# CAMPUS FOR STUDENT SUCCESS - MULTIPURPOSE ROOM RENOVATIONS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601 NEWPORT NEWS PUBLIC SCHOOLS

ISSUED FOR BID: IFB #011-0-2026/SB

12465 WARWICK BOULEVARD, NEWPORT NEWS, VA 23606



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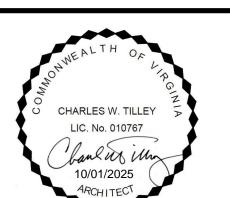
1 PANEL SCHEDULES AND RISER DIAGRAM



1840 WEST BROAD STF SUITE 400 RICHMOND, VA 23220

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CAMPUS FOR STUDENT
SUCCESS MULTIPURPOSE ROOM
NEWPORT NEWS PUBLIC
SCHOOLS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601

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#### PROJECT TEAM

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#### PROJECT DATA

### THIS BUILDING RENOVATION IS DESIGNED TO BE COMPLIANT WITH THE 2021 EDITION OF

THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE, INCLUDING THE 2021 EDITION OF THE VIRGINIA EXISTING BUILDING CODE, AND THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.

THE CONTRACTOR SHALL COMPLY WITH ALL ORDINANCES, REGULATIONS AND REQUIREMENTS OF THE CITY OF NEWPORT NEWS AND THE COMMONWEALTH OF VIRGINIA.

GENERAL PROJECT DESCRIPTION:

THIS PROJECT CONSISTS OF RENOVATIONS TO INTERIOR SPACES OF APPROXIMATELY 4,420 SF AT THE EXISTING CAMPUS FOR STUDENT SUCCESS (THE FORMER SOUTH MORRISON ELEMENTARY SCHOOL). RENOVATIONS INCLUDE, BUT ARE NOT LIMITED TO, INTERIOR ALTERATIONS TO THE EXISTING GYMNATORIUM AND STAGE AREA AS WELL AS ADJACENT SPACES. INTERIOR WORK WILL PROVIDE NEW FINISHES, FOLDING WALLS WITH NEW STRUCTURAL, AND NEW LIGHTING AND MECHANICAL SYSTEMS.

BUILDING RENOVATION SQUARE FOOTAGE LEVEL 1: 4,420 GSF

**EXISTING BUILDING RENOVATION** 

BUILDING USE GROUP: E
CONSTRUCTION TYPE: IIB
SEISMIC DESIGN CATEGORY: 0
AUTOMATIC FIRE SUPPRESSION: NONE

#### VICINITY MAP

CAMPUS FOR STUDENT SUCCESS 746 ADAMS DRIVE, NEWPORT NEWS, VA 23601



No Date Descri

No. Date Description

PROJECT MANAGER: DRAWN BY:

OT MINI

ISSUED FOR BID: IFB #011-0-2026/SB QEA No.Project Number 52406380 ISSUED FOR BID

COVER SHEET

OCTOBER 1, 2025

G001

**BLW** BELOW **BM** BEAM **BOS** BOTTOM OF STEEL **BOT** BOTTOM **BR** BRASS OR BRONZE **BRG** BEARING **BTWN** BETWEEN **BUR** BUILT-UP ROOF C-C CENTER TO CENTER **CAB** CABINET **CEM** CEMENT CIP CAST-IN-PLACE **CJ** CONTROL JOINT **CL** CENTER LINE **CLG** CEILING **CLO** CLOSET **CLR** CLEAR(ANCE) COL COLUMN **COM** COMMUNICATIONS **CONC** CONCRETE COND CONDITION **CONFIG(S)** CONFIGURATION(S) **CONST** CONSTRUCTION **CONT** CONTINUOUS **COORD** COORDINATE **CORR** CORRIDOR **CPT** CARPET(ED) **CT** CERAMIC TILE CTR CENTER **D** DEEP/DEPTH **DBL** DOUBLE **DEG** DEGREE **DETER DETERIORATING** DETERIORATED **DIA** DIAMETER **DIAG** DIAGONAL **DIM(S)** DIMENSION(S) **DIV** DIVIDE **DN** DOWN **DR** DOOR, DRAIN **DS** DOWNSPOUT **DTL** DETAIL **DWG(S)** DRAWING(S) **DWR** DRAWER E EAST **E-P** EPOXY PAINT **EA** EACH **EJ** EXPANSION JOINT **EL** ELEVATION (TOPO)

**ENCL** ENCLOS(E,URE)

**EOS** EDGE OF SLAB

BOARD

**EQUIP** EQUIPMENT

**EST** ESTIMATE(D)

**EW** EACH WAY

**EXH** EXHAUST

**EXHB** EXHIBIT

**EXIST** EXISTING

**EQ** EQUAL

**EPDM** ETHYLENE PROPYLENE

DIENE MONOMER

**EPS** EXPANDED POLYSTYRENE

**EWC** ELECTRIC WATER COOLER

**EXP** EXPOSED, EXPANSION

**ENGR** ENGINEER

**ENTR** ENTRANCE

**EXT** EXTERIOR A/C AIR CONDITIONING A/E ARCHITECT / ENGINEER **ABV** ABOVE **FA** FIRE ALARM **ACCESS** ACCESSIBLE **FAS** FASTEN(ER) **ACP** ACOUSTICAL CEILING PANEL **FD** FLOOR DRAIN **FDC** FIRE DEPARTMENT **ACST** ACOUSTIC CONNECTION **AD** AREA DRAIN **FDTN** FOUNDATION **ADA AMERICANS WITH FE** FIRE EXTINGUISHER DISABILITIES ACT **ADD'L** ADDITIONAL **FEC FIRE EXTINGUISHER CABINET** FF FINISH(ED) FACE **ADJ** ADJACENT/ADJUST **AFF** ABOVE FINISHED FLOOR FF&E FURNITURE, FIXTURES & **EQUIPMENT AFG** ABOVE FINISHED GRADE FH FIRE HOSE, FIRE HYDRANT **AGG** AGGREGATE **FHC** FIRE HOSE CABINET **ALT** ALTERNATE FIN(S) FINISH(ES) **ALUM** ALUMINIUM **FIXT** FIXTURE **APPROX** APPROXIMATE(LY) **FL** FLOOR(ING) **ARCH** ARCHITECT(URAL, URE) **FLAM** FLAMMABLE **ASPH** ASPHALT(IC) **FLUOR** FLUORESCENT **ASSOC** ASSOCIATED **FO** FINISHED OPENING **AUTO** AUTOMATIC **FOS** FACE OF STUDS **AVG** AVERAGE **FP** FIRE PROTECTION **AWP** ACOUSTICAL WALL PANEL FR FRAME(D,ING), FIRE RATING, FIRE RESISTANT **BBT** BIO-BASED TILE FT FEET **BC** BRICK COURSE **FTG** FOOTING **BD** BOARD **FUR** FURR(ED,ING) **BIT BITUMINOUS, BITUMEN FWC** FABRIC WALL COVERING **BLDG** BUILDING **BLKG** BLOCKING **G** NATURAL GAS **BLKHD** BULKHEAD **GA** GAUGE **GALV** GALVANIZED **GB** GRAB BAR GC GENERAL CONTRACT(OR) **GEN** GENERATOR **GF** GLASS FILM **GFRC** GLASS-FIBER-REINFORCED CONCRETE **GFRG** GLASS-FIBER-REINFORCED GYPSUM **GFRP** GLASS-FIBER-REINFORCED POLYESTER, GLASS-FIBER-REINFORCED PLASTIC **CFS** COLD FORMED STEEL **GL** GLASS, GLAZING **GLU LAM** GLUE LAMINATED WOOD **GOVT** GOVERNMENT **GT** GROUT **GWB** GYPSUM WALLBOARD **CMU** CONCRETE MASONRY UNIT HAZ MAT HAZARDOUS MATERIAL **HB** HOSE BIBB **HC** HOLLOW CORE, HOSE CABINET **HCWD** HOLLOW CORE WOOD DOOR **HD** HEAVY DUTY **HDR** HEADER **HDWD** HARDWOOD **HDWR** HARDWARE **HID** HIGH INTENSITY DISCHARGE **HM** HOLLOW METAL **HORIZ** HORIZONTAL(LY) **HP** HIGH POINT **HSS** HOLLOW STRUCTURAL SECTION **HT** HEIGHT(S) **HT** HEIGHT **DEMO** DEMOLISH, DEMOLITION **HVAC** HEATING, VENTILATION & AIR CONDITIONING **HW** HOT WATER **DF** DRINKING FOUNTAIN **ID** INSIDE DIAMETER **ILO** IN LIEU OF IN INCH(ES) **INCAN** INCANDESCENT **INCL** INCLUDE(S,D,ING) **INFO** INFORMATION **INSUL INSULATION, INSULATED INT** INTERIOR **INV** INVERT **IRMA** INVERTED ROOF MEMBRANE **ASSEMBLY J-BOX** JUNCTION BOX **JAN** JANITOR JT(S) JOINT(S) **ELEC** ELECTRICAL KIT KITCHEN **KO** KNOCK OUT **ELEV** ELEVATION (ARCH), ELEVATOR **EMER** EMERGENCY **L** ANGLE

**LAM** LAMINATE(D)

**LH** LEFT HAND

**LL** LIVE LOAD

**LP** LOW POINT

LT GA LIGHT GAUGE

LV LOW VOLTAGE

**LW** LIGHT WEIGHT

LVT LUXURY VINYL TILE

LTG LIGHTING

**LHR** LEFTHAND REVERSE

**LLV** LONG LEG VERTICAL

**LLH** LONG LEG HORIZONTAL

**LAV** LAVATORY

LBL LABEL

**MAS MASONRY MATL** MATERIAL(S) **MAX** MAXIMUM **MDO** MEDIUM DENSITY OVERLAY **MECH MECHANICAL MED** MEDIUM **MEMB** MEMBRANE **MFR** MANUFACTURE(R) MIN MINIMUM MISC MISCELLANEOUS **MO** MASONRY OPENING **MOD BIT** MODIFIED BITUMEN **MR** MLISTURE RESISTANT **MTD** MOUNTED MTG MOUNTING MTL METAL N NORTH **NA** NOT APPLICABLE **NAT** NATURAL NC NOISE CRITERIA, NORMALLY CLOSED NIC NOT IN CONTRACT, NOISE ISOLATION CLASS NO('S) NUMBER(S), NORMALLY OPEN **NOM** NOMINAL **NRC** NOISE REDUCTION COEFFICIENT NTS NOT TO SCALE O-O OUT TO OUT OC ON CENTER **OD** OUTSIDE DIAMETER **OF/CI** OWNER FURNISHED / CONTRACTOR INSTALLED **OFC** OFFICE **OH** OPPOSITE HAND, OVERHEAD **OPNG** OPENING(S) **ORIG** ORIGINAL **PA** PUBLIC ADDRESS PAR PARALLEL PART PARTITION(S), PARTIAL **PC** PRECAST **PERF** PERFORATE(D) **PL** PLATE, PROPERTY LINE **PLAM** PLASTIC LAMINATE **PLAS** PLASTER **PLWD** PLYWOOD PNL PANEL(ED) **POL** POLISHED **POLY** POLYETHYLENE **PR** PAIR **PREP** PREPARE (SURFACE) **PROV** PROVIDE(D) **PSF** POUNDS PER SQUARE FOOT **PSI** POUNDS PER SQUARE INCH PT PAINT, POST-TENSIONED. PRESSURE TREATED PTD PAINTED **PVC** POLYVINYL CHLORIDE **PVMT** PAVEMENT **PWR** POWER **QT** QUARRY TILE **QTY** QUANTITY **QUAD** QUADRANT **QZ** QUARTZ **QZT** QUARTZ TILE R RADIUS, RISER, THERMAL RESISTANCE **RB** RUBBER BASE **RBR** RUBBER **RCP** REFLECTED CEILING PLAN **RD** ROOF DRAIN **REBAR** REINFORCING BAR **REF** REFERENCE **REG** REGISTER. REGULATION **REINF REINFORCED REPL** REPLACE

**REQ** REQUIRED

**RES** RESILIENT

**RFG** ROOFING

**RFG** ROOFING

RM ROOM

HUMIDITY

**RL** RAIN LEADER

**RO** ROUGH OPENING

**RS** RESILIENT SHEET

**RTU** ROOF TOP UNIT

S SOUTH, SEAL

**SB** SPLASH BLOCK

**SCT** STRUCTURAL CLAY TILE

**SCWD** SOLID CORE WOOD DOOR

**SC** SOLID CORE

**SALV** SALVAGE

**SCHED** SCHEDULE

**SAN** SANITARY

**RTF** RUBBER TILE FLOOR

**RV** ROOF VENTILATOR

**SAB** SOUND ATTENUATION BATT

**RET** RETAINING, RETURN

**REV** REVISION(S) / REVISE(D)

RH RIGHT HAND, RELATIVE

**RHR** RIGHT HAND REVERSE

**SDT** STANDARD DISSIPATIVE TILE SEC SECURE, SECURITY **SECT** SECTION **SF** SQUARE FEET **SHT** SHEET **SIM** SIMILAR **SLD** SEALED **SLL** SOUND / LIGHT LOCK **SPEC** SPECIFICATION **SQ** SQUARE **SS** STAINLESS STEEL **SSM** SOLID SURFACE MATERIAL ST STONE **STD** STANDARD **STL** STEEL **STN** STAIN **STO** STORAGE **STRUC** STRUCTURAL **SUB** SUBSTITUTION SUSP SUSPENDED **SYS** SYSTEM T THICK, TREAD, TOILET **T&G** TONGUE AND GROOVE T.O. TOP OF **TBB** TILE BACKER BOARD **TECH** TECHNOLOGY **TEL** TELEPHONE **TEMP** TEMPORARY, TEMPERED THRS THRESHOLD THRU THROUGH **TOC** TOP OF CONCRETE **TOF** TOP OF FOOTING **TOJ** TOP OF JOIST **TOM** TOP OF MASONRY **TOP** TOP OF PARAPET **TOS** TOP OF STEEL **TOW** TOP OF WALL **TRANS TRANSPARENT** TRZ TERAZZO **TV** TELEVISION TYP TYPICAL **UC** UNDERCUT **UH** UNIT HEATER **UIO** UNLESS INDICATED OTHERWISE **UL** UNDERWRITER'S LABORATORY **UNFIN** UNFINISHED **UR** URINAL **VAR** VARIES **VAT** VINYL ASBESTOS TILE **VB** VINYL BASE **VCT** VINYL COMPOSITION TILE

**VERT** VERTICAL

**VEST** VESTIBULE

**VIF** VERIFY IN FIELD

W-W WALL TO WALL

**WC** WATER CLOSET

**WH** WALL HEATER

W/ WITH

**WD** WOOD

**WDW** WINDOW

POINT

X BRACE CROSS BRACING

**XFER** TRANSFER

& AND

5

**WT** WEIGHT

W/O WITHOUT

**VTR** VENT THROUHG ROOF

**VU** VENTILATION UNIT

**VWC** VINYL WALLCOVERING

**W** WEST, WIDE, WIDE FLANGE

**WP** WATERPROOFING, WORK

**WWF** WELDED WIRE FABRIC

**WWM** WELDED WIRE MESH

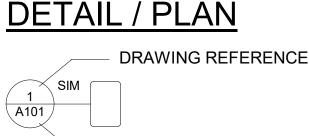
**YD** YARD, YARD DRAIN

# NUMBER, POUND

**±** PLUS / MINUS

**GRAPHIC SYMBOLS** 

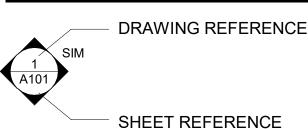
#### **BLDG SECTION CUT**

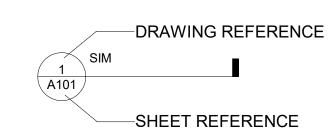


SHEET REFERENCE

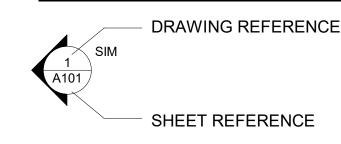
-DRAWING REFERENCE -SHEET REFERENCE

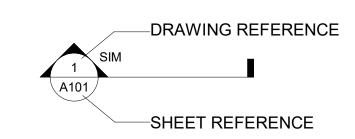
INTERIOR ELEVATION **DETAIL CUT** 

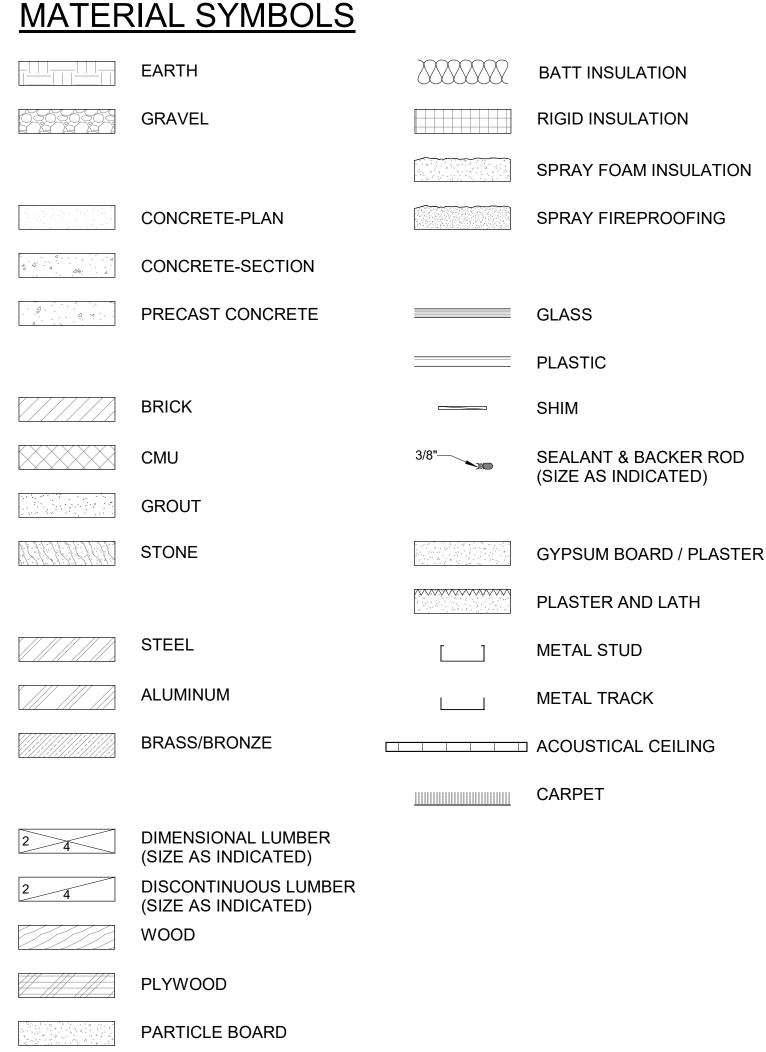




#### **EXTERIOR ELEVATION** WALL SECTION CUT





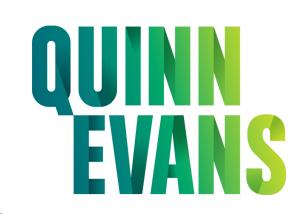


#### **SYMBOLS**

Room name	ROOM NUMBER FINISH TYPE	XX-XX	KEYNOTE
101	DOOR NUMBER	XX	MATERIAL DESIGNATION (REFER TO MATERIALS SCHED. ).
⟨xx⟩	WALL TYPES		REVISION CLOUD AND INDICATOR
$\langle xx \rangle$	WINDOW NUMBER	XX	CONSTRUCTION ASSEMBLY
<del>\( \)</del>	LOUVER TAG	X/SHEET #_ X/SHEET #	MATCHLINE
$\bigoplus$	EXISTING ELEVATION	(A)	EXISTING COLUMN
<b>•</b>	NEW ELEVATION	î	LINE
+	WORK POINT	A	NEW COLUMN LINE

#### **GENERAL WORK NOTES**

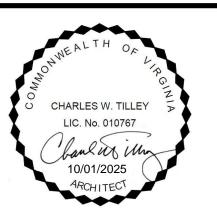
- REFER TO SPECIFICATION SECTION 01010, SUMMARY OF WORK, FOR REQUIREMENTS DURING CONSTRUCTION AND USE OF PREMISES.
- BUILDING DEMOLITION MAY BEGIN ONLY AFTER OWNER HAS VACATED THE AREA.
- CONTRACTOR ACCESS TO THE SPACE WILL BE AVAILABLE TO THE CONTRACTOR AT NOTICE TO PROCEED.
- THE CONTRACTOR SHALL BEAR ALL RESPONSIBILITY FOR SAFE CONDUCT OF THE WORK. INCLUDING BUT NOT LIMITED TO. PERSONNEL SAFETY. LIFTS AND CRANES. ELEVATED WORK MEASURES, SITE LIGHTING, AND IDENTIFICATION OF WORK AREAS. WORK SHALL PROGRESS IN A MANNER SO NOT TO OVERLOAD THE BUILDING STRUCTURE OR INDUCE LOADS ON PARTIALLY COMPLETED WORK WITHOUT ADEQUATE TEMPORARY SHORING, BRACES, SUPPORTS AND OTHER MEASURES TO PROTECT THE WORK IN PLACE. PROVIDE FIRE EXTINGUISHERS THROUGHOUT THE WORK AREA, AND IDENITIFY A FIRST AID STATION ON THE SITE.
- THE CONTRACTOR SHALL BEAR ALL RESPONSIBILITY FOR SECURING THE SITE DURING CONSTRUCTION. PROVIDE TEMPORARY SIGNAGE AS REQUIRED FOR EMERGENCY ACCESS. MAINTAIN ALL TEMPORARY FACILIITES SUCH AS FENCES, PROJECT TRAILERS AND STORAGE CONTAINERS IN NEAT CONDITION. PROVIDE TEMPORARY RESTROOM FACILITIES ON THE SITE WITHIN SECURED AREA FOR ALL CONSTRUCTION PERSONNEL USE DURING THE WORK.
- THE BUILDING SHALL REMAIN OCCUPIED AND IN USE DURING THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFE AND CLEAR IDENTIFICATION OF THE CONSTRUCTION SITE, AND SHALL PROVIDE TEMPORARY BARRIERS, SIGNAGE. PEDESTRIAN WALKWAYS AND TRAFFIC CONTROL DEVICES AS NEEDED TO ASSURE THE SAFETY OF STUDENTS, STAFF AND THE PUBLIC.
- CONSTRUCTION ACCESS TO THE WORK AREA SHALL BE AS INDICATED. CONTRACTOR SHALL SECURE CONSTRUCTION AREA & ACCESS. USE OF SCHOOL PARKING LOT SHALL BE APPROVED BY NNPS DURING THE SCHOOL DAY (7:30 AM -4:00 PM).
- CONTRACTOR TO MAINTAIN PUBLIC ACCESS TO ALL PUBLIC ROADS AT ALL TIMES.
- IF CONTRACTORS MAKES AN AREA, COURTYARD, OR FIELD INACCESSIBLE TO THE SCHOOL (BLOCKED OFF BY CONSTRUCTION FENCE). THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING, MOWING AND WEED EATING UNTIL TURNED OVER TO OWNER.
- 10. ALL UTILITY SERVICE TO SCHOOL SHALL NOT BE INTERRUPTED DURING SCHOOL SESSIONS. MAINTAIN ALL EXISTING UTILITIES DURING CONSTRUCTION. COORDINATE POWER/ UTLITIES OUTAGES W/ OWNERS REPRESENTATIVES. THIS INCLUDES ELECTRICAL POWER COMMUNICATIONS, AND OTHER UTILITIES AS REQUIRED.
- 11. CONTRACTOR SHALL CREATE CONSTRUCTION ENTRANCES TO WORK AREAS THROUGH RENOVATION AREAS ONLY
- 12. ALL CORRIDORS SHALL REMAIN CLEAR OF SUPPLIES AND CONSTRUCTION PERSONNEL DURING OCCUPIED SCHOOL HOURS. CONTRACTOR SHALL TAKE PROPER MEASURES FOR PUBLIC SAFETY FOR ALL WORK ADJACENT TO AREAS NOT CURRENTLY UNDER CONSTRUCTION.
- 13. ALL SCHOOL EXITS MUST BE MAINTAINED. WHERE THE EGRESS ELEMENTS OF AN OCCUPIED BUILDING DISCHARGE THROUGH AND / OR ALONG A PLANNED AREA OF RENOVATION. THE CONTRACTOR SHALL PROVIDE TEMPORARY BARRICADES THAT MAINTAIN A SAFE, SECURE, AND DISTINCT EGRESS PATH FROM SAID OCCUPIED
- 14. CONTRACTOR SHALL COORDINATE ROOFING WORK ADJACENT TO NEW MECHANICAL SYSTEMS TO ENSURE WATERTIGHT CONDITION OF BUILDINGS.
- 15. EXISTING UTILITY ROUTING WITHIN BUILDING IS NOT SHOWN. CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH OTHER DISCIPLINES TO PROVIDE TEMPORARY RELOCATION AND RE-ROUTING OF MECH., PLUMB., AND ELEC. SYSTEMS AND DEVICES AS NEEDED FOR CONSTRUCTION. ALL TEMP. RELOCATION SHALL INCUR NO ADDITIONAL COSTS TO THE OWNER DURING CONSTRUCTION.
- 16. CONTRACTOR TO PROVIDE AND MAINTAIN TEMPORARY UTILITIES NOTED IN ITEM #15 ABOVE AND AS REQUIRED FOR CONSTRUCTION PHASING. TEMPORARY UTILITIES TO BE REMOVED UPON COMPLETION OF WORK.
- 17. CORRIDOR CEILING FINISHES IN OCCUPIED SPACES MAY BE LEFT INCOMPLETE (OPEN) TO FACILITATE INSTALLATION OF MECHANICAL AND ELECTRICAL SYSTEMS AS NEEDED DURING CONSTRUCTION. ALL MEANS OF EGRESS SIGNAGE, LIFE SAFETY SYSTEMS, LIGHTING, FIRE SPRINKLER, AND MECHANICAL SYSTEMS SHALL REMAIN AS REQUIRED. COORDINATE NEW WORK WITH EXISTING SYSTEMS THAT ARE REQUIRED FOR OCCUPANCY. ENSURE ALL EQUIPMENT, DEVICES AND CONNECTIONS ARE SECURED TO STRUCTURE.
- 18. IF AREA IS NOT SHOWN FOR MODIFICATION DURING CONSTRUCTION, CONTRACTOR IS TO REPAIR ALL SITE AND BUILDING MODIFICATIONS REQUIRED FOR CONSTRUCTION ACCESS TO MATCH EXISTING CONDITIONS.
- 19. EXISTING AND NEW MATERIALS: THE DRAWINGS, OTHER THAN THE DEMOLITION PLANS, SHOW THE DESIRED FINISH CONSTRUCTION. NEW WORK ITEMS ARE CALLED OUT ON THE DRAWINGS WITHOUT REFERENCE TO BEING "NEW." EXISTING ITEMS THAT ARE INTEGRAL TO THE CONSTRUCTION DETAIL AND THEREBY POSSIBLY CONFUSED WITH THE NEW MATERIALS ARE IDENTIFIED BY THE SUFFIX "TO REMAIN." ITEMS IN ACCORDANCE WITH THE LEGEND SYMBOLS, DRAWN WITH HEAVIER LINEWEIGHTS OR THAT ARE SHADED TYPICALLY INDICATE NEW MATERIALS UNLESS OTHERWISE NOTED
- 20. THE CONTRACTOR IS TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE EXISTING BUILDING AT ALL TIMES. AT NO TIME IS THE REMOVAL OR DEMOLITION OF STRUCTURAL ELEMENTS TO OCCUR WITHOUT THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
- 21. THE CONTRACTOR SHALL EXAMINE THE EXISTING STRUCTURE PRIOR TO REMOVING ANY EXISTING WALLS OR PARTITIONS TO ENSURE THAT EXISTING STRUCTURE AND WALL ELEMENTS ABOVE AND ADJACENT ARE PROPERLY SUPPORTED AND/OR TEMPORARILY SHORED AND BRACED.
- 22. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING THE BUILDING IN A WEATHERTIGHT CONDITION THROUGHOUT THE CONSTRUCTION PERIOD AND REPAIR ALL DAMAGE CAUSED BY CONSTRUCTION OR WATER INTRUSION.
- 23. THE CONTRACTOR SHALL RE-SEED AND REFURBISH ANY AREAS OF THE SITE DAMAGED BY THE CONTRACTOR'S OPERATIONS. REFURBISHING SHALL INCLUDE THE FILLING OF ANY RUTS CREATED BY THE CONTRACTOR'S EQUIPMENT, AND THE RE-ESTABLISHMENT OF TURF IN THESE AND ANY OTHER AREAS WHERE GRASS HAS BEEN DAMAGED DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY CONCRETE CURBS AND SIDEWALKS. DRIVEWAYS. OR ASPHALT-PAVED SURFACES DAMAGED BY OPERATIONS.
- 24. DIMENSIONS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO STARTING THE WORK.
- 25. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL EXAMINE THE CONTRACT DOCUMENTS THOROUGHLY BEFORE COMMENCEMENT OF WORK AND COORDINATE SCHEDULING OF THE WORK. ANY CONFLICTS OR DISCREPANCIES WILL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE AND ARCHITECT IN ORDER TO BE RESOLVED BEFORE PROCEEDING. FAILURE TO PREFORM THIS COORDINATION WILL NOT EXCUSE SUBSEQUENT CONFLICT OR FAILURE TO MEET CONTRACTED COMPLETION DATE.
- 26. IN GENERAL, ALL PATCHING, REPAIR, AND RENOVATION WORK IS INTENDED TO MATCH, COMPLEMENT, AND ALIGN WITH THE EXISTING ADJACENT CONDITIONS.
- 27. HANDICAPPED (HC) ACCESSIBILITY: ALL NEW WORK AT INTERIOR OF FACILITY SHALL COMPLY WITH ICC/ANSI A117.1 STANDARD FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES (2009), AND VCC 2021 CHAPTER 11 WITH RESPECT TO HANDICAPPED ACCESSIBILITY. SWITCHES AND CONTROLS RELATED TO INTERIOR LIGHTING AND HVAC OPERATION SHALL BE PLACED AT 4'-0" HEIGHT WHERE INDICATED. NO OTHER MODIFICATIONS TO THIS FACILITY THAT ARE NOT OTHERWISE IMPACTED BY WORK UNDER THIS CONTRACT ARE REQUIRED. REFER TO ADDITIONAL NOTES CONCERNING HC-ACCESSIBILITY UNDER THE LIFE SAFETY/BUILDING CODE COMPLIANCE NOTES.



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CAMPUS FOR STUDENT **SUCCESS -MULTIPURPOSE ROOM NEWPORT NEWS PUBLIC** SCHOOLS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601

No. Date Description PROJECT MANAGER:

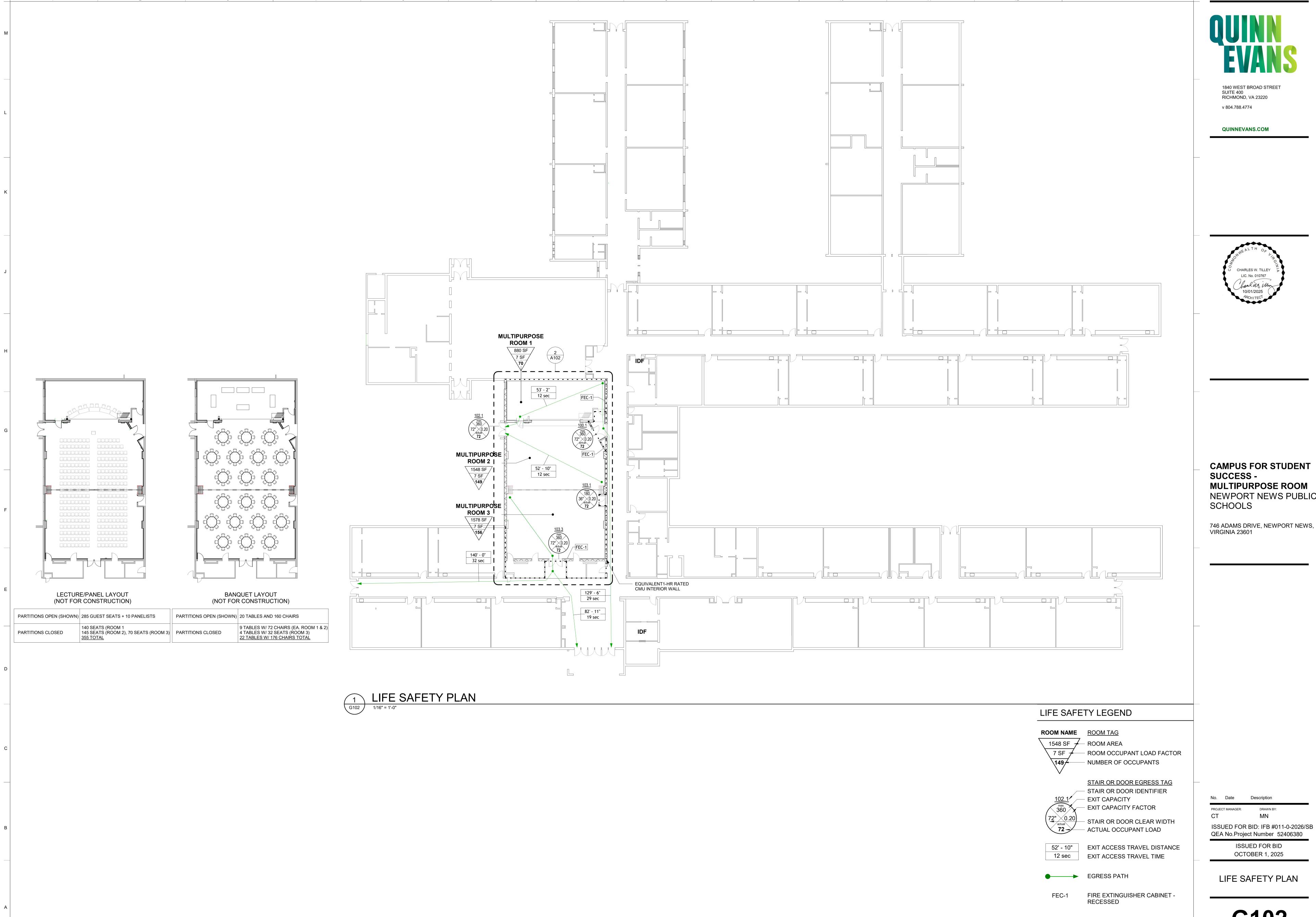
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LEGENDS, SYMBOLS, ABBREVIATIONS. & **GENERAL NOTES** 

QEA No.Project Number 52406380

ISSUED FOR BID

OCTOBER 1, 2025



**MULTIPURPOSE ROOM** NEWPORT NEWS PUBLIC



G102

1. DASHED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED U.N.O., REMOVAL OF PARTITIONS INCLUDES REMOVAL OF ALL ITEMS FIXED TO PARTITIONS (DOORS, CASEWORK, ELECTRICAL, PLUMBING, ETC). EXTENT OF SELECTIVE DEMOLITION SHALL BE AS REQUIRED FOR INSTALLATION OF NEW WORK. EXISTING WORK TO REMAIN, IF DAMAGED BY DEMOLITION OPERATIONS, SHALL BE REPAIRED TO MATCH ORIGINAL SURFACE CONDITION OR AS INDICATED IN THE DRAWINGS.

2. PRIOR TO REMOVAL OR MODIFICATION OF WALLS OR OTHER LOAD BEARING ELEMENTS. THE ACTUAL SIZE AND LOCATION OF THE STRUCTURAL COMPONENTS AND LOAD BEARING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR BY MEANS OF SELECTIVE DEMOLITION. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY UNUSUAL OR HAZARDOUS CONDITION INCLUDING BUT NOT LIMITED TO CRACKS, ABSENCE OF BRACING, OR LOOSE ELEMENTS AND COMPONENTS.

3. CONTRACTOR SHALL PROVIDE ALL TEMPORARY BRACING AND SHORING REQUIRED TO SAFELY SUPPORT ALL LOADS, INCLUDING ROOF LOADS, AND TO MAINTAIN EXISTING FRAMING TO REMAIN IN ITS EXISTING LOCATION WHILE MAKING MODIFICATIONS REQUIRED UNDER THIS CONTRACT. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

4. REFERENCE MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR REMOVAL OF ALL EQUIPMENT, FIXTURES, DEVICES, WIRING, PIPING, ETC. DEMOLISH ALL EXISTING WIREMOLD. ABANDONED PIPING AND CONDUIT SHALL BE CAPPED IN CONCEALED LOCATIONS AFTER BEING SECURED IN PLACE. PATCH EXPOSED WALLS BEHIND REMOVED EQUIPMENT, INCLUDING LARGER AREAS OF WALL WHERE ELECTRICAL PANELS ARE BEING REMOVED FROM WALLS TO REMAIN IN PLACE, ACCORDING TO GENERAL NOTE 6A, AT ALL AREAS WHERE NEW PIPING IS BEING INSTALLED IN AN EXISTING WALL, DEMOLISH THE EXISTING WALL AS REQUIRED AND PATCH WITH NEW WALL TO MATCH EXISTING. TOOTH-IN NEW MASONRY AS REQUIRED TO ACHIEVE AN "AS NEW" CONDITION.

