

# MAINE DEPARTMENT OF EDUCATION



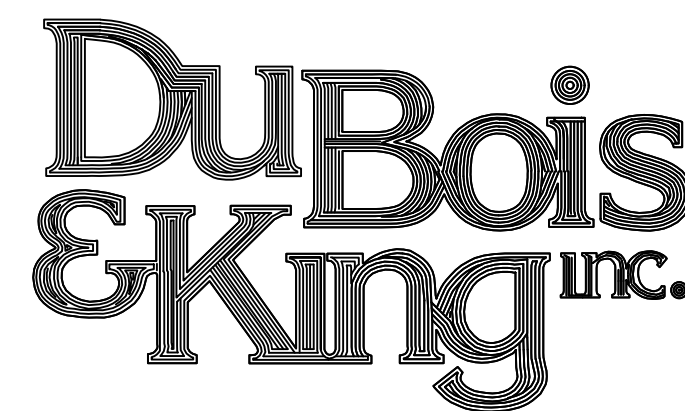
111 SEWALL ST.  
AUGUSTA, ME 04330

## EDMUNDS SCHOOL ENCLOSURE REPAIRS & MECHANICAL SYSTEM UPGRADES

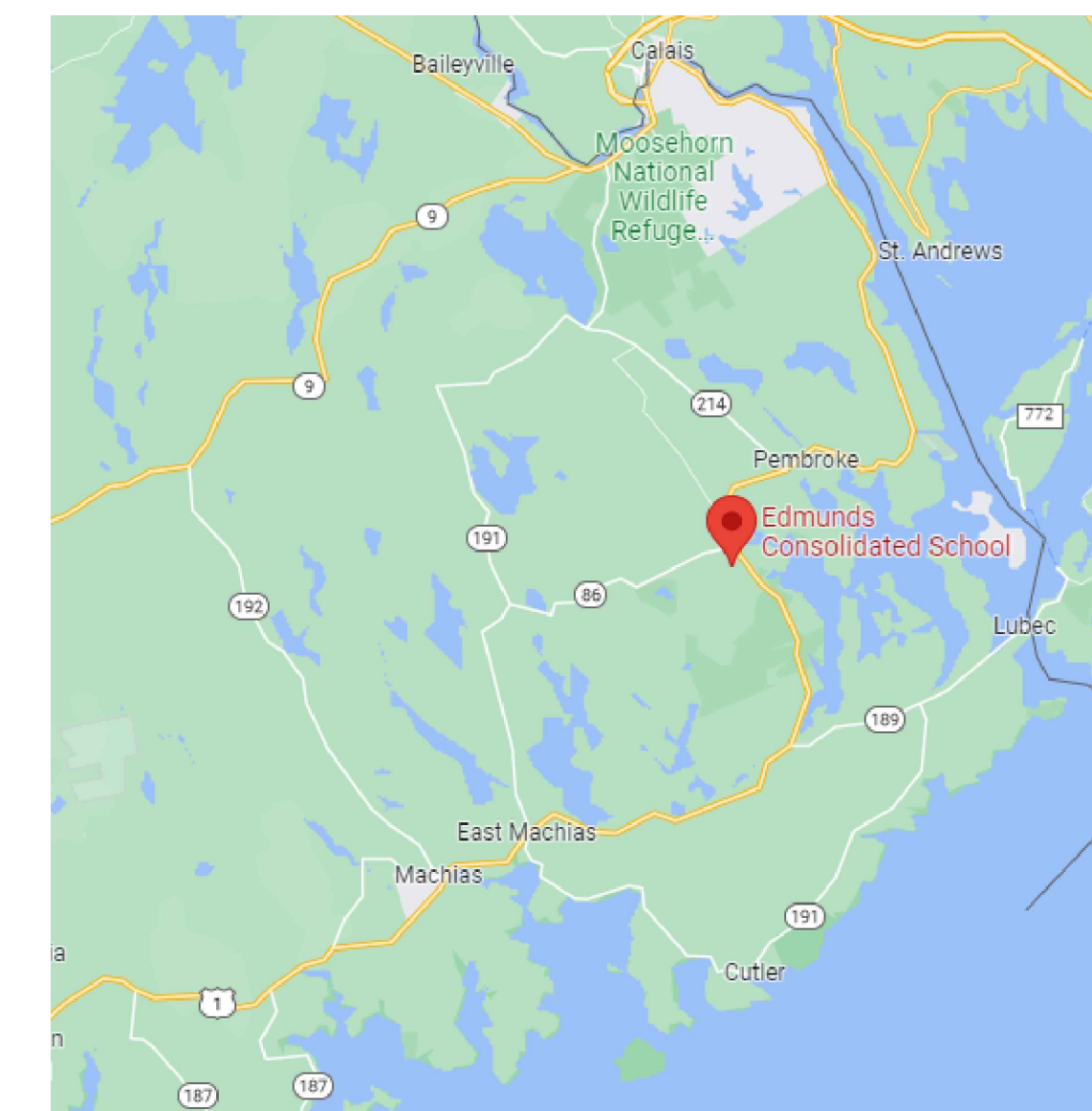
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JULY 21, 2023



6 GREEN TREE DRIVE  
SOUTH BURLINGTON, VERMONT 05403  
PHONE: (802) - 878 -7661  
FAX: (802) - 878 -2907



LOCATION MAP  
NOT TO SCALE

# EDMUNDS CONSOLIDATED SCHOOL

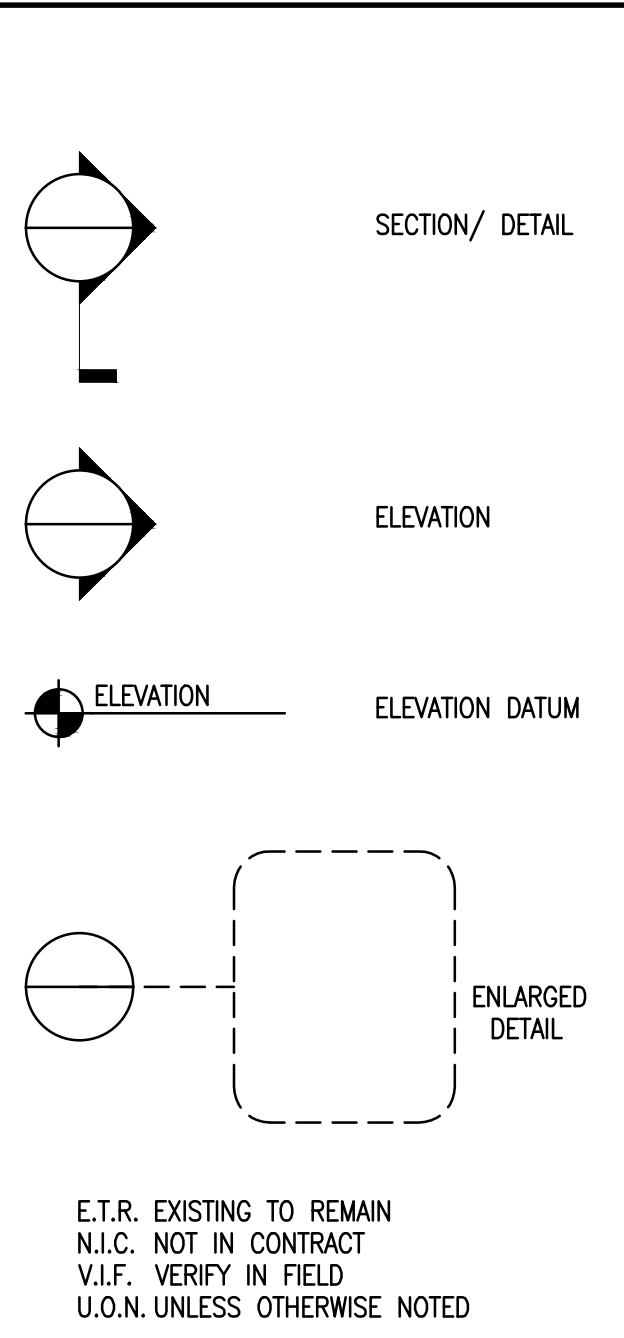
## ENCLOSURE REPAIRS

**LeMessurier.**

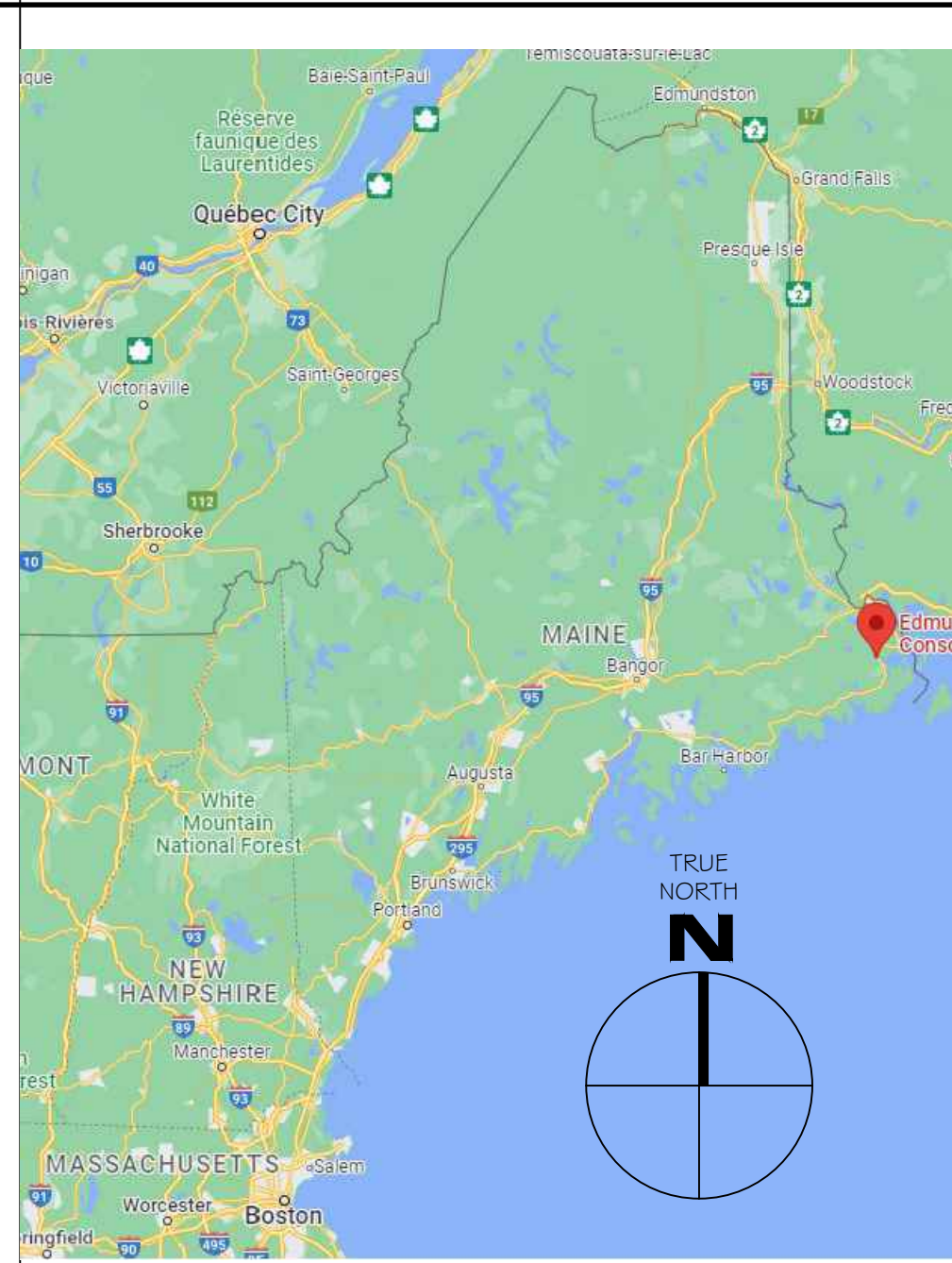
1 MADISON ST. FLOOR 2  
SOUTH PORTLAND MAINE. 04106  
PHONE: 207.400.0086

PROFESSIONAL SEAL

### GENERAL SYMBOL LEGEND



### LOCATION



### GENERAL CONSTRUCTION NOTES

**GENERAL NOTES**

A. ALL REPAIR WORK WILL BE COMPLETED IN ACCORDANCE WITH CURRENT PRACTICES IN THE CONSTRUCTION INDUSTRY, ALL NATIONAL, STATE, LOCAL BUILDING CODES INCLUDING, BUT NOT LIMITED TO THE MAINE UNIFORM BUILDING AND ENERGY CODE.

B. **SUBMITTALS:** CONTRACTOR MUST SUBMIT ALL MATERIALS USED FOR CONSTRUCTION WORK FOR APPROVAL PRIOR TO THE START OF WORK. ALL PRODUCT SUBMITTALS MUST HAVE A COVER SHEET INDICATING THAT IT IS A SUBMITTAL AND ALL THE PERTINENT DATA NEEDED TO BE REVIEWED. THIS SUBMISSION MUST INCLUDE A SUBMITTAL SCHEDULE. CONTRACTOR IS RESPONSIBLE FOR THE ACCURACY OF THE TERM "MATCH EXISTING" AND WILL BE EXPECTED TO PROVIDE TO THIS LEVEL OF "STANDARD OF CARE" AS IT RELATES TO MAINTAINING INTENT OF HISTORICAL RESTORATION.

C. SUBMITTALS WILL HAVE A MINIMUM OF ONE WEEK FOR REVIEW. A **SUBSTITUTION IS NOT A SUBMITTAL.** A SUBSTITUTION REQUEST MUST HAVE A COVER SHEET INDICATING IT IS A "REQUEST FOR SUBSTITUTION". ALL PERTINENT DATA FOR THE SUBSTITUTED PRODUCT AND THE SPECIFIED PRODUCT MUST BE PART OF THE REQUEST. SUBMITTALS WILL ONLY BE REVIEWED WITH CONTRACTORS STAMP/APPROVAL AND DATE. REQUEST MADE WITHOUT ALL THE INFORMATION INDICATED WILL BE REJECTED. REQUESTS FOR SUBSTITUTION WILL HAVE A MINIMUM OF TWO WEEKS FOR REVIEW. REFER TO ARCHITECTS SPECIFICATION OF SUBMITTALS.

D. CONTRACTOR TO COORDINATE ALL WORK WITHIN SUPPLEMENTAL SCHEDULE AND WITH A/E OF RECORD SCHEDULE AS PER SPECIFICATIONS WITH OTHER SUB-TRADES, AND WITH OWNER TO MINIMIZE EXPOSURE TO PEDESTRIANS, VEHICLES, AND ADJACENT BUILDINGS.

E. CONTRACTOR TO VERIFY AND DOCUMENT EXISTING CONDITIONS WITH CONTRACT DOCUMENTS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR TO NOTIFY A/E OF ANY CONFLICTS IN THE WORK OUTLINED ON CONSTRUCTION DOCUMENTS PRIOR TO THE COMMENCING WORK. NOTIFY A/E PRIOR TO COMMENCING WORK.

F. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL ITEMS ON THE BUILDING THAT MAY INTERFERE WITH THE WORK PROPOSED IN THESE DRAWINGS. ITEMS NOT SHOWN ON THE DRAWINGS THAT MUST BE REMOVED OR ALTERED EVEN IN A TEMPORARY FASHION MUST BE ACCOUNTED FOR PRIOR TO THE START OF WORK. IF CONTRACTOR IS UNSURE OF A CERTAIN SITUATION PLEASE CONTACT A/E BEFORE PROCEEDING.

G. CONTRACTOR TO VERIFY ALL DIMENSIONS AND QUANTITIES INDICATED ON BID DOCUMENTS AND ASSESS ADDITIONAL QUANTITIES AS NOTED AGAINST TRANSPORTING DAMAGE, REMOVAL AND EXTRACTING. CONTRACTOR SHALL CARRY QUANTITIES AND SQUARE FOOTAGE SUFFICIENT TO COMPLETE THE INDICATED TASK.

H. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING ANY ACCESS TO THIS STORAGE AREA. (SEE EXCEPTION.) (EXCEPTION: IF ANY ELEMENTS PURCHASED, NEW OR EXISTING BY OWNER ARE TO BE STORED OFF SITE, G.C. TO PROVIDE COMPLETE ACCESS TO OWNER IN COMPLIANCE WITH A/E OR RECORD SPECIFICATIONS FOR RETAINING OWNERS PROPERTY OFF SITE.

I. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SCAFFOLDING AND THE COORDINATION WITH THE BUILDING ENCLOSURE SCAFFOLDING IS TO HAVE A STAIR TOWER AND TO COMPLY WITH ALL LOCAL STATE, FEDERAL CODES AND SAFETY STANDARDS ECT.

J. CONTRACTOR TO MAINTAIN A CLEAN CLEAR FREE OF CONSTRUCTION DEBRIS ON A DAILY BASIS. CONTRACTOR IS TO RESTORE / REPLACE EXISTING DAMAGE TO GROUNDS SURROUNDING THE PROJECT.

K. CRITICAL ENTRANCES MUST REMAIN SAFE AND OPERATIONAL. THE G.C. SHALL COORDINATE AND PHASE ALL WORK THROUGHOUT CONSTRUCTION TO PROVIDE AND MAINTAIN A SECURE FACILITY. TEMPORARY "SECURE PANELS" SHALL BE CONSTRUCTED, MOVED AND MAINTAINED THROUGHOUT THE CONSTRUCTION DURATION TO PREVENT UNAUTHORIZED ACCESS DAILY AFTER CONSTRUCTION ACTIVITIES. REFER TO SHEETS A1.3 AND A1.4 FOR ADDITIONAL INFORMATION.

L. SAFE - SECURE - STORAGE TO PROVIDED ON SITE FOR THE SAFE / SECURE PROTECTION OF BUILDING ELEMENTS TO BE REINSTALLED, RETAINED, OR INSTALLED NEW, NOT LIMITED TO ANY OF THE BUILDING ELEMENTS OR NEW BUILDING MATERIALS TO BE EMPLOYED WITHIN THE DURATION OF THIS PROJECT

M. CONTRACTOR TO PROVIDE AND MAINTAIN AND SECURE ON SITE STORAGE, AGAINST THE FOLLOWING BUT NOT LIMITED TO: THEFT, WEATHER, DAMAGE, VANDALISM, UNAUTHORIZED ACCESS.

N. ANY AND ALL ACCESSORY ITEMS ATTACHED TO OR PENETRATING THE BUILDING'S ENCLOSURE IMPACTING THE SCOPE OF WORK, REQUIRING ITS RELOCATION, SUCH AS INCLUDING BUT NOT LIMITED TO: ELECTRICAL SERVICE, FIRE ALARM, SECURITY, LIGHTING, SIGNAGE, PLUMBING, MECHANICAL, TO BE COORDINATED WITH THE OWNER AND OR THE A/E OF REC. PRIOR TO ITS RELOCATION.

O. DISCONNECTION OF SERVICES TO BE APPROVED BY OWNER PRIOR TO DISCONNECTION.

P. DURATION OF DISCONNECTION TO BE COORDINATED AND APPROVED IN WRITING BY: OWNER AND LOCAL AUTHORITY HAVING JURISDICTION.

**QUALITY CONTROL NOTES**

A/E WILL PERFORM REGULAR INSPECTIONS OF THE RESTORATION WORK OVER THE DURATION OF THE PROJECT. INSPECTIONS WILL BE CONSIDERED AS PART OF THE "PUNCH LIST" INSPECTION PROCESS. ITEMS, WHICH DO NOT FOR CONFORM WITH THE INTENT OF THE CONSTRUCTION DOCUMENTS, SPECIFICATIONS OR INDUSTRY STANDARDS WILL BE MARKED WITH FLORESCENT MARKER WITH INSTRUCTIONS GUIDING THE CONTRACTOR WHAT TO CORRECT. FOR SUBSEQUENT INSPECTIONS, AS CORRECTIONS ARE COMPLETED, A/E, WILL INSPECT AGAIN AND REMOVE THE TAPE IF SATISFIED. ONLY THE A/E OR AN AGENT OF IS AUTHORIZED TO REMOVE THE FLORESCENT MARKER. PLEASE ASK QUESTIONS. A/E IS ALWAYS WILLING TO PROVIDE CLARIFICATION TO THESE DOCUMENTS AS NEEDED WITHIN REASON. PLEASE SUBMIT ALL QUESTIONS IN WRITING IN THE FORM OF A "REQUEST FOR INFORMATION" (RFI). ALL REQUESTS WILL BE RESPONDED TO AS PER RFI TIME TABLES.

IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CONFORM TO ALL MANUFACTURERS INSTALLATION GUIDELINES AND SPECIFICATIONS. ANY DEVIATION FROM THIS DIRECTIVE MUST BE APPROVED BY A/E IN WRITING PRIOR TO INSTALLATION.

**SPECIFIC PROJECT NOTES:**

ALL SEALANT JOINTS BETWEEN 1/4" AND 1/2" TO HAVE BACKER ROD AND SEALANT UNLESS OTHERWISE NOTED (UON).  
ALL WINDOWS ARE TO HAVE PAN FLASHING WITH BACK AND END DAMS.  
CONTRACTOR TO VERIFY ALL WINDOW ROUGH OPENINGS AND TO MODIFY ROUGH OPENINGS AS NEEDED TO RECEIVE NEW WINDOWS.

**PRODUCTS USED IN THIS PROJECT:**

- LP SMART SIDE SIDING - SERIES 76 SMART LOCK CEDAR TEXTURE LAP
- LP SMART SIDE TRIM - 440 SERIES SMOOTH FINISH TRIM 0.675" & 0.970" THICKNESS
- LP SMART SIDE SOFFIT - VENTED SOFFIT
- 1 X4 FURRING STRIPS
- DUPONT TYVEK COMMERCIAL WRAP ( WRB )
- DUPONT TYVEK FLASHING TAPE
- DUPONT TYVEK DRAIN VENT RAIN SCREEN
- COMPOSITE WINDOW WILL
- REPLACEMENT WINDOWS - ANDERSON SERIES 100 WINDOWS SINGLE HUNG
- REPLACEMENT DOOR AND FRAMES - COMMERCIAL - SECURE STEEL SERVICE
- REPLACEMENT DOOR HARDWARE - GRADE 5 EXTERIOR WITH S.S. COMPONENTS
- YORK S.S FLASH VENT FOR DRAINAGE PLANE FLASHING
- YORK 304 SA FOR WINDOW HEAD, JAMB AND SILL FLASHING
- YORK 304 SA FOR WINDOW PAN FLASHING
- 1/6 GA SS FLASHING FOR WALL BASE
- TREMCO DYMONIC 100 SEALANT
- CLOSED CELL BACKER ROD STANDARD H88
- CONCRETE PATCH- JAHN M90 BY CATHEDRAL STONE PRODUCTS OR MASTERMACO T 1060 BY BASF
- CONCRETE SEALER - BASF MASTERTPROTECT H 400
- MASONRY MINERAL PAINT- KEIM EXCLUSIV- COLOR TBD - (COLOR MATCHED WITH BENJAMIN MOORE COLORS) ( FINAL COLOR TO BE DETERMINED )
- 060 EPDM MEMBRANE TO MATCH EXISTING COLOR - CARLISLE
- EPDM MEMBRANE PATCH TAPE-CARLISLE
- EPDM MEMBRANE SEALANT- CARLISLE
- METAL COPING - TO MATCH EXISTING
- WHITE BREAK METAL FLASHING - TO MATCH EXISTING
- 1/2" EXTERIOR CDX SHEATHING ( FOR REMEDIATION )
- MINERAL WOOL INSULATION ( FOR REMEDIATION )
- 5/8" TYPE X GWB TO MATCH EXISTING (FOR REMEDIATION)
- 6 MIL POLY FOR INTERIOR VAPOR BARRIER (FOR REMEDIATION)
- INTERIOR FINISHES - PAINT BENJAMIN MOORE LATEX (FOR REMEDIATION)

**MASONRY PROJECT NOTES**

- ENSURE ALL MORTAR INGREDIENTS ARE FRESH WITH DOCUMENTED DATES OF MANUFACTURE SUBMITTED TO LEMESSURIER FOR APPROVAL. NO LIME OR CEMENT PRODUCTS INCLUDING PATCHING MORTAR SHALL BE OLDER THAN 6 MONTHS FROM TIME OF MANUFACTURING.
- STORE ALL MASONRY MATERIAL AS PER THE RECOMMENDATIONS OF THE BRICK INDUSTRY ASSOCIATION AND THE MASONRY INSTITUTE OF AMERICA.
- HOT AND COLD WEATHER MASONRY CONSTRUCTION AND QUALITY CONTROL REQUIRE SOME ADDITIONAL ATTENTION TO CONSTRUCTION PRACTICES AND PROTECTION. ALL WORK TO CONFORM TO INSTALLATION REQUIREMENTS SET FORTH BY THE MASONRY INSTITUTE OF AMERICA.
- CLEAN AS PER MANUFACTURERS PRODUCT RECOMMENDATIONS.
- CONTRACTOR TO STRIP ALL EXISTING PAINT FROM BRICK AND CONCRETE MASONRY AT INDICATED WORK AREAS.
- CONTRACTOR TO PAINT ALL THE CONCRETE MASONRY AT COMPLETION OF THE REPAIR WORK.

**ALT 1 =**

- REMOVE VINYL SIDING AND REPLACE IT WITH LP SMARTSIDE @ SIDING - SERIES 76 SMART LOCK CEDAR TEXTURE LAP
- REMOVE WHITE BREAK METAL FLASHING AND TRIM AND REPLACE WITH NEW TO MATCH EXISTING

NEW / INSTALL NEW - PROPOSED ENGINEERED TRIM AND SIDING REFER TO MATERIAL KEY OPTIONS INCLUDE: RAIN SCREEN AND FURRING STRIPS OVER 2" RIGID INSULATION.  
( IN ALL AREAS WITH BREAK METAL FLASHING AND TRIM REPLACE TO MATCH EXISTING- NOT ENGINEERED

- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CONFORM TO ALL MANUFACTURERS INSTALLATION GUIDELINES AND SPECIFICATIONS.

### SCOPE OF WORK

**BASICS OF DESIGN**

**DEMOLITION**

BASE =

- DEMO / REMOVE EXISTING BOARD & BATT AND TRIM ONLY.
- REMOVE EXISTING WINDOW ASSEMBLY INCLUDE: INTERIOR TRIM AND GYPWB JAMB/HEADER RETURN ( ALL EXTERIOR WINDOWS )
- REMOVE EXISTING DOOR/FRAME/ HARDWARE ASSEMBLY INCLUDE: INTERIOR TRIM AND GYPWB SILL/JAMB/HEADER RETURN ( ALL EXTERIOR DOORS )
- ( ALL INDICATED AREAS OF REMEDIATION ) INCLUDE: REMOVAL OF AIR AND MOISTURE BARRIER, PLYWD SHEATHING, BATT INSUL AND INDICATED PORTIONS OF GWB.

ALT 1 =

- REMOVE EXISTING VINYL SIDING AND TRIM.

**NEW INSTALLATION**

BASE =

- NEW / INSTALL NEW - PROPOSED ENGINEERED TRIM AND SIDING REFER TO MATERIAL KEY OPTIONS INCLUDE: RAIN SCREEN AND FURRING STRIPS OVER 2" RIGID INSULATION.
- NEW / INSTALL NEW WINDOW ASSEMBLY - REFER TO WINDOW SCHEDULE INCLUDE: INTERIOR TRIM AND GYPWB JAMB/HEADER RETURN
- NEW / INSTALL NEW DOOR/FRAME/ HARDWARE ASSEMBLY - REFER TO WINDOW SCHEDULE INCLUDE: INTERIOR TRIM AND GYPWB SILL/JAMB/HEADER RETURN.
- NEW / INSTALL VINYL SIDING AND TRIM - REFER TO MATERIAL KEY OPTIONS
- ( INDICATED AREAS OF REMEDIATION ) INCLUDE: INSTALLATION OF AIR/MOISTURE BARRIER, PLYWD SHEATHING, BATT INSUL AND INDICATED PORTIONS OF GWB.

ALT 1 =

- INSTALL VINYL SIDING AND TRIM TO MATCH EXISTING.

DRAWING NUMBER	DRAWING TITLE	SCHEMATIC DESIGN	DD 100%	CLIENT REVIEW	DD 95% REVIEW	DD 100% DOCUMENTS
BEC1.1	COVER SHEET					
BEA1.1	DEMOLITION & PROPOSED PARTIAL FLOOR PLAN AA					
BEA1.2	DEMOLITION & PROPOSED PARTIAL FLOOR PLAN BB					
BEA1.3	DEMOLITION & PROPOSED PARTIAL ROOF PLAN					
BEA2.0	ELEVATIONS   DEMOLITION					
BEA2.1	ELEVATIONS   PROPOSED FACADE					
BEA2.2	ELEVATIONS   DEMOLITION & PROPOSED FACADE					
BEA5.1	EXISTING & DEMOLITION PARTIAL SECTIONS & DETAILS					
BEA5.2	PROPOSED PARTIAL SECTIONS DETAILS					
BEA6.1	WINDOW TYPES   SCHEDULE & DETAILS					
BEA6.2	DOOR TYPES, SCHEDULE, BIO-REMEDIATION ASSESSMENT					

### REQUIRED MOCKUPS

- FULL PROPOSED WALL ASSEMBLY INCLUDING WINDOW WITH ALL TRIM AND FLASHING, VAPOR BARRIER, WOOD STUDS, INTERIOR BATT INSULATION, SHEATHING, AIR AND WATER BARRIER, EXTERIOR POLYISO BOARD INSULATION, RAINSCREEN AND LP SMART SIDING AND TRIM.
- DOOR AND HARDWARE IN FRAME
- CONCRETE PAINT SEALANT 2 LINEAR FEET - PROVIDE PULL TEST RESULTS SUBMITTAL PRIOR TO WORK.

### DESIGN CRITERIA

EXISTING SCHOOL: WOOD CONSTRUCTION WITH WOOD AND VINYL SIDING

ISSUED FOR BID  
NOT FOR CONSTRUCTION  
07-21-23

### BID 100% DOCUMENTS

NO.	DATE	DESCRIPTION	BY	CHK'D
0	07/21/2023			



AUGUSTA, ME

EDMUNDS SCHOOL  
BUILDING ENCLOSURE &  
MECHANICAL SYSTEMS  
UPGRADES

21 HARRISON RD  
DENNYVILLE, ME 04628

SHEET TITLE

COVER SHEET

DRAWN BY  
R/JH

DATE  
10/30/2022

CHECKED BY  
DCM

USK PROJECT #  
528137

LeM 21.0321

PROJ. ENG.  
N/A

USK ARCHIVE #

SHEET NUMBER

BEC1.1

SHEET 2 OF 30

**DEMOLITION**

**BASE=**

- DEMO / REMOVE EXISTING BOARD & BATT AND TRIM ONLY.
- REMOVE EXISTING WINDOW ASSEMBLY INCLUDE; INTERIOR TRIM AND GYPWB JAMB/HEADER RETURN ( ALL EXTERIOR WINDOWS )
- REMOVE EXISTING DOOR/FRAME/ HARDWARE ASSEMBLY INCLUDE; INTERIOR TRIM AND GYPWB SILL/JAMB/HEADER RETURN ( ALL EXTERIOR DOORS )
- ( ALL INDICATED AREAS OF REMEDIATION ) INCLUDE; REMOVAL OF AIR AND MOISTURE BARRIER, PLYWD SHEATHING,BATT INSUL AND INDICATED PORTIONS OF GWB.

**ALT 1 =**

- REMOVE EXISTING VINYL SIDING AND TRIM.

**NEW INSTALLATION**

**BASE =**

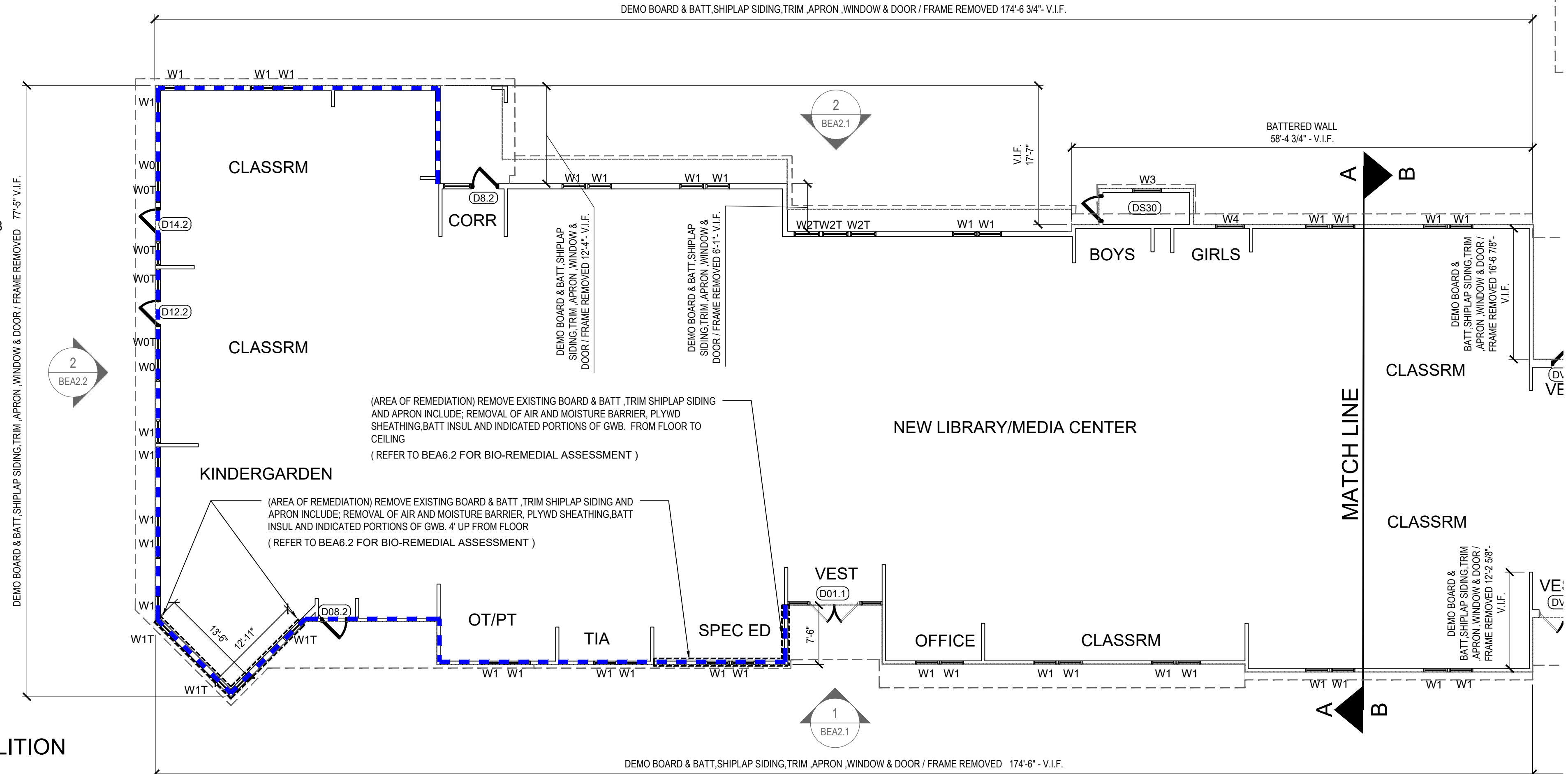
- NEW / INSTALL NEW -PROPOSED ENGINEERED TRIM AND SIDING REFER TO MATERIAL KEY OPTIONS INCLUDE; RAIN SCREEN AND FURRING STRIPS OVER 2" RIGID INSULATION.
- NEW / INSTALL NEW WINDOW ASSEMBLY - REFER TO WINDOW SCHEDULE INCLUDE; INTERIOR TRIM AND GYPWB JAMB/HEADER RETURN
- NEW / INSTALL NEW DOOR/FRAME/ HARDWARE ASSEMBLY - REFER TO DOOR/FRAME HARDWARE SCHEDULE INCLUDE; INTERIOR TRIM AND GYPWB SILL/JAMB/HEADER RETURN.
- NEW / INSTALL VINYL SIDING AND TRIM - REFER TO MATERIAL KEY OPTIONS
- (INDICATED AREAS OF REMEDIATION) INCLUDE; INSTALLATION OF AIR,MOISTURE BARRIER, PLYWD SHEATHING,BATT INSUL AND INDICATED PORTIONS OF GWB.

