLATION.

15. THE CONTRACTOR SHALL MAINTAIN CONSTRUCTION PREMISES IN A NEAT AND ORDERLY CONDITION AND SHALL REMOVE TRASH AND DEBRIS AT THE END OF EACH WORKING DAY

16. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT, IN WRITING, AND RECEIVE APPROVAL BEFORE ORDERING OR INSTALLING ITEMS OR MATERIALS WHICH ARE PROPOSED EQUALS. PROPOSED SUBSTITUTIONS SHALL BE SUBMITTED WITH BID PROPOSAL WITH ADD OR DEDUCT PRICING FROM THE ITEMS OR SYSTEM SPECIFIED IN THE CONTRACT DOCUMENTS.

17. JUST PRIOR TO THE OWNER'S OCCUPANCY, THE CONTRACTOR SHALL CLEAN ALL SURFACES OF DUST, DEBRIS, LOOSE CONSTRUCTION MATERIAL AND EQUIPMENT AND LEAVE ALL FLOORS VACUUMED CLEAN. REMAINING CONSTRUCTION MATERIAL AND EQUIPMENT, IF ANY, SHALL BE MOVED AND TEMPORARILY SECURED IN AN AREA DIRECTED BY THE OWNER

18. WINDOWS AND PLUMBING FIXTURES WITHIN THE WORK AREA SHALL BE WASHED JUST PRIOR TO OWNER OCCUPANCY.

19. ALL NEW WORK AND CONSTRUCTION OPERATIONS SHALL NOT UNDERMINE THE STRUCTURAL INTEGRITY OF THE BUILDING.

20. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND/OR ARCHITECT FOR ITEMS FURNISHED AND/OR INSTALLED BY OTHERS FOR EXACT LOCATIONS AND PROPER FITTING; AND SCHEDULE THEM FOR WORK.

21. THE CONTRACTOR SHALL SECURE AND LOCK UP THE OWNER'S PREMISES AT THE END OF EACH WORKING DAY AND SHALL NOT PERMIT UNAUTHORIZED PERSONNEL TO CIRCULATE IN THE OWNER'S SPACE.

22. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SAFE AND UNINTERRUPTED CIRCULATION OF HVAC, ELECTRICAL, PLUMBING, AND FIRE PROTECTION SYSTEMS IN EXISTING AREAS NOT AFFECTED BY CONSTRUCTION.

23. THE CONTRACTOR SHALL PATCH ALL HOLES AND CHASES BOTH ABOVE AND BELOW THE CEILING CREATED BY THE WORK OF ALL TRADES, TO MAKE WATERTIGHT AND FIREPROOF. INSTALLATION, ALTERATION OR REMOVAL OF DUCTS, PIPES, CONDUITS, CEILINGS, ETC., TO MATCH EXISTING SURFACE.

24. THE CONTRACTOR SHALL PROVIDE APPROVED FIRE RATED MINERAL WOOL OR APPROVED EQUAL PACKED SOLID AT SPACE AROUND PIPES, DUCTS, AND CONDUITS PENETRATING FIRE RATED WALLS OR PARTITIONS AND SHALL COMPLY WITH ALL REGULATIONS AS SET BY APPLICABLE SECTIONS OF THE STATE BUILDING CODE AND OTHER CODES HAVING JURISDICTION.

25. FIRESTOPPING SHALL BE AS REQUIRED BY APPLICABLE SECTIONS OF THE STATE BUILDING CODE AND OTHER CODES HAVING JURISDICTION.

26. ALL INTERIOR FINISHES AND BACKING SHALL COMPLY WITH APPLICABLE SECTIONS OF THE STATE BUILDING CODE AND OTHER CODES HAVING JURISDICTION.

27. THE CONTRACTOR SHALL PATCH ALL HOLES AND DEFECTS IN THE FLOOR AND PROVIDE FLASH PATCHING OF ALL FLOORING. THE CONTRACTOR SHALL INSPECT THE FLOORS WITH THE FLOORING INSTALLER AND SHALL MAKE THE NECESSARY REPAIRS PRIOR TO THE ACCEPTANCE OF THE FLOOR SUBSTRATE BY THE FLOORING INSTALLER.

28. THE CONTRACTOR SHALL INSPECT AND MAKE THE NECESSARY CORRECTIVE MEASURES TO INSURE THAT ALL PARTITIONS SHALL ALIGN WITHOUT ANY BREAKS BETWEEN APPROVED BREAK POINTS.

29. THE CONTRACTOR SHALL PROVIDE AND ESTABLISH AN ELEVATION BENCHMARK AT 0'-0" TO BE USED AS A WORK POINT BY ALL TRADES FOR VERTICAL DIMENSIONS.

30. SUPERVISION BY THE CONTRACTOR:

DURING THE ENTIRE PERIOD OF THE PROGRESS OF THE WORK, THE CONTRACTOR SHALL BE REPRESENTED AT THE SITE OF THE WORK BY A QUALIFIED SUPERINTENDENT WHO SHALL BE EMPOWERED TO ACT ON HIS BEHALF, AND WHO SHALL BE RESPONSIBLE FOR:

1. ESTABLISHMENT AND MAINTENANCE OF PROPER AND SAFE WORKING CONDITIONS WITHIN THE STATE OF THE WORK.

2. COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS.

3. LAYOUT AND COMPLETE COORDINATION OF ALL ELEMENTS OF THE WORK INCLUDING MECHANICAL AND ELECTRICAL COORDINATION.

ASCERTAINING ITS COMPLIANCE WITH THE CONTRACT DOCUMENTS.

5. REMOVAL AND PROPER REPLACEMENT OF ALL INSTALLED WORK WHICH IS NOT IN COMPLIANCE WITH CONTRACT

4. CHECKING OF ALL WORK IN PLACE FOR THE PURPOSE OF

DOCUMENTS.

6. MAINTAINS A CLEAR AND CLEAN WORK SITE.

31. SUBMITTALS

A. CONTRACTOR SHALL SUBMIT SAMPLES AND SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW PRIOR TO FABRICATION AND INFORM THE ARCHITECT IN WRITING AT THE TIME OF SUBMISSION OF ANY PROPOSED DEVIATION IN SUBMITTALS FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. BY REVIEWING, APPROVING, AND SUBMITTING SHOP DRAWINGS AND SAMPLES PRIOR TO SUBMISSION TO THE ARCHITECT, THE CONTRACTOR REPRESENTS THAT HE HAS DETERMINED AND VERIFIED FIELD MEASUREMENTS, AND THAT EACH SUBMITTAL HAS BEEN CHECKED AND COORDINATED WITH THE REQUIREMENTS OF THE CONTRACT.

B. TIMING

1. PRIOR TO COMMENCING THE WORK THE CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH A SUBMITTAL SCHEDULE FOR ALL ITEMS REQUIRED BY THE CONTRACT DOCUMENTS WHICH IS FULLY COORDINATED WITH THE CONSTRUCTION SCHEDULE TO INSURE A TIMELY REVIEW PROCESS.

2. MAKE SUBMITTALS FAR ENOUGH IN ADVANCE OF SCHEDULE DATES FOR INSTALLATION TO PROVIDE TIME REQUIRED FOR REVIEWS, FOR SECURING NECESSARY APPROVALS, FOR POSSIBLE REVISIONS AND RESUBMITTALS, AND FOR PLACING ORDERS AND SECURING DELIVERY.

C. SAMPLES

1. REJECTED SAMPLES SHALL BE RESUBMITTED AS SOON
AS POSSIBLE AND SHALL BE IDENTIFIED AS "RESUBMITTED SAMPLES".

A. REMOVE ALL WASTES, REFUSE, AND DEBRIS

32. REMOVALS, CLEAN-UP, AND PROTECTION

ACCUMULATING FROM CONSTRUCTION WORK AND LEGALLY DISPOSE OF INDEPENDENTLY FROM OTHERS IN THE BUILDING.

B. GENERAL CONTRACTOR SHALL ENSURE THAT CONSTRUCTION PREMISES ARE LEFT IN A GENERALLY CLEAN CONDITION AT THE END OF EACH WORKING DAY. ONCE HARDWOOD FLOORING HAS BEEN INSTALLED, ALL FLOORS WILL BE VACUUMED AND TEMPORARILY PROTECTED AGAINST DAMAGE DURING MOVE-IN. PROTECTION FOR WALLS, CORNERS, AND DOOR FRAMES WILL ALSO BE PROVIDED AS REQUIRED.

C. JUST PRIOR TO OWNER OCCUPANCY, CLEAN ALL SURFACES, REMOVE TEMPORARY LABELS, STAINS, AND FOREIGN SUBSTANCES, POLISH TRANSPARENT AND GLOSSY SURFACES, CLEAN EQUIPMENT AND FIXTURES TO A SANITARY CONDITION; REPLACE FILTERS OF MECHANICAL EQUIPMENT. REMAINING CONSTRUCTION MATERIAL AND EQUIPMENT, IF ANY, SHALL BE MOVED AND TEMPORARY SECURED IN AN AREA DIRECTED BY OWNER.

D. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AFTER-HOURS WORK AS REQUIRED BY THE OWNER- (I.E. EXCESSIVE NOISE, FUMES, ETC.)

E. CONTRACTOR IS RESPONSIBLE FOR COORDINATING AVAILABILITY OF PARKING FOR WORKERS WITH THE OWNER.

F. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND COORDINATING WORK OF SEPARATE CONTRACTS (I.E. ELECTRICAL, PLUMBING/HVAC CONTRACTORS., ETC).

33. WHERE EXISTING CONSTRUCTION IS FOUND TO CONTAIN ANY HAZARDOUS MATERIAL, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE ARCHITECT IN WRITING. NOTE: REMOVAL, DISPOSAL AND REPLACEMENT OF THE HAZARDOUS MATERIAL SHALL BE IN ACCORDANCE WITH STATE, LOCAL AND FEDERAL REGULATIONS.

CODE INFORMATION

GENERAL BUILDING INFORMATION

1st Floor - "7,640" sf - 2nd Floor - "7,260" sf - 3rd Floor- "1,490" sf

Area modified: 1,000sf on first level (no new square footage)

Building Height: "42" feet

2015 INTERNATIONAL BUILDING CODE: (IBC)
Refer to the following sections to determine compliance w

Refer to the following sections to determine compliance with the requirements for construction documents in Sections 105.0, 106.0, 107.0, 108.0, 109.0, 1704.0, 1804.0. The building must comply with all Sections of the International Building Code.

304 USE GROUP:

503 GENERAL HEIGHT & AREA LIMITATIONS:

Height: 85 feet 7 stories Area: 34,200 feet

504 HEIGHT MODIFICATIONS:

Add "x" story and "XX" feet -NOT REQUIRED EXISTING BUILDING
506 AREA MODIFICATIONS: NA

16,390 ACTUAL

507 UNLIMITED AREAS:

"List Space with exception" -N/A

602 CONSTRUCTION CLASSIFICATION
Type 1B

TABLE 601 FIRE RESISTANCE RATINGS OF STRUCTURE ELEMENTS:
Structural Elements: 2 hour, (modified per section) NO MODIFICATIONS
Elevator Shaft(s): 2 hour, (modified per section) NO MODIF.
Elevator Machine Room: 2 hour, (modified per section) NO MODIF.
Corridor(s): 0 hour, (modified per section) NO MODIF.
Mechanical Room(s): 0, (modified per section) NO MODIF.
Egress Stairwell(s): 2, (modified per section) NO MODIF.
Electrical Room(s): 0, (modified per section) NO MODIF.
-ALL ITEMS NOTED ARE EXISTING

906 FIRE SPRINKLER SYSTEM:
Type: None
1008 OCCUPANT LOAD:
Maximum Floor Area per Occupant 100 sf

(# of Occupants) x ("X" sf) = "XXX sf floor area"

 $163 \times 100 \text{ sf} = 16,390 \text{ sf floor area}$

1003.2.3 CAPACITY OF EGRESS COMPONENTS:

Egress Width .2" Corridor & .3" stairs per person
(# of Occupants) x ("XX" inches) = "XXX" inch egress width

163 x ..2 = 32.6" OR 48.9" for stairs 1005 NUMBER OF EGRESS EXITS: 7 Provided 2 Required

1607 FLOOR LIVE LOAD:

07 FLOOR LIVE LOAD:
Occupancy Floors @ 40 psf
Corridors @ 80 psf

Corridor 1st Floor @ 100 psf

1607.9 Reduction in Live Loads
"XXX" psf

1607 ROOF LIVE LOAD:

100 psf of horizontal projection

1608.0 SNOW LOADS: 1608.3 Flat-Roof & Low-Slope Snow Load:

35 psf 1608.3.1 Snow Exposure Factor: 1.0

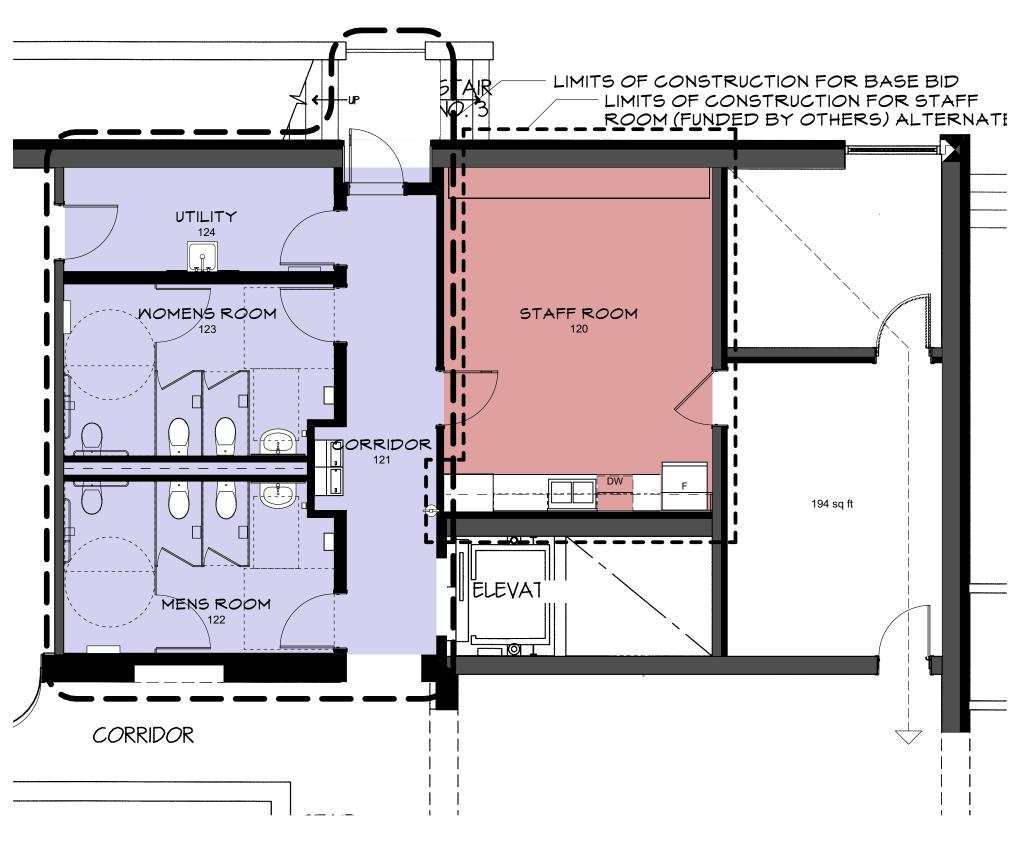
1608.3.3 Snow Load Importance Factor: 1.1

1609.3 BASIC WIND SPEED:
"XX" mph

1609.1 Exposure Catagory: B1604.5 Wind Load Importance Factor: 1.15

1609.7 Wind Design Pressure: 23

All applicable building codes adopted and enforced by the City of Portsmouth can be seen ont he City of Portsmouth website in the Inspection Department section.



LIMITS OF CONSTRUCTION

SCALE: 3/16" = 1'-0"

KREG ARCHITECT & BUILD NO. 04411

JONES NO. 04411

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T.H.E. A.R.C.H.I.T.E.C.T.S.
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General Notes & Code Revieu

revisions:

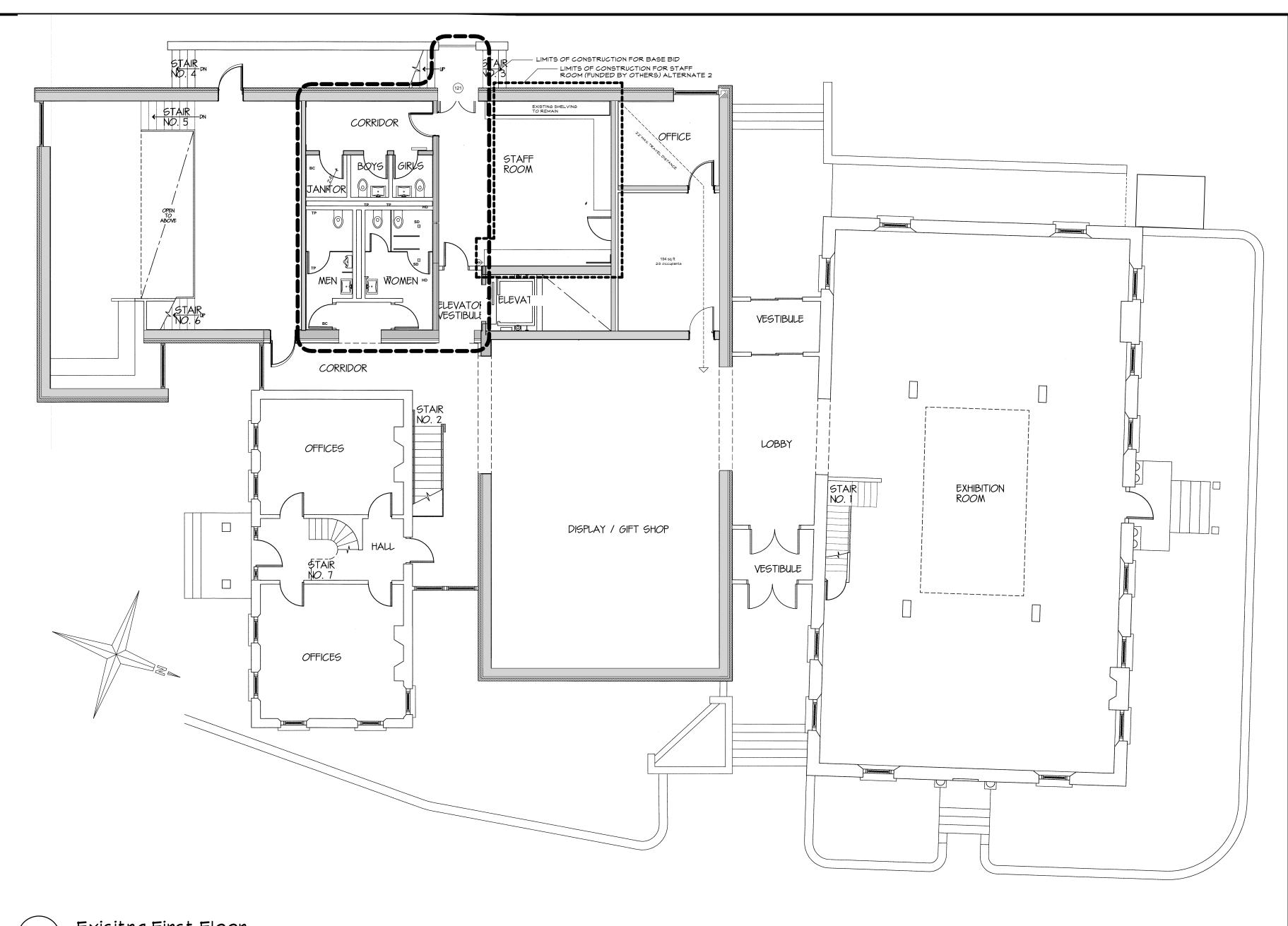
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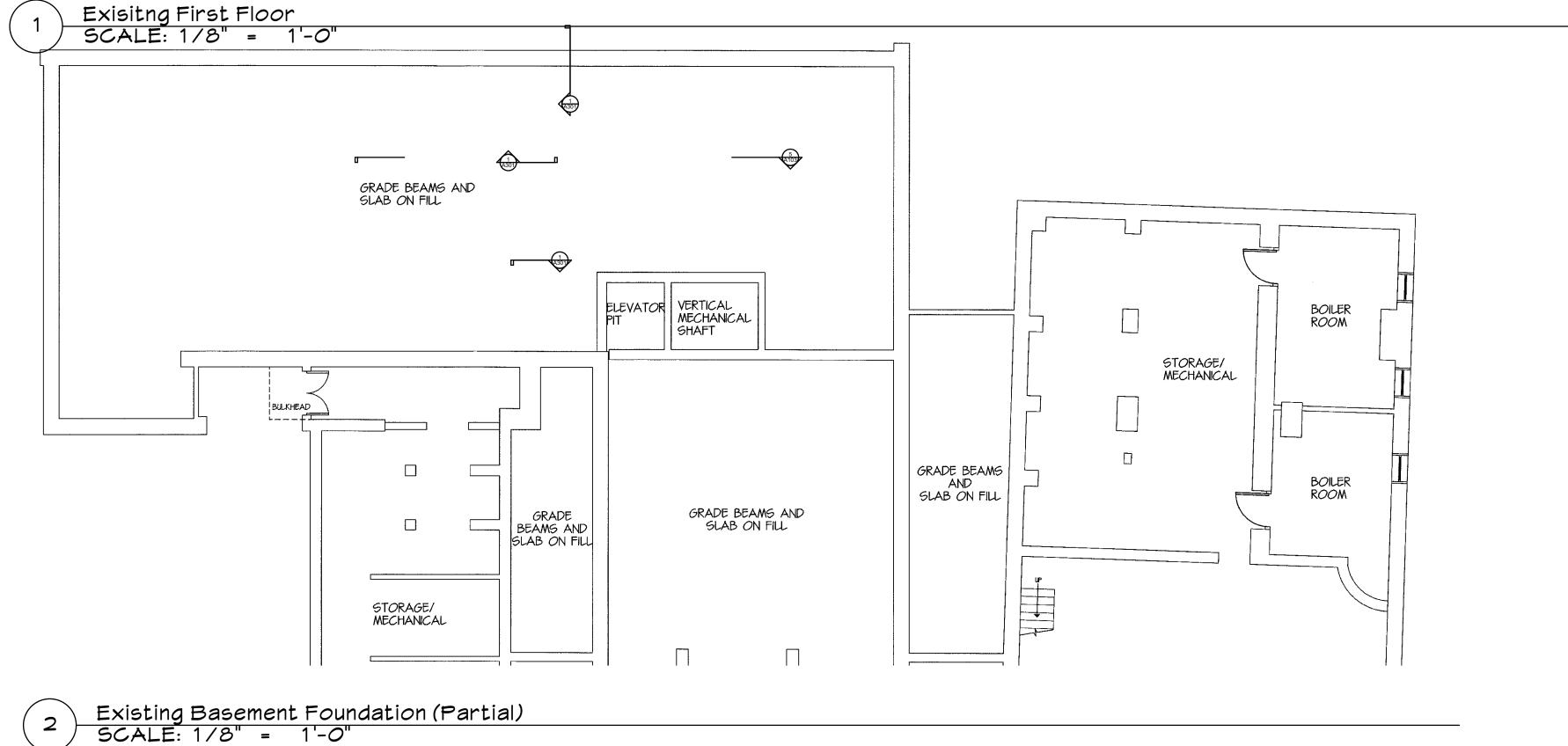
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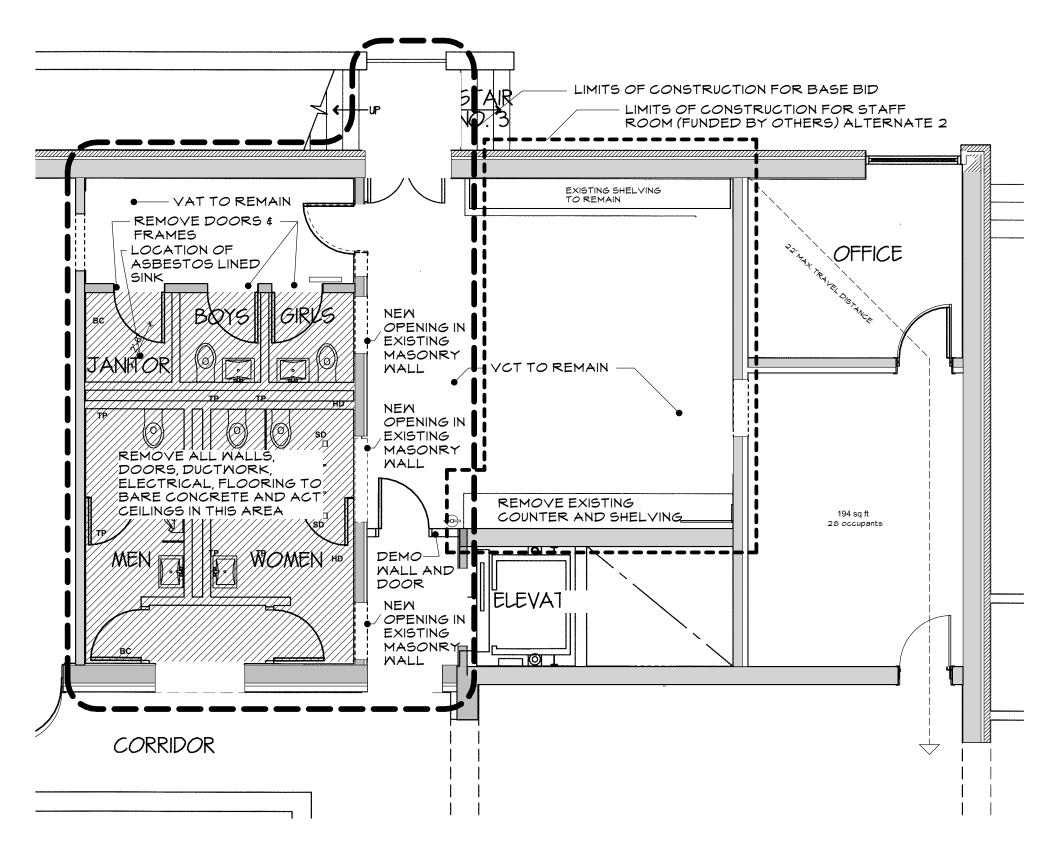
AX101