5. TYPICAL DEMOLITION, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:

- A. WALLS/PARTITIONS: REMOVE ENTIRELY WHERE SHOWN DASHED. WHERE WALLS ARE INDICATED TO REMAIN, REMOVE ALL ITEMS MOUNTED TO WALL. AT INTERSECTIONS OF ONE OR MORE WALLS TO BE REMOVED OR WHERE NEW DOOR OPENINGS ARE CUT, REPAIR REMAINING EXPOSED MASONRY SURFACES BY TOOTHING NEW MASONRY INTO EXISTING COURSING AND/OR REPAIR SURFACE OF DRYWALL TO ACHIEVE AN "AS NEW" CONDITION. WHERE FRAMES. LINTELS. AND PORTIONS OF EXISTING MASONRY WALLS ARE SCHEDULED TO BE REMOVED, REPAIR WALLS BY TOOTHING IN MASONRY. AT ALL LOCATIONS WHERE THIS EXISTING MASONRY IS BRICK. REPAIRS SHALL BE MADE WITH SALVAGED BRICK OR BRICK TO MATCH EXISTING TOOTHED INTO EXISTING COURSING. WHERE PARTITIONS EXTEND BELOW FLOOR, REMOVE PARTITIONS TO 8" MINIMUM BELOW FLOOR AND REPAIR EXISTING SLAB. WHERE NEW PARTITIONS ARE SCHEDULED TO BE INSTALLED AT SAME LOCATION AS REMOVED PARTITION REFERENCE STRUCTURAL DRAWINGS FOR DETAILS.
- B. WALL BASE: REMOVE BASE MATERIAL FROM ALL WALLS/PARTITIONS INCLUDING ALL OF THOSE EXISTING TO REMAIN. PATCH EXISTING SURFACES AS REQUIRED TO RECEIVE NEW BASE MATERIAL.

DEMOLITION FLOOR PLAN

1/8" = 1'-0"

REMOVE

C. FLOORS: REMOVE IN ITS ENTIRETY U.N.O. RESILIENT FLOORING (VINYL COMPOSITION TILE), CARPET AND MASTIC. EXISTING FLOORS TO RECEIVE NEW FINISHES SHALL BE PREPARED AS REQUIRED (STRIPPING, GRINDING FLASH PATCHING, ETC) TO RECEIVE NEW FINISHES. COORDINATE WITH FINISH SCHEDULE. WHERE EXISTING CONCRETE IS NEW FINISH, GRIND SMOOTH AND PATCH EXISTING FLOOR WITH FLOOR LEVELING COMPOUND AND AS REQUIRED IN ALL AREAS WHERE ADJACENT SLABS ARE NOT LEVEL AFTER REMOVAL OF WALLS.

- D. CEILINGS AND BULKHEADS: UNLESS NOTED OTHERWISE REMOVE ALL SUSPENDED ACOUSTIC CEILINGS AND GRID SYSTEMS, EXISTING DRYWALL/PLASTER CEILINGS AND SUPPORT ITEMS.
- E. DOORS: WHERE BOTH DOORS AND FRAMES ARE SCHEDULED TO BE REMOVED, REMOVE DOORS, LINTELS, FRAMES AND RELATED HARDWARE. WHERE DOORS ARE SCHEDULED TO BE REMOVED, REMOVE DOORS AND RELATED HARDWARE. PREPARE EXISTING TO REMAIN FRAMES TO RECEIVE NEW HARDWARE AND PAINT AS REQUIRED. REFERENCE DEMOLITION PLAN LEGEND AND FRAME SCHEDULE FOR EXISTING FRAME TO REMAIN.
- F. FURNISHINGS/EQUIPMENT: CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CASEWORK AND ALL ITEMS AFFIXED TO WALLS INCLUDING BUT NOT LIMITED TO MARKERBOARDS, TACKBOARDS, SHELVING AND BRACKETS. ANY OTHER FURNISHINGS AND BUILT-IN EQUIPMENT, INTERIOR OR EXT. LEFT IN PROJECT AREA AT TIME OF TURNOVER TO CONTRACTOR SHALL BE REMOVED BY THE CONTRACTOR.

6. AT ALL WALL LOCATIONS WHERE EXISTING CHASE WALL HAS BEEN REMOVED AND THE INTERIOR CHASE WALL IS BEING EXPOSED AND SCHEDULED TO REMAIN REPOINT CMU AND/OR BRICK AS REQUIRED TO ACHIEVE AN "AS NEW" WALL CONDITION.

7. ALL DIMENSIONS INDICATED IN DEMOLITION PLANS ARE TO FINISHED FACE OF NEW OPENING U.N.O. CONTRACTOR TO COORDINATE EXTENT OF DEMO NECESSARY WITH NEW WORK.

8. GRIND SMOOTH AND PATCH EXISTING FLOOR WITH FLOOR LEVELING COMPOUND AND AS REQUIRED IN ALL AREAS WHERE ADJACENT SLABS ARE NOT LEVEL AFTER REMOVAL OF WALLS. PREPARE FOR INSTALLATION OF NEW FINISHES.

9. AT ALL LOCATIONS WHERE THE EXTERIOR ENVELOPE IS BEING DEMOLISHED OR INFILLED. THE CONTRACTOR SHALL PROVIDE SECURITY CLOSURE AND WEATHER PROTECTION IN ORDER TO SECURE THE BUILDING AND PROTECT IT AGAINST THE ELEMENTS.

10. AT ALL NEW RECESSED FIRE EXTINGUISHER CABINETS TO BE INSTALLED IN EXISTING WALLS, DEMOLISH PORTION OF WALL REQUIRED FOR INSTALLATION OF NEW RECESSED FEC. COORDINATE WITH NEW WORK.

11. AT EXTERIOR FACE BRICK DEMOLITION, SALVAGE AND PREPARE EXISTING FACE BRICK FOR REUSE WITHIN EXISITING INFILL

#### **DEMOLITION KEYNOTES**

 $\langle~?~
angle~$  NOTED AS ON DEMOLITION PLAN 1/A102

REMOVE 6-INCH CMU WALL ENTIRELY AND PATCH THE ADJACENT WALL AND FLOOR AS REQUIRED FOR NEW WORK.

- REMOVE EXISTING WINDOW TREATMENT AND HARDWARE.
- REMOVE ALL CURTAINS, TRACK, HARDWARE, PROJECTION SCREENS, HVAC, LIGHTING AND OTHER CEILING MOUNTED COMPONENTS NOT REQUIRED FOR NEW WORK.
- REMOVAL OF EXISTING ELEVATED STAGE FLOOR STRUCTURE: EXISTING TOP OF FINISHED WOOD FLOOR FOR THE STAGE IS 2'-10"+/- (VIF) ABOVE THE MAIN FLOOR ELEVATION. THE EXISTING WALL SECTION DENOTES BACKFILL OF SOIL FILL MATERIALS AND STONE UNDER STAGE AREA. REMOVE ALL FLOOR AND SLAB MATERIALS AND EXCAVATE TO THE LEVEL REQUIRED FOR NEW WORK.

#### NEW WORK KEYNOTES

NOTED AS ON NEW WORK FLOOR PLAN 2/A102

#### REFERENCE 2/A102

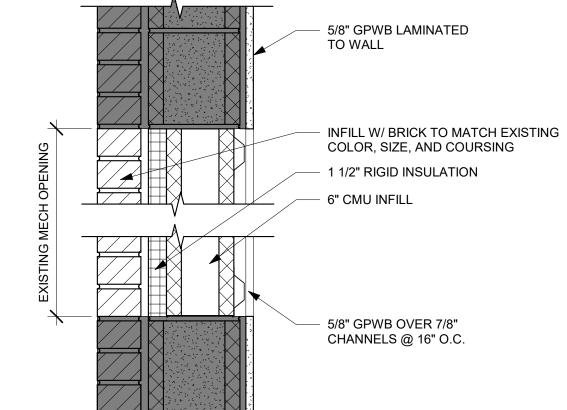
REFERENCE 1/A102

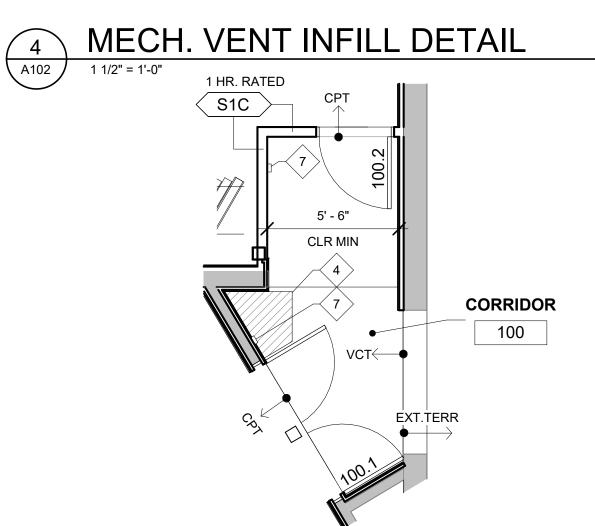
NEW MASONRY INFILL AT ABANDONED MECHANICAL LOUVER APPROXIMATELY 5'-4" WIDE X 2'-8" TALL - VERIFY DIMENSIONS IN THE FIELD. TOOTH IN NEW BRICK MASONRY TO MATCH EXISTING COLOR AND COURSING.

- AT CONCRETE STAIR DEMOLITION. REMOVE EXISITING CMU IN PLANE OF BUILDING EXTERIORWALL AND INFILL AREA COVERED BY STAIR AND LANDING WITH NEW FACE BRICK TO MATCH EXISTING EXTERIOR BRICK WALLS.
- TOOTH IN NEW CMU AT NEW OPENING IN EXISTING CMU WALLS TO MATCH EXISTING APPLIES TO NEW OPENINGS AND HOLLOW METAL DOOR JAMBS (BOTH SIDES) AND HEAD.
- AT REMOVAL OF EXISTING CMU WALLS AT THE NEW OPENING AREA, PATCH TERRAZZO FLOOR SLAB WITH NEW CONCRETE INFILL AND LAMINATE 5/8-INCH GPDW WALL SURFACE OVER EXISTING CMU/TILE WALL. SHIM GYP AS REQUIRED TO PROVIDE A CONSISTENT, VERTICAL SURFACE.
- APPROXIMATE LOCATION OF DUCT PENETRATION ABOVE CEILING. COORDINATE LOCATION MECHANICAL INSTALLATION. REFERENCE DETAILS ON SHEET A104.
- 6. INFILL DUCT LOCATION IN EXISTING 6-INCH CMU WALL. TOOTH IN NEW MASONRY TO MATCH WALL COURSING.
- NEW DOOR ACCESS CONTROL CARD READER. ROUGH IN AS NOTED ON ELECTRICAL DRAWINGS, CABLING AND READER CONTROLS AND HARDWARE BY OWNERS.
- DIGITAL PROJECTOR CONTROL LOCATION. ROUGH IN AS NOTED ON ELECTRICAL

DRAWINGS. CABLING, CONNECTIONS AND HARDWARE BY OWNER.

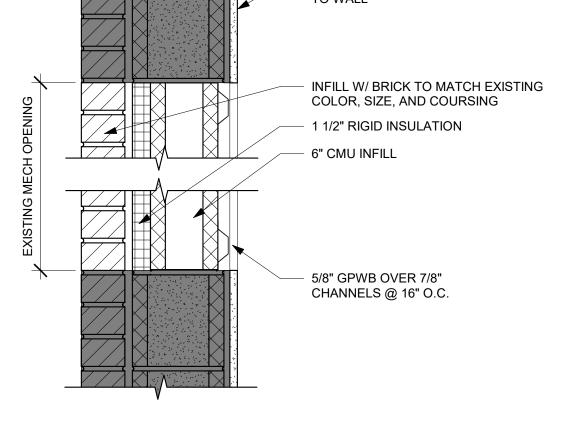
FURNISH AND INSTALL 6'-0" TALL, 3/4"-INCH FIRE RETARDANT TREATED PANELS ON WALL FOR MOUNTING AV/IT SYSTEMS.

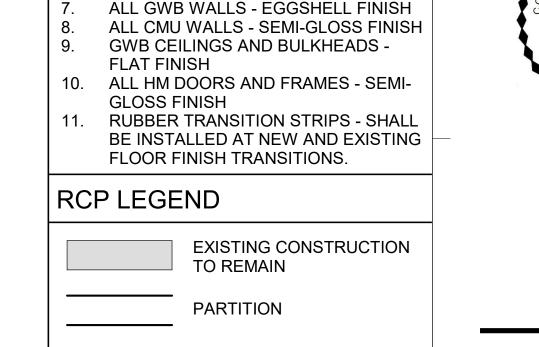




**ENLARGED VIEW - NEW WORK** 

VIF





**ACOUSTIC PANEL CEILING** 

GYPSUM BOARD CEILING

**GENERAL NEW WORK NOTES** 

DIMENSION ARE TO FINISH FACE

UNLESS INDICATED OTHERWISE.

A. TYPE **S2A1** UNLESS INDICATED

TO RECEIVE S2A1 WALL

ALIGNED WITH ADJACENT

CONSTRUCTION WHERE

PAINT ALL NEW AND EXISTING WALLS,

HOLLOW METAL DOORS AND FRAMES

AND GWB CEILINGS IN NEW WORK

OUTLET BOXES AND ASSOCIATED

CONDUITS, ROUTE OR TRENCH OUT

AT ALL NEW ELECTRICAL WALL

CMU/ CERAMIC TILE WALL TO

FINISHED WALL SURFACE.

FABRIC WALL PANEL:

FLOORS:

WALLS:

WALLS:

CEILING:

FULL RANGE.

WALL BASE:

CONCEAL NEW WORK WITHIN

INTERIOR FINISHES (REFERENCE

SPECIFICATIONS) AND COLORS:

CARPET AND VCT

FIELD COLOR, PNT-1

ACCENT COLOR, PNT

FWP-1

RUBBER

ACT-1

ALL COLORS SHALL BE SELECTED BY

ARCHITECT FROM MANUFACTURER'S

ALL INTERIOR EXISTING WALLS

ASSEMBLY ON FULL HEIGHT OF

INTERIOR PARTITIONS TO BE:

OTHERWISE.

SHOWN.

RECESSED CAN LIGHT **CAMPUS FOR STUDENT SUCCESS -MULTIPURPOSE ROOM NEWPORT NEWS PUBLIC** 

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10/01/2025

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v 804.788.4774

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PROJECTOR (NIC) SCHOOLS **NEW WORK LEGEND** 

**EXISTING CONSTRUCTION** 

EXISTING DOOR TO REMAIN

TO REMAIN

WALL / PARTITION

**DEMOLITION LEGEND EXISTING CONSTRUCTION** TO REMAIN

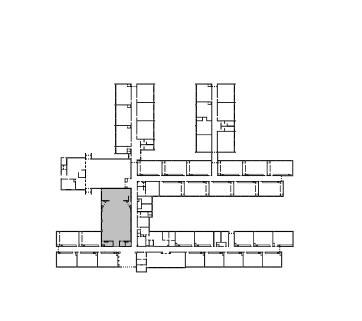
EXISTING DOOR TO REMAIN

> TO BE REMOVED. SALVAGED OR REINSTALLED DOOR TO BE REMOVED.

ITEM / CONSTRUCTION

SALVAGED OR REINSTALLED **EXTENT OF SLAB/FLOOR** 

FINISH REMOVAL



WORK PLAN, & RCP

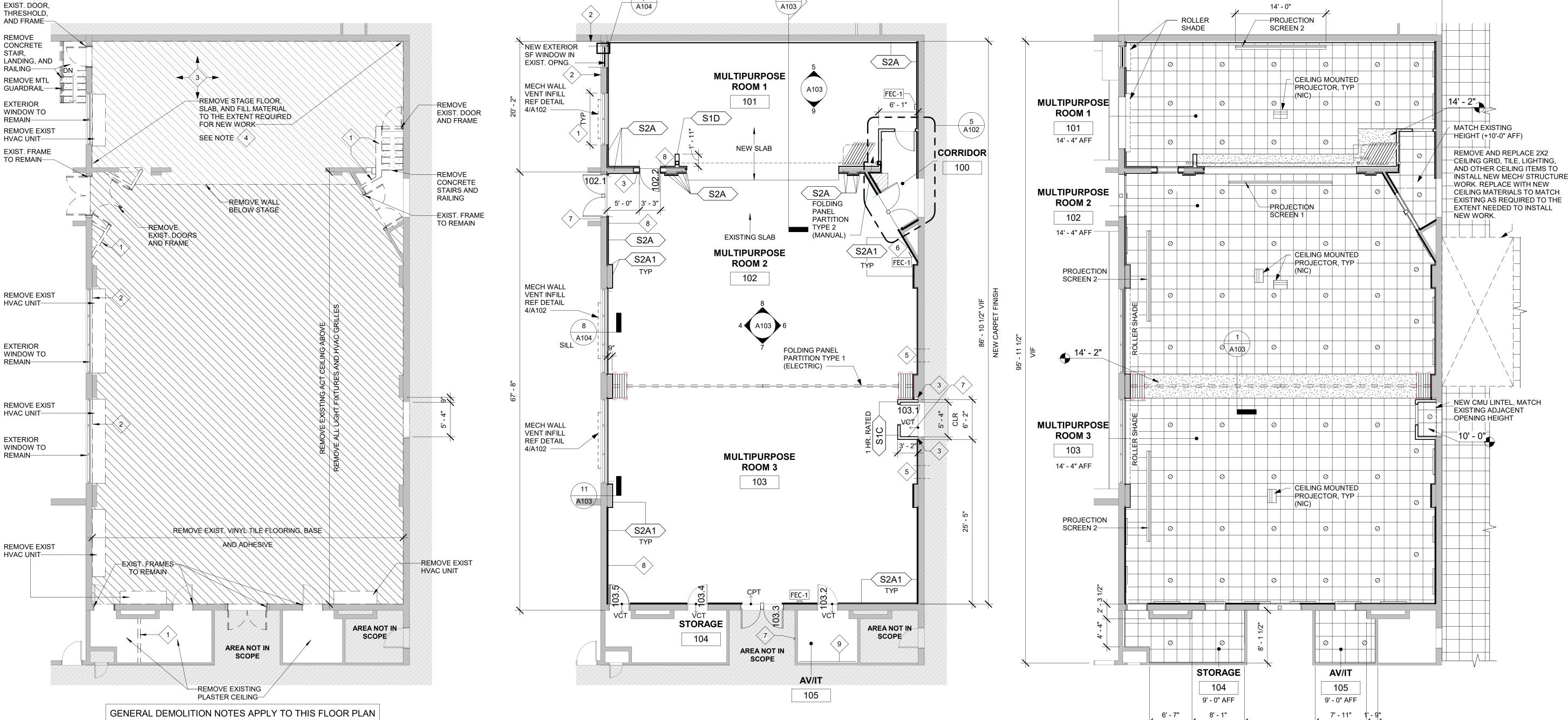
A102

ISSUED FOR BID: IFB #011-0-2026/SE QEA No.Project Number 52406380

ISSUED FOR BID

OCTOBER 1, 2025

DEMO PLAN, NEW

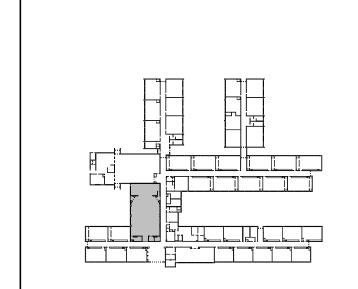


**NEW WORK FLOOR PLAN** 

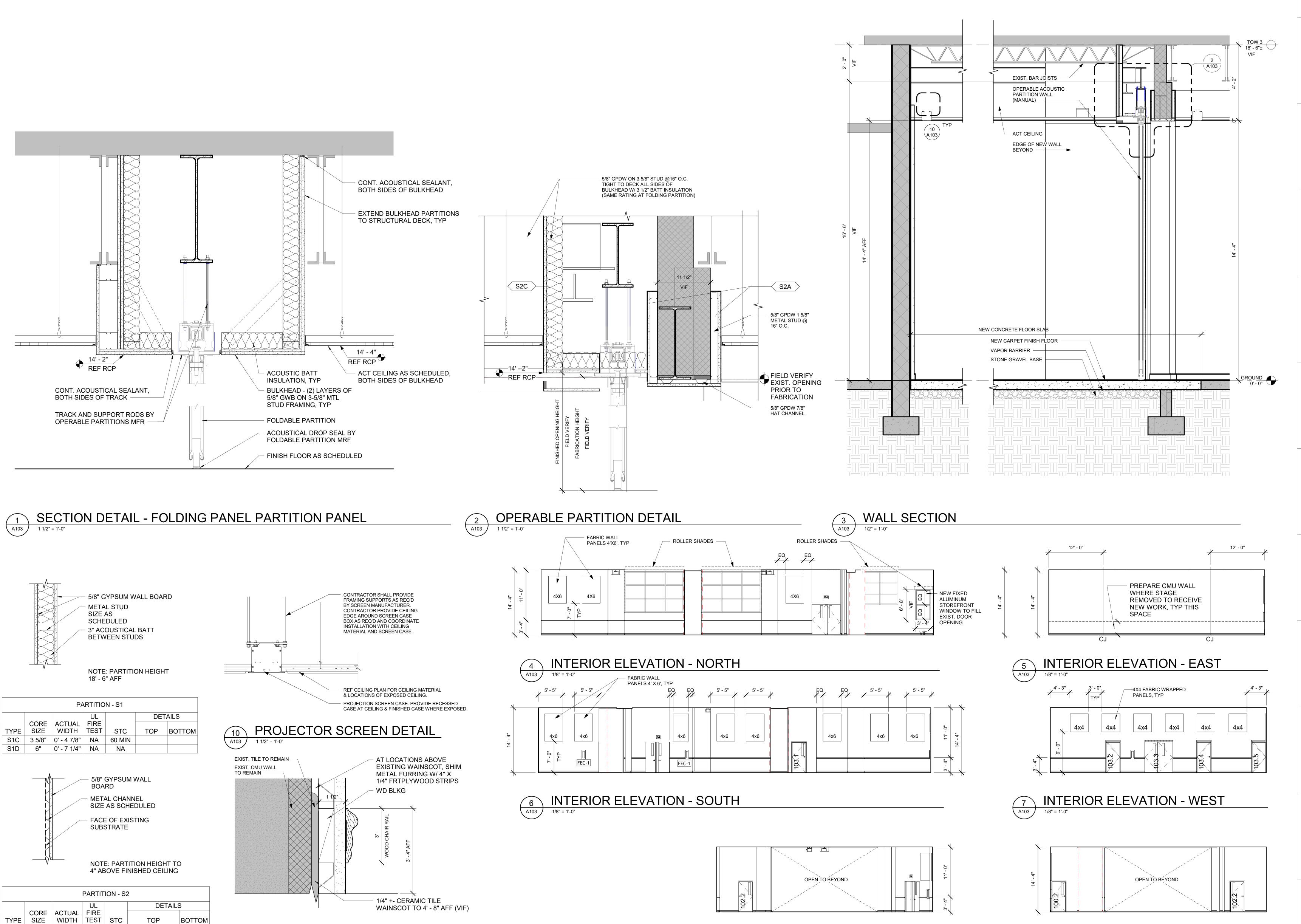
NEW WORK REFLECTED CEILING PLAN

A102

KEY PLAN:



PROJECT MANAGER:



MULTIPURPOSE ROOM 2 - EAST

8 A103

1 5/8" | 0' - 2 1/4" | NA | NA

S2C 1 5/8" 0' - 4 1/4" NA NA

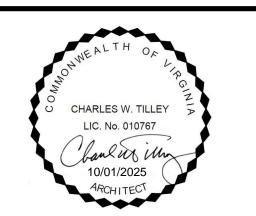
7/8" 0' - 1 1/2" NA NA CONTINUES 8"

**ABOVE SACT** 

CHAIR RAIL DETAIL

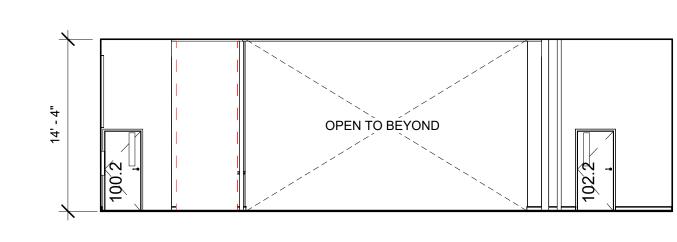
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9 MULTIPURPOSE ROOM 3 - WEST

1/8" = 1'-0"

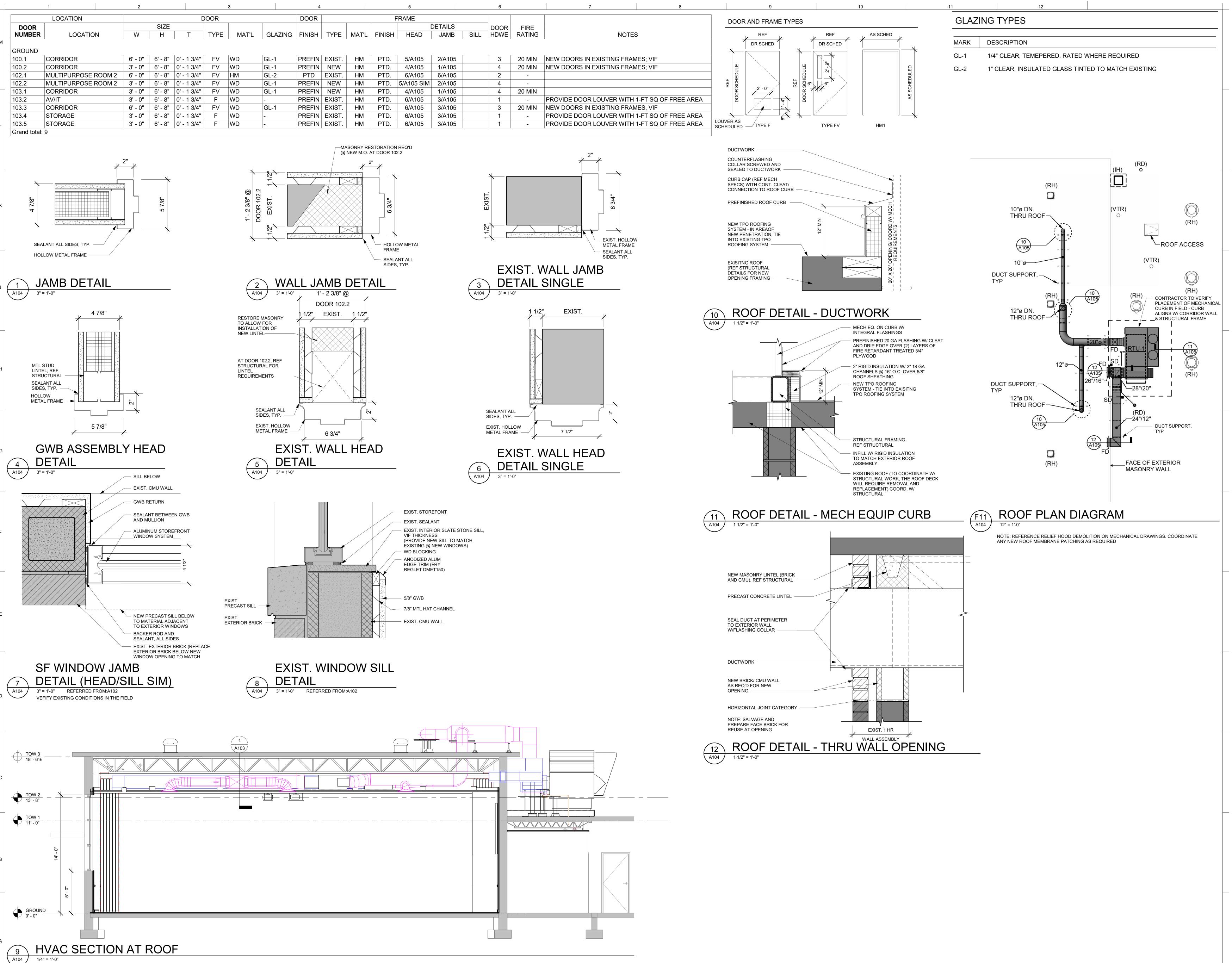
PROJECT MANAGER:

ISSUED FOR BID: IFB #011-0-2026/SB QEA No.Project Number 52406380

ISSUED FOR BID OCTOBER 1, 2025

WALL SECTION, DETAILS, & INTERIOR **ELEVATIONS** 

A103

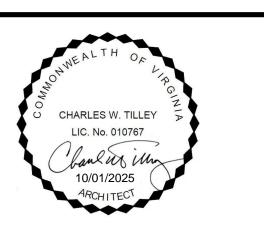




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ISSUED FOR BID: IFB #011-0-2026/SB QEA No.Project Number 52406380

> ISSUED FOR BID OCTOBER 1, 2025

DOOR SCHEDULE AND DETAILS/ ROOF **DETAILS** 

A104

RENOVATION/ ALTERATION - PART II OF THE VUSBC - "VIRGINIA EXISTING BUILDING CODE"

CLASSIFICATION OF WORK FOR THIS PROJECT = ALTERATION-LEVEL 2

**GBC-2:** NO LOADS IN EXCESS OF THE DESIGN LIVE LOADS LISTED SHALL BE IMPOSED UPON ANY AREA DURING CONSTRUCTION, UNLESS ADEQUATE SHORING OR OTHER MEANS IS PROVIDED TO SUPPORT THE EXCESSIVE

<u>GBC-3:</u> IF ANY CHANGES ARE MADE IN WEIGHT AND/OR LOCATION OF POINTS OF SUPPORT OF EQUIPMENT, THE CONTRACTOR SHALL FURNISH DETAILS OF CHANGES TO THE ARCHITECT FOR REVIEW AND NECESSARY MODIFICATIONS.

<u>GBC-4:</u> TEMPORARY BRACING, GUY WIRES, SHORING, ETC., SHALL BE USED AS NECESSARY TO RESIST ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED DURING CONSTRUCTION, INCLUDING EQUIPMENT AND ITS OPERATION.

**GBC-5**: THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. THE ERECTION PROCEDURE AND SEQUENCE INCLUDING THE DESIGN ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC., IS THE SOLE RESPONSIBILITY OF THE

GBC-6: STRUCTURAL DRAWINGS DO NOT SHOW ALL OPENINGS, COORDINATE WITH MECHANICAL DRAWINGS. VERIFY SIZES AND LOCATIONS OF ALL OPENINGS WITH MECHANICAL.

GBC-7: REFER TO ARCHITECTURAL DRAWINGS FOR WATERPROOFING DETAILS.

<u>GBC-8:</u> THE ENGINEER SHALL NOT HAVE THE AUTHORITY OR RESPONSIBILITY TO SUPERVISE OR DIRECT THE

GBC-9: ALL SECTIONS AND DETAILS, WHETHER EXPLICITLY CUT ON PLAN OR NOT, SHALL BE CONSIDERED TYPICAL AND SHALL APPLY AT SIMILAR CONDITIONS.

GBC-10: ADDITIONS AND ALTERATIONS TO THE EXISTING BUILDING DO NOT INCREASE THE DEMAND/CAPACITY RATIO OF ANY EXISTING STRUCTURAL LATERAL FORCE RESISTING ELEMENT BY MORE THAN 10%: THEREFORE. AN ENGINEERING EVALUATION AND ANALYSIS OF THE ALTERED EXISTING STRUCTURE IS NOT REQUIRED.

GBC-11: ASCE 7-22 HAS BEEN INCORPORATED IN ITS ENTIRETY BY THE VUSBC. ALL LOADS STATED WITHIN THESE GENERAL STRUCTURAL NOTES CONFORM TO ASCE 7-22 EDITION.

#### **EXISTING CONSTRUCTION**

EC-1: INFORMATION REGARDING STRUCTURAL MEMBERS INDICATED TO BE EXISTING WAS OBTAINED DURING LIMITED FIELD OBSERVATIONS AND FROM LIMITED AVAILABLE EXISTING DRAWINGS. ACTUAL CONDITIONS MAY DIFFER FROM THAT WHICH IS INDICATED. IF THE CONTRACTOR UNCOVERS EXISTING CONDITIONS THAT DIFFER FROM THAT WHICH IS INDICATED ON PLAN, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD OF THE DISCREPANCY IN ORDER THAT THE CONDITION MAY BE RESOLVED.

EC-2: FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO THE CONSTRUCTION AND FABRICATION OF ANY NEW STRUCTURAL MEMBERS. AT ALL LOCATIONS WHERE NEW ROOFS AND FLOORS ADJOIN EXISTING ROOFS AND FLOORS. EMPLOY A LICENSED SURVEYOR TO VERIFY EXISTING DIMENSIONS. FLOOR ELEVATIONS. AND FLOOR-TO-FLOOR HEIGHTS BEFORE ORDERING, DETAILING, FABRICATING, OR ERECTING ANY NEW STRUCTURAL MEMBERS.

EC-3: EXISTING CONSTRUCTION IS DENOTED USING SLANTED LETTERING, PHANTOM LINETYPE (DASH DOUBLE DOT), AND HALFTONE

#### SPECIAL INSPECTIONS

SI-1: SPECIAL INSPECTIONS ARE REQUIRED BY THE BUILDING CODE (CHAPTER 17). REFER TO SECTION 014000 OF THE SPECIFICATIONS FOR THE GENERAL INSPECTION REQUIREMENTS. THE FOLLOWING IS A LIST OF ITEMS THAT REQUIRE SPECIAL INSPECTION. REFER TO THE REFERENCED SPECIFICATION SECTION FOR THE SPECIFIC REQUIREMENTS FOR EACH ITEM. THE INDEPENDENT INSPECTION AGENCY, ENGAGED BY THE OWNER, SHALL REVIEW THE TEST PROCEDURES AND INSPECTIONS WITH THE STRUCTURAL ENGINEER OF RECORD. THE GENERAL CONTRACTOR, AND THE OWNER PRIOR TO CONDUCTING TESTS AND INSPECTIONS.

A. STRUCTURAL STEEL FRAMING

**SECTION 051200** 

#### SHOP DRAWING SUBMITTALS

SDS-1: THE CONTRACTOR SHALL COORDINATE THE ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING, AND ELECTRICAL REQUIREMENTS WITH THE STRUCTURAL DRAWINGS, INCLUDING THE LOCATION OF MISCELLANEOUS ITEMS AFFECTING THE STRUCTURAL WORK SUCH AS OPENINGS, BENT PLATES, INSERTS, ETC. PROMPTLY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR OMISSIONS.

SDS-2: THE CONTRACTOR SHALL VERIFY ALL FLOOR AND ROOF MOUNTED MECHANICAL EQUIPMENT DIMENSIONS AND WEIGHTS, AND VERIFY ALL ROOF OPENING SIZES AND LOCATIONS, WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND REVIEWED SHOP DRAWINGS.

SDS-3: REFER TO PROJECT MANUAL FOR SUBMITTAL REQUIREMENTS. IN THE ABSENCE OF A PROJECT MANUAL. PROVIDE (1) ELECTRONIC PDF COPY OF ALL STRUCTURAL SUBMITTALS.

SDS-4: SHOP DRAWINGS ARE TO BE REVIEWED BY THE CONTRACTOR AND SUBCONTRACTOR PRIOR TO BEING SUBMITTED FOR APPROVAL. SUBMITTED SHEETS SHALL CONTAIN THE CONTRACTOR'S SIGNED AND DATED REVIEW STAMP.

#### TEMPORARY SHORING/ BRACING SUBMITTAL

SH-1: DESIGN AND PROVIDE TEMPORARY SHORING, BRACING, AND STRUCTURAL SUPPORTS AS REQUIRED TO PRESERVE STABILITY AND PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF CONSTRUCTION AND FINISHES TO REMAIN, AND TO PREVENT UNEXPECTED OR UNCONTROLLED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED. SHORING MEMBERS SUPPORTING CONSTRUCTION TO REMAIN SHALL BE DESIGNED TO L/480 DEFLECTION CRITERIA FOR TOTAL LOAD SUPPORTED. THIS SUBMITTAL SHALL INCLUDE ANALYSIS DATA SIGNED AND SEALED BY A QUALIFIED PROFESSIONAL ENGINEER, REGISTERED IN THE JURISDICTION OF THE PROJECT, RESPONSIBLE FOR THEIR PREPARATION.

#### SHOP DRAWING SUBMITTALS

SDS-1: THE CONTRACTOR SHALL COORDINATE THE ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING. AND ELECTRICAL REQUIREMENTS WITH THE STRUCTURAL DRAWINGS, INCLUDING THE LOCATION OF MISCELLANEOUS ITEMS AFFECTING THE STRUCTURAL WORK SUCH AS OPENINGS, BENT PLATES, INSERTS, ETC. PROMPTLY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR OMISSIONS.

<u>SDS-2:</u> THE CONTRACTOR SHALL VERIFY ALL FLOOR AND ROOF MOUNTED MECHANICAL EQUIPMENT DIMENSIONS AND WEIGHTS, AND VERIFY ALL ROOF OPENING SIZES AND LOCATIONS, WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND REVIEWED SHOP DRAWINGS

SDS-3: REFER TO PROJECT MANUAL FOR SUBMITTAL REQUIREMENTS. IN THE ABSENCE OF A PROJECT MANUAL, PROVIDE (1) ELECTRONIC PDF COPY OF ALL STRUCTURAL SUBMITTALS.