**ALT 1=**

- INSTALL SMARTSIDE @ SERIES 76 SMART LOCK CEDAR TEXTURE LAP
- REPLACE BREAK METAL FLASHING AND TRIM TO MATCH EXISTING

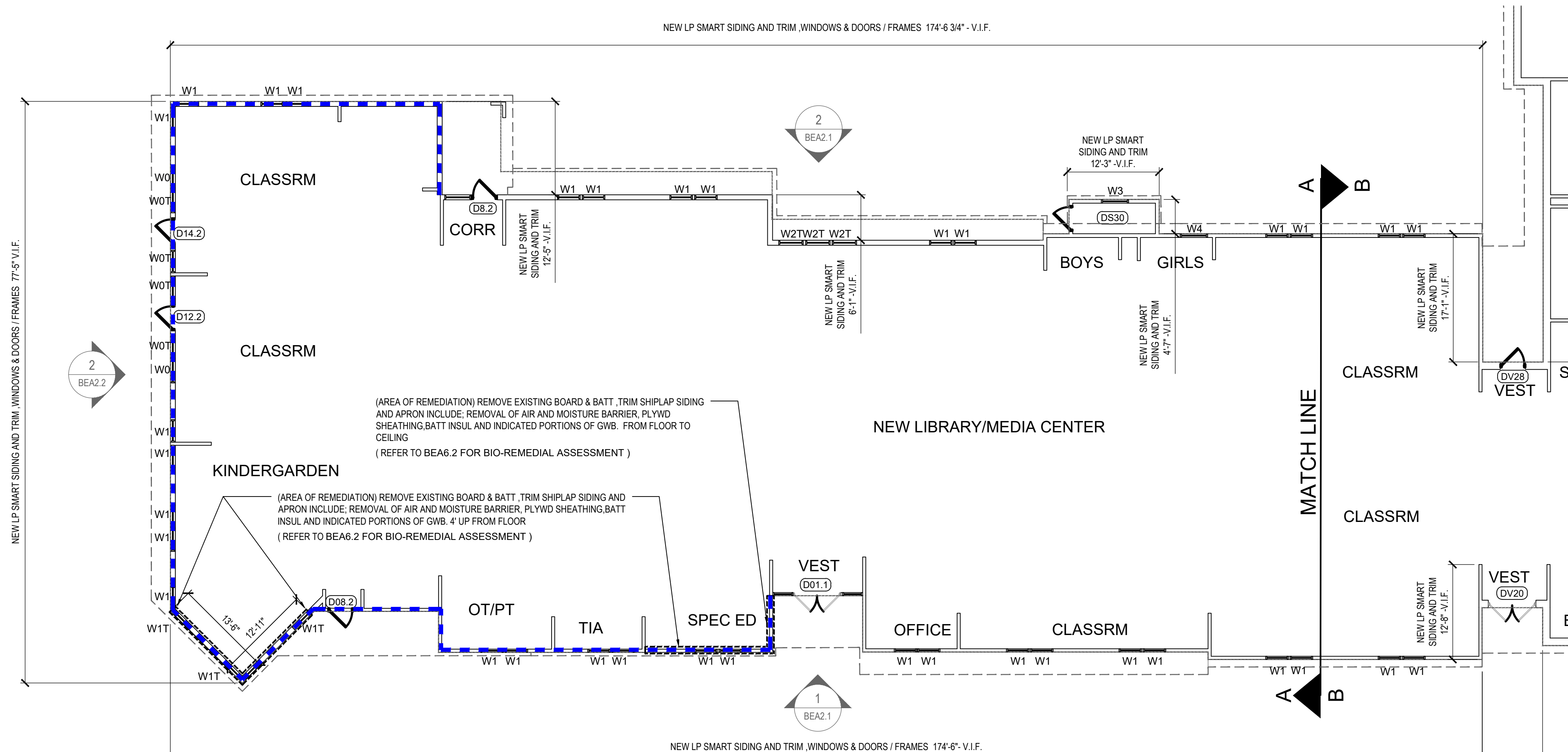
BLUE DASHED LINE INDICATES AREA OF NEW 1/2" RAISED MASUNKY BASE

DEMO BOARD & BATT,SHIPLAP SIDING,TRIM ,APRON ,WINDOW & DOOR / FRAME REMOVED 174'-6 3/4" - V.I.F.

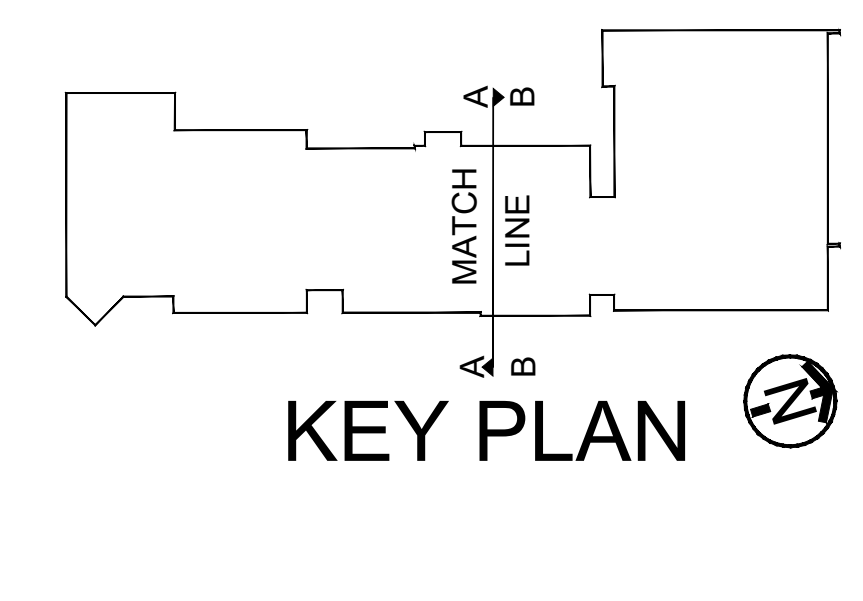


**PARTIAL EXISTING | DEMOLITION FLOOR PLAN [ A-A ]**  
SCALE : 1" = 10'-0"

NEW LP SMART SIDING AND TRIM ,WINDOWS & DOORS / FRAMES 174'-6 3/4" - V.I.F.



**PARTIAL FLOOR PLAN [ A-A ]**  
SCALE : 1" = 10'-0"



ISSUED FOR BID  
NOT FOR CONSTRUCTION  
07-21-23

**DuBois & King**  
6 GREEN TREE DRIVE  
S0. BURLINGTON, VT 05403  
TEL: 802.878.7661  
www.dubois-king.com  
VERMONT  
NEW HAMPSHIRE  
MAINE AND NEW YORK  
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**LeMessurier.**  
1 MADISON ST., FLOOR 2  
SOUTH PORTLAND MAINE, 04106  
PHONE: 207.400.0086

PROFESSIONAL SEAL

**BID 100% DOCUMENTS**

TSD	R/JH	BID DOCUMENTS	NO.	DATE	DESCRIPTION	BY	CK'D
0	07/21/2023						

**Maine DOE**  
AUGUSTA, ME  
EDMUNDS SCHOOL BUILDING ENCLOSURE & MECHANICAL SYSTEMS UPGRADES  
21 HARRISON RD  
DENNYVILLE, ME 04628

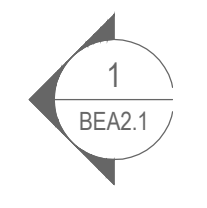
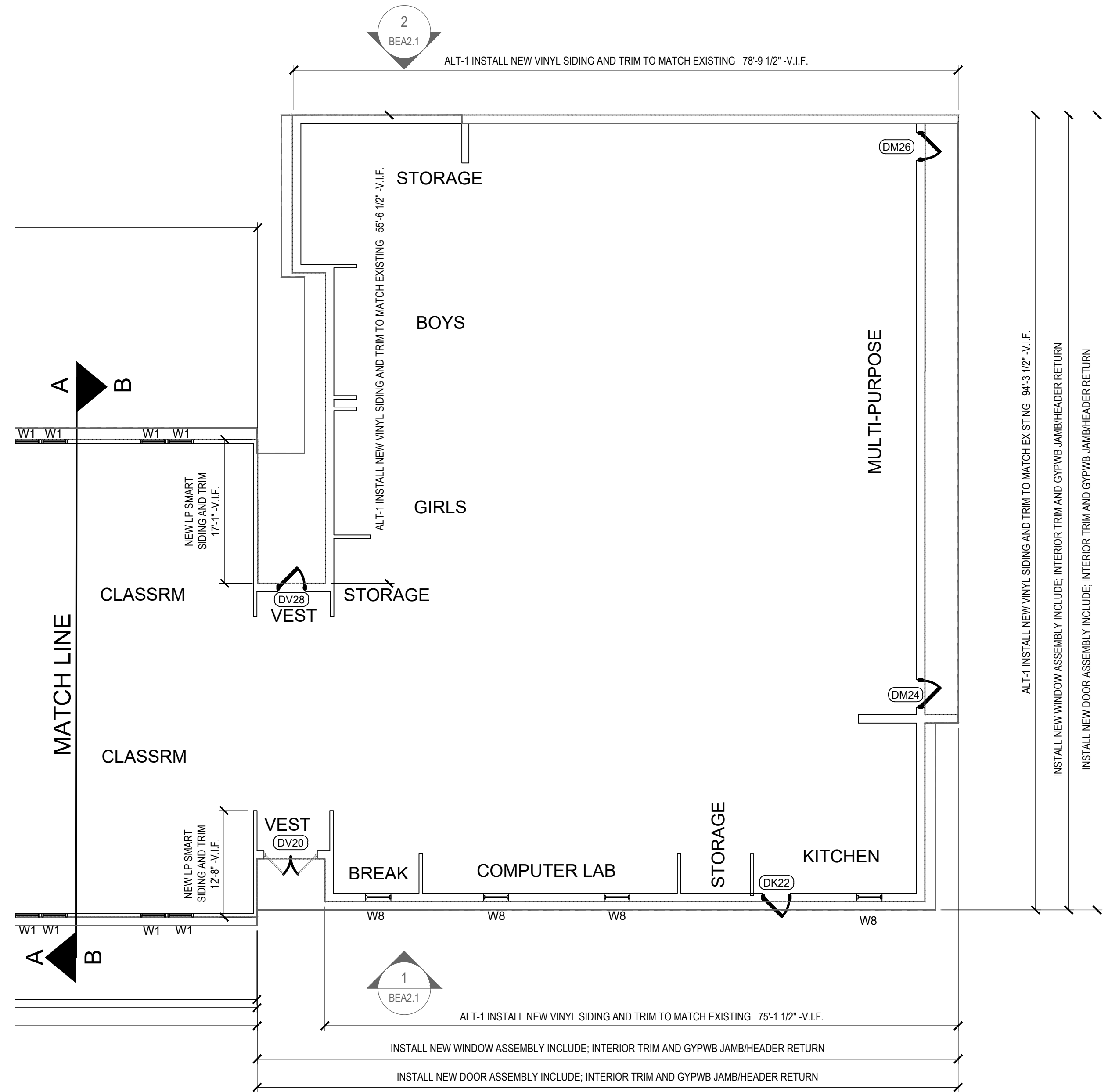
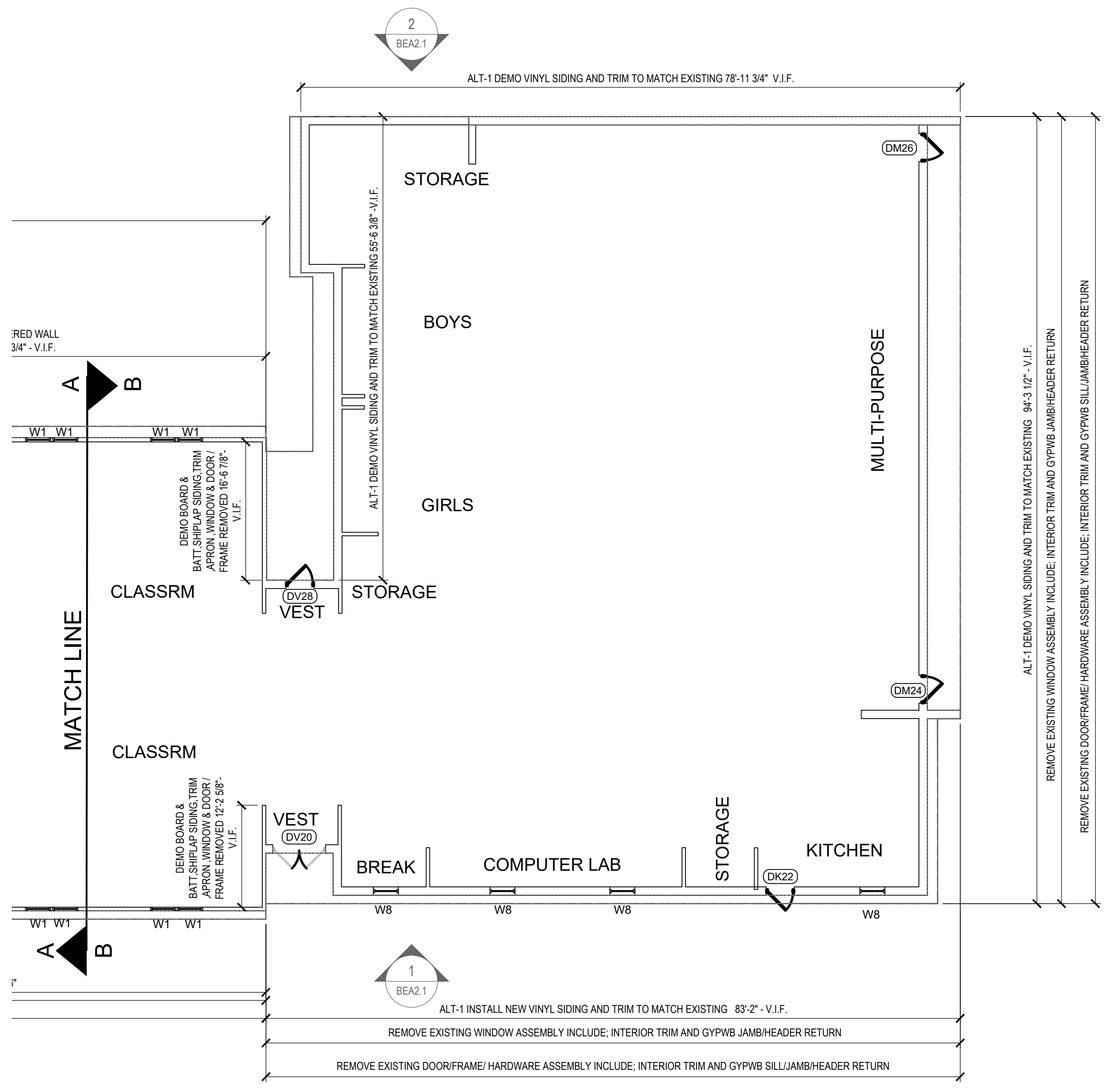
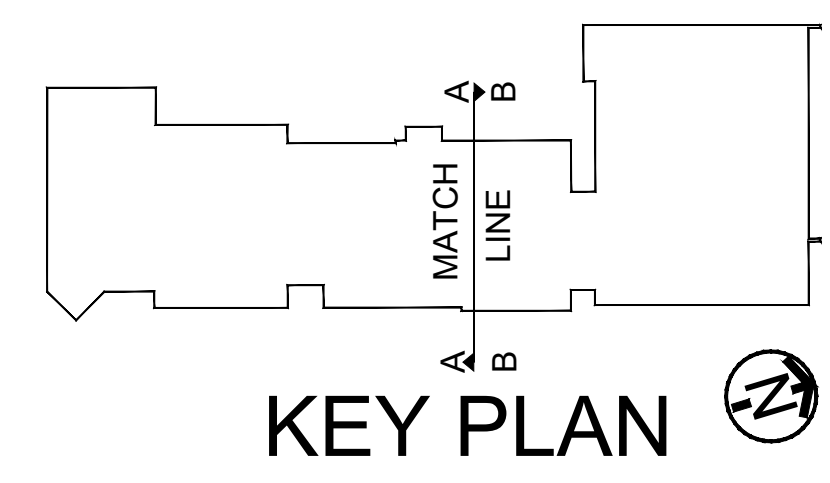
**SHEET TITLE**  
DEMOLITION & PROPOSED PARTIAL FLOOR PLAN AA

DRAWN BY: R/JH      DATE: 10/30/2022  
CHECKED BY: DM      D&K PROJECT #: 528137  
PROJ. ENG.: N/A      D&K ARCHIVE #

**SHEET NUMBER**

**BEA1.1**

SHEET 3 OF 30



- DEMOLITION**
- BASE=
- DEMO / REMOVE EXISTING BOARD & BATT AND TRIM ONLY.
  - REMOVE EXISTING WINDOW ASSEMBLY INCLUDE: INTERIOR TRIM AND GYPWB JAMB/HEADER RETURN ( ALL EXTERIOR WINDOWS )
  - REMOVE EXISTING DOOR/FRAME/ HARDWARE ASSEMBLY INCLUDE: INTERIOR TRIM AND GYPWB SILL/JAMB/HEADER RETURN ( ALL EXTERIOR DOORS )
  - ( ALL INDICATED AREAS OF REMEDIATION ) INCLUDE: REMOVAL OF AIR AND MOISTURE BARRIER, PLYWD SHEATHING, BATT INSUL AND INDICATED PORTIONS OF GWB.
- ALT 1 =
- REMOVE EXISTING VINYL SIDING AND TRIM.
- NEW INSTALLATION**
- BASE =
- NEW / INSTALL NEW -PROPOSED ENGINEERED TRIM AND SIDING REFER TO MATERIAL KEY OPTIONS INCLUDE: RAIN SCREEN AND FURRING STRIPS OVER 2" RIGID INSULATION.
  - NEW / INSTALL NEW WINDOW ASSEMBLY - REFER TO WINDOW SCHEDULE INCLUDE: INTERIOR TRIM AND GYPWB JAMB/HEADER RETURN
  - NEW / INSTALL NEW DOOR/FRAME/ HARDWARE ASSEMBLY - REFER TO DOOR/FRAME HARDWARE SCHEDULE INCLUDE: INTERIOR TRIM AND GYPWB SILL/JAMB/HEADER RETURN.
  - NEW / INSTALL VINYL SIDING AND TRIM - REFER TO MATERIAL KEY OPTIONS
  - (INDICATED AREAS OF REMEDIATION) INCLUDE: INSTALLATION OF AIR,MOISTURE BARRIER, PLYWD SHEATHING, BATT INSUL AND INDICATED PORTIONS OF GWB.

- ALT 1=
- NEW / INSTALL NEW - PROPOSED ENGINEERED TRIM AND SIDING REFER TO MATERIAL KEY OPTIONS INCLUDE: RAIN SCREEN AND FURRING STRIPS OVER 2" RIGID INSULATION. ( REPLACE BREAK METAL FLASHING AND TRIM TO MATCH EXISTING

PROFESSIONAL SEAL

**BID 100% DOCUMENTS**

TSD	R/JH	BID DOCUMENTS	NO.	DATE	DESCRIPTION	BY	CK'D
0	07/21/2023						



EDMUNDS SCHOOL BUILDING ENCLOSURE & MECHANICAL SYSTEMS UPGRADES

21 HARRISON RD DENNISVILLE, ME 04628

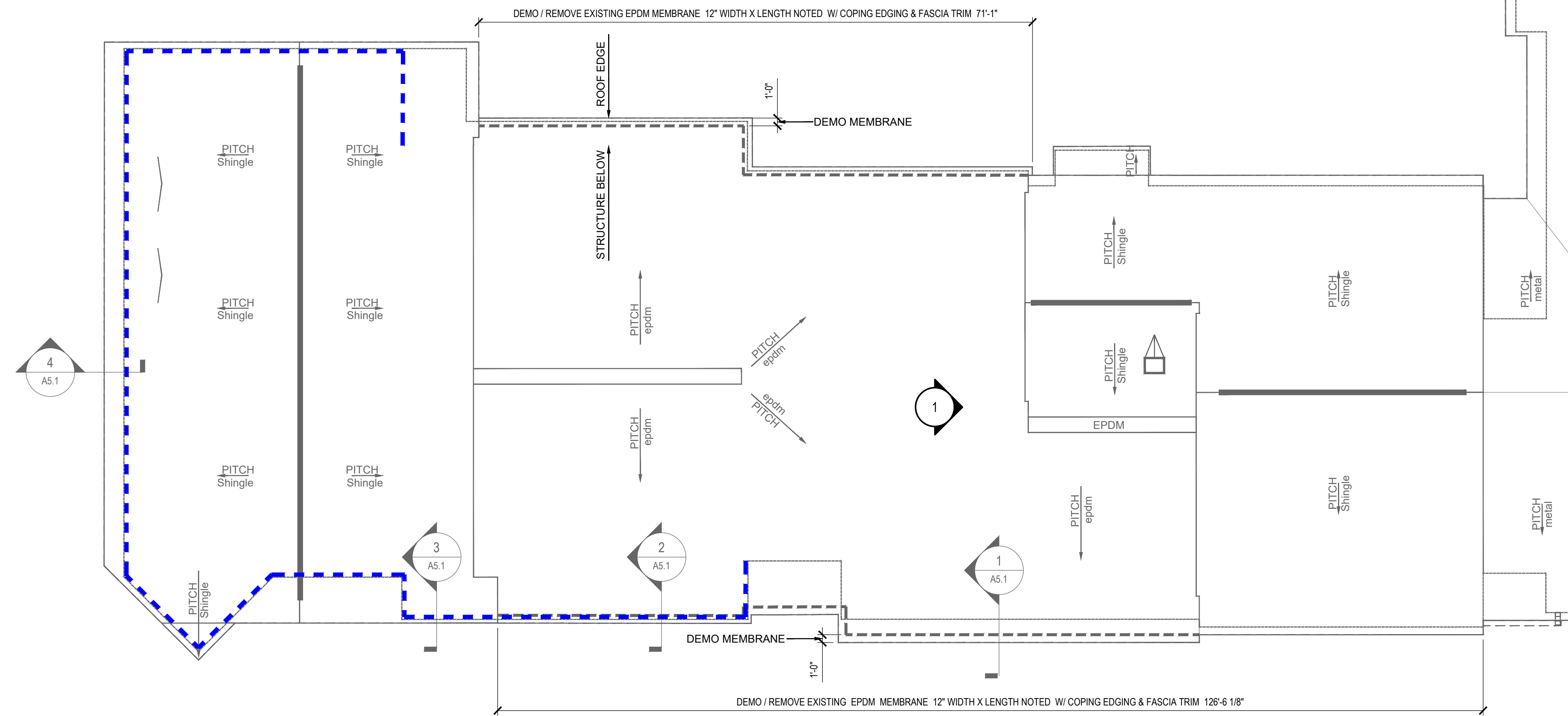
**SHEET TITLE**  
DEMOLITION & PROPOSED PARTIAL FLOOR PLAN BB

DRAWN BY RJH	DATE 10/30/2022
CHECKED BY DM	US&K PROJECT # 528137
PROJ. ENG. N/A	US&K ARCHIVE #

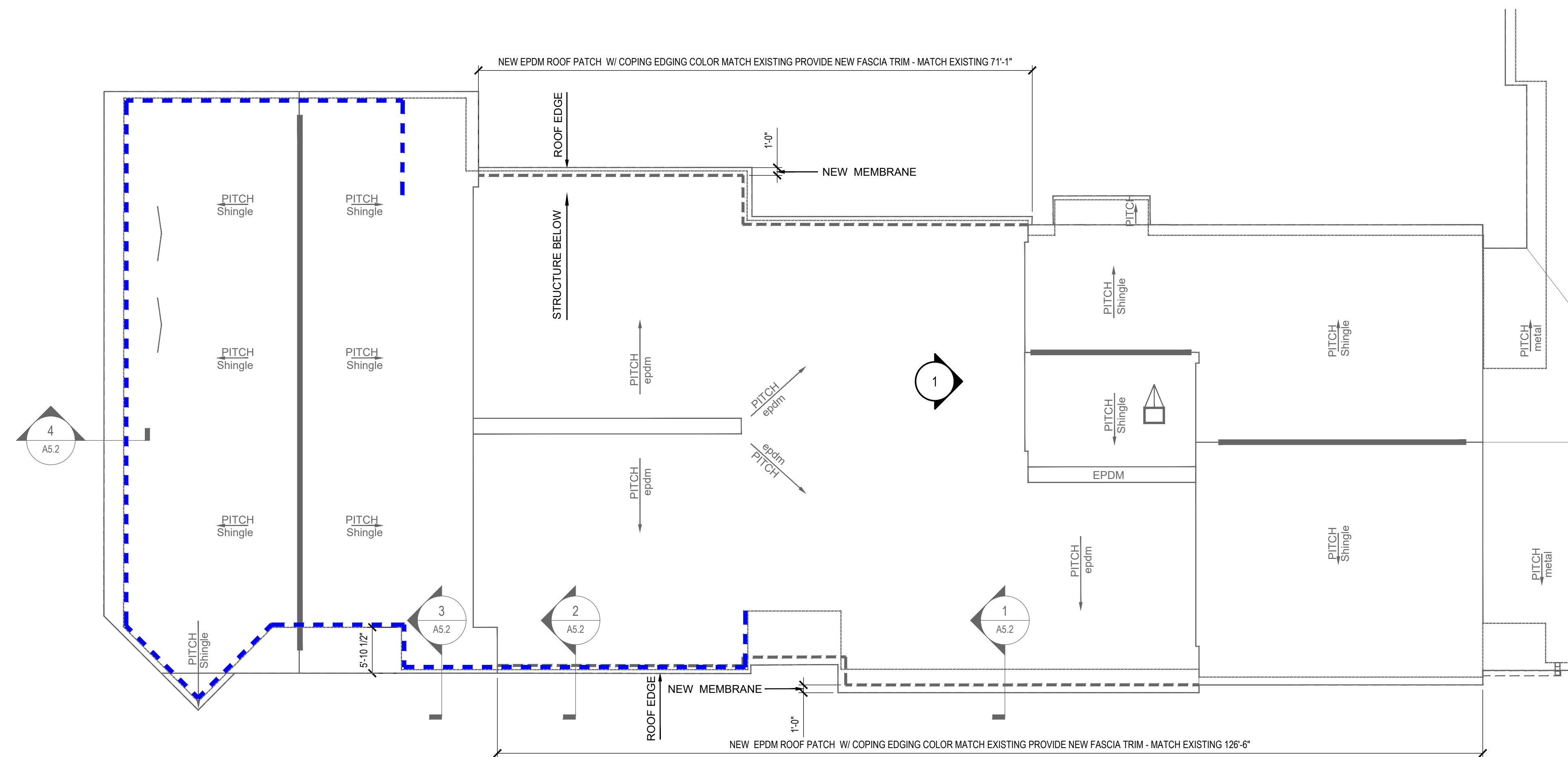
SHEET NUMBER

**BEA1.2**

ISSUED FOR BID  
NOT FOR CONSTRUCTION  
07-21-23



PARTIAL EXISTING | DEMOLITION ROOF PLAN [A-A]  
SCALE : 1" = 10'-0"



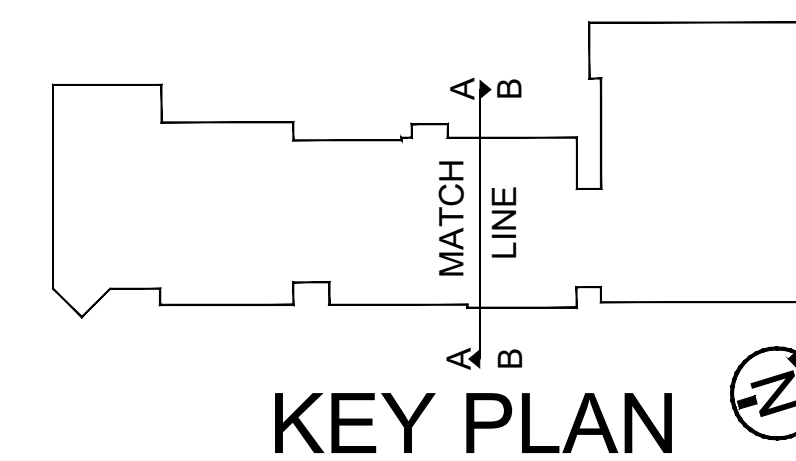
PARTIAL PROPOSED ROOF PLAN [A-A]  
SCALE : 1" = 10'-0"



1 ALTERNATE-1- IMAGE SOUTH



2 ALTERNATE 1 - IMAGE NORTH



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PROFESSIONAL SEAL

BID 100% DOCUMENTS

TSD	R/JH	BID DOCUMENTS	NO.	DATE	DESCRIPTION	BY	CK'D
0	07/21/2023						



EDMUNDS SCHOOL  
BUILDING ENCLOSURE &  
MECHANICAL SYSTEMS  
UPGRADES

21 HARRISON RD  
DENNISVILLE, ME 04628

SHEET TITLE  
DEMOLITION &  
PROPOSED  
PARTIAL  
ROOF PLAN

DRAWN BY R/JH	DATE 10/30/2022
CHECKED BY DM	US&K PROJECT # 528137
PROJ. ENG. N/A	US&K ARCHIVE #

SHEET NUMBER

BEA1.3

SHEET 5 OF 30

TSD	RJH	BID DOCUMENTS	NO.	DATE	DESCRIPTION	BY	CK'D
0	07/21/2023						



EDMUNDS SCHOOL  
BUILDING ENCLOSURE &  
MECHANICAL SYSTEMS  
UPGRADES

21 HARRISON RD  
DENNYVILLE, ME 04628

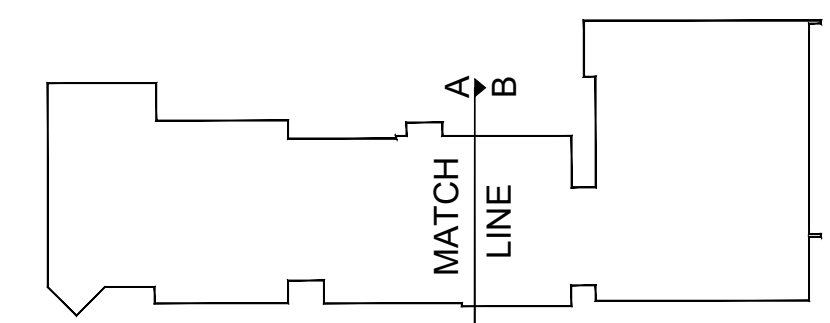
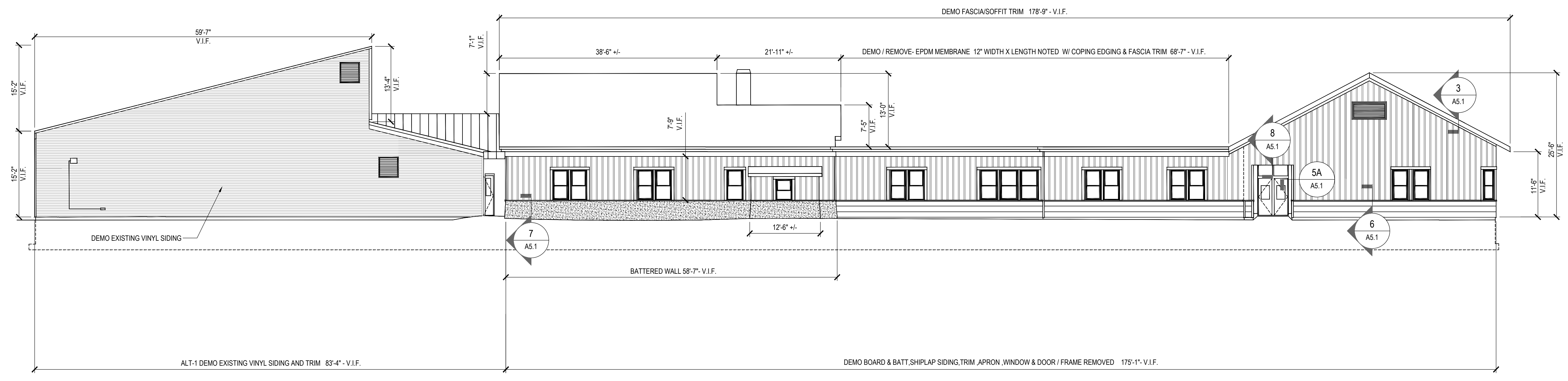
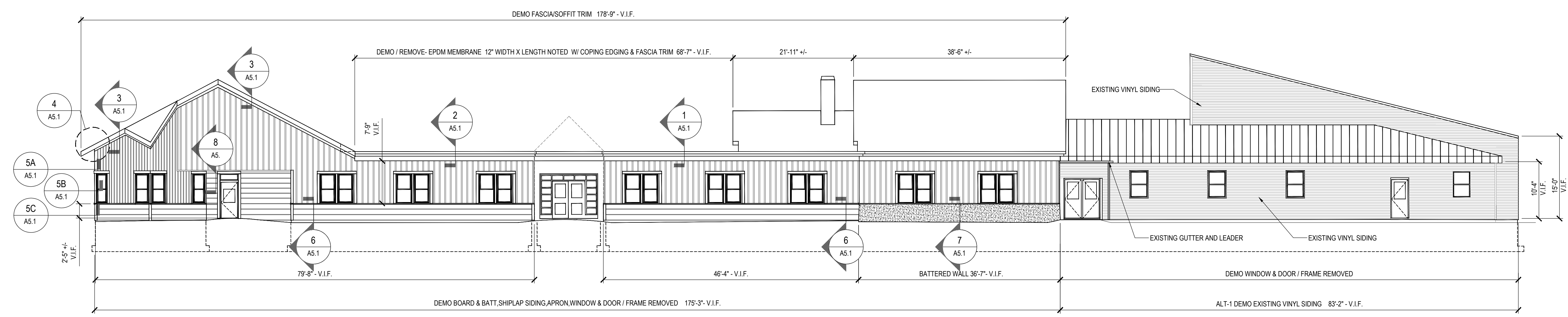
SHEET TITLE

ELEVATIONS  
DEMOLITION

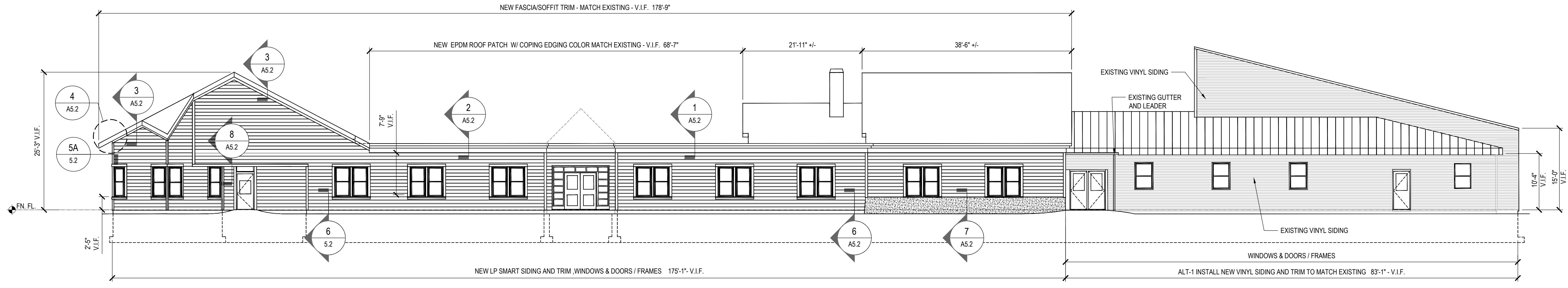
DRAWN BY	DATE
RJH	10/30/2022
CHECKED BY	US&K PROJECT #
DM	528137
PROJ. ENG.	US&K ARCHIVE #
N/A	