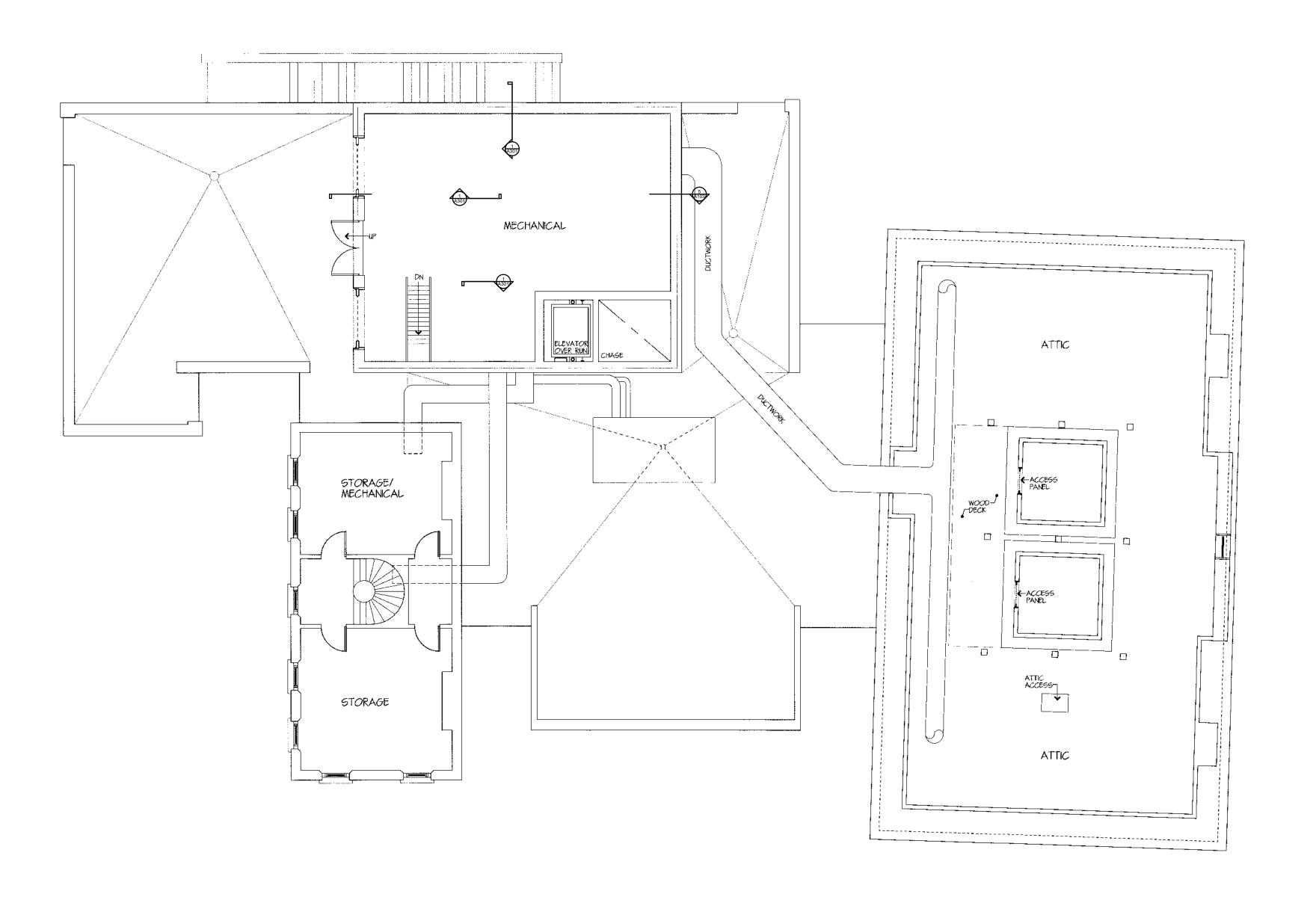


GENERAL DEMOLITION NOTES

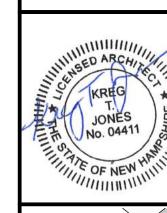
- A PROTECT ALL FINISHES ADJACENT TO AREAS OF DEMOLITION AND REPAIRS
- B EACH CONTRACTOR TO CAREFULLY EXAMINE EXISTING CONDITIONS AT THE TIME OF BID. ALL INCIDENTAL DEMOLITION IS NOT SHOWN.
- C REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR WORK IN THOSE TRADES. THE CONTRACTOR IS TO COORDINATE WITH DEMOLITION WORK OF THOSE TRADES.
- D DEMOLITION OF WALLS INCLUDES ALL ITEMS ATTACHED TO THE WALL, UNLESS NOTED TO BE SALVAGED (SALVAGE SECURITY EQUIPMENT AND PREP FOR REINSTALLATION IN NEW LOCATION). SAW CUT NEW OPENINGS AND REPAIR EXPOSED ENDS OF WALLS PER MASONRY RESTORATION.
- E SALVAGE EXISTING SOLID CORE DOORS, FRAMES TO REMAIN, UNLESS NOTED OTHERWISE. F PROTECT EXISTING DOORS SCHEDULED TO REMAIN.
- G REMOVE ALL HEATERS AND PIPING NOT TO BE USED IN NEW MECHANICAL SYSTEM. PREPARE WALLS FOR PATCHING AND PENETRATIONS TO BE FILLED.
- H ABATE ASBESTOS FROM SINK COVERING AND LEAD PAINT THROUGHOUT. NOTE ANY PRESENCE OF ASBESTOS MATERIAL FOUND DURING DEMOLITION. ALL VCT FLOOR TILE AND MASTIC NOT TO BE REMOVED.
- I REMOVE DOORS SCHEDULED TO BE REMOVED AND PREPARE OPENINGS FOR NEW DOORS. J SALVAGE ALL ELECTRICAL UNLESS NOTED OTHERWISE ON ELECTRICAL PLANS
- K REMOVE ALL CEILINGS IN AREAS OF HEAVY CONSTRUCTION. REFER TO SCHEDULE FOR OTHER LOCATIONS. SALVAGE 30 TILES FOR USE IN OTHER LOCATIONS.
- L REMOVE ALL CERAMIC TILE FLOORING DOWN TO CONCRETE OR BARE FLOORING TO PREPARE FOR AREAS OF NEW CERAMIC TILE FLOORING. YCT FLOOR TO REMAIN. REFER TO SCHEDULE FOR ALL LOCATIONS.
- M. HAZARDOUS MATERIALS HAVE BEEN IDENTIFIED IN THE AREA OF WORK. ONE KITCHEN SINK WITH AN ASBESTOS LINER WILL BE REMOVED. ALL OTHER HAZARDOUS MATERIALS SHALL BE ENCAPSULATED IN NEW CONSTRUCTION (I.E. FLOOR TILES). IF CUTTING OR PATCHING OF AREAS CONTAINING HAZARDOUS MATERIALS IS ENCOUNTERED, CONTACT THE OWNER and ARCHITECT FOR DIRECTION.

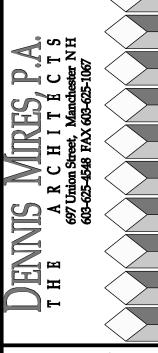


Demolition Plan SCALE: 3/16" = 1'-0" 1 Existing Second Floor (Partial)
SCALE: 1/8" = 1'-0"



2 Existing Third Floor and Roof Plan SCALE: 1/8" = 1'-0" DISCOVER PORTSMOUTH CENTE RESTROOM AND ADA REMODEL 10 MIDDLE STREET PORTSMOUTH NEW HAMPSHIRE





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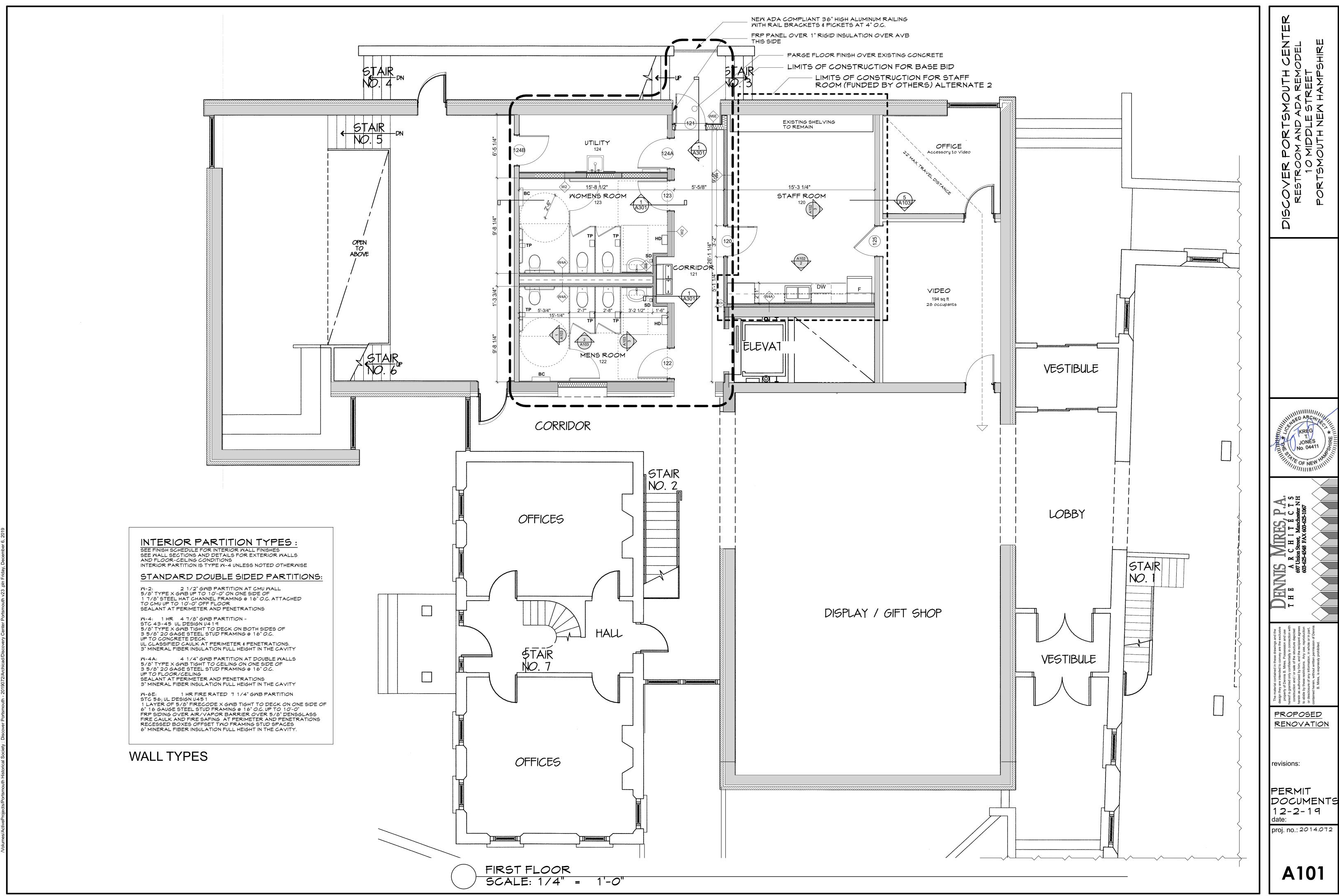
EXISTING UPPER FLOOR PLANS

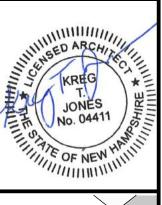
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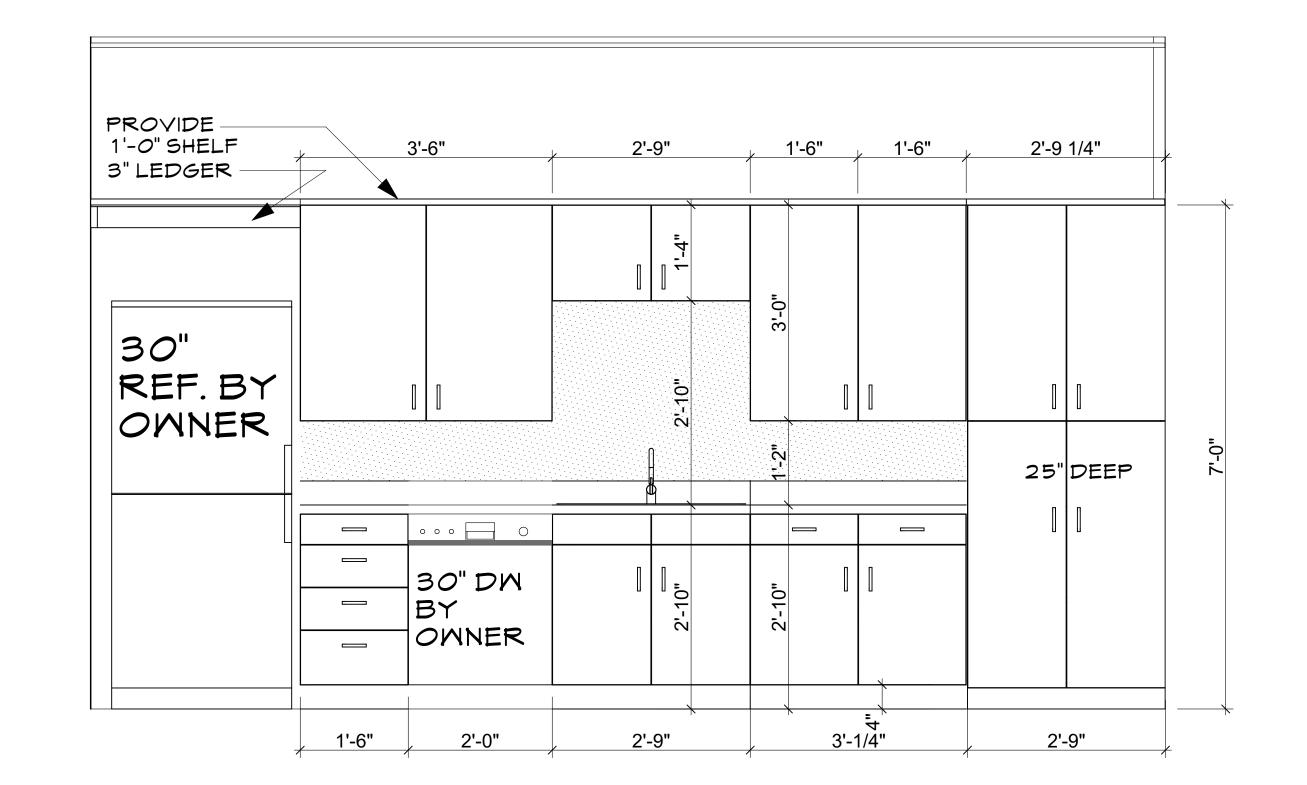
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DOCUMENTS
12-2-19

proj. no.: 2014.072

AX102







STAFF ROOM KITCHEN SECTION SCALE: 3/4" = 1'-0"