SDS-4: SHOP DRAWINGS ARE TO BE REVIEWED BY THE CONTRACTOR AND SUBCONTRACTOR PRIOR TO BEING SUBMITTED FOR APPROVAL. SUBMITTED SHEETS SHALL CONTAIN THE CONTRACTOR'S SIGNED AND DATED

#### DESIGN LOADS AND PARAMETERS

*DL-1:* THE FOLLOWING DESIGN LOADS APPLY TO FRAMING MEMBERS IMPACTED BY THE SCOPE OF WORK ONLY IF THE REMAINDER OF THE EXISTINGHAS NOT BEEN ANALYZED.

DL-2: BUILDING RISK CATEGORY (TABLE 1604.5) = CATEGORY II

<u>DL-3:</u> <u>LIVE LOADS</u> (REFER TO FRAMING PLANS FOR MORE SPECIFIC LOADS)

20 PSF

ROOF LIVE LOAD REDUCTION (BY EQ 16-26 OR NOT USED)

DL-3: CONCENTRATED LIVE LOADS (OVER 2.5'X2.5' AREA):

300 POUNDS - ROOFS

**DL-4:** SNOW LOADS

RISK CATEGORY II

Pa=42 PSF (GROUND SNOW) P<sub>m. max</sub> = 35 PSF (TABLE 7.3-4) C<sub>e</sub>=1.0 (SNOW EXPOSURE FACTOR)

C<sub>t</sub>=1.0 (THERMAL FACTOR)  $P_f$  (SNOW LOAD FOR LOW-SLOPE ROOF)=0.7X( $C_e$ )X( $C_f$ )X( $P_g$ ) = 0.7X1.0X1.0X42 = 29.4 PSF RAIN-ON-SNOW SURCHARGE (LOW-SLOPE ROOFS ONLY WHERE P<sub>0</sub> ≤ 35 PSF)= 8.0 PSF

TOTAL (LOW-SLOPE ROOF) = ??.? PSF + 8.0 PSF = ??.? PSF MINIMUM  $P_m$  (LOW-SLOPE ROOF WHERE  $P_q \le P_{m, max}$ ) =  $P_q$  = ?? PSF MINIMUM  $P_m$  (LOW-SLOPE ROOF WHERE  $P_q > P_{m, max}$ ) =  $P_{m, max}$  = ?? PSF

USE ?? PSF LOW-SCOPE ROOF SNOW LOAD  $P_s=(C_s)X(P_f)$  (SLOPED ROOF SNOW LOAD) = (??)X35.0 = ?? PSF

SNOW LOAD DETERMINATION BY: ASCE 7-22 CHAPTER 7 (STRENGTH- LEVEL LOADS)

#### **DL-5**: WIND LOADS

 $V_{asd} = 98 MPH$ 

V = 127 MPH (BUILDING RISK CATEGORY: II) (BASIC WIND SPEED: 3-SECOND GUST)

EXPOSURE C K<sub>d</sub>=0.85 (WIND DIRECTIONALITY FACTOR)

K<sub>21</sub>=1.0 (TOPOGRAPHIC FACTOR) Ke=1.0 (GROUND ELEVATION FACTOR)

GCpi=±0.18 (ENCLOSED BUILDING OR PARTIALLY OPEN BUILDING) GCpi=±0.55 (PARTIALLY ENCLOSED BUILDING)

WIND LOAD DETERMINATION BY: ASCE 7-22, CHAPTERS 26, 27, 29, 30 (DIRECTIONAL PROCEDURE)

**DL-6: SEISMIC LOADS** 

l<sub>e</sub>=1.0 (ASCE 7-22 TABLE 1.5-2) SEISMIC SITE CLASS = D (DEFAULT)

 $S_s = 12.0\%g$ S₁=4.1%g

 $S_{ds}=(2/3)X(S_{ms})=11.0\%g$  $S_{d1}=(2/3)X(S_{m1})=5.8\%g$ 

SEISMIC DESIGN CATEGORY = A

ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE METHOD

 $S_{ms} = 16.0\%g$ 

 $S_{m1} = 8.8\%g$ 

STRUCTURAL HEIGHT, h<sub>n</sub> = 18.5 FT FUNDAMENTAL PERIOD, T = 8 SEC SEISMIC RESPONSE COEFFICIENT, C<sub>s</sub> = 0.01

#### DL-8: ICE LOADS

ICE DENSITY= 56 pcf (ASCE 7-22, SECTION 10.4) t=0.60" (NOMINAL ICE THICKNESS AT 33' HT, ASCE 7-22 Fig 10.4-2)

CONCURRENT TEMPERATURE = 15 DEGREES F

GUST SPEED = 30 MPH Z=30' (HT ABOVE GROUND)

 $f_z = (Z/33)^{0.10}$  (HT FACTOR, ASCE 7-22 EQ 10.4-4) =  $(18.5/33)^{0.10} = 0.94$ K<sub>zt</sub>=1.0 (TOPOGRAPHIC FACTOR, ASCE 7-22 CH. 26)

 $t_{d}=(t)(f_{7})(K_{7})^{0.35}$  (DESIGN ICE THICKNESS, ASCE 7-22 EQ 10.4-5) = (0.60") (1.0) (0.94) (1.0)<sup>0.35</sup> = 0.566" WEIGHT OF ICE = 0.60"/12 X 56 PCF = 33.6 PSF SURFACE AREA

#### STRUCTURAL STEEL

SS-1: ALL STRUCTURAL STEEL AND ARCHITECTURALLY EXPOSED STRUCTURAL STEEL WORK SHALL CONFORM TO THE REQUIREMENTS OF AISC 360-16 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS". BOLTED CONNECTIONS SHALL BE FULLY PRETENSIONED UNLESS NOTED OTHERWISE ON PLAN. REFER TO DRAWINGS FOR CONNECTIONS. IF CONNECTIONS ARE NOT SHOWN. FABRICATOR SHALL DESIGN CONNECTIONS FOR BEAM UNIFORMLY LOADED TO CAPACITY.

ASTM A992 (W-SHAPES, WT-SHAPES AND CHANNELS)

 $F_v = 50 \text{ KSI}$ ASTM A500 GRADE C (SQUARE AND RECTANGULAR HSS SHAPES)  $F_v = 50 \text{ KSI}$  $F_{v} = 50 \text{ KSI}$ ASTM A572 GRADE 50 (ANGLES AND PLATE)

ASTM A36 (OTHER ROLLED STRUCTURAL SHAPES NOT INDICATED ABOVE) E70XX (SMAW PROCESS WELDING)

ASTM F3125 GRADE A325-N (BOLTS)

ASTM F3125 GRADE A490-N (BOLTS) ASTM F3125 GRADE F1852 (TENSION-CONTROL BOLTS A325 EQUIVALENT)

ASTM F3125 GRADE F2280 (TENSION-CONTROL BOLTS A490 EQUIVALENT) ASTM A563 (HEAVY HEX NUT)

ASTM F436 (HARDENED STEEL WASHER) ASTM A108 GRADE B (HEADED SHEAR STUDS)

SS-2: UNLESS NOTED OTHERWISE, BOLT SIZES INDICATED FOR CONNECTIONS ON PLANS, SECTIONS, AND DETAILS SHALL BE OF THE FOLLOWING GRADE AND TYPE.

 $F_{v} = 36 \text{ KSI}$ 

3/4" DIAMETER = ASTM F3125 GRADE F1852 (TENSION-CONTROL) 1" DIAMETER = ASTM F3125 GRADE F2280 (TENSION-CONTROL)

1 1/4" DIAMETER = ASTM F3125 GRADE F2280 (TENSION-CONTROL)

SS-3: DETAILING AND ERECTION OF STRUCTURAL STEEL SHALL COMPLY WITH CURRENT OSHA STANDARDS FOR THE CONSTRUCTION INDUSTRY-SUBPART R - STEEL ERECTION.

SS-4: CONTRACTOR SHALL PROVIDE FIELD CURED SAMPLES OF CAST-IN-PLACE CONCRETE IN FOOTINGS, PIERS, AND WALLS AND PRISMS OF MASONRY PIERS AND WALLS IN ACCORDANCE WITH OSHA SECTION 1926.752 TO DETERMINE THAT CONCRETE AND MASONRY HAVE ACHIEVED A MINIMUM OF 75% OF DESIGN STRENGTH PRIOR TO THE COMMENCEMENT OF STEEL ERECTION.

SS-5: WHERE SLIP-CRITICAL CONNECTIONS OR FULLY PRETENSIONED BOLTS ARE REQUIRED, USE TENSION CONTROL BOLTS (TWIST-OFF STYLE).

SS-6: ALL FIELD WELDING TO EXISTING STRUCTURAL STEEL SHALL COMPLY WITH AISC AND AWS D1.1 FOR WELDING PROCEDURES TO EXISTING STEEL. EXISTING STEEL SHALL BE PROPERLY PRE-HEATED AND ALLOWED TO COOL DOWN BETWEEN PASSES TO LIMIT STEEL BEAM DISTORTION. ALL UNDERCUTS, NOTCHES, AND GOUGES SHALL BE FILLED AND GROUND OUT. ALL EXISTING STEEL SHALL BE CLEANED TO REMOVE ALL RUST, FIREPROOFING. PAINT OR CONTAMINANTS TO EXPOSE BARE METALS FOR A DISTANCE OF 2 INCHES FROM EACH SIDE OF WELD. EXISTING STEEL BEAMS SHALL BE TEMPORARILY SHORED AS REQUIRED DURING FIELD WELDING

#### STRUCTURAL MASONRY

M-1: ALL MASONRY WORK SHALL CONFORM TO THE REQUIREMENTS OF TMS 402/602-16 "BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES."

ASTM C476 (GROUT) - 2000 PSI MINIMUM COMPRESSIVE STRENGTH

M-2: GROUT SLUMP SHALL BE 8" TO 11". PLACE GROUT PER TMS 602 SECTION 3.5 AND CONSOLIDATE BY VIBRATION. RECONSOLIDATE BY VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED.

M-3: AFTER STEEL ERECTION IS COMPLETE, FILL ALL POCKETS AT BEARING OF JOISTS AND BEAMS SOLID WITH MASONRY. BUILD TIGHT TO STEEL MEMBER.

5 6 7

#### POST-INSTALLED ANCHORS

**GENERAL STRUCTURAL NOTES** 

PA-1: ALL POST-INSTALLED ANCHORS (IN CONCRETE OR CMU) ARE TO BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS (INCLUDING BUT NOT LIMITED TO DRILL BIT SIZE, PROPER CLEANING OF HOLES, INSTALLATION TORQUE, AND TEMPERATURE CONSTRAINTS).

PA-2: WHEN A SPECIFIC PRODUCT AND MANUFACTURER IS REFERENCED IN THE CONTRACT DOCUMENTS, THAT SPECIFIC PRODUCT SHALL BE USED UNLESS AN ALTERNATE PRODUCT IS APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CODE COMPLIANT STRENGTH DESIGN CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT, SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC - ES REPORT SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION

PA-3: THE ANCHOR MANUFACTURER'S REPRESENTATIVE SHALL BE PRESENT DURING THE INITIAL INSTALLATION OF EACH TYPE OF ANCHOR TO REVIEW AND APPROVE OF THE CONTRACTOR'S INSTALLATION PROCEDURES. THE OWNER'S TESTING AGENCY SHALL ALSO OBSERVE THE INITIAL INSTALLATION OF EACH ANCHOR TYPE. AND PROVIDE THE INSPECTION OF ANCHORS DURING INSTALLATION TO VERIFY CONFORMANCE WITH THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS. SUBMIT REPORT FROM MANUFACTURER'S REPRESENTATIVE FOR DUNBAR REVIEW. INSTALLATION OF ALL HORIZONTAL OR UPWARDLY INCLINED ADHESIVE ANCHORS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM OR APPROVED EQUIVALENT. SUBMIT CREDENTIALS OF CERTIFIED INSTALLERS. CONTINUOUS INSPECTION IS REQUIRED FOR ALL HORIZONTAL OR UPWARDLY INCLINED ADHESIVE ANCHORS. REMOVE AND REPLACE MISPLACED OR MALFUNCTIONING ANCHORS. FILL EMPTY ANCHOR HOLES AND PATCH FAILED ANCHOR LOCATIONS WITH HIGH-STRENGTH, NONMETALLIC GROUT.

PA-4: FASTENERS REFERRED TO AS "SCREW ANCHOR" ON THE DRAWINGS SHALL BE ONE OF:

TITEN HD BY SIMPSON STRONG-TIE

KWIK HUS-EZ (KH-EZ) BY HILTI SCREW-BOLT+ BY DEWALT

TEMPERATURE.

FOR THESE SCREW ANCHORS LISTED, USE STANDARD ANSI DRILL BIT (NO SPECIAL BIT REQUIRED). PROVIDE HOLES IN STEEL MEMBERS 1/8" LARGER THAN NOMINAL DIAMETER OF ANCHOR. PROVIDE STD ZINC-PLATED CARBON STEEL ANCHOR UNLESS MECHANICAL GALVANIZED FINISH OR STAINLESS STEEL ANCHOR IS INDICATED ON DRAWINGS.

PA-5: CHEMICAL ADHESIVE ANCHORING SYSTEMS USED IN HOLLOW MASONRY GENERICALLY REFERRED TO AS ADHESIVE ANCHORING SYSTEMS SHALL BE ONE OF:

HIT-HY 270 BY HILTI SET-3G SYSTEM BY SIMPSON STRONG-TIE

AC100+ GOLD BY DEWALT USE SCREEN TUBES BY THE SAME MANUFACTURER WHEN USING THESE ADHESIVES IN MASONRY WITH VOIDS OR

PA-6: CHEMICAL ADHESIVE ANCHORING SYSTEMS USED IN SOLID OR GROUTED MASONRY GENERICALLY REFERRED TO AS ADHESIVE ANCHORING SYSTEMS SHALL BE ONE OF:

SET-3G BY SIMPSON STRONG TIE

HIT-HY 270 BY HILTI AC100+ GOLD BY DEWALT

PA-7: CHEMICAL ADHESIVE ANCHORING SYSTEMS USED IN CONCRETE GENERICALLY REFERRED TO AS "ADHESIVE ANCHORS" SHALL BE ONE OF:

SET - 3G BY SIMPSON STRONG-TIE

HIT-RE 500-V3 BY HILTI HIT-HY 200-V3 BY HILTI

PURE 220+ BY DEWALT AC 200+ BY DEWALT

KWIK-X BY HILTI

THREADED ROD ANCHORS USED WITH THESE SYSTEMS SHALL BE PROVIDED BY THE ADHESIVE MANUFACTURER AND HAVE A MINIMUM STEEL STRENGTH OF  $F_v$  = 36 KSI UNLESS NOTED OTHERWISE.

PA-8: CHEMICAL ADHESIVE ANCHOR SYSTEMS FOR USE WITH REINF STEEL IN CONCRETE SHALL BE ONE OF:

SET-3G BY SIMPSON STRONG-TIE HIT-RE 500-V3 BY HILTI

PURE 220+ BY DEWALT HIT-FP 700R BY HILTI (AT FIRE-RATED CONSTRUCTION ONLY)

UNLESS NOTED OTHERWISE, REINFORCING STEEL USED WITH THESE SYSTEMS SHALL BE ASTM A615 GRADE 60.

PA-9: FASTENERS GENERICALLY REFERRED TO AS "CONCRETE/MASONRY SCREWS" SHALL BE ONE OF:

TITEN TURBO BY SIMPSON STRONG-TIE KWIK-CON II+ BY HILTI

ULTRACON+ BY DEWALT

PA-10: ANCHORS OR REINFORCING STEEL SHALL BE INSTALLED ONLY IN DRY CONCRETE A MINIMUM OF 21 DAYS

OLD. DRILL AND INSTALL BY ONE OF THE FOLLOWING METHODS: USE ONLY A CARBIDE BIT (NO CORE DRILLING) AND CLEAN HOLE FOLLOWING MANUFACTURER'S INSTRUCTIONS USING AIR COMPRESSOR WITH NOZZLE AND WIRE BRUSH PROVIDED BY ADHESIVE

USE HOLLOW DRILL BIT SYSTEM WITH ACCOMPANYING VACUUM PROVIDED BY THE ADHESIVE

FOR ADHESIVE ANCHORS. OVERHEAD HOLES AND ANY HOLES GREATER THAN 10 INCHES DEEP REQUIRE THE USE OF A PISTON PLUG AT THE END OF THE ADHESIVE APPLICATOR. USE ADHESIVE RETAINING CAP AT OVERHEAD

ADHESIVE ANCHORS RANGING IN ORIENTATION FROM HORIZONTAL TO VERTICALLY OVERHEAD SHALL BE INSTALLED BY AN ADHESIVE ANCHOR INSTALLER (AAI) WHO IS CERTIFIED THROUGH ACI/CRSI (ACI 318-19 SECTION 17.2.3). SUBMIT CURRENT CERTIFICATION TO THE ARCHITECT FOR REVIEW PRIOR TO COMMENCEMENT OF INSTALLATION.

PA-11: OTHER MANUFACTURER'S PRODUCTS MAY BE SUBMITTED AS A FORMAL REQUEST FOR SUBSTITUTION IF REQUIREMENTS ABOVE ARE MET. SIZES AND EMBEDMENTS OF SUBSTITUTE ANCHORS SHALL BE INCREASED AS NECESSARY TO ACHIEVE SHEAR AND TENSION VALUES PUBLISHED FOR LISTED ANCHORS. CONTRACTOR SHALL SUBMIT A COMPLETE SUBSTITUTION LIST FOR ALL ANCHOR SIZES AND SUBSTRATES. DUE TO HIGH VARIABILITY BETWEEN NOMINAL SIZES AND ACTUAL SIZES OF SCREW ANCHORS (AND HOLES REQUIRED), THIS SUBSTITUTION REQUEST SHALL BE SUBMITTED PRIOR TO STEEL SHOP DRAWINGS. ANY PRODUCTS SUBMITTED AS A REQUEST FOR SUBSTITUTION IN CONCRETE SHALL BE COMPLIANT WITH ACI 318-14 CHAPTER 17 AND APPROVED FOR USE IN CRACKED CONCRETE. PROPOSED SUBSTITUTE PRODUCTS SHALL HAVE AN ICC-ES REPORT WHICH CONSIDERS EQUIVALENT EDGE AND SPACING REQUIREMENTS AS THE SPECIFIED PRODUCTS.

#### **FOUNDATIONS**

F-1: FOUNDATIONS FOR THIS STRUCTURE ARE SPREAD FOOTINGS BEARING ON EITHER VIRGIN SOIL OR CONTROLLED COMPACTED FILL WITH AN ASSUMED SOIL BEARING CAPACITY OF 1500 PSF IN ACCORDANCE WITH VCC SECTION 1806.2.

F-2: THE OWNER'S GEOTECHNICAL ENGINEER SHALL VERIFY, PRIOR TO POURING CONCRETE, THAT THE SOIL IS  $\overline{\mathsf{CAPABLE}}$  OF SUPPORTING SUCH A LOAD AND IS CONSISTENT WITH THE GEOTECHNICAL REPORT.

#### CONCRETE

-1: ALL CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301-20 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 318-19 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"

CONCRETE CATEGORY	PROJECT LOCATION	EXPOSURE CLASSES	CONC WT	MIN F'c (PSI)	MAX W/CM RATIO	AIR CONTENT
A1	INTERIOR FDNS	F0, S0, W1, C1	NW	3000	NA	<u>≤</u> 3.0%
				·		· ·

C | INTERIOR SOG | F0, S0, W0, C0 | NW | 3500 | NA |  $\leq 3.0\%$ C-2: STEEL REINFORCING OF CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS.

ASTM A615 GRADE 60 (TYPICAL REINFORCING STEEL)

ASTM A1064 (PLAIN WELDED WIRE FABRIC - USE FLAT SHEETS ONLY) C-3: REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND EXTENT OF DEPRESSIONS FOR SPECIAL FLOOR

C-4: REFER TO SPECIFICATIONS FOR FINISHES.

8

#### **ABBREVIATIONS**

AB = ANCHOR BOLT JT = JOINT LBS = POUNDS AFF = ABOVE FINISHED FLOOR APC = ARCHITECTURAL PRECAST CONCRETE ARCH = ARCHITECTURAL BLDG = BUILDING BM = BEAM BOT = BOTTOM LL = LIVE LOAD BRG = BEARING

CANT = CANTILEVER CFS-S = COLD-FORMED STEEL- STRUCTURAL CFS-NS = COLD-FORMED STEEL- NON STRUCTURAL CFST = COLD-FORMED STEEL TRUSS CIP = CAST-IN-PLACE CJ = CONTROL JOINT

= CENTERLINE CLG = CEILING CLR = CLEAR CLSM = CONTROLLED LOW-STRENGTH MATERIAL = CONCRETE MASONRY UNIT

COL = COLUMN CONC = CONCRETE CONN = CONNECTION CONT = CONTINUOUS COORD = COORDINATE = CONCRETE SURFACE PROFILE = DEFORMED BAR ANCHOR DET = DETAIL

DFT = DRY FILM THICKNESS DIA = DIAMETER DIAG = DIAGONAL DIM = DIMENSION DL = DEAD LOAD DN = DOWNDWGS = DRAWINGS = EACH

= EXPANSION JOINT = ELEVATION ELEV = ELEVATOR EOS = EDGE OF SLAB EQ = EQUALEQUIP = EQUIPMENT EXIST = EXISTING = EACH WAY EW = EXPANSION EXP = EXTERIOR

HOLLOW CMU. INSTALL USING DRILL IN ROTATION-ONLY MODE TO KEEP FROM DAMAGING INSIDE OF FACE SHELL. = FINISHED FLOOR ELEVATION FLR = FLOOR FLT = FLAT BAR FRT = FIRE RETARDANT TREATED FTG = FOOTING = GAUGE GALV = GALVANIZED = GENERAL CONTRACTOR = GIRDER TRUSS

= HOOK HORIZ = HORIZONTA = HIGH STRENGT = HEIGHT INT = INTERIOR

LD = TENSION DEVELOPMENT LENGTH OF STRIAGHT REBAR LDH = TENSION DEVELOPMENT LENGTH OF HOOKED REBAR LLH = LONG LEG HORIZONTAL LLV = LONG LEG VERTICAL LSH = LONG SIDE HORIZONTAL

LSV = LONG SIDE VERTICAL LTS = TENSION LAP SPLICES LENGTH OF RFRAR LVL = LAMINATED VENEER LUMBER LW = LIGHT WEIGHT MAS = MASONRY MAX = MAXIMUMMECH = MECHANICAL

MFR = MANUFACTURE MISC = MISCELLANEOUS MIN = MINIMUM [NC] = NON-COMPOSITE = NUMBER NIC = NOT IN CONTRACT NTS = NOT TO SCALE NW = NORMAL WEIGHT OC = ON CENTER OPP = OPPOSITE OH = OPPOSITE HAND

OWSJ = OPEN WEB STEEL JOIST PAF = POWDER ACTUATED FASTENER PL = PLATE PLF = POUNDS PER LINEAR FOOT POJ = PLANE OF JOIST PSF = POUNDS PER SQUARE FOOT PSI = POUNDS PER SQUARE INCH REF = REFERENCE

REINF = REINFORCING REQD = REQUIREDSECT = SECTION SIM = SIMILAR SOG = SLAB-ON-GROUND SOMD = SLAB-ON-METAL DECK SPA = SPACE STD = STANDARD STIFF = STIFFENER TBE = TRUSS BEARING ELEVATION T&B = TOP AND BOTTOM T&G = TONGUE AND GROOVE TOB = TOP OF BEAM

TOS = TOP OF STEEL TYP = TYPICAL UNO = UNLESS NOTED OTHERWISE VERT = VERTICAL WCJ = WALL CONTROL JOINT WT = WEIGHT WWF = WELDED WIRE FABRIC

(H) = HIGH

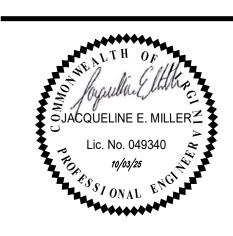
TOC = TOP OF CONCRETE

1840 WEST BROAD STREET SUITE 400 RICHMOND, VA 23220

v 804.788.4774

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CAMPUS FOR STUDENT **SUCCESS -MULTIPURPOSE ROOM** NEWPORT NEWS PUBLIC **SCHOOLS** 

746 ADAMS DRIVE, NEWPORT NEWS,

VIRGINIA 23061

No. Date Description

PROJECT MANAGER:

QEA No.52406380 ISSUED FOR BID OCTOBER 1, 2025

**GENERAL** STRUCTURAL NOTES

4" SLAB ON GRADE

FD-1: TYPICAL SLAB-ON-GROUND SHALL BE 4" NORMAL WEIGHT CONCRETE WITH 6X6-W1.4XW1.4 WWF AT MID-DEPTH, OVER VAPOR BARRIER, OVER 4" POROUS FILL.

FD-2: REFER TO DRAWING S201 FOR TYPICAL FOUNDATION DETAILS.

<u>FD-3:</u> TOP OF SLAB ELEVATION INDICATED THUS <u>-X'-XX"</u> RELATIVE TO TYPICAL EXISTING FIRST FLOOR

<u>FD-4:</u> FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO THE CONSTRUCTION AND FABRICATION OF ANY NEW STRUCTURAL MEMBERS.

SECTION 3/4" = 1'-0" S101 S101

SECTION S101 S101 3/4" = 1'-0"

—8" СМU ---WALL FOOTING

12" OWSJ AT 4'-0" OC +/-SET BM ON TOP OF COL EA END + W14X38 ( +17'-3" ) 1'-3" CANT, MAX COORDINATE WITH TYP 2 LOCATIONS TYP 2 LOCATIONS 3400 LB W24X62 (FIELD SPLICE) **ROOF FRAMING PLAN** T------1/8"=1'-0" Reference drawing \$201 for typical roof construction details. R-2: REFER TO ARCHITECTURAL DRAWINGS AND MECHANICAL DRAWINGS FOR DIMENSIONS FOR MECHANICAL AND OTHER

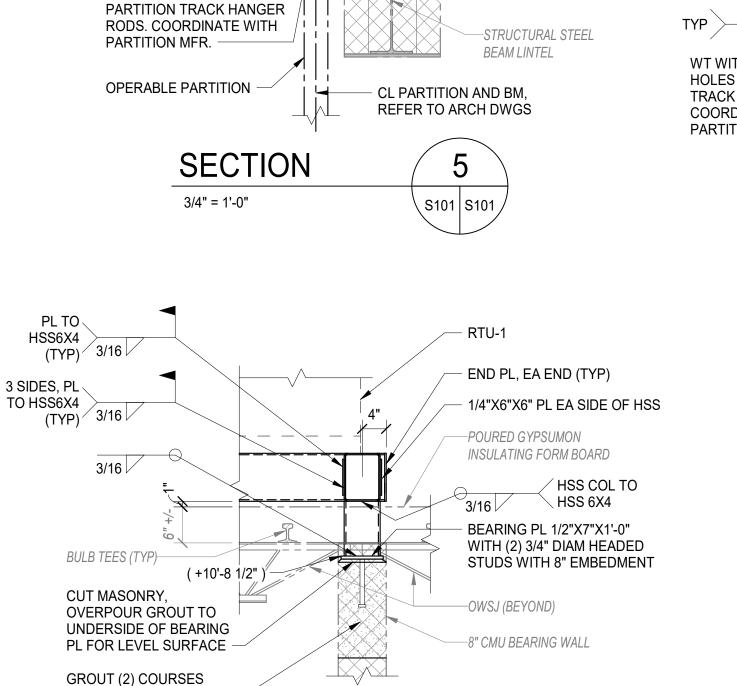
PENETRATIONS THROUGH ROOF AND/OR CEILING. R-3: PROVIDE THE FOLLOWING STEEL FRAMING CONNECTIONS. 'CP' INDICATES BEAM BEARS ON TOP OF COLUMN PLATE. 'ST' INDICATES 3/8" SHEAR TAB CONN WITH 3/4" DIA BOLTS.

USE SINGLE SHEAR TAB CONNECTION (ST) TO HSS COLUMN UNLESS NOTED OTHERWISE.

<u>R-4:</u> REFER TO S201 FOR LINTEL SCHEDULE AND FOR CONNECTION DETAILS AT MULTI-PLY STUD POSTS AND MULTI-PLY HEADERS/LINTELS.

<u>R-5:</u> PROVIDE STEEL ANGLE FRAMES AT ALL ROOF OPENINGS, INCLUDING THOSE FOR ROOF DRAINS AND ROOF OVERFLOW DRAINS. REFER TO ARCHITECTURAL ROOF PLAN FOR LOCATIONS. REFER TO S--- FOR TYPICAL DETAIL OF FRAME.  $\underline{R-6:}$  FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO THE CONSTRUCTION AND FABRICATION OF ANY NEW STRUCTURAL MEMBERS.

R-7: DO NOT CUT BULB TEES. INVESTIGATE LOCATION OF BULB TEES PRIOR TO CUTTING HOLES IN ROOF.



\ S101 | S101

POURED GYPSUM ON INSULATING FORM BOARD BULB TEES (TYP) L3X3X1/4 -HSS3X3X1/4 -\_\_\_\_12" CMU COORD W PARTITION MFR COORD W WT WITH PRE-DRILLED PARTITION MFR HOLES FOR PARTITION TRACK HANGER RODS. COORDINATE WITH PARTITION MFR. (TYP) -**SECTION** \S101 S101 3/4" = 1'-0"

1/2" FULL HT STIFFENER —

BEARING PL 3/4"X1'-2"X1'-6"

WITH (4) 3/4" DIAM HEADED

STUDS WITH 8" EMBEDMENT

OVERPOUR GROUT TO

GROUT (2) COURSES

3/4" = 1'-0"

SOLID (2'-0" WIDE) -

UNDERSIDE OF BEARING

PL FOR LEVEL SURFACE -

—POURED GYPSUM ON

24" OPEN WEB STEEL

S101 S101

OPERABLE PARTITION

—POURED GYPSUM ON

BULB TEES (TYP)

INSULATING FORM BOARD

ROOF JOIST (TYP)----

3 SIDES,

L2X2X1/4 @ 6'-0" OC

EA SIDE OF BEAM —

W24 BEAM WITH

PARTITION TRACK

COORDINATE WITH

PARTITION MFR. ——

**SECTION** 

3/4" = 1'-0"

HANGER RODS.

PRE-DRILLED

**HOLES FOR** 

OWSJ----

CONT L5X5X5/16

BTWN JOISTS -

SOLID (2'-0" WIDE) -

**SECTION** 

3/4" = 1'-0"

L2X2X1/4 AT 8'-0" OC,

W14 BEAM WITH PRE-

DRILLED HOLES FOR

INSULATING FORM BOARD

- L3x3 EA SIDE OF

1/4" PL EA SIDE

OF BM AT EA L2

BM AT EA L2

—BULB TEES (TYP)

—POURED GYPSUM ON

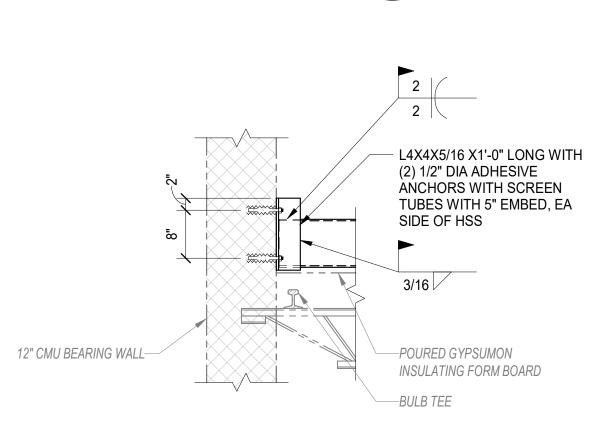
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1'-7 1/4" +/-

S101 S101

INSULATING FORM BOARD

CMU PILASTER



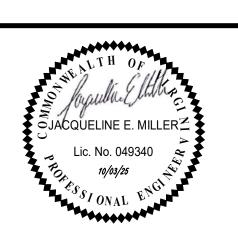
SECTION 8 3/4" = 1'-0" S101 S101

KEY PLAN:

1840 WEST BROAD STREET SUITE 400 RICHMOND, VA 23220 v 804.788.4774

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**CAMPUS FOR STUDENT SUCCESS** -**MULTIPURPOSE ROOM NEWPORT NEWS PUBLIC SCHOOLS** 

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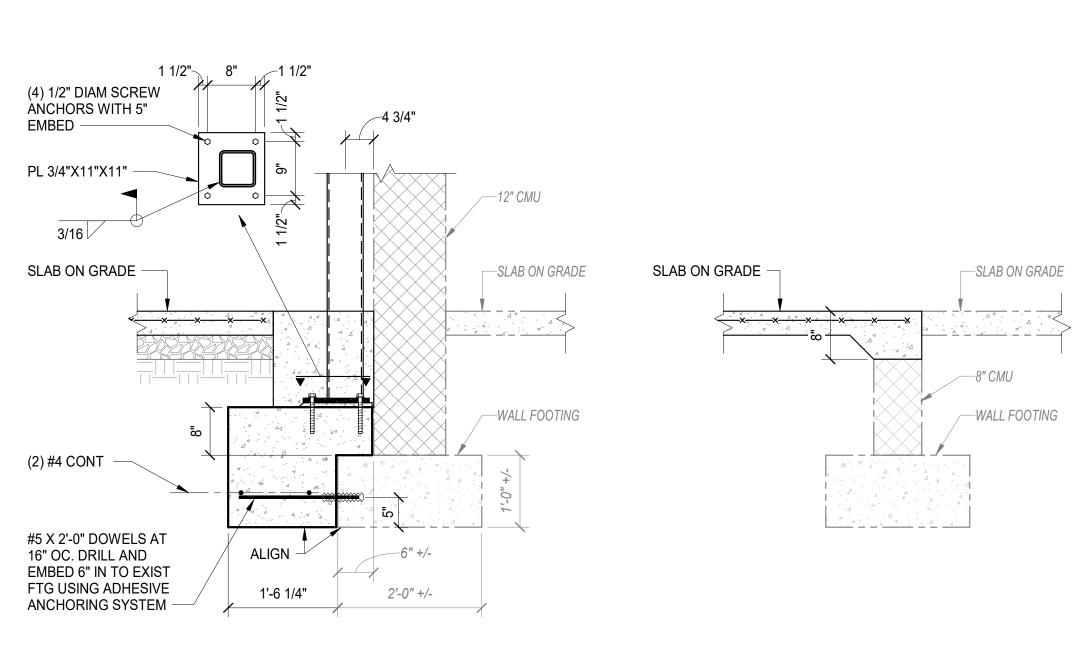
PROJECT MANAGER: JSD

QEA No.52406380

**ISSUED FOR BID** OCTOBER 1, 2025

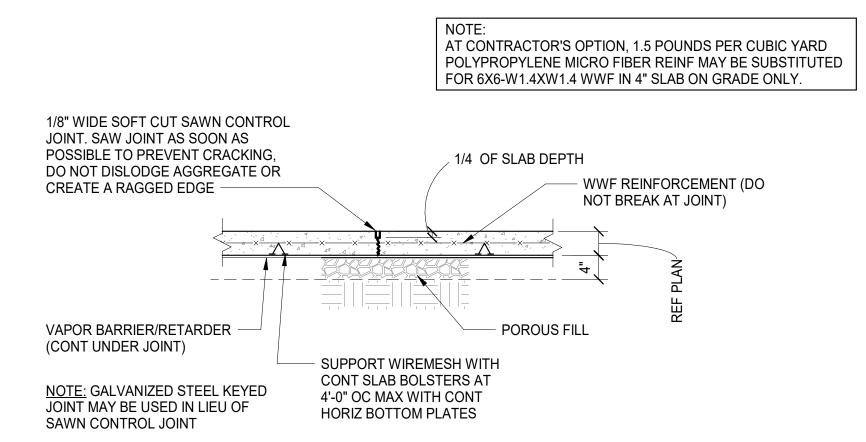
STRUCTURAL PLANS AND SECTIONS

**S101** 

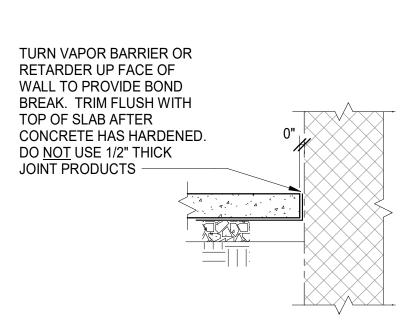


### TYPICAL DIAMOND SLAB JOINT AT COLUMNS

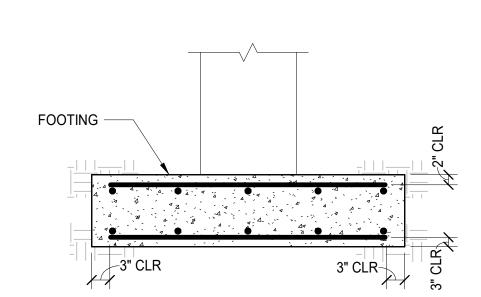
NO SCALE



## TYPICAL SLAB-ON-GROUND AND CONTROL JOINT DETAIL



# TYPICAL BOND BREAK AT SLAB-ON-GROUND 3/4"=1'-0"



TYPICAL CONCRETE COVER/CLEAR AT FOOTINGS

3/4"=1'-0"

MININ	MUM BOLTIN	IG SCHEDULE
BEAM SIZE	# OF BOLTS IN SINGLE SHEAR CONN	# OF BOLT ROWS IN DOUBLE ANGLE CONN
W8	2	2
W10	2	2
W12	3	3
W14	3	3
W16	4	4
W18	5	4
W21	6	5
W24	7	5
W27	8	6
W30	9	6
W33	10	7
W36	10	8
W40	11	9
W44	12	10

NOTES:

I. REFER TO FRAMING PLAN NOTES FOR INSTRUCTIONS REGARDING LOCATIONS WHERE CONNECTION TYPES ARE TO BE APPLIED.

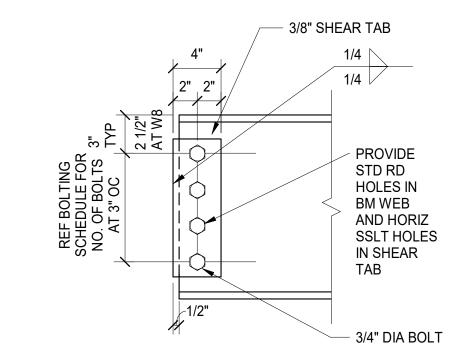
PROVIDE PLATE AND ANGLE CONNECTION MATERIAL MEETING ASTM A572 GRADE 50 KSI STANDARD.