SHEET NUMBER

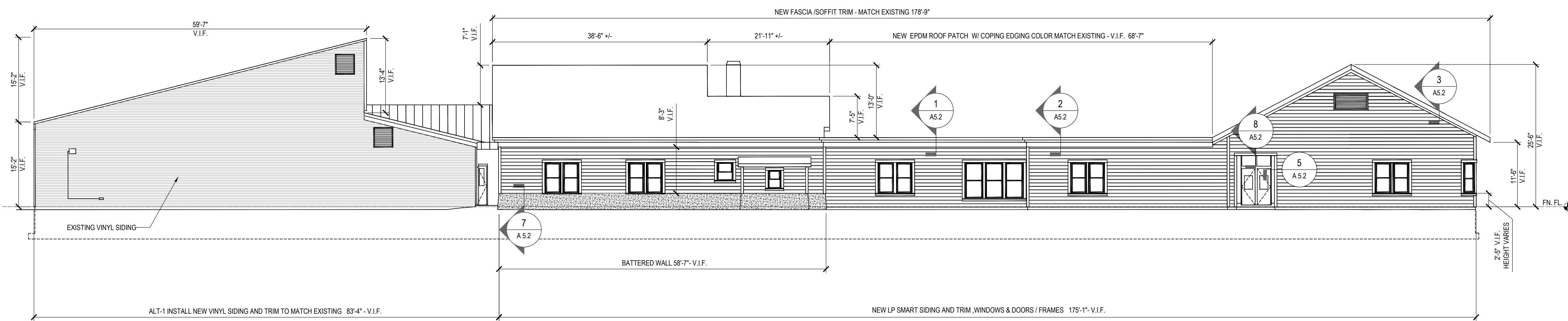
**BEA2.0**



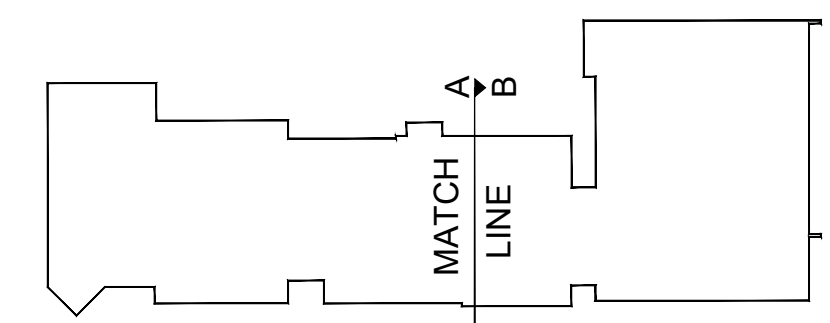
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1 EAST ELEVATION PROPOSED  
1" = 10'-0"



2 WEST ELEVATION PROPOSED  
1" = 10'-0"



KEY PLAN

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PROFESSIONAL SEAL

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DOCUMENTS

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0		07/21/2023					



AUGUSTA, ME  
EDMUNDS SCHOOL  
BUILDING ENCLOSURE &  
MECHANICAL SYSTEMS  
UPGRADES

21 HARRISON RD  
DENNYVILLE, ME 04628

SHEET TITLE

ELEVATIONS  
PROPOSED FACADE

DRAWN BY: R/J/H DATE: 10/30/2022

CHECKED BY: DM US&K PROJECT #: 528137

PROJ. ENG.: N/A US&K ARCHIVE #

SHEET NUMBER

BEA2.1

SHEET 7 OF 30

NO.	DATE	DESCRIPTION	BY	CK'D
0	10/21/2023			



EDMUNDS SCHOOL  
BUILDING ENCLOSURE &  
MECHANICAL SYSTEMS  
UPGRADES

21 HARRISON RD  
DENNYVILLE, ME 04628

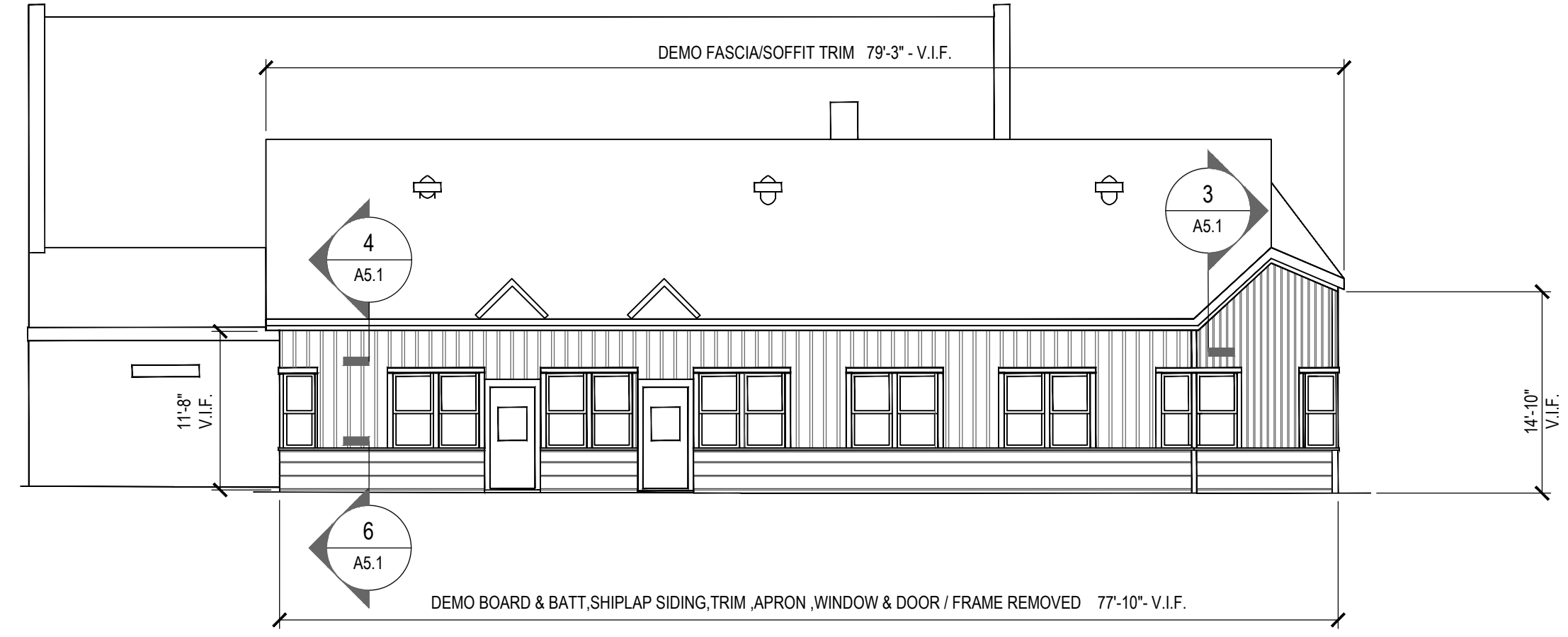
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ELEVATIONS |  
DEMOLITION &  
PROPOSED FACADE

DRAWN BY	DATE
RJH	10/30/2022
CHECKED BY	US&K PROJECT #
DM	528137
PROJ. ENG.	US&K ARCHIVE #
N/A	

SHEET NUMBER

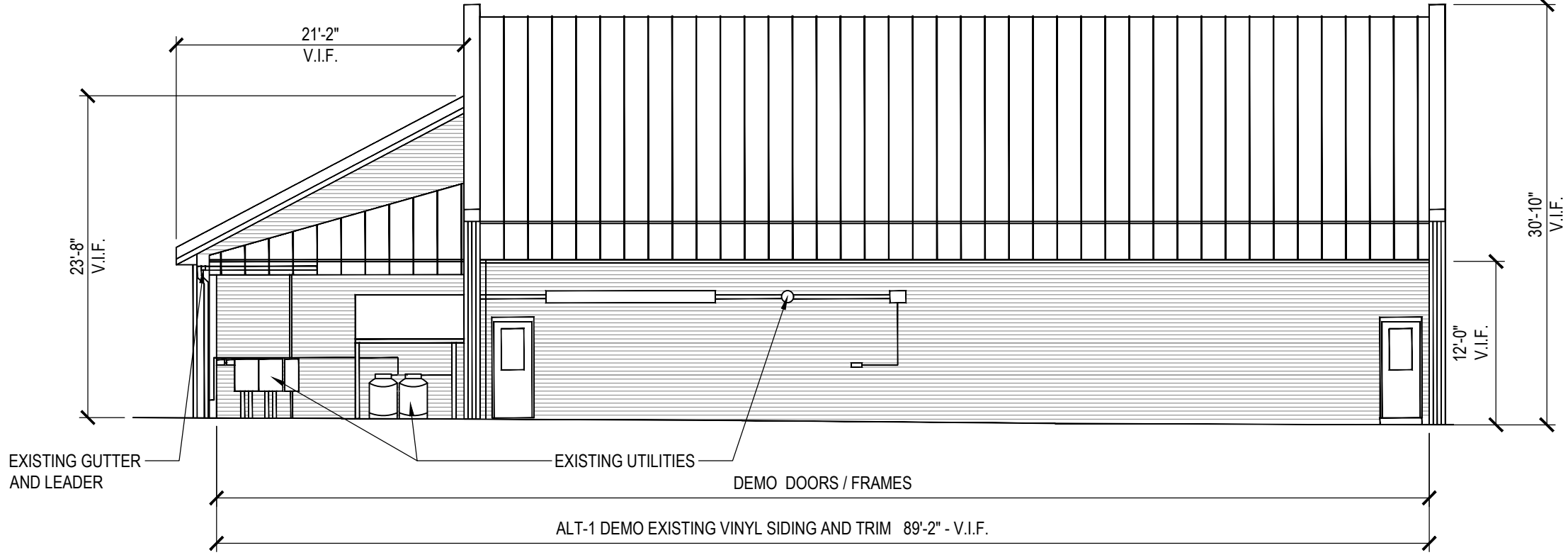
**BEA2.2**



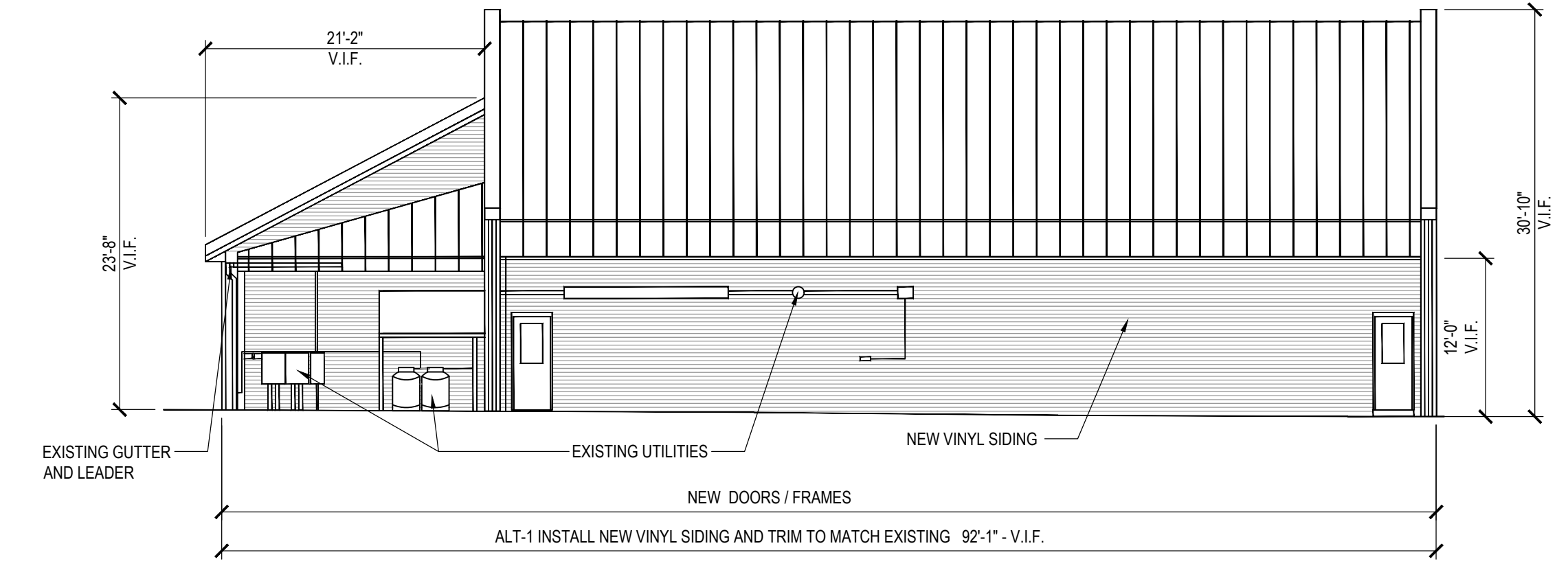
**1 NORTH ELEVATION DEMOLITION**  
1" = 10'-0"



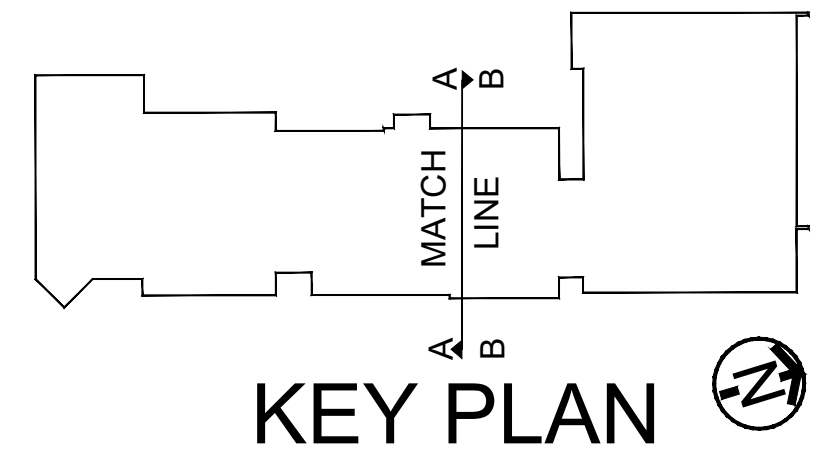
**3 NORTH ELEVATION PROPOSED FACADE**  
1" = 10'-0"



**2 SOUTH ELEVATION DEMOLITION**  
1" = 10'-0"

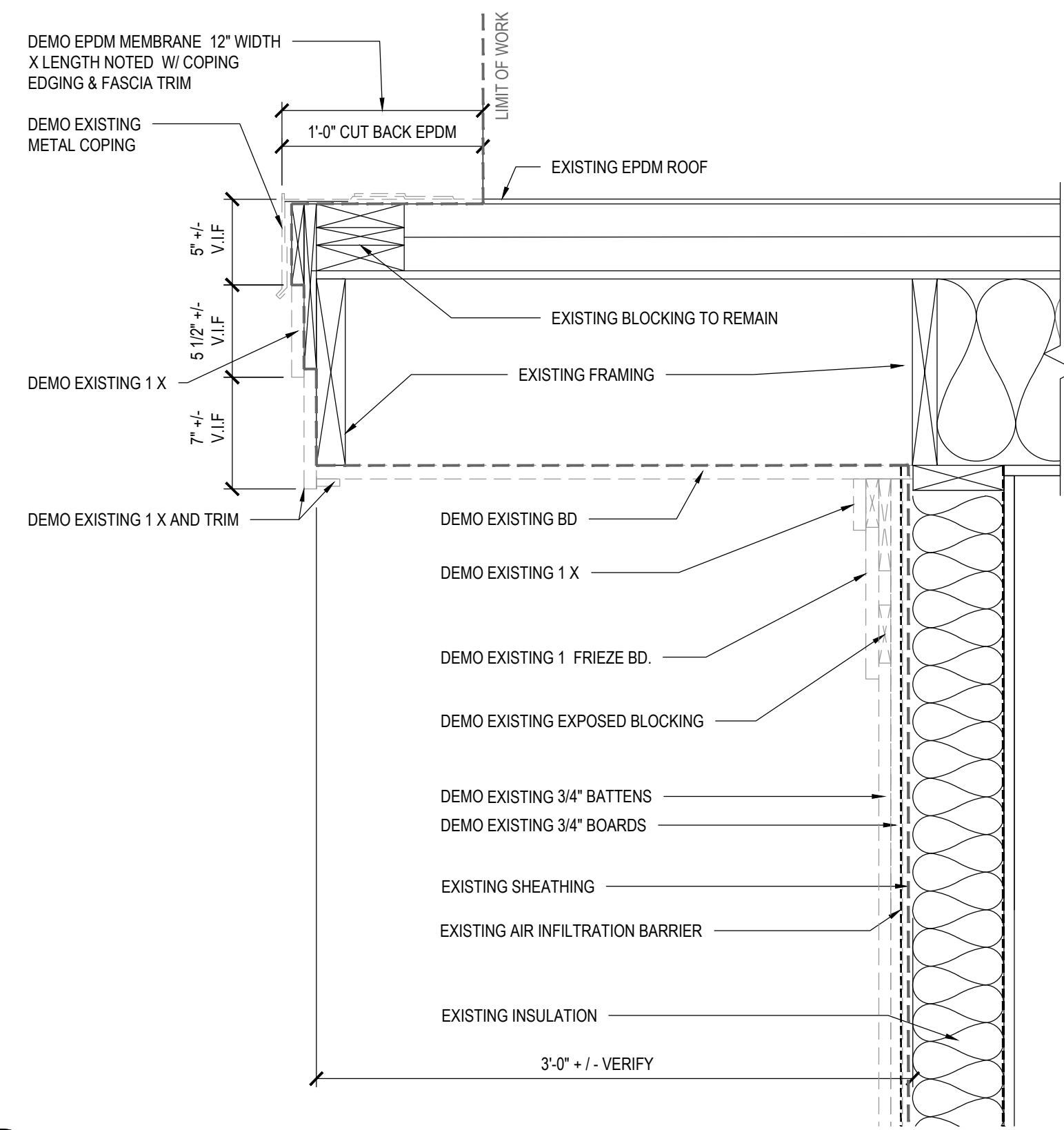


**4 SOUTH ELEVATION PROPOSED FACADE**  
1" = 10'-0"

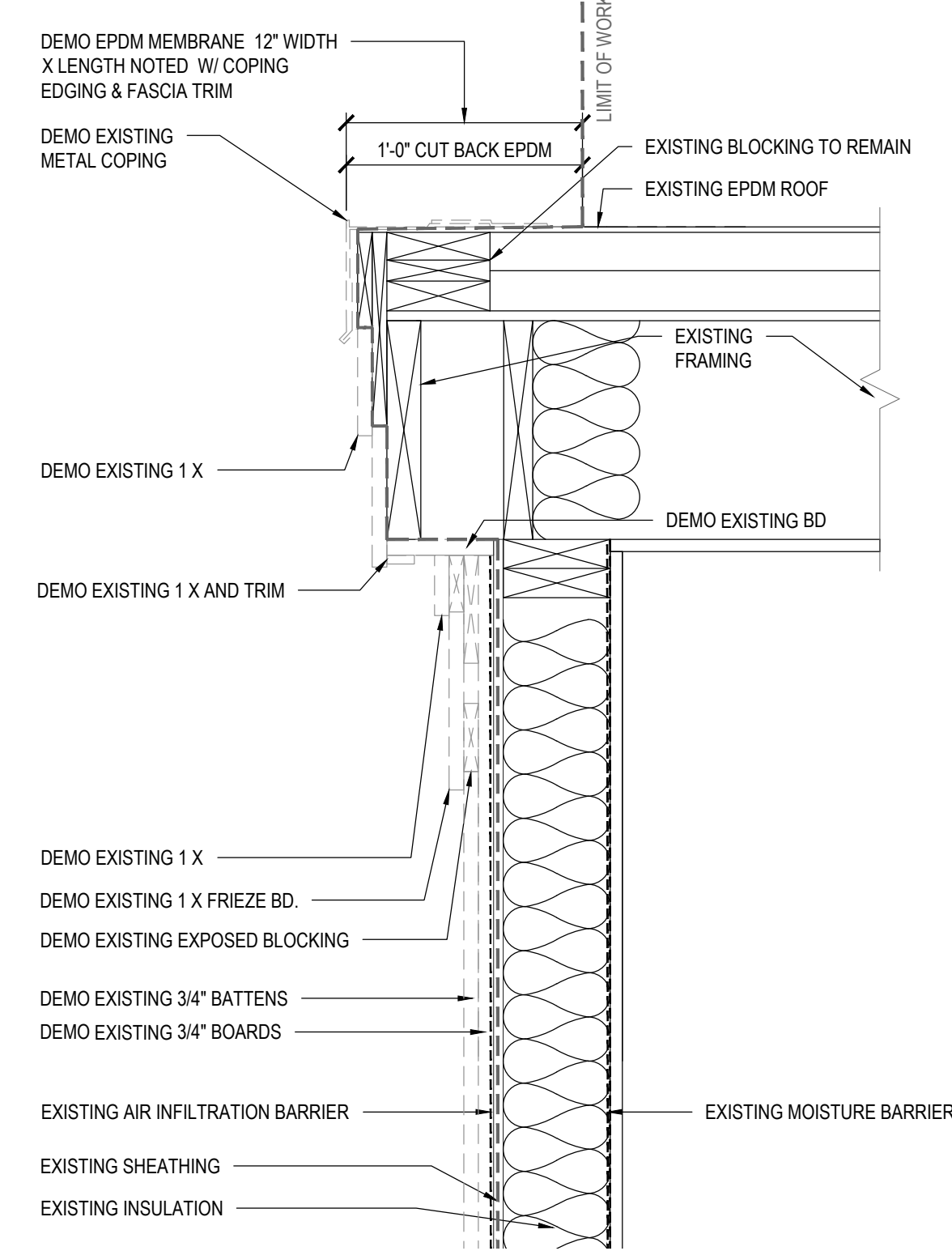


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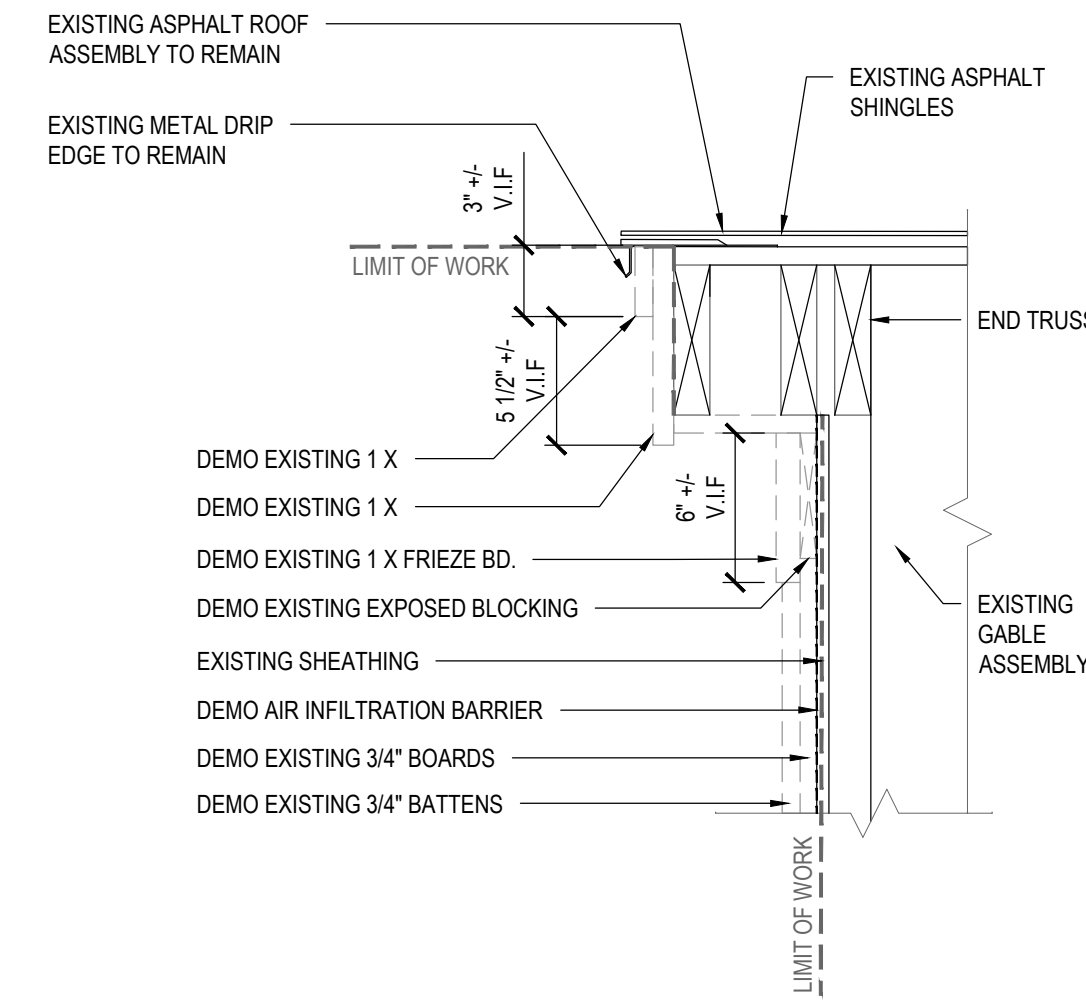




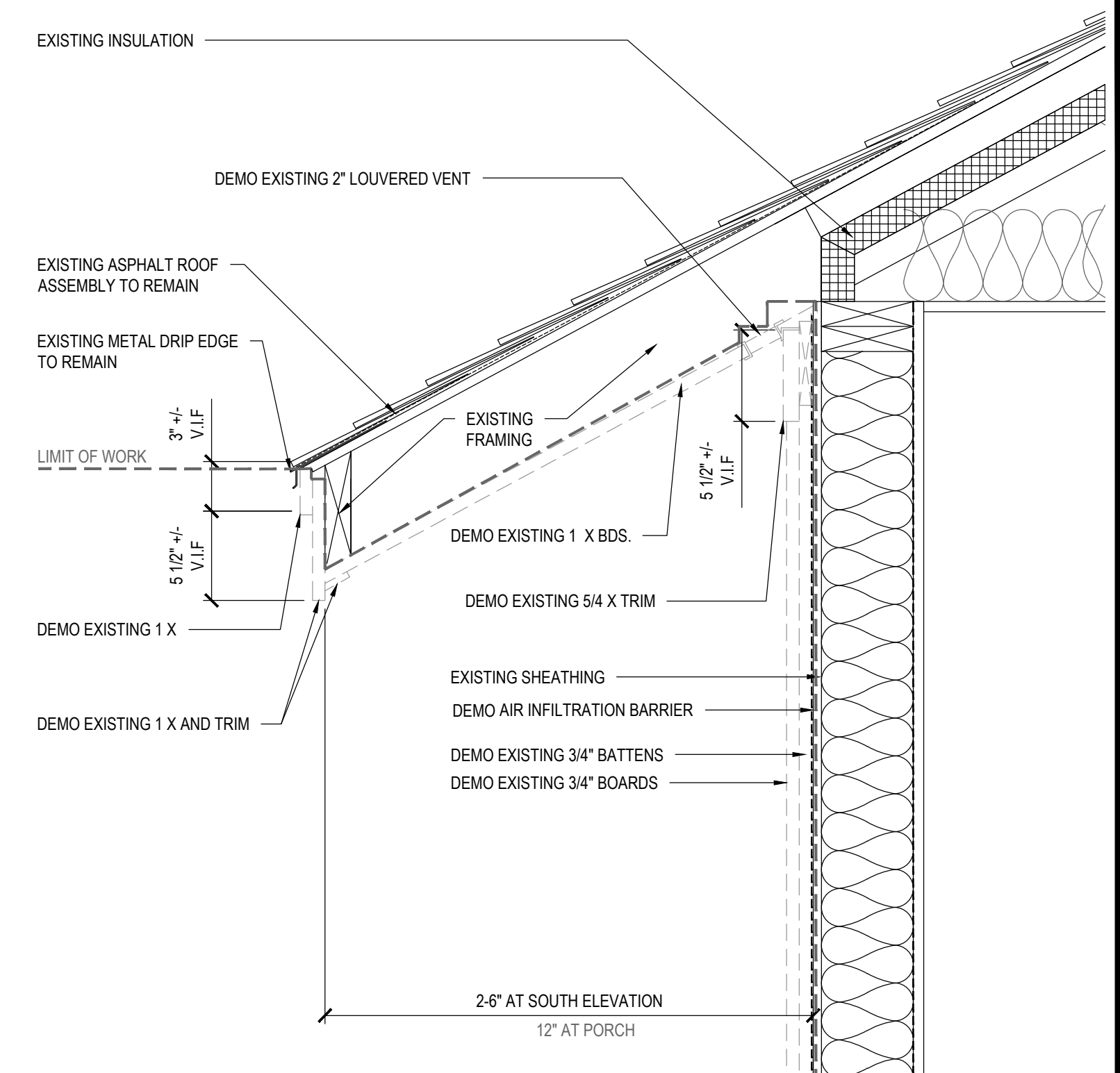
1 EAVE AT 1961 ADDITION  
1-1/2" = 1'-0"



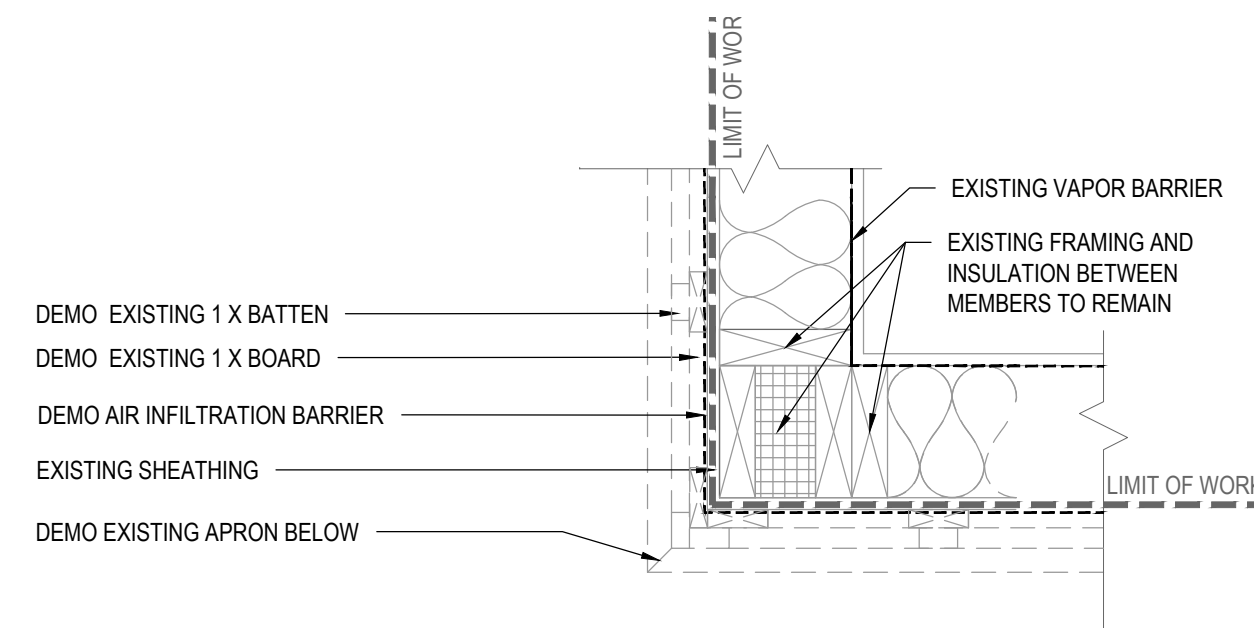
2 EAVE DETAIL  
1-1/2" = 1'-0"



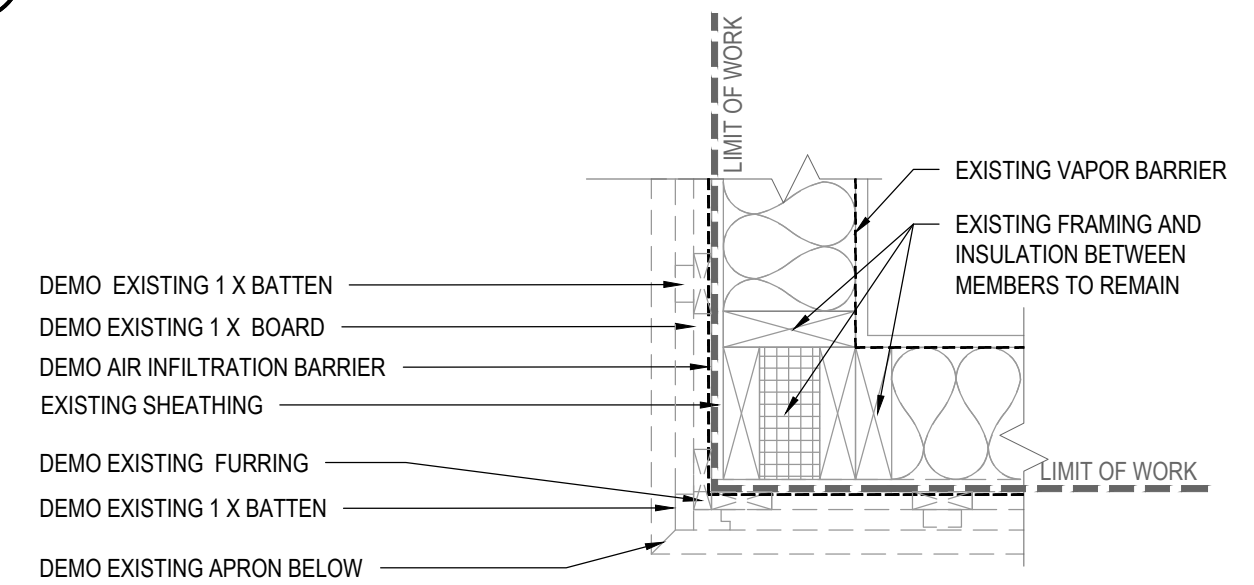
3 EAVE ELEVATION  
1-1/2" = 1'-0"



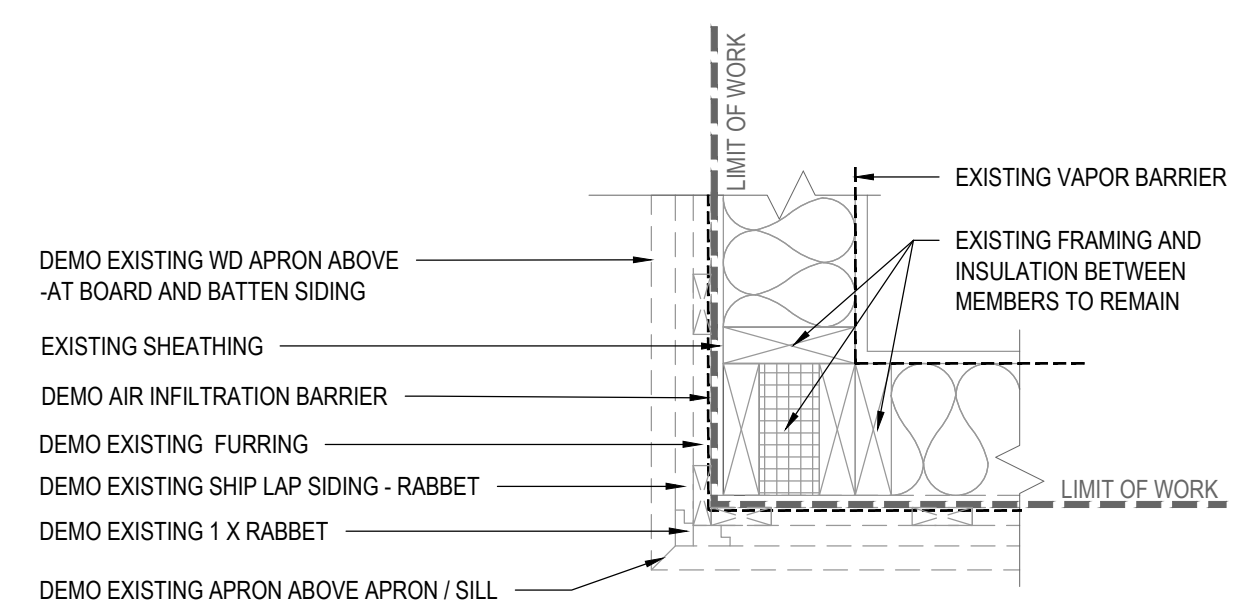
4 EAVE DETAIL  
1-1/2" = 1'-0"