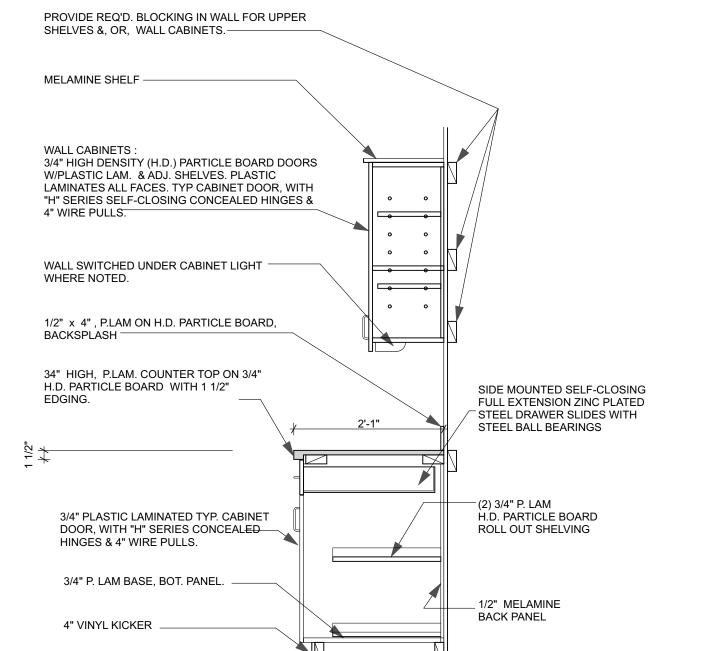
GENERAL STAFF ROOM NOTES

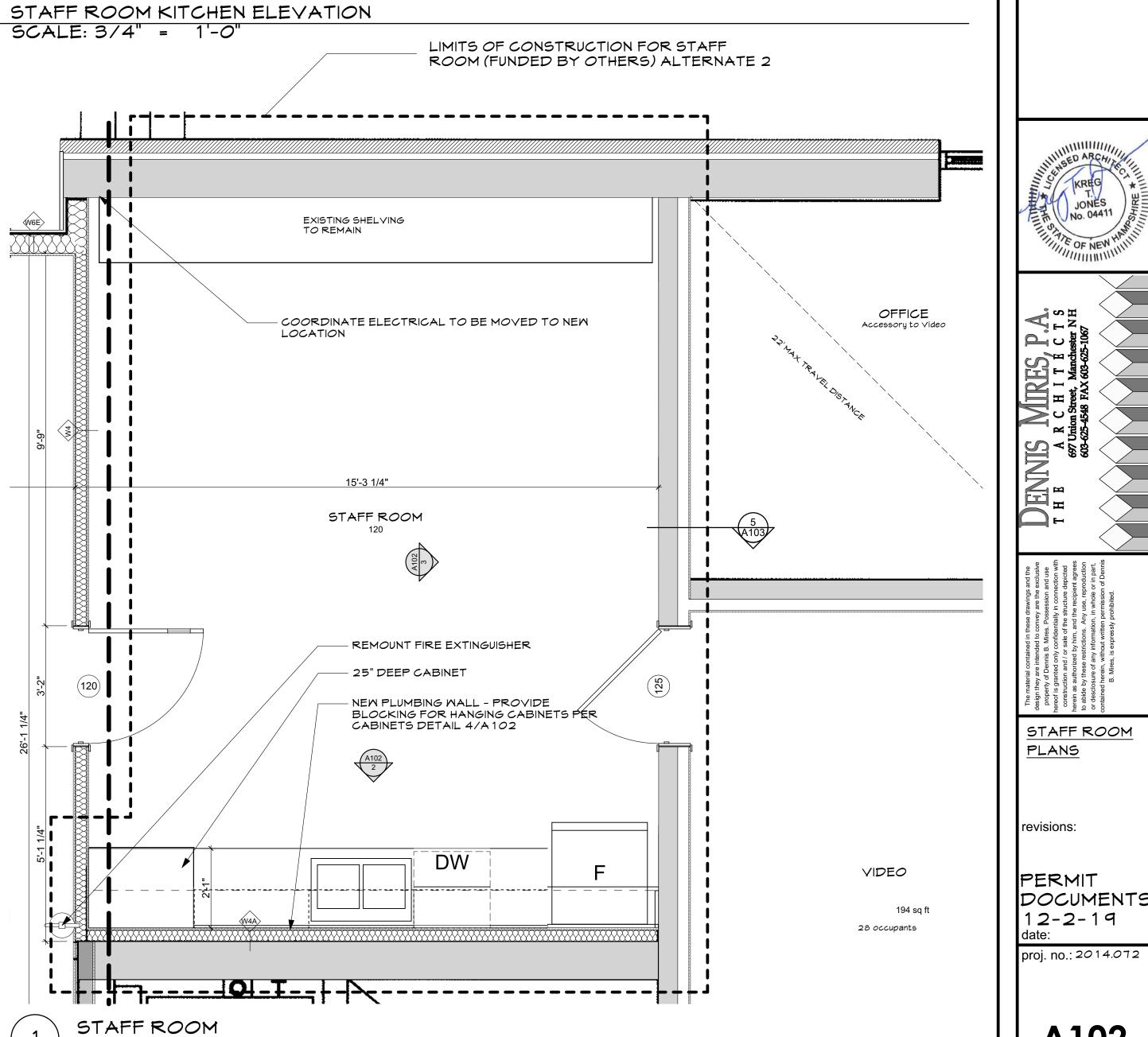
STAFF ROOM WORK TO BE ALTERNATE 2 - SEPARATE PRICING TO BE WORK FUNDED BY OTHERS AND NOT PART OF THE BASE BID

- A ALL WORK INSIDE OF NEW CORRIDOR WALL TO BE PART OF ALTERNATE TO INCLUDE CABINE IS MITH ASSOCIATED PLUMBING AND ELECTRICAL, SHELVING, MALL BEHIND CABINETRY AND PAINTING OF THREE PERIMETER WALLS. DOOR HARDWARE AND EXIT SIGN TO BE INCLUDED IN BASE BID.
- B EACH CONTRACTOR TO CAREFULLY EXAMINE EXISTING CONDITIONS AND VERIFY IN FIELD ALL DIMENSIONS AT THE TIME OF BID.
- C REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR WORK IN THOSE
- TRADES. THE CONTRACTOR IS TO COORDINATE WORK OF THOSE TRADES. D COORDINATE LOCATION OF ALL MEP. ALL CEILINGS TO BE RE-USED. ALL MECHANICAL VENTS AND DUCTING TO REMAIN, UNLESS NOTED OTHERWISE.
- J SALVAGE ALL ELECTRICAL UNLESS NOTED OTHERWISE ON ELECTRICAL PLANS
- K RETAIN CEILINGS IN STAFF AREA. REFER TO SCHEDULE FOR OTHER LOCATIONS. L EXISTING VCT TILE FLOORING TO REMAIN.
- H PROVIDE ADDITIONAL PAINTING AS NEEDED IN STAFF ROOM THAT IS NOT COVERED IN BASE









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

A102

12-2-19

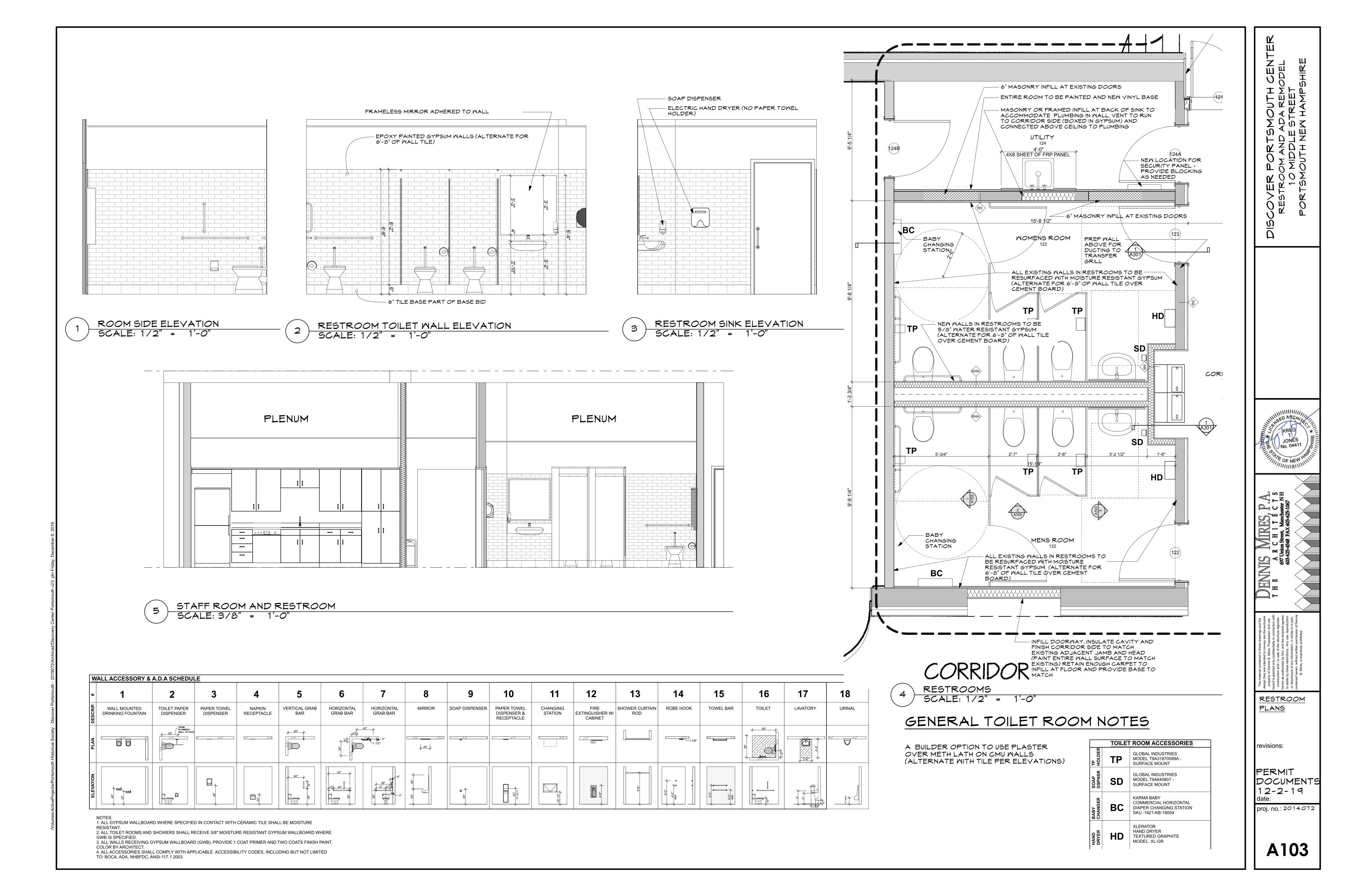
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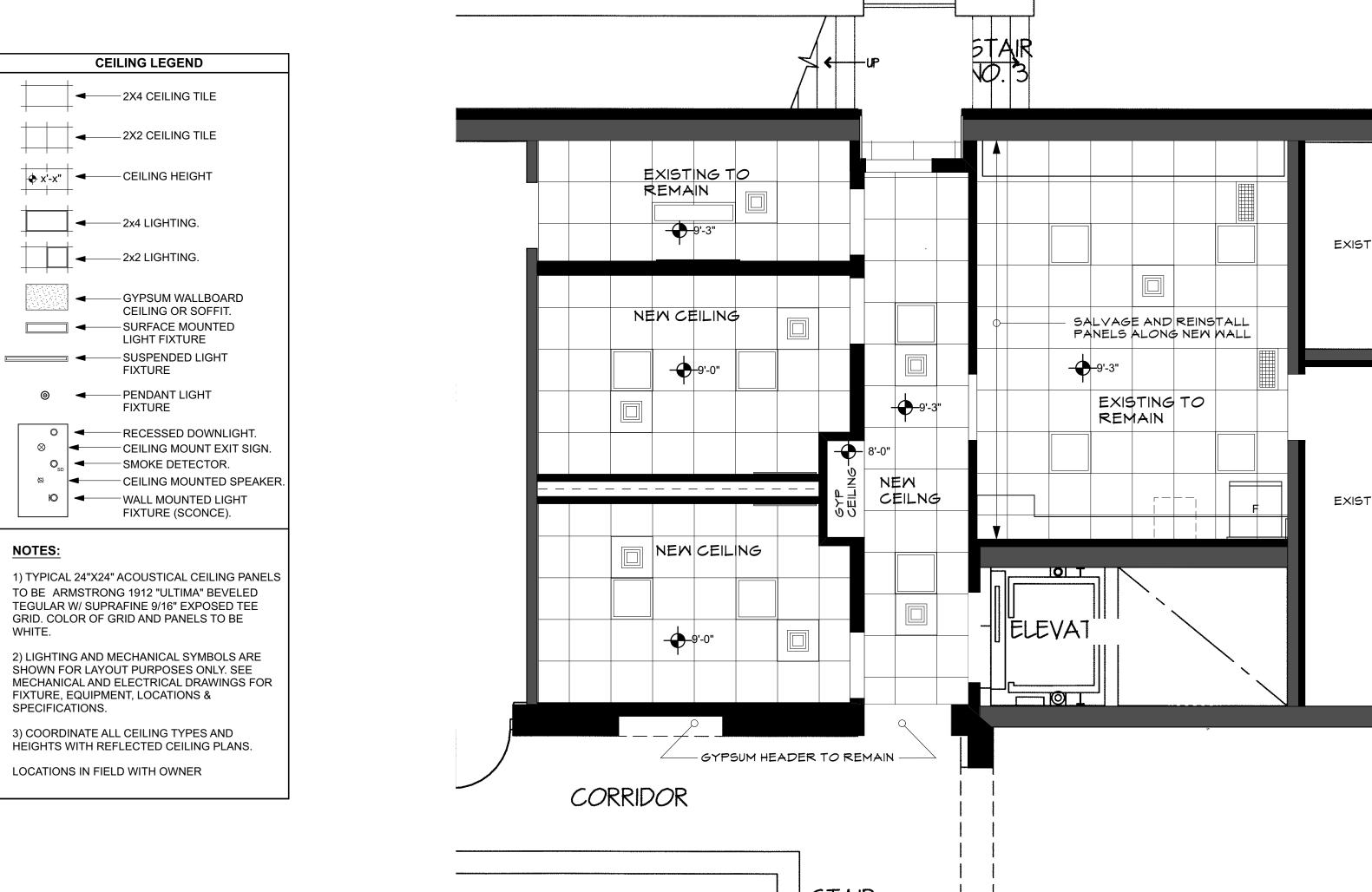
STAFF ROOM

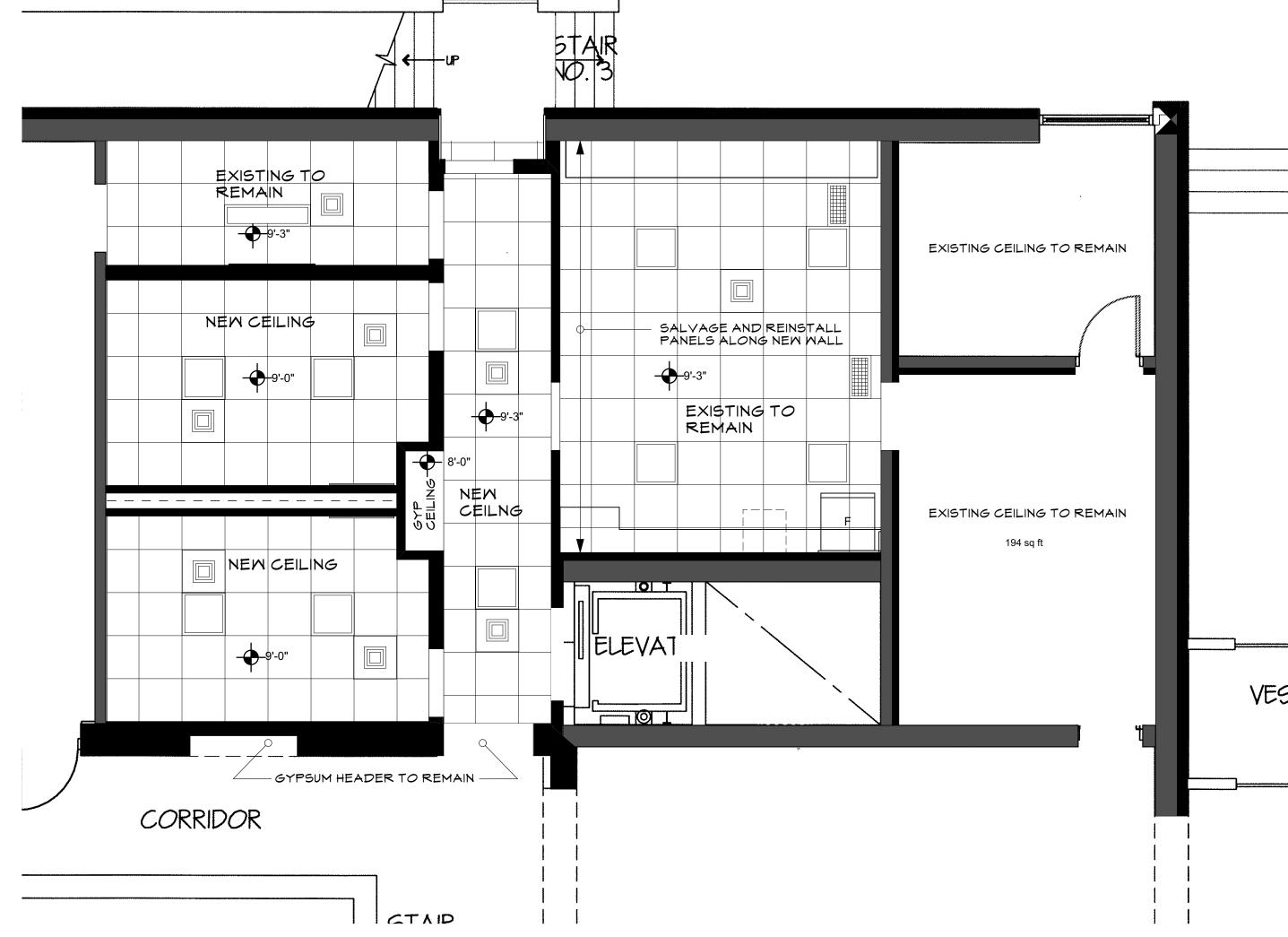
<u>PLANS</u>

CENTI

RESTROC 101 PORTSMG







Reflected Ceiling Plan SCALE: 1/4" = 1'-0"

10UTH CENT DA REMODEL STREET SHAMPSHIRE

COVER F RESTROC 101 PORTSMC

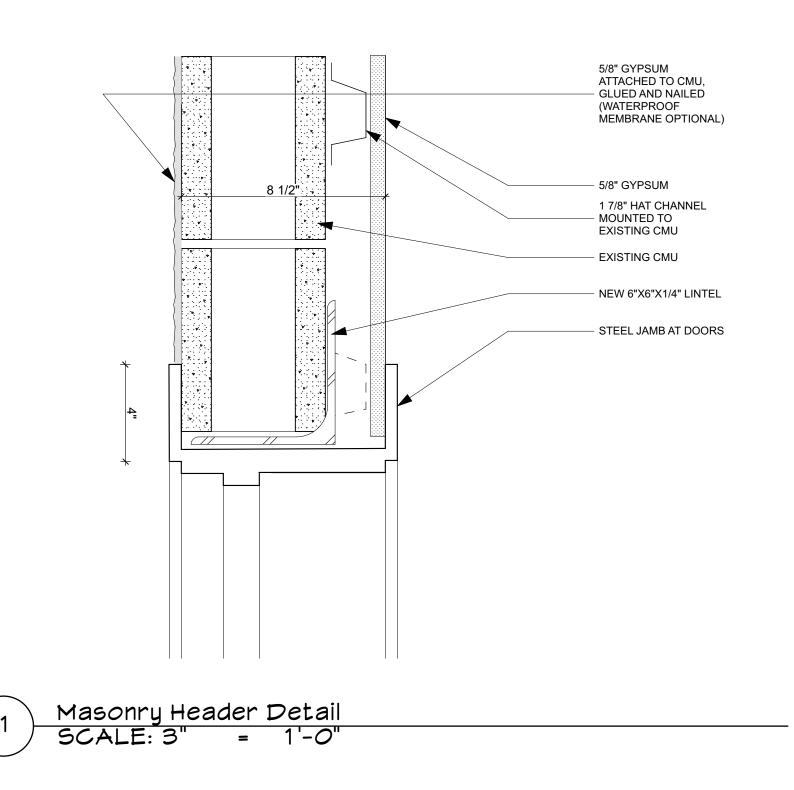
REFLECTED CEILING PLAN

revisions:

PERMIT DOCUMENTS 12-2-19 proj. no.: 2014.072

A104

HEADER DETAIL AT WATER COOLER SCALE: 3" = 1'-0"



INTERIOR ACT CEILING

EXISTING BRICK
VENEER CMU WALL
8' METAL FRAMING
WITH 8' BAIT
INSULATION

J-CHANNEL WITH
CAULKED EDGES

FRP PANEL OVER AIR
AND VAPOR BARRIER
OVER 58' EXTERIOR
GPPSUM

NEW DOOR IN NEW 8'
WALL (INSULATED)
EXISTING BRICK EDGE
EXPOSED

SECTION AT REAR ENTRY DOOR

SCALE: 1" = 1'-0"

SOLID BACKING

DRY-SET OR LATEX-PORTLAND CEMENT MORTAR BOND COAT

CERAMIC TILE

WATERPROOF MEMBRANE AS REQTD

3/8" – 3/4" MORTAR BED

WW METAL LATH

CERAMIC TILE FINISH OVER CMU DETAIL

Street, Manchester NH

B FAX 603-625-1067

B FAX 603-625-1067

COVER PORTSMOUTH CENT RESTROOM AND ADA REMODEL 10 MIDDLE STREET PORTSMOUTH NEW HAMPSHIRE

DENNIS MIRES, P.A.
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603-625-4548 FAX 603-625-1067

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Mall Sections & Details

revisions:

PERMIT
DOCUMENTS
12-2-19
date:

proj. no.: 2014.072

A301

2. DALTILE: 12X24 LINDEN POINT (LP21 GRIGIO) & 3X12 BULLNOSE BASE W/ SCHLUTER COVE WITH WALLTILE 3X6 DESERT GRAY - MATTE

4. VCT: VINYL COMPOSITION TILE- MATCH EXISTING IN CORRIDOR

3. JOHNSONITE VINYL BASE 4"

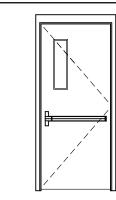
FINISH SCHEDULE

| | ROOM | | Floor | WALLS | | | | | CEIL | ING | # | NOTES | |
|-----|-------------|--------|-----------------|-------|-------|------------|------|---------|--------------|--------|-----|--|--|
| # | Name | — Area | FIOOI | North | South | East | West | Base | FINISH | HEIGHT | # | INOTES | |
| 120 | STAFF ROOM | 286 | Existing VCT | - | GYP | GYP | - | VINYL | Existing ACT | 9'-3" | 120 | PAINT WALLS COMPLETE | |
| 121 | CORRIDOR | 150 | CARPET TILE | GYP | GYP | GYP | GYP | VINYL | ACT | 9'-3" | 121 | PAINT WALLS COMPLETE | |
| 122 | MENS ROOM | 139 | 12X36 CER. TILE | GYP | GYP | GYP | GYP | 6" TILE | ACT | 9'-0" | 122 | PAINT WALLS COMPLETE, ALTERNATE- 6'-8" CERAMIC WALL TILE | |
| 123 | WOMENS ROOM | 152 | 12X36 CER.TILE | GYP | GYP | GYP | GYP | 6" TILE | ACT | 9'-0" | 123 | PAINT WALLS COMPLETE, ALTERNATE- 6'-8" CERAMIC WALL TILE | |
| 124 | UTILITY | 95 | 9"X9" VCT | - | - | CMU INFILL | - | VINYL | Existing ACT | 9'-3" | 124 | PAINT WALLS COMPLETE | |

TYPICAL EXTERIOR & INTERIOR STEEL DOOR & FRAME:

EXTERIOR:

16 GA. FULL FLUSH PRIMED & PTD. G60 GALVANIZED. INSULATED TO U.23 W/ EXPANDED POLYSTYRENE. INSULATED & TEMPERED GLAZING AT VISION PANELS.