AT HEAVY SHEAR TAB (HST) CONNECTION AND SKEWED BENT PLATE (BPL) CONN, PROVIDE 1" DIA ASTM F3125 GRADE F2280 (TENSION-CONTROL) BOLTS.
 PROVIDE 3/4" DIA ASTM F3125 GRADE F1852 (TENSION-CONTROL) BOLTS AT ALL OTHER CONNECTION TYPES UNO.

PROVIDE ASTM F436 WASHERS AT ALL BOLTS.
 REFER TO INDIVIDUAL CONNECTION DETAILS FOR CORRECT LOCATIONS OF STANDARD ROUND HOLES VERSUS SHORT HORIZONTAL SLOTTED HOLES.
 WHERE SLIP-CRITICAL CONNECTIONS ARE INDICATED ELSEWHERE IN PROJECT-SPECIFIC SECTIONS

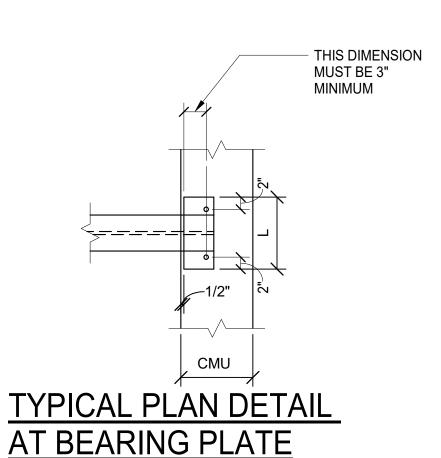
AND DETAILS, PROVIDE CLASS A FAYING SURFACES.

8. AT PLANE-OF-JOIST (POJ) BEAM CONNECTION TO GIRDER, PROVIDE DOUBLE ANGLE (DA) CONNECTION IN LIEU OF SHEAR TAB (ST) CONNECTION. PROVIDE MAXIMUM NUMBER OF BOLT ROWS AT 3" +/- OC SPACING THAT WILL FIT WITHIN THE REMAINING BEAM WEB.

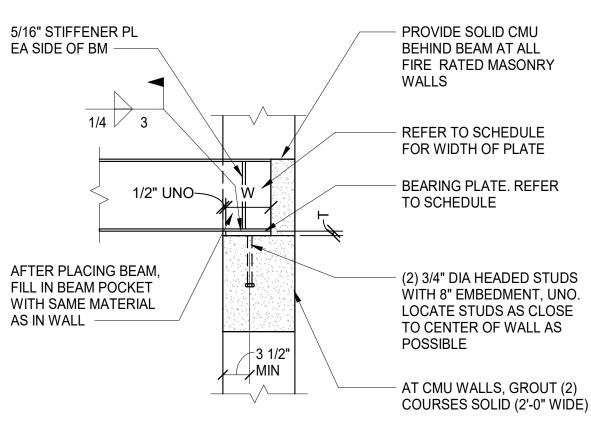


#### TYPICAL SHEAR TAB CONNECTION (ST)

DETAIL APPLIES AT WIDE FLANGE BEAM CONNECTIONS TO HSS COLUMNS AND OTHER WIDE FLANGE BEAMS OR GIRDERS.
REFER TO MINIMUM BOLTING SCHEDULE FOR REQUIRED NUMBER OF BOLTS



1 1/2"=1'-0"

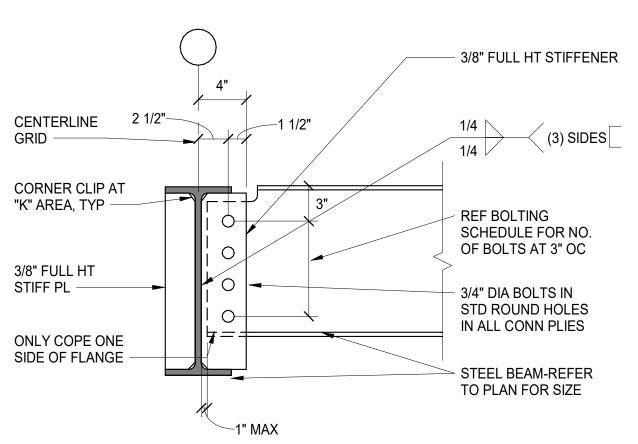


## TYPICAL SECTION AT BEARING PLATE WITH HEADED STUDS

NOTE: DO NOT WELD BEAM UNTIL FINAL STRUCTURAL FRAME ALIGNMENT IS COMPLETE IN THE AFFECTED AREA

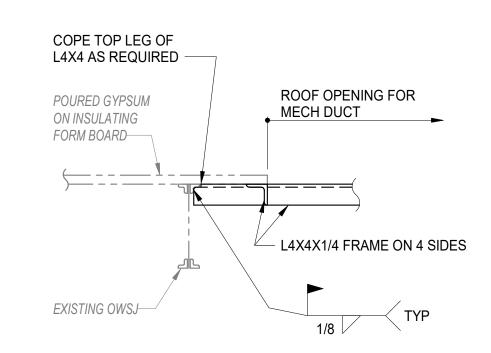
3/4"= 1'-0"

STEEL BEAM BEARING PLATE SCHEDULE										
MARK	SIZE (TXWXL)	COMMENTS								
BP-A	PL3/4X7X1'-2"									



# TYPICAL FULL HT STIFFENER PLATE CONNECTION (SP) 11/2"=1'-0"

USE WHERE 'SP' CONNECTION TYPE INDICATED ON PLAN. REFER TO MINIMUM BOLTING SCHEDULE FOR REQUIRED NUMBER OF



TYPICAL FRAMING AT NEW ROOF OPENING FOR MECH DUCT

LINTEL SCHEDULE

**CONFIGURATION** 

12" CMU

<u>MARK</u>

**DESCRIPTION** 

12" WIDE X 8" DEEP CMU BOND

BEAM WITH (2) #5 BOTTOM

12" WIDE X 16" DEEP CMU

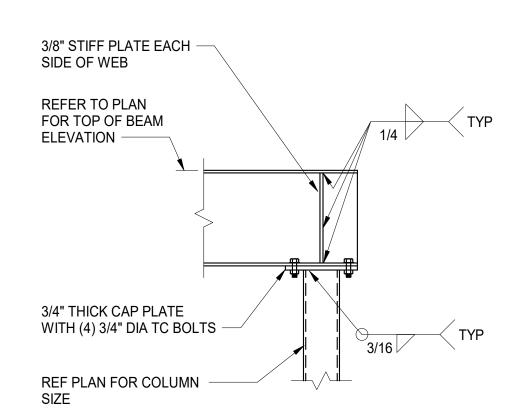
AND BOTTOM

BOND BEAM WITH (2) #5 TOP

**LOCATION** 

WHERE INDICATED

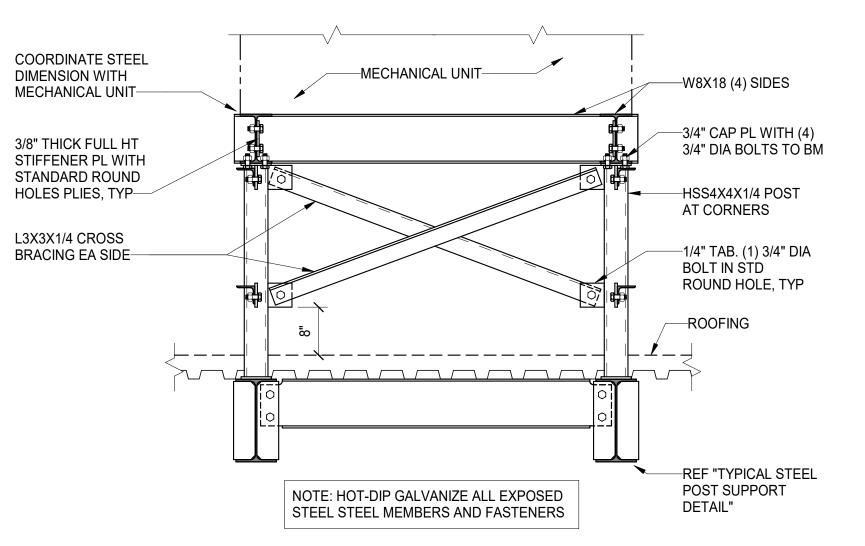
WHERE INDICATED.



TYPICAL BEAM TO TOP OF COLUMN CONNECTION AND BEAM SPLICE DETAIL

### LINTEL SCHEDULE

- REINFORCING BARS IN CMU BOND BEAMS SHALL BE ASTM A615 GRADE 60.
- 2. FILL ALL BOND BEAMS WITH f'c AT 28 DAY, 2000 PSI MINIMUM PORTLAND CEMENT GROUT. SHORE BOND BEAMS UNTIL GROUT HAS CURED.
- 3. BEAR ALL CMU BOND BEAMS AND STEEL LINTELS 8" ON SOLID MASONRY EACH END UNLESS NOTED OTHERWISE.
- 4. FOR LINTELS NOT INDICATED USE A SIMILAR LINTEL TYPE INDICATED ABOVE FOR THE SIMILAR WALL TYPE AND SPAN LENGTH.
- 5. LINTELS ARE REQUIRED OVER ELECTRICAL PANEL BOARDS OR ANY RECESSED CABINETS WITH PIPES OR CONDUIT RISING VERTICALLY. INSTALL THE LINTEL A MINIMUM OF 8" (1 FULL BLOCK COURSE) ABOVE THE CEILING.
- REFER TO SPECIFICATION FOR LINTELS IN NON- BEARING STEEL STUD WALLS.
- 7. SHORE EXISTING WALLS AS REQD WHERE NEW LINTELS ARE TO BE INSTALLED WITHIN EXISTING WALLS.
- 8. ALL TRADES CUTTING HOLES IN NEW OR EXISTING CMU WALLS SHALL COORDINATE THEIR WORK WITH THE MASON SO THAT AN APPROPRIATE LINTEL MAY BE PROVIDED AT THE OPENING. AT LOCATIONS ABOVE CEILINGS, PRECAST CMU OR PRECAST CONCRETE LINTELS MAY BE SUBSTITUTED FOR BOND BEAM LINTELS INDICATED SO LONG AS THE SAME UNIT SIZE AND REINFORCING STEEL IS PROVIDED.



TYPICAL ELEVATED

MECHANICAL UNIT SUPPORT 
ALTERNATE

NOT TO SCALE

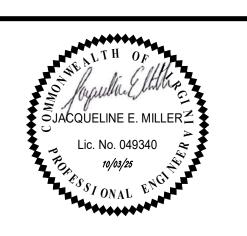
QUINN EVANS

> 1840 WEST BROAD STREET SUITE 400 RICHMOND, VA 23220 v 804.788.4774

QUINNEVANS.COM

DUNBAR

1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 2407-23



CAMPUS FOR STUDENT SUCCESS -MULTIPURPOSE ROOM NEWPORT NEWS PUBLIC SCHOOLS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23061

No. Date Description

PROJECT MANAGER: DRAWN BY:

JSD JEM

QEA No.52406380

TYPICAL DETAILS

OCTOBER 1, 2025

**S201** 

WHERE PIPING IS INDICATED TO BE REMOVED, IT SHALL MEAN COMPLETE REMOVAL OF PIPING, INCLUDING VALVES, FITTINGS, INSULATION, SUPPORTS, HANGERS, BRACKETS, CONTROLS AND INCIDENTAL ITEMS CONNECTED OR FASTENED TO THE PIPING. PIPING IS DIAGRAMMATIC AND INDICATES THE GENERAL EXTENT OF WORK. NO ATTEMPT IS MADE TO SHOW EVERY ELL, TEE, OFFSET, FITTING AND VALVE. REMOVE PIPING AS INDICATED AND SPECIFIED.

WHERE <u>DUCTWORK</u> IS INDICATED TO BE REMOVED, IT SHALL MEAN COMPLETE REMOVAL OF DUCTWORK, INCLUDING FITTINGS, INSULATION, SUPPORTS, BRACKETS, CONTROLS AND INCIDENTAL ITEMS CONNECTED OR FASTENED TO THE DUCTWORK. DUCTWORK IS DIAGRAMMATIC AND INDICATES THE GENERAL EXTENT OF WORK. NO ATTEMPT IS MADE TO SHOW EVERY ELL, TEE, OFFSET AND FITTING. REMOVE DUCTWORK AS INDICATED AND SPECIFIED.

REFER TO REFLECTED CEILING PLANS ON ARCHITECTURAL DRAWINGS FOR DEMOLITION AND NEW WORK RELATED TO CEILINGS.

CONTRACTOR SHALL RECLAIM AND DISPOSE OF ALL REFRIGERANT IN ACCORDANCE WITH ALL STATE AND LOCAL CODES PRIOR TO REMOVING THE EXISTING UNIT.

#### **GENERAL NOTES**

AND WALLS.

1. CONTRACTOR SHALL VISIT JOB SITE TO DETERMINE EXTENT OF WORK INVOLVED PRIOR TO BIDDING THE PROJECT.

2. THE MECHANICAL SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2021 VIRGINIA UNIFORM STATEWIDE BUILDING CODE.

3. COORDINATE LOCATION OF ALL DUCTWORK, SUPPLY AND RETURN DEVICES, THERMOSTATS AND OTHER WALL OR CEILING MOUNTED EQUIPMENT WITH REFLECTED PLANS, LIGHT FIXTURES, SPRINKLER SYSTEMS AND ACCESSORIES INSTALLED BY OTHER TRADES SO AS TO PRESENT A NEAT AND ATTRACTIVE INSTALLATION THROUGHOUT THE BUILDING.

4. ALL PIPING, VALVES, DUCTWORK, ETC., SHALL BE CONCEALED UNLESS OTHERWISE NOTED

5. PIPING ARRANGEMENTS ARE DIAGRAMMATIC.

6. PIPING PASSING THROUGH WATERPROOF MEMBRANES SHALL BE MADE WATERTIGHT.

7. ARRANGE PIPING AND DUCTWORK PARTICULARLY ABOVE CEILING AS REQUIRED TO CLEAR STRUCTURE, CONDUIT, LIGHTS, ETC., ALLOWING SPACE FOR HANGERS, INSULATION, ETC.

8. SEAL AROUND AND MAKE AIRTIGHT ALL DUCTS AND PIPES PENETRATING INSULATED CEILINGS

9. DUCT DIMENSIONS MAY BE MODIFIED AS APPROVED BY ENGINEER.

10. DUCT SIZES SHOWN ARE INSIDE FREE AREA DIMENSIONS.

11. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE PROTECTION PLANS FOR ALL RATED

12. REFER TO FIRE SAFETY DETAILS ON DRAWING M403 FOR PENETRATIONS THROUGH FIRE RATED WALLS, PARTITIONS AND ASSEMBLIES.

13. ALL PENETRATIONS THROUGH FLOORS SHALL BE PROVIDED WITH SCHEDULE 40 STEEL PIPE SLEEVES IN ACCORDANCE WITH SPECIFICATIONS. SLEEVE SHALL EXTEND 1" ABOVE THE FLOOR SLAB, FILL ANNULAR VOID SPACE WITH FIRE-PROOFING MATERIAL AND CAULK WATERTIGHT.

14. REFER TO SPECIFICATIONS FOR FIRE DAMPER REQUIREMENTS. FURNISH AND INSTALL FIRE DAMPERS INDICATED ON DRAWINGS OR AS REQUIRED BY CODE. ALL FIRE DAMPERS SHALL BE IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS, AND UL LABELED AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS.

15. PROVIDE ACCESS DOORS TO ALL FIRE DAMPERS. PROVIDE ACCESS DOORS TO ALL FIRE DAMPERS. DAMPERS EQUIPPED WITH FUSIBLE LINKS, INTERNAL OPERATORS OR BOTH SHALL BE PROVIDED WITH AN ACCESS DOOR THAT IS NOT LESS THAN 12 INCHES SQUARE OR PROVIDED WITH A REMOVABLE DUCT SECTION.

16. MAINTAIN PROPER CLEARANCES PER ELECTRICAL CODE ON ALL VAV BOXES AND OTHER EQUIPMENT. COORDINATE WITH ALL TRADES TO ENSURE CLEARANCES ARE NOT OBSTRUCTED.

17. FINAL LOCATION OF SPACE THERMOSTATS, HUMIDISTATS, AND SENSORS SHALL BE APPROVED BY ARCHITECT.

18. INSTALL ALL WALL MOUNTED NON-ADJUSTABLE SENSORS AT 5'-0" FROM FINISHED FLOOR TO TOP OF SENSOR. ADJUSTABLE DEVICES SHALL BE INSTALLED AT 4'-0' FROM FINISHED FLOOR TO TOP OF SENSOR.

19. ALL ROUND BRANCH DUCTS TO DIFFUSERS SHALL MATCH NECK SIZES SHOWN ON SCHEDULE, UNLESS OTHERWISE NOTED.

20. ALL DIFFUSERS, GRILLES AND REGISTERS SHALL BE SIZED TO HAVE A MINIMUM FREE AREA OF 70% AND MEET PERFORMANCE CRITERIA SCHEDULED.

21. PROVIDE A CONTINUOUS RETURN AIR PATH FROM SPACE CEILING RETURN PLENUMS TO THEIR ASSOCIATED ROOFTOP UNIT OR AIR HANDLER. IN SPACES HAVING WALLS THAT ARE CONTINUOUS TO DECK, AND FOR WHICH NO TRANSFER DUCT HAS BEEN INDICATED, PROVIDE SLEEVED WALL OPENING WITH TRANSFER "L" DUCT SIZED AT 500 FPM.

22. CONTRACTOR SHALL ONLY USE DESIGNATED AREAS WITHIN THE EQUIPMENT FOR PENETRATIONS OF ELECTRICAL CONDUITS AND CONTROL CONDUITS. THESE PENETRATIONS MUST BE WATERTIGHT. IF A CONTRACTOR PENETRATES ANY AREAS IN THE EQUIPMENT THAT IS NOT DESIGNATED BY THE MANUFACTURER FOR PENETRATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS TO THE EQUIPMENT, TO ENSURE IT IS WATERTIGHT. IF EQUIPMENT CAN NOT BE MADE WATERTIGHT, THE CONTRACTOR SHALL BE REQUIRED TO REPLACE EQUIPMENT AT HIS OWN EXPENSE.

23. REFER TO STRUCTURAL DRAWINGS FOR STRUCTURAL WORK REQUIRED FOR INSTALLATION OF ROOF MOUNTED HVAC EQUIPMENT.

24. PROVIDE NEMA 3R ENCLOSURES FOR ALL INTERIOR FIELD-INSTALLED CONTROLS, ACCESSORIES, AND ELECTRICAL COMPONENTS WHETHER INDICATED OR NOT. FIELD-INSTALLED CONTROLS, ACCESSORIES, AND ELECTRICAL COMPONENTS INSTALLED EXTERIOR TO BUILDING SHALL BE NEMA 4X-SS.

#### **ABBREVIATIONS**

FIRE DAMPER

**VOLUME DAMPER** 

3/4" DOOR UNDERCUT

SMOKE DETECTOR LOCATION

DIFFUSER, REGISTER, AND GRILLE CFM AS INDICATED

DOOR LOUVER, FREE AREA AS INDICATED

THERMOSTAT OR TEMPERATURE SENSOR,

TRANSFER DUCT WITH GRILLE, SIZE AS INDICATED

RECTANGULAR DUCT ELBOW WITH TURNING VANES

HUMIDISTAT OR HUMIDITY SENSOR

CONTROLLING UNIT AS INDICATED

RETURN/EXHAUST GRILLE

EXISTING TO BE REMOVED

DUCTWORK WITH TRANSITION

ROUND OR RADIUS DUCT ELBOW

ROUND OR RADIUS DUCT ELBOW

90° ROUND DUCT ELBOW - TURN UP

ROOF MOUNTED EXHAUST FAN

ROOF MOUNTED INTAKE HOOD

**ROUND DUCT** 

DEMOLITION NOTE

NEW WORK NOTE

POINT OF DEMOLITION

POINT OF NEW WORK

DIRECTION OF AIR FLOW

90° ROUND DUCT ELBOW - TURN DOWN

90° RECTANGULAR DUCT ELBOW - TURN UP

90° RECTANGULAR DUCT ELBOW - TURN DOWN

ROOF MOUNTED EXHAUST OR RELIEF HOOD

SUPPLY DIFFUSER

EXISTING TO REMAIN

NEW DUCT WORK

FLEXIBLE AIR DUCT

**LEGEND** 

**GALLONS PER MINUTE** 

/\DDI\			
Ø	DIAMETER	HP	HORSEPOWER
APD	AIR PRESSURE DROP	HWR	HOT WATER RETURN
В-х	BOILER DESIGNATION (EXISTING)	HWS	HOT WATER SUPPLY
CFM	CUBIC FEET PER MINUTE	IH	INTAKE HOOD (EXISTING)
COMP.	COMPRESSOR	IN	INCH/INCHES
CU	CONDENSING UNIT DESIGNATION	KW	KILOWATTS
D	CONDENSATE DRAIN	kA K	ILO AMPS INTERRUPTING CAPACITY
DALT	DUCT AIR LEAKAGE TESTING	LAT	LEAVING AIR TEMPERATURE
DB	DRY BULB	LBS	POUNDS
DDC	DIRECT DIGITAL CONTROL	LWT	LEAVING WATER TEMPERATURE
DISCH	DISCHARGE	MAX	MAXIMUM
DN	DOWN	MBH	1000 BRITISH THERMAL UNITS PER HOUR
DX	DIRECT EXPANSION	MCA	MINIMUM CIRCUIT AMPS
EA	EXHAUST AIR	MIN	MINIMUM
EAT	ENTERING AIR TEMPERATURE	MOCP	MAXIMUM OVER CURRENT PROTECTION
EC	ELECTRONICALLY COMMUTATED	NC	NOISE CRITERIA
ESP	EXTERNAL STATIC PRESSURE	NO	NUMBER
EWT	ENTERING WATER TEMPERATURE	OA	OUTSIDE AIR
°F	DEGREES FAHRENHEIT	P-x	PUMP DESIGNATION (EXISTING)
FA	FREE AREA	PH	PHASE
FD	FIRE DAMPER	ΔΡ	PRESSURE DIFFERENTIAL
FT	FEET	RA	RETURN AIR

MXXX

**ENLARGED PLAN: NUMBER "1"** 

ROOF DRAIN (EXISTING)

RELIEF HOOD (EXISTING)

SHORT CIRCUIT RATING

SMOKE DETECTOR

SUPPLY AIR

**SENSIBLE** 

**TYPICAL** 

**VOLTS** 

WATTS

WET BULB

WATER GAUGE

VOLUME DAMPER

**SQUARE FEET** 

SD

TYP

REVOLUTIONS PER MINUTE

ROOFTOP UNIT DESIGNATION

TRANSFER FAN DESIGNATION

UNIT VENTILATOR DESIGNATION

VARIABLE FREQUENCY DRIVE

WATER HEATER (EXISTING)

WATER PRESSURE DROP

VENT THROUGH ROOF (EXISTING)

THERMOSTAT OR TEMPERATURE SENSOR

VARIABLE AIR VOLUME UNIT DESIGNATION



PHOTO: NUMBER "1"



EXISTING SIZES AS INDICATED

PIPE CAP

→ THREADED UNION

PRESSURE GAUGE WITH VALVE

PRESSURE/TEMPERATURE TEST PORT

→ DIRECTION OF FLOW IN PIPE

PIPE TEE UP

o— PIPE UP

→ D → DRAIN PIPING

EXISTING PIPING TO REMAIN

→ NEW PIPING

→ → BUTTERFLY VALVE

• • • • • • 1-HR FIRE RATED WALL

SEE SHEET MXXX

RADIATED

SEE SHEET MXXX



SECTION: LETTER "A" SEE SHEET MXXX

C——— PIPE DOWN PIPE TEE DOWN

→ HWR HOT WATER RETURN PIPING

HWS—HOT WATER SUPPLY PIPING

 $\vdash - - - - - \rightarrow PIPING TO BE REMOVED$ 

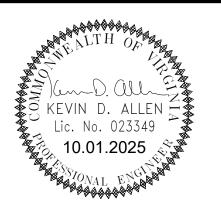
THERMOMETER WITH SEPARABLE WELL DIRECTION OF PITCH FOR PIPING OR DUCTWORK

TWO-WAY CONTROL VALVE MANUAL AIR VENT

→ BALL VALVE

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CAMPUS FOR STUDENT **SUCCESS -**MULTIPURPOSE ROOM NEWPORT NEWS PUBLIC SCHOOLS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601

No. Date Description PROJECT MANAGER:

ISSUED FOR BID:IFB #011-0-2026/SB QEA No.Project Number 52406380

> ISSUED FOR BID OCTOBER 1, 2025

GENERAL NOTES, LEGEND AND **ABBREVIATIONS** 

### PACKAGED ROOFTOP AIR CONDITIONER UNIT SCHEDULE

		AIR QUA	NTITY	SL	JPPLY F	FAN	EXHAU	ST FAN DA	TA			DX COO	LING CC	IL DATA						HOT WA	TFR RFF	HEAT COIL	PFRF	ORMANO	CF				FL FC	TRICAL					
LINIT	- NO -	TOTAL	$\bigcirc$		ESP		TOTAL	ESP		TOTAL	SENS	E	\T	L	AT	NO OF	NO. OF CONDENSER	,	NAINI		_	1 1		· · · · · · ·	, <u> </u>					ITTOKE			SELECTION	MODEL NO.	REMARKS
ONT	110.	TOTAL CFM	OA CFM	CFM	(IN)	HP	CFM	(IN. WG)	HP	(MBH)	(MBH)	DB(°F)	WB(°F)	DB(°F)	WB(°F)	NO. OF COMP.	FANS	CFM	MIN. COIL FA (SF)	CAPACITY TOTAL (MBH)	EAT DB(°F)	LAT DB(°F)	APD (IN.)	GPM	EWT (FT.)	LWT (°F)	WPD FT.)	V	PH	MCA	МОСР	(LBS)	"TRANE"	MODEL NO.	KLIVIAKKO
RTI	U-1	4,035	1,370	4,035	2.5	3.0	3,630	0.5	1.5	228.9	133.4	83.1	70.5	52.2	51.9	1	2	4,035		202.0	50.0	95.7	0.12	10.0	180	140	0.2	460	3	42.6	50	3305	HORIZON	OADG020	1, 2, 3, 4, 5, 6, 7, 8, 9, 10

			S	ERIE	ES F	AN I	POW	ERE	D V	AV BO	)XS	CHE	DUL	E		
UNIT NO.	MAX CFM	ILET VAL\ MIN CFM	/E SIZE (IN.)	FAN CFM	DATA ESP (IN.)	EAT (°F)	El LAT (°F)	ECTRIC MBH	HEATIN KW	IG COIL DAT	ra V	PH	NC DISCH.	NC RAD	SELECTION BASED ON "TRANE"	REMARKS
VAV1-1	920	345	10"ø	920	0.33	68.0	94.0	25.9	9.0	25	480	3	25	30	VSEG	1, 2, 3, 4
VAV1-2	1545	600	14"ø	600	0.6	68.0	95.6	46.2	16.0	35	480	3	31	34	VSEG	1, 2, 3, 4
VAV1-3	1570	615	14"ø	1570	0.6	68.0	94.8	46.0	16.0	35	480	3	31	34	VSEG	1, 2, 3, 4

		GRILLE, R	EGISTE	R & DII	FFUSE	R SCHE	DULE			
MARK	NECK SIZE	DESCRIPTION	MATERIAL	FINISH	VOLUME DAMPER	SHAPE	MAXIMUM ΔP	MAXIMUM NC	SELECTION	REMARKS
С	10"ø	LOUVERED FACE ADJUSTABLE CEILING DIFFUSER	STEEL	WHITE	NO	SQUARE	0.1"	25	SCDA	1, 2
D	12"ø	LOUVERED FACE ADJUSTABLE CEILING DIFFUSER	STEEL	WHITE	NO	SQUARE	0.1"	25	SCDA	1, 2
W	24"/24"	CEILING RETURN GRILLE 45° DEFLECTION, 3/4" SPACING	STEEL	WHITE	NO	SQUARE	0.1"	25	530	1
WF	24"/24"	FILTERED CEILING RETURN GRILLE, 45° DEFLECTION, 3/4" SPACING	STEEL	WHITE	NO	SQUARE	0.1"	25	530	1
Υ	10"/8"	LOUVERED SIDEWALL GRILLE	STEEL	WHITE	NO	RECTANGULAR	0.1"	25	530	

			EXHA	JST F	AN S	SCHE	EDUL	E							
UNIT NO.	TYPE	ARRANGEMENT	WHEEL	DRIVE	CFM	ESP (IN.)	FAN RPM	MAX TIP SPEED	MOT HP (W)	OR DA	TA PH	CONTROL METHOD	MAX SONES	SELECTION BASED ON "GREENHECK"	REMARKS
TF-1	CEILING CABINET	HORIZONTAL	FORWARD CURVED CENTRIFUGAL	DIRECT	200	0.125	900	1590	(55)	120	1	THERMOSTAT	2.3	SP-A200	1, 2, 3

<u>PLAN VIEW</u>

# **REAR VIEW** 10 5 (12) FRONT VIEW **RIGHT VIEW** | | (5) |

RTU-1 COMPONENT DIAGRAM

NOT TO SCALE

#### RTU COMPONENTS

- 1 CONTROLS AND ELECTRICAL COMPARTMENT
- 2 ACCESS DOOR
- (3) BASE RAIL
- (4) FILTER
- 5 DX COIL
- 6 SUPPLY FAN SECTION
- (7) EXHAUST FAN SECTION
- (8) CONDENSER FAN SECTION
- (9) OUTDOOR AIR INTAKE WITH CONTROL DAMPER
- (10) HOT WATER PIPING
- (11) CONNECT DUCTWORK TO UNIT USING FLEXIBLE CONNECTORS.
- (12) HORIZONTAL DISCHARGE SUPPLY
- (13) HORIZONTAL RETURN
- (14) EXHAUST AIR
- (15) ROOF CURB BY MANUFACTURER
- (16) CONDENSATE DRAIN

#### **SCHEDULE REMARKS:**

#### **PACKAGED ROOFTOP UNIT SCHEDULE:**

- PROVIDE VFD FOR SUPPLY AND EXHAUST FAN.
- . WEIGHT DOES NOT INCLUDE ROOF CURB, ISOLATION RAIL AND ACOUSTICAL SYSTEM.
- B. UNIT COOLING COIL CAPACITY IS GROSS CAPACITY; BASED ON 95°F DB/78°F WB AMBIENT CONDITIONS.
- PROVIDE SINGLE POINT POWER CONNECTION.
- 5. EXHAUST FAN CAPACITY BASED ON ECONOMIZER OPERATION.
- 6. PROVIDE CONDENSATE OVERFLOW PROTECTION SWITCH.
- 7. PROVIDE UNIT WITH 65 KAIC SCCR.
- 8. PROVIDE WITH VARIABLE SPEED COMPRESSOR AND CONDENSER FAN MOTORS.
- 9. PROVIDE WITH R-454B REFRIGERANT.
- 10.PROVIDE WITH BIPOLAR IONIZATION AIR PURIFICATION SYSTEM. REFER TO SPECIFICATION 230500 2.9.B FOR REQUIREMENTS. A 24-VOLT STEP DOWN TRANSFORMER SHALL BE PROVIDED BY THE ROOFTOP UNIT MANUFACTURER. MECHANICAL CONTRACTOR SHALL WIRE THE POWER SUPPLY TO THE TRANSFORMER. THE ENGINEERED VENTILATION SYSTEM WILL PREVENT THE MAXIMUM CONCENTRATION OF CONTAMINANTS FROM EXCEEDING THAT OBTAINABLE BY THE RATE OF OUTDOOR AIR VENTILATION DETERMINED IN ACCORDANCE WITH SECTION 403.3 OF ASHRAE STANDARD 62.1-2018.

#### SERIES FAN POWERED VAV BOX SCHEDULE:

- . PROVIDE WITH EC MOTOR.
- PROVIDE WITH 1" FOIL FACED INSULATION.
- PROVIDE UNIT WITH BOTTOM ACCESS PANEL FOR FAN MAINTENANCE AND SIDE ACCESS FOR CONTROL PANEL AND FILTER.
- 4. PROVIDE WITH SOUND ATTENUATOR.

#### GRILLE, REGISTER & DIFFUSER SCHEDULE:

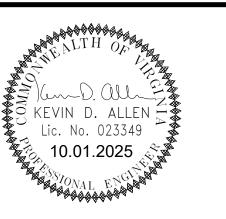
- REFER TO ARCHITECT'S REFLECTED CEILING PLAN FOR CEILING TYPES. FOR ACOUSTIC CEILING, PROVIDE WITH 24" x 24" PANEL SUITABLE FOR MOUNTING IN LAY-IN GRID. FOR GYPSUM BOARD CEILING, PROVIDE WITH SMALL FACE AND SURFACE MOUNT FRAME.
- PROVIDE 3-CONE, 12" x 12" FACE MOUNTED IN 2' x 2' METAL PANEL.

#### **EXHAUST FAN SCHEDULE:**

- . PROVIDE WITH LINE VOLTAGE THERMOSTAT.
- PROVIDE WITH BACKDRAFT DAMPER AND DISCONNECT SWITCH.
- 3. PROVIDE WITH EC MOTOR.