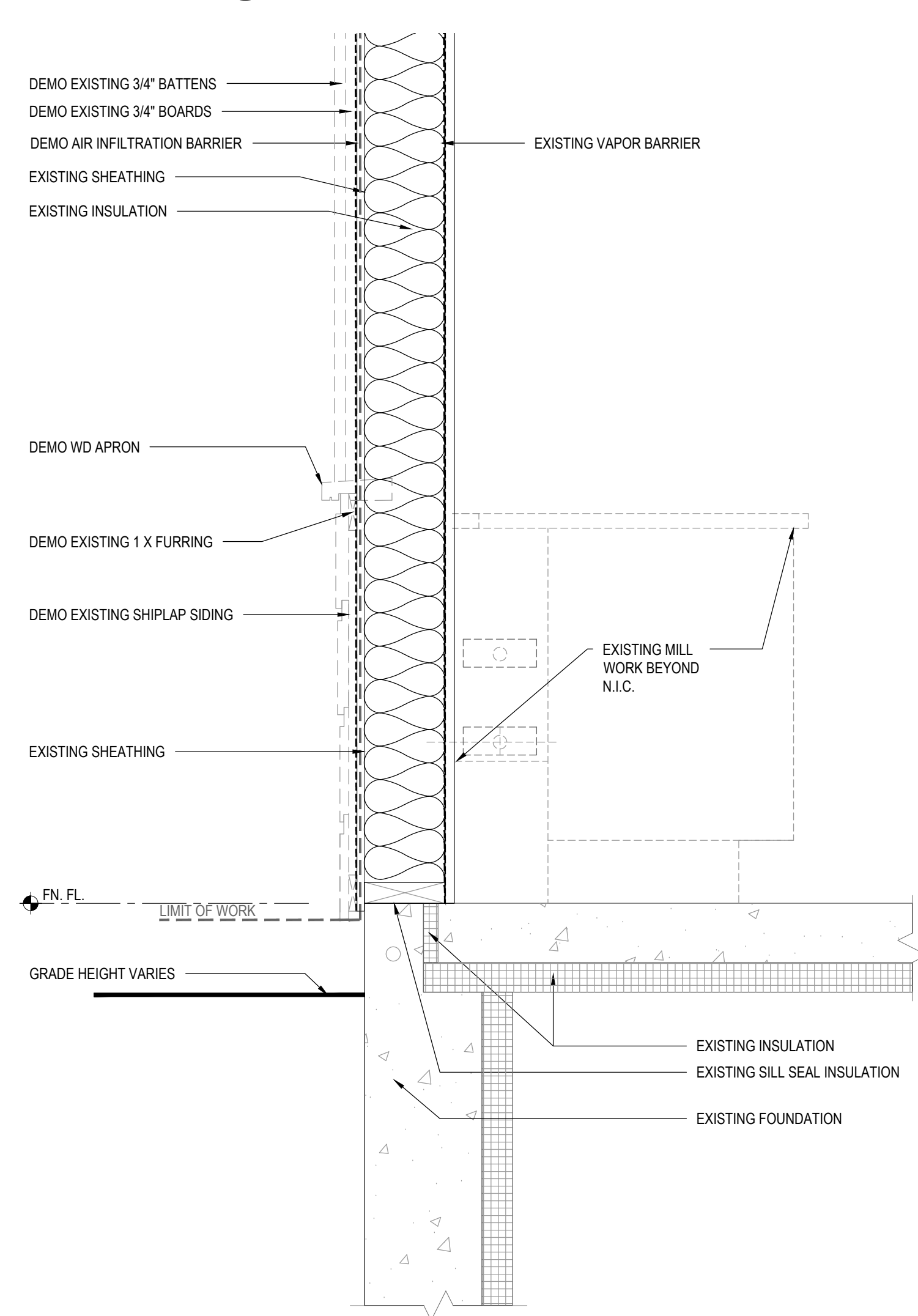
5A BOARD AND BATTEN CORNER DETAIL ( PLAN )  
1-1/2" = 1'-0"



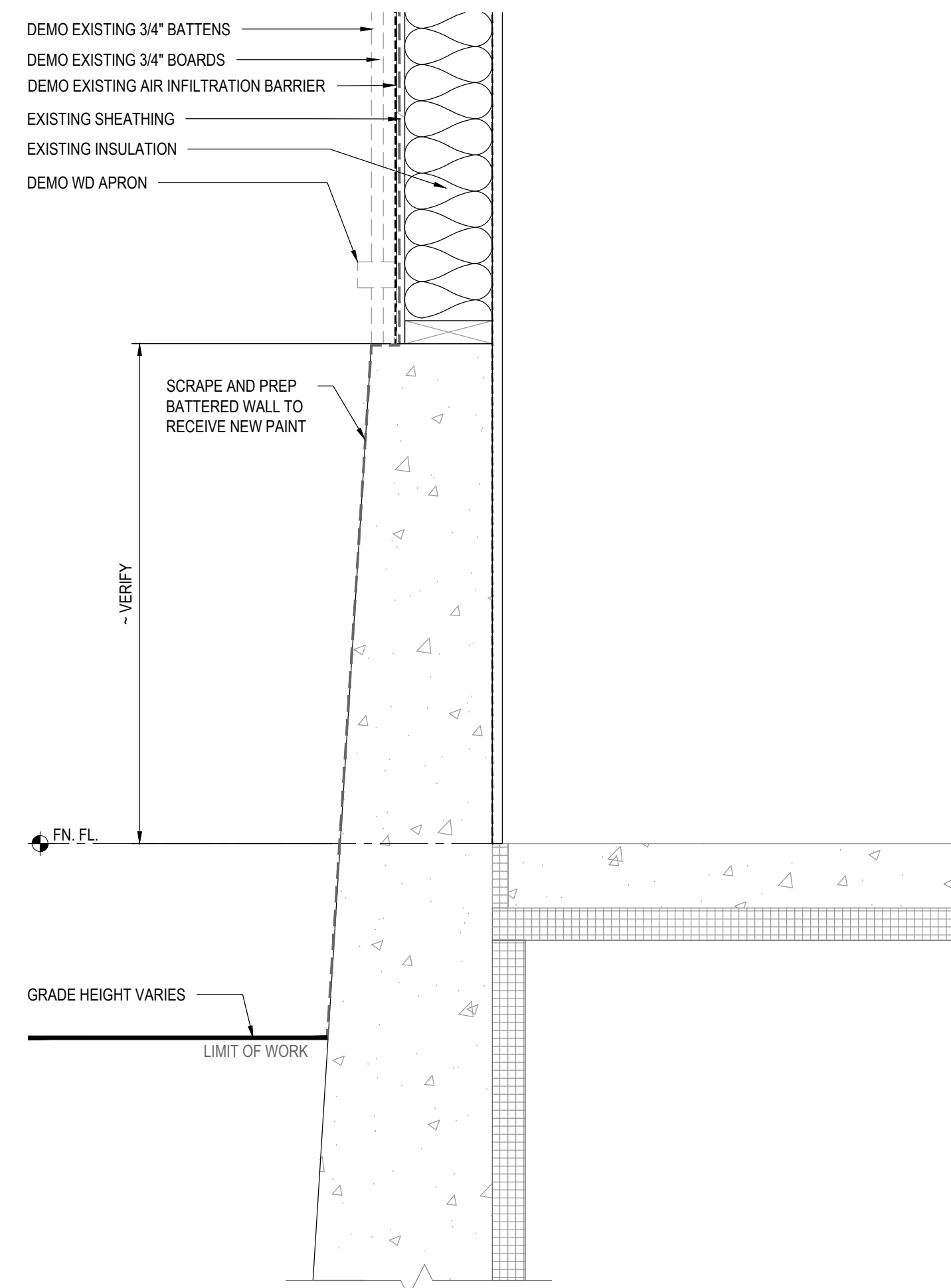
5B BOARD AND BATTEN CORNER DETAIL MID WALL HEIGHT ( PLAN )  
1-1/2" = 1'-0"



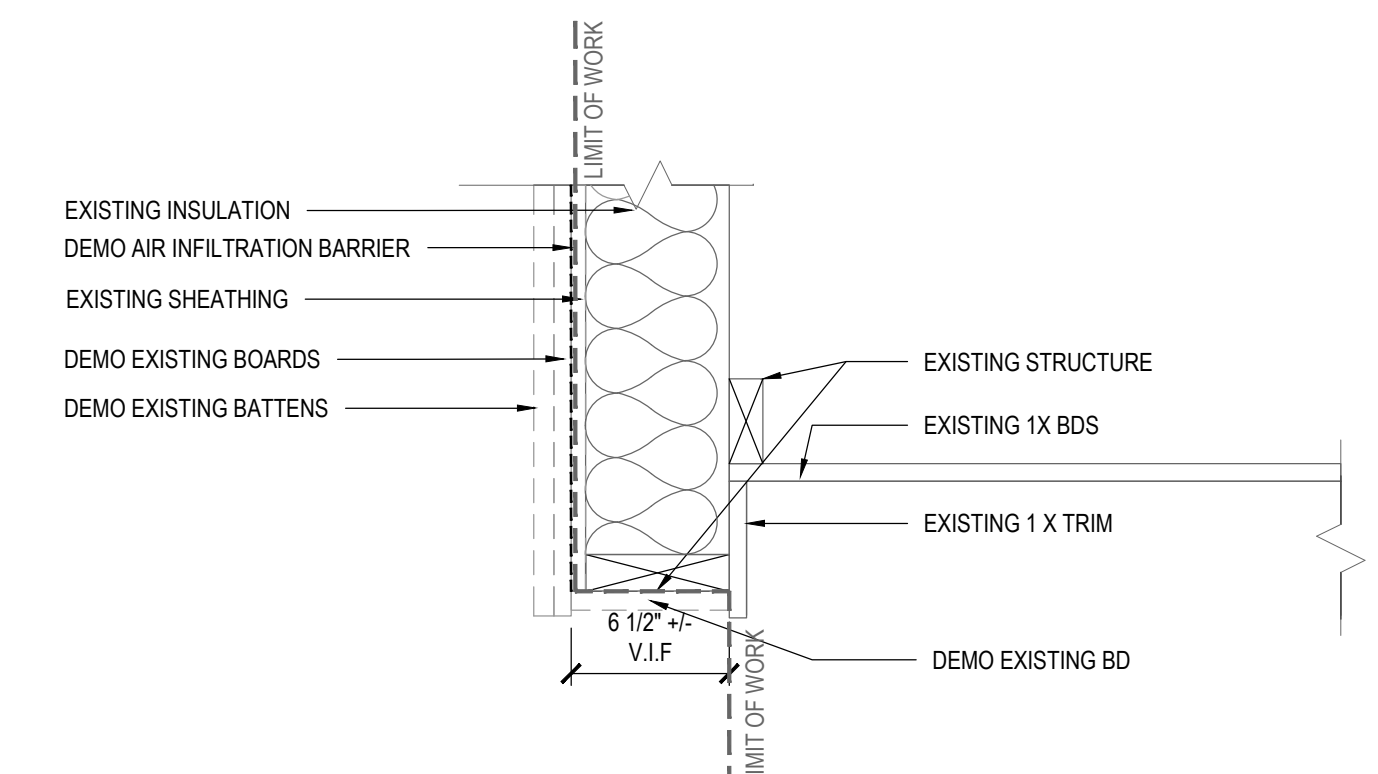
5C BOARD AND BATTEN CORNER DETAIL BELOW WINDOW ( PLAN )  
1-1/2" = 1'-0"



6 WALL DETAIL  
1-1/2" = 1'-0"



7 BATTERED WALL DETAIL  
1-1/2" = 1'-0"



8 SOFFIT DETAIL  
1-1/2" = 1'-0"

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0	07/21/2023						

**Maine DOE**  
AUGUSTA, ME

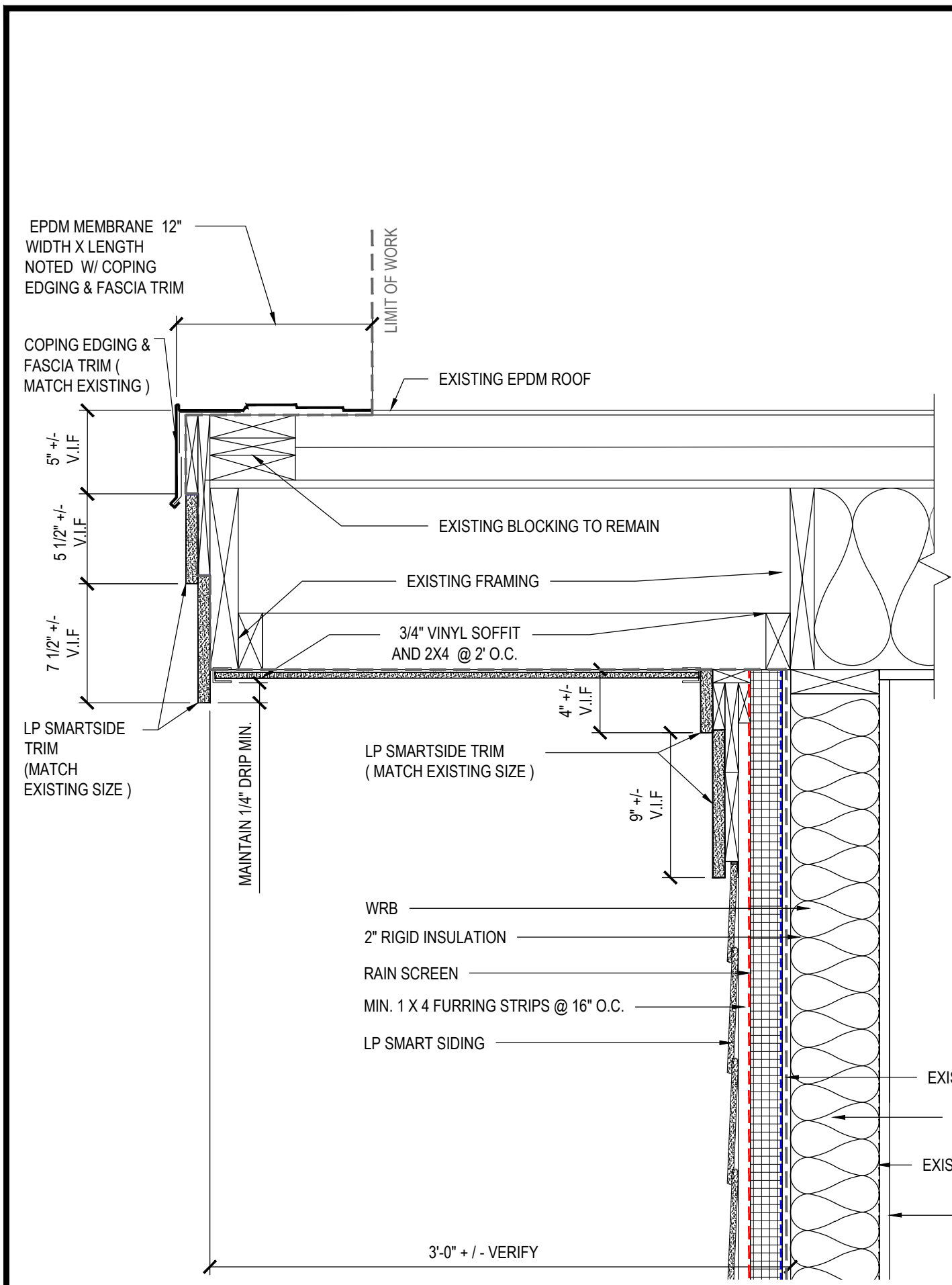
EDMUNDS SCHOOL  
BUILDING ENCLOSURE &  
MECHANICAL SYSTEMS  
UPGRADES

21 HARRISON RD  
DENNYVILLE, ME 04628

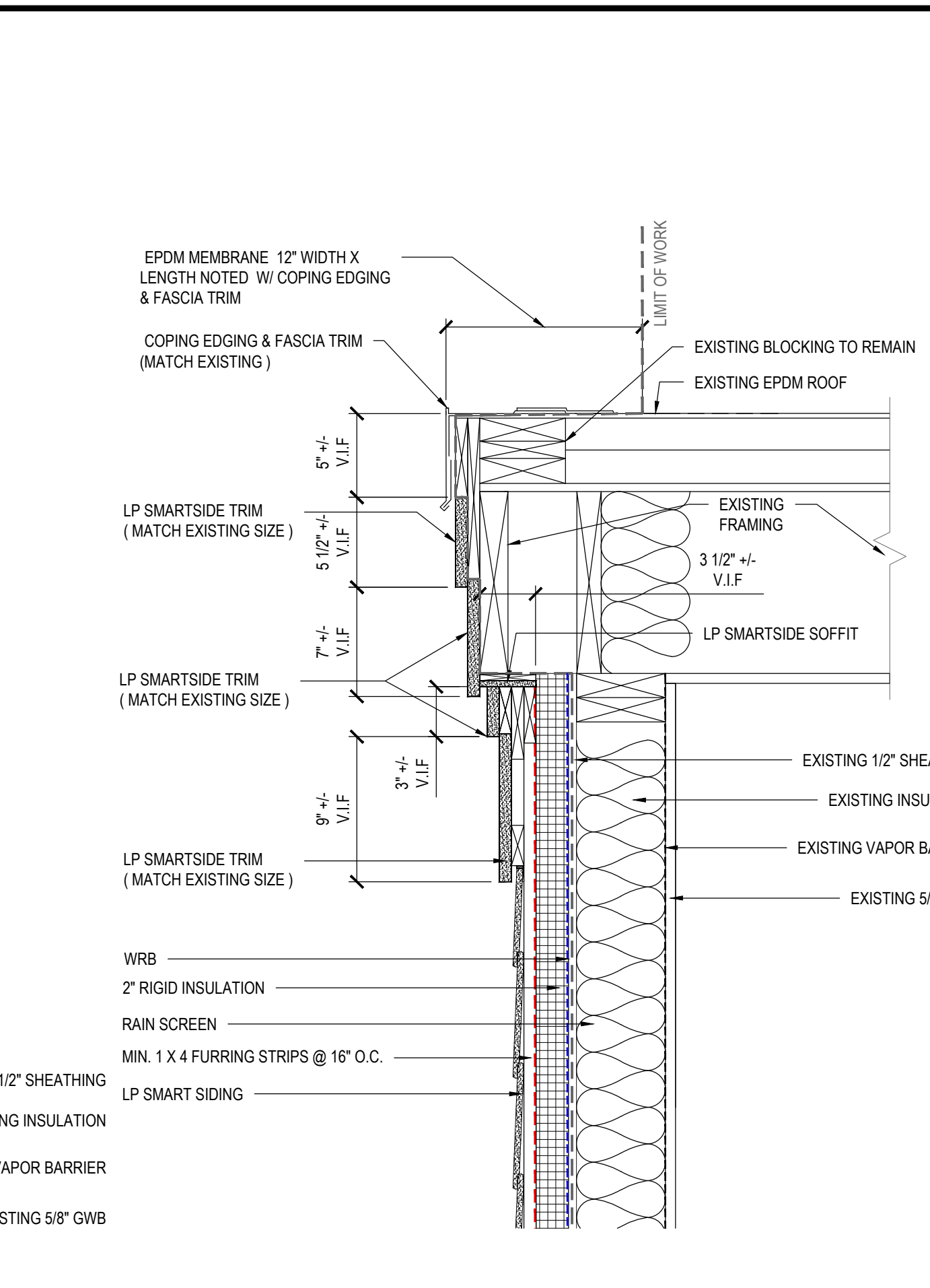
SHEET TITLE  
EXISTING &  
DEMOLITION  
PARTIAL SECTIONS  
&  
DETAILS

DRAWN BY R/JH	DATE 10/30/2022
CHECKED BY DM	D&K PROJECT # 528137
PROJ. ENG. N/A	D&K ARCHIVE #

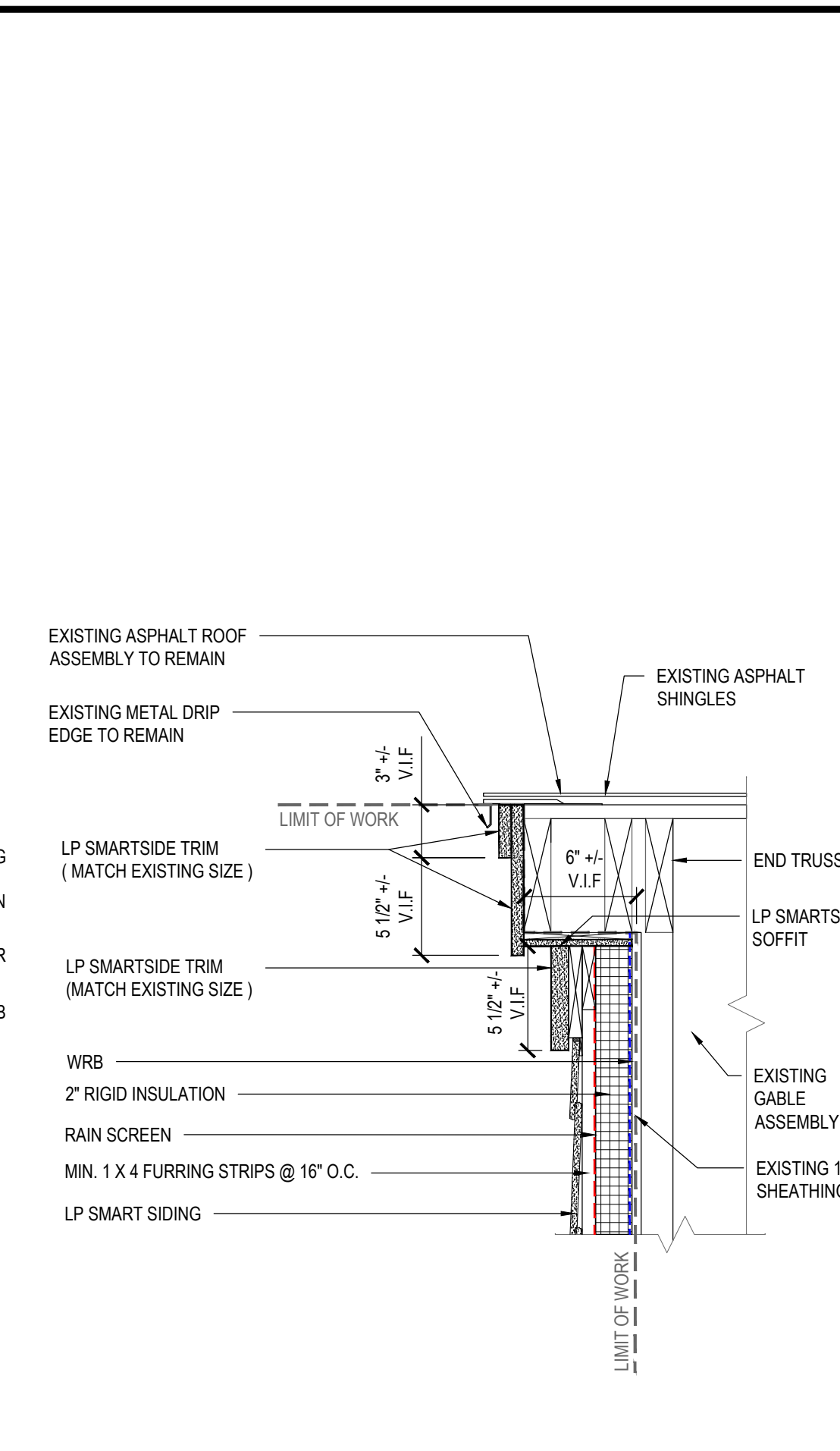
SHEET NUMBER



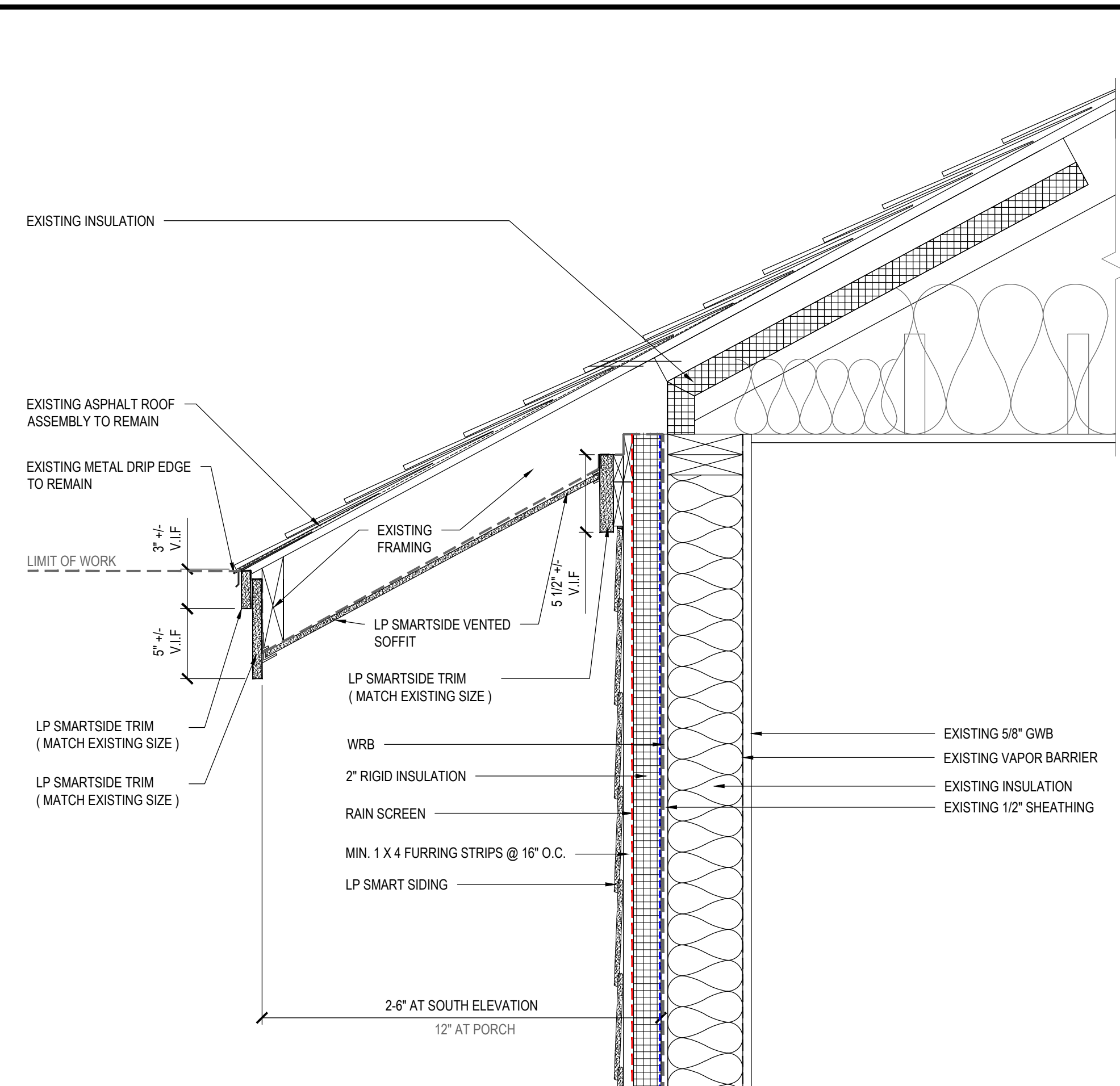
1 EAVE AT 1961 ADDITION  
1-1/2" = 1'-0"



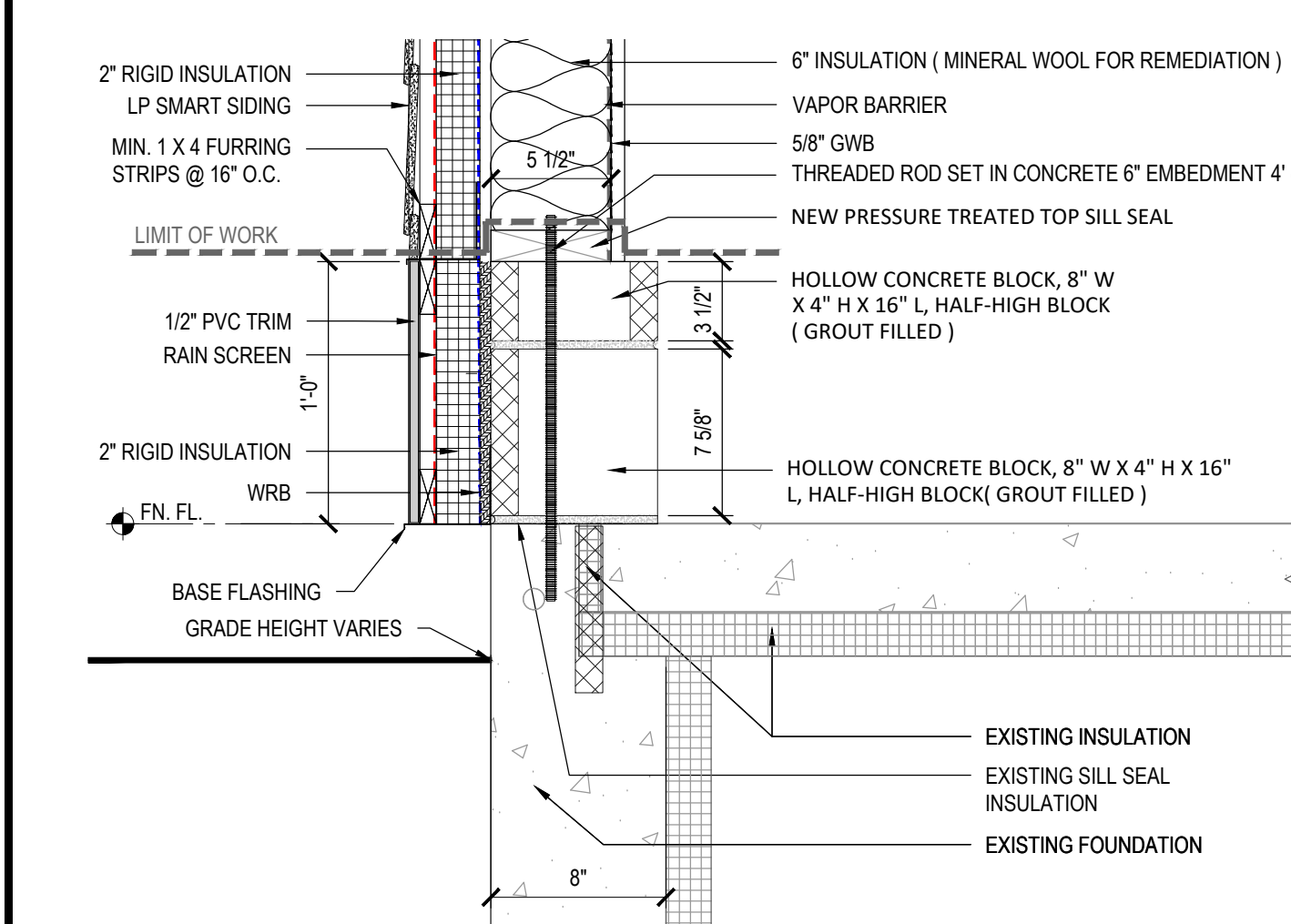
2 EAVE DETAIL  
1-1/2" = 1'-0"



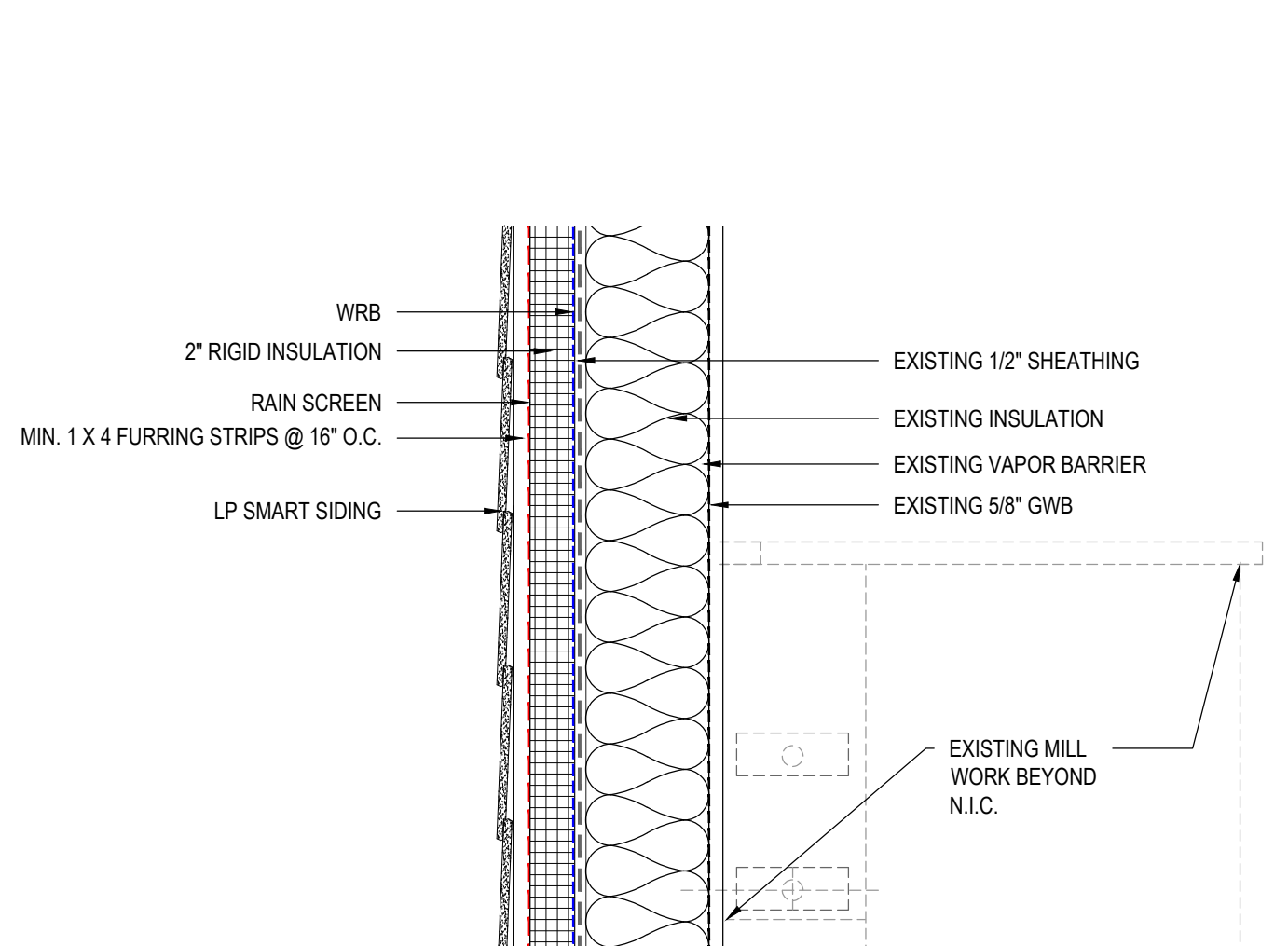
3 EAVE ELEVATION  
1-1/2" = 1'-0"