IMF

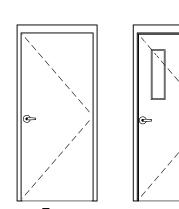
TYPICAL INTERIOR DOORS & FRAMES:

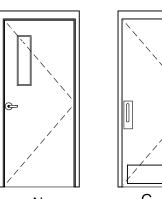
1 3/4" 7-PLY SOLID CORE FLUSH DOOR W/ HARDWOOD VENEER (MAPLE)
PREFINISHED PARTICLE CORE W/ 30 PCF DENSITY.
MINERAL CORE AT RATED DOORS, MATCHING LAMINATED STILES.
ADHESIVES SHALL CONTAIN NO FORMALDEHYDE.
1/4" TEMPERED SAFETY GLASS AT VISION PANELS.
3/4" FIRE RESISTIVE SAFETY GLASS AT FIRE RATED OPENINGS.

FIRE RESISTIVE GLASS TO MEET REQUIREMENTS OF ASTM E119 SUPERLITE X 45/60/90 NON WIRED FIRE PROTECTIVE GLAZING OR APPROVED EQUAL

HOLLOW METAL FRAMES. WELDED FRAMES AT MASONRY WALLS 2" DRYWALL KD 18 GA.,1/2" BACKBEND, 16 GA. AT FIRE RATED OPENINGS.

PRIMED. COMPRESSION ANCHORS & 7 GA. HARDWARE REINFORCEMENTS.





REFER TO SPECIFICATIONS FOR SIGN DESIGNATIONS AND DETAILS.

HARDWARE NOTES:

STOPS & HOLDERS BY IVES.

S.S PUSH PLATES

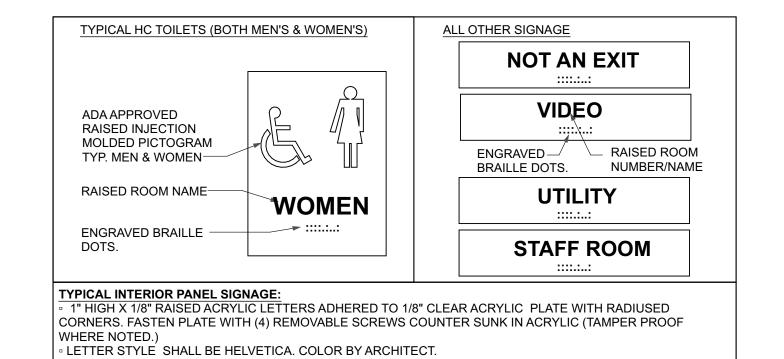
:TYPICAL HARDWARE SET SHALL CONSIST OF ALL STANDARD COMPONENTS FOR THE OPERATION/FUNCTION SHOWN EVEN IF NOT LISTED HERE. TO INCLUDE:

FIVE-KNUCKLE, FULL MORTISE, BALL BEARING HINGES BY IVES (STAINLESS @ EXTERIOR.) LOCKSETS & DEADBOLTS BY SCHLAGE. ND-SERIES. TUBULAR.

FUNCTION AS NOTED. SATIN CHROME US26D FINISH. EXIT DEVICES & MULLIONS BY FALCON. 24/25 SERIES. DOOR CLOSERS BY FALCON. SC70 SERIES. PUSH & PULL PLATES & BARS. IVES 9100 SERIES. PROTECTION PLATES. IVES 8400 SERIES.

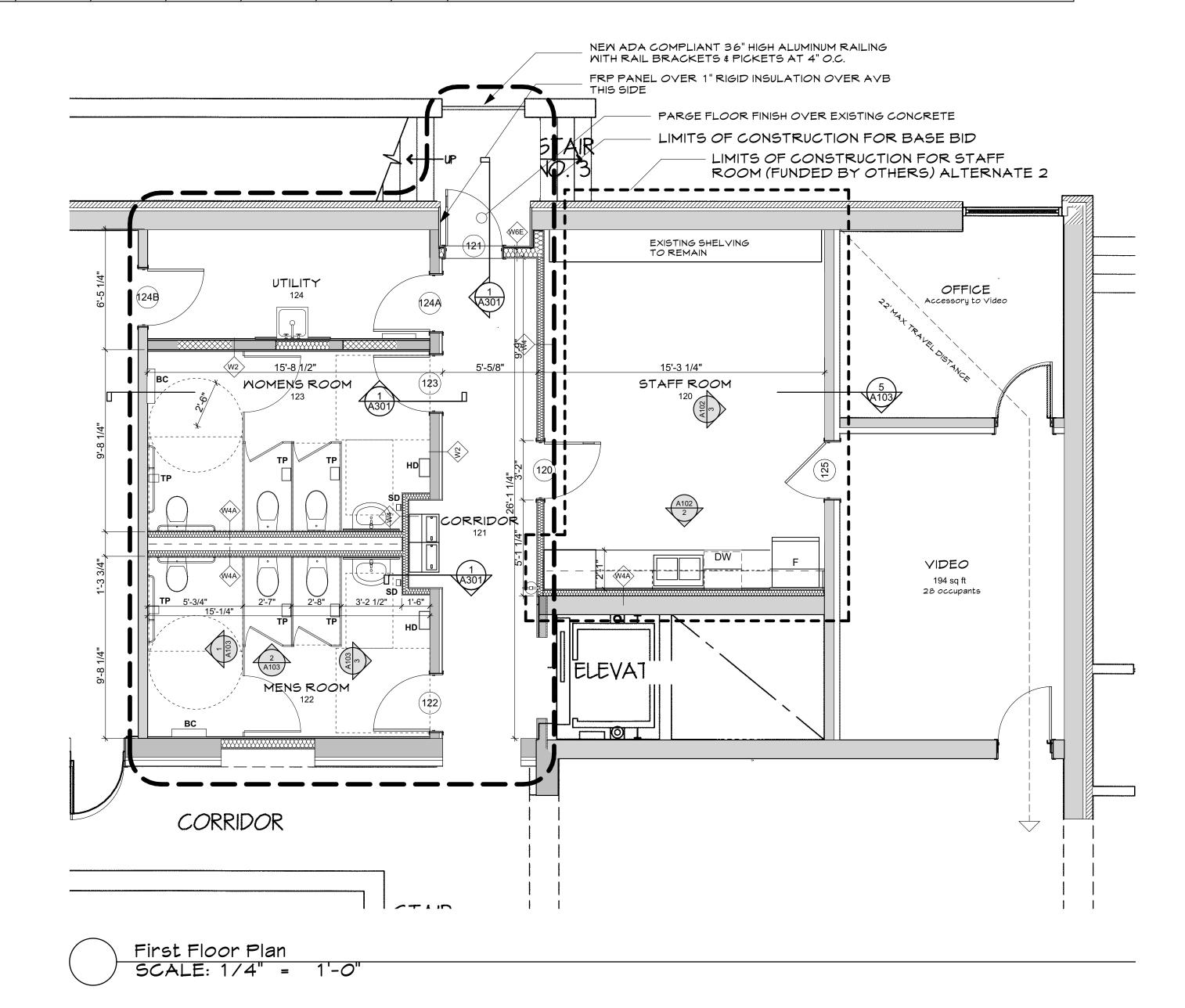
SILENCERS BY IVES.
MAGNETIC-HOLD OPENS BY LCN.
CYLINDERS & KEYING BY SCHLAGE.
THRESHOLDS & WEATHERSTRIPS BY REESE.
POWER OPERATORS & DOOR ACTUATORS. LCN 4640/8310 SERIES.
10" S.S KICKPLATES

INTERIOR SIGNAGE IS REQUIRED AT ALL INTERIOR DOORS W/ ROOM NAME/# PER ADA STANDARDS. "THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS TO BE POSTED AT ALL EXTERIOR DOORS."



CONTRACTOR SHALL COORDINATE WITH BUILDING OWNER FOR FINAL ROOM NAME/NUMBER CONFIGURATION.

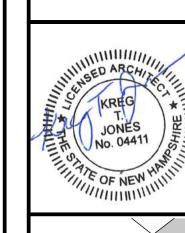
Interior Signage

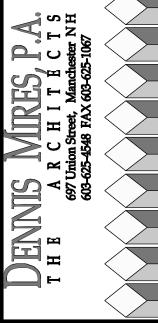


| DOOR AND FRAME SCHEDULE | | | | | | | | | | | | |
|-------------------------|-------------|------------|--------------------|------|---------|------------|---------|-----------|--------|-------------------------------------|--|--|
| Door No | W H O' | Carrier or | | Door | | | ıme | Lookoot | Class | Notes / Demonto | | |
| Door No. | W x H Size | Swing | Core Fin | Elev | Glazing | Mat | FrType | Lockset | Closer | Notes / Remarks | | |
| 120 | 3'-0"×7'-0" | | Wood Stain | N | Vision | Steel | 4" Head | Keyed | No | | | |
| 121 | 3'-0"×6'-8" | | Ins. Stl. Paint | IMF | Vision | INS. Steel | 4" Head | Keyed | Yes | Provide Push Bar and Kickplates | | |
| 122 | 3'-0"×7'-0" | | Wood Stain | G | No | Steel | 4" Head | Push/Pull | Yes | Provide Push Plates and Kick Plates | | |
| 123 | 3'-0"×7'-0" | | Wood Stain | G | No | Steel | 4" Head | Push/Pull | Yes | Provide Push Plates and Kick Plates | | |
| 124A | 3'-0"×7'-0" | | Wood Stain | F | No | Steel | 4" Head | Passage | No | | | |
| 124B | 3'-0"×7'-0" | | Existing to Remain | | No | Existing | | Keyed | | New Lever Handle only | | |
| 125 | 3'-0"×7'-0" | | Existing to Remain | | No | Existing | | Keyed | | New Lever Handle only | | |

VER PORTSMOUTH CENTE STROOM AND ADA REMODEL 10 MIDDLE STREET RTSMOUTH NEW HAMPSHIRE

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The material contained in these drawings and the design they are intended to convey are the exclusive property of Dennis B. Mires. Possession and use hereof is granted only confidentially in connection with construction and for sale of the structure depicted herein as authorized by him, and the recipient agrees to abide by these restrictions. Any use, reproduction or desclosure of any information, in whole or in part, contained herein, without written permission of Dennis B. Mires, is expressly prohibited.

Finish Plans and Schedules

revisions:

PERMIT DOCUMENTS 12-2-19 date:

proj. no.: 2014.072

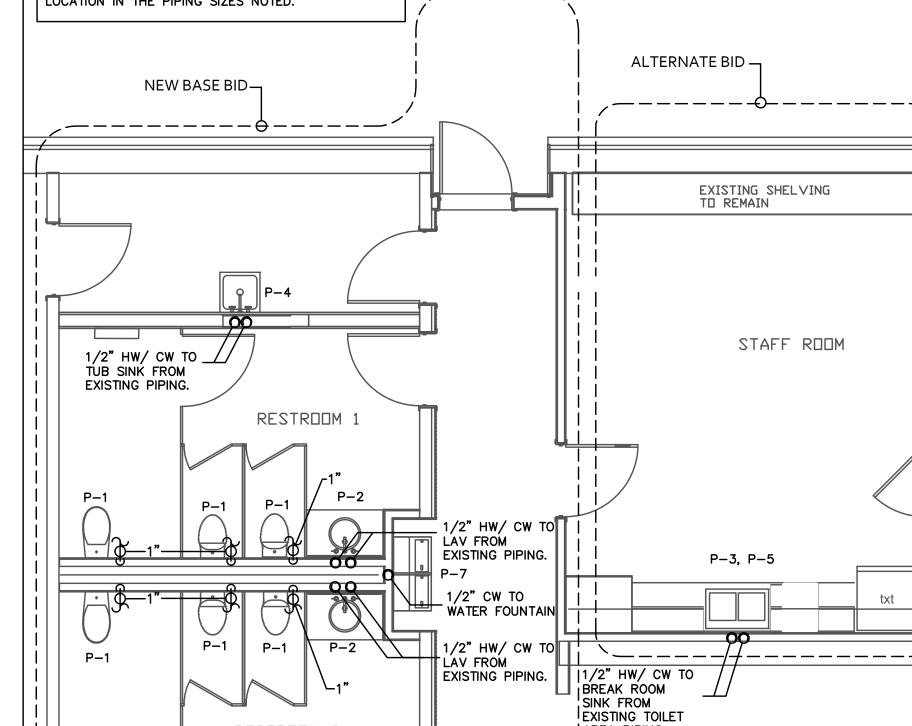
A601

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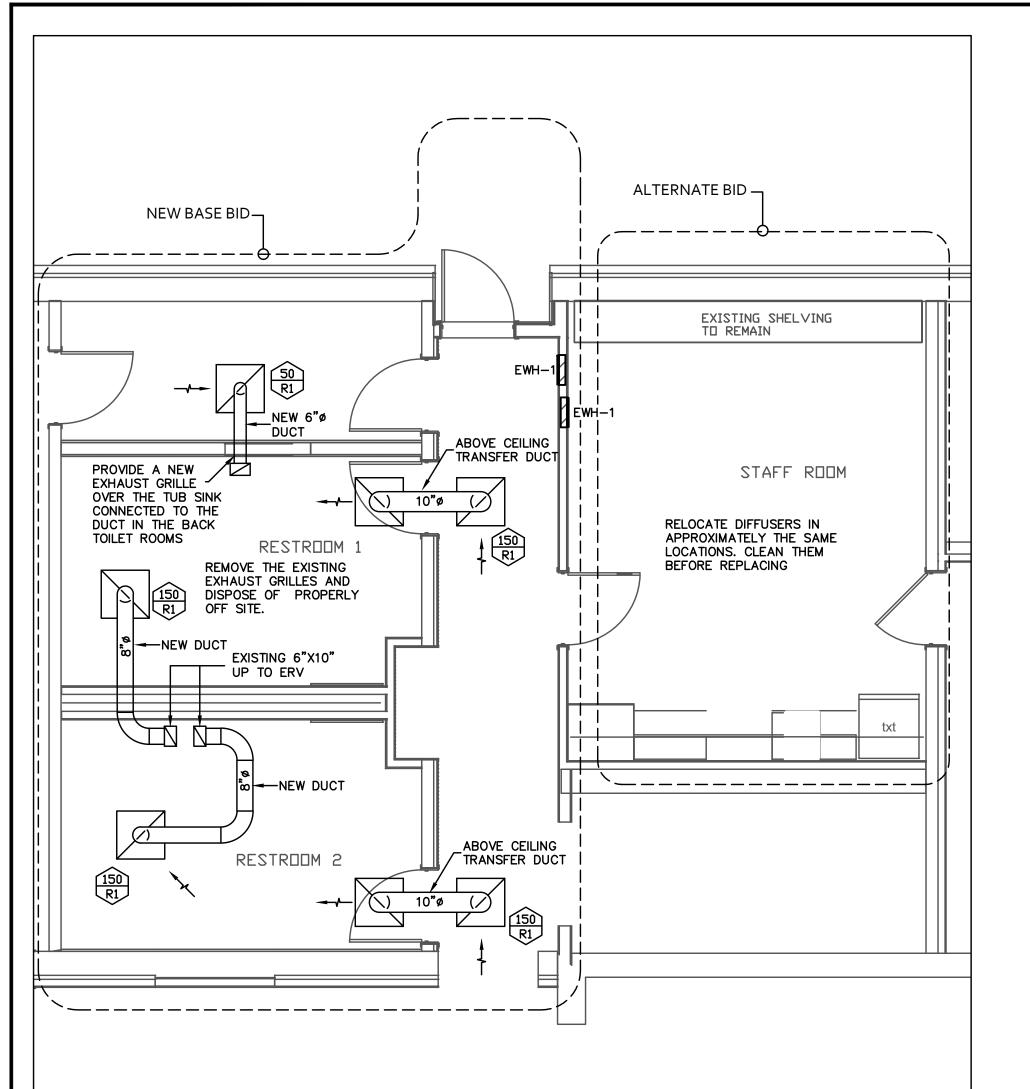
1 OF 2

THE EXISTING TOILET AREA HAS FIVE FLUSH VALVE W.C., FOUR LAV SINKS AND A JANITOR'S SERVICE SINK. . DISCONNECT ALL OF THESE FIXTURES AND TAKE PIPING BACK TO A POINT TO ALLOW REWORKING OF THE CW/ HW PIPING TO THE NEW FIXTURE *____*__ LOCATION IN THE PIPING SIZES NOTED. ALTERNATE BID — NEW BASE BID .—-----TO REMAIN 1/2" HW/ CW TO ___/
TUB SINK FROM EXISTING PIPING.



AREA PIPING.

RESTROOM 2



THE CONTRACTOR WILL BE REQUIRED TO CUT THE SLAB TO CONFIRM THE LOCATION OF THE EXISTING SANITARY

VENT AS NEEDED AND REUSE EXISTING VENTING IN THE TOILET ROOMS.

ALTERNATE BID —

EXISTING SHELVING

STAFF ROOM

LGREY WATER SANITARY

OVER TO THE TOILET

ROOMS TO DROP TO A DIRECT CONNECTION IN THE BUILDING SANITARY.

PIPING FROM DRAIN PUMP UP TO THE CEILING THEN

TO REMAIN

LINE IN THE CURRENT TOILET ROOMS AND THEN CONNECT THE NEW FIXTURES SHOWN TO THE DRAIN

NEW BASE BID

APPROXIMATE LOCATION

OF EXISTING

SANITARY STACK

AND CLEANOUT.

.—----

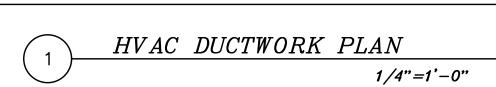
P-TRAP INTO WALL THEN - DOWN TO TRENCH IN TOILET ROOM SIDE

VENT UP

RESTROOM 1

RESTROOM 2

`———————



| MARK | MAKE | MODEL | KW | VOLT/PH | AMPS | STYLE | NOTES |
|--------|-------|------------|----------|---------|------|-------------------------|-------|
| EWH-1 | QMARK | CW H2101DS | 1.0/ 0.5 | 120/1 | 8.4 | RECESSED/ SURFACE MOUNT | 1 |
| NOTES: | | | | | | | |

| REGISTER (| GRILLE DIF | FUSER SCH | HEDULE (RGD |)) | | | | | |
|------------|------------|-----------|-------------|----------|-----------|--------------|-----------|-------------|-------|
| MARK | MAKE | MODEL | DAMPER | PATTERN | NECK SIZE | FRAME STYLE | MATERIAL | DESCRIPTION | NOTES |
| RGD-R-1 | PRICE | 80 | NO | EGGCRATE | SEE DWGS | LAY-IN T BAR | AL/ PLAST | RETURN | |
| NOTES: | | 19. | | | .1 | | | | |

| | FIXTURE SCHEDULE | Î | Ĭ . | FIXTURE CONNECTIONS | | | | | | | | FLOW | | FIVTUD | FILMUTC | | | | |
|------|--|---|--|---------------------|---|-----------|--------------|--|------|----------|--|------|----------|--------|---------|--------|----------|--|-------|
| MARK | DESCRIPTION | MAKE | MODEL | | 200000000000000000000000000000000000000 | P2-0-9202 | and the same | and the state of t | | | Lance de la constante de la co | 1202 | FLOW | 12080 | T | EUNITS | 12000000 | ACCESSORIES & NOTES | |
| | proprieta de como de c | 0.0000000000000000000000000000000000000 | DELONGO PERSONAL PERS | SAN | VENT | TRAP | IW | COLD | НОТ | 140°F | ELECTRICAL | GAS | CONTROL | CW | HW | TOTAL | SAN | advision for passes in manufacture in this prompted in their | |
| P-1 | ADA WC, FLUSHOMETER | KOHLER | K-4405-0 | 3" | 2" | | - | 1" | | - | 0. - . | - | 1.28 GPF | 5.00 | | 5.00 | 4.00 | K-4731-C-0, BATTERY SENSOR VALVE K-10956-SV-CP | WHITE |
| P-2 | ADA LAV, WALL HUNG | KOHLER | K-2084 | 1-1/2" | 1-1/2" | P-TRAP | | 1/2" | 1/2" | <u>=</u> | 72 | (2) | 0.5 GPM | 1.50 | 1.50 | 2.00 | 1.00 | BATTERY SENSOR FAUCET K-13461 , HANGERS, ADA PROTECTIVE INSULATION | |
| P-3 | BREAKROOM SINK | KOHLER | K-3145-4 | 1-1/2" | 1-1/2" | P-TRAP | (1) | 1/2" | 1/2" | = | (| • | 1.5 GPM | 1.00 | 1.00 | 1.40 | 2.00 | K-15176-FL-CP, 1054432, K-8801-CP | |
| P-4 | LAUNDRY TUB SINK | FIAT | FL7 | 2" | 1-1/4" | P-TRAP | (= (| 1/2" | 1/2" | ~ | - | 141 | 2.2 GPM | 2.25 | 2.25 | 3.00 | 2.00 | A1000 FAUCET BLADE HANDLES, 4" CENTERS, CHROME | WHITE |
| P-5 | DRAIN PUMP | SANICOM | 1 | 1" | 2" | - | • | - | • | - | | • | 17 GPM | • | - | • | | | |
| P-6 | WALL CLEANOUT | ZURN | Z1446 | SEE DWGS | - | ** | | - | - | - | (+ | :=) | - | | - | | | - | |
| P-7 | WATER FOUNTAIIN | ELKAY | EZSTLDDWSVRSK | 1-1/2" | 1-1/2" | P-TRAP | (1) | 1/2" | 125 | - | - | - | - | 12 | - | - | = | DUAL HEIGHT ADA BOTTLE FILLER | SS |

 \vdash

2 OF 2

D DIVISION 23 - HVAC SPECIFICATIONS

I) <u>GENERAL</u>

A) WORK INCLUDED:

1)THESE SPECIFICATIONS INCLUDE GENERAL REQUIREMENTS FOR ALL WORK REPRESENTED ON THESE DRAWINGS. NOT ALL SYSTEMS OR SYSTEM COMPONENTS DESCRIBED IN THESE SPECIFICATIONS ARE NECESSARILY INCLUDED AS A PART OF THIS PROJECT.