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**CAMPUS FOR STUDENT SUCCESS -**MULTIPURPOSE ROOM NEWPORT NEWS PUBLIC SCHOOLS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601

No. Date Description

ISSUED FOR BID:IFB #011-0-2026/SB QEA No.Project Number 52406380

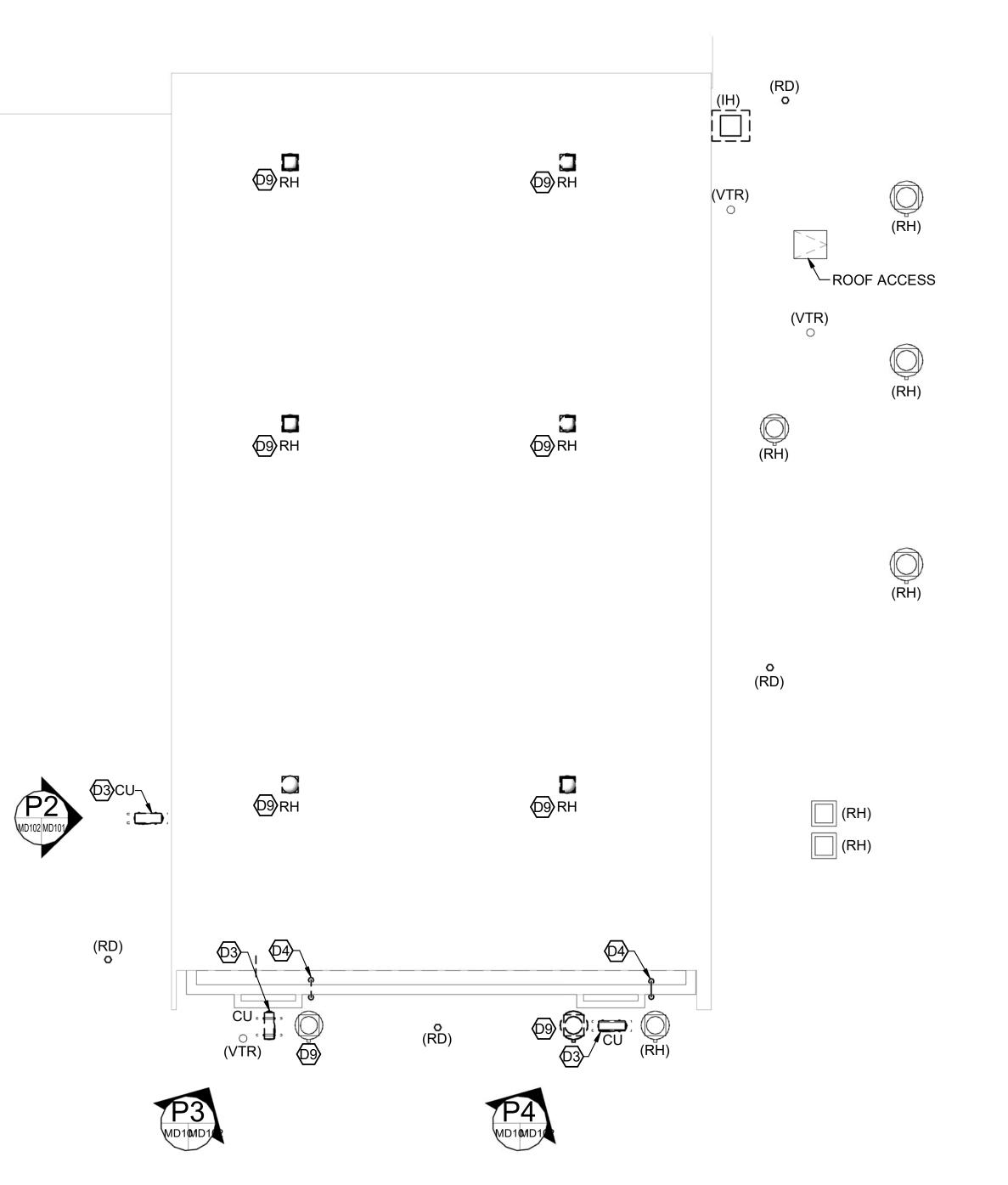
> ISSUED FOR BID OCTOBER 1, 2025

MECHANICAL SCHEDULES AND DIAGRAMS

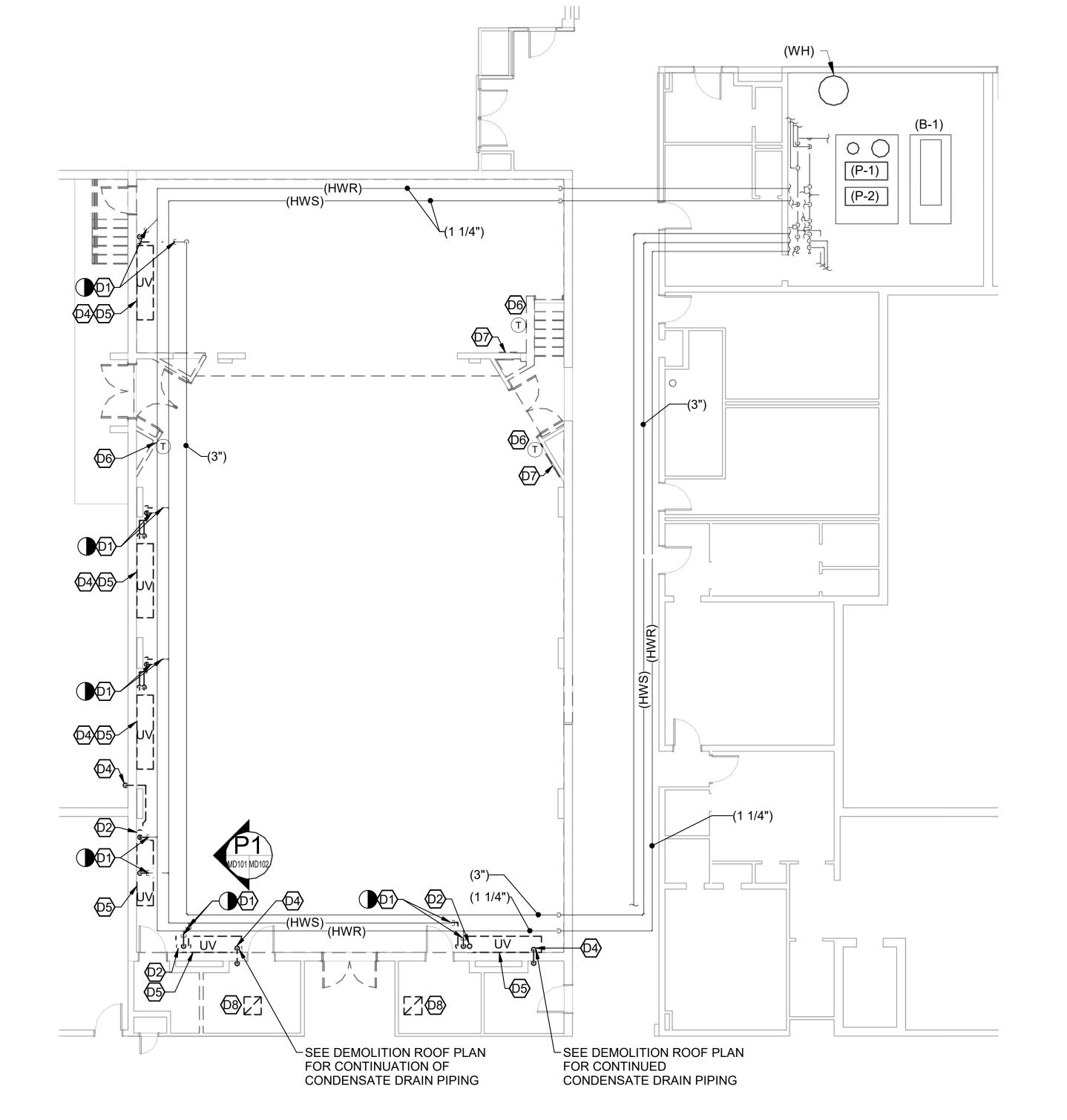
COMPLETE.

DISCONNECT AND REMOVE CONDENSATE DRAIN PIPING

	DEMOLITION NOTES
NO.	DESCRIPTION
D5	DISCONNECT AND REMOVE UNIT VENTILATOR COMPLETE. REFER TO ARCHITECTURAL DRAWINGS FOR ANY WALL OR FLOOR PATCHING DETAILS.
D6	REMOVE THERMOSTAT COMPLETE.
D7	DISCONNECT AND REMOVE WALL LOUVER COMPLETE. REFER TO ARCHITECTURAL DRAWINGS FOR WALL PATCHING DETAILS.
D8	DISCONNECT AND REMOVE GRILLE COMPLETE.
D9	REMOVE RELIEF HOOD AND CAP ROOF CURB. REFER TO "EQUIPMENT CURB DETAIL" ON DRAWING M401.



ROOF PLAN - DEMOLITION - MECHANICAL SCALE: 1/8" = 1'-0"



FLOOR PLAN - DEMOLITION - MECHANICAL SCALE: 1/8" = 1'-0"

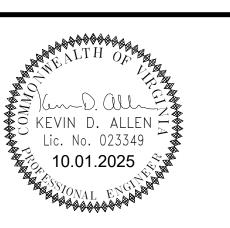
KEY PLAN: 

0' 2' 4' 8' 16'

**MD101** 

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**CAMPUS FOR STUDENT** SUCCESS -**MULTIPURPOSE ROOM** NEWPORT NEWS PUBLIC SCHOOLS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601

ISSUED FOR BID OCTOBER 1, 2025 FLOOR PLANS -

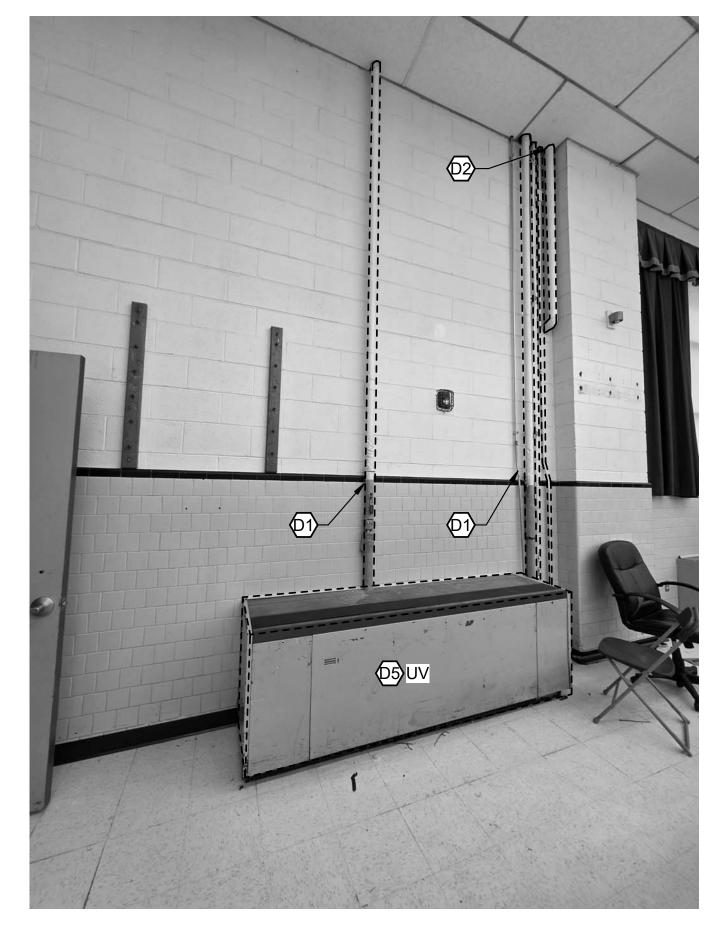
**DEMOLITION -**

MECHANICAL

QEA No.Project Number 52406380

ISSUED FOR BID:IFB #011-0-2026/SB

PROJECT MANAGER: DRAWN BY:







P2 CONDENSING UNIT REMOVAL PHOTO

MD102 NOT TO SCALE



P3 CONDENSING UNIT REMOVAL PHOTO

MD102 NOT TO SCALE



P4 CONDENSING UNIT REMOVAL PHOTO
MD102 NOT TO SCALE



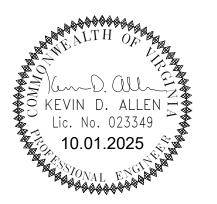
P5 PIPING AND MECHANICAL EQUPMENT REMOVAL PHOTO
MD102 NOT TO SCALE

	DEMOLITION NOTES
NO.	DESCRIPTION
D1	DISCONNECT AND REMOVE HOT WATER SUPPLY AND RETURN PIPING EXPOSED ON WALL FROM UV TO ABOVE CEILING COMPLETE INCLUDING HANGERS AND SUPPORTS TO POINT INDICATED AND CAP ABOVE CEILING.
D2	DISCONNECT AND REMOVE REFRIGERANT PIPING COMPLETE.
D3	DISCONNECT AND REMOVE CONDENSING UNIT COMPLETE. SUPPORTS SHALL BE EXISTING TO REMAIN.
D5	DISCONNECT AND REMOVE UNIT VENTILATOR COMPLETE. REFER TO ARCHITECTURAL DRAWINGS FOR ANY WALL OR FLOOR PATCHING DETAILS.
D9	REMOVE RELIEF HOOD AND CAP ROOF CURB. REFER TO "EQUIPMENT CURB DETAIL" ON DRAWING M401.
D10	CONTRACTOR SHALL ISOLATE HOT WATER PIPING SERVING THE GYM/STAGE AREAS. ISOLATION SHALL BE COMPLETED IN A MANNER THAT DOES NOT DISRUPT OPERATION OF OTHER HEATING ZONES.

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CAMPUS FOR STUDENT
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NEWPORT NEWS PUBLIC
SCHOOLS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601

PROJECT MANAGER: DRAWN BY:

KDA JAR

ISSUED FOR BID:IFB #011-0-2026/SB QEA No.Project Number 52406380

ISSUED FOR BID OCTOBER 1, 2025

DEMOLITION PHOTOGRAPHS

**MD102** 

REFER TO "ROOF MOUNTED PIPE SUPPORT DETAIL" ON

DISCHARGE CONDENSATE DRAIN INTO ROOF DRAIN.

DRAWINGS FOR FURTHER INFORMATION.

DRAWING M402.

NEW WORK NOTES DESCRIPTION REFER TO "ROOFTOP UNIT MOUNTING DETAIL" ON DRAWING M402. PROVIDE 1"x 1" WIRE MESH AND FRAME OVER OPEN END OF DUCTWORK. 11 PROVIDE ROOF CURB FOR DUCTWORK PENTRATING THE ROOF. REFR TO "DUCT THRU ROOF CURB DETAIL" ON DRAWING M401. PROVIDE DOUBLE WALL DUCTWORK WITH 3" FIBERGLASS INSULATION ENCAPSULATED BETWEEN SOLID INNER WALL FOR ALL DUCTWORK INSTALLED OUTDOORS. REFER TO SPECIFICATION 230500 FOR DUCTWORK REQUIREMENTS. REFER TO SPECIFICATION 230700 FOR WEATHERPROOF COATING DETAILS. REFER TO "TYPICAL SERIES FAN POWERED VAV BOX (WITH ELECTRIC REHEAT COIL) INSTALLATION DETAIL" ON DRAWING M402. WB1 1-1/4" HWS/HWR (10.0 GPM)

THOMPSON
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O KEVIN D. ALLEN I. Lic. No. 023349

10.01.2025

CAMPUS FOR STUDENT SUCCESS -MULTIPURPOSE ROOM NEWPORT NEWS PUBLIC SCHOOLS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601

FLOOR PLAN - NEW WORK - MECHANICAL

SCALE: 1/8" = 1'-0"

MULTIPURPOSE

ROOM 1 101

VAV1-2

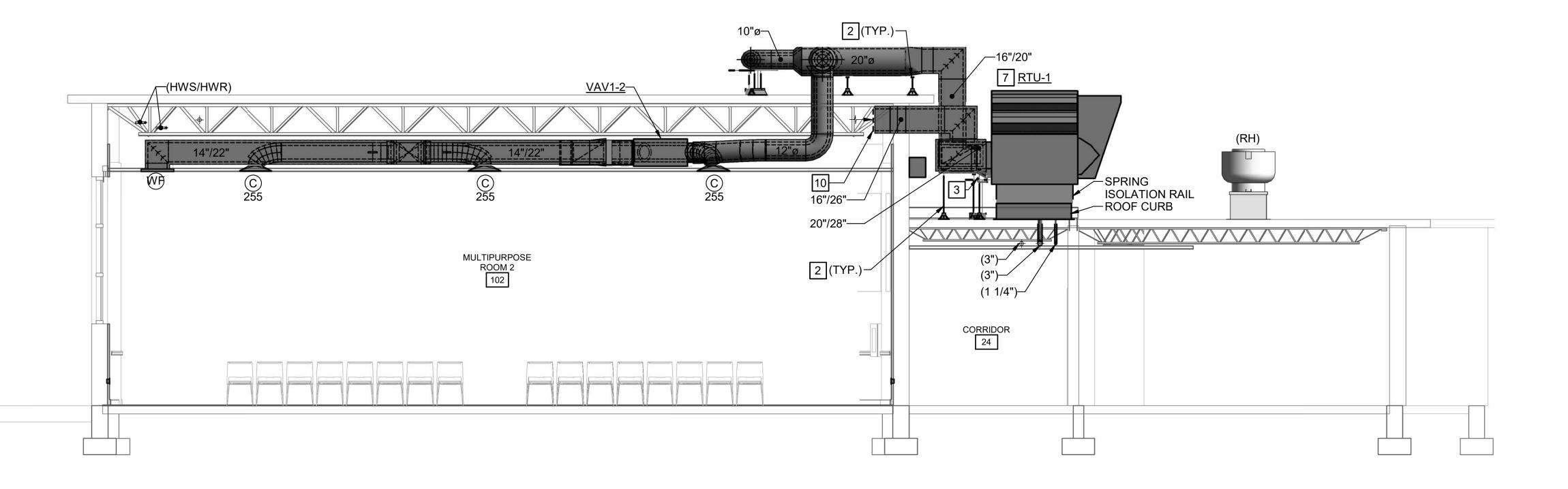
13 <u>VAV1-2</u>

−10"ø UP

TO ROOF

ROOF PLAN - NEW WORK - MECHANICAL

SCALE: 1/8" = 1'-0"



(P-2)

—<u>RTU-1</u>ON LOW ROOF

KEY PLAN:

No. Date Description

PROJECT MANAGER: DRAW

KDA JAI

ISSUED FOR BID:IFB #011-0-2026/SB
QEA No.Project Number 52406380
ISSUED FOR BID

OCTOBER 1, 2025

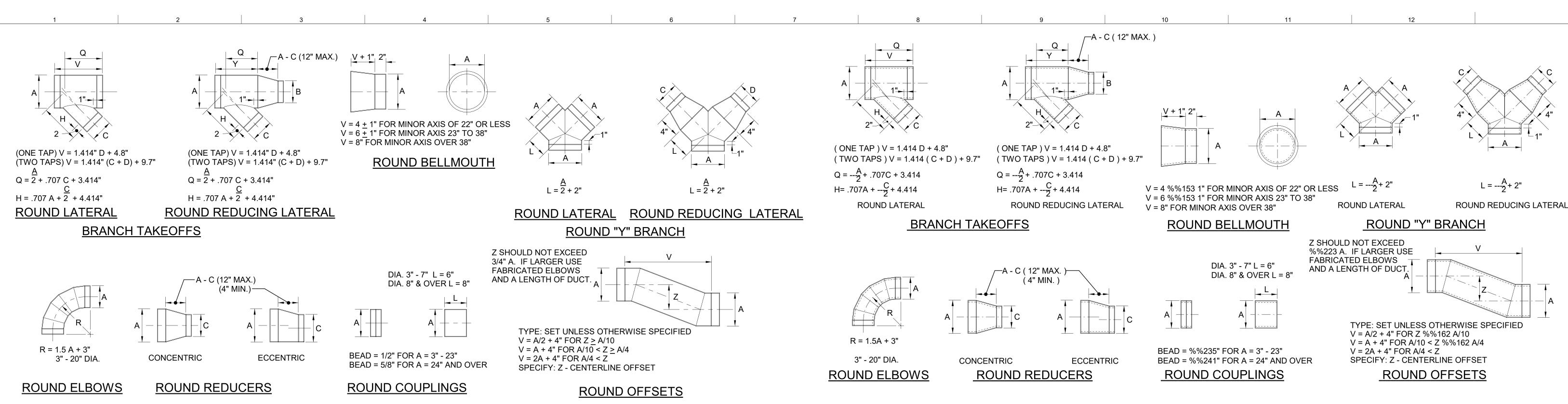
FLOOR PLANS - NEW WORK - MECHANICAL

M101

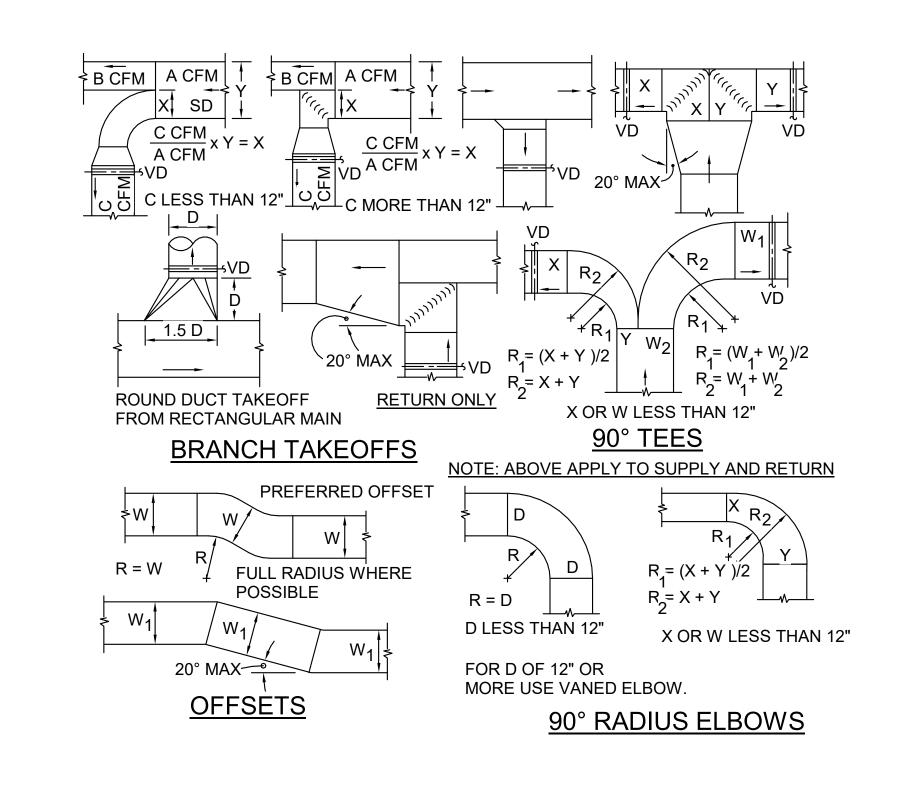
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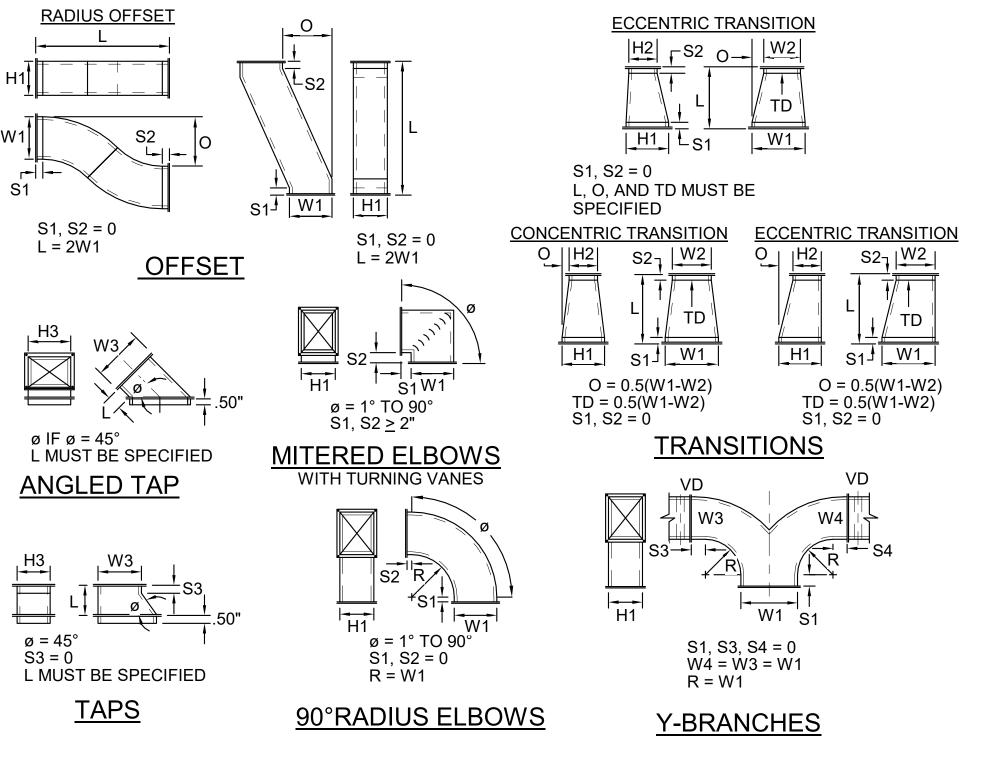
A M101

A SECTION A
M101 M101 SCALE: 1/4" = 1'-0"



LOW VELOCITY SINGLE-WALL ROUND DUCTWORK FITTING DETAILS MEDIUM-PRESSURE DOUBLE-WALL DUCTWORK DETAILS NOT TO SCALE





DUC	TWORK CONSTRU	CTION REQUIREM	<u>ENTS</u>
SYSTEM	PRESSURE CLASS	SEAL CLASS	LEAKAGE CLASS
SUPPLY AIR (MEDIUM PRESSURE)	+ 3.0" W.G.	CLASS A	RECTANGULAR - 4 ROUND - 2
SUPPLY AIR (LOW PRESSURE)	+ 1.5" W.G.	CLASS A	RECTANGULAR - 4 ROUND - 2
RETURN AIR	- 1.0" W.G.	CLASS A	RECTANGULAR - 8 ROUND - 4
TRANSFER AIR	N/A	NOT REQUIRED	-

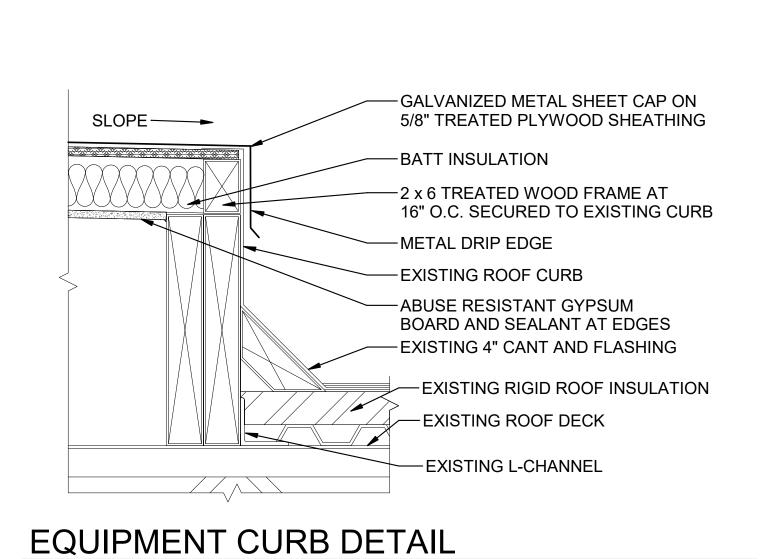
 $L = --\frac{A}{2} + 2$ "

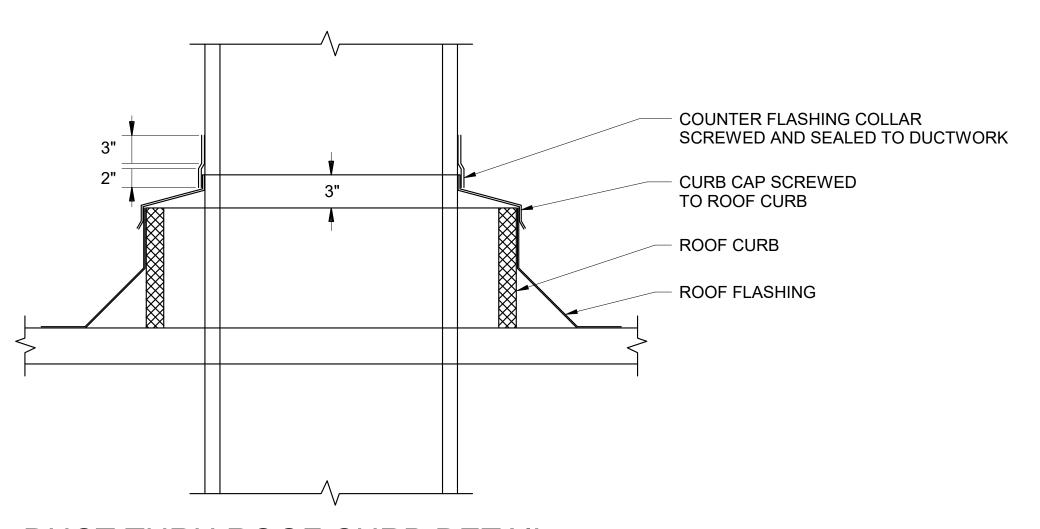
- CONSTRUCT ALL DUCTWORK IN ACCORDANCE WITH "SMACNA" HVAC DUCT CONSTRUCTION STANDARDS.
- ALL MEDIUM PRESSURE DUCTWORK SHALL BE LEAK TESTED (DALT) AS SPECIFIED IN 2305003.3. MEDIUM PRESSURE DUCTWORK IS DEFINED AS ANY DUCTWORK CONSTRUCTED TO +3.0" W.G. PRESSURE CLASS OR HIGHER, AND IS TYPICALLY SPECIFIED IN VAV SYSTEMS BETWEEN THE AIR HANDLING UNIT AND TERMINAL UNITS.
- PROVIDE VOLUME DAMPERS FOR EACH BRANCH DUCT SERVING SUPPLY OR RETURN AIR
- ALL RECTANGULAR AND MITERED ELBOWS SHALL BE PROVIDED WITH TURNING VANES.

REFER TO SMACNA HVAC DUCT LEAKAGE MANUAL FIGURE 5-1 FOR LEAKAGE RATES.

#### LOW VELOCITY SINGLE-WALL RECTANGULAR DUCTWORK DETAIL NOT TO SCALE

#### LOW VELOCITY DOUBLE-WALL RECTANGULAR DUCTWORK DETAILS NOT TO SCALE

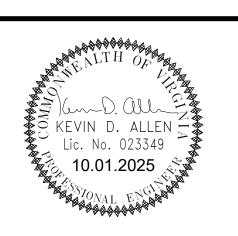




DUCT THRU ROOF CURB DETAIL

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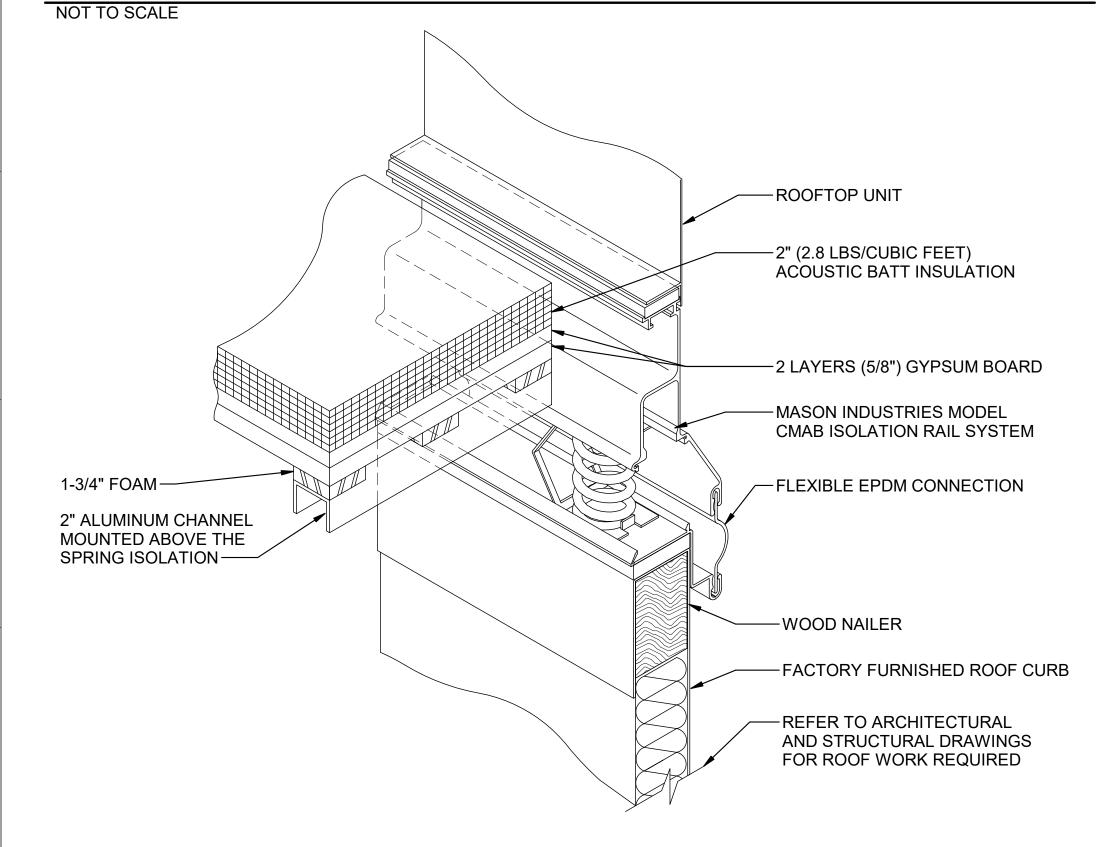
ISSUED FOR BID:IFB #011-0-2026/SB QEA No.Project Number 52406380

> **ISSUED FOR BID** OCTOBER 1, 2025

**MECHANICAL DETAILS** 

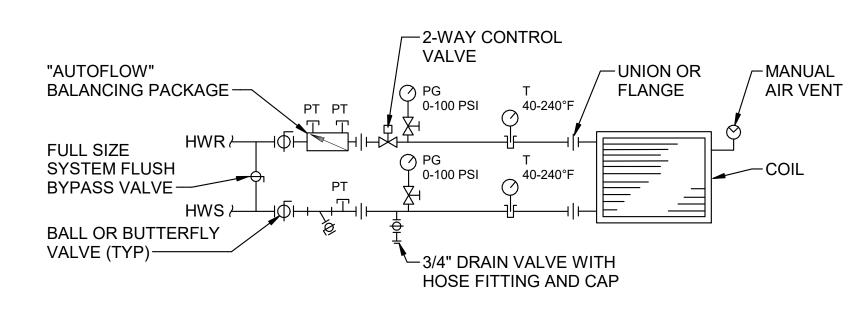
M401

ROOF MOUNTED PIPE SUPPORT DETAIL



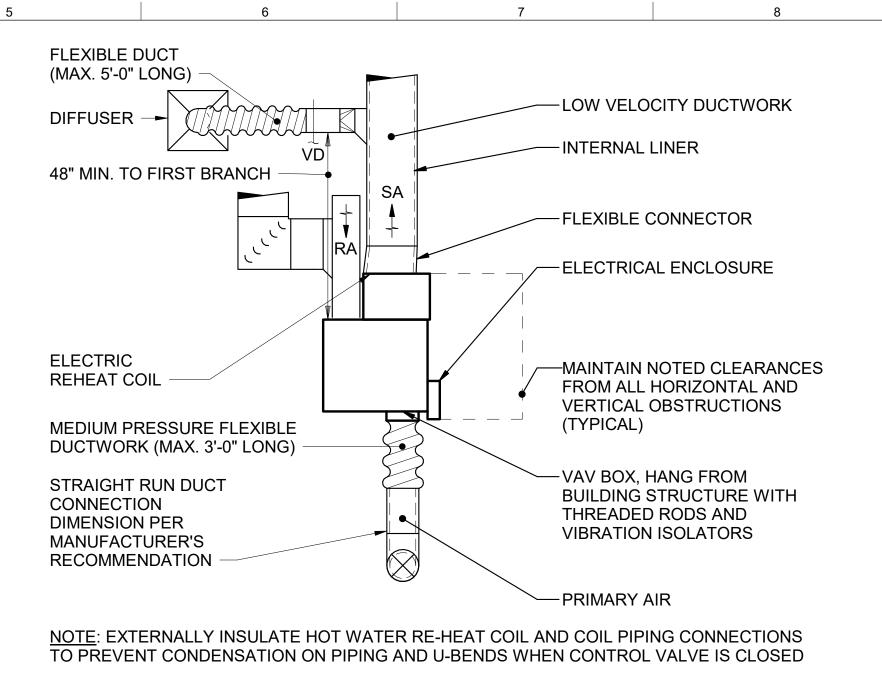
ROOFTOP UNIT MOUNTING DETAIL

NOT TO SCALE

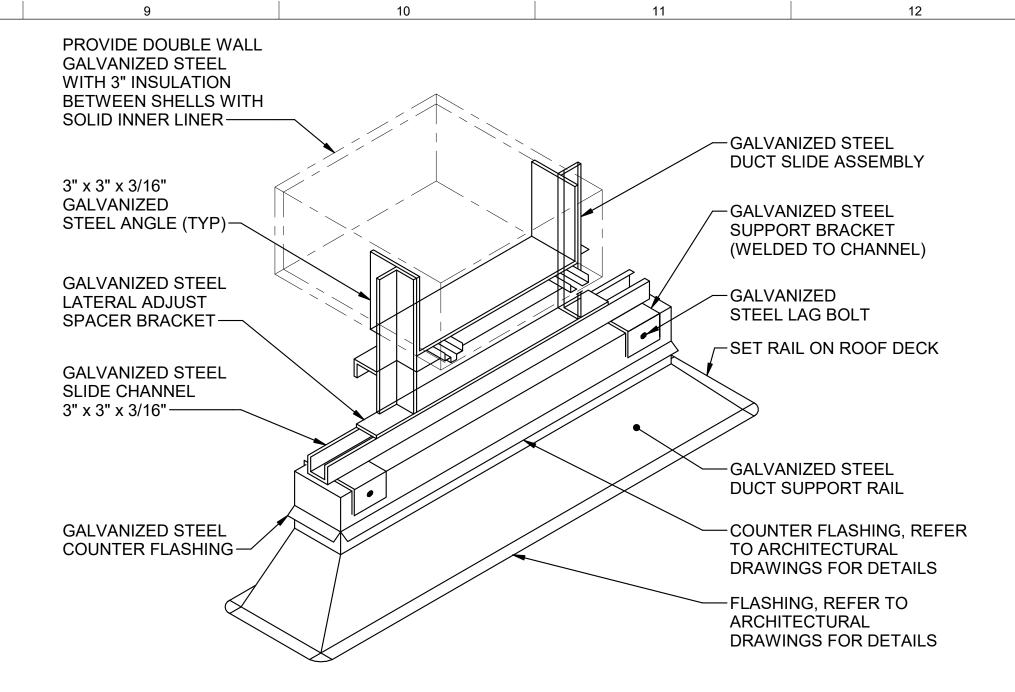


PROVIDE FOR RTU-1. ARRANGE PIPING TO PERMIT REMOVAL OF COIL IN RTU-1.