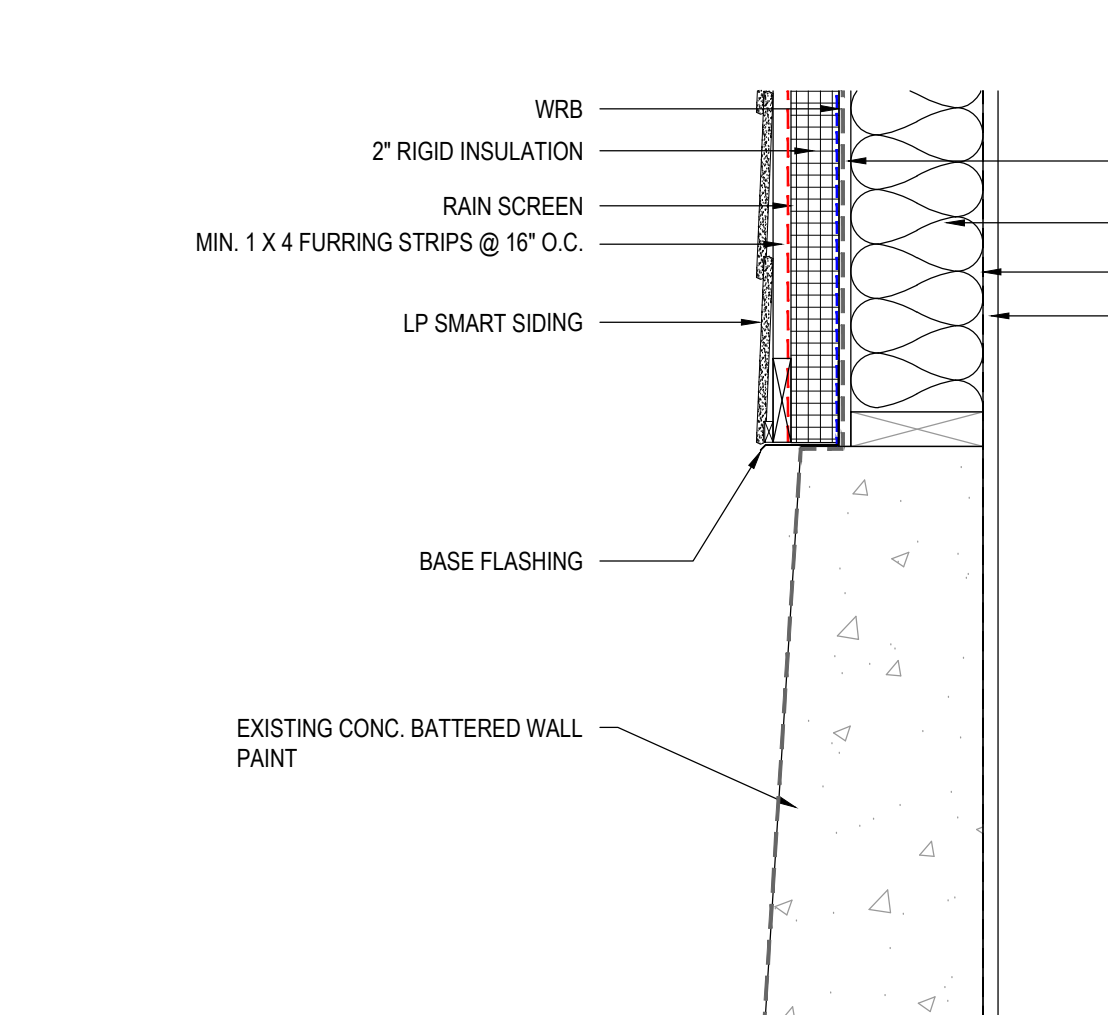
4 EAVE DETAIL  
1-1/2" = 1'-0"



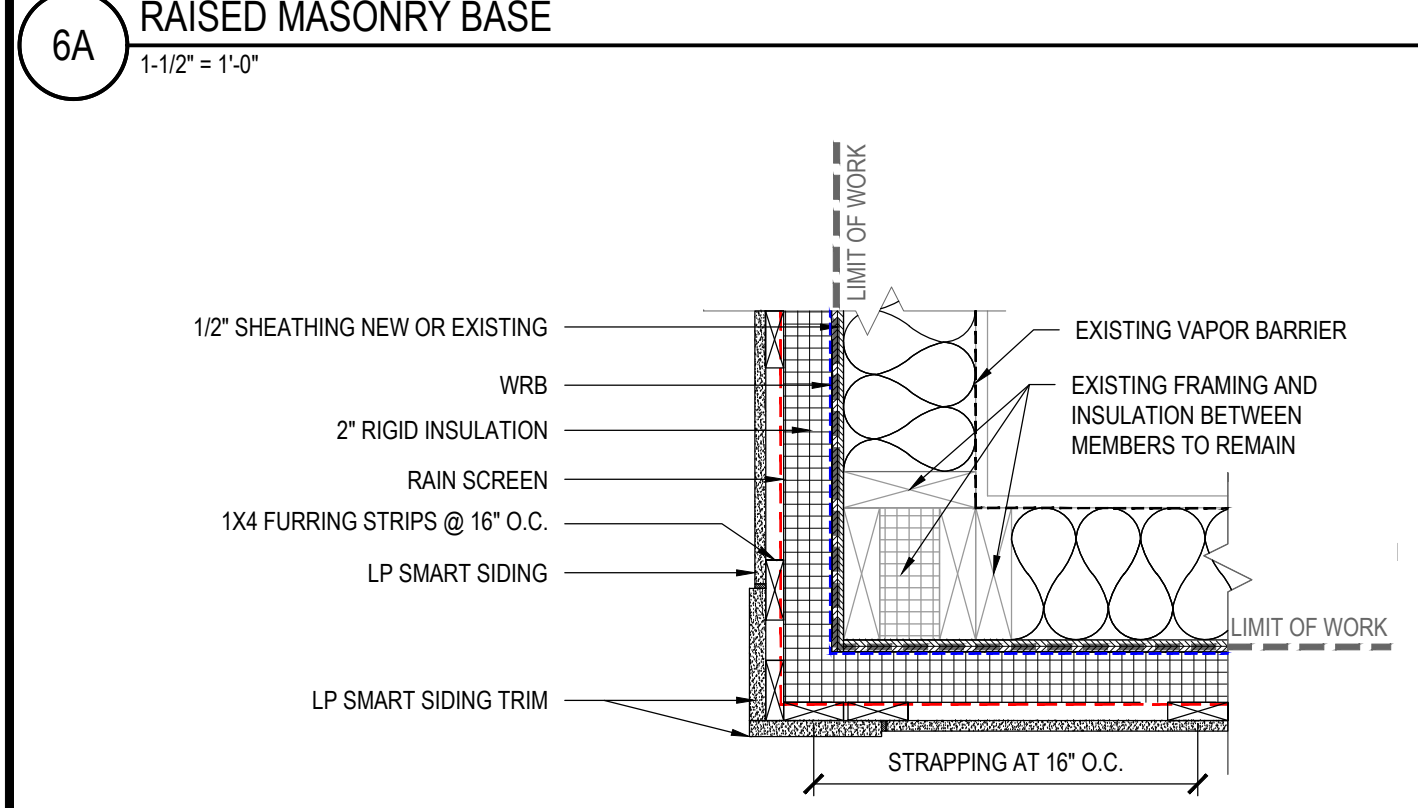
6A RAISED MASONRY BASE  
1-1/2" = 1'-0"



6 SIDING DETAIL  
1-1/2" = 1'-0"

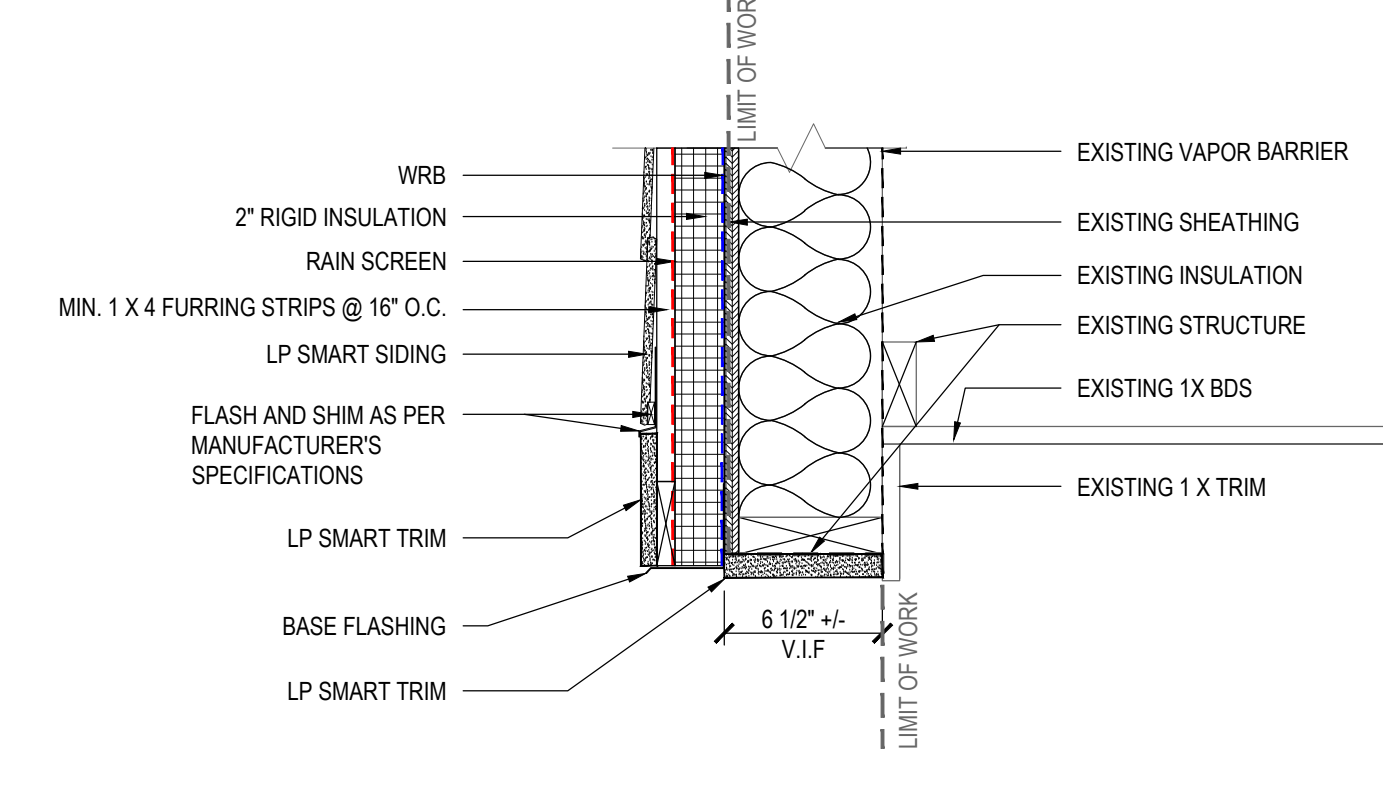


7 BATTERED WALL DETAIL  
1-1/2" = 1'-0"



5A BOARD AND BATTEN CORNER DETAIL  
1-1/2" = 1'-0"

**NOTE:**  
ALL LP SMARTSIDE TRIM & SIDING PRODUCTS EDGES / ENDS ARE TO BE PAINTED WHEN CUT. FOLLOW MANUFACTURES RECOMMENDATIONS.



8 SOFFIT DETAIL  
1-1/2" = 1'-0"

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TSD	RJH	BID DOCUMENTS	NO.	DATE	DESCRIPTION	BY	CK'D
0	07/21/2023						

**Maine DOE**  
AUGUSTA, ME  
EDMUNDS SCHOOL  
BUILDING ENCLOSURE &  
MECHANICAL SYSTEMS  
UPGRADES  
21 HARRISON RD  
DENNISVILLE, ME 04628

SHEET TITLE  
ALT 1PB -  
PROPOSED  
PARTIAL SECTIONS  
&  
DETAILS

DRAWN BY RJH	DATE 10/30/2022
CHECKED BY DM	US&K PROJECT # 528137
PROJ. ENG. N/A	US&K ARCHIVE #

SHEET NUMBER  
**BEA5.2**  
SHEET 10 OF 30

TSD	DATE	BY	CK'D
RJH			
BID DOCUMENTS		DESCRIPTION	
0	07/21/2023		



AUGUSTA, ME

EDMUNDS SCHOOL  
BUILDING ENCLOSURE &  
MECHANICAL SYSTEMS  
UPGRADES

21 HARRISON RD  
DENNISVILLE, ME 04628

SHEET TITLE

WINDOW TYPES |  
SCHEDULE &  
DETAILS

DRAWN BY

RJH DATE 10/30/2022

CHECKED BY DM D&K PROJECT # 528137

PROJ. ENG. N/A D&K ARCHIVE #

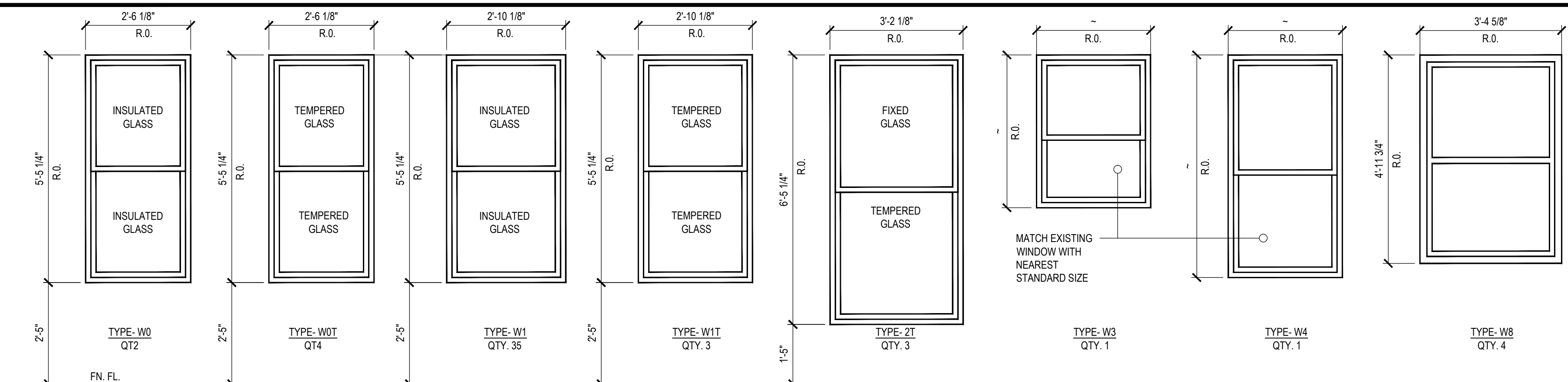
SHEET NUMBER

SHEET 11 OF 30

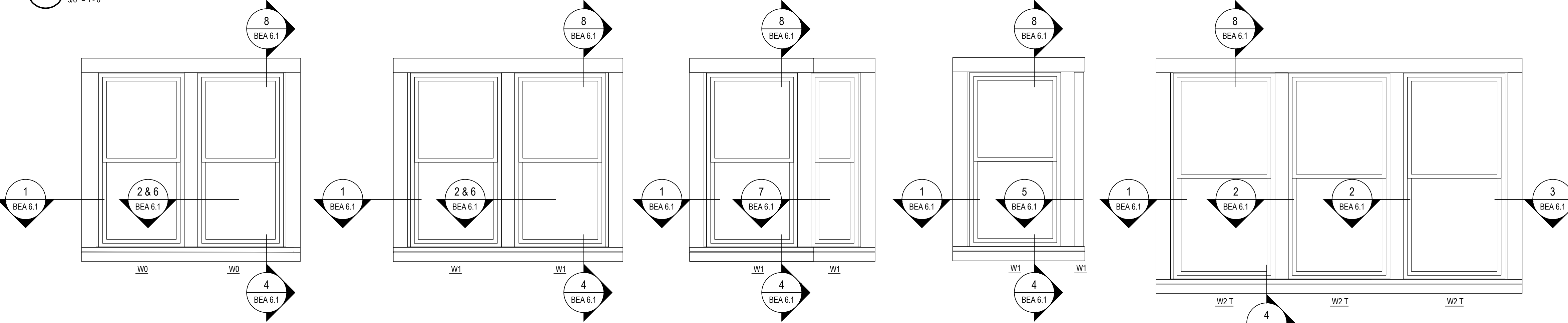
**BEA6.1**

SHEET 11 OF 30

NOTE:  
ALL WINDOWS TO BE ANDERSEN 100 SERIES SINGLE HUNG, WHITE VINYL  
EXTERIOR FINISH, WOOD INTERIOR POLYURETHANE FINISH.  
CONTRACTOR TO V.I.F. ALL DIMENSIONS PRIOR TO ORDERING WINDOWS.

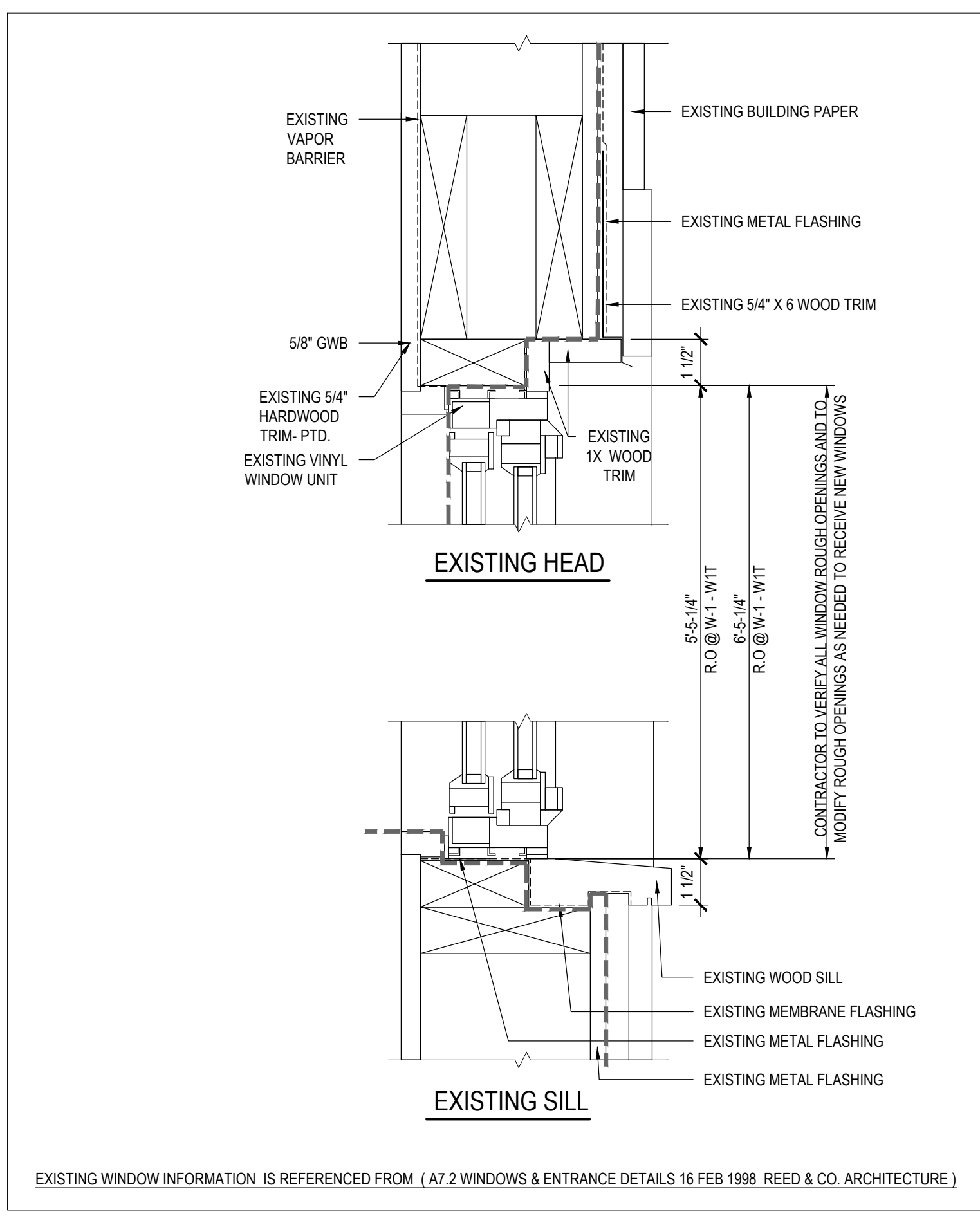
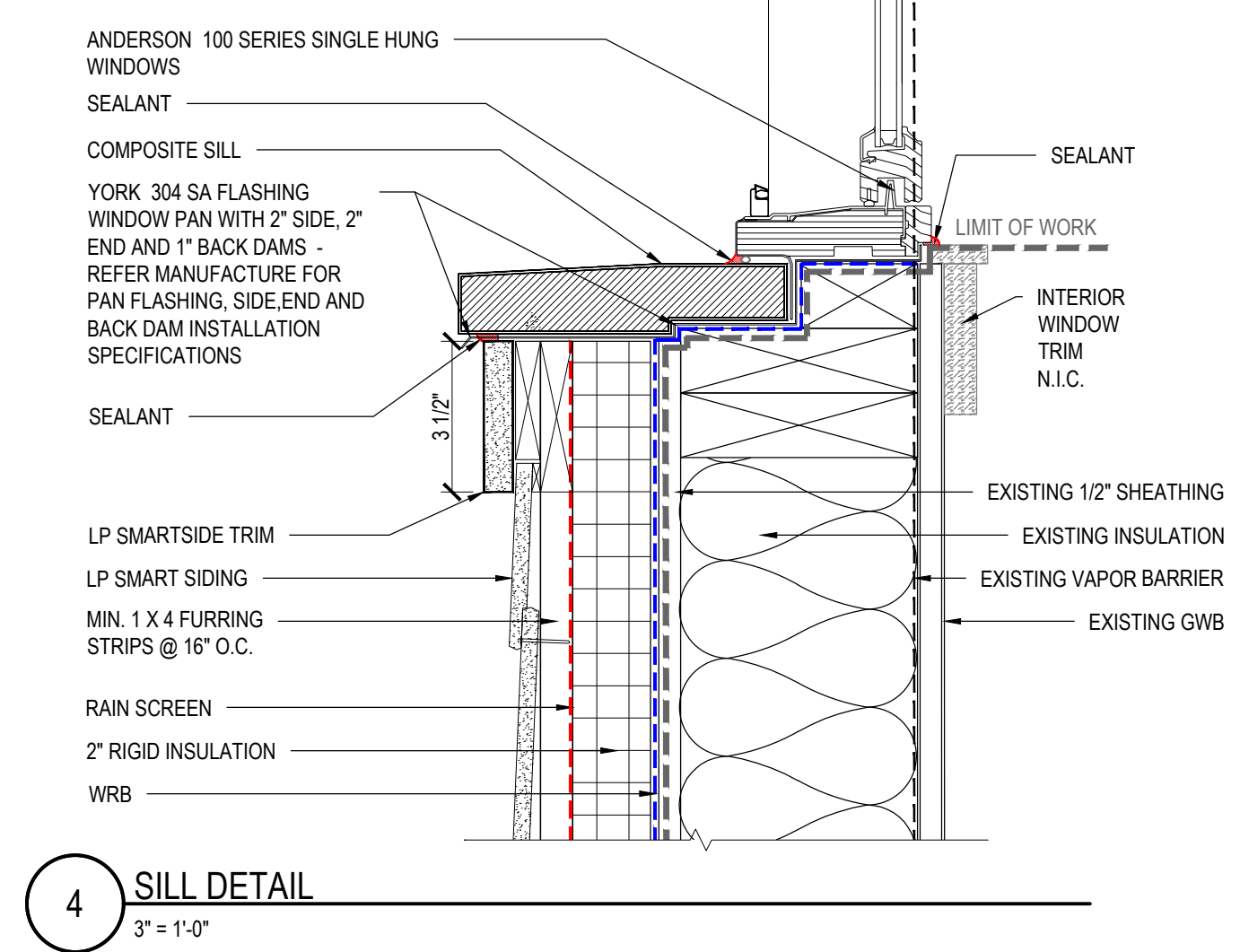
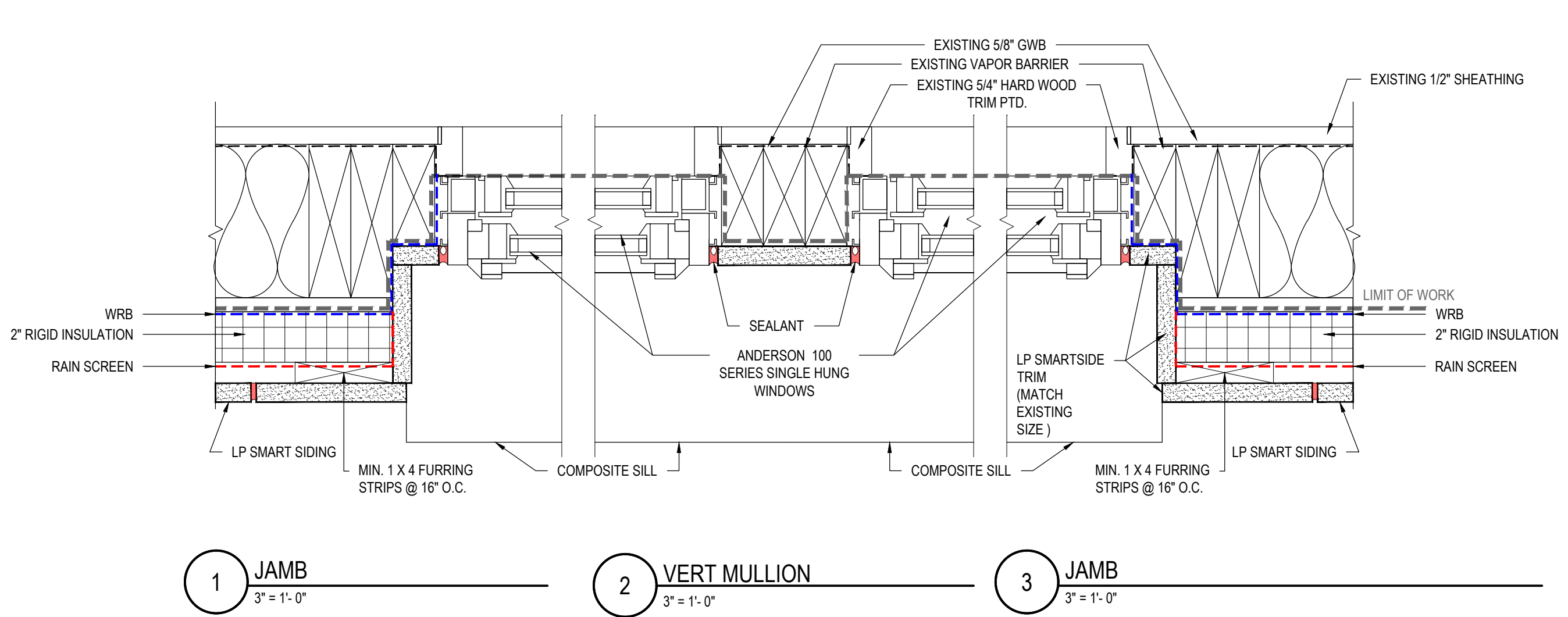
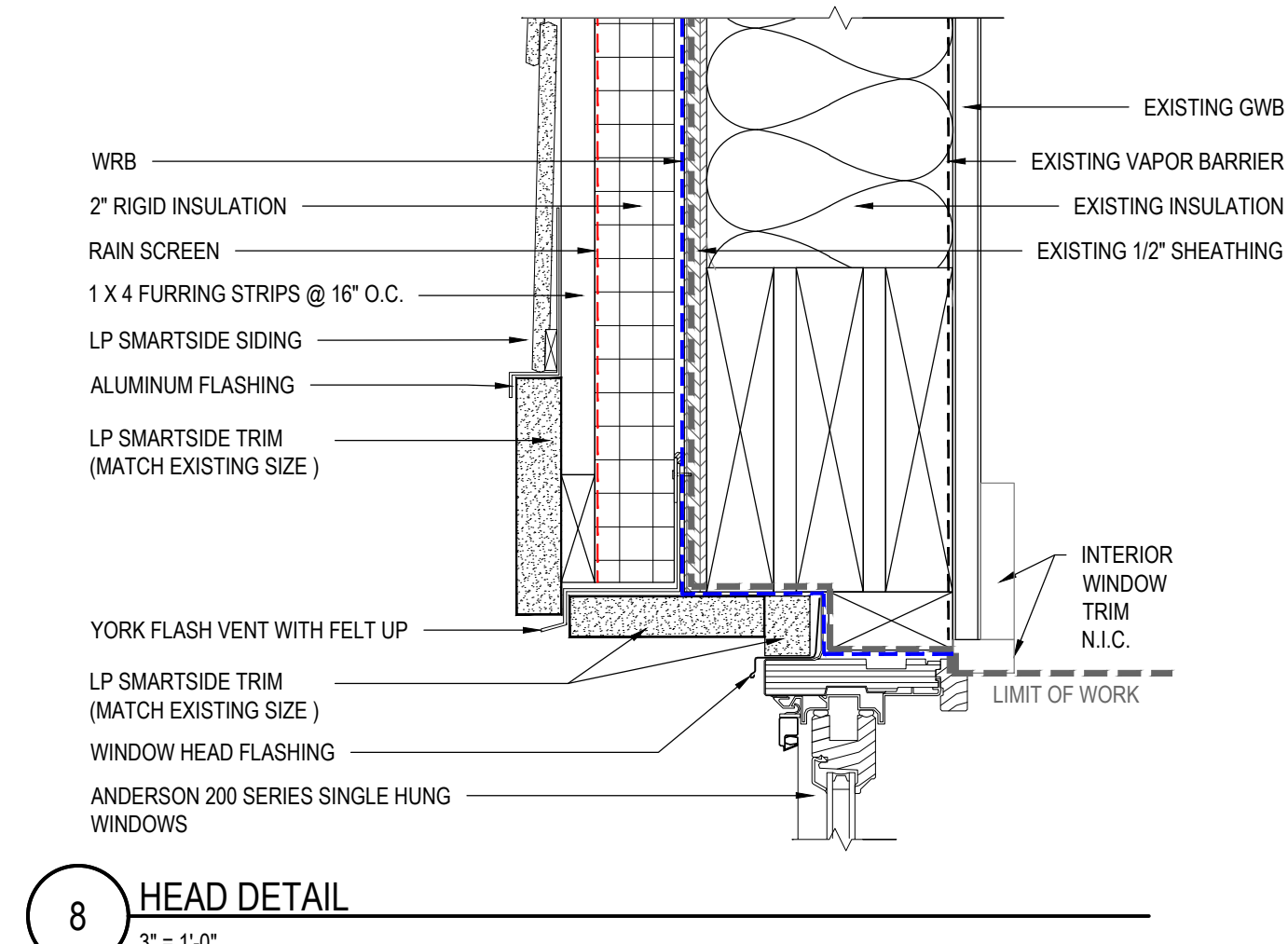
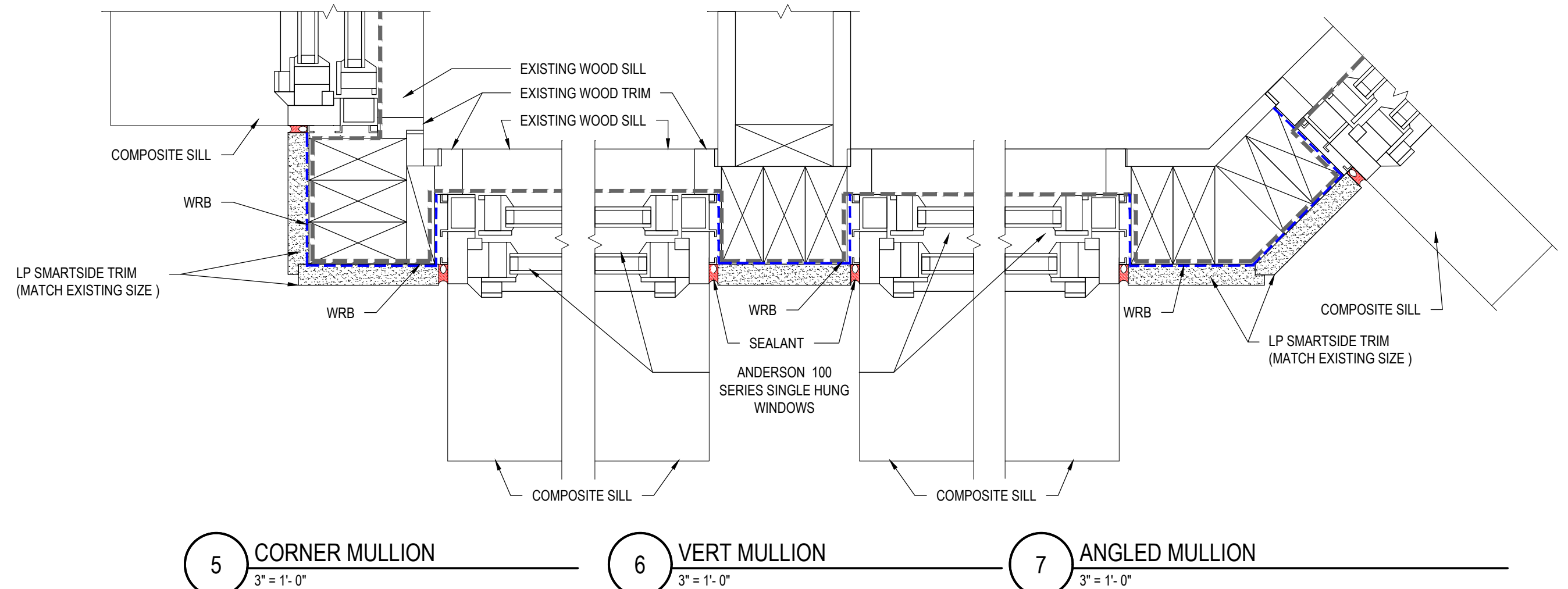


12 WINDOW TYPES  
3/8" = 1'-0"



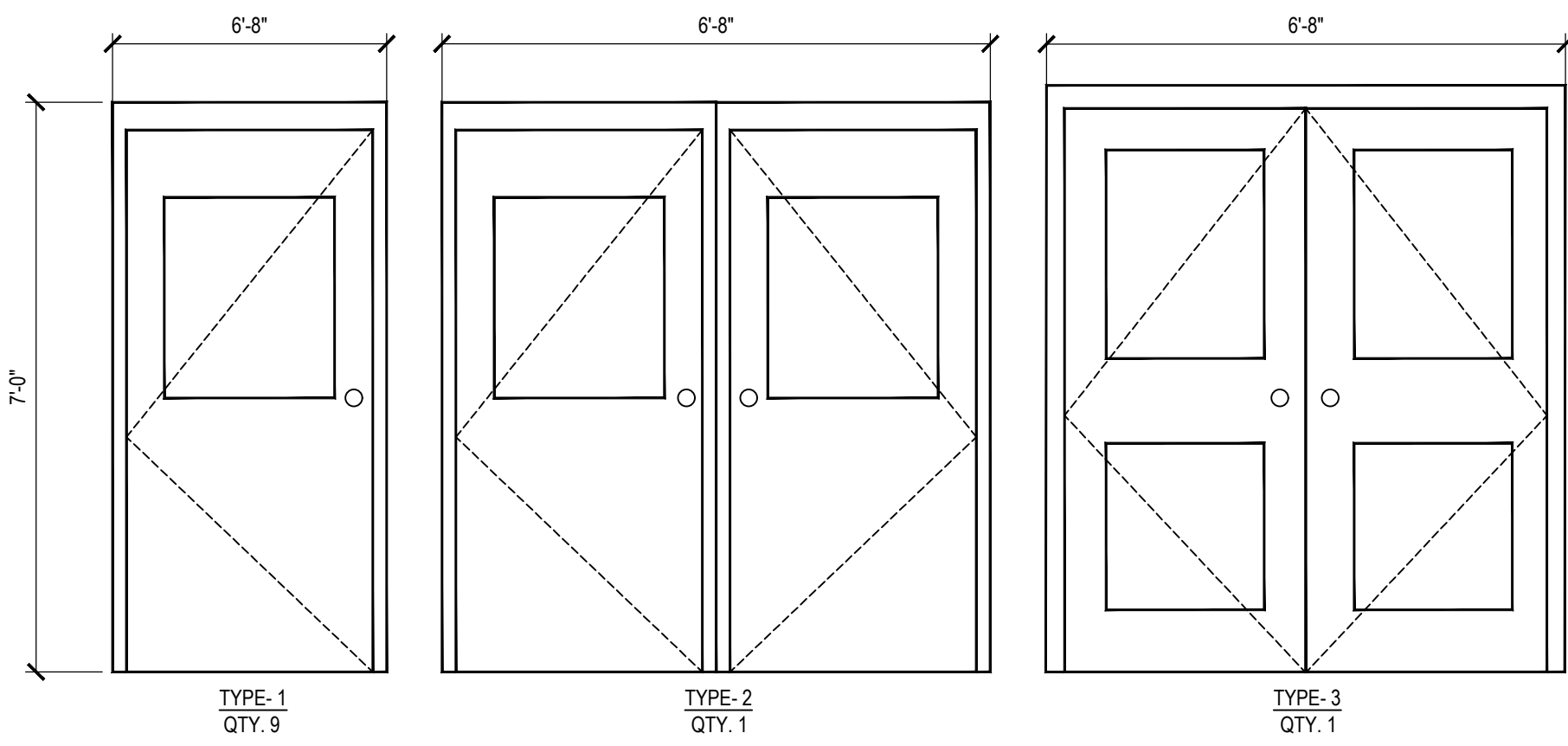
11 TYPICAL WINDOW CONFIGURATIONS  
3/8" = 1'-0"

NOTE:  
ALL LP SMARTSIDE TRIM & SIDING PRODUCTS EDGES / ENDS ARE TO BE PAINTED WHEN CUT.  
FOLLOW MANUFACTURES RECOMMENDATIONS.