2) THE HEATING, VENTILATING, AND AIR CONDITIONING (HVAC) CONTRACTOR SHALL HEREAFTER BE DESCRIBED AS "THE CONTRACTOR" IN THIS HVAC SPECIFICATION. THE CONTRACTOR SHALL PROVIDE, INSTALL, PIPE, DUCT, AND WIRE, AS REQUIRED, HVAC SYSTEMS AS DESCRIBED BELOW, AND SHOWN OR DESCRIBED ON THESE PLANS AND SPECIFICATIONS.

B) QUALITY ASSURANCE:

- 1) THE NEW HAMPSHIRESTATE BUILDING CODE, THE INTERNATIONAL MECHANICAL CODE (IMC) 2015, AND THE INTERNATIONAL ENERGY CONSERVATION CODE (IEEC) 2015 ARE THE GOVERNING CODES FOR ALL HVAC WORK. THE CODES AND STANDARDS REFERENCED IN THE MECHANICAL CODE SHALL BE CONSIDERED A PART OF THE REQUIREMENTS OF CODE TO THE PRESCRIBED EXTENT OF EACH SUCH REFERENCE. WHERE DIFFERENCES OCCUR BETWEEN PROVISIONS OF THE CODE AND THE REFERENCED STANDARDS, THE PROVISIONS OF THE CODE SHALL APPLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE REQUIREMENTS OF ALL CODES AS THEY HAVE BEEN ADOPTED BY THE STATE AND LOCAL JURISDICTIONS.
- 2) EXCEPT AS SPECIFICALLY DESCRIBED OTHERWISE IN THESE SPECIFICATIONS, ALL COMPONENTS
- 3) THE WORKMANSHIP AND MATERIALS COVERED BY THESE SPECIFICATIONS SHALL CONFORM TO ALL ORDINANCES AND REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTION, INCLUDING BUT NOT
- 4) THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR HVAC PERMITS, INSTALLATION OF THE HVAC SYSTEM. THE CONTRACTOR SHALL PROVIDE TO THE OWNER ALL
- 5) THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE ALL CONDITIONS AFFECTING THE PROPER EXECUTION OF THE CONTRACT, VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND NOTIFY THE
- 6) DURING THE PROGRESS OF THE WORK, THE CONTRACTOR SHALL MAINTAIN AN ACCURATE RECORD OF ALL CHANGES MADE IN THE HVAC INSTALLATION FROM THE LAYOUT AND MATERIALS CONTAINED IN THE APPROVED DRAWINGS AND SPECIFICATIONS.
- 7) DRAWINGS AND CATALOG CUTS, SHOWING ALL HVAC EQUIPMENT AND SYSTEM COMPONENTS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. FIELD MEASURE AND COORDINATE WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS AND ALL OTHER TRADES THE PROPOSED LOCATIONS FOR NEW EQUIPMENT AND COMPONENTS BEFORE PRODUCING SUBMITTALS. NO ITEMS SHALL BE PURCHASED OR ORDERED BEFORE APPROVAL IS GIVEN BY THE ENGINEER IN WRITING.
- 8) THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES.

C) RELATED DOCUMENTS:

- 1)THE GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTAL GENERAL CONDITIONS OF THE CONTRACT AND DIVISION 1 SPECIFICATION SECTIONS PROVIDED BY THE ARCHITECT, AND ALL OTHER DRAWINGS AND SPECIFICATIONS PROVIDED AS A PART OF THIS PROJECT, APPLY TO THIS DIVISION 23 AND TO ALL CONTRACTORS, SUBCONTRACTORS, OR OTHER PERSONS SUPPLYING MATERIALS AND/OR LABOR, ENTERING INTO THE PROJECT SITE AND/OR PREMISES, DIRECTLY OR INDIRECTLY.
- 2) THE SPECIFICATIONS AND DRAWINGS ARE INTENDED TO BE COMPLEMENTARY. A PARTICULAR SECTION, PARAGRAPH OR HEADING IN A DIVISION MAY NOT DESCRIBE EACH AND EVERY DETAIL CONCERNING WORK TO BE DONE AND MATERIALS TO BE FURNISHED. THE DRAWINGS ARE DIMENSIONS ARE SHOWN FOR CRITICAL AREAS ONLY AS AN AID TO THE CONTRACTOR; ALL DIMENSIONS AND ACTUAL PLACEMENTS ARE TO BE VERIFIED IN THE FIELD. IT IS TO BE
- 3) ALL TRADE SUBCONTRACTORS ARE TO NOTE THAT THE ORGANIZATION OF SPECIFICATIONS INTO GENERAL CONTRACTOR IN DIVIDING THE WORK AMONG TRADE SUBCONTRACTORS OR IN ESTABLISHING THE EXTENT OF THE WORK TO BE PERFORMED BY ANY TRADE. REFER TO GENERAL CONDITIONS.

II)PRODUCTS

A) ELECTRICAL REQUIREMENTS OF MECHANICAL WORK:

1)BASIC ELECTRICAL COMPONENTS INCLUDE, BUT ARE NOT LIMITED TO ALL REQUIRED STARTERS, DISCONNECT SWITCHES, CONTROL DEVICES, AND MOTORS. IT INCLUDES MOTORS THAT ARE FACTORY-INSTALLED AS PART OF EQUIPMENT AND APPLIANCES AS WELL AS FIELD-INSTALLED MOTORS.

2) STARTERS AND DISCONNECTS: WHERE AVAILABLE, PROVIDE FACTORY MOUNTED DISCONNECTS AND STARTERS, OR, WHEN FACTORY MOUNTED STARTERS AND DISCONNECTS ARE NOT AVAILABLE PROVIDE COMBINATION STARTERS AND DISCONNECT SWITCHES, OR, WHERE COMBINATION STARTERS AND DISCONNECT SWITCHES ARE NOT SUITABLE OR AVAILABLE, PROVIDE SEPARATE STARTERS AND DISCONNECTS FOR ALL HVAC EQUIPMENT, AS REQUIRED FOR PROPER INSTALLATION AND OPERATION OF EQUIPMENT.

B) DUCTWORK:

1)UNLESS OTHERWISE SPECIFIED, ALL RIGID DUCTWORK SHALL BE SHEET METAL MATERIALS AS SPECIFIED IN ASTM A700, WITH GALVANIZED SHEET STEEL: LOCK-FORMING QUALITY, ASTM A527, COATING DESIGNATION G60; MILL PHOSPHATIZED FINISH.

- 2) PRESSURE CLASS AND SEAL CLASS (PER SMACNA):
- (a) 2" PRESSURE CLASS, SEAL CLASS A (ALL TRANSVERSE JOINTS, LONGITUDINAL SEAMS AND DUCT WALL PENETRATIONS).
- 3) RECTANGULAR DUCT FABRICATION: FABRICATE RECTANGULAR DUCTS WITH GALVANIZED SHEET STEEL, IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS", TABLES 1-3 THROUGH 1-19, INCLUDING THEIR ASSOCIATED DETAILS. CONFORM TO THE REQUIREMENTS IN THE REFERENCED STANDARD FOR METAL THICKNESS, REINFORCING TYPES AND INTERVALS, TIE ROD APPLICATIONS, AND JOINT TYPES AND INTERVALS.
- 4) WATER BASED LIQUID RUBBER DUCT SEALANT OR FLANGED JOINT MASTICS SHALL BE ONE-PART, ACID- CURING, SILICONE ELASTOMERIC JOINT SEALANTS, COMPLYING WITH ASTM C920, TYPE S, GRADE NS, CLASS 25, USE O.
- 5) FLEXIBLE DUCT CONNECTORS SHALL BE INSTALLED AT POINTS AS CLOSE AS POSSIBLE TO AIR HANDLERS AND FANS. THE CONNECTOR SHALL BE AT LEAST FOUR (4") INCHES WIDE AND FABRICATED SPECIFICALLY FOR USE AS A FLEXIBLE CONNECTOR. ALL CONNECTIONS SHALL BE AIRTIGHT AND MADE SO THE CONNECTOR IS UNDAMAGED WHEN THE JOINT IS REMOVED.
- 6) FLEXIBLE DUCTS: LIMITED TO 6 FEET MAXIMUM STRAIGHT AND FULLY STRETCHED. DO NOT USE FLEX AS AN ELBOW.
- (a) INTERNAL FABRIC SHALL BE ACOUSTICALLY RATED BLACK RESILIENT CALENDERED FILM WITH COATED STEEL WIRE HELIX, 2" FIBERGLASS BLANKET (R-6.0), AND FIBERGLASS SCRIM REINFORCED ALUMINIZED POLYESTER FILM VAPOR BARRIER AS EXTERIOR FACING, LISTED AND LABELED AS A CLASS 1 AIR DUCT PER UL STD 181. RATED FOR PRESSURE CLASS LISTED ABOVE. EQUIVALENT TO THERMAFLEX M-KE.
- 7) BELLMOUTH OR 45 DEGREE TAKEOFFS SHALL BE USED FOR DUCT TAKEOFFS TO MINIMIZE
- 8) MANUAL VOLUME DAMPERS SHALL BE INSTALLED AT ALL DUCT TAKEOFFS AND AS NEEDED ELSEWHERE TO PROPERLY BALANCE THE SYSTEMS.

1)ALL INSULATION SHALL BE UL APPROVED FOR A FLAME SPREAD RATING OF NOT OVER 25 AND A SMOKE DEVELOPED RATING OF NOT OVER 50.

- 2) ALL INSULATION SHALL CONFORM TO THE REQUIREMENTS OF THE ENERGY CODE.
- 3) DUCTWORK: ALL INDOOR SUPPLY AND OUTDOOR AIR DUCTS AND PLENUMS (INCLUDING THOSE INSTALLED IN RETURN AIR PLENUMS) SHALL BE INSULATED WITH FIBERGLASS WITH FSK JACKET WITH AN INSTALLED MINIMUM R-6 FORMALDEHYDE-FREE INSULATION, SIMILAR TO JOHNS MANVILLE MICROLITE EQ TYPE 75, 2-1/5" THICK.

- A) THE CONTRACTOR SHALL PROVIDE ALL SUPERVISION, LABOR, EQUIPMENT, MATERIAL, MACHINERY, PLANS, RIGGING, AND ANY AND ALL OTHER ITEMS NECESSARY TO COMPLETE THE MECHANICAL SYSTEM. SMALL DETAILS NOT USUALLY INDICATED ON THE DRAWINGS OR SPECIFIED, BUT WHICH ARE NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OF THE MECHANICAL SYSTEM SHALL BE INCLUDED IN THE WORK AND IN THE CONTRACTOR'S ESTIMATE THE SAME AS IF HEREIN SPECIFIED OR SHOWN ON
- B) THE CONTRACTOR SHALL INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. THIS INCLUDES CHECKING THE MANUFACTURER'S INSTRUCTIONS TO DETERMINE WHAT TYPE OF GLYCOL SYSTEM MAY BE USED WITHI EQUIPMENT SO AS NOT TO VOID THE WARRANTY OR IMPAIR THE OPERATION OF THE EQUIPMENT, WHERE THE DRAWINGS AND SPECIFICATIONS CONFLICT WITH THE MANUFACTURER'S RECOMMENDATIONS, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO BRING THIS TO THE ATTENTION OF THE ENGINEER.
- C) THE HVAC EQUIPMENT MAY NOT BE USED FOR TEMPORARY HEAT DURING CONSTRUCTION. THE HVAC EQUIPMENT SHALL NOT BE STARTED AND TESTED UNTIL ALL CONSTRUCTION ACTIVITY THAT HAS THE POTENTIAL OF CREATING AIR BORNE PARTICULATES THAT COULD BE DRAWN INTO THE HVAC EQUIPMENT AND DUCTWORK SYSTEMS HAS BEEN COMPLETED. IN ADDITION, ALL DUCTWORK OPENINGS SHALL BE SEALED UNTIL THE TIME WHEN THE HVAC EQUIPMENT IS TO BE STARTED AND TESTED.
- D) DUCTWORK AND FITTINGS SHALL HAVE ENDS COVERED WITH PLASTIC AT ALL TIMES.
- E) UPON COMPLETION OF WORK, THE CONTRACTOR SHALL CLEAN, OIL AND GREASE (UNLESS FACTORY LUBRICATED) ALL FANS, PUMPS, MOTORS, ALL OTHER RUNNING EQUIPMENT AND APPARATUS AND MAKE CERTAIN THAT ALL SUCH APPARATUS AND MECHANISMS ARE IN PROPER WORKING ORDER AND MADE READY FOR TESTING.
- F) REPLACE ALL FILTERS USED DURING CONSTRUCTION.
- G) EQUIPMENT SHALL BE STARTED, TESTED, ADJUSTED AND PLACED IN SATISFACTORY OPERATING CONDITION BY THE CONTRACTOR.
- H) THE CONTRACTOR SHALL INSTRUCT OWNER IN THE PROPER OPERATION OF EQUIPMENT, EXPLAIN THE PROPER OPERATING AND MAINTENANCE PROCEDURES AND SHALL FURNISH THE OWNER WITH ALL INSTRUCTION PAMPHLETS, BOOKS AND OTHER MATERIAL FURNISHED BY THE VARIOUS MANUFACTURERS
- I) ALL VIBRATING EQUIPMENT NOT MOUNTED ON THE GROUND FLOOR SHALL BE MOUNTED ON OR SUSPENDED FROM VIBRATION ISOLATORS.

DRIVES, VALVES, AND CONTROLS SHALL BE ACCESSIBLE FOR SERVICING AND/OR REPLACEMENT.

- J)EQUIPMENT SHALL BE INSTALLED WITH CLEARANCE FOR PROPER MAINTENANCE. FILTERS, COILS,
- K) EQUIPMENT SHALL BE COVERED FOR ONE YEAR FROM THE REVIEWING ENGINEER'S DATE OF ACCEPTANCE AND/OR THE DURATION OF THE MANUFACTURER'S GUARANTEE OR WARRANTY, WHICH EVER IS LONGER. THE CONTRACTOR SHALL FURNISH THE OWNER WITH ALL MANUFACTURER'S GUARANTEES OR WARRANTIES.
- L)THE AIR SYSTEMS SHALL BE BALANCED FROM -10% TO + 10% OF THE CFM VALUES SHOWN ON THE APPROVED HVAC PLANS. BALANCING SHALL BE DONE IN ACCORDANCE WITH STANDARDS ESTABLISHED BY THE AABC OR NEBB USING REPORT SHEETS DEVELOPED BY THE AABC OR NEBB. SUBMIT REPORTS TO THE ENGINEER.

END OF DIVISION 23

DIVISION 22 - PLUMBING SPECIFICATIONS

I) <u>GENERAL</u>

A) WORK INCLUDED:

1)THESE SPECIFICATIONS INCLUDE GENERAL REQUIREMENTS FOR ALL WORK REPRESENTED ON THESE DRAWINGS. NOT ALL SYSTEMS OR SYSTEM COMPONENTS DESCRIBED IN THESE SPECIFICATIONS ARE NECESSARILY INCLUDED AS A PART OF THIS PROJECT.

- 2) THE PLUMBING CONTRACTOR SHALL HEREAFTER BE DESCRIBED AS "THE CONTRACTOR" IN THIS PLUMBING SPECIFICATION. THE CONTRACTOR SHALL PROVIDE, INSTALL, PIPE AS REQUIRED, PLUMBING SYSTEMS AS DESCRIBED BELOW, AND SHOWN OR DESCRIBED ON THESE PLANS AND SPECIFICATIONS.
- B) QUALITY ASSURANCE:
- 1) THE NEW HAMPSHIRE STATE BUILDING CODE, THE INTERNATIONAL PLUMBING CODE (IPC) 2009, NFPA 54-2009 NATIONAL FUEL GAS CODE, AND THE INTERNATIONAL ENERGY CONSERVATION CODE (IEEC) 2009 ARE THE GOVERNING CODES FOR ALL PLUMBING WORK. THE CODES AND STANDARDS REFERENCED IN THE PLUMBING CODE SHALL BE CONSIDERED A PART OF THE REQUIREMENTS OF CODE TO THE PRESCRIBED EXTENT OF EACH SUCH REFERENCE. WHERE DIFFERENCES OCCUR BETWEEN PROVISIONS OF CODE AND THE REFERENCED STANDARDS, THE PROVISIONS OF CODE SHALL APPLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE REQUIREMENTS OF ALL CODES AS THEY HAVE BEEN ADOPTED BY THE STATE AND THE LOCAL
- 2) EXCEPT AS SPECIFICALLY DESCRIBED OTHERWISE IN THESE SPECIFICATIONS, ALL COMPONENTS ALLOWED WITHIN THE ABOVE REFERENCED CODES SHALL BE ALLOWED AS A PART OF THE WORK.
- 3) THE WORKMANSHIP AND MATERIALS COVERED BY THESE SPECIFICATIONS SHALL CONFORM TO ALL ORDINANCES AND REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTION, INCLUDING BUT NOT LIMITED TO, ALL APPLICABLE REGULATIONS OF THE CITY, COUNTY, AND STATE.
- 4) THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR PLUMBING PERMITS, INVESTMENT FEES, TAXES, CONNECTION AND INSPECTION FEES AS REQUIRED FOR THE COMPLETE INSTALLATION OF THE PLUMBING SYSTEM. THE CONTRACTOR SHALL PROVIDE TO THE OWNER ALL CERTIFICATES OF INSPECTION ISSUED BY THE JURISDICTION.
- 5) THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE ALL CONDITIONS AFFECTING THE PROPER EXECUTION OF THE CONTRACT, VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK.
- 6) DURING THE PROGRESS OF THE WORK, THE CONTRACTOR SHALL MAINTAIN AN ACCURATE RECORD OF ALL CHANGES MADE IN THE PLUMBING INSTALLATION FROM THE LAYOUT AND MATERIALS CONTAINED IN THE APPROVED DRAWINGS AND SPECIFICATIONS.
- 7) DRAWINGS AND CATALOG CUTS, SHOWING ALL PLUMBING EQUIPMENT AND SYSTEM COMPONENTS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. FIELD MEASURE AND COORDINATE WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS AND ALL OTHER TRADES THE PROPOSED LOCATIONS FOR NEW EQUIPMENT AND COMPONENTS BEFORE PRODUCING SUBMITTALS. NO ITEMS SHALL BE PURCHASED OR ORDERED BEFORE APPROVAL IS GIVEN BY THE ENGINEER IN WRITING.
- 8) THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES.

C) RELATED DOCUMENTS:

- 1)THE GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTAL GENERAL CONDITIONS OF THE CONTRACT AND DIVISION 1 SPECIFICATION SECTIONS PROVIDED BY THE ARCHITECT, AND ALL OTHER DRAWINGS AND SPECIFICATIONS PROVIDED AS A PART OF THIS PROJECT, APPLY TO THIS DIVISION 22 AND TO ALL CONTRACTORS, SUBCONTRACTORS, OR OTHER PERSONS SUPPLYING MATERIALS AND/OR LABOR, ENTERING INTO THE PROJECT SITE AND/OR PREMISES, DIRECTLY OR INDIRECTLY.
- 2) THE SPECIFICATIONS AND DRAWINGS ARE INTENDED TO BE COMPLEMENTARY. A PARTICULAR SECTION, PARAGRAPH OR HEADING IN A DIVISION MAY NOT DESCRIBE EACH AND EVERY DETAIL CONCERNING WORK TO BE DONE AND MATERIALS TO BE FURNISHED. THE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT SHOW ALL OF THE WORK REQUIRED OR ALL CONSTRUCTION DETAILS. DIMENSIONS ARE SHOWN FOR CRITICAL AREAS ONLY AS AN AID TO THE CONTRACTOR; ALL DIMENSIONS AND ACTUAL PLACEMENTS ARE TO BE VERIFIED IN THE FIELD. IT IS TO BE UNDERSTOOD THAT THE BEST TRADE PRACTICES OF THE DIVISION WILL PREVAIL.
- 3) ALL TRADE SUBCONTRACTORS ARE TO NOTE THAT THE ORGANIZATION OF SPECIFICATIONS INTO DIVISIONS. AND LIKEWISE THE ARRANGEMENT OF THE DRAWINGS, IS SET UP FOR THE CONVENIENCE OF UNDERSTANDING THE SCOPE OF THE WORK ONLY. THIS STRUCTURING SHALL NOT CONTROL THE GENERAL CONTRACTOR IN DIVIDING THE WORK AMONG TRADE SUBCONTRACTORS OR IN ESTABLISHING THE EXTENT OF THE WORK TO BE PERFORMED BY ANY TRADE. REFER TO GENERAL CONDITIONS.