HOT WATER COIL PIPING DIAGRAM - 2 WAY VALVE NOT TO SCALE



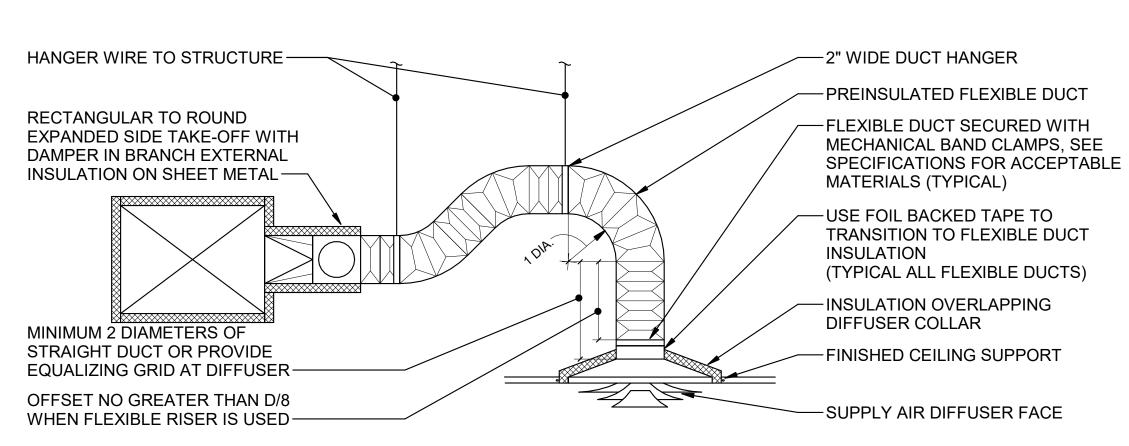
TYPICAL SERIES FAN POWERED VAV BOX (WITH ELECTRIC REHEAT COIL) INSTALLATION DETAIL



NOTE: DUCT SUPPORTS SHALL BE SPACED A MAXIMUM OF 4'-0" APART.

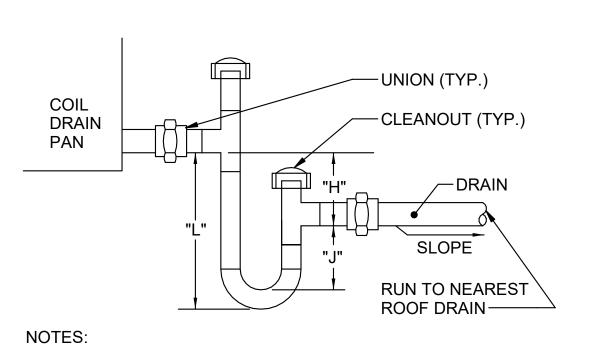
NOT TO SCALE

ROOF MOUNTED DUCT SUPPORT DETAIL



TYPICAL CEILING DIFFUSER INSTALLATION DETAIL NOT TO SCALE

(RTU-1)



NOTES:
1. "H" = (1" FOR EACH 1" OF MAXIMUM NEGATIVE STATIC PRESSURE) + 1". 2. "J" = HALF OF H. 3. "L" = H + J + PIPE DIAMETER + INSULATION.

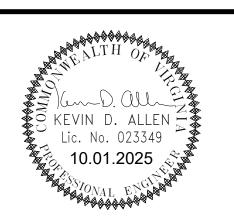
4. SIZE TRAP IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

COIL CONDENSATE TRAP DETAIL

(NEGATIVE PRESSURE)

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746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601

PROJECT MANAGER:

ISSUED FOR BID:IFB #011-0-2026/SB QEA No.Project Number 52406380

> ISSUED FOR BID OCTOBER 1, 2025

**MECHANICAL DETAILS** 

#### PACKAGED ROOFTOP VAV AIR CONDITIONING UNIT (RTU-1) CONTROL DRAWING

#### PACKAGED ROOFTOP VAV AIR CONDITIONING UNIT (RTU-1) SEQUENCE OF OPERATION

#### BUILDING AUTOMATION SYSTEM INTERFACE:

THE BUILDING AUTOMATION SYSTEM (BAS) SHALL SEND THE CONTROLLER OCCUPIED BYPASS, MORNING WARM-UP / PRE-COOL, AND HEAT / COOL MODES. IF COMMUNICATION IS LOST WITH THE BAS, THE CONTROLLER SHALL OPERATE USING DEFAULT MODES AND SETPOINTS. THE BAS SHALL ALSO SEND THE CONTROLLER A DUCT STATIC PRESSURE SETPOINT, DISCHARGE AIR TEMPERATURE SETPOINT, AND VENTILATION AIRFLOW SETPOINT, EACH CALCULATED BY OPTIMIZATION ROUTINES IN THE BAS.

#### OCCUPIED MODE

THE SUPPLY FAN SHALL RUN CONTINUOUSLY AND THE OUTSIDE AIR DAMPER SHALL OPEN TO CURRENT AIRFLOW SETPOINT. THE UNIT CONTROLLER SHALL CONTROL THE SUPPLY FAN SPEED TO MAINTAIN THE CURRENT DUCT STATIC PRESSURE SETPOINT (ADJ.). THE DX COOLING SHALL STAGE OR THE HW CONTROL VALVE SHALL MODULATE TO MAINTAIN THE CURRENT DISCHARGE AIR TEMPERATURE SETPOINT (55°F, ADJ). IF ECONOMIZING IS ENABLED, THE OUTSIDE AIR DAMPER SHALL MODULATE TO MAINTAIN THE CURRENT DISCHARGE AIR TEMPERATURE SETPOINT.

#### COOLING AND HEATING MODES

THE UNIT SHALL UTILIZE THE DISCHARGE AIR TEMPERATURE SENSOR AND DISCHARGE AIR TEMPERATURE SETPOINT TO DETERMINE WHEN TO INITIATE REQUESTS FOR COOLING AND HEATING. WHEN THE DISCHARGE AIR TEMPERATURE FALLS BELOW THE DISCHARGE AIR TEMPERATURE SETPOINT (55°F, ADJ.) AND THE OUTSIDE AIR DAMPER IS AT ITS MINIMUM POSITION, THE UNIT SHALL MODULATE THE HOT WATER CONTROL VALVE TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT. WHEN THE DISCHARGE AIR TEMPERATURE RISES ABOVE THE DISCHARGE AIR TEMPERATURE SETPOINT, AND THE OUTSIDE AIR DAMPER IS AT ITS MINIMUM POSITION, THE UNIT SHALL MODULATE THE DX COOLING TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT.

WHEN 100% OF THE VAV TERMINAL UNITS ARE IN THE HEATING MODE, AND HOT WATER HEAT HAS BEEN ENABLED AT THE UNIT, THE UNIT SHALL RESET THE DISCHARGE AIR TEMPERATURE UP IN 2°F INCREMENTS UNTIL AT LEAST TWO OF THE VAV TERMINAL UNITS ARE NO LONGER CALLING FOR HEAT.

#### ECONOMIZER:

THE SUPPLY AIR SENSOR SHALL MEASURE THE DRY BULB TEMPERATURE OF THE AIR LEAVING THE EVAPORATOR COIL WHILE ECONOMIZING. WHEN ECONOMIZING IS ENABLED AND THE UNIT IS OPERATING IN THE COOLING MODE, THE ECONOMIZER DAMPER SHALL BE MODULATED BETWEEN ITS MINIMUM POSITION AND 100% TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT. THE ECONOMIZER DAMPER SHALL MODULATE TOWARD MINIMUM POSITION IN THE EVENT THE DISCHARGE AIR TEMPERATURE FALLS BELOW THE DISCHARGE LOW LIMIT TEMPERATURE SETPOINT. COMPRESSORS SHALL BE DELAYED FROM OPERATING UNTIL THE ECONOMIZER HAS OPENED TO 100%.

#### REFERENCE DRY BULB:

BI) COOLING STAGES

OUTSIDE AIR TEMPERATURE SHALL COMPARED WITH A REFERENCE DRY BULB SETPOINT. THE ECONOMIZER SHALL ENABLE WHEN THE OUTDOOR AIR TEMPERATURE IS LESS THAN OR EQUAL TO REFERENCE DRY BULB SETPOINT. THE ECONOMIZER SHALL BE DISABLED WHEN OUTDOOR AIR TEMPERATURE IS GREATER THAN REFERENCE DRY BULB SETPOINT + 5.0 DEG. F.

#### VENTILATION CONTROL:

THE OUTSIDE AIR DAMPER SHALL MODULATE TO MAINTAIN THE CURRENT VENTILATION AIRFLOW SETPOINT, AS MEASURED BY THE OUTSIDE AIRFLOW MONITORING STATION.

#### SUPPLY DUCT STATIC PRESSURE CONTROL:

THE DUCT STATIC PRESSURE SETPOINT SHALL BE RESET TO THE OPTIMAL SETPOINT COMMUNICATED BY THE BAS. THE BAS SHALL RESET THE DUCT STATIC PRESSURE SETPOINT BASED ON THE POSITION OF THE FURTHEST OPEN VAV DAMPER.

IF FOR ANY REASON THE SUPPLY AIR PRESSURE EXCEEDS THE SUPPLY AIR PRESSURE HIGH LIMIT, THE SUPPLY FAN SHALL SHUT DOWN. THE UNIT SHALL BE ALLOWED TO RESTART THREE TIMES AFTER A 15 MINUTE OFF PERIOD. IF THE OVERPRESSURIZATION CONDITION OCCURS ON THE FOURTH RESTART, THE UNIT SHALL SHUT DOWN AND A MANUAL RESET DIAGNOSTIC IS DISPLAYED AT THE REMOTE PANEL AND/OR THE BAS SYSTEM.

#### BUILDING PRESSURE CONTROL

A DIFFERENTIAL PRESSURE TRANSDUCER SHALL ACTIVELY MONITOR THE DIFFERENCE IN PRESSURE BETWEEN THE BUILDING (INDOORS) AND OUTDOORS. IF THE BUILDING PRESSURE INCREASES ABOVE THE DIFFERENTIAL PRESSURE SETPOINT, THE UNIT CONTROLLER SHALL TURN ON THE EXHAUST FAN AND MODULATE THE EXHAUST FAN DAMPER TO CONTROL BUILDING PRESSURE TO THE DIFFERENTIAL PRESSURE SETPOINT. IF THE BUILDING PRESSURE DECREASES BELOW THE DIFFERENTIAL PRESSURE SETPOINT, THE CONTROLLER SHALL DEACTIVATE THE EXHAUST FAN.

#### SMOKE DETECTOR SHUTDOWN

THE UNIT SHALL SHUT DOWN IN RESPONSE TO A SIGNAL FROM EITHER SMOKE DETECTOR INDICATING THE PRESENCE OF SMOKE. THE SMOKE DETECTORS SHALL BE INTERLOCKED TO THE UNIT THROUGH THE DRY CONTACTS OF THE SMOKE DETECTORS. A MANUAL RESET OF THE SMOKE DETECTORS SHALL BE REQUIRED TO RESTART THE UNIT.

#### CONDENSATE OVERFLOW ALARM:

A HARDWIRED, CONDENSATE OVERFLOW CONTACT SHALL BE ELECTRICALLY INTERLOCKED WITH THE SUPPLY FAN. THE DDC CONTROLLER SHALL CLOSE THE OUTSIDE AIR DAMPER AND AN ALARM SHALL BE ANNUNCIATED AT THE BAS.

#### GRAPHICAL USER INTERFACE MAIN SCREEN

	ŀ	HARDWAF	RE POINT	S	SOFTWAR	RE POINTS			
POINT NAME	AI	AO	BI	ВО	AV	BV	TREND	ALARM	SHOW ON GRAPHIC
UNIT ENABLE				Х					X
SUPPLY FAN START/STOP				Х		Х	Х		Х
SUPPLY FAN STATUS			Х			Х	Х	Х	X
SUPPLY FAN SPEED		Х					Х		Х
EXHAUST FAN START/STOP				Х		Х	Х		X
EXHAUST FAN STATUS			Х			Х	Х	Х	X
EXHAUST FAN SPEED		Х					Х		X
OUTDOOR AIR TEMP	Х						Х		Х
COMPRESSOR STATUS	Х					Х	Х	Х	Х
BUILDING PRESSURE (1)	Х						Х	Х	Х
BUILDING PRESSURE SET POINT					Х		Х		Х
OUTSIDE AIR DAMPER POSITION		Х					Х	Х	Х
OUTSIDE AIR FLOW	Х						Х		Х
EXHAUST AIR DAMPER POSITION		Х					Х		Х
RETURN AIR TEMPERATURE	Х						Х	Х	X
FILTER STATUS			Х					Х	Х
MIXED AIR TEMPERATURE	Х						Х		Х
BIPOLAR ION GENERATOR (1)			Х				Х		Х
COOLING COIL DISCH. AIR TEMP.	Х						Х	Х	Х
HOT WATER CONTROL VALVE		Х					Х		X
DISCHARGE AIR TEMP (UNIT)	Х						Х	Х	Х
DUCT-MOUNTED ION SENSOR (1)			Х				Х	Х	Х
DOWN DUCT STATIC PRESSURE (1)	Х						Х	Х	Х
CONDENSATE SWITCH (1)			Х					Х	Х
SMOKE DETECTOR			Х					Х	Χ
CONDENSER FAN STATUS			Х			Х	Х	Х	Χ
NOTES:									

SENSOR PROVIDED AND INSTALLED BY DDC CONTRACTOR.

2 PROVIDE SECONDARY DATA PAGE IN GRAPHICAL USER INTERFACE CONTAINING ALL POINTS NOT LISTED ABOVE, BUT AVAILABLE THROUGH THE UNIT'S BACNET INTERFACE

PACKAGED ROOFTOP VAV AIR CONDITIONING UNIT (RTU-1) POINTS LIST

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746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601

No. Date Description

PROJECT MANAGER: DRAWN BY

KDA JAR

ISSUED FOR BID:IFB #011-0-2026/SB
QEA No.Project Number 52406380
ISSUED FOR BID

OCTOBER 1, 2025

AUTOMATIC TEMPERATURE CONTROLS

M501

PACKAGED ROOFTOP VAV AIR CONDITIONING UNIT (RTU-1) CONTROL DIAGRAM
NOT TO SCALE

#### SERIES FAN POWERED TERMINAL UNIT CONTROL DRAWING

#### SERIES FAN POWERED TERMINAL UNIT SEQUENCE OF OPERATION

FAN POWERED SERIES VAV BOX WITH ELECTRIC RE-HEAT

1. BUILDING AUTOMATION SYSTEM INTERFACE

A. THE BUILDING AUTOMATION SYSTEM (BAS) SHALL SEND THE CONTROLLER OCCUPIED AND UNOCCUPIED COMMANDS. THE BAS MAY ALSO SEND A HEAT/COOL MODE, PRIORITY SHUTDOWN COMMANDS, SPACE TEMPERATURE AND/OR SPACE TEMPERATURE SETPOINT. IF COMMUNICATION IS LOST WITH THE BAS, THE VAV CONTROLLER SHALL OPERATE USING ITS LOCAL SETPOINTS.

2. OCCUPANCY MODE:

A. THE OCCUPANCY MODE SHALL BE COMMUNICATED OR HARDWIRED TO THE VAV VIA A BINARY INPUT. VALID OCCUPANCY MODES FOR THE VAV SHALL BE:

(1) OCCUPIED: NORMAL OPERATING MODE FOR OCCUPIED SPACES OR DAYTIME OPERATION. WHEN THE UNIT IS IN THE OCCUPIED MODE THE VAV SHALL MAINTAIN THE SPACE TEMPERATURE AT THE VAV

(2) UNOCCUPIED: NORMAL OPERATING MODE FOR UNOCCUPIED SPACES OR NIGHTTIME OPERATION. WHEN THE UNIT IS IN UNOCCUPIED MODE THE VAV CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE AT THE STORED UNOCCUPIED HEATING OR COOLING SETPOINT REGARDLESS OF THE PRESENCE OF A HARDWIRED OR COMMUNICATED SETPOINT. WHEN THE SPACE TEMPERATURE EXCEEDS THE ACTIVE UNOCCUPIED SETPOINT THE VAV SHALL MODULATE FULLY CLOSED.

(3) OCCUPIED BYPASS: MODE USED TO TEMPORARILY PLACE THE UNIT INTO THE OCCUPIED OPERATION. TENANTS SHALL BE ABLE TO OVERRIDE THE UNOCCUPIED MODE FROM THE SPACE SENSOR. THE OVERRIDE SHALL LAST FOR A MAXIMUM OF 4 HOURS (ADJ.). THE TENANTS SHALL BE ABLE TO CANCEL THE OVERRIDE FROM THE SPACE SENSOR AT ANY TIME. DURING THE OVERRIDE THE UNIT SHALL OPERATE IN OCCUPIED MODE.

3. HEAT/COOL MODE:

A. THE HEAT/COOL MODE SHALL BE SET BY A COMMUNICATED VALUE OR AUTOMATICALLY BY THE VAV. IN STANDALONE OR AUTO MODE THE VAV SHALL COMPARE THE PRIMARY AIR TEMPERATURE WITH THE CONFIGURED AUTO CHANGEOVER SETPOINT TO DETERMINE IF THE AIR IS "HOT" OR "COLD". HEATING MODE SHALL COMMAND THE VAV TO HEAT ONLY; IT IMPLIES THE PRIMARY AIR TEMPERATURE IS HOT. COOLING MODE SHALL COMMAND THE VAV TO COOL ONLY; IT IMPLIES THE PRIMARY AIR TEMPERATURE IS COLD.

4. HEAT/COOL SETPOINT:

A. THE SPACE TEMPERATURE SETPOINT SHALL BE DETERMINED EITHER BY A LOCAL (E.G., THUMBWHEEL) SETPOINT, THE VAV DEFAULT SETPOINT OR A COMMUNICATED VALUE. THE VAV SHALL USE THE LOCALLY STORED DEFAULT SETPOINTS WHEN NEITHER A LOCAL SETPOINT NOR COMMUNICATED SETPOINT IS PRESENT. IF BOTH A LOCAL SETPOINT AND COMMUNICATED SETPOINT EXIST, THE VAV SHALL USE THE COMMUNICATED VALUE.

5. COOLING MODE:

A. WHEN THE UNIT IS IN COOLING MODE, THE VAV CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE AT THE ACTIVE COOLING SETPOINT BY MODULATING THE AIRFLOW BETWEEN THE ACTIVE COOLING MINIMUM AIRFLOW SETPOINT TO THE MAXIMUM COOLING AIRFLOW SETPOINT. BASED ON THE VAV CONTROLLER OCCUPANCY MODE, THE ACTIVE COOLING SETPOINT SHALL BE ONE OF THE FOLLOWING:

SETPOINT
OCCUPIED COOLING SETPOINT
UNOCCUPIED COOLING SETPOINT
OCCUPIED STANDBY COOLING SETPOINT
OCCUPIED MIN COOLING AIRFLOW SETPOINT
OCCUPIED MAX COOLING AIRFLOW SETPOINT
SEE VAV SCHEDULE
OCCUPIED MAX COOLING AIRFLOW SETPOINT
SEE VAV SCHEDULE

B. THE VAV SHALL USE THE MEASURED SPACE TEMPERATURE AND THE ACTIVE COOLING SETPOINT TO DETERMINE THE REQUESTED COOLING CAPACITY OF THE UNIT. THE OUTPUTS WILL BE CONTROLLED BASED ON THE UNIT CONFIGURATION AND THE REQUESTED COOLING CAPACITY.

6. HEATING MODE:

A. WHEN THE UNIT IS IN HEATING MODE, THE VAV CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE AT THE ACTIVE HEATING SETPOINT BY MODULATING THE AIRFLOW BETWEEN THE ACTIVE HEATING MINIMUM AIRFLOW SETPOINT TO THE MAXIMUM HEATING AIRFLOW SETPOINT. BASED ON THE VAV CONTROLLER OCCUPANCY MODE, THE ACTIVE HEATING SETPOINT SHALL BE ONE OF THE FOLLOWING:

SETPOINT
OCCUPIED HEATING SETPOINT
UNOCCUPIED HEATING SETPOINT
OCCUPIED STANDBY HEATING SETPOINT
OCCUPIED MIN HEATING AIRFLOW SETPOINT
OCCUPIED MAX HEATING AIRFLOW SETPOINT
SEE VAV SCHEDULE
OCCUPIED MAX HEATING AIRFLOW SETPOINT
SEE VAV SCHEDULE

B. THE VAV CONTROLLER SHALL USE THE MEASURED SPACE TEMPERATURE AND THE ACTIVE HEATING SETPOINT TO DETERMINE THE REQUESTED HEATING CAPACITY OF THE UNIT. THE OUTPUTS WILL BE CONTROLLED BASED ON THE UNIT CONFIGURATION AND THE REQUESTED HEATING CAPACITY.

7. CONTINUOUS FAN CONTROL:

A. THE VAV FAN SHALL OPERATE CONTINUOUSLY IN ALL OCCUPIED MODES. DURING THE UNOCCUPIED MODE, THE PRIMARY AIR VALVE SHALL MODULATE FULLY CLOSED. THE TERMINAL FAN AND HEAT SHALL CYCLE AS NEEDED TO MAINTAIN A REDUCED SPACE TEMPERATURE.

8. REHEAT CONTROL:

A. REHEAT SHALL ONLY BE ALLOWED WHEN THE PRIMARY AIR TEMPERATURE IS 5.0 DEG. F BELOW THE CONFIGURED REHEAT ENABLE SETPOINT OF 70.0 DEG. F (ADJ.). THE REHEAT SHALL BE ENABLED WHEN THE SPACE TEMPERATURE DROPS BELOW THE ACTIVE COOLING SETPOINT AND THE AIRFLOW IS AT THE MINIMUM COOLING AIRFLOW SETPOINT. DURING REHEAT THE VAV SHALL OPERATE AT ITS MINIMUM HEATING AIRFLOW SETPOINT AND ENERGIZE THE HEAT AS FOLLOWS:

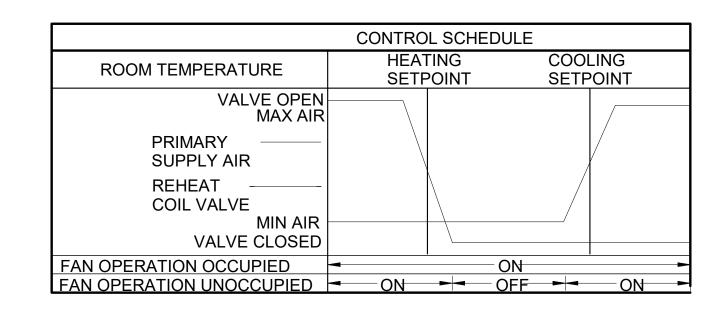
B. ELECTRIC REHEAT: IF THE SPACE TEMPERATURE IS BELOW THE HEATING SETPOINT THE ELECTRIC RESISTANCE REHEAT COIL SHALL STAGE AS REQUIRED TO MAINTAIN THE ACTIVE HEATING

12. SPACE SENSOR FAILURE:

A. IF THERE IS A FAULT WITH THE OPERATION OF THE ZONE SENSOR AN ALARM SHALL BE ANNUNCIATED AT THE BAS. SPACE SENSOR FAILURE SHALL CAUSE THE VAV TO DRIVE THE DAMPER TO MINIMUM AIR FLOW IF THE VAV IS IN THE OCCUPIED MODE, OR DRIVE IT CLOSED IF THE VAV IS IN THE UNOCCUPIED MODE. THE SERIES FAN SHALL BE ENABLED AND THE REHEAT WILL BE DISABLED.

#### SERIES FAN POWERED TERMINAL UNIT CONTROL DIAGRAM

NOT TO SCAL



		Hardwa	re Points		Softwa	re Points				
POINT NAME	Al	AO	DI	DO	AV	BV	Trend	Alarm	Show on Graphic	DEFAULT VALUE
SPACE TEMPERATURE	Х						Х	Х	Х	
SPACE SETPOINT	Х						Х		X	
DISCHARGE AIR TEMPERATURE	Х						Х	Х	X	
FAN			Х				Х	Х	X	
ELECTRIC HEAT				Х			Х	Х	X	
PRIMARY AIR CFM	Х								X	
OCCUPANCY						Х				
OCCUPIED COOLING SETPOINT						Х				74°F
OCCUPIED HEATING SETPOINT						Х				71°F
UNOCCUPIED COOLING SETPOINT						Х				85°F
UNOCCUPIED HEATING SETPOINT						Х				60°F
OCCUPIED BYPASS TIMER						Х				2 HOURS
# OF SPARE POINTS	3		3	3						

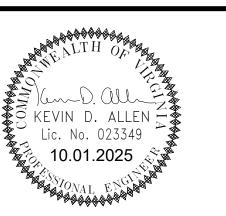
NOTE: THE GRAPHICS SHALL INCLUDE THE SETPOINT DISPLAY FOR EACH CONTROLLED OR MONITORED VARIABLE.

#### SERIES FAN POWERED TERMINAL UNIT POINTS LIST

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NEWPORT NEWS PUBLIC
SCHOOLS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601

No. Date Description

PROJECT MANAGER: DRAWN BY

ISSUED FOR BID:IFB #011-0-2026/SB QEA No.Project Number 52406380

ISSUED FOR BID

**TEMPERATURE** 

CONTROLS

OCTOBER 1, 2025

AUTOMATIC

M = 0.0

EXISTING 6" DOWNLIGHT.

EXISTING WALL MOUNTED LED LIGHT FIXTURE, HEIGHT AS INDICATED. NUMBER

SUBSCRIPT INDICATES LIGHT FIXTURE TYPE.

**EXISTING WALL MOUNTED EXIT LIGHT** 

EXISTING STAGE LIGHT BAR.

EXISTING EMERGENCY LIGHT FIXTURE WITH SELF-CONTAINED BATTERY PACK.

EXISTING LIGHTING HOMERUN TO PANEL. "HA" INDICATES PANEL NAME, "2" INDICATES CIRCUIT BREAKER NUMBER.

DOWNLIGHT LED FIXTURE. WHEN SHOWN HALF SHADED, IT INDICATES LIGHT FIXTURE WITH SELF CONTAINED EMERGENCY BATTERY PACK. CONNECT BATTERY AHEAD ANY LOCAL SWITCHING. SUBSCRIPTS WHEN USED INDICATE THE FOLLOWING:

INDICATES LIGHT FIXTURE TYPE.

EXISTING EXTERIOR SURFACE MOUNT LIGHT FIXTURE.

INDICATES LIGHT FIXTURE CONTROLLED BY CORRESPONDING LIGHT SWITCH WITH SUBSCRIPT "A".

INDICATES LIGHT FIXTURE CONNECTED TO PANEL "HMP", CIRCUIT BREAKER #1.

WALL MOUNTED EXIT LIGHT WITH DIRECTIONAL ARROWS AS INDICATED. SHADED AREA INDICATES FACE-LIT WITH SELF CONTAINED EMERGENCY BATTERY PACK. "HMP-1" INDICATES LIGHT FIXTURE CONNECTED TO PANEL "HMP", CIRCUIT BREAKER #1.

EXISTING WALL MOUNTED LIGHT FIXTURE.

CEILING MOUNTED, LINE VOLTAGE OCCUPANCY SENSOR, SENSOR SWITCH CATALOG NO. CMR-PDT-10 OR EQUAL.

SINGLE POLE LIGHT SWITCH. 20A, 120/277V, AC. INSTALL +46" AFF TO CENTER OF OUTLET BOX, U.O.N. SUBSCRIPT WHEN USED INDICATE THE FOLLOWING:

FOUR-WAY

THREE-WAY

2000W, THREE-WAY DIMMER, COORDINATE TYPE WITH DRIVER IN LIGHT FIXTURE

AD or BD CORRESPONDING LIGHT FIXTURES CONTROLLED. 2000W, THREE-WAY DIMMER. COORDINATE TYPE WITH DRIVER IN LIGHT FIXTURE. SWITCH WITH LINE VOLTAGE OCCUPANCY SENSOR

RAISE/LOWER PROJECTION SCREEN KEY SWITCH CONTROLLER

FOOT CANDLE INDICATOR.

2000W WALL MOUNTED PHOTOCELL, PARAGON "CW" SERIES OR APPROVED EQUAL INSTALL ON SIDE OF CANOPY (NOT ON FRONT) AND CONCEAL ALL WIRING INSIDE CANOPY SYSTEM, SO NOT EXPOSED.

LIGHTING BRANCH CIRCUITRY SHALL BE RUN CONCEALED ABOVE CEILING, IN WALL, BELOW FLOOR SLAB OR UNDERGROUND. AS A MINIMUM, EACH SINGLE-PHASE LIGHTING CIRCUIT SHALL HAVE ONE #12 PHASE CONDUCTOR, ONE #12 NEUTRAL CONDUCTOR, AND ONE #12 GROUND CONDUCTOR IN 1/2" CONDUIT. PROVIDE ADDITIONAL CONDUCTORS AS REQUIRED FOR LIGHTING CONTROLS, SWITCH LEG, THREE-WAY, AND FOUR-WAY LIGHT SWITCHES. PROVIDE ADDITIONAL UNSWITCHED PHASE CONDUCTORS FOR EXIT LIGHTS, EMERGENCY LIGHTING EQUIPMENT AND DEVICES. PROVIDE ADDITIONAL CONDUCTORS FOR LIGHTING DIMMING CONTROLS. MULTIPLE LIGHTING CIRCUITS SERVING DIMMING LOADS SHALL NOT SHARE COMMON NEUTRALS. EACH CIRCUIT SHALL HAVE AN INDIVIDUAL NEUTRAL. SEE NOTES ON DRAWINGS AND PANELBOARD SCHEDULES FOR CONDUCTOR SIZES LARGER THAN #12.

#### FIRE ALARM SYSTEM:

PULL STATION. INSTALL SINGLE GANG OUTLET BOX +42" A.F.F. TO CENTER. PROVIDE 3/4" CONDUIT FROM OUTLET BOX AND TERMINATE ABOVE NEAREST LAY-IN TILE CEILING. PROVIDE PULL STATION TO MATCH EXISTING MANUFACTUER OF FACP.

EXISTING AUDIO/VISUAL DEVICE.

CEILING MOUNTED AUDIO/VISUAL DEVICE. SEE FLOOR PLANS FOR ADDITIONAL REQUIREMENTS. SUBSCRIPT INDICATES CANDELA LEVEL.

EXISTING SMOKE DETECTOR.

EXISTING FIRE ALARM CONTROL PANEL.

PROVIDE 2" EMT CONDUIT SLEEVE U.O.N. FOR AUXILIARY SYSTEMS ABOVE CEILING (QUANTIFY AS INDICATED) BUT NOT LESS THAN 4" OF CONDUIT ON EACH SIDE OF THE WALL U.O.N. CONDUITS SHALL RUN FROM ABOVE HIGH CEILING IN NEW AREA TO LOWER CEILING IN CORRIDOR. COORDINATE PATHWAY WITH FURRED OUT WALLS. PROVIDE UL APPROVED FIRE SEALS. PROVIDE BUSHINGS ON EACH SIDE.

PROVIDE DUCT SMOKE DETECTOR WITH SAMPLING TUBES AND REMOTE TEST STATION. SEE "GENERAL FIRE ALARM NOTES" ON DRAWING E002 FOR ADDITIONAL INFORMATION.

#### **INTERCOM SYSTEM:**

EXISTING WALL MOUNTED SPEAKER.

#### **INTRUSION DETECTION SYSTEM:**

EXISTING WALL MOUNTED MOTION DETECTOR.

#### **CLOCK SYSTEM:**

EXISTING WALL MOUNTED SCHOOL CLOCK.

#### POWER:

DUPLEX RECEPTACLE, 20A, 120V, TAMPER-PROOF. INSTALL +18" A.F.F. TO CENTER OF RECEPTACLE, U.O.N. "LMP-10" INDICATES RECEPTACLE LMP-10 CONNECTED TO PANEL "LMP", CIRCUIT BREAKER #10. "4" WHEN USED INDICATES DOUBLE DUPLEX RECEPTACLE. "C", WHEN USED, INDICATES

CEILING MOUNTED RECEPTACLE. "E", WHEN USED, INDICATES EXISTING RECEPTACLE.

GFI,WP,LMP-10 DUPLEX RECEPTACLE 20A, 120V, TAMPER-PROOF, WEATHER RESISTANT GROUND FAULT INTERRUPTER. "LMP-10" INDICATES RECEPTACLE CONNECTED TO PANEL "LMP", CIRCUIT BREAKER #10.

PULLBOX, SIZE AS REQUIRED.

ELECTRICAL CONNECTION TO EQUIPMENT

JUNCTION BOX - SIZE AS REQUIRED.

ELECTRICAL CONNECTION TO TRANSFER FAN.

MECHANICAL PROVIDED AND INSTALLED THERMOSTAT.

DISCONNECT SWITCH, 600V, U.O.N.: 3P=NUMBER OF POLES, 60=SWITCH RATING, 40=FUSE RATING. PROVIDE IN NEMA 1 ENCLOSURE IF INSTALLED 3P <u>60</u> 3R INDOORS AND PROVIDE NEMA 3R ENCLOSURE IF INSTALLED OUT OF DOORS.

DRY TYPE TRANSFORMER

PANELBOARD, 208Y/120 VOLT.

PANELBOARD, 480Y/277 VOLT.

WHEN SHOWN ON DRAWINGS INDICATES POWER BRANCH CIRCUITRY OR FEEDER WIRING IN CONDUIT. RUN CONCEALED ABOVE CEILING, IN WALL BELOW FLOOR SLAB OR UNDERGROUND. NO TICK MARKS INDICATE 2 #12 CONDUCTORS & 1 #12 GND., IN 1/2" CONDUIT, U.O.N. TICK MARKS, WHEN SHOWN, INDICATE NUMBER OF CONDUCTORS IF OTHER THAN THREE: (7) INDICATES GROUNDING CONDUCTOR. SEE NOTES ON DRAWINGS AND PANELBOARD SCHEDULES FOR CONDUCTOR SIZES LARGER THAN #12.

WHEN SHOWN ON DRAWINGS INDICATES POWER HOMERUN BRANCH CIRCUITRY TO PANEL. "HMP" INDICATES PANEL NAME, "5" INDICATES CIRCUIT BREAKER NUMBER.

MOTOR STARTER. PROVIDED BY SUPPLIER OF EQUIPMENT AND **INSTALLED BY DIVISION 26.** 

POWER BRANCH CIRCUIT WIRING FOR ALL RECEPTACLES SHALL BE IN CONDUIT AND RUN CONCEALED ABOVE CEILING, IN WALL, BELOW FLOOR SLAB OR UNDERGROUND, U.O.N. AS A MINIMUM, EACH SINGLE-PHASE POWER CIRCUIT SHALL HAVE ONE #12 PHASE CONDUCTOR, ONE #12 NEUTRAL CONDUCTOR AND ONE #12 GROUND CONDUCTOR IN 1/2" CONDUIT. NEUTRALS MAY NOT BE SHARED BETWEEN PHASES. NO TWO OF THE SAME PHASE CONDUCTOR PER CONDUIT. NO MORE THAN THREE (3) PHASE CONDUCTOR PLUS THREE NEUTRALS AND ONE (1) GROUND PER CONDUIT, EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE. SEE NOTES ON DRAWINGS AND PANELBOARD SCHEDULES FOR CONDUCTOR SIZES LARGER THAN #12.

#### TELECOMMUNICATION SYSTEM:

EXISTING TEACHERS PANEL PLATE.

EXISTING DATA OUTLET.

EXISTING COAXIAL OUTLET.

EXISTING CEILING MOUNTED WIRELESS ACCESS DATA OUTLET.

TEACHER PANEL. PROVIDE TWO-GANG OUTLET BOX. PROVIDE (1) 1" CONDUIT WITH PULLWIRE AND BUSHINGS ON EACH END. TERMINATE CONDUIT +6" ABOVE LAY-IN TILE CEILING.

DATA OUTLET. PROVIDE SINGLE GANG OUTLET BOX WITH COVERPLATE, FOR FOUR (4) INSERTS. PROVIDE 1" CONDUIT WITH PULLWIRE FROM OUTLET BOX TO ABOVE LAY-IN TILE CEILING. PROVIDE BUSHINGS AT EACH END. INSTALL BOX +18" A.F.F. AND BESIDE RECEPTACLE.

#### **CCTV SYSTEM:**

EXISTING INTERIOR WALL MOUNTED CCTV CAMERA.

#### TELECOMMUNICATION SYSTEM:

CARD READER. PROVIDE TWO GANG OUTLET BOX ON WALL AT +48" A.F.F FOR SECURITY SYSTEM CARD READER. CARD READER TO BE SUPPLIED BY OWNER. COORDINATE SIZE OF OUTLET BOX WITH OWNER'S SECURITY SYSTEM SUPPLIER. PROVIDE 3/4" CONDUIT WITH PULLWIRE AND BUSHINGS ON EACH END. TERMINATE CONDUIT +6" ABOVE LAY-IN TILE CEILING.

EXISTING SECURITY SYSTEM DOOR CONTACT POSITION SWITCH. COORDINATE REWIRE OF CONTACTS WITH OWNER'S SECURITY SYSTEM PROVIDER. PROVIDE SINGLE GANG OUTLET BOX. PROVIDE 3/4" CONDUIT WITH PULLWIRE FROM OUTLET BOX TO ABOVE LAY-IN TILE CEILING. PROVIDE BUSHINGS ON EACH END.

CEILING MOUNTED CCTV CAMERA. PROVIDE SINGLE GANG OUTLET BOX. PROVIDE 3/4" CONDUIT WITH PULLWIRE FROM OUTLET BOX TO ABOVE LAY-IN TILE CEILING. PROVIDE BUSHINGS ON EACH END.