10 TYPICAL EXISTING HEAD AND SILL ( INCLUDED FOR FOR REFERENCE )  
3" = 1'-0"

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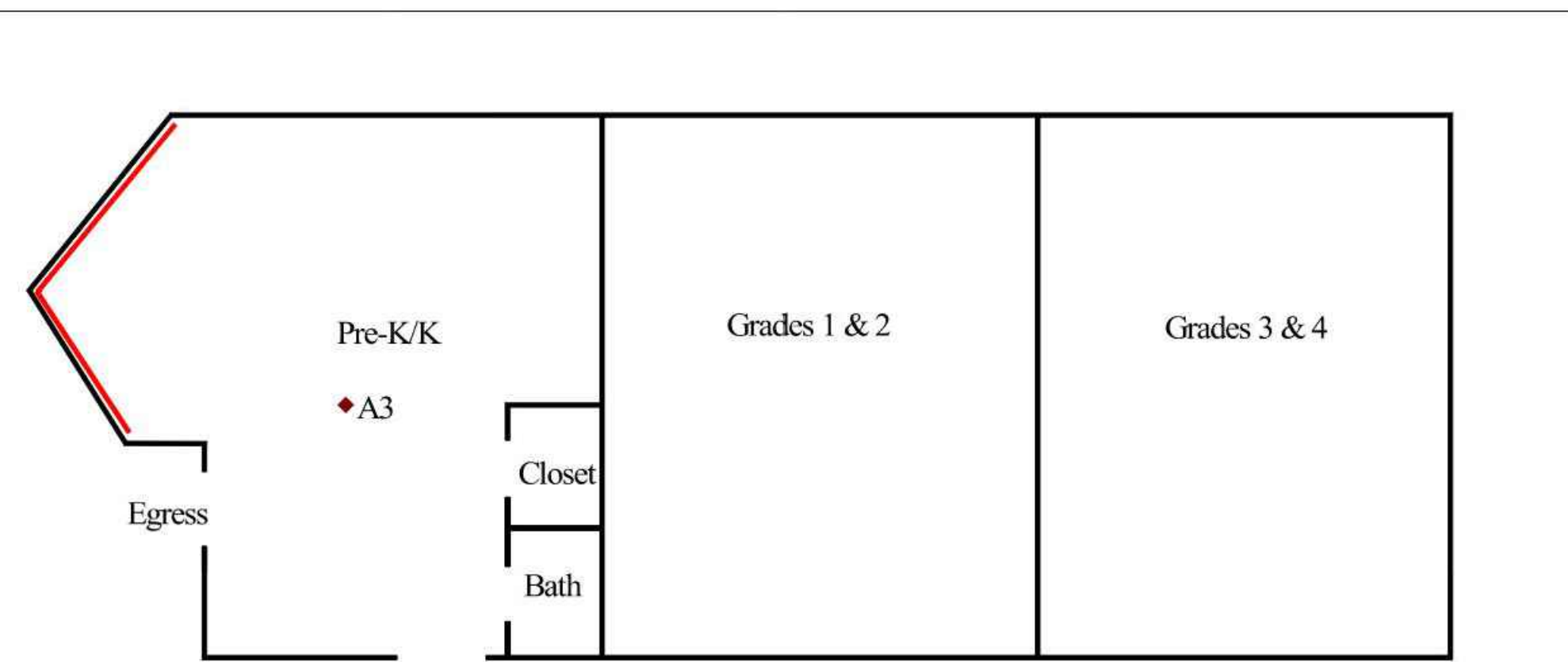


- NOTE:
1. ALL DOORS ARE TO MATCH EXISTING STYLE AND COLOR.
  2. CONTRACTOR TO V.I.F. ALL DIMENSIONS PRIOR TO ORDERING.
  3. EXISTING HARDWARE TO BE REPLACED WITH GRADE 5 EXTERIOR WITH S.S. COMPONENTS.

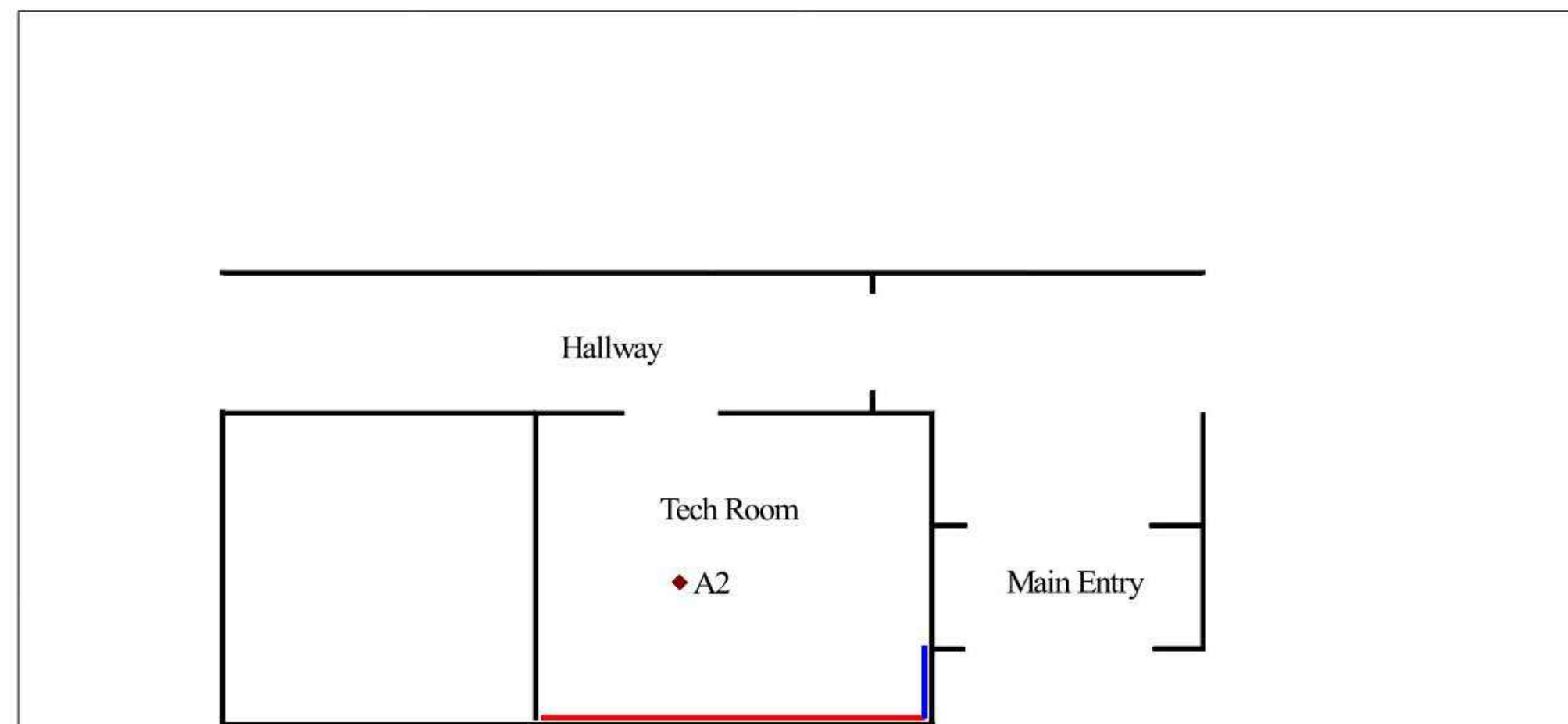
1 DOOR TYPES  
1/2" = 1'-0"

DOOR SCHEDULE								
TAG	TYPE	FRAME MATERIAL	DOOR MATERIAL	FINISH	REMARKS	GRADE	HARDWARE	GLASS
DOB.2	1	MTL	MTL	PAINT	INSULATED	COMMERCIAL - SECURE STEEL SERVICE	GRADE 5 EXTERIOR WITH S.S. COMPONENTS	LAMINATED
DOI.1	3	MTL	MTL	PAINT	INSULATED	COMMERCIAL - SECURE STEEL SERVICE	GRADE 5 EXTERIOR WITH S.S. COMPONENTS	LAMINATED
DV20	2	MTL	MTL	PAINT	INSULATED	COMMERCIAL - SECURE STEEL SERVICE	GRADE 5 EXTERIOR WITH S.S. COMPONENTS	LAMINATED
DK22	1	MTL	MTL	PAINT	INSULATED	COMMERCIAL - SECURE STEEL SERVICE	GRADE 5 EXTERIOR WITH S.S. COMPONENTS	LAMINATED
DM24	1	MTL	MTL	PAINT	INSULATED	COMMERCIAL - SECURE STEEL SERVICE	GRADE 5 EXTERIOR WITH S.S. COMPONENTS	LAMINATED
DM26	1	MTL	MTL	PAINT	INSULATED	COMMERCIAL - SECURE STEEL SERVICE	GRADE 5 EXTERIOR WITH S.S. COMPONENTS	LAMINATED
DV28	1	MTL	MTL	PAINT	INSULATED	COMMERCIAL - SECURE STEEL SERVICE	GRADE 5 EXTERIOR WITH S.S. COMPONENTS	LAMINATED
DS30	1	MTL	MTL	PAINT	INSULATED	COMMERCIAL - SECURE STEEL SERVICE	GRADE 5 EXTERIOR WITH S.S. COMPONENTS	LAMINATED
D8.2	1	MTL	MTL	PAINT	INSULATED	COMMERCIAL - SECURE STEEL SERVICE	GRADE 5 EXTERIOR WITH S.S. COMPONENTS	LAMINATED
D14.2	1	MTL	MTL	PAINT	INSULATED	COMMERCIAL - SECURE STEEL SERVICE	GRADE 5 EXTERIOR WITH S.S. COMPONENTS	LAMINATED
D12.2	1	MTL	MTL	PAINT	INSULATED	COMMERCIAL - SECURE STEEL SERVICE	GRADE 5 EXTERIOR WITH S.S. COMPONENTS	LAMINATED

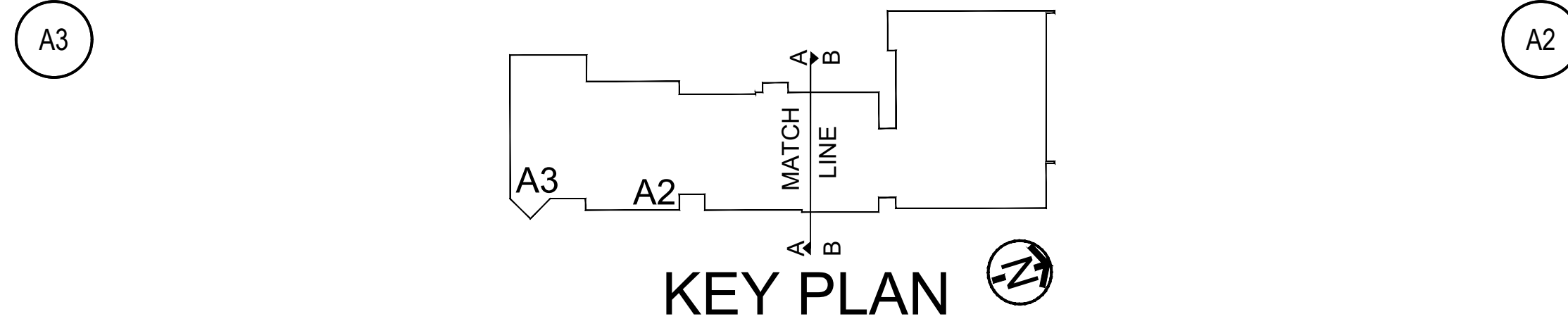
1 DOOR SCHEDULE  
1/2" = 1'-0"



<p>Sample Location (T# - Tape, A# - Air)</p> <p>Remove Wall System 4' Up From Floor. Dry, HEPA Vac, Treat Wall Framing With Clean/Treatment System &amp; Replace Wall System</p>	<p>Note:</p> <p>After removal of the materials as outlined above, an evaluation of the exposed surfaces should be performed. Damages may extend further than noted and these surfaces may warrant removal.</p>	<p>Clean Treatment System - Any System of High Surface Cleaner That Has The Ability To Remove Fungal Growth From The Building Materials</p> <p>Wall Ceiling/Floor System - Defined As The Finish Layer, Substrate And Any Associated Insulation &amp; Vapor Barrier</p>	<p>Air Quality Management Services, Inc. PO Box 2491, Lewiston, Maine 04241 Phone (207)637-7360 Fax (207)637-7361</p> <p>Client: State of Maine EIU Richard Colpitts</p> <p>Project: Bio-Remedial Assessment</p> <p>Address: 21 Harrison Road Edmunds TWP, Maine</p> <p>AQM Project: 21-643 Claim/File: ND Inspection Date: 8/30/21 Scale: None</p>
<p>1) All Cleaning &amp; Restoration Activities Should be Completed In Accordance With IICRC S520 &amp; S500 Standards.</p> <p>2) Prior To Application Of Any Sealants, All Wood Surfaces Should Be Dried To Below 15%.</p>			



<p>Sample Location (T# - Tape, A# - Air)</p> <p>Remove Wall System 4' Up From Floor. Dry, HEPA Vac, Treat Wall Framing With Clean/Treatment System &amp; Replace Wall System</p> <p>Remove Wall Floor to Ceiling. Dry, HEPA Vac, Treat Wall Framing With Clean/Treatment System &amp; Replace Wall System</p>	<p>Note:</p> <p>After removal of the materials as outlined above, an evaluation of the exposed surfaces should be performed. Damages may extend further than noted and these surfaces may warrant removal.</p>	<p>Clean Treatment System - Any System of High Surface Cleaner That Has The Ability To Remove Fungal Growth From The Building Materials</p> <p>Wall Ceiling/Floor System - Defined As The Finish Layer, Substrate And Any Associated Insulation &amp; Vapor Barrier</p>	<p>Air Quality Management Services, Inc. PO Box 2491, Lewiston, Maine 04241 Phone (207)637-7360 Fax (207)637-7361</p> <p>Client: State of Maine EIU Richard Colpitts</p> <p>Project: Bio-Remedial Assessment</p> <p>Address: 21 Harrison Road Edmunds TWP, Maine</p> <p>AQM Project: 21-643 Claim/File: ND Inspection Date: 8/30/21 Scale: None</p>
<p>1) All Cleaning &amp; Restoration Activities Should be Completed In Accordance With IICRC S520 &amp; S500 Standards.</p> <p>2) Prior To Application Of Any Sealants, All Wood Surfaces Should Be Dried To Below 15%.</p>			



3 BIO-REMEDIATION ASSESSMENT  
NOT TO SCALE

ISSUED FOR BID  
NOT FOR CONSTRUCTION  
07-21-23



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PROFESSIONAL SEAL

BID 100%  
DOCUMENTS

TSD	R/JH	BID DOCUMENTS	0	10/21/2023	NO.	DATE	DESCRIPTION	BY	CK'D



EDMUNDS SCHOOL  
BUILDING ENCLOSURE &  
MECHANICAL SYSTEMS  
UPGRADES

21 HARRISON RD  
DENNISVILLE, ME 04628

SHEET TITLE  
DOOR FRAME,  
HARDWARE  
SCHEDULE, DETAILS,  
BIO-REMEDIATION  
ASSESSMENT

DRAWN BY	DATE
R/JH	10/30/2022
CHECKED BY	US&K PROJECT #
DM	528137
PROJ. ENG.	US&K ARCHIVE #
N/A	

SHEET NUMBER

BEA6.2

SHEET 12 OF 30

MECHANICAL GENERAL NOTES

- A. QUALITY OF WORK
1. CONTRACT DOCUMENTS ARE IN PART DIAGRAMMATIC, INTENDED TO CONVEY SCOPE & ARRANGEMENT OF WORK. CONSULT ELECTRICAL AND STRUCTURAL CONSTRUCTION DRAWINGS FOR FAMILIARITY WITH CONDITIONS AFFECTING WORK. VERIFY ALL SPACES IN WHICH WORK WILL BE PERFORMED BY ON-SITE MEASUREMENTS. DO NOT SCALE DRAWINGS.
2. IT IS THE INTENT OF THE DRAWINGS AND SPECIFICATIONS TO OBTAIN A COMPLETE AND SATISFACTORY INSTALLATION. AN ATTEMPT HAS BEEN MADE TO SEPARATE AND DEFINE THE WORK OF THE CONTRACTOR. DRAWINGS ARE DIAGRAMMATIC, BUT MUST BE FOLLOWED AS ACTUAL CONSTRUCTION OF THE FACILITY AND WORK OF OTHER TRADES WILL PERMIT. THE DRAWINGS UTILIZE SYMBOLS AND SCHEMATIC DIAGRAMS TO INDICATE VARIOUS ITEMS OF WORK. THEREFORE, NO INTERPRETATION WILL BE MADE FROM THE LIMITATION OF SYMBOLS AND DIAGRAMS THAT ANY ELEMENTS NECESSARY FOR THE COMPLETE INSTALLATION ARE EXCLUDED. THE ENGINEER SHOULD BE NOTIFIED OF ANY DISCREPANCIES, OMISSIONS, CONFLICTS, OR INTERFERENCE WHICH OCCUR BETWEEN VARIOUS DRAWINGS AND SPECIFICATIONS. IF SUCH NOTIFICATION IS NOT RECEIVED, THE INSTALLING CONTRACTOR(S) SHALL BE RESPONSIBLE FOR THEIR INTERPRETATIONS.
3. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AS THERE MAY BE VARIOUS CONDITIONS AT THE SITE WHICH DO NOT SHOW ON THE ACCOMPANYING DRAWINGS, OR WHICH ARE AT VARIANCE WITH THE CONDITIONS INDICATED ON THE DRAWINGS. IT IS IMPORTANT THAT EACH BIDDER VISIT THE SITE TO BECOME ACQUAINTED WITH THE EXISTING CONDITIONS, AND TO TAKE THESE CONDITIONS INTO CONSIDERATION WHEN PREPARING THEIR PROPOSAL. EACH BIDDER SHALL OBTAIN ANY INFORMATION OR MAKE ANY MEASUREMENT DESIRED. LACK OF KNOWLEDGE RELATIVE TO THE EXISTING SITE CONDITIONS WILL NOT BE ALLOWED AS A BASIS FOR EXTRA COMPENSATION.
4. "PROVIDE" SHALL MEAN "FURNISH AND INSTALL" AND SHALL INCLUDE ALL EQUIPMENT, DEVICES, HARDWARE, MOUNTS, LABOR, RIGGING, SUBCONTRACTS, ETC., THAT RESULT IN A COMPLETE AND FUNCTIONAL PROJECT.
5. PROVIDE ALL EQUIPMENT, ACCESSORIES, SUPPORTS, FITTINGS AND ALL OTHER INCIDENTAL MATERIAL NEEDED FOR THE COMPLETE AND OPERATING INSTALLATION. MINOR ITEMS TO FINISH THE WORK SUCH AS PATCHING, BLOCKING, TRIM, TOUCH-UP PAINT, ETC., SHALL BE PROVIDED WHETHER OR NOT INDICATED IN THE CONTRACT DOCUMENTS.
6. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
7. THE LOCATION OF EXISTING UTILITIES IS ONLY SHOWN IN AN APPROXIMATE WAY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PAY FOR AND REPAIR ALL DAMAGES CAUSED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES UNLESS OTHERWISE INDICATED.
8. LOCATE ALL TEMPERATURE, PRESSURE, AND FLOW MEASURING DEVICES IN ACCESSIBLE LOCATIONS IN STRAIGHT SECTIONS OF PIPE OR DUCT AS RECOMMENDED BY THE MANUFACTURER.
9. WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF EQUIPMENT ARE REQUIRED, THE PRODUCT OF ONE MANUFACTURER SHALL BE USED.
10. ALL WORKSMANSHIP, MATERIALS, AND EQUIPMENT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE BY THE OWNER.
11. PROVIDE IDENTIFICATION LABELS FOR NEW EQUIPMENT. AFFIX PERMANENT IDENTIFYING TAGS OR LABELS TO FANS, TERMINAL UNITS, AIR-HANDLERS ETC. IDENTIFY SYSTEM ON PIPING AND DUCTWORK MAINS AND INDICATE DIRECTION OF FLOW ON PIPING. INDICATE THE CONTROLLED EQUIPMENT ON WALL MOUNTED CONTROLS.

- B. CODES/PERMITS
1. WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH NFPA, ASHRAE, UNDERWRITERS LABORATORIES AND ALL MUNICIPAL, STATE AND OTHER AUTHORITIES. PUBLIC AND PRIVATE, HAVING JURISDICTION. REPORT ALL DISCREPANCIES WITH SUCH REGULATIONS TO ENGINEER AND DO NOT PROCEED WITH ANY WORK UNTIL WRITTEN AUTHORIZATION IS RECEIVED FROM THE ENGINEER.
2. ALL NECESSARY FEES, PERMITS, AND APPROVALS AS REQUIRED BY THE WORK OF THESE DRAWINGS AND SPECIFICATIONS SHALL BE OBTAINED AND PAID FOR BY THIS CONTRACTOR.
3. NOTHING CONTAINED IN THE SPECIFICATIONS OR INDICATED ON THESE DRAWINGS SHALL BE CONSTRUED TO CONFLICT WITH APPLICABLE PORTIONS OF ANY LAWS, ORDINANCES, REGULATIONS, OR CODES.

- C. COORDINATION OF WORK
1. COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, AND ELECTRICAL WORK - NEW OR EXISTING.
2. WHEN MECHANICAL WORK (HVAC, PLUMBING, FIRE PROTECTION, ETC.) IS SUBCONTRACTED, IT SHALL BE THE MECHANICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE SUBCONTRACTORS AND THE ASSOCIATED CONTRACTS. WHEN DISCREPANCIES ARISE PERTAINING TO WHICH CONTRACTOR PROVIDES A PARTICULAR ITEM OF THE MECHANICAL CONTRACT OR WHICH CONTRACTOR PROVIDES FINAL CONNECTIONS FOR A PARTICULAR ITEM OF THE MECHANICAL CONTRACT, IT SHALL BE BROUGHT TO THE ATTENTION OF THE MECHANICAL CONTRACTOR, WHOSE DECISION SHALL BE FINAL.

- 3. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS ARE APPROXIMATE AND ARE NOT DEFINITELY FIXED BY DIMENSIONS. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS AND SHALL HAVE THE APPROVAL OF THE ENGINEER BEFORE BEING INSTALLED. DO NOT SCALE THE DRAWINGS.
4. PROVIDE LOCATIONS OF REQUIRED ACCESS PANELS FOR INSTALLATION IN WALLS AND CEILINGS TO SERVICE VALVES, DAMPERS, AND OTHER CONCEALED MECHANICAL EQUIPMENT. GENERAL CONTRACTOR SHALL FURNISH & INSTALL ACCESS PANELS.
5. COORDINATE LOCATIONS AND SIZES OF ALL FLOOR, WALL, AND ROOF OPENINGS WITH ALL OTHER TRADES INVOLVED. ALL OPENINGS IN FIRE WALLS FOR PIPING, CONDUIT, ETC., SHALL BE FIRE STOPPED.

- 6. EXTENT OF DEMOLITION TO BE FIELD-VERIFIED BY THE CONTRACTOR. EXTENT SHOWN ON DRAWING FOR REFERENCE ONLY. CONTRACTOR IS RESPONSIBLE TO VIF DEMO EXTENT TO FACILITATE INSTALLATION OF NEW WORK & MODIFY AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
D. PIPING
1. TAKE ALL NECESSARY MEASUREMENTS AT THE BUILDING AND FABRICATE THE PIPING ON THE SITE, IF REQUIRED, TO ENSURE AN APPROVABLE INSTALLATION.
2. UNLESS OTHERWISE NOTED, ALL PIPING IS OVERHEAD, TIGHT TO UNDERSIDE OF STRUCTURE OR SLAB, WITH SPACE FOR INSULATION.
3. INSTALL ALL PIPING WITHOUT FORCING OR SPRINGING.
4. ALL PIPING SHALL CLEAR DOORS AND WINDOWS.
5. COORDINATE ALL PIPING WITH EXISTING CONDITIONS. OFFSETS IN PIPING AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
6. PIPING PENETRATIONS OF ALL WALLS SHALL BE SEALED WITH FIRE CAULK.
7. PROVIDE AIR VENTS AT THE HIGH POINT OF EACH DROP IN CLOSED WATER PIPING SYSTEMS. ALL PIPING SHALL SLOPE TO LOW POINTS. PROVIDE HOSE AND DRAIN VALVES AT THE BOTTOM OF ALL RISERS AND AT LOW POINTS.

- 8. INSTALL PIPING SO THAT ALL VALVES, STRAINERS, UNIONS, TRAPS, FLANGES, AND OTHER APPURTENANCES REQUIRING ACCESS ARE ACCESSIBLE. ALL VALVES SHALL BE ADJUSTED FOR SMOOTH AND EASY OPERATION.
9. ALL VALVES (EXCEPT CONTROL VALVES) AND STRAINERS SHALL BE FULL SIZE OF PIPE REDUCING SIZE TO MAKE CONNECTIONS TO EQUIPMENT.
10. UNIONS AND/OR FLANGES SHALL BE INSTALLED AT EACH PIECE OF EQUIPMENT, IN BYPASSES, AND IN LONG PIPING RUNS (100 FEET OR MORE) TO PERMIT DISASSEMBLY FOR ALTERNATION AND REPAIRS.
11. PROVIDE FLEXIBLE CONNECTION IN ALL PIPING SYSTEMS CONNECTED TO PUMPS, CHILLERS, AND OTHER EQUIPMENT WHICH REQUIRE VIBRATION ISOLATION EXCEPT WATER COILS. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AS CLOSE TO THE EQUIPMENT AS POSSIBLE OR AS INDICATED ON DRAWINGS.

- E. DUCTWORK
1. FABRICATE DUCTWORK FROM FIELD VERIFIED DIMENSIONS. FABRICATE DUCTWORK IN ACCORDANCE WITH SMACNA GUIDELINES (LATEST EDITION). PRIOR TO FABRICATING DUCTWORK VERIFY CEILING CLEARANCES WITH STRUCTURE, PIPES, ETC. COORDINATE THE INSTALLATION OF DUCTWORK WITH SPRINKLER PIPING. INSTALL DUCTWORK PRIOR TO INSTALLING ANY PIPING AND ELECTRICAL WORK TO REDUCE CONFLICTS.
2. ALL DUCTWORK SHALL BE FABRICATED FROM G-90 GALVANIZED SHEET METAL IN LOCK-FORMING QUALITY, UNLESS SPECIFIED OTHERWISE.
3. ALL DUCTWORK DIMENSIONS SHOWN ON PLANS ARE CLEAR INTERNAL SIZES.
4. ALL SUPPLY, RETURN, EXHAUST, AND OUTSIDE AIR DUCTWORK SHALL BE FABRICATED AT A MINIMUM CLASS OF 2 INCH WATER GAGE, SEAL CLASS 'A'.
5. PROVIDE UL APPROVED DYNAMIC FIRE DAMPERS AT ALL REQUIRED LOCATIONS. PROVIDE ACCESS DOORS FOR ALL FIRE DAMPERS. THE DOOR SHALL BE 18 INCHES WIDE OR NOT LESS THAN THE DUCT WIDTH MINUS 2 INCHES. THE DOOR LENGTH SHALL EQUAL THE DOOR WIDTH BUT NOT LESS THAN 12 INCHES. DAMPERS AND INSTALLATION SHALL COMPLY WITH UL 555.
6. ALL DUCT SEALANT TO BE WATER BASED LOW VOC.
7. INSULATE ALL FLEXIBLE DUCTS. FLEXIBLE DUCT LENGTHS SHALL NOT EXCEED 5 FEET. SUPPORT ALL FLEX DUCTS SO AS TO LIMIT DUCT DEFLECTIONS TO ONE INCH. THE MAXIMUM UNSUPPORTED LENGTH SHALL NOT EXCEED 5 FEET.
8. COORDINATE THE LOCATION OF CEILING AIR INLETS AND OUTLETS WITH: LIGHTS, SPRINKLER HEADS, AND LIFE SAFETY DEVICES.
9. PROVIDE ADJUSTABLE VOLUME DAMPERS AT ALL BRANCH DUCT TAKE OFFS. "RAP-IT" STYLE VOLUME DAMPERS AND HARDWARE IS NOT PERMITTED.

- F. TESTING, ADJUSTING, AND BALANCING
1. WORK SHALL BE PERFORMED BY AN INDEPENDENT TESTING AND BALANCING AGENCY SPECIALIZING IN TESTING, ADJUSTING, AND BALANCING OF HEATING, VENTILATION, AND COOLING SYSTEMS. TESTING AND BALANCING CONTRACTOR SHALL BE AABC OR NEBB CERTIFIED.
2. TOLERANCE OF HYDRONIC SYSTEMS: ADJUST FLUID FLOW RATES AT BALANCE VALVES AND ALL EQUIPMENT TO PLUS/MINUS 10% OF DESIGN FLOW RATES.
3. TOLERANCE OF AIR SYSTEMS: ADJUST AIR FLOW RATES AT AIR HANDLING UNITS TO PLUS/MINUS 5% OF DESIGN FOR SUPPLY SYSTEMS AND PLUS/MINUS 10% OF DESIGN FOR RETURN AND EXHAUST SYSTEMS. ADJUST AIR FLOW RATES AT AIR INLETS AND OUTLETS TO PLUS/MINUS 10% OF DESIGN TO THE SPACE. MAINTAIN RELATIVE PRESSURIZATION OF EXISTING SPACES AND ESTABLISH REQUIRED PRESSURIZATION IN MODIFIED SPACES.
4. SCHEDULED EQUIPMENT SHALL BE BALANCED AND A PRELIMINARY REPORT SUBMITTED TO THE ENGINEER FOR REVIEW. PROVIDE ALLOWANCE FOR (2) RETURN TRIPS FOR ADDITIONAL REBALANCE WORK AFTER ENGINEER REVIEW OF INITIAL REPORTS. PROVIDE THE FINAL REPORT TO ENGINEER.

- G. WARRANTY
1. GUARANTEE ALL WORK PERFORMED AND MATERIALS AND EQUIPMENT INSTALLED TO THE FULL EXTENT REQUIRED BY THE DRAWINGS AND SPECIFICATIONS TO BE FREE FROM INHERENT DEFECTS OF MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE.
2. REPLACE ANY MATERIAL AND EQUIPMENT PRIOR TO THE FINAL ACCEPTANCE WHICH IS CORRODED OR OTHERWISE DAMAGED THROUGH THE MECHANICAL CONTRACTOR'S FAILURE TO PROPERLY OPERATE AND MAINTAIN THE INSTALLATION DURING CONSTRUCTION OR RETESTING.
3. KEEP THE WORK IN REPAIR AND REPLACE ANY DEFECTIVE MATERIALS, EQUIPMENT, OR WORKMANSHIP UPON NOTICE FROM THE ENGINEER OR OWNER'S REPRESENTATIVE FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE.
4. CONSIDER DEFECTIVE ALL MATERIAL OR EQUIPMENT REQUIRING EXCESSIVE SERVICE DURING THE FIRST YEAR OF OPERATION.
5. THE DATE OF ACCEPTANCE OF THE PROJECT APPEARS ON THE ENGINEER'S CERTIFICATE OF SUBSTANTIAL COMPLETION.

- H. INSURANCE
1. THE CONTRACTOR SHALL, DURING THE LIFE OF THE CONTRACT, MAINTAIN IN FORCE, SUCH INSURANCE AS IS REQUIRED OF THE PRIME CONTRACTOR IN THE GENERAL CONDITIONS OF THE CONTRACT; AND SHALL FURNISH THE PRIME CONTRACTOR AND THE OWNER WITH CERTIFICATION OF SUCH INSURANCE BEFORE BEGINNING WORK ON THIS SECTION OF CONTRACT.
I. DOCUMENTATION
1. PROVIDE A COMPLETE AND FINAL SET OF PROJECT CLOSE-OUT DOCUMENTS TO OWNER PER CONTRACT DOCUMENTS. PACKAGE SHALL CONTAIN COMPLETE O&M MANUALS WITH ALL PROJECT SUBMITTALS AND SUBMITTAL COMMENTS, TAB REPORTS, TEST REPORTS, AND FINAL RECORD DRAWINGS, PLUS ALL ADMINISTRATIVE DOCUMENTS.