II)PRODUCTS

A) GENERAL PLUMBING MATERIALS:

- 1)WATER HAMMER ARRESTORS: INSTALL APPROPRIATELY SIZED WATER HAMMER ARRESTORS AT FAST CLOSING POSITIVE SHUTOFF VALVES TO PREVENT WATER HAMMER.
- 2) ESCUTCHEONS: AT ALL FINISHED WALL PENETRATIONS, PROVIDE CHROME-PLATED SPLIT-RING ESCUTCHEON. INSIDE DIAMETER SHALL CLOSELY FIT PIPE OUTSIDE DIAMETER OR OUTSIDE OF PIPE INSULATION WHERE PIPE IS INSULATED. OUTSIDE DIAMETER SHALL COMPLETELY COVER THE OPENING IN FLOORS, WALLS, OR CEILINGS.
- 3) UNIONS: MALLEABLE-IRON, CLASS 150 FOR LOW PRESSURE SERVICE AND CLASS 250 FOR HIGH PRESSURE SERVICE; HEXAGONAL STOCK, WITH BALL-AND-SOCKET JOINTS, METAL-TO- METAL BRONZE SEATING SURFACES; FEMALE THREADED ENDS.
- 4) DIELECTRIC UNIONS: PROVIDE DIELECTRIC UNIONS WITH APPROPRIATE END CONNECTIONS FOR THE PIPE MATERIALS IN WHICH INSTALLED (SCREWED, SOLDERED, OR FLANGED), WHICH EFFECTIVELY ISOLATE DISSIMILAR METALS, TO PREVENT GALVANIC ACTION, AND STOP CORROSION.
- 5) SLEEVES: GALVANIZED STEELMETAL OR SCHEDULE 40 STEEL PIPE AS APPROPRIATE FOR THE WALL CONSTRUCTION.
- 6) SLEEVE SEALS: MODULAR TYPE, CONSISTING OF INTERLOCKING SYNTHETIC RUBBER LINKS SHAPED TO CONTINUOUSLY FILL ANNULAR SPACE BETWEEN PIPE AND SLEEVE, CONNECTED WITH BOLTS AND PRESSURE PLATES WHICH CAUSE RUBBER SEALING ELEMENTS TO EXPAND WHEN TIGHTENED, PROVIDING WATERTIGHT SEAL AND ELECTRICAL INSULATION.
- 7) VALVES PRESSURE AND TEMPERATURE RATED AS REQUIRED TO SUIT SYSTEM PRESSURES AND TEMPERATURES. UNLESS OTHERWISE INDICATED, PROVIDE VALVES OF SAME SIZE AS UPSTREAM PIPE SIZE.
- 8) SUPPORTS AND ANCHORS: HANGERS FOR PIPE UP TO 4" SHALL BE SWIVEL RING, SPLIT RING, WROUGHT PIPE CLAMP, BAND, ADJUSTABLE WROUGHT CLEVIS TYPE OR TRAPEZE.

- 9) SADDLES AND SHIELDS: PROVIDE SADDLES AND SHIELDS UNDER PIPING HANGERS AND SUPPORTS, FACTORY—FABRICATED, FOR ALL INSULATED PIPING. SIZE SADDLES AND SHIELDS FOR EXACT FIT TO MATE WITH PIPE INSULATION.
- B) ELECTRICAL REQUIREMENTS OF PLUMBING WORK:

1)BASIC ELECTRICAL COMPONENTS INCLUDE, BUT ARE NOT LIMITED TO ALL REQUIRED CONTROL DEVICES, AND MOTORS. IT INCLUDES MOTORS THAT ARE FACTORY—INSTALLED AS PART OF EQUIPMENT AND APPLIANCES.

C) IDENTIFICATION:

1)PROVIDE PIPE MARKERS AND LINE MARKERS COMPLYING WITH ANSI A13.1 FOR LETTERING SIZE, LENGTH OF COLOR FIELD, COLORS, AND INSTALLED VIEWING ANGLES OF IDENTIFICATION DEVICES.

(a) SNAP-ON TYPE: PROVIDE MANUFACTURER'S STANDARD PRE-PRINTED, SEMI-RIGID, SNAP- ON, COLOR-CODED, PIPE MARKERS.

(b) PRESSURE-SENSITIVE TYPE: PROVIDE MANUFACTURER'S STANDARD PRE-PRINTED, PERMANENT ADHESIVE, COLOR-CODED, PRESSURE-SENSITIVE VINYL PIPE MARKERS.

(c) INSTALL EVERY 40 FEET AND AT EACH CHANGE IN DIRECTION.

- 3) LINE MARKERS UNDERGROUND TYPE: MANUFACTURER'S STANDARD PERMANENT, BRIGHT-COLORED, CONTINUOUS-PRINTED PLASTIC TYPE, INTENDED FOR DIRECT-BURIAL SERVICE; NOT LESS THAN 6" WIDE X 4 MILS THICK. PROVIDE TAPE WITH PRINTING WHICH MOST ACCURATELY INDICATES TYPE OF SERVICE OF BURIED PIPE.
- D) PIPE AND FITTINGS:

1)UNDERGROUND SANITARY PIPE AND FITTINGS SHALL BE HUB AND SPIGOT, SERVICE (SV) CAST IRON OR SCHEDULE 40 PVC WITH DWV FITTINGS.

- 2) ABOVEGROUND SANITARY PIPE AND FITTINGS SHALL BE NO HUB, SERVICE (SV) CAST IRON WITH NO HUB CLAMPS, SCHEDULE 40 PVC WITH DWV FITTINGS OR TYPE DWV COPPER PIPE AND FITTINGS.
- 3) PRESSURE (SUMP PUMPS) SANITARY PIPE AND FITTINGS SHALL BE NO HUB CAST IRON WITH NO HUB CLAMPS, TYPE DWV COPPER OR SCHEDULE 40 PVC PRESSURE PIPE AND FITTINGS.
- 4) ABOVEGROUND DOMESTIC COLD FITTINGS SHALL BE HARD DRAWN COPPER TUBE TYPE "L" WITH WROUGHT FITTINGS SOLDERED WITH LEAD FREE SOLDER, CPVC, OR ASTM F876/F877 SDR9 CROSSLINKED POLYETHYLENE (PEX-A) WITH ASTM F1960 COLD EXPANSION FITTINGS AND PEX REINFORCING RINGS INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
- 5) UNDERGROUND DOMESTIC WATER PIPE AND FITTINGS WITHIN THE BUILDING SHALL BE TYPE "K" ROLLED COPPER WITH NO FITTINGS BELOW SLAB OR ASTM F876/F877 SDR9 CROSSLINKED POLYETHYLENE (PEX-A) WITH ASTM F1960 COLD EXPANSION FITTINGS AND PEX REINFORCING RINGS INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
- BLACK IRON FITTINGS OR MEGAPRESS G FOR SIZES 2 INCH & SMALLER AND WELDED STEEL FITTINGS FOR SIZES 2-1/2 INCH & LARGER. PROVIDE AND INSTALL ISOLATION VALVES, UNIONS/FLANGES, MANUAL AIR VENTS, AND DRAIN

6) GAS PIPE AND FITTINGS SHALL BE SCHEDULE 40 BLACK STEEL WITH SCREWED MALLEABLE

- VALVES AT ALL PIECES OF EQUIPMENT. 8) PROVIDE A DRAIN VALVE AT ALL LOW POINTS OF WATER PIPING.
- 9) HANG ALL PIPE SO THAT THERE WILL BE NO COPPER OR STEEL TO METAL CONTACT AND RESULTANT NOISE DURING PIPE EXPANSION AND CONTRACTION.

E) INSULATION:

1)ALL INSULATION SHALL BE UL APPROVED FOR A FLAME SPREAD RATING OF NOT OVER 25 AND A

SMOKE DEVELOPED RATING OF NOT OVER 50. 2) PIPE INSULATION SHALL BE FLEXIBLE ELASTOMERIC THERMAL INSULATION (PROVIDE UV PROTECTIVE COATING ON ELASTOMERIC INSULATION THAT IS EXPOSED TO SUNLIGHT).

(a) COLD WATER PIPE INSULATION (CONDENSATION CONTROL)

- (1) ½" THICK INSULATION FOR ALL COPPER PIPE SIZES.
- (2) CPVC AND PEX PIPING DO NOT REQUIRE INSULATION.

III) <u>EXECUTION</u>

- A) EACH FIXTURE OR PIECE OR EQUIPMENT SHALL HAVE ISOLATION OR STOP VALVES.
- B) ALL FIXTURES SHALL BE PROPERLY SUPPORTED WITH CARRIERS OR WALL HANGERS.
- C) SANITARY SYSTEM SHALL BE PROPERLY TRAPPED, VENTED AND HYDROSTATICALLY TESTED WITH ACCESSIBLE CLEANOUTS IN ACCORDANCE WITH CODE REQUIREMENTS AND GOVERNING REGULATIONS.
- D) THE CONTRACTOR SHALL PROVIDE ALL SUPERVISION, LABOR, EQUIPMENT, MATERIAL, MACHINERY, PLANS, RIGGING, AND ANY AND ALL OTHER ITEMS NECESSARY TO COMPLETE THE PLUMBING SYSTEM. SMALL DETAILS NOT USUALLY INDICATED ON THE DRAWINGS OR SPECIFIED, BUT WHICH ARE NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OF THE PLUMBING SYSTEM SHALL BE INCLUDED IN THE WORK AND IN THE CONTRACTOR'S ESTIMATE THE SAME AS IF HEREIN SPECIFIED OR SHOWN ON THE DRAWINGS.
- E) THE CONTRACTOR SHALL INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- F) THE CONTRACTOR SHALL INSTRUCT OWNER IN THE PROPER OPERATION OF EQUIPMENT, EXPLAIN THE PROPER OPERATING AND MAINTENANCE PROCEDURES AND SHALL FURNISH THE OWNER WITH ALL INSTRUCTION PAMPHLETS, BOOKS AND OTHER MATERIAL FURNISHED BY THE VARIOUS MANUFACTURERS
- G) EQUIPMENT SHALL BE INSTALLED WITH CLEARANCE FOR PROPER MAINTENANCE.
- H) EQUIPMENT SHALL BE COVERED FOR ONE YEAR FROM THE REVIEWING ENGINEER'S DATE OF ACCEPTANCE AND/OR THE DURATION OF THE MANUFACTURER'S GUARANTEE OR WARRANTY, WHICH EVER IS LONGER. THE CONTRACTOR SHALL FURNISH THE OWNER WITH ALL MANUFACTURER'S GUARANTEES OR WARRANTIES.
- END OF DIVISION 22

AMDREW W. ARSENAULT No. 7099

date: 12/02/19 proj. no. – DDM #19214

ALLOWED WITHIN THE ABOVE REFERENCED CODES SHALL BE ALLOWED AS A PART OF THE WORK.

LIMITED TO, ALL APPLICABLE REGULATIONS OF THE CITY, COUNTY, AND STATE.

INVESTMENT FEES, TAXES, CONNECTION AND INSPECTION FEES AS REQUIRED FOR THE COMPLETE CERTIFICATES OF INSPECTION ISSUED BY THE JURISDICTION.

ENGINEER OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK.

DIAGRAMMATIC AND MAY NOT SHOW ALL OF THE WORK REQUIRED OR ALL CONSTRUCTION DETAILS.

UNDERSTOOD THAT THE BEST TRADE PRACTICES OF THE DIVISION WILL PREVAIL. DIVISIONS, AND LIKEWISE THE ARRANGEMENT OF THE DRAWINGS, IS SET UP FOR THE CONVENIENCE OF UNDERSTANDING THE SCOPE OF THE WORK ONLY. THIS STRUCTURING SHALL NOT CONTROL THE

NOTE: THIS SYMBOL LIST IS A MASTER SCHEDULE. SOME OF THE SYMBOLS LISTED ABOVE MAY NOT BE APPLICABLE TO THE SCOPE OF WORK FOR THIS PROJECT.

WITH ARCHITECT PRIOR TO ORDERING.

GENERAL NOTES

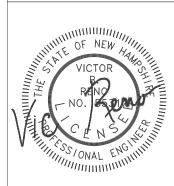
EXISTING EQUIPMENT TO BE REMOVED

- . ELECTRICAL CONDUIT SHALL BE RUN CONCEALED WHEREVER POSSIBLE. RUN EXPOSED CONDUIT PERPENDICULAR OR PARALLEL TO BUILDING WALLS OR COLUMNS.
- 2. WIRE AND CONDUIT SIZES INDICATED ON HOMERUNS SHALL RUN CONTINUOUS THROUGHOUT CIRCUIT.
- 3. A PROPERLY SIZED EQUIPMENT GROUNDING CONDUCTOR SHALL BE RUN WITH ALL CIRCUITS INSTALLED IN PVC, EMT OR RIGID STEEL RACEWAYS AND IN ALL PREMANUFACTURED WIRING SYSTEMS.
- 4. CONDUITS AND CIRCUITRY INDICATED ON THE DRAWINGS ARE DIAGRAMMATIC ONLY. FINAL LOCATION OF CONDUIT SHALL BE FIELD COORDINATED SO AS TO AVOID CONFLICTS WITH OTHER TRADES.
- 5. ALL 120V BRANCH CIRCUITS WHEN 100 LINEAR FEET OR MORE FROM LAST OUTLET OR FIXTURE IN CIRCUIT TO RESPECTIVE PANELBOARDS SHALL BE A MINIMUM OF #10 AWG
- COPPER WIRE(S). 6. ALL 208V OR 277V BRANCH CIRCUITS WHEN 200 LINEAR FEET OR MORE FROM LAST OUTLET OR FIXTURE IN CIRCUIT TO RESPECTIVE PANELBOARDS SHALL BE A MINIMUM OF #10
- AWG COPPER WIRE(S).
- 7. COORDINATE EXACT LOCATION OF MECHANICAL EQUIPMENT WITH H.V.A.C., PLUMBING, AND FIRE PROTECTION CONTRACTOR'S.
- 8. COORDINATE EXACT LOCATION OF TENANT EQUIPMENT WITH THE ARCHITECT'S FIELD SUPERVISOR.
- 9. RACEWAYS RUN THROUGH AREAS OF WIDELY DIFFERENT TEMPERATURES SHALL BE SEALED WITH A PLIABLE COMPOUND AT THE VARIANT TEMPERATURE AREA.
- 10. WHEN ROUGHING IN, OUTLET BOXES FOR DEVICES SHALL BE MEASURED OFF OF FINISHED FLOOR TO A SET HEIGHT, AND THEN ALIGNED HORIZONTALLY SO THAT ALL DEVICES WILL BE LEVEL WITHIN A GIVEN AREA.
- 11. PROVIDE ELECTRICAL OUTLET DEVICE PLATE GASKETS IN ALL WIRING DEVICE BOXES INSTALLED IN WALLS SEPARATING CONDITIONED AND UNCONDITIONED SPACES.
- 12. ALL RACEWAY PENETRATIONS THROUGH FIRE RATED WALL, CEILING, OR FLOOR ASSEMBLIES SHALL BE PROPERLY FIRE SEALED.

- 14. OUTLETS OR DEVICES MOUNTED ON EXISTING CMU OR CONCRETE WALLS SHALL BE SURFACE MOUNTED IN APPROPRIATE BOXES
- 15. ELECTRICAL RACEWAYS WHICH TRAVERSE THROUGH CMU WALLS SHALL BE PROPERLY WEATHERSEALED.
- 16. FEEDERS OR BRANCH CIRCUITS TO ALL ELECTRICALLY POWERED ROOFTOP MOUNTED EQUIPMENT SHALL BE RUN IN THE JOIST SPACE ON THE UNDERSIDE OF THE ROOF DECK. FOR ROOFTOP AIR CONDITIONING UNITS THE POWER CIRCUIT AND RACEWAY SHALL RISE UP TO THE TERMINALS OF THE UNIT CONTROL PANEL WITHIN THE CURB CUT OPENING, FOR ALL OTHER ELECTRICALLY POWERED ROOFTOP EQUIPMENT PROVIDE PITCH POCKETS AND RACEWAY SEALS AS REQUIRED.
- 17. BACK TO BACK RECEPTACLES, SWITCH, AND/OR VOICE/DATA DEVICES AND OUTLETS WILL NOT BE ALLOWED IN THE SAME STUD SPACE OF ACOUSTICALLY TREATED OR FIRE RATED WALL PARTITIONS.
- 18. CONFIRM THE VOLTAGE AND AMPERAGE CHARACTERISTICS OF ALL ELECTRICALLY POWERED HVAC, PLUMBING OR FIRE PROTECTION EQUIPMENT WITH THE MECHANICAL CONTRACTORS PRIOR TO COMMENCING WORK AND BEFORE ORDERING ELECTRICAL DISTRIBUTION EQUIPMENT.
- 19. THE ELECTRICAL CONTRACTOR SHALL ENSURE THAT ALL RIGID OR FLEXIBLE WIRING SYSTEMS INSTALLED CONCEALED ABOVE SUSPENDED CEILINGS ARE NOT VISIBLE (FROM THE FINISHED SPACE) THROUGH PERFORATED OR BLADE TYPE SUPPLY OR RETURN AIR CEILING REGISTERS OR DIFFUSERS,
- 20. THE VOICE/DATA CONTRACTOR SHALL ENSURE THAT ALL RIGID OR FLEXIBLE WIRING SYSTEMS INSTALLED CONCEALED ABOVE SUSPENDED CEILINGS ARE NOT VISIBLE (FROM THE FINISHED SPACE) THROUGH PERFORATED OR BLADE TYPE SUPPLY OR RETURN AIR CEILING REGISTERS OR DIFFUSERS.
- 21. ALL WALL MOUNTED LIGHTING CONTROL DEVICES (I.E. ELECTRONIC TIMER SWITCHES, OCCUPANCY SENSORS, ETC.) SHALL HAVE A NEUTRAL CONDUCTOR INCLUDED WITH THE SWITCH LEGS OR CIRCUIT CONDUCTORS RUN FROM THE WALL BOX TO THE AREA LIGHTING CONTROLLED.
- 22. STRUCTURAL METAL THAT IS INTERCONNECTED TO FORM A METAL BUILDING FRAME OR THAT IS NOT INTERCONNECTED, BUT IS LIKELY TO BECOME ENERGIZED, AND IS NOT INTENTIONALLY GROUNDED SHALL BE BONDED TO THE BUILDING GROUNDING ELECTRODE SYSTEM IN ACCORDANCE WITH N.E.C. TABLE 250.66.
- 23. ALL WIRING DEVICES SHALL HAVE THEIR PANELBOARD ORIGIN AND CIRCUIT NUMBERS STAMPED OR TAPED ON THE BACKSIDE OF THEIR ASSOCIATED WALLPLATE. 24. WIRING DEVICE COLORS SHALL AS FOLLOWS, UNLESS NOTED OTHERWISE: NORMAL POWER DEVICES: WHITE WITH WHITE WALL PLATES. ISOLATED GROUND: ORANGE WITH WHITE WALLPLATES. NORMAL/STANDBY OR EMERGENCY POWER: RED WITH RED FACEPLATES. UPS POWER: GREEN WITH WHITE FACEPLATES. CONFIRM COLOR OF DEVICES AND WALLPLATES
- 25. ALL WIRING DEVICES, OUTLET BOXES, ETC SHALL BE FLUSH MOUNTED IN NEW WALLS OR CEILINGS, UNLESS SPECIFICALLY NOTED OTHERWISE.
- 26. ALL NEMA 5-15R AND 5-20R RECEPTACLES SHALL BE TAMPER RESISTANT TYPE UNLESS SPECIFICALLY NOTED OTHERWISE

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LEGEND AND <u>NOTES</u>

revisions

Permit Documents date: 12/2/19

proj. no.: 2014.072

E101

ELECTRICAL SPECIFICATIONS

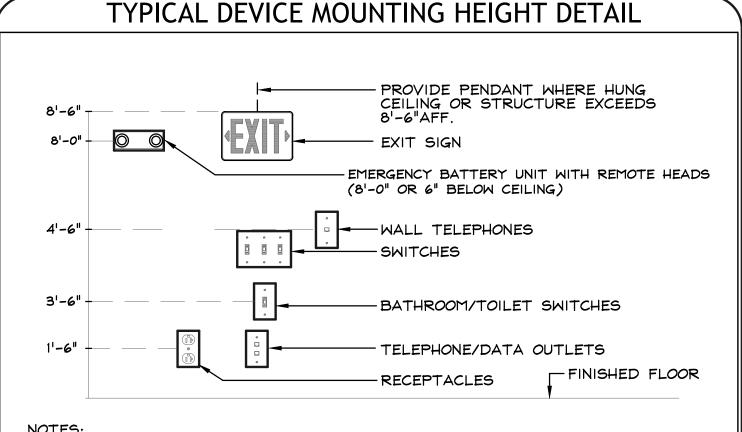
, THE GENERAL CONDITIONS SHALL BE CONSIDERED AS FORMING A PART OF THESE SPECIFICATIONS AND SHALL BE CAREFULLY EXAMINED BEFORE PROPOSALS FOR ANY WORK ARE SUBMITTED.