#### **GENERAL**:

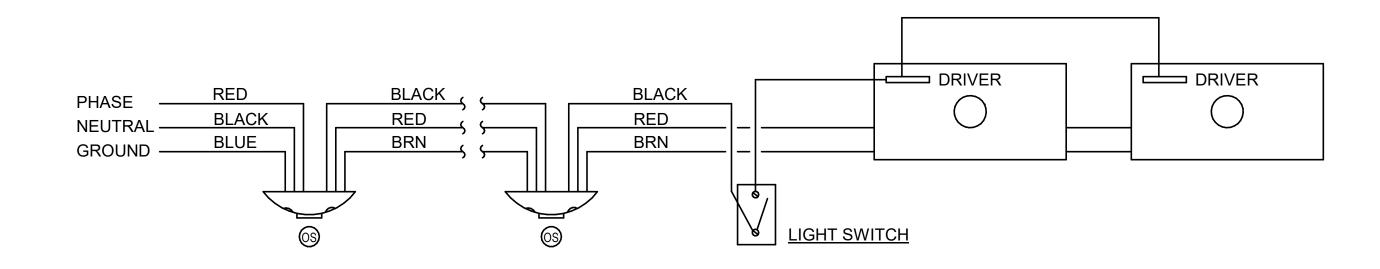
DEMOLITION NOTE INDICATOR.

NEW WORK NOTE INDICATOR.

ROOM NUMBER INDICATOR.

#### ABBREVIATIONS:

AC	ALTERNATING CURRENT	MLO	MAIN LUGS ONLY
A.F.F.	ABOVE FINISHED FLOOR	MTD	MOUNTED
AIC	AMPERE INTERRUPTING CAPACITY	N.E.C.	NATIONAL ELECTRICAL CODE
&	AND	# OR NO.	NUMBER
BKR	BREAKER	PNL	PANEL
С	CONDUIT	RECEPT.	RECEPTACLE
CAT.	CATALOG	RTU	ROOF TOP UNIT
CCTV	CLOSED CIRCUIT TELEVISION	Т	THERMOSTAT
CIRC. OR CKT.	CIRCUIT	TF	TRANSFER FAN
CU	COPPER	TP	TEACHER'S PANEL
EBU	EMERGENCY BACKUP UNIT	TYP.	TYPICAL
EC	ELECTRONICALLY COMMUTATED	U.O.N.	UNLESS OTHERWISE NOTED
EX	EXISTING	V	VOLT
FACP	FIRE ALARM CONTROL PANEL	VAV	VARIABLE AIR VOLUME
GFI	GROUND FAULT INTERRUPTER	W	WIRE
GND.	GROUND	WP	WEATHERPROOF
KAIC	KILO-AMPERE INTERRUPTING CAPACITY (SYMMETRICAL)	XFMR	TRANSFORMER
KCMIL	THOUSAND CIRCULAR MIL	Υ	WYE
МСВ	MAIN CIRCUIT BREAKER		

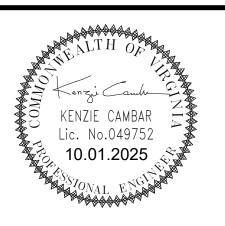


TYPICAL LINE VOLTAGE OCCUPANCY SENSOR WIRING DIAGRAM NOT TO SCALE



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PROJECT MANAGER: ISSUED FOR BID:IFB #011-0-2026/SB

QEA No.Project Number 52406380 ISSUED FOR BID

ELECTRICAL LEGEND AND ABBREVIATIONS

OCTOBER 1, 2025

NO TWO OF THE SAME PHASE CONDUCTOR PER CONDUIT.
 PROVIDE 120V CIRCUIT WITH INDIVIDUAL NEUTRALS PER CIRCUIT. NEUTRALS MAY NOT BE SHARED BETWEEN PHASES.

- 2. PAINT ALL EXPOSED CONDUIT AND SURFACE METAL RACEWAY TO MATCH THE SURFACE TO WHICH ATTACHED IF THE SURFACE IS PAINTED.
- 3. COORDINATE WITH MECHANICAL AND PLUMBING CONTRACTOR AND DRAWINGS FOR EXACT LOCATION OF EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS INCLUDING BUT NOT LIMITED TO NUMBER OF ELECTRICAL CONNECTIONS, NUMBER AND SIZE OF FEEDERS' TERMINAL LUGS, MAXIMUM OVERCURRENT PROTECTION, AND SIZE AND TYPE OF FUSES. MAKE ADJUSTMENTS TO CONDUIT ROUTING, PLACEMENT OF DISCONNECTS AND STARTERS AS REQUIRED.
- 4. PROTECT BRANCH CIRCUIT WIRING FROM PAINT OVERSPRAY DURING CONSTRUCTION TO PRESERVE COLOR-CODING. CONDUCTORS PAINTED SHALL BE COMPLETELY CLEANED OF PAINT BEFORE FINAL CONNECTIONS ARE MADE.
- 5. VERIFY OUTLET BOX, DEVICE AND WIRING REQUIREMENTS FOR INTERCOM STATIONS, SPEAKERS AND FIRE ALARM DEVICES WITH THE EXISTING SYSTEM MANUFACTURER'S AND PROVIDE ALL MATERIAL AND LABOR REQUIRED TO EXTEND THE EXISTING SYSTEMS.
- 6. COORDINATE WIRING DEVICE OUTLET LOCATIONS WITH ARCHITECTURAL PLANS, ELECTRICAL PLANS, ENLARGED FLOOR PLANS, EQUIPMENT AND FURNITURE LAYOUTS, SECTIONS, ELEVATIONS, DETAILS AND JOB SITE DIFFERENCES PRIOR TO ROUGHING-IN CONDUITS. MAKE REQUIRED ADJUSTMENTS WITH ARCHITECTS AND ENGINEERS' APPROVAL.
- 7. INSTALL DEVICES SHOWN ON DRAWINGS IN ACCORDANCE WITH MOUNTING HEIGHTS SHOWN IN THE ELECTRICAL LEGEND AND/OR THE PROJECT SPECIFICATIONS. ALL MOUNTING HEIGHT DIMENSIONS ARE TO THE CENTER OF THE OUTLET BOX, UON. MOUNTING HEIGHTS TO CEILING SUSPENDED DEVICES ARE TO BOTTOM OF DEVICE UON. WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ARCHITECT/ENGINEER.
- 8. INSTALL FIRE ALARM DEVICES IN ACCORDANCE WITH A.D.A. REQUIREMENTS.

CIRCUIT BREAKER OR MAIN LUGS WHETHER INDICATED OR NOT.

- 9. WHERE THE TERM "BRANCH CIRCUITRY" IS USED ON THESE DRAWINGS, IT IS TO BE CONSTRUED TO MEAN CONDUIT AND CONDUCTORS.
- 10. PROVIDE EACH EXTERIOR RECEPTACLE WITH A "WEATHERPROOF WHILE IN USE" RATED LOCKABLE COVERPLATE.
- 11. ALL CIRCUIT BREAKERS REQUIRED TO SERVE TEMPERATURE CONTROL LOADS SHALL BE FURNISHED UNDER DIVISION 23 AND INSTALLED IN THE PANELBOARDS UNDER DIVISION 26.
- 12. PROVIDE GROUND FAULT INTERRUPTING TYPE RECEPTACLES FOR ALL LOCATIONS WITHIN 6 FEET OF A LAVATORY, SINK, WATER CLOSET, SHOWER STALL, OR ANY WATER USING APPLIANCE.
- 13. CIRCUIT BREAKERS SERVING SURGE PROTECTIVE DEVICES "SPD" SHALL BE LOCATED CLOSE TO THE EQUIPMENT MAIN
- 14. PROVIDE HACR RATED CIRCUIT BREAKERS FOR ALL HEATING AND AIR CONDITIONING EQUIPMENT.
- 15. PROVIDE GFCI CIRCUIT BREAKERS WHERE INDICATED. GFCI CIRCUIT BREAKERS SHALL BE CLASS A GROUND-FAULT PROTECTION (5-MA TRIP).
- 16. CIRCUIT BREAKERS SERVING HEAT TRACE AND ICE MELTING EQUIPMENT SHALL BE PROVIDED WITH A PERMANENT LOCK-OUT DEVICE.
- 17. PROVIDE GFEP CIRCUIT BREAKERS WHERE INDICATED. GFEP CIRCUIT BREAKERS SHALL BE CLASS B GROUND-FAULT PROTECTION (30-MA TRIP)
- 18. SECURE DISCONNECTS SWITCHES SERVING HVAC EQUIPMENT TO BUILDING ELEMENTS OR EQUIPMENT HOUSINGS AS INDICATED ON THE DRAWINGS. WHERE BUILDING WALLS OR EQUIPMENT HOUSINGS DO NOT PROVIDE SUITABLE MOUNTING SURFACES, PROVIDE A GALVANIZED UNISTRUT FRAME OR RACK SATISFACTORY IN SIZE TO SECURELY SUPPORT THE DISCONNECT SWITCH, MAGNETIC CONTACTOR AND/OR VFD. WHERE RACKS ARE REQUIRED TO BE ROOF MOUNTED, SECURE THE RACK TO THE ROOF IN A METHOD THAT DOES NOT COMPROMISE THE ROOF MEMBRANE IN ANY WAY. SUBMIT THE ROOF ATTACHMENT METHOD TO THE ARCHITECT / ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION OR INSTALLATION.
- 19. THE CONTRACTOR SHALL ONLY USE DESIGNATED AREAS WITHIN THE HVAC EQUIPMENT FOR PENETRATIONS OF ELECTRICAL CONDUITS AND CONTROL CONDUITS. THESE PENETRATIONS MUST BE WEATHERTIGHT. IF A CONTRACTOR PENETRATES ANY AREAS IN THE EQUIPMENT THAT IS NOT DESIGNATED BY THE MANUFACTURER FOR PENETRATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS TO THE EQUIPMENT, TO INSURE IT IS WEATHERTIGHT. IF EQUIPMENT CANNOT BE MADE WEATHERTIGHT, THE CONTRACTOR SHALL BE REQUIRED TO REPLACE THE EQUIPMENT AT HIS/HER OWN EXPENSE.
- 20. ALL LIGHT FIXTURES INSTALLED RECESSED IN DRYWALL CEILINGS SHALL BE PROVIDED WITH DRYWALL FLANGE KIT. THE USE OF LIGHT FIXTURES WITH BUILT-IN SCREW CLAMPS OR FLAPS WILL NOT BE ACCEPTED.
- 21. PROVIDE A TYPED CIRCUIT INDEX CARD FOR EACH PANELBOARD UPON COMPLETION OF INSTALLATION WORK. INDICATE LOAD SERVED AND ROOM NUMBER(S). NEW PANEL INDEX SHALL COMPLY WITH NEC ARTICLE 408.5. USE FINAL ROOM NUMBERS OBTAINED FROM THE ARCHITECT OR OWNER. NOT CONSTRUCTION ROOM NUMBERS AS SHOWN ON THE DRAWINGS.
- 22. THE HVAC CONTROLS BRANCH CIRCUITRY BETWEEN EACH HVAC CONTROL PANEL AND ELECTRICAL PANELS WITH CIRCUIT BREAKERS LABELED AS "HVAC CONTROLS" SHALL BE PROVIDED BY THE MECHANICAL CONTROLS CONTRACTOR. THE FINAL TERMINATION OF EACH CONTROLS BRANCH CIRCUITRY TO THE ELECTRICAL PANELS SHALL BE DONE BY THE ELECTRICAL CONTRACTOR.
- 23. DISCONNECT SWITCHES SHALL CONFORM TO GOVERNING INDUSTRY NEMA STANDARDS. THEY SHALL BE LISTED BY UL. DISCONNECT SWITCHES SHALL BE NEMA STANDARD HEAVY DUTY, QUICK-MAKE, QUICK-BREAK TYPE, AND CAPABLE OF BEING LOCKED IN THE OFF POSITION. WHERE DISCONNECT SWITCHES ARE INDICATED OR REQUIRED BY THE NEC TO BE WEATHERPROOF, FURNISH NEMA 3R ENCLOSURES, UNLESS INDICATED OTHERWISE. PROVIDE ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOOR WITH NEMA 3R ENCLOSURES. WHETHER INDICATED OR NOT.
- 24. WHERE CONFLICTS ARE FOUND BETWEEN DRAWINGS, DETAILS, OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY. NOTIFY ARCHITECT OF DISCREPANCY IN WRITING.
- 25. PROVIDE MAINTENANCE RECEPTACLE WITHIN 25 FEET OF EACH MECHANICAL UNIT AS REQUIRED BY NEC, WHETHER INDICATED OR NOT. COORDINATE INSTALLATION LOCATIONS WITH FINAL EQUIPMENT LAYOUT PROVIDE BY MECHANICAL CONTRACTOR.
- 26. SEAL AROUND ALL EXISTING AND NEW CONDUIT PENETRATIONS THROUGH WALLS WITH FIRE RETARDANT SEALANT THAT MEETS OR EXCEEDS THE FIRE RATING OF THE WALL. ALL OTHER THRU WALL PENETRATIONS SHALL BE GROUTED OR SEALED WITH CAULK. ALL PENETRATIONS SHALL BE CORE DRILLED OR DRILLED WITH PROPER TOOLS. HAMMERS SHALL NOT BE USED TO CREATE PENETRATIONS IN WALLS. REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 27. THE CONTRACTOR SHALL INCLUDE IN HIS/HER BID THE HIRING OF THE "SEAM GROUP" TO PROVIDE SHORT CIRCUIT, COORDINATION STUDY, ARC FLASH HAZARD ANALYSIS, AND ARC FLASH LABELS. THE CONTRACTOR SHALL CONTACT JUSTIN SANDERS justin.sanders1@us.abb.com (1-765-418-7112) AT THE "SEAM GROUP" PRIOR TO PROCURING A CONTRACT FOR THIS PROJECT. THE SHORT CIRCUIT, COORDINATION STUDY, AND ARC FLASH HAZARD ANALYSIS SHALL BE PROVIDED FOR ALL NEW POWER DISTRIBUTION EQUIPMENT, ALL HVAC EQUIPMENT, AND ALL EXISTING POWER DISTRIBUTION EQUIPMENT AFFECTED BY THE SCOPE OF THIS CONTRACT. THE ARC FLASH EQUIPMENT LABELS SHALL BE UV PROTECTED TYPE, FURNISHED BY THE SEAM GROUP, AND INSTALLED ON THE EQUIPMENT BY THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE SEAM GROUP AND PROVIDE THE REQUIRED DATA (POWER EQUIPMENT SHOP DRAWINGS, FEEDERS INFORMATION [TYPE, LENGTH, AND SIZES], FOR POWER COMPANY TRANSFORMER INFORMATION, ETC.) TO THE SEAM GROUP TO PERFORM THE STUDY AND ARC FLASH ANALYSIS. THE STUDY AND ANALYSIS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO SUBMITTING POWER DISTRIBUTION EQUIPMENT SHOP DRAWINGS. THE CONTRACTOR SHALL SUBMIT A HARD COPY ALONG WITH AN ELECTRONIC COPY OF THE FINAL STUDY PRODUCED BY THE SEAM GROUP TO THE OWNER.
- SPLICES. KINKS. TWISTS AND DEFECTS OF ANY NATURE WILL NOT BE ACCEPTED BY NNPS TECHNOLOGY STAFF AND THE
- 29. CONTRACTOR MUST, AT ITS OWN EXPENSE, REPLACE ALL SECTION OF CABLE IDENTIFIED BY NNPS.
- NNPS TECHNOLOGY STAFF SHOULD BE CONSULTED BY CONTRACTOR FOR CHANGES THAT WILL BE MADE AND FOR 30. GUIDANCE.
- HARD AND ELECTRONIC COPIES OF AS-BUILT DRAWINGS SHALL BE PROVIDED TO NNPS TECHNOLOGY STAFF THAT SHOWS 31. CABLE PATH, ZONE NUMBER FOR ANY NEW DEVICES, LOCATION OF DEVICES, ETC.

32. COORDINATE AND SCHEDULE ALL POWER OUTAGES IN ADVANCE WITH THE OWNER.

IF WORK ON THE EXISTING ELECTRICAL DISTRIBUTION EQUIPMENT REQUIRES POWER OUTAGES, THE CONTRACTOR SHALL PROVIDE A TEMPORARY GENERATOR TO SUPPORT THE EXISTING FIRE ALARM SYSTEM, SECURITY SYSTEMS (ACCESS CONTROL, INTRUSION DETECTION, CCTV), KITCHEN FREEZER/COOLER, AND INTERNET/DATA/TELEPHONE EQUIPMENT.

CONTRACTOR SHALL USE RUBBER-BASED PIPE SUPPORT BLOCKS WITH GALVANIZED STRUT, DURA-BLOK OR EQUAL TO SUPPORT ALL CONDUITS INSTALLED ON THE ROOF. PROVIDE ALL THE REQUIRED ACCESSORIES TO SUPPORT ALL CONDUITS PROVIDE A RUBBER ROOF MEMBRANE BARRIER EQUAL TO THE THICKNESS OF THE ROOF MEMBRANE. BARRIER SHALL BE PERMANENTLY ATTACHED TO THE BLOCK.

#### GENERAL DEMOLITION NOTES

ABANDONED OUTLET BOXES.

- 1. PERFORM ALL THE REQUIRED DEMOLITION TO COMPLY WITH THE SCOPE AND INTENT OF THE PROJECT. REMOVE ALL WIRING ASSOCIATED WITH THE REQUIRED DEMOLITION BACK TO POINT OF ORIGIN OR LAST DEVICE TO REMAIN
- 2. VERIFY ALL CIRCUITS SAVED DURING DEMOLITION FOR REUSE AS TO WIRE SIZE AND POINT OF ORIGIN
- 3. EXERCISE CARE IN REMOVING MATERIAL AND EQUIPMENT DURING DEMOLITION. REPAIR ALL DAMAGE TO EXISTING SURFACES OR EXISTING EQUIPMENT TO REMAIN TO THE SATISFACTION OF THE ARCHITECT AND OWNER AT NO ADDITIONAL COST TO THE OWNER.
- 4. PROVIDE THE OWNER WITH FIRST RIGHT OF REFUSAL FOR ALL ELECTRICAL EQUIPMENT BEING REMOVED AS A PART OF THIS CONTRACT AND NOT SCHEDULED FOR REINSTALLATION. ALL ELECTRICAL EQUIPMENT NOT TURNED OVER TO THE OWNER SHALL BECOME THE PROPERTY OF THE ELECTRICAL CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.
- 5. FLUORESCENT BALLASTS IN EXISTING LIGHT FIXTURES SCHEDULED TO BE REMOVED MAY CONTAIN PCB'S. REMOVE THE BALLASTS FROM THE LIGHT FIXTURES, PROPERLY CONTAIN AND DISPOSE OF THE SAME IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS GOVERNING THE SAME.
- FLUORESCENT LAMPS IN EXISTING LIGHT FIXTURES SCHEDULED TO BE REMOVED MAY CONTAIN MERCURY. REMOVE THE LAMPS FROM THE LIGHT FIXTURES, PROPERLY CONTAIN AND DISPOSE OF THE SAME IN ACCORDANCE WITH ALL FEDERAL STATE AND LOCAL REGULATIONS GOVERNING SAME.
- DURING THE REMOVAL OF EXISTING CEILINGS, SUPPORT ALL EXISTING AUXILIARY SYSTEMS CABLES (DATA, INTERCOM, TELEPHONE, TELEVISION, CCTV, ETC.) FROM STRUCTURE ABOVE EXISTING CEILING. ADJUST ROUTING OF THESE CABLES TO ACCOMMODATE THE INSTALLATION OF NEW HVAC SYSTEM EQUIPMENT. RE-VERIFY THE WORKING CONDITION OF THESE CABLES AND REPLACE ALL THE CABLES FOLIND DEFECTIVE AFTER REINSTALLATION, WHICH WERE WORKING PRIOR TO
- CABLES AND REPLACE ALL THE CABLES FOUND DEFECTIVE AFTER REINSTALLATION, WHICH WERE WORKING PRIOR TO REMOVAL WITH CABLES TO MATCH EXISTING AT NO ADDITIONAL COST TO THE OWNER.
- IN AREAS WHERE NO OTHER TRADES ARE INVOLVED, THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF EXISTING CEILING TILES AS REQUIRED TO INSTALL THE NEW BRANCH CIRCUITRY. REINSTALL EXISTING CEILING TILES AFTER COMPLETION OF WORK. REPLACE ALL CEILING TILES DAMAGED DURING THIS PROJECT WITH NEW TILES TO MATCH EXISTING 9. TO THE SATISFACTION OF THE ARCHITECT AND OWNER.
- PROVIDE ALL ELECTRICAL DEMOLITION WORK NECESSARY TO INSTALL NEW WORK. REROUTE AND RECONNECT ALL CIRCUIT 10. THAT IS REQUIRED TO REMAIN IN USE BUT INTERFERES WITH NEW CONSTRUCTION.
- CONDUITS MAY BE ABANDONED IN WALLS AND BELOW FIRST FLOOR SLABS ONLY. REMOVE ALL WIRING FROM ABANDONED CONDUITS. DISCONNECT CONDUCTORS FROM ALL POWER SOURCES AND PROVIDE BLANK COVERPLATES ON ALL
- WHERE THE TERM "BRANCH CIRCUITRY" IS USED ON THESE DRAWINGS, IT IS TO BE CONSTRUED TO MEAN CONDUIT AND CONDUCTORS.
- 12. PROVIDE NEW TYPED PANEL INDEX CARDS IN EXISTING PANELBOARDS WHERE CIRCUITS HAVE BEEN MODIFIED BY THIS PROJECT. NEW PANEL INDEX SHALL COMPLY WITH NEC ARTICLE 408.5. PROVIDE COPIES OF MODIFIED PANEL INDEX CARDS ON AS BUILT DRAWINGS AND INCLUDED IN OPERATION AND MAINTENANCE MANUALS. PROVIDE CIRCUIT BREAKER FILLER PLATES FOR ALL CIRCUIT BREAKERS REMOVED FROM EXISTING PANELBOARDS DURING DEMOLITION WORK.
- THE EXISTING CONDITIONS ILLUSTRATED HAVE BEEN DETERMINED FROM ORIGINAL CONSTRUCTION DOCUMENTS AND A LIMITED NON-INVASIVE FIELD INVESTIGATION. THE CONTRACTOR SHALL INVESTIGATE FIELD CONDITIONS PRIOR TO COMMENCEMENT OF WORK, COORDINATE AND MAKE ADJUSTMENTS AS NECESSARY.

IF WORK ON THE EXISTING ELECTRICAL DISTRIBUTION EQUIPMENT REQUIRES POWER OUTAGES, THE CONTRACTOR SHALL PROVIDE A TEMPORARY GENERATOR TO SUPPORT THE EXISTING FIRE ALARM SYSTEM, SECURITY SYSTEMS (ACCESS CONTROL, INTRUSION DETECTION, CCTV), KITCHEN FREEZER/COOLER, AND INTERNET/DATA/TELEPHONE EQUIPMENT. COORDINATE AND SCHEDULE ALL POWER OUTAGES IN ADVANCE WITH OWNER.

#### GENERAL FIRE ALARM NOTES

TIE WRAPS TO SUPPORT CABLES ABOVE CEILING.

- 1. THE EXISTING FIRE ALARM SYSTEM IS A BOSCH 9512 G SERIES ADDRESSABLE SYSTEM. NEWPORT NEWS PUBLIC SCHOOLS WILL PROVIDE ADDRESSES AND PROGRAMMING FOR THE FACP. THE FIRE ALARM CONTROL PANEL IS LOCATED IN THE MAIN MDF SPACE.
- 2. A CERTIFIED BOSCH FIRE ALARM SYSTEM TECHNICIAN MUST PERFORM ALL MODIFICATIONS TO THE BUILDING FIRE ALARM SYSTEM. NO SUBSTITUTIONS TO ANY REQUIRED FIRE ALARM SYSTEM EQUIPMENT WILL BE CONSIDERED. THE CONTRACTOR SHALL COORDINATE ALL COMMUNICATIONS WITH ALTRONIX.
- 3. ALL FIRE ALARM WORK, NEW, REMOVAL, AND REINSTALLATION OF EXISTING (WIRING DEVICES AND CONNECTING DEVICES) SHALL BE PERFORMED BE CERTIFIED BOSCH / RADIONICS INSTALLER. DOCUMENTATION OF CERTIFICATION BY COMPANY AND INSTALLER SHALL BE PROVIDED.
- 4. NNPS TECHNOLOGY STAFF WILL PROVIDE ADDRESSING AND VERBAL GUIDANCE ON THE ALARM CONNECTIVITY. IF QUESTIONS COME UP DURING THE PROJECT CONTACT NNPS TECHNOLOGY.
- 5. NNPS TECHNOLOGY STAFF WILL PROVIDE THE FIRE ALARM PANEL PROGRAMMING.
- 6. PRIOR TO THE PROJECT STARTING GENERAL CONTRACTOR FOREMAN AND ASSISTANT FOREMAN NAMES AND TELEPHONE NUMBERS SHOULD BE PROVIDED TO NNPS TECHNOLOGY SO THAT ALARM CODES CAN BE CREATED AND THE ABILITY OF PLACING THE ALARM SYSTEMS ON TEST.
- 7. PRIOR TO ANY DISTURBANCE OF THE ALARM SYSTEMS THE SYSTEM(S) SHOULD BE PLACED ON TEST WITH OUR ALARM MONITORING CENTER.
- 8. NO T-TAPPING SHALL BE USED ON THE FIRE ALARM SYSTEM. CONTRACTOR SHALL REQUEST AS-BUILTS FROM OWNER FOR CURRENT CIRCUITRY.
- 9. IF ANY MODIFICATIONS OR DEVCE REMOVAL/REINSTALLATIONS ARE NEEDED A CITY PERMIT MUST BE PULLED FOR THE FIRE ALARM SYSTEM.
- 10. PROVIDE FIRE ALARM DEVICES, CABLING AND ACCESSORIES, U.O.N., THAT ARE COMPATIBLE WITH THE EXISTING RADIONICS FIRE ALARM PANEL. ALL NEW FIRE ALARM CABLING SHALL BE RED IN COLOR AND PLENUM RATED. PROVIDE PLENUM RATED
- 11. ALL AREAS IN THE BUILDING WILL BE IN USE. CONTRACTOR SHALL SCHEDULE WORK AT TIMES CONVENIENT TO THE OWNER.
- 12. AT NO TIME SHALL THE BUILDING BE WITHOUT AN ACTIVE FIRE ALARM SYSTEM. FIRE DEPARTMENT SHALL BE NOTIFIED WHEN THE FIRE ALARM SYSTEM IS OFF-LINE AND THE CONTRACTOR SHALL PROVIDE A FIRE WATCH AS REQUIRED BY THE E LOCAL FIRE MARSHALL.
- 13. PROVIDE FIRE ALARM SYSTEM WIRING IN 3/4" CONDUIT. IF SPLICING BECOMES A NECESSITY, IT SHALL BE DONE IN AN APPROPRIATELY SIZED JUNCTION BOX. PAINT THE ENTIRE JUNCTION BOX RED.
- 14. PROVIDE CONDUCTORS (NUMBER, SIZE AND TYPE) IN ACCORDANCE WITH THE FIRE ALARM SYSTEM MANUFACTURERS RECOMMENDATION.
- 15. THE FIRE ALARM SYSTEM CONTRACTOR SHALL PROVIDE A COMPLETE SYSTEM WIRING DIAGRAM AND SHALL INSTALL THE SYSTEM IN ACCORDANCE WITH THE WIRING DIAGRAM, THE NATIONAL ELECTRICAL CODE, AND ANY AND ALL LOCAL CODES AND ORDINANCES WHICH PERTAIN TO THE WORK.
- 16. PROVIDE PHOTOELECTRIC DUCT SMOKE DETECTORS WITH AIR SAMPLING TUBES. DUCT TYPE SMOKE DETECTORS SHALL ACCOMMODATE AN INTELLIGENT PHOTOELECTRIC SENSOR THAT PROVIDES CONTINUOUS ANALOG MONITORING AND ALARM VERIFICATION FROM THE FIRE ALARM CONTROL PANEL. PROVIDE AUXILIARY RELAYS/CONTACTS FOR EACH DETECTOR AS REQUIRED TO SUPPORT THE REQUIRED TEMPERATURE CONTROL FUNCTIONS. THE DUCT DETECTOR SHALL BE RATED FOR AIR DUCT VELOCITIES OF 100 TO 3000 CUBIC FEET PER MINUTE. PROVIDE SAMPLING TUBES, LENGTH AS DIRECTED BY THE MECHANICAL CONTRACTOR.
- 17. DUCT SMOKE DETECTORS ARE FURNISHED BY THE DIVISION 28 FIRE ALARM SYSTEM CONTRACTOR, INSTALLED IN THE DUCTWORK BY THE MECHANICAL CONTRACTOR AND CONNECTED TO THE FIRE ALARM SYSTEM BY THE DIVISION 28 FIRE ALARM SYSTEM CONTRACTOR IN ACCORDANCE WITH SECTION 606 IN THE INTERNATIONAL MECHANICALCODE. SEE ELECTRICAL AUXILIARY SYSTEMS DRAWINGS, MECHANICAL DRAWINGS AND/OR SPECIFICATIONS FOR THE QUANTITY AND LOCATION OF DUCT SMOKE DETECTORS REQUIRED.
- 18. PROVIDE EACH DUCT SMOKE DETECTOR WITH A REMOTE TEST STATION IN ACCORDANCE WITH NFPA 72. INSTALL REMOTE INDICATING LIGHT FLUSH IN THE CEILING BELOW THE DUCT DETECTOR.
- 19. LABEL ALL REMOTE INDICATING LIGHTS WITH MECHANICAL EQUIPMENT DESIGNATIONS THAT ARE ASSOCIATED WITH THE DUCT SMOKE DETECTOR.
- 20. CORRIDOR DOORS INSTALLED IN FIREWALLS WILL BE HELD OPEN WITH MAGNETIC HOLD OPEN DEVICES THAT WILL BE ACTIVATED BY SMOKE DETECTORS INSTALLED ON EACH SIDE OF THE DOORS. SEE ARCHITECTURAL PLANS FOR LOCATIONS OF FIRE DOORS.
- 21. WHERE FIRE ALARM DEVICES ARE REMOVED AND NOT REPLACED, PROVIDE A BLANK COVERPLATE ON THE EXISTING OUTLET BOX OF SUFFICIENT SIZE TO CONCEAL ALL GAPS AROUND THE OUTLET BOX. PAINT COVERPLATE TO MATCH SURFACE ON WHICH ATTACHED.
- 22. PROVIDE ONLY PLENUM RATED FIRE ALARM CABLE ON THIS PROJECT. INSTALL ALL FIRE ALARM SYSTEM ABOVE LAY-IN TILE CEILINGS WITHOUT CONDUIT, U.O.N. TIE CABLES TOGETHER WITH PLENUM RATED NYLON TIE WRAPS AND SUPPORT FROM J-HOOKS OR CABLE TRAY ATTACHED TO THE WALL ABOVE THE CEILING AND BELOW EXISTING PIPING AND DUCTWORK. RUN ALL FIRE ALARM CABLES ABOVE A HARD CEILING OR IN AN EXPOSED AREA WITH NO CEILING IN 3/4" CONDUIT. IF SPLICING BECOMES A NECESSITY, IT SHALL BE DONE IN AN APPROPRIATELY SIZED JUNCTION BOX (JUNCTION BOX SHALL THEN BE PAINTED RED). ALL DOWN STREAM MODULES (I.E. ZONE ADDRESSABLE AND/OR ZONE ADAPTER MODULES) SHALL BE INSTALLED IN JUNCTION BOXES CONCEALED ABOVE LAY-IN TILE CEILINGS.
- 23. INSTALL ALL NEW FIRE ALARM MANUAL PULL STATIONS WITHIN 5'-0" OF EGRESS DOORS IN ACCORDANCE WITH THE NATIONAL FIRE ALARM CODE. NFPA 72.
- 24. PATCH OPENINGS AROUND CONDUIT THROUGH WALL PENETRATIONS ON EACH SIDE OF THE WALL WITH FIRE RATED SEALANT EQUAL OR GREATER THAN THE RATING OF THE WALL.
- 25. INSTALL CEILING MOUNTED SMOKE DETECTORS ON A 4" SQUARE JUNCTION BOX. CUT ACOUSTICAL TILE CEILING TO ACCOMMODATE THE JUNCTION BOX. PROVIDE ACOUSTICAL TEE 24" SPAN ELECTRICAL BOX HANGAR BY ERICO CADDY FASTENER, CATALOG NUMBER 512 OR APPROVED EQUAL FOR SUPPORT OF JUNCTION BOX.
- 26. PROVIDE ALL EQUIPMENT NECESSARY IN THE FIRE ALARM CONTROL PANEL TO COMPLY WITH THE FOLLOWING:
  - A. THE ACTIVATION OF ANY AUTOMATIC FIRE DETECTION DEVICE SHALL ACTIVATE A GENERAL ALARM AND
  - TRANSMISSION OF THE SIGNAL TO AN OFF-SITE MONITORING AGENCY.

    B. THE ACTIVATION OF THE GENERAL ALARM SHALL DE-ENERGIZE ALL DOOR HOLD OPEN DEVICES.
  - C. THE ACTIVATION OF ANY DUCT SMOKE DETECTOR SHALL ACTIVATE A GENERAL ALARM AND SHUT DOWN THE MECHANICAL EQUIPMENT ASSOCIATED WITH THE DUCT DETECTOR.

27. ALL VISUAL FIRE ALARM NOTIFICATION DEVICES SHALL FLASH IN SYNCHRONIZATION

	LIGHT FIXTURE SCHEDULE													
TYPE	MANUFACTURER'S CATALOG No.	VOLT	LUMENS	WATTAGE	MOUNTING	REMARKS								
1	CHLORIDE ER44RLDU1R	277	WITH FIXTURE	5 W	WALL	SEE NOTE 1								
2	LIGHTOLIER P6RDL50935WCDZ10U	277	5000 LUMEN LED	41 W	RECESSED									
3	DAY-BRITE FSS430L835-UNV-EMLED	277	3000 LUMEN LED	21.8 W	SURFACE									
4	RAB VANLED-20-FR-W/E2	277	2875 LUMEN LED	20 W	SURFACE									

#### LIGHT FIXTURE SCHEDULE NOTES:

#### GENERAL:

- 1 MATCH MOUNTING HARDWARE AND FRAME WITH THE CEILING TYPE OR CONSTRUCTION IN WHICH FIXTURE IS TO BE INSTALLED, COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLANS AND FINISH SCHEDULES.
- 2 ALL LIGHT FIXTURES COLOR SELECTIONS SHALL BE SELECTED AND APPROVED BY THE ARCHITECT PRIOR TO

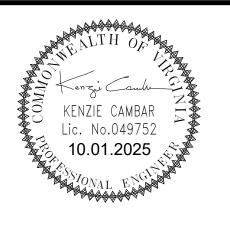
#### SPECIFIC:

SHADING INDICATES NUMBER OF FACES LIT. INSTALL BOTTOM OF EXIT FIXTURE 6" ABOVE DOOR HEADER. FIXTURE SHALL HAVE INTERNAL EMERGENCY BATTERY.

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CAMPUS FOR STUDENT
SUCCESS MULTIPURPOSE ROOM
NEWPORT NEWS PUBLIC
SCHOOLS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601

No. Date Description

PROJECT MANAGER: DRAWN BY:

ISSUED FOR BID:IFB #011-0-2026/SB QEA No.Project Number 52406380

ISSUED FOR BID

GENERAL NEW
WORK, DEMO AND
FIRE ALARM NOTES
\_\_AND SCHEDULES\_

F002

NO. DESCRIPTION

D1 EXISTING TO REMAIN.

D2 DISCONNECT AND REMOVE ALL CEILING MOUNTED EXIT LIGHTS, LIGHT FIXTURES, EBU LIGHT FIXTURES AND SWITCHES SHOWN ON THIS DRAWING. REMOVE BRANCH CIRCUITRY BACK TO INDICATED PANELBOARD OR POINT OF

EXISTING "MDS" (D1)

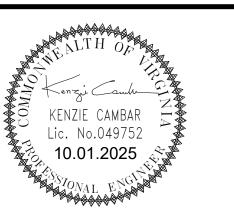
ORIGIN. ABANDON ALL CONCEALED CONDUIT IN WALLS

AND ABOVE CEILING.