DESIGN BASIS

- SEE DRAWING M7.1 FOR BASIS OF DESIGN

MECHANICAL ABBREVIATIONS

Table with 3 columns: Abbreviation, Description, Abbreviation, Description. Includes: AFF ABOVE FINISHED FLOOR, AI ANALOG INPUT, AO ANALOG OUTPUT, AWT AVERAGE WATER TEMPERATURE, BAS BUILDING AUTOMATION SYSTEM, BDD BACKDRAFT DAMPER, BHP BRAKE HORSEPOWER, BOILER HP, BOD BROKE OFF OF DUCTWORK (ELEVATION), BTUH BTU PER HOUR, CD CONDENSATE DRAIN, CFM CUBIC FEET PER MINUTE, COP COEFFICIENT OF PERFORMANCE, DB DRY BULB TEMPERATURE, DDC DIRECT DIGITAL CONTROL, DI DIGITAL INPUT, DIA DIAMETER, DN DOWN, DO DIGITAL OUTPUT, DP DIFFERENTIAL PRESSURE, DWG DRAWING, DWV DRAIN, WASTE, VENT, EA EXHAUST AIR, EAT ENTERING AIR TEMPERATURE, EC ELECTRICAL CONTRACTOR, EDB ENTERING DRY BULB, EER ENERGY EFFICIENCY RATIO, EFF EFFICIENCY, EG EXHAUST AIR GRILLE, ETR EXISTING TO REMAIN, ESP EXTERIOR STATIC PRESSURE, EWB ENTERING WET BULB, EWT ENTERING WATER TEMPERATURE, EX EXISTING, EXH EXHAUST, EXH DEGREES FAHRENHEIT, F FIRE DAMPER, FLOOR DRAIN, FD/AD FIRE DAMPER W/ACCESS DOOR, FLA FULL LOAD AMPS, FOB FLAT ON BOTTOM, FOT FLAT ON TOP, FPI FINS PER INCH, FPM FEET PER MINUTE, FTR FIN TUBE RADIATION, FLS FLOW SWITCH, GAL GALLON, GC GENERAL CONTRACTOR, GPM GALLONS PER MINUTE, HOA HAND-OFF-AUTOMATIC, HP HORSEPOWER, HEAT PUMP, ID INSIDE DIAMETER, KW KILOWATT, LAT LEAVING AIR TEMPERATURE, LDB LEAVING DRY BULB, LF LINEAR FEET, LWB LEAVING WET BULB, LWT LEAVING WATER TEMPERATURE, MBH THOUSANDS OF BTUS PER HOUR, MC MECHANICAL CONTRACTOR, MCA MINIMUM CIRCUIT AMPACITY, MCC MOTOR CONTROL CENTER, MEP MECHANICAL, ELECTRICAL, PLUMBING, MMBH MILLIONS OF BTUS PER HOUR, MOCB MAXIMUM OVERCURRENT PROTECTION, MOD MOTOR OPERATED DAMPER, MU MAKE-UP (WATER OR AIR), NC NORMALLY CLOSED, NOISE CRITERIA, NIC NOT IN CONTRACT, NO NORMALLY OPEN, NTS NOT TO SCALE, OA OUTSIDE AIR, OAT OUTSIDE AIR TEMPERATURE, OD OUTSIDE DIAMETER, PD PRESSURE DROP, PRV PRESSURE RELIEF VALVE, PSI POUNDS PER SQUARE INCH, RA RETURN AIR, RPM REVOLUTIONS PER MINUTE, RR RETURN AIR REGISTER, SA SUPPLY AIR, SAT SUPPLY AIR TEMPERATURE, SD SUPPLY AIR DIFFUSER, SMOKE DAMPER, SF SQUARE FEET, SF STATIC PRESSURE, SR SUPPLY AIR REGISTER, SS STAINLESS STEEL, TSP TOTAL STATIC PRESSURE, TYP TYPICAL, UD UNDERCUT DOOR, VAV VARIABLE AIR VOLUME, VD VOLUME DAMPER, VFD VARIABLE FREQUENCY DRIVE, VIF VERIFY IN FIELD, WB WET BULB TEMPERATURE, WC WATER COLUMN

MECHANICAL LEGEND:

Table with 2 columns: SYMBOL, DESCRIPTION. Includes: DUCTWORK (20x12 RECTANGULAR DUCT, 20# ROUND RIGID DUCT, 20# ROUND FLEXIBLE DUCT, 20x20 SUPPLY DUCT, 20x20 RETURN DUCT, 20x20 EXHAUST DUCT, 20# ROUND DUCT, RECTANGULAR DUCT 90° MITERED ELBOW, TYPICAL LONG RADIUS ELBOW, TYPICAL BRANCH DUCT, DUCT RISE, DUCT SET DOWN), DUCTWORK, GENERAL (FD FIRE DAMPER, S SMOKE DAMPER, FS FIRE & SMOKE DAMPER, S\_D DUCT SMOKE DETECTOR, DUCT SOUNDLINING, BDD BACKDRAFT DAMPER, FLEXIBLE DUCT CONNECTOR, BRD BAROMETRIC RELIEF DAMPER, TG TRANSFER GRILLE, DIRECTION OF SUPPLY AIR FLOW, DIRECTION OF RETURN OR EXHAUST AIR FLOW, SRV FAN, INTAKE ROOF VENTILATOR, ERV FAN, EXHAUST ROOF VENTILATOR, FAN (SCHEMATIC), SMOKE DETECTOR), PIPING (LP PROPANE GAS, PC PUMPED STEAM CONDENSATE, CD CONDENSATE DRAIN, RL REFRIGERANT LIQUID, RS REFRIGERANT SUCTION, CR CONDENSER WATER RETURN, CS CONDENSER WATER SUPPLY, GHR GLYCOL HEATING RETURN, GHS GLYCOL HEATING SUPPLY, LPS LOW PRESSURE STEAM, MPS MEDIUM PRESSURE STEAM, HPS HIGH PRESSURE STEAM, HWR HEATING HOT WATER RETURN, HWS HEATING HOT WATER SUPPLY, MU MAKE-UP WATER, CHWR CHILLED WATER RETURN, CHWS CHILLED WATER SUPPLY, GCR CHILLED GLYCOL RETURN, GCS CHILLED GLYCOL SUPPLY, CTR COOLING TOWER RETURN, CTS COOLING TOWER SUPPLY)

Table with 2 columns: SYMBOL, DESCRIPTION. Includes: GATE VALVE, GLOBE VALVE, CHECK VALVE, BALL VALVE, ANGLE GATE VALVE, RELIEF OR SAFETY VALVE, BUTTERFLY VALVE, ELECTRIC MOTOR ACTUATED 2 WAY CONTROL VALVE, COMBINATION VALVE, PNEUMATIC ACTUATOR, ELECTRIC SOLENOID ACTUATOR, ELECTRIC MOTOR ACTUATED 3 WAY CONTROL VALVE, PRESSURE REDUCING VALVE, UNION, Y STRAINER, STRAINER WITH DRAIN, PIPE ANCHOR, FLEXIBLE PIPE CONNECTOR, ELBOW UP, ELBOW DOWN, TEE TOP TAKE-OFF, TEE BOTTOM TAKE-OFF, THERMOMETER, PRESSURE GAGE WITH VALVE, MANUAL AIR VENT, AUTOMATIC AIR VENT, FLOAT & THERMOSTATIC TRAP, PUMP (PLAN), PUMP (SCHEMATIC), PIPING RISE, PIPING DROP, AIR INLET/OUTLET DEVICE LABEL, DEVICE TAG NUMBER, CUBIC FEET PER MINUTE (CFM), RETURN AIR REGISTER OR GRILLE, EXHAUST AIR REGISTER OR GRILLE

NOTE: NOT ALL SYMBOLS LISTED BELOW MAY BE USED ON THIS SET OF DRAWINGS.

Table with 2 columns: SYMBOL, DESCRIPTION. Includes: PIPING VALVES AND FITTINGS (GATE VALVE, GLOBE VALVE, CHECK VALVE, BALL VALVE, ANGLE GATE VALVE, RELIEF OR SAFETY VALVE, BUTTERFLY VALVE, ELECTRIC MOTOR ACTUATED 2 WAY CONTROL VALVE, COMBINATION VALVE, PNEUMATIC ACTUATOR, ELECTRIC SOLENOID ACTUATOR, ELECTRIC MOTOR ACTUATED 3 WAY CONTROL VALVE, PRESSURE REDUCING VALVE, UNION, Y STRAINER, STRAINER WITH DRAIN, PIPE ANCHOR, FLEXIBLE PIPE CONNECTOR, ELBOW UP, ELBOW DOWN, TEE TOP TAKE-OFF, TEE BOTTOM TAKE-OFF, THERMOMETER, PRESSURE GAGE WITH VALVE, MANUAL AIR VENT, AUTOMATIC AIR VENT, FLOAT & THERMOSTATIC TRAP, PUMP (PLAN), PUMP (SCHEMATIC), PIPING RISE, PIPING DROP), CONTROLS AND BALANCING (CONTROLS WIRING, WALL MOUNTED THERMOSTAT, UNIT MOUNTED THERMOSTAT, THERMOSTAT, PNEUMATIC, HUMIDISTAT, THERMAL SENSOR, AQUASTAT, PRESSURE TRANSMITTER, FLOW SWITCH, FLOW CONTROL VALVE, BALANCING VALVE, DIFFERENTIAL PRESSURE SWITCH, MANUAL VOLUME DAMPER, MOTOR OPERATED DAMPER, AIR FLOW SWITCH, CARBON MONOXIDE GAS SENSOR, CARBON DIOXIDE GAS SENSOR, CONTROL PANEL, CONTROL PANEL, BUILDING EQUIPMENT), GENERAL SYMBOLS (PHASE OR ROUND DIAMETER, HEAVY DASHED LINES DENOTE EQUIPMENT TO BE REMOVED, LIGHT LINES DENOTE EXISTING EQUIPMENT TO REMAIN, REVISION CLOUD WITH REVISION NUMBER, CONNECT NEW TO EXISTING AT THIS POINT - VIF ACTUAL POINT, REMOVE EXISTING UP TO THIS POINT - VIF ACTUAL POINT, MOTORIZED EQUIPMENT ABBREVIATION, NON-MOTORIZED EQUIPMENT ABBREVIATION, DETAIL NUMBER, DRAWING NUMBER, SECTION LETTER, SHEET NO. WHERE SECTION VIEW IS SHOWN)

MECHANICAL DRAWING DIRECTORY

- M1.1 MECHANICAL GENERAL NOTES, ABBREVIATIONS, AND LEGEND
M2.1 PARTIAL FIRST FLOOR PLAN - MECHANICAL DEMOLITION - AREA A
M2.2 PARTIAL FIRST FLOOR PLAN - MECHANICAL DEMOLITION - AREA B
M3.1 PARTIAL FIRST FLOOR PLAN - AIR DISTRIBUTION - AREA A
M3.2 PARTIAL FIRST FLOOR PLAN - AIR DISTRIBUTION - AREA B
M4.1 PARTIAL FIRST FLOOR PLAN - HYDRONICS - AREA A
M4.2 PARTIAL FIRST FLOOR PLAN - HYDRONICS - AREA B
M5.1 MECHANICAL ENLARGED PLANS
M5.2 MECHANICAL ENLARGED PLANS
M6.1 MECHANICAL DETAILS
M6.2 MECHANICAL CONTROLS
M6.3 PIPING SCHEMATICS
M7.1 MECHANICAL SCHEDULES
M7.2 MECHANICAL SCHEDULES

APPLICABLE CODES AND STANDARDS

- MAINE UNIFORM BUILDING AND ENERGY CODE 2018
INTERNATIONAL BUILDING CODE (IBC) 2015
INTERNATIONAL EXISTING BUILDING CODE (IEBC) 2015
INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2015
INTERNATIONAL PLUMBING CODE (IPC) 2015
INTERNATIONAL MECHANICAL CODE (IMC) 2015
VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY ASHRAE 62.1
ENERGY STANDARD FOR BUILDINGS ASHRAE 90.1 2016
LIQUID PETROLEUM GAS CODE NFPA 58

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PROFESSIONAL SEAL
STEVEN V. DUMAS
No. FE17382
LICENSED PROFESSIONAL ENGINEER

Table with 2 columns: NO., DATE

Maine DOE
AUGUSTA, ME
EDMUNDS SCHOOL
ENCLOSURE REPAIRS &
MECHANICAL SYSTEMS
UPGRADES
21 HARRISON RD
DENNISVILLE, ME 04628

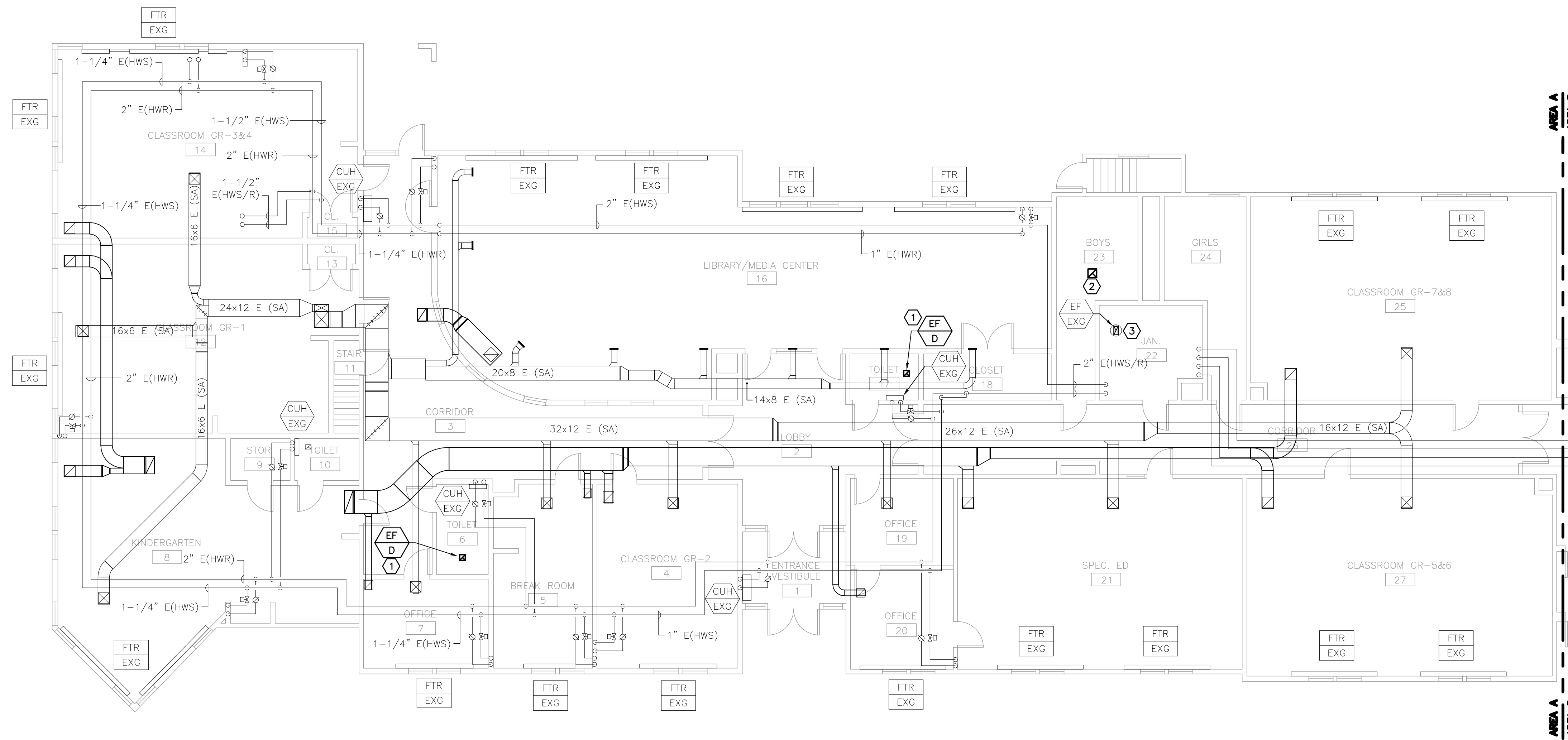
SHEET TITLE
MECHANICAL
GENERAL NOTES,
ABBREVIATIONS,
AND LEGEND

Table with 2 columns: DRAWN BY, DATE; CHECKED BY, D&K PROJECT #; PROJ. ENG., D&K ARCHIVE #; SHEET NUMBER; ISSUED FOR BID 07/21/2023; SHEET 13 OF 30

I:\A\528137 Edmunds School Building Enclosure & Mechanical\Drawings\Mechanical\ME28137.dwg 7/25/2023 2:53 PM

- KEYED NOTES:**
- 1 COMPLETELY REMOVE EXISTING EXHAUST FAN INCLUDING ALL ASSOCIATED MECHANICAL, ELECTRICAL AND CONTROLS CONNECTIONS. COORDINATE WITH ELECTRICAL CONTRACTOR. EXISTING DUCTWORK SHALL REMAIN FOR REUSE.
  - 2 COMPLETELY REMOVE EXISTING GRILLE AND ALL ASSOCIATED DUCTWORK, AND HANGERS. PREP CEILING GRID FOR INSTALLATION OF NEW EXHAUST GRILLE.
  - 3 EXISTING EXHAUST FAN ON ROOF AND ASSOCIATED DUCTWORK AND GRILLE SERVING JAN. RM - 22 SHALL REMAIN.

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**1 PARTIAL FIRST FLOOR PLAN - MECHANICAL DEMOLITION - AREA A**  
 SCALE: 1/8" = 1'-0"



PROFESSIONAL SEAL



NO.	DATE	DESCRIPTION	BY	CHK'D



EDMUNDS SCHOOL  
 ENCLOSURE REPAIRS &  
 MECHANICAL SYSTEMS  
 UPGRADES  
 21 HARRISON RD  
 DENNISVILLE, ME 04628

SHEET TITLE

**MECHANICAL  
 DEMOLITION PLANS**

DRAWN BY MJH	DATE 07/21/2023
CHECKED BY SVD	D&K PROJECT # 528137
PROJ. ENG. SVD	D&K ARCHIVE #

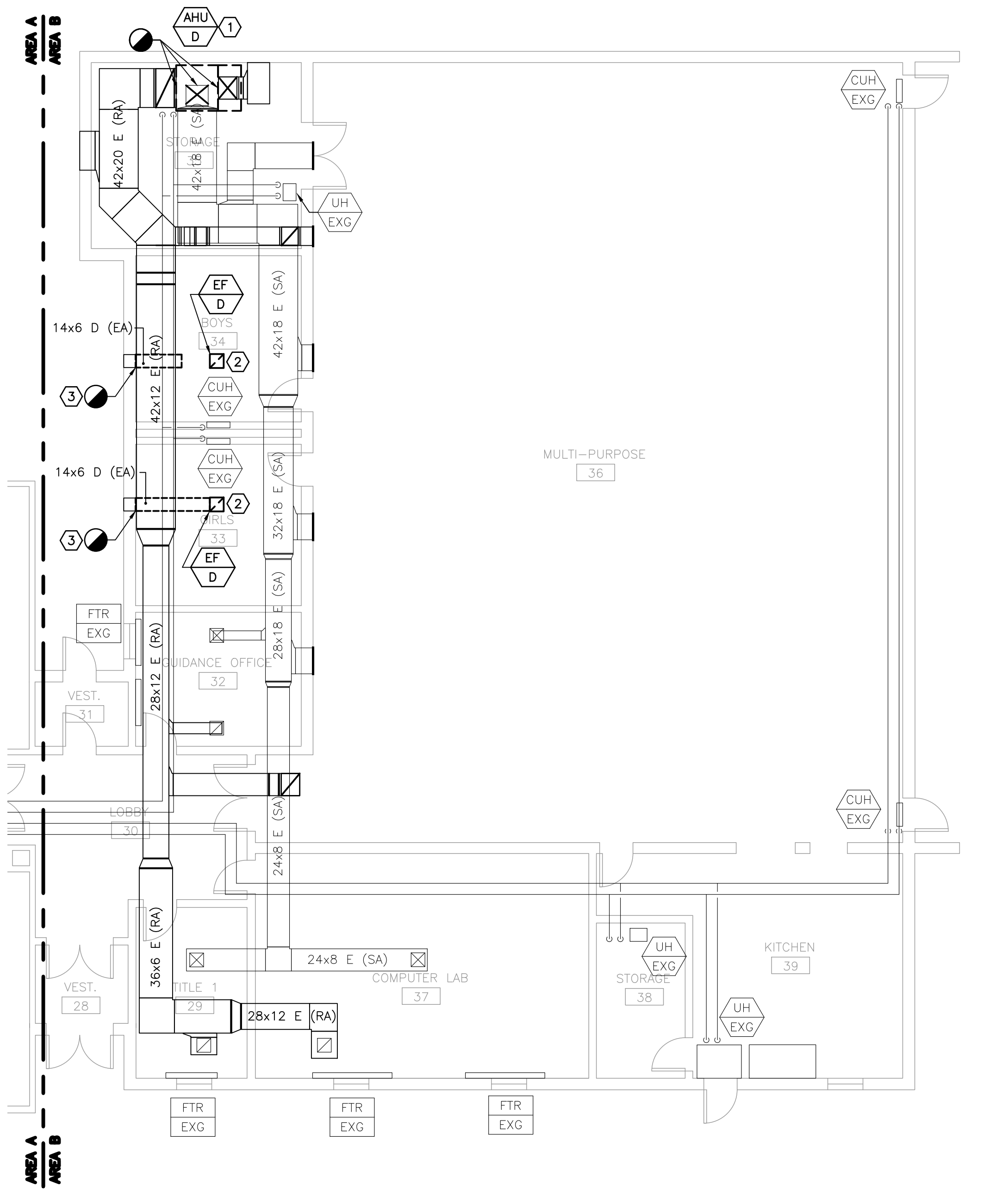
SHEET NUMBER

**M2.1**

ISSUED FOR BID  
 07/21/2023

**KEYED NOTES:**

- 1 COMPLETELY REMOVE EXISTING AHU INCLUDING ALL ASSOCIATED ELECTRICAL AND CONTROLS CONNECTIONS. COORDINATE WITH ELECTRICAL CONTRACTOR. MECHANICAL CONNECTIONS SHALL REMAIN FOR CONNECTION TO NEW UNIT.
- 2 COMPLETELY REMOVE EXISTING EXHAUST FAN AN ALL ASSOCIATED MECHANICAL AND CONTROLS CONNECTIONS. COMPLETELY REMOVE ASSOCIATED EXHAUST GRILLE.
- 3 COMPLETELY REMOVE EXISTING DUCTWORK BACK TO EXTERIOR WALL LOUVER. LOUVER SHALL REMAIN FOR CONNECTION TO NEW EXHAUST FAN.



1 PARTIAL FIRST FLOOR PLAN – MECHANICAL DEMOLITION – AREA B  
 SCALE: 1/8" = 1'-0" NORTH



NO.	DATE	DESCRIPTION	BY	CK'D



EDMUNDS SCHOOL  
 ENCLOSURE REPAIRS &  
 MECHANICAL SYSTEMS  
 UPGRADES  
 21 HARRISON RD  
 DENNYVILLE, ME 04628

SHEET TITLE  
 MECHANICAL  
 DEMOLITION PLANS

DRAWN BY MJH	DATE 07/21/2023
CHECKED BY SVD	D&K PROJECT # 528137
PROJ. ENG. SVD	D&K ARCHIVE #

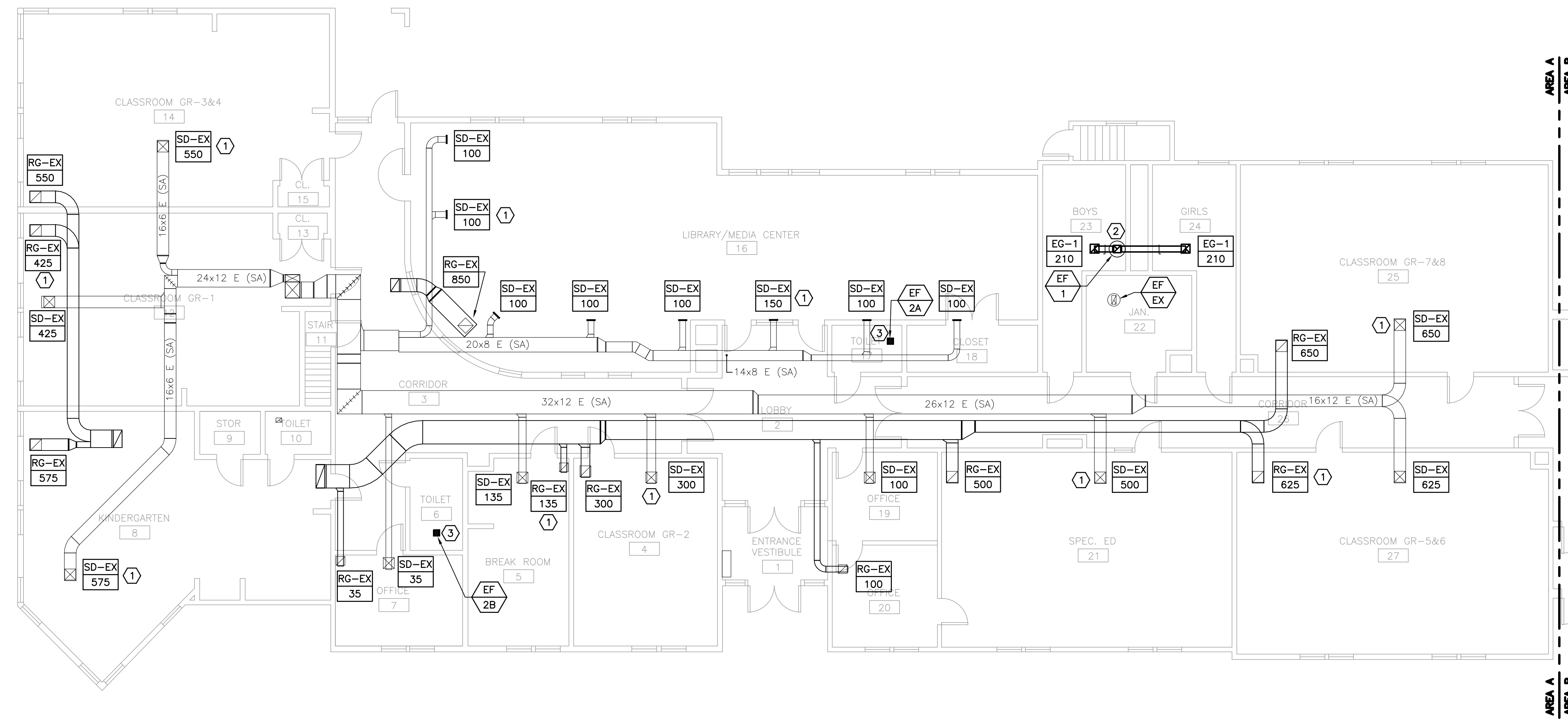
SHEET NUMBER  
**M2.2**  
 SHEET 15 OF 30

ISSUED FOR BID  
 07/21/2023

### KEYED NOTES:

- 1 BALANCE EXISTING GRILLE OR DIFFUSER TO CFM INDICATED (TYP). PROVIDE TAB REPORT.
- 2 PROVIDE NEW EXHAUST FAN ON ROOF ABOVE.
- 3 PROVIDE NEW CEILING EXHAUST FAN. ROUTE DUCTWORK UP THROUGH ROOF AND TERMINATE WITH MANUFACTURER'S ROOF CAP.

PROFESSIONAL SEAL



AREA A  
 AREA B  
 AREA A  
 AREA B

1 PARTIAL FIRST FLOOR PLAN - AIR DISTRIBUTION - AREA A  
 SCALE: 1/8" = 1'-0"

NO.	DATE	DESCRIPTION	BY	CK'D



**EDMUNDS SCHOOL ENCLOSURE REPAIRS & MECHANICAL SYSTEMS UPGRADES**

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SHEET TITLE  
 PARTIAL FIRST FLOOR PLAN - AIR DISTRIBUTION - AREA A

DRAWN BY MJH	DATE 07/21/2023
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SHEET NUMBER

**M3.1**

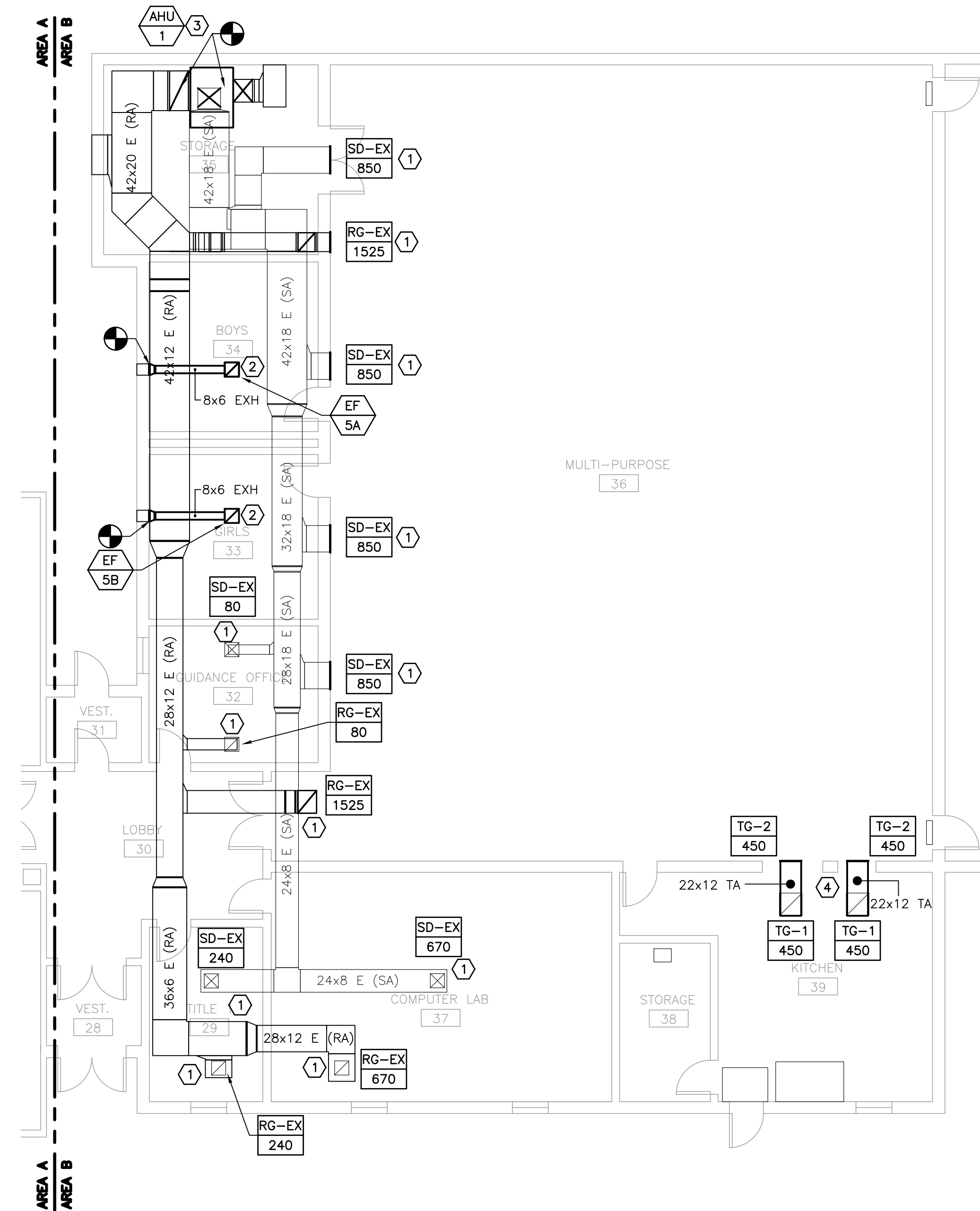
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- KEYED NOTES:**
- ① BALANCE EXISTING GRILLE OR DIFFUSER TO CFM INDICATED (TYP).
  - ② PROVIDE NEW CEILING EXHAUST FAN. CONNECT NEW DUCTWORK TO EXISTING LOUVER. TRANSITION DUCTWORK TO MATCH EXISTING LOUVER SIZE.
  - ③ PROVIDE NEW FLOOR MOUNTED AHU ON NEW CONCRETE PAD AND CONNECT TO EXISTING DUCTWORK AND PIPING. MODIFY EXISTING DUCTWORK AND PIPING AS REQUIRED FOR INSTALLATION OF NEW AHU.
  - ④ PROVIDE NEW TRANSFER GRILLES AND DUCTWORK BETWEEN KITCHEN AND MULTI-PURPOSE ROOM.

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① PARTIAL FIRST FLOOR PLAN – AIR DISTRIBUTION – AREA B  
 SCALE: 1/8" = 1'-0"

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EDMUNDS SCHOOL ENCLOSURE REPAIRS & MECHANICAL SYSTEMS UPGRADES

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**SHEET TITLE**  
 PARTIAL FIRST FLOOR PLAN - AIR DISTRIBUTION - AREA B

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SVD	

SHEET NUMBER

**M3.2**

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**KEYED NOTES:**

- 1 PROVIDE TWO NEW 1,000 GALLON PROPANE STORAGE TANKS BURIED UNDERGROUND.
- 2 PROVIDE NEW CONDENSING UNIT OUTSIDE ON GRADE ON NEW CONCRETE PAD.
- 3 PROVIDE NEW CONDENSING UNIT ON EQUIPMENT SLING ON ROOF ABOVE.
- 4 PROVIDE 1100 MBH LP REGULATOR ON WALL. REGULATOR SHALL BE LOCATED A MINIMUM OF 5' FROM ALL SOURCES OF IGNITION AND CLEARANCE TO OPERABLE WINDOWS PER NFPA 58.
- 5 PROVIDE NEW 2-WAY MODULATING DDC CONTROL VALVE WIRED TO NEW BMS.
- 6 ROUTE CONDENSATE PIPING TO MOP SINK.
- 7 ROUTE CONDENSATE PIPING TO SINK TRAP. REFER TO DETAIL ON SHEET M6.1. PATCH WALL TO MATCH EXISTING CONDITIONS.
- 8 ROUTE BOTTOM OF REFRIGERANT PIPING THROUGH WALL AT 9'9" A.F.F. PROVIDE COVER ON EXPOSED REFRIGERANT PIPING.

PROFESSIONAL SEAL



NO.	DATE	DESCRIPTION	BY	CHK'D
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NO.	DATE	DESCRIPTION	BY	CHK'D
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NO.	DATE	DESCRIPTION	BY	CHK'D
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EDMUNDS SCHOOL  
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MECHANICAL SYSTEMS  
UPGRADES

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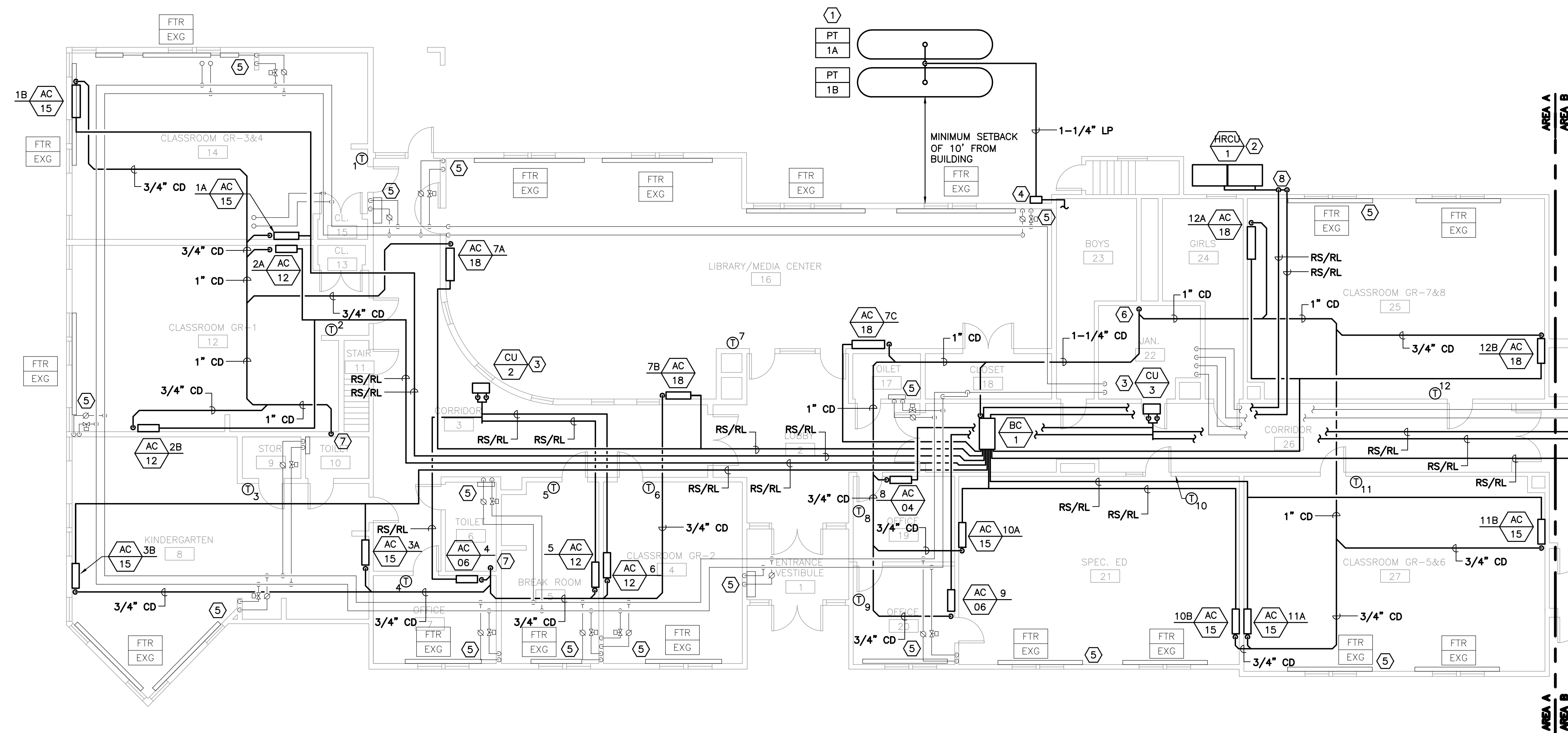
SHEET TITLE

PARTIAL FIRST  
FLOOR PLAN -  
HYDRONICS -  
AREA A

DRAWN BY	DATE
MJH	07/21/2023
CHECKED BY	D&K PROJECT #
SVD	528137
PROJ. ENG.	D&K ARCHIVE #
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SHEET NUMBER

**M4.1**

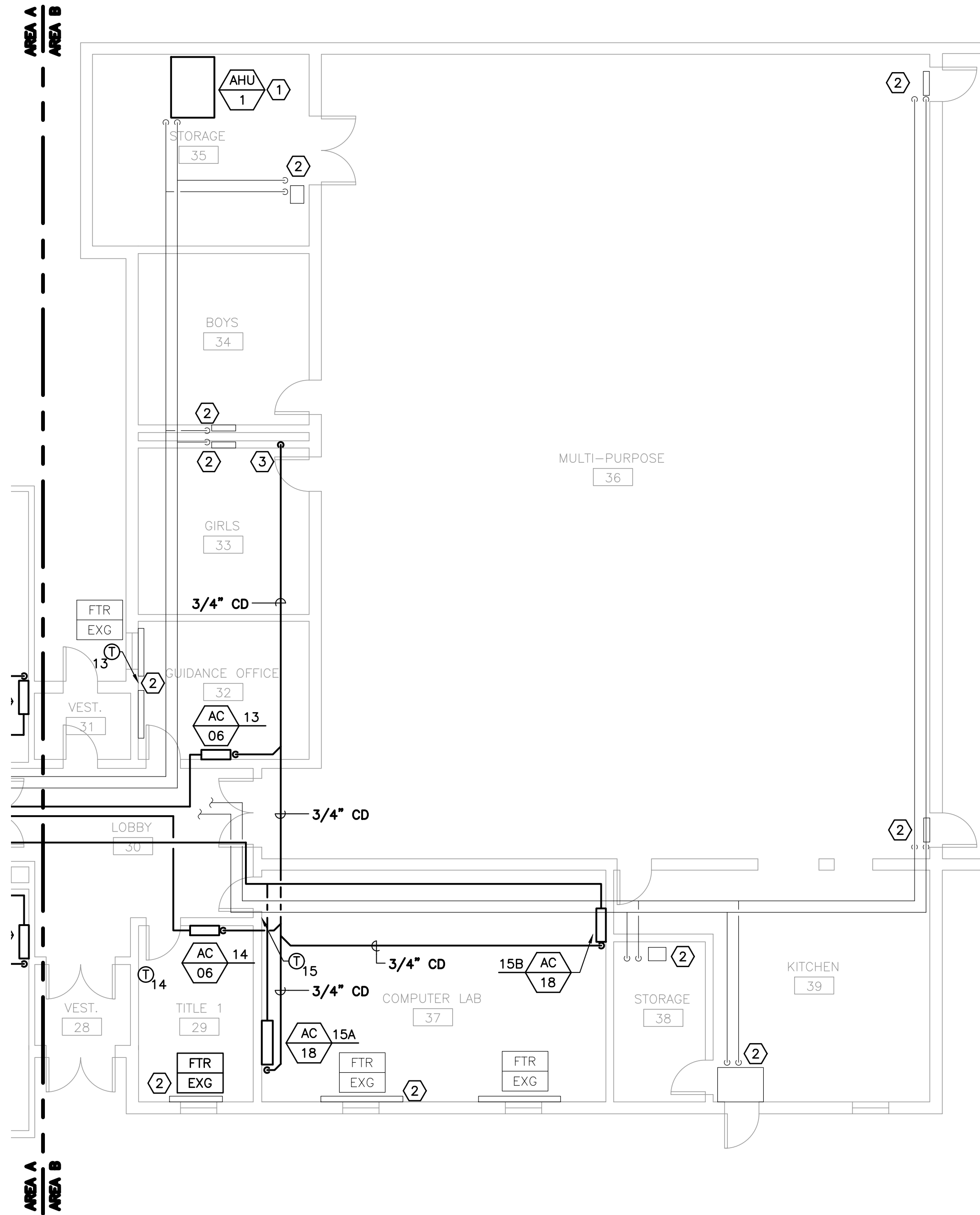


1 PARTIAL FIRST FLOOR PLAN - HYDRONICS - AREA A  
SCALE: 1/8" = 1'-0"

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07/21/2023

**KEYED NOTES:**

- 1 PROVIDE NEW FLOOR-MOUNTED AHU ON NEW CONCRETE PAD. CONNECT TO EXISTING DUCTWORK AND PIPING. MODIFY EXISTING DUCTWORK AND PIPING AS REQUIRED FOR CONNECTION TO NEW AHU.
- 2 PROVIDE NEW MODULATING 2-WAY DDC CONTROL VALVE FOR CONNECTION TO NEW BMS.
- 3 ROUTE CONDENSATE PIPING TO SINK TRAP. REFER TO DETAIL ON SHEET M6.1. PATCH WALL TO MATCH EXISTING CONDITIONS.