THE SCOPE OF WORK SHALL CONSIST OF ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES REQUIRED TO COMPLETE ALL WORK INDICATED ON THE DRAWINGS AND IN THESE SPECIFICATIONS. THE WORK SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, THE

- A. MODIFICATIONS TO THE SECONDARY DISTRIBUTION SYSTEM AS INDICATED ON THE DRAWINGS,
- B. GROUNDING AND BONDING OF ELECTRICAL SYSTEMS AND EQUIPMENT
- C. WIRING DEVICES (SWITCHES AND RECEPTACLES) COMPLETE WITH ASSOCIATED WALL PLATES.
- D. POWER WIRING TO HVAC, PLUMBING AND FIRE PROTECTION EQUIPMENT OR APPLIANCES.
- E. LIGHTING SYSTEM INCLUDING ALL FIXTURES, LAMPS, SWITCHING, ETC. AS REQUIRED.
- F. FIRE ALARM SYSTEM MODIFICATIONS COMPLETE WITH DEVICES AND WIRING.
- G. ALL OTHER SYSTEMS HEREINAFTER SPECIFIED OR AS INDICATED ON THE DRAWINGS.
- 3. ALL ELECTRICAL WORK SHALL MEET OR EXCEED THE LATEST REQUIREMENTS OF ALL NATIONAL, STATE, MUNICIPAL AND OTHER AUTHORITIES HAVING JURISDICTION OVER ELECTRICAL CONSTRUCTION WORK AND THE PROJECT.
- 4. OBTAIN AND PAY FOR ALL PERMITS, FEES, INSPECTIONS, AND TESTS, AND COMPLY WITH ALL LAWS, ORDINANCES AND CODES PERTAINING TO THIS PORTION OF THE CONTRACT.
- 5. ALL WORK PROVIDED UNDER THIS SECTION SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE
- 6. PRIOR TO PURCHASING ANY EQUIPMENT OR MATERIALS A LIST OF THEIR MANUFACTURERS AND "SHOP DRAWINGS" CATALOG CUTS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL.
- 7. ALL BRANCH WIRING, AND MAIN FEEDERS RUN IN EXPOSED AREAS SHALL BE RUN IN EMT RACEWAYS. COORDINATE ANY EXPOSED WIRING WITH ARCHITECT FOR APPROVAL PRIOR TO ROUGHIN. BRANCH CIRCUITRY RUN ABOVE SUSPENDED CEILINGS OR RUN WITHIN STUD WALLS SHALL BE METAL CLAD CABLE TYPE MC W/ INSULATED GROUND CONDUCTOR. ISOLATED GROUND RECEPTACLES CIRCUITS SHALL BE CIRCUITED WITH "HOSPITAL GRADE" BX.
- 8. ALL WIRING SHALL BE COPPER WITH 600V INSULATION, THWN OR THHN FOR BRANCH CIRCUITRY, AND XHHW FOR FEEDERS. MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG. USE SOLID OR STRANDED CONDUCTORS FOR #12 AND #10 AWG. USE STRANDED COPPER FOR #8 AWG AND LARGER.
- 9. THE ELECTRICAL CONTRACTOR SHALL PROVIDE OUTLET, JUNCTION AND PULL BOXES AT ALL LOCATIONS WHERE THEY ARE REQUIRED TO FACILITATE THE PULLING, SUPPORTING, OR CONNECTING OF WIRES AND CABLES.
- 10. STANDARD DUPLEX CONVENIENCE RECEPTACLES SHALL BE 20A-125V-3 WIRE, GROUNDING TYPE BACK \$ SIDE WIRED. NEMA 5-20R, WHITE IN COLOR. STANDARD SWITCHES SHALL BE TOGGLE TYPE, AC QUITE DESIGN, 20A 125V/277V, SPEC GRADE WHITE IN COLOR. PROVIDE WHITE PLASTIC WALLPLATES WITH ALL WIRING DEVICES.
- ALL EQUIPMENT AND SYSTEMS SHALL BE GROUNDED IN ACCORDANCE WITH BEST INDUSTRY PRACTICE AND SHALL COMPLY WITH NATIONAL ELECTRICAL CODE CURRENTLY ENFORCED REQUIREMENTS.
- 12. BEFORE AN APPLICATION FOR FINAL ACCEPTANCE OF THE WORK, ALL TESTS DEEMED NECESSARY BY THE ARCHITECT TO SHOW PROPER EXECUTION OF THE WORK SHALL HAVE BEEN PERFORMED AND COMPLETED IN THE PRESENCE OF THE ARCHITECT. ANY DEFECTS OR DEFICIENCIES DISCOVERED IN ANY OF THE ELECTRIC WORK SHALL BE CORRECTED.
- 13. AS PART OF THE ELECTRICAL WORK, A COMPLETE SET OF "AS BUILTS" OR RECORD ELECTRICAL DRAWINGS SHALL BE MADE UP AND DELIVERED TO THE ARCHITECT. THE DRAWINGS SHALL BE PREPARED ON AUTOCAD AND SUBMITTED ON DISK AND ONE SET OF REPRODUCIBLE PLOTS AT THE COMPLETION OF THE PROJECT.
- 14. SUPPORT AND FASTEN ELECTRICAL WORK IN ACCORDANCE WITH BEST INDUSTRY PRACTICE.
- 15. ALL ELECTRICAL CONDUIT SHALL BE RUN CONCEALED WHEREVER POSSIBLE. RUN EXPOSED CONDUIT PERPENDICULAR OR PARALLEL TO BUILDING WALLS OR COLUMNS.
- EXCEPT WHERE MODIFIED BY A SPECIFIC NOTATION TO THE CONTRARY, IT SHALL BE UNDERSTOOD THAT THE INDICATION AND/OR DESCRIPTION OF ANY ELECTRICAL ITEM IN THE DRAWINGS OR SPECIFICATIONS FOR ELECTRICAL WORK CARRIES WITH IT THE INSTRUCTION TO FURNISH, INSTALL AND CONNECT THE ITEM AS PART OF THE ELECTRICAL WORK REGARDLESS OF WHETHER OR NOT IT IS SPECIFICALLY STATED TO DO SO.
- 17. IT SHALL BE UNDERSTOOD THAT THE SPECIFICATIONS AND DRAWINGS FOR ELECTRICAL WORK ARE COMPLIMENTARY AND ARE TO BE TAKEN TOGETHER FOR A COMPLETE INTERPRETATION OF THE ELECTRICAL WORK, EXCEPT THAT INDICATIONS ON THE DRAWINGS. WHICH REFER TO AN INDIVIDUAL ELEMENTS OF WORK, TAKE PRECEDENCE OVER THE SPECIFICATIONS WHERE THEY CONFLICT WITH
- 18. THE ELECTRICAL CONTRACTOR SHALL BE PERMITTED TO INSPECT THE CONDITIONS AT THE SITE, IF HE/SHE SO DESIRES. FAILURE TO INSPECT EXISTING CONDITIONS OR TO FULLY UNDERSTAND THE WORK WHICH IS REQUIRED SHALL NOT EXCUSE THE ELECTRICAL CONTRACTOR FROM HIS/HER OBLIGATIONS TO FURNISH AND INSTALL THE WORK IN ACCORDANCE WITH THESE SPECIFICATIONS AND THE CONTRACT DRAWINGS AND UNDER ALL SITE CONDITIONS AS THEY EXIST.
- 19. IN SPACES WITHIN SUSPENDED CEILINGS UTILIZED AS RETURN AIR PLENUMS, ALL WIRING SYSTEMS MUST EITHER BE RUN IN METALLIC RACEWAYS OR SHALL BE UL APPROVED FIRE RATED PLENUM CABLE.
- 20. ALL MATERIALS SHALL BE NEW AND SHALL BEAR THE UL LABEL.
- 21. THE INSULATION OF EACH WIRE OR CABLE SHALL BE COLOR CODED, AS PER THE 120/208V OR 277/480V NATIONAL ELECTRIC CODE CURRENTLY ENFORCED REQUIREMENTS.
- 22. QMQB DISTRIBUTION SWITCHES SHALL BE NEMA TYPE HEAVY DUTY (GENERAL DUTY WHERE 60A OR LESS) HORSEPOWER RATED
- 23. THE HVAC CONTRACTOR SHALL PROVIDE MAGNETIC MOTOR STARTERS WHERE INDICATED FOR MECHANICAL EQUIPMENT. PROVIDE AUXILIARY CONTACTS IN MOTOR STARTERS WHERE REQUIRED FOR INTERLOCKING PURPOSES.
- 24. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, PATCHING OR CORING OF WALL AND FLOOR SURFACES REQUIRED FOR THE INSTALLATION OF ANY ELECTRICAL WORK.
- 25. PROVIDE A TEMPORARY LIGHTING AND POWER SYSTEM THROUGHOUT THE SPACE FOR USE DURING THE CONSTRUCTION PERIOD. USE THE EXISTING PANELBOARDS FOR THE TEMPORARY FEED POINT. PROVIDE ALL EQUIPMENT THAT MAY BE REQUIRED INCLUDING METERING, PANELS, ETC. REMOVE ALL TEMPORARY WIRING, FIXTURES AND OUTLETS AT THE TERMINATION OF THE CONSTRUCTION PERIOD. THE GENERAL CONTRACTOR SHALL PAY FOR ALL ENERGY CONSUMED DURING THE CONSTRUCTION PERIOD.
- 26. THE GENERAL CONTRACTOR SHALL X-RAY THE SLAB BEFORE CUTTING OR CORING ANY EXISTING CONCRETE SLABS OR SURFACES.
- 27. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL EXISTING ELECTRICAL WORK IN THE DESIGNATED RENOVATED AREAS UNLESS SPECIFICALLY NOTED OTHERWISE. COORDINATE ALL ITEMS TO BE DEMOLISHED WITH THE ARCHITECT BEFORE COMMENCING WORK.
- 28. OUTLETS OR DEVICES MOUNTED ON EXISTING C.M.U. WALLS SHALL BE SURFACE MOUNTED IN APPROPRIATE BOXES.
- 29. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND RE-INSTALLING ALL EXISTING CEILING TILES REQUIRED FOR THE ELECTRICAL CONTRACTOR TO PERFORM HIS/HER WORK.
- 30. ALL DRY TYPE TRANSFORMERS SHALL BE VENTILATED TYPE AND SHALL BE TP-1 RATED.
- 31. ALL WIRING DEVICES SHALL HAVE THEIR PANELBOARD ORIGIN AND CIRCUIT NUMBERS STAMPED OR TAPED ON THE BACKSIDE OF THEIR ASSOCIATED WALLPLATE.
- 32. PANELBOARDS SHALL BE OF BOLT-ON CONSTRUCTION WITH EQUIPMENT GROUND BAR AND TYPED CIRCUIT DIRECTORIES.
- 33. ALL NEW FIRE ALARM DEVICES SHALL BE AS MANUFACTURED BY THE EXISTING FIRE ALARM MANUFACTURER.
- 34. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING THE FIRE ALARM SYSTEM AT THE COMPLETION OF THE WORK TO THE SATISFACTION OF THE LOCAL FIRE DEPARTMENT OR THE LOCAL AUTHORITY HAVING JURISDICTION.

TYPICAL DEVICE BOX INSTALLATION @ METAL STUD NOTE: PROVIDE METAL STUD - FLOOR AND DECK HORIZONTAL METAL BONDING AS PER ARTICLE 250 TRACK BY OTHERS REQUIREMENTS. ROOF DECK -24" LONG ADJUSTABLE DEVICE BOX VERTICAL METAL MOUNTING BAR CADDY #TSGB16/24 FRAMING STUD BY FOR SINGLE DEVICE BOX OTHERS APPLICATIONS. CADDY #RBS16/24 FOR MULTIPLE BOX APPLICATIONS. PROVIDED BY THE ELECTRICAL CONTRACTOR (TYPICAL) METALLIC WIRING -CONCRETE SLAB BY DEVICE BOX PROVIDED OTHERS BY THE ELECTRICAL

CONTRACTOR (TYPICAL)



- 1. ALL MOUNTING HEIGHTS SHALL BE MEASURED FROM FINISHED FLOOR TO CENTERLINE OF DEVICES EXCEPT EXIT SIGNS.
- 1. DEVICES SHALL BE INSTALLED ON A COMMON VERTICAL CENTERLINE WHEREVER POSSIBLE.

| 8'-6" - 8'-0" - | PROVIDE PENDANT WHERE HUNG CEILING OR STRUCTURE EXCEEDS 8'-6"AFF. EXIT SIGN EMERGENCY BATTERY UNIT WITH REMOTE HEADS (8'-0" OR 6" BELOW CEILING) |
|--------------------|--|
| 4'-6" - | |
| 3'-6" - | BATHROOM/TOILET SWITCHES |

2. ALL DEVICES SHALL BE INSTALLED AT MOUNTING HEIGHTS AS INDICATED ON

THIS DETAIL UNLESS OTHERWISE NOTED.

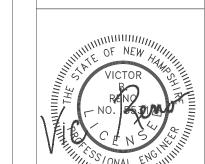
LIGHT FIXTURE SCHEDULE

| ~p= | DECCRIPTION | MANUFACTURER \$ | LAT | 1PS | INF | TUT | - REMARKS | |
|----------------|--|---|---|--|--|--|--|--|
| IPE | DESCRIPTION | CATALOG NO. | NO. | TYPE | VOLTS | WATTS | REMARKS | |
| В | 13" ROUND, LED, SURFACE MOUNT DOWNLIGHT CEILING SURFACE MOUNT | JUNO LIGHTING # JSF 13IN 18LM 35K 90CRI 120FRPC WH | LED | LED 90+CRI 3500K | 120 | 20 | - | |
| Ħ | 3', LED WALL LIGHT WALL MOUNT ABOVE MIRROR | LITHONIA LIGHTING # FMVCCLS 36IN MVOLT 30K35K40K 90CRI BN | LED | LED 90CRI 3000K | MVOLT | 25 | - | |
| ۳ | 4', LED STRIP CEILING SURFACE MOUNT | LITHONIA LIGHTING # SHLP 48IN 40K 80CRI DNA M12 | LED | LED 80CRI 4000K | 120 | 36 | - | |
| UC2 | 2', LED UNDER CABINET LIGHT MOUNT UNDER CABINET | LITHONIA LIGHTING # UCEL 24IN 30K 90CRI WH | LED | LED 90CRI 3000K | 120 | 10 | - | |
| UC3 | 3', LED UNDER CABINET LIGHT MOUNT UNDER CABINET | LITHONIA LIGHTING # UCEL 36IN 30K 90CRI WH | LED | LED 90CRI 3000K | 120 | 15 | - | |
| XW XC XP | SINGLE FACE UNIVERSAL MOUNT ILLUMINATED LED EXIT SIGN WITH INTEGRAL EMERGENCY BATTERY | LITHONIA LIGHTING # LQM-S-W-3-R-120/277-ELN | LED | LED | 120 277 | 2.4 | PROVIDE DIRECTIONAL ARROWS AS INDICATED | |
| | B E F UC2 | B SURFACE MOUNT DOWNLIGHT CEILING SURFACE MOUNT 3', LED WALL LIGHT WALL MOUNT ABOVE MIRROR 4', LED STRIP CEILING SURFACE MOUNT 2', LED UNDER CABINET LIGHT MOUNT UNDER CABINET LIGHT MOUNT UNDER CABINET LIGHT MOUNT UNDER CABINET XW SINGLE FACE UNIVERSAL MOUNT ILLUMINATED LED EXIT SIGN WITH INTEGRAL | B I3" ROUND, LED, SURFACE MOUNT DOWNLIGHT CEILING SURFACE MOUNT B WALL MOUNT ABOVE MIRROR 4', LED STRIP CEILING SURFACE MOUNT CEILING SURFACE MOUNT F CEILING SURFACE MOUNT LITHONIA LIGHTING # SHLP 48IN 40K 80CRI DNA MI2 2', LED UNDER CABINET LIGHT MOUNT UNDER CABINET LIGHT MOUNT UNDER CABINET LIGHT MOUNT UNDER CABINET LIGHT MOUNT UNDER CABINET LIGHT MOUNT UNDER CABINET LIGHT MOUNT UNDER CABINET LIGHT MOUNT UNDER CABINET LIGHT MOUNT UNDER CABINET LIGHT MOUNT UNDER CABINET LIGHT MOUNT UNDER CABINET LITHONIA LIGHTING # UCEL 24IN 30K 90CRI WH LITHONIA LIGHTING # UCEL 36IN 30K 90CRI WH LITHONIA LIGHTING # LITHONIA LIGHTING # | MANUFACTURER & CATALOG NO. 13" ROUND, LED, SURFACE MOUNT DOWNLIGHT JSF 13IN 18LM 35K 90CR1 120FRPC WH 21, LED WALL LIGHT LITHONIA LIGHTING # LED WALL MOUNT ABOVE FMVCCLS 36IN MVOLT 30K35K40K 90CR1 BN 41, LED STRIP LITHONIA LIGHTING # LED CEILING SURFACE MOUNT SHLP 48IN 40K 80CR1 DNA M12 21, LED UNDER CABINET LITHONIA LIGHTING # LED WOUNT UNDER CABINET LED LED WOUNT UNDER CABINET LED LED WOUNT UNDER CABINET LED LED WOUNT UNDER CABINET LITHONIA LIGHTING # LED WOUNT UNDER CABINET LED LED WOUNT UNDER CABINET LED LED WOUNT UNDER CABINET LED LED LED WOUNT UNDER CABINET LED LED LED LED LED | B I3" ROUND, LED, SURFACE MOUNT DOWNLIGHT LED JOHN LIGHTING # JOHN LIGHTING # LED 40+CRI 3500K E I3" ROUND, LED, SURFACE MOUNT LED JOHN JOHN LED 40+CRI 3500K E JOHN JOHN LIGHT LITHONIA LIGHTING # LED 40-CRI 3000K F CEILING SURFACE MOUNT SOK35K40K 40CRI BN E WALL MOUNT ABOVE FMVCCLS 36IN MVOLT 30K35K40K 40CRI BN E LED 40-CRI 3000K F CEILING SURFACE MOUNT SHIP LITHONIA LIGHTING # LED 80CRI 4000K CEILING SURFACE MOUNT SHIP LITHONIA LIGHTING # LED 40CRI 3000K LED 40-CRI 3 | MANUFACTURER & CATALOG NO. NO. TYPE VOLTS | TYPE DESCRIPTION MANUFACTURER & CATALOG NO. NO. TYPE VOLTS WATTS 13" ROUND, LED, SURFACE MOUNT JUNO LIGHTING # JSF 13IN 18LM 35K 90CRI 120 20 | |

- THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL LIGHTING FIXTURES COMPLETE WITH MOUNTING ACCESSORIES TO MEET JOB CONDITIONS.
- 2. THE ELECTRICAL CONTRACTOR SHALL VERIFY FIXTURE MOUNTING AND EXACT LOCATIONS AGAINST ARCHITECTS REFLECTED CEILING PLANS, ELEVATIONS AND DETAIL DRAWINGS.
- 3. ALL FIXTURES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE, INDEPENDENT OF HUNG CEILING.
- 4. EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL FIXTURES SHALL BE CONFIRMED WITH THE ARCHITECT PRIOR TO ROUGHING IN.
- 5. INFORMATION LISTED IN THE SECOND COLUMN OF THE FIXTURE SCHEDULE ABOVE SETS THE GENERAL DESCRIPTION OF EACH FIXTURE. INFORMATION LISTED IN THE THIRD COLUMN OF THE FIXTURE SCHEDULE SETS THE STANDARD OF QUALITY. IF DISCREPANCIES ARISE BETWEEN DESCRIPTION OF FIXTURE AND THE CATALOG NUMBER THEN NOTIFY THE ENGINEER BEFORE ORDERING SAID FIXTURE.
- 6. MANUFACTURERS AND CATALOG NUMBERS ARE LISTED IN THE FIXTURE SCHEDULE TO SET A STANDARD OF QUALITY FOR THE LIGHTING FIXTURES, SUBSTITUTION OF LIGHTING FIXTURES WILL BE ALLOWED WHEN THE SUBSTITUTED FIXTURE(S) EQUAL OR EXCEED THE AESTHETIC AND PERFORMANCE CHARACTERISTICS OF THE LIGHTING FIXTURE(S) SPECIFIED, AND ARE APPROVED BY THE ENGINEER.
- 7. FOR ALL FIXTURES EQUIPPED WITH REFLECTORS; PROVIDE ALIGNER CLIPS AT ALL FIXTURE JOINTS.
- 8. ALL RECESSED FIXTURES INSTALLED IN AREAS SEPERATING CONDITIONED AND UNCONDITIONED SPACES SHALL BE IC
- 9. ALL FLUORESCENT LAMPS OR LED ARRAYS SHALL BE LOW MERCURY T.C.L.P. COMPLIANT.

| ΡE | DECERIPTION | MANUFACTURER \$ | LAY | 1PS | INP | TUT | REMARKS | |
|-----|--|---|-----|------------------------|---------|-------|---|--|
| | DESCRIPTION | CATALOG NO. | NO. | TYPE | VOLTS | WATTS | REMARKS | |
| 3 | 13" ROUND, LED, SURFACE MOUNT DOWNLIGHT CEILING SURFACE MOUNT | JUNO LIGHTING # JSF 13IN 18LM 35K 90CRI 120FRPC WH | LED | LED 90+CRI 3500K | 120 | 20 | - | |
| 1.1 | 3', LED WALL LIGHT WALL MOUNT ABOVE MIRROR | LITHONIA LIGHTING # FMVCCLS 36IN MVOLT 30K35K40K 90CRI BN | LED | LED 90CRI 3000K | MVOLT | 25 | - | |
| | 4', LED STRIP CEILING SURFACE MOUNT | LITHONIA LIGHTING # SHLP 48IN 40K 80CRI DNA M12 | LED | LED 80CRI 4000K | 120 | 36 | - | |
| C2 | 2', LED UNDER CABINET LIGHT MOUNT UNDER CABINET | LITHONIA LIGHTING # UCEL 24IN 30K 90CRI WH | LED | LED 90CRI 3000K | 120 | 10 | - | |
| ;3 | 3', LED UNDER CABINET LIGHT MOUNT UNDER CABINET | LITHONIA LIGHTING # UCEL 36IN 30K 90CRI WH | LED | LED 90CRI 3000K | 120 | 15 | - | |
| W | SINGLE FACE UNIVERSAL MOUNT ILLUMINATED LED EXIT SIGN WITH INTEGRAL EMERGENCY BATTERY | LITHONIA LIGHTING # LQM-S-W-3-R-120/277-ELN | LED | LED | 120 277 | 2.4 | PROVIDE DIRECTIONAL ARROWS AS INDICATED | |

LIGHT FIXTURE SCHEDULE NOTES



COVER RESTRO

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10. ALL LED LUMINAIRES SHALL COMPLY WITH LM79 AND LM80 TESTING STANDARDS.