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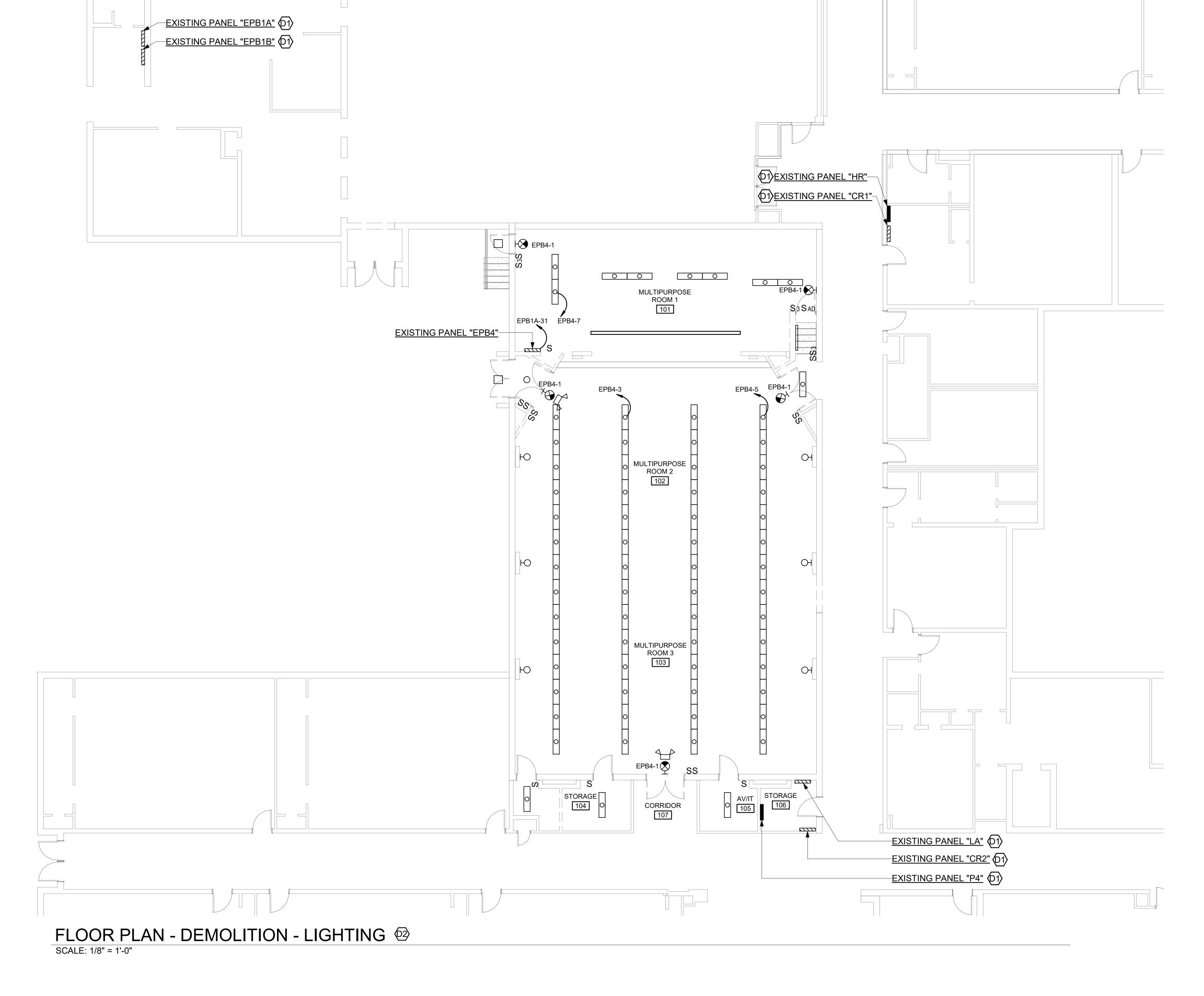
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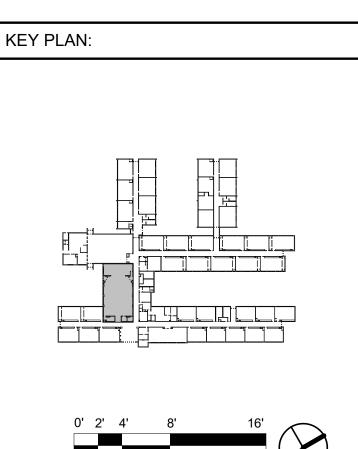




CAMPUS FOR STUDENT SUCCESS -MULTIPURPOSE ROOM NEWPORT NEWS PUBLIC SCHOOLS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601





No. Date Description

PROJECT MANAGER: DRAWN BY:
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ISSUED FOR BID:IFB #011-0-2026/SB

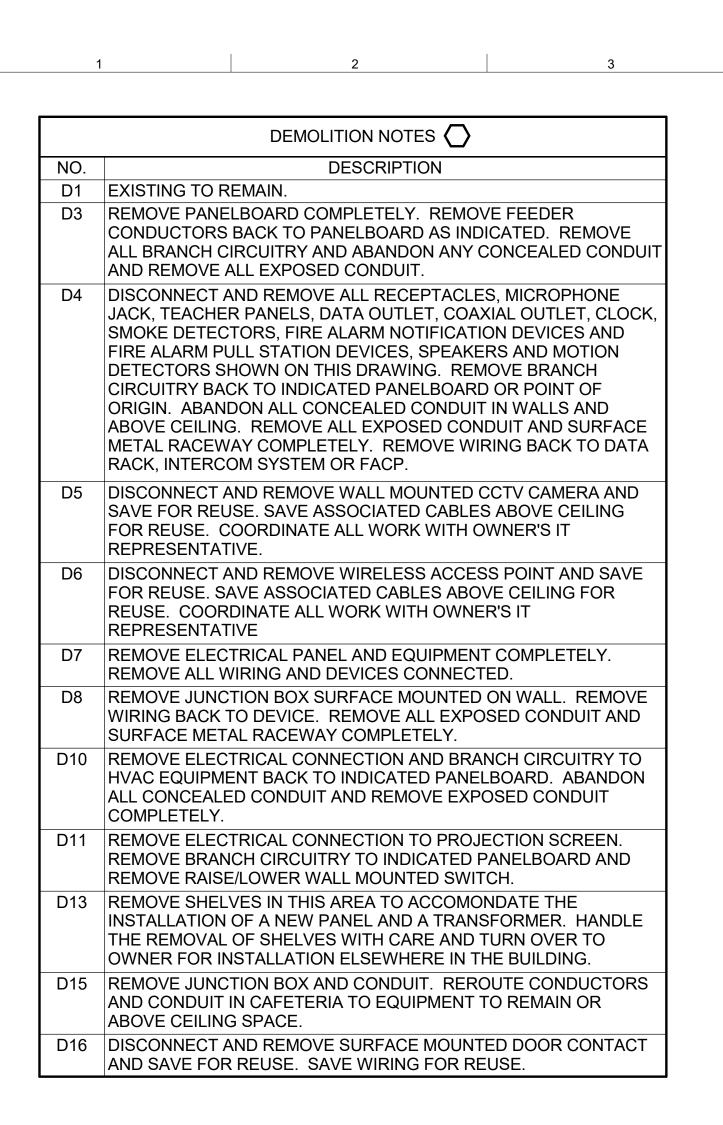
QEA No.Project Number 52406380

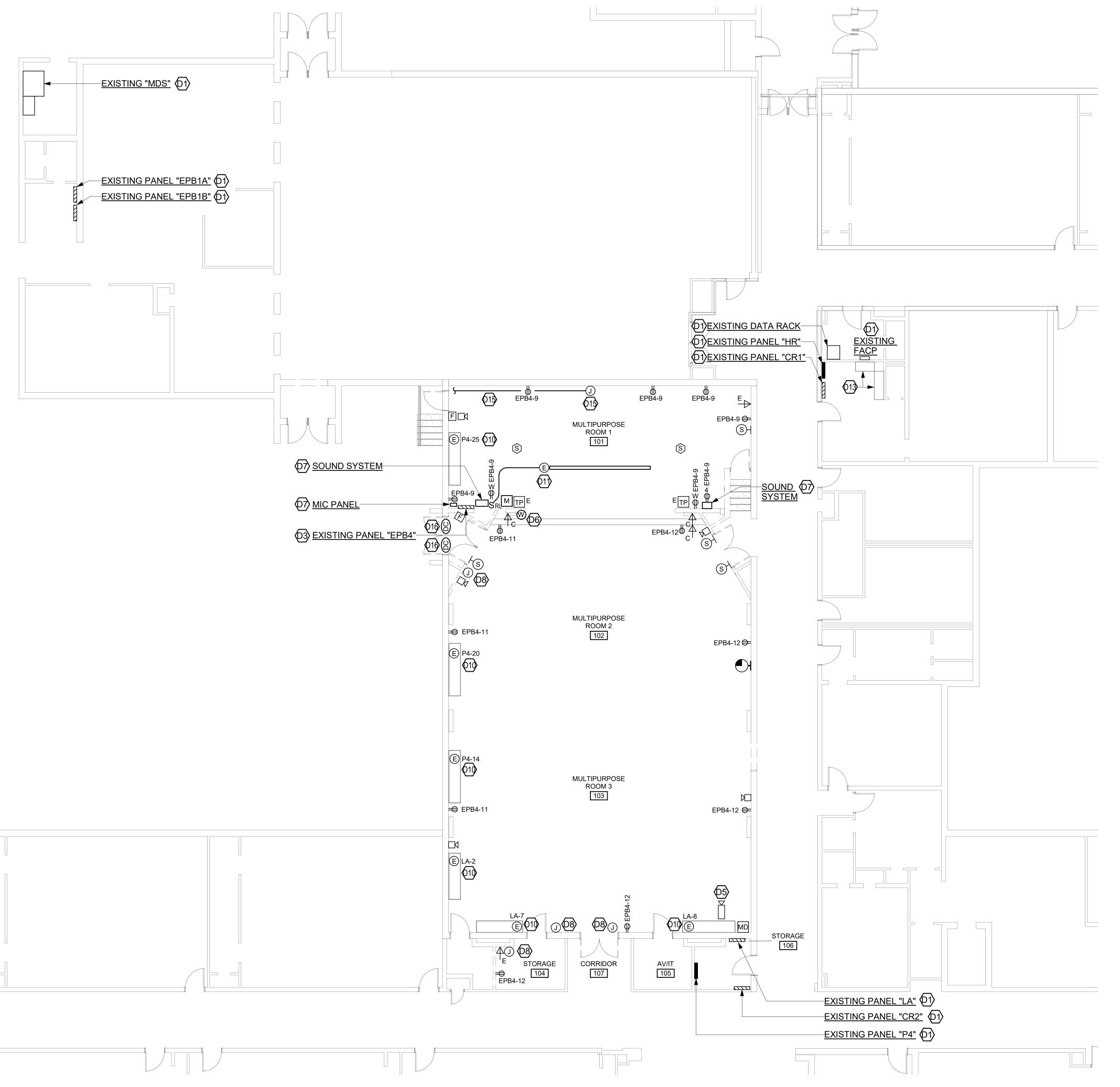
ISSUED FOR BID

OCTOBER 1, 2025

FLOOR PLAN -DEMOLITION -LIGHTING

**ED101** 





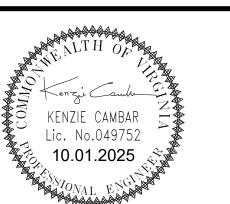
FLOOR PLAN - DEMOLITION - POWER, HVAC POWER AND AUXILIARY SYSTEMS 🕾

SCALE: 1/8" = 1'-0"

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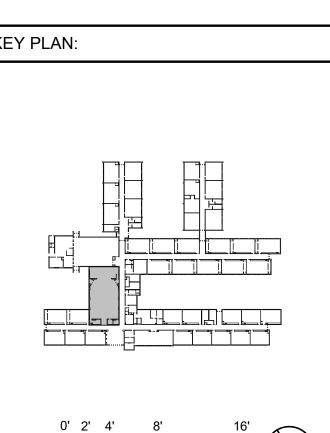
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QEA No.Project Number 52406380

ISSUED FOR BID
OCTOBER 1, 2025

FLOOR PLAN DEMOLITION POWER AND
AUXILIARY SYSTEMS

**ED201** 

PATH & FILENAME: Autodesk Docs://Campus for Student Success/Campus for St PLOTTING DATE & TIME: 10/2/2025 1:34:50 PM NEW WORK NOTES

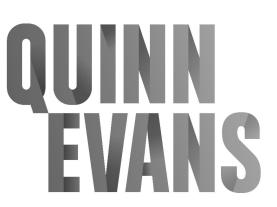
NO. DESCRIPTION

4 PROVIDE 2 #12 AND 1 #12 GND IN 1/2" CON

- PROVIDE 2 #12 AND 1 #12 GND., IN 1/2" CONDUIT FROM NEW LIGHT FIXTURE TO EXISTING CORRIDOR LIGHT FIXTURE.
   PROVIDE 2 #12 AND 1 #12 GND., IN 1/2" CONDUIT FROM NEW LIGHT FIXTURE TO NEW LIGHT FIXTURE.
- 25 INTERLOCK ALL LINE VOLTAGE OCCUPANCY SENSORS IN THIS SPACE SUCH THAT WHEN ANY SENSOR IS ACTUATED IT WILL ENERGIZE THE LIGHTING CIRCUIT SERVING SPACE.
- 28 CONNECT PHOTOCELL AHEAD OF FIXTURE TYPE 4 UNDER CANOPY.
- 33 COORDINATE SCREEN LOCATION SO AS NOT TO INTERFERE WITH LIGHT FIXTURES.

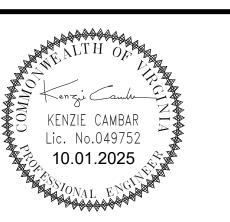
NEW PANEL "HMP" MULTIPURPOSE ROOM 11 68 fc 25

FLOOR PLAN - NEW WORK - LIGHTING
SCALE: 1/8" = 1'-0"



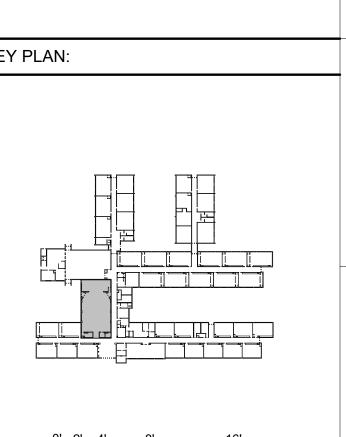
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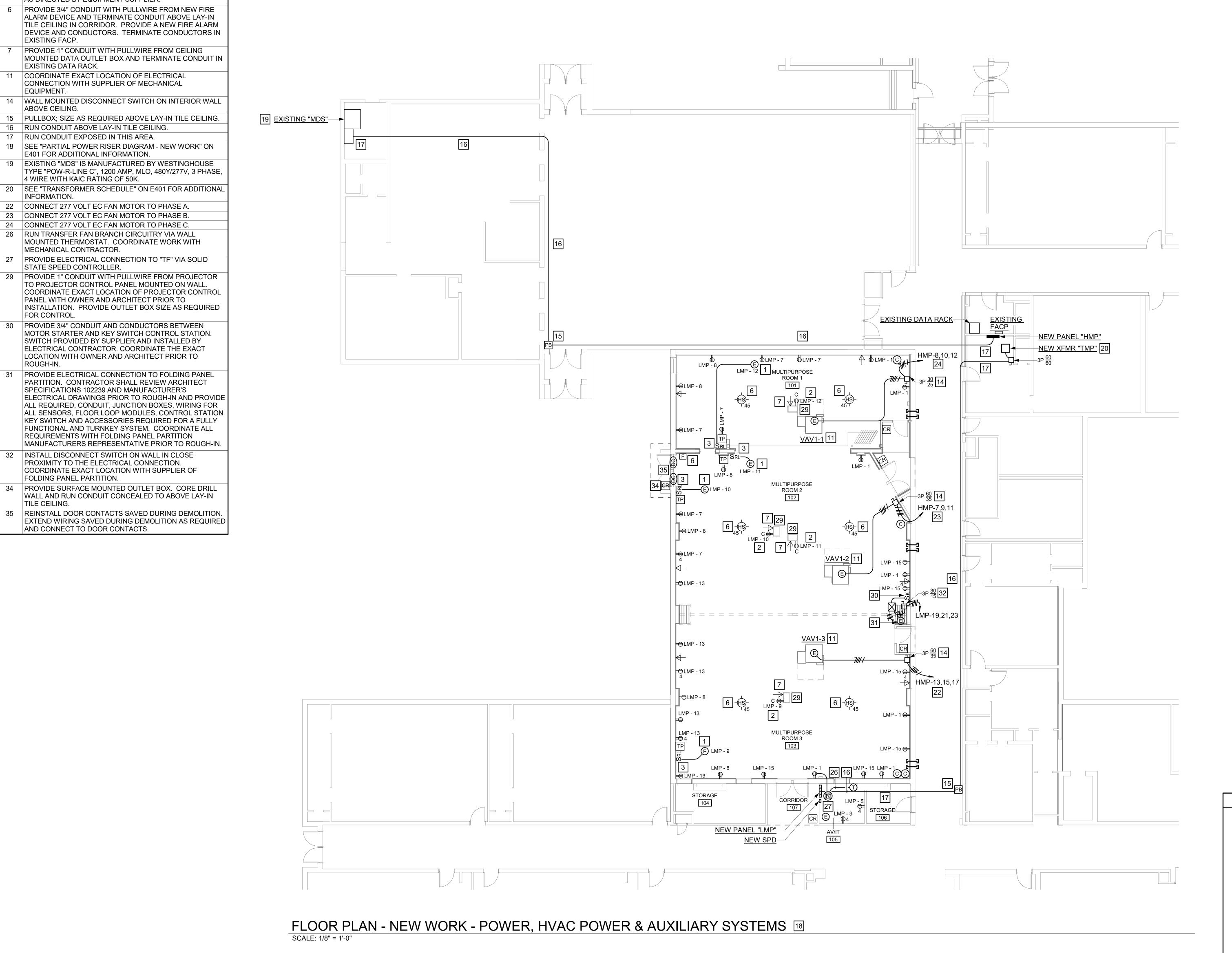
FLOOR PLAN - NEW WORK - LIGHTING

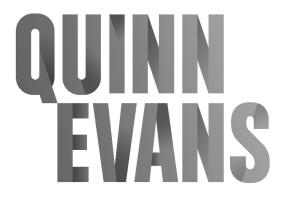
34 PROVIDE SURFACE MOUNTED OUTLET BOX. CORE DRILL

AND CONNECT TO DOOR CONTACTS.

TILE CEILING.

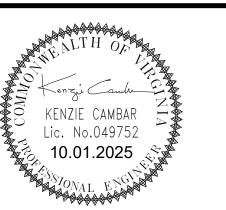
WALL AND RUN CONDUIT CONCEALED TO ABOVE LAY-IN





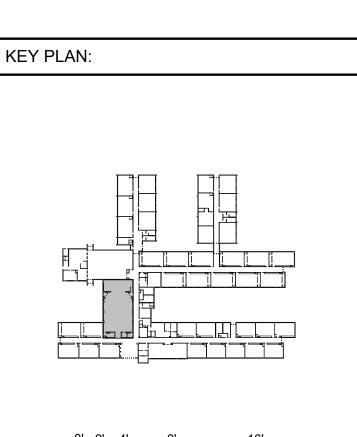
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**CAMPUS FOR STUDENT SUCCESS -MULTIPURPOSE ROOM NEWPORT NEWS PUBLIC** SCHOOLS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601



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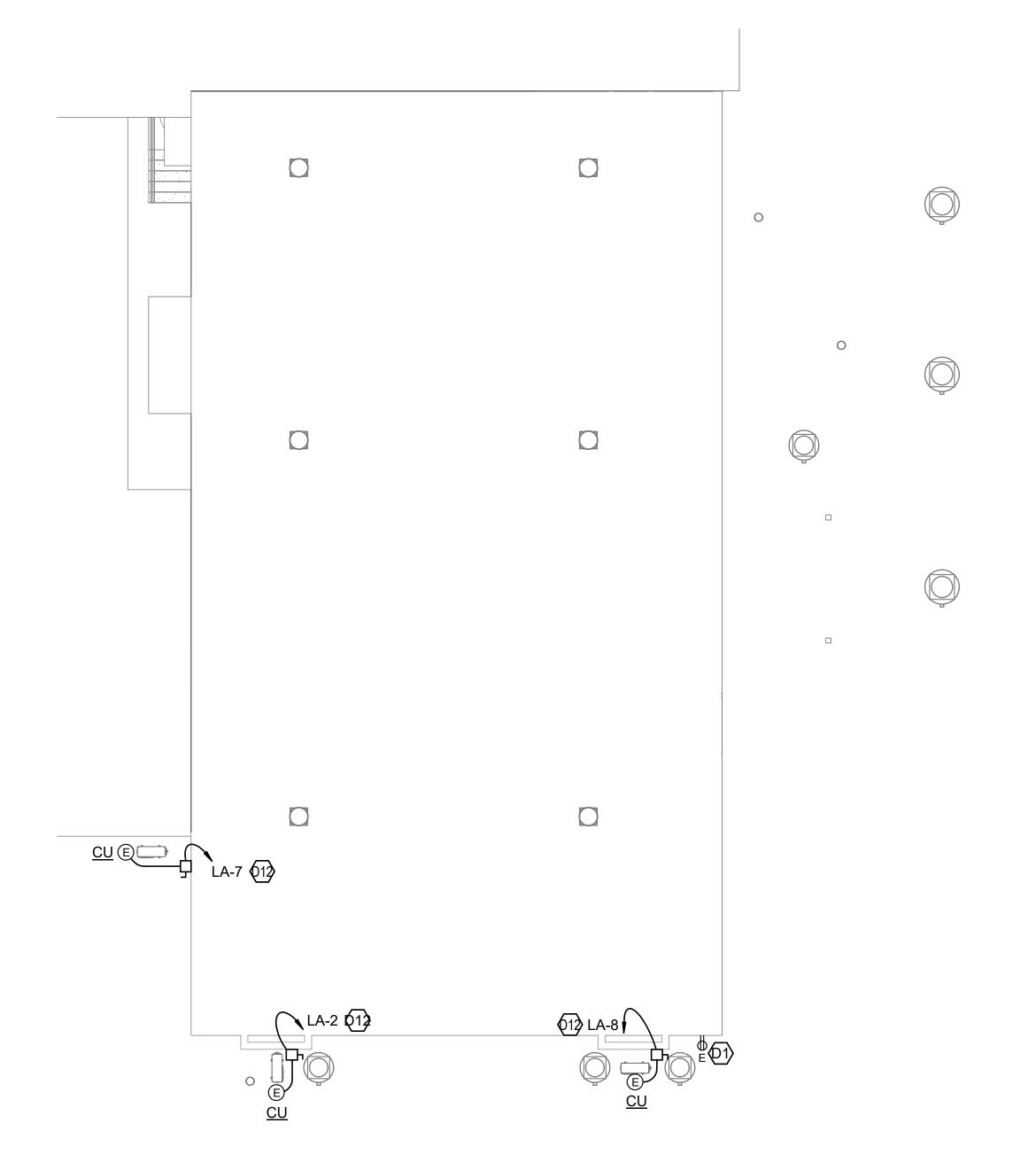
OCTOBER 1, 2025 FLOOR PLAN - NEW WORK - POWER, HVAC POWER AND \_AUXILIARY SYSTEMS\_

	NEW WORK NOTES
NO.	DESCRIPTION
8	EXISTING WALL MOUNTED RECEPTACLE.
9	PROVIDE 2 #12 AND 1 #12 GND., IN 1/2" CONDUIT FROM EXISTING RECEPTACLE AND TERMINATE AT NEW WALL MOUNTED RECEPTACLE
10	WALL MOUNT EXTERIOR RECEPTACLE AT SAME HEIGHT AS EXISTING RECEPTACLE.
11	COORDINATE EXACT LOCATION OF ELECTRICAL CONNECTION WITH SUPPLIER OF MECHANICAL EQUIPMENT.
12	RUN CONDUIT AND CONDUCTORS BELOW ROOF. COORDINATE WITH MECHANICAL AS TO PATHWAY TO ELECTRICAL CONNECTION WITHIN UNIT.
13	WALL MOUNTED DISCONNECT SWITCH ON EXTERIOR WALL.
21	SEE E201 FOR EXACT LOCATION OF NEW PANEL "HMP".
36	COORDINATE EXACT LOCATION OF DUCT SMOKE DETECTOR WITH

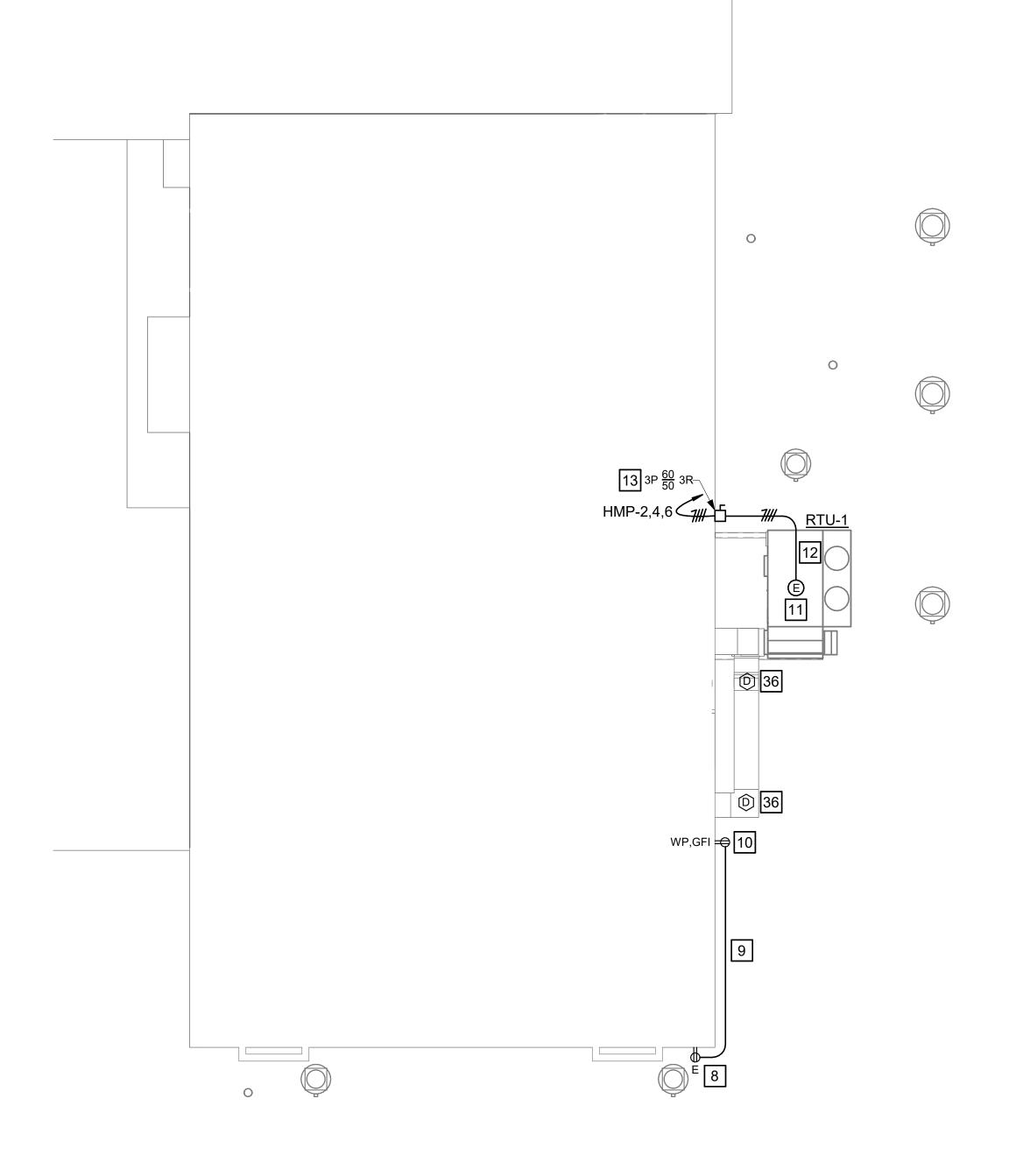
MECHANICAL DRAWINGS AND DETAILS FOR DUCTWORK SHOWN

ON THE ROOF. SEE "GENERAL FIRE ALARM NOTES" FOR

ADDITIONAL INFORMATION.







ROOF PLAN - NEW WORK - HVAC POWER (21)
SCALE: 1/8" = 1'-0"

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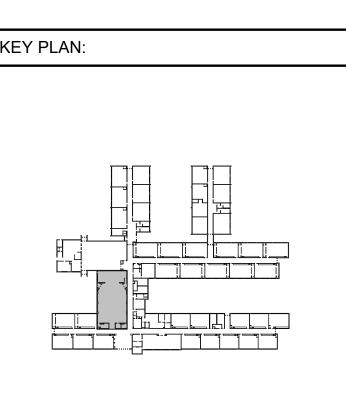
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CAMPUS FOR STUDENT SUCCESS -MULTIPURPOSE ROOM NEWPORT NEWS PUBLIC SCHOOLS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601



No. Date Description

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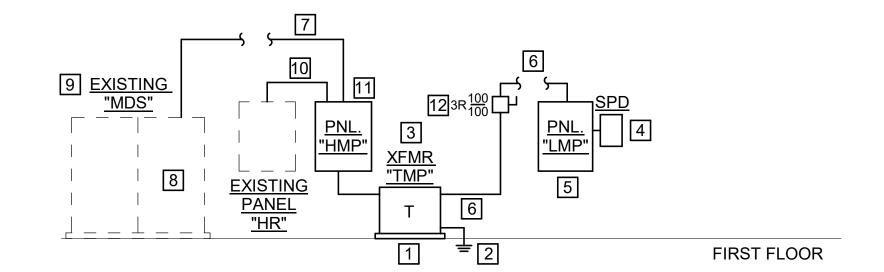
ISSUED FOR BID
OCTOBER 1, 2025

ROOF PLANS DEMOLITION AND
NEW WORK - HVAC
POWER

						PAI	NEL	: HN	1P						
	LOCATION: MOUNTING: Surfact NEMA: Type 1		VOLTS: 480/277 Wye KAIC RATING: 18 PHASES: 3 MAINS TYPE: M.L.O. WIRES: 4 MAINS RATING: 400 A												
CKT NO	LOAD SERVED P		C/B TRIP	WIRE SIZE	,	A		в с		WIRE SIZE	C/B TRIP	Р	LOAD SERVED	CK1	
1	LIGHTS	1	20	12	2.6	39.2									2
3	LIGHTS	1	20	12			3.4	39.2			8	50	3	RTU-1	4
5	LIGHTS	1	20	12					3.4	39.2					6
7					25.3	16.8									8
9	VAV 1-2	3	35	8			25.3	16.8			10	25	3	VAV 1-1	10
11									25.3	16.8					12
13					25.3	36.0						45		PANEL "LMP"	14
15	VAV 1-3	3	35	8			25.3	36.0			8		3	VIA	16
17									25.3	36.0				XFMR "TMP"	18
19	SPARE	1	20		0.0	160.0									20
21	SPARE	1	20				0.0	160.0			3/0	200	3	PANEL "HR"	22
23	SPARE	1	20						0.0	160.0					24
25	SPARE	1	20		0.0								1	SPACE	26
27	SPARE	1	20				0.0						1	SPACE	28
29	SPARE	1	20						0.0				1	SPACE	30
31	SPACE	1											1	SPACE	32
33	SPACE	1											1	SPACE	34
35	SPACE	1											1	SPACE	36
37	SPACE	1											1	SPACE	38
39	SPACE	1											1	SPACE	40
41	SPACE	1											1	SPACE	42
	CONI	NECTED LO	DAD (A	MPS):	30	5 A	30	6 A	30	6 A					
		NNECTED	LOAD	(KVA):	85 I	kVA	85	kVA		kVA					
	ONNECTED LOAD (KVA): 254 kVA							TOTA	AL ESTI	MATED	DEMA	ND LC	DAD (F	(VA): 254 kVA	
IOTES:	STORA	GE ROC	OM												

						PA	NEL	: LN	<b>IP</b>						
	LOCATION: AV/IT 105 MOUNTING: Surface NEMA: Type 1					PH	OLTS IASES WIRES	3: 3	/208 W	<b>/</b> ye		ľ	MAII	RATING: 10 NS TYPE: M.L.O. RATING: 100 A	
KT NO	LOAD SERVED	Р	C/B TRIP	WIRE SIZE		4	ı	3		<b>C</b>	WIRE SIZE	C/B TRIP	Р	LOAD SERVED	CK1 NO
1	RECEPTACLES	1	20	12	10.5	1.0									2
3	RECEPTACLE	1	20	10			10.0	1.0			10	30	3	SPD	4
5	RECEPTACLE	1	20	10					10.0	1.0					6
7	RECEPTACLES	1	20	12	10.5	9.0					12	20	1	RECEPTACLES	8
9	PROJECTOR & SCREEN	1	20	12			5.7	5.7			12	20	1	PROJECTOR & SCREEN	10
11	PROJECTOR & SCREEN	1	20	12					5.7	5.7	12	20	1	PROJECTOR & SCREEN	12
13	RECEPTACLES	1	20	12	12.0	0.0						20	1	SPARE	14
15	RECEPTACLES	1	20	12			12.0	0.0				20	1	SPARE	16
17	SPACE	1								0.0		20	1	SPARE	18
19					4.2								1	SPACE	20
21	FOLDING PANEL PARTITION	3	15	10			4.2						1	SPACE	22
23									4.2				1	SPACE	24
·	CONNEC		•	•	49	Α	40	Α		Α		'	<b>,</b>		,
	CONNE	CTED	LOAD	(KVA):	6 k	VA	5 k	VA		VA					
TOTAL C	CONNECTED LOAD (KVA): 13 kVA							ТОТ	AL ESTI	MATED	DEMA	ND LO	AD (KVA	A): 13 kVA	

	TRANSFORMER SCHEDULE													
TRANSF. NO.	KVA	PRIMARY	SECONDARY	ROOM LOCATION	APPROXIMATE WT.	MOUNTING	REMARKS							
XFMR "TMP"	30	480V	208Y/120	STORAGE ROOM	380 LBS.	FLOOR	K4 RATED							

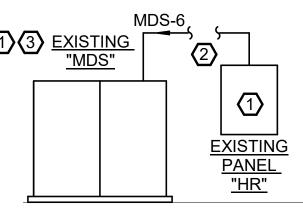


PARTIAL POWER RISER DIAGRAM - NEW WORK

NOT TO SCALE

#### POWER RISER DIAGRAM NOTES - NEW WORK:

- 1 PROVIDE CONCRETE HOUSEKEEPING PAD IN ACCORDANCE WITH SPECIFICATION SECTION 262200.
- 2 PROVIDE 1 #8 COPPER GROUNDING ELECTRODE CONDUCTOR AND CONNECT IN ACCORDANCE WITH N.E.C. ARTICLE 250.
- 3 PROVIDE K4 RATED, 480 VOLT DELTA PRIMARY, 208Y/120 VOLT WYE SECONDARY TRANSFORMER IN ACCORDANCE WITH TRANSFORMER SCHEDULE ON THIS DRAWING AND SPECIFICATION SECTION 262200.
- 4 PROVIDE SURGE PROTECTIVE DEVICE "SPD" IN ACCORDANCE WITH SPECIFICATION SECTION 264313. PROVIDE 4 #10 AND 1 #10 GND. IN 3/4" CONDUIT. CONNECT DEVICE TO CIRCUIT BREAKER INDICATED IN PANELBOARD SCHEDULES.
- 5 PROVIDE NEW PANEL IN ACCORDANCE WITH PANEL SCHEDULE ON THIS DRAWING AND SPECIFICATION SECTION 262416. PROVIDE THIS PANEL WITH DOUBLE NEUTRAL BUSSES.
- 6 PROVIDE 3 #3, 2 #3 NEUTRALS AND 1 #8 GROUND, IN 1-1/2" CONDUIT.
- 7 PROVIDE 3-600 KCMIL, 1-600 KCMIL NEUTRAL AND 1 #3 GND. IN 4" CONDUIT.
- PROVIDE 400A-3P CIRCUIT BREAKER IN SPACE 6 IN THE EXISTING "MDS". PROVIDE PRL4 BLANK COVER AND BREAKER CONNECTOR KIT, BREAKER FRAME "PDG3" AND KIT "KPRL4X334S". COORDINATE ALL WORK WITH SUPPLIER OF EQUIPMENT AND PROVIDE A COMPLETE TURNKEY ASSEMBLY FOR CIRCUIT BREAKER IN EXISTING "MDS".
- 9 EXISTING "MDS" IS MANUFACTURED BY WESTINGHOUSE TYPE "POW-R-LINE C", 1200 AMP, MLO, 480Y/277V, 3 PHASE, 4 WIRE WITH KAIC RATING OF 50K.
- 10 PROVIDE 4 #3/0 AND 1#6 GROUND IN 2-1/2" CONDUIT.
- PROVIDE NEW PANEL IN ACCORDANCE WITH PANEL SCHEDULE ON THIS DRAWING AND SPECIFICATION SECTION 262416.
- 12 PROVIDE NEW FUSED DISCONNECT SWITCH.



FIRST FLOOR

#### PARTIAL POWER RISER DIAGRAM - DEMOLITION

NOT TO SCALE

#### POWER RISER DIAGRAM NOTES - DEMOLITION:

- (1) EXISTING TO REMAIN.
- REMOVE FEEDER CONDUIT AND CONDUCTORS BACK TO INDICATED CIRCUIT BREAKER IN MDS. ABANDON ALL CONCEALED CONDUIT IN PLACE.
- REMOVE 200A-3P CIRCUIT BREAKER FEEDING PANEL "HR". TURN CIRCUIT BREAKER OVER TO OWNER.

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CAMPUS FOR STUDENT SUCCESS -MULTIPURPOSE ROOM NEWPORT NEWS PUBLIC SCHOOLS

746 ADAMS DRIVE, NEWPORT NEWS, VIRGINIA 23601

No. Date Description

PROJECT MANAGER: DRAWN BY:
- -

ISSUED FOR BID:IFB #011-0-2026/SB QEA No.Project Number 52406380

OCTOBER 1, 2025

ISSUED FOR BID

PANEL SCHEDULES AND RISER DIAGRAM