1 PARTIAL FIRST FLOOR PLAN - HYDRONICS - AREA B  
 SCALE: 1/8" = 1'-0"



PROFESSIONAL SEAL



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SHEET TITLE  
 PARTIAL FIRST  
 FLOOR PLAN -  
 HYDRONICS -  
 AREA B

DRAWN BY	DATE
MJH	07/21/2023
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SVD	528137
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SVD	

SHEET NUMBER

**M4.2**

ISSUED FOR BID  
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**KEYED NOTES:**

- 1 COMPLETELY REMOVE EXISTING PUMP INCLUDING ALL ASSOCIATED ELECTRICAL AND CONTROLS CONNECTIONS. COORDINATE WITH ELECTRICAL CONTRACTOR. PIPING SHALL REMAIN FOR CONNECTION TO NEW PUMP.
- 2 COMPLETELY REMOVE EXISTING BOILER INCLUDING ALL ASSOCIATED ELECTRICAL AND CONTROLS CONNECTIONS. COORDINATE WITH ELECTRICAL CONTRACTOR. COMPLETELY REMOVE EXISTING FUEL OIL PIPING. REMOVE EXISTING HOT WATER PIPING AND BOILER VENT BACK TO POINT INDICATED.
- 3 COMPLETELY REMOVE EXISTING FUEL OIL STORAGE TANKS AND ALL ASSOCIATED FUEL OIL PIPING. DISPOSE OF LEGALLY PER ALL APPLICABLE REGULATIONS AND FILE ALL REQUIRED DOCUMENTATION.
- 4 COMPLETELY REMOVE EXISTING OIL FIRED DOMESTIC WATER HEATER, AND ALL ASSOCIATED FUEL OIL PIPING. EXISTING DOMESTIC HOT WATER PIPING AND RECIRCULATION PUMP SHALL REMAIN FOR RECONNECTION.
- 5 PROVIDE NEW PROPANE-FIRED BOILERS AND CONNECT TO EXISTING HOT WATER HEATING PIPING.
- 6 PROVIDE NEW HOT WATER HEATING PUMP AND CONNECT TO EXISTING HOT WATER HEATING PIPING.
- 7 PROVIDE NEW BOILER VENT SYSTEM AND CONNECT TO EXISTING CHIMNEY. INSTALL PER MANUFACTURERS INSTRUCTIONS. PROVIDE FLUE DAMPERS IN EACH BOILER VENT WITH CONDENSATE DRAIN INSTALLED ABOVE FLUE DAMPER. PROVIDE NEW CHIMNEY LINING AS REQUIRED FOR PROPANE-FIRED BOILERS.
- 8 PROVIDE NEW MOTORIZED DAMPER ON LOUVER AND INTERLOCK WITH NEW BOILERS.
- 9 PROPANE PIPING TO PROPANE TANKS. REFER TO SHEET M4.1 FOR CONTINUATION.
- 10 PROVIDE NEW ELECTRIC WATER HEATER AND CONNECT TO EXISTING DOMESTIC HOT WATER PIPING.
- 11 PROVIDE NEW DDC CONTROL PANEL FOR NEW BMS.

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SHEET TITLE

**MECHANICAL  
ENLARGED PLANS**

DRAWN BY: MJH DATE: 07/21/2023

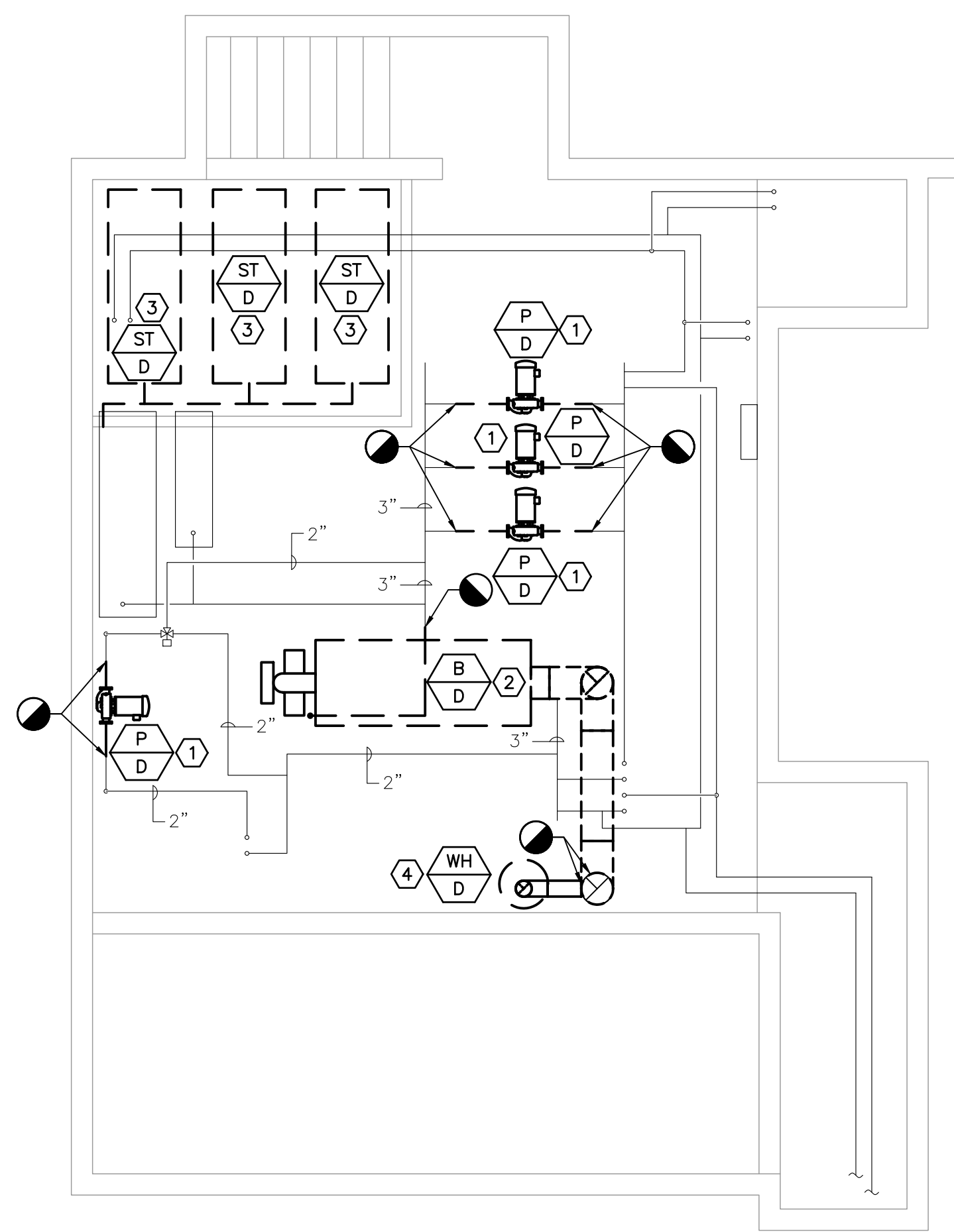
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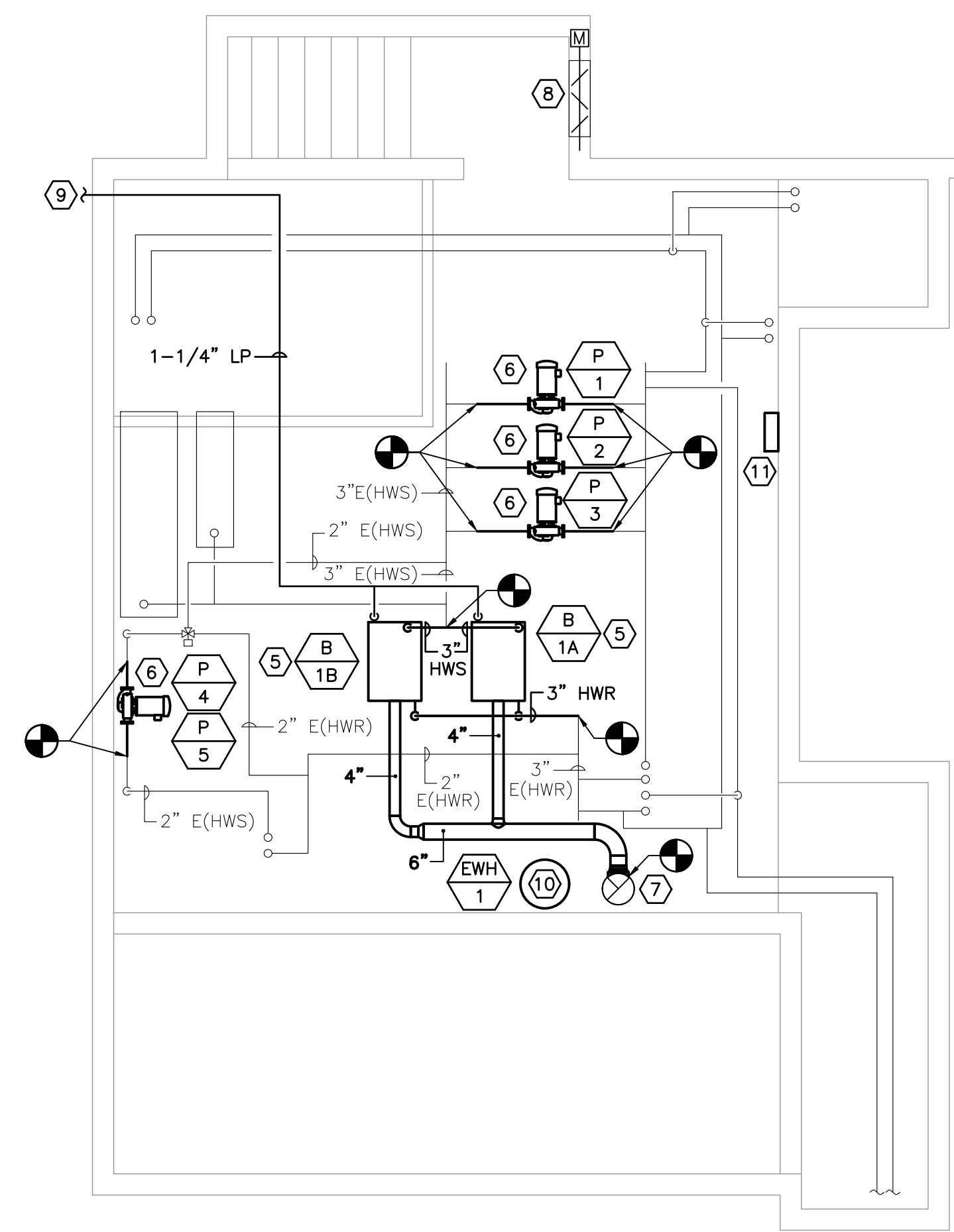
SHEET NUMBER

**M5.1**

SHEET 20 OF 30



2 ENLARGED MECHANICAL ROOM PLAN — MECHANICAL DEMOLITION  
SCALE: 1/4" = 1'-0"

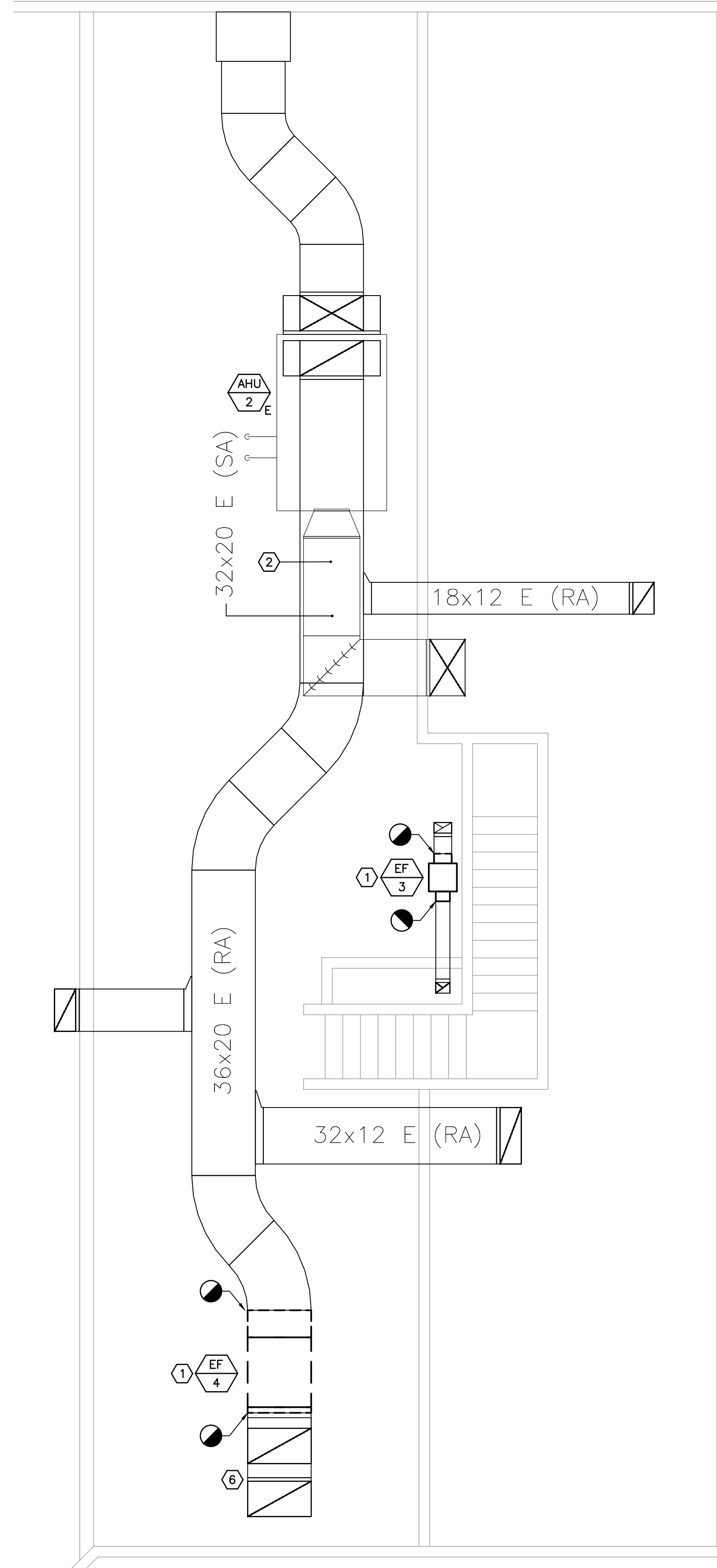


2 ENLARGED MECHANICAL ROOM PLAN — MECHANICAL NEW WORK  
SCALE: 1/4" = 1'-0"

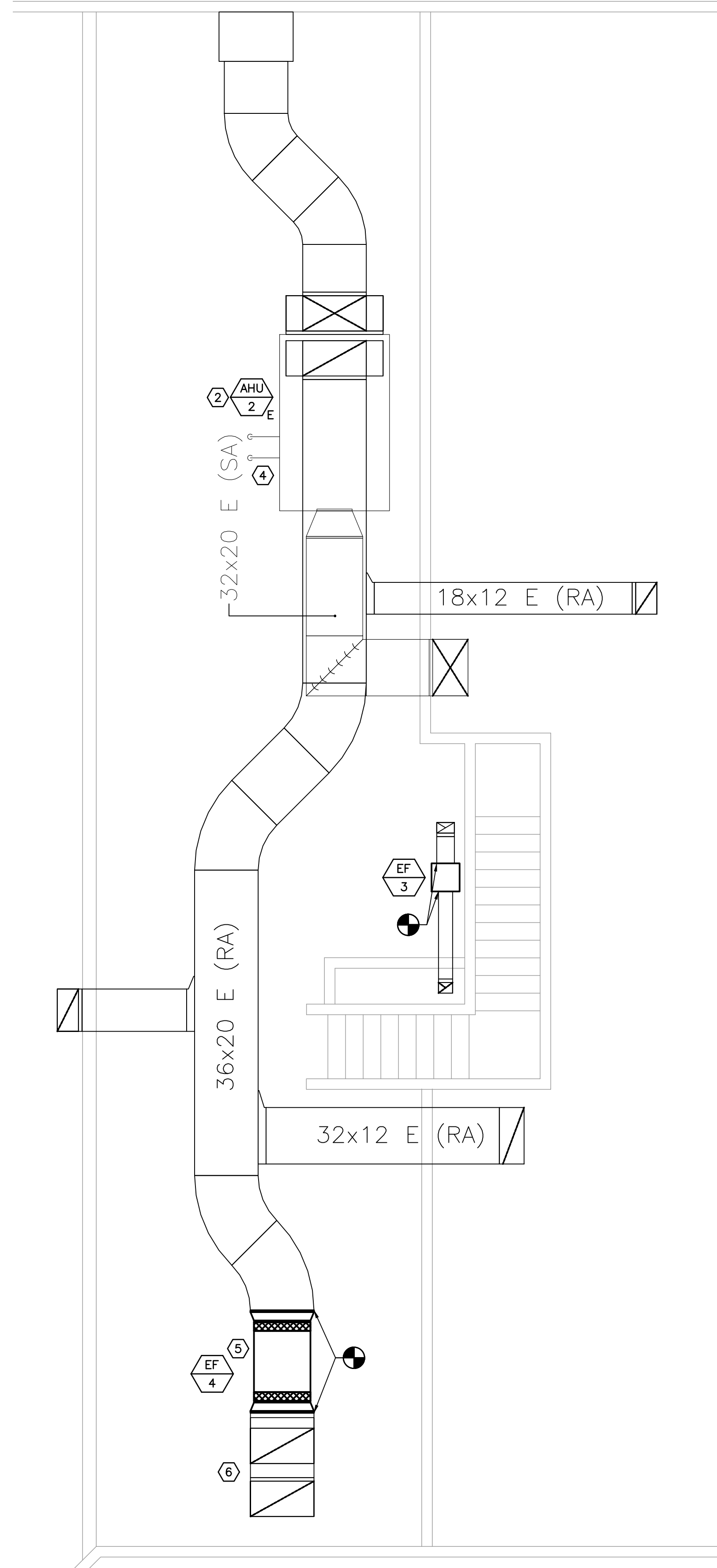


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2 ENLARGED ATTIC PLAN - MECHANICAL DEMOLITION  
SCALE: 1/4" = 1'-0"



2 ENLARGED ATTIC PLAN - MECHANICAL NEW WORK  
SCALE: 1/4" = 1'-0"



**KEYED NOTES:**

- 1 COMPLETELY REMOVE EXHAUST FAN INCLUDING ALL ASSOCIATED ELECTRICAL AND CONTROLS CONNECTIONS. COORDINATE WITH ELECTRICAL CONTRACTOR. DUCTWORK SHALL REMAIN FOR CONNECTION TO NEW EXHAUST FAN.
- 2 PRIOR TO DEMOLITION: PROVIDE DUCT TRAVERSES IN SUPPLY AND RETURN DUCTS TO AHU-1. PROVIDE AIRFLOW, VELOCITY, STATIC PRESSURE, AND TEMPERATURE READINGS TO ENGINEER.
- 3 BALANCE EXISTING AHU-1 AS REQUIRED TO PROVIDE NEW VENTILATION AIRFLOWS. PROVIDE NEW MOTOR, BELTS, SHEAVES, ETC. AS REQUIRED.
- 4 PROVIDE NEW MODULATING 2-WAY DDC CONTROL VALVE FOR CONNECTION TO NEW BMS.
- 5 PROVIDE NEW INLINE EXHAUST FAN HUNG FROM ROOF STRUCTURE WITH VIBRATION ISOLATORS. PROVIDE FLEXIBLE CONNECTIONS FROM FAN TO DUCTWORK.
- 6 RELIEF DUCT DOWN TO RELIEF GRILLE IN SOFFIT.

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SHEET TITLE

MECHANICAL  
ENLARGED PLANS

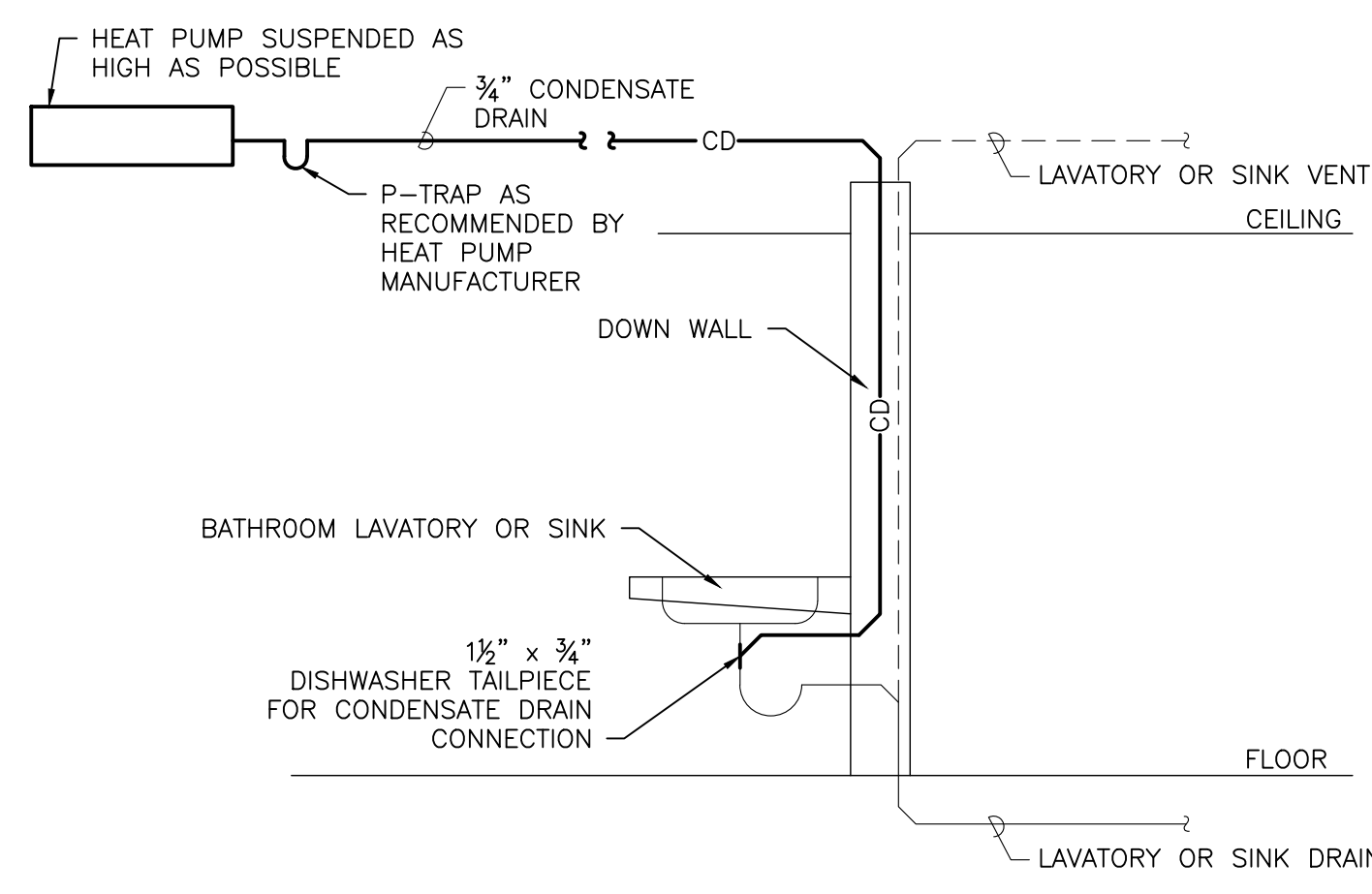
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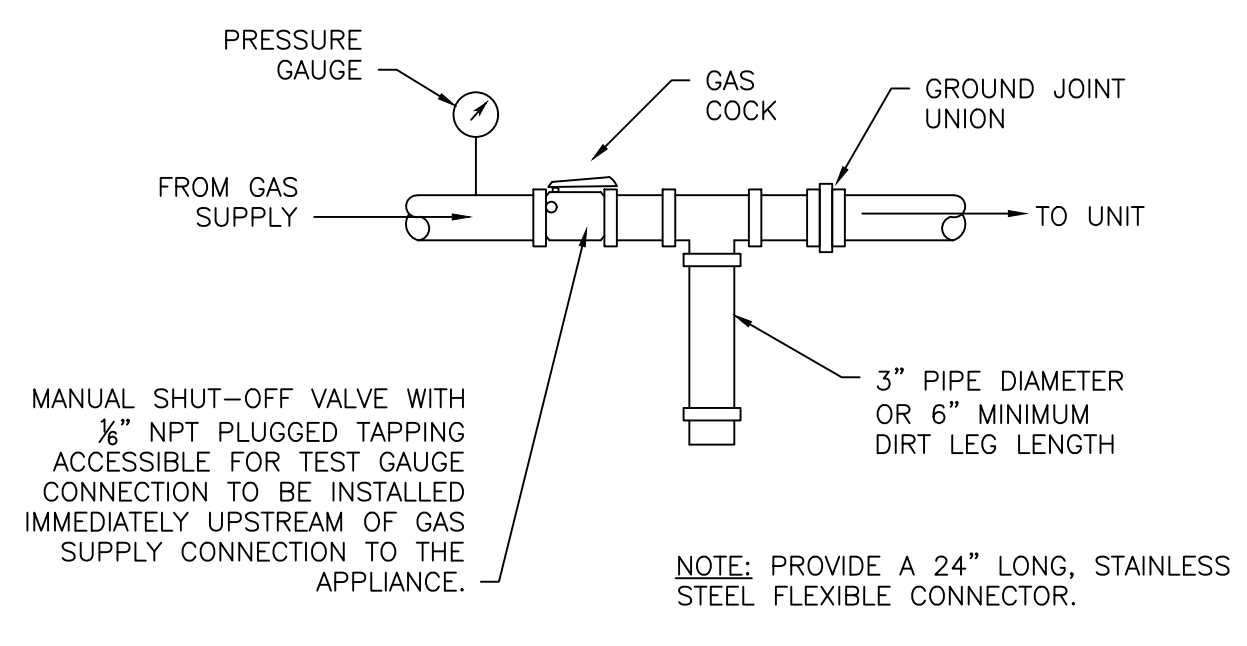
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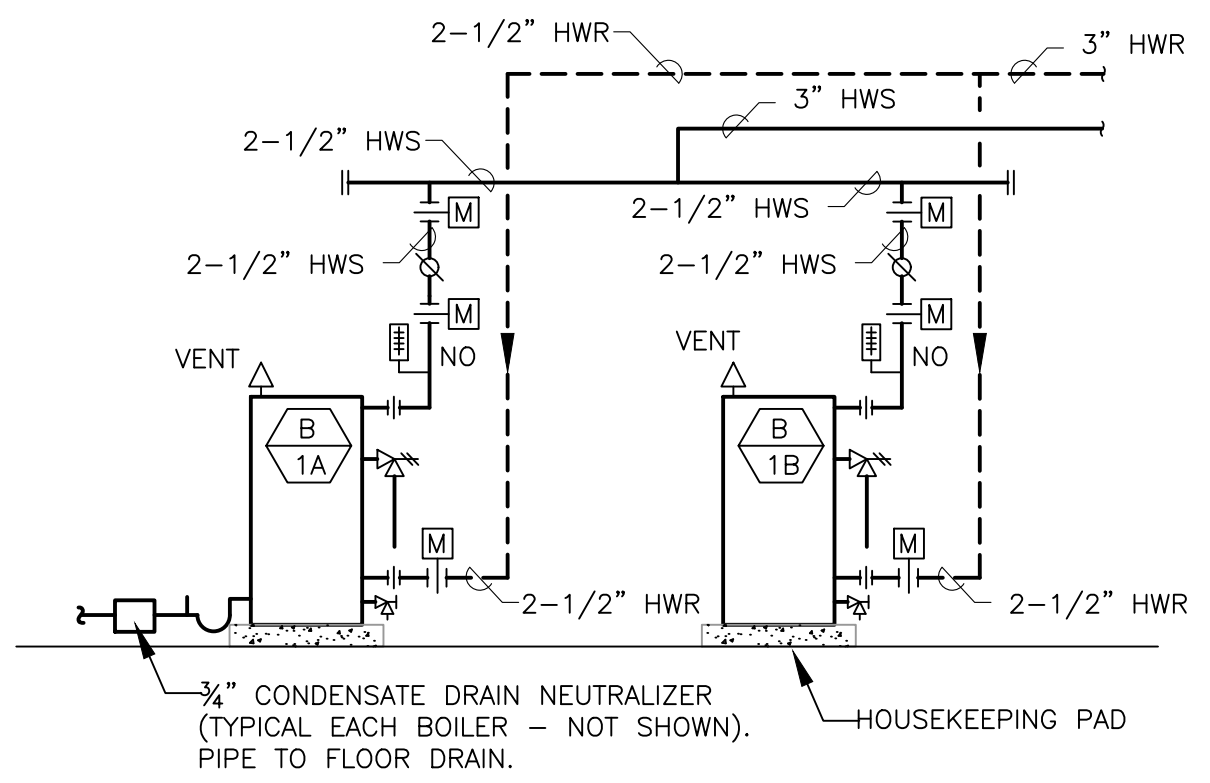
SHEET 21 OF 30



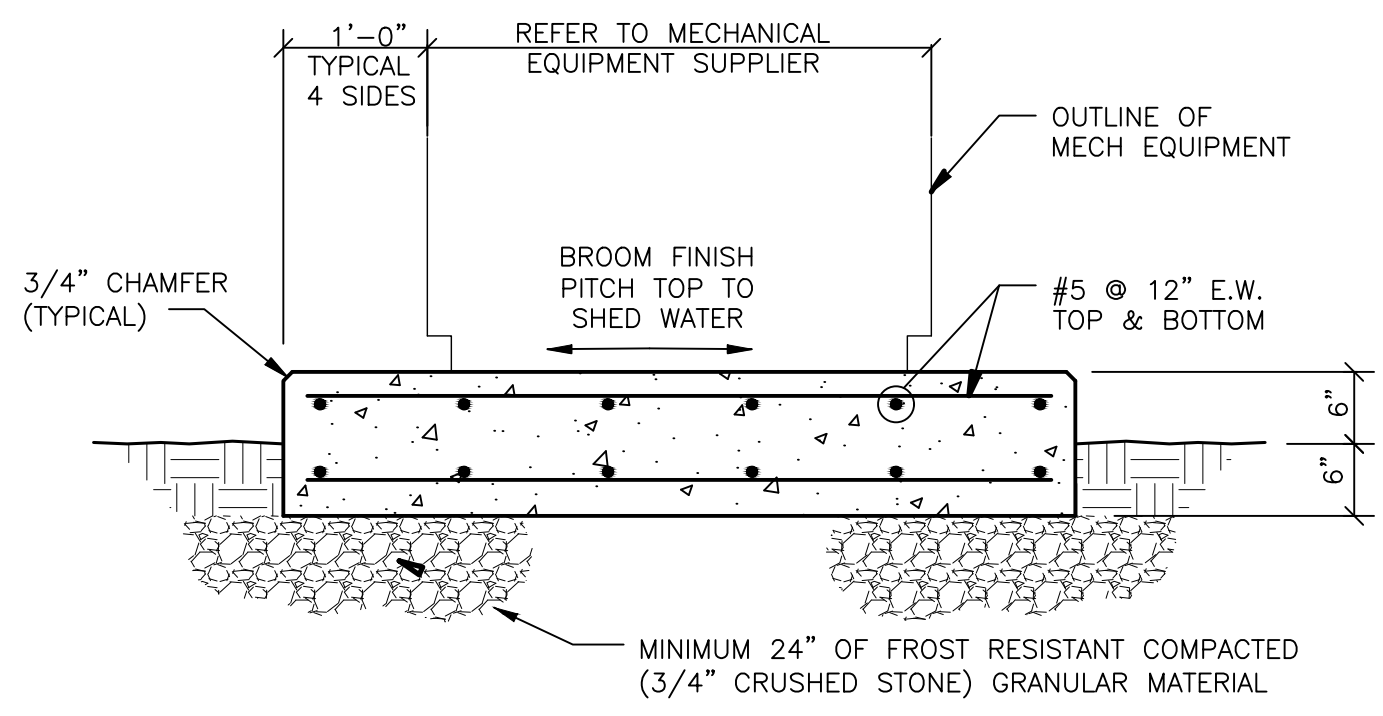
**9 CONDENSATE DRAIN DETAIL**  
NOT TO SCALE



**6 GAS SUPPLY CONNECTION DETAIL**  
NOT TO SCALE