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ELECTRICAL SPECIFICATIONS, LIGHT FIXTURE SCHEDULE AND NOTES

revisions:

Permit Documents date: 12/2/19 proj. no.: 2014.072

E102

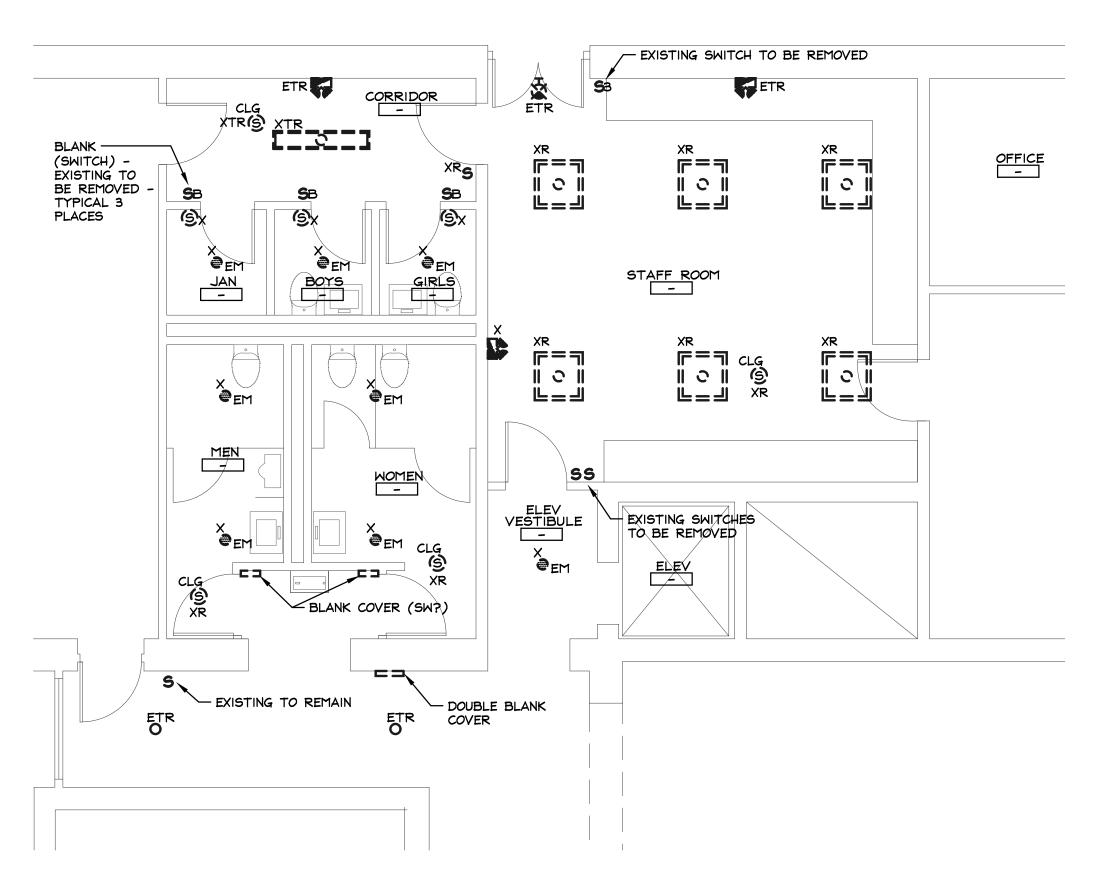
1. MAINTAIN CODE LEGAL AND AHJ APPROVED FIRE ALARM SYSTEM. REMOVE AND RELOCATE DEVICES AS REQUIRED BY THE RENOVATIONS. ADD DEVICES AS REQUIRED. PROTECT INITIATION AND NOTIFICATION DEVICES DURING CONSTRUCTION.

LIGHTING DEMOLITION PLAN NOTES

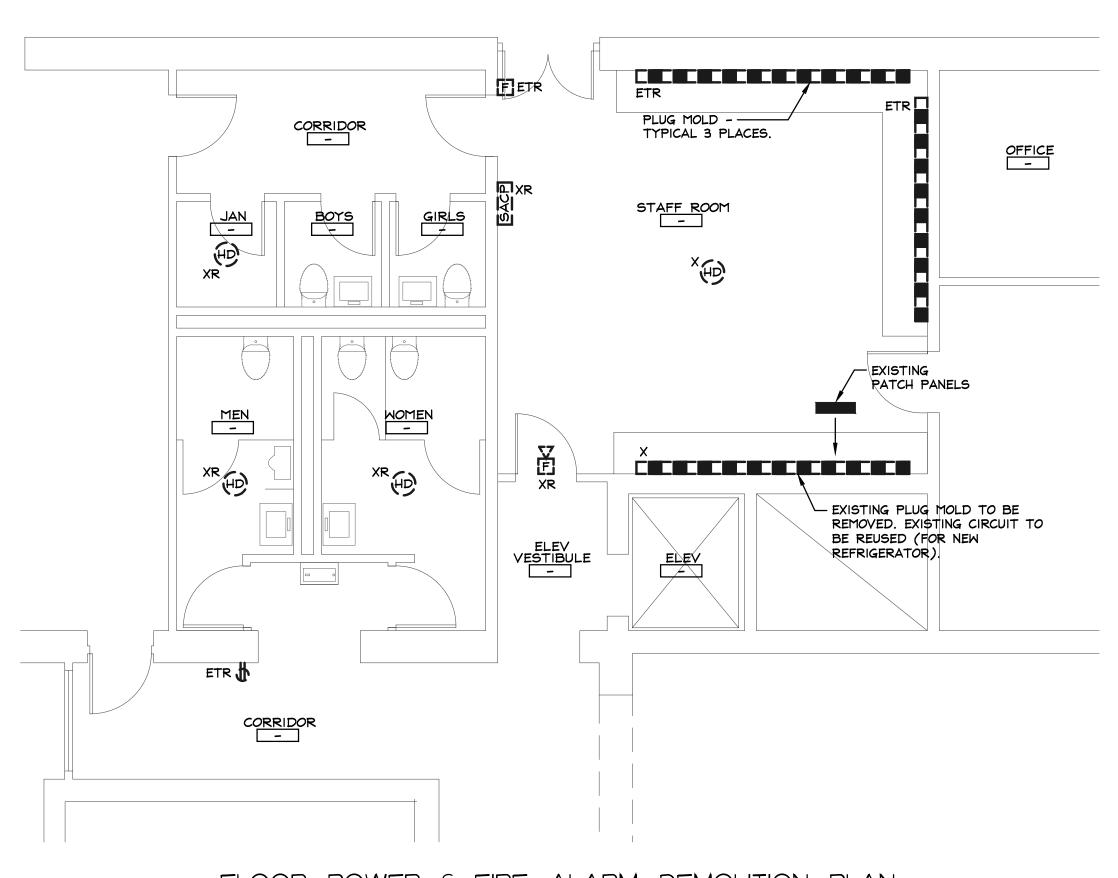
- 1. ALL EXISTING LIGHTING, SWITCHING AND ASSOCIATED BRANCH CIRCUITRY, IN THIS ROOM OR AREA, SHALL REMAIN UNLESS SPECIFICALLY NOTED OTHERWISE.
- 2. ALL EXISTING LIGHTING SWITCHING AND ASSOCIATED BRANCH CIRCUITRY, IN THIS ROOM OR AREA, SHALL BE REMOVED UNLESS SPECIFICALLY NOTED OTHERWISE.
- 3. LIGHTING FIXTURES DESIGNATED BY "RX" IS AN EXISTING LIGHTING FIXTURE TO BE RELOCATED (ALONG WITH ITS ASSOCIATED BRANCH CIRCUITRY) AND TO BE CLEANED AND REINSTALLED AT LOCATIONS SHOWN ON LIGHTING PLAN.
- 4. EXISTING LIGHTING FIXTURE TO BE DISCONNECTED FROM THE AREA 277V NORMAL LIGHTING CIRCUIT (WITHOUT DISRUPTING LOCAL SWITCHING) AND CIRCUIT TO THE AREA 277V EMERGENCY/NIGHT LIGHTING CIRCUIT.
- 5. EACH ITEM REFERRED TO THIS NOTE IS AN EXISTING TOGGLE SWITCH TO BE RELOCATED (ALONG WITH ITS ASSOCIATED BRANCH CIRCUITRY) TO THE LOCATION INDICATED ON THE FLOOR PLAN.
- 6. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND MAKE SAFE ALL LIGHTING FIXTURES, LIGHTING CIRCUITS, ETC. REMOVAL AND DISPOSAL OF LIGHT FIXTURES, CONDUIT, WIRE, BOXES, CABLE, HARDWARE, ETC SHALL BE PROVIDED BY THE DEMOLITION CONTRACTOR.
- 7. THE ELECTRICAL CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL FLUORESCENT LAMPS.

POWER DEMOLITION PLAN NOTES

- . ALL EXISTING WIRING DEVICES, ELECTRICAL EQUIPMENT, ETC. AND ASSOCIATED CIRCUITRY IN THIS ROOM OR AREA SHALL REMAIN UNLESS SPECIFICALLY NOTED OTHERWISE.
- 2. ALL EXISTING WIRING DEVICES, ELECTRICAL EQUIPMENT, ETC. AND ASSOCIATED CIRCUITRY IN THIS ROOM OR AREA SHALL BE REMOVED UNLESS SPECIFICALLY NOTED OTHERWISE.
- 3. MAINTAIN EXISTING BRANCH CIRCUITS OUTSIDE OF RENOVATED AREAS.
- 4. HOLES OR OPENINGS LEFT BY THE REMOVAL OF EXISTING POKE-THRU DEVICES SHALL BE FIRE SEALED, FILLED AND GRINDED TO A SMOOTH FINISH BY THE GENERAL CONTRACTOR.
- 5. EACH ITEM REFERRED TO THIS NOTES IS AN EXISTING WIRING DEVICE TO BE RELOCATED (ALONG WITH ITS ASSOCIATED BRANCH CIRCUITRY) TO THE LOCATION INDICATED.
- 6. EACH ITEM REFERRED TO THIS NOTE IS AN EXISTING UNIT OF MECHANICAL EQUIPMENT TO BE RELOCATED (ALONG WITH ITS ASSOCIATED POWER CIRCUITRY) TO THE LOCATION INDICATED.
- 7. EACH ITEM REFERRED TO THIS NOTE IS AN EXISTING PANELBOARD TO BE RELOCATED (ALONG WITH ALL OF ITS BRANCH AND FEEDER CIRCUITRY) TO THE LOCATION INDICATED ON THE FLOOR PLANS. REPLACE FLUSH TRIM WITH NEW SURFACE TRIM.
- 8. REPLACE EXISTING IVORY WIRING DEVICES WITH NEW WHITE DEVICE WITH WHITE WALL PLATES.
- 9. REMOVE EXISTING RECEPTACLE AND MAINTAIN EXISTING BRANCH CIRCUIT.
- 10. EACH ITEM REFFERED TO THIS NOTE IS AN EXISTING BASE FEED MODULE POWER AND VOICE/DATA CONNECTION TO BE RELOCATED (ALONG WITH IT'S ASSOCIATED BRANCH CIRCUITRY) TO THE LOCATION INDICATED.
- 11. RELOCATE CORD DROP RECEPTACLE AND EXTEND ALL ASSOCIATED CIRCUITRY AS NECESSARY.
- 12. EACH ITEM REFERRED TO THIS NOTE IS AN EXISTING UNIT OF MECHANICAL EQUIPMENT TO BE ELECTRICALLY DISCONNECTED BY THE ELECTRICAL CONTRACTOR, AND REMOVED BY THE MECHANICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL REMOVE THE MECHANICAL EQUIPMENT BRANCH CIRCUITRY OR FEEDER BACK TO ITS POINT OF SUPPLY, AND SHALL REMOVE AND DISCARD ALL UNIT CONTROLLERS AND/OR SAFETY SWITCHES.
- 13. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND MAKE SAFE ALL ELECTRICAL POWERED EQUIPMENT, GENERAL POWER, ETC. REMOVAL AND DISPOSAL OF EQUIPMENT, CONDUIT, WIRE, BOXES, CABLE, HARD, ETC SHALL BE PROVIDED BY THE DEMOLITION CONTRACTOR.

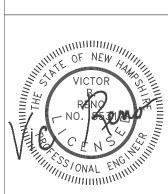


FLOOR LIGHTING DEMOLITION PLAN SCALE, NOT TO SCALE



FLOOR POWER & FIRE ALARM DEMOLITION PLAN SCALE; NOT TO SCALE

DISCOVER PORTSMOUTH CENTER
RESTROOM AND ADA REMODEL
10 MIDDLE STREET
PORTSMOUTH, NEW HAMPSHIRE



THE ARCHITECTS

F.A.

THE ARCHITECTS

697 Union Street, Manchester NH

603-625-4548 FAX 603-625-1067

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FLOOR LIGHTING & POWER DEMOLITION PLANS

revisions:

Permit Documents date: 12/2/19 proj. no.: 2014.072

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FLOOR LIGHTING PLAN SCARE MAY 1-50

FIRE ALARM PLAN NOTES

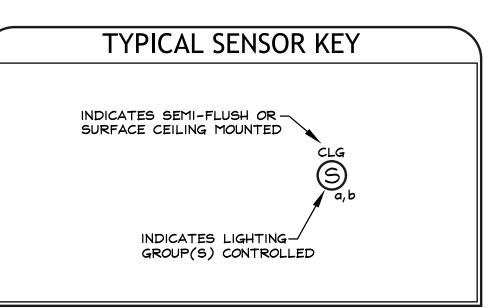
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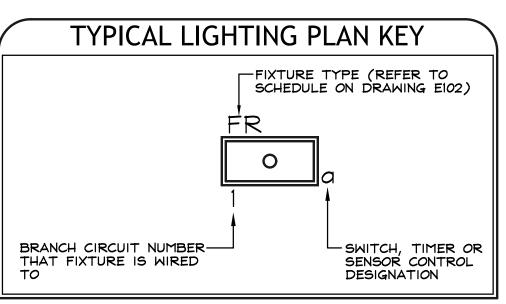
LIGHTING PLAN NOTES

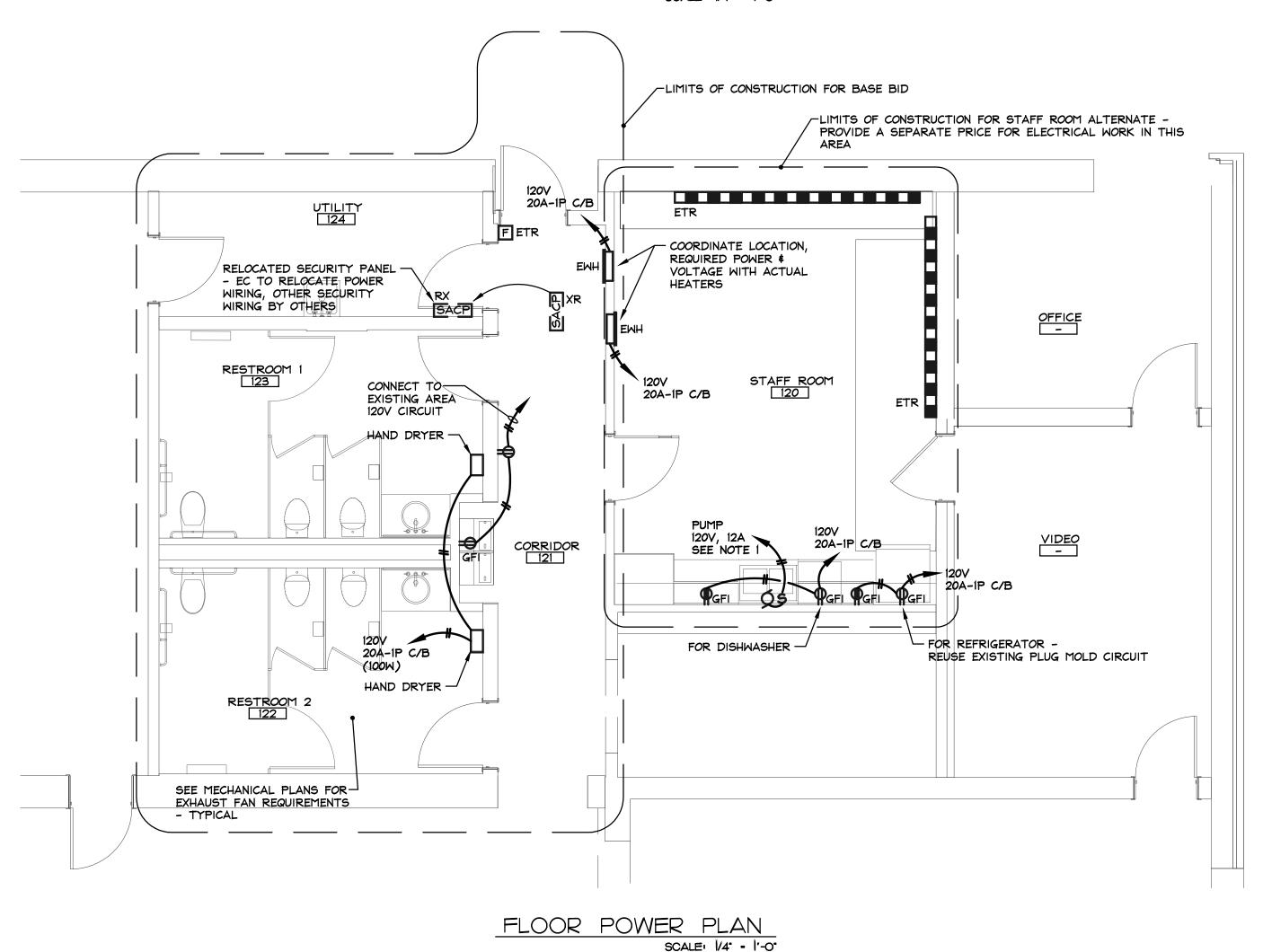
- 1. ALL EXISTING LIGHTING, SWITCHING AND ASSOCIATED BRANCH CIRCUITRY, IN THIS ROOM OR AREA, SHALL REMAIN UNLESS SPECIFICALLY NOTED OTHERWISE.
- 2. ALL EXISTING LIGHTING SWITCHING AND ASSOCIATED BRANCH CIRCUITRY, IN THIS ROOM OR AREA, SHALL BE REMOVED UNLESS SPECIFICALLY NOTED OTHERWISE.
- 3. SEE ARCHITECTURAL PLANS AND ELEVATIONS FOR MOUNTING HEIGHTS AND EXACT LOCATIONS.
- 4. WIRING AND CONDUIT SHALL BE REQUIRED BETWEEN ALL LIGHTING FIXTURES AND SWITCHING AS PER CIRCUIT NUMBER'S AND SWITCH GROUPS INDICATED.
- 5. ALTHOUGH NOT ALL BRANCH CIRCUIT WIRING IS SHOWN ON THESE PLANS, IT IS THE INTENT OF THESE DRAWINGS, THAT A COMPLETE BRANCH WIRING SYSTEM SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE SPECIFICATION.
- 6. EMERGENCY BATTERY UNITS SHALL BE CIRCUITED TO THE LOCAL LIGHTING CIRCUIT AHEAD OF ANY LOCAL SWITCHING, RELAYS, OR CONTROLS.
- 7. ALL EXIT SIGNS SHALL BE WIRED TO THE AREA 120V EMERGENCY LIGHTING CIRCUIT AHEAD OF ANY LOCAL SWITCHING, RELAYS, OR CONTROLS. ALL NEW EXIT SIGN SHALL BE STANDARD TYPE FOR BUILDING.
- 8. CONNECT TO EXISTING AREA 120V LIGHTING CIRCUIT.
- 9. TEST EXISTING EBU AND REPLACE AS NECESSARY.

POWER PLAN NOTES

- . THERE IS A PUMP UNDER THE SINK FOR THE DRAIN. WE BELIEVE THE PUMP WILL BE 1HP, 120V, 12 AMPS. PROVIDE 120 VOLTS FROM A DEDICATED 20A/IP BREAKER WITH A HORSEPOWER RATED SERVICE SWITCH. COORDINATE EXACT POEWR REQUIREMENTS FOR THE PUMP ON SITE WITH THE MECHANICAL CONTRACTOR/INSTALLER.
- 2. USE EXISTING AREA POWER WHERE POSSIBLE BUT THERE IS A POWER PANEL PPI IN THE BASEMENT BELOW WITH AVAILABLE SPACE FOR ADDITIONAL BREAKERS.
- 3. ALL EXISTING WIRING DEVICES, ELECTRICAL EQUIPMENT, ETC. AND ASSOCIATED CIRCUITRY IN THIS ROOM OR AREA SHALL REMAIN UNLESS SPECIFICALLY NOTED OTHERWISE.
- 4. ALL EXISTING WIRING DEVICES, ELECTRICAL EQUIPMENT, ETC. AND ASSOCIATED CIRCUITRY IN THIS ROOM OR AREA SHALL BE REMOVED UNLESS SPECIFICALLY NOTED OTHERWISE.
- 5. PROVIDE INDIVIDUAL NEUTRAL CONDUCTORS WITH EACH 120V RECEPTACLE CIRCUIT.
- 6. PROVIDE HOMERUN TO NEW 20A-1P C/B INSTALLED IN AVAILABLE SPACE IN PANELBOARD DESIGNATED.
- 7. MAINTAIN EXISTING BRANCH CIRCUITS OUTSIDE OF RENOVATED AREAS.
- 8. CONNECT TO EXISTING RECEPTACLE CIRCUIT.
- 9. ALL WIRING REQUIREMENTS, WIRE SIZES, CONDUIT SIZES, OVERCURRENT PROTECTION, ETC. SHALL BE CONFIRMED WITH THE EQUIPMENT MANUFACTURER.

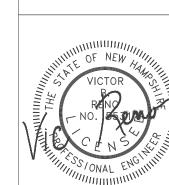






DISCOVER PORTSMOUTH CENTER RESTROOM AND ADA REMODEL 10 MIDDLE STREET





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FLOOR LIGHTING
PLAN & POWER
PLAN

revisions:

Permit Documents date: 12/2/19

proj. no.: 2014.072

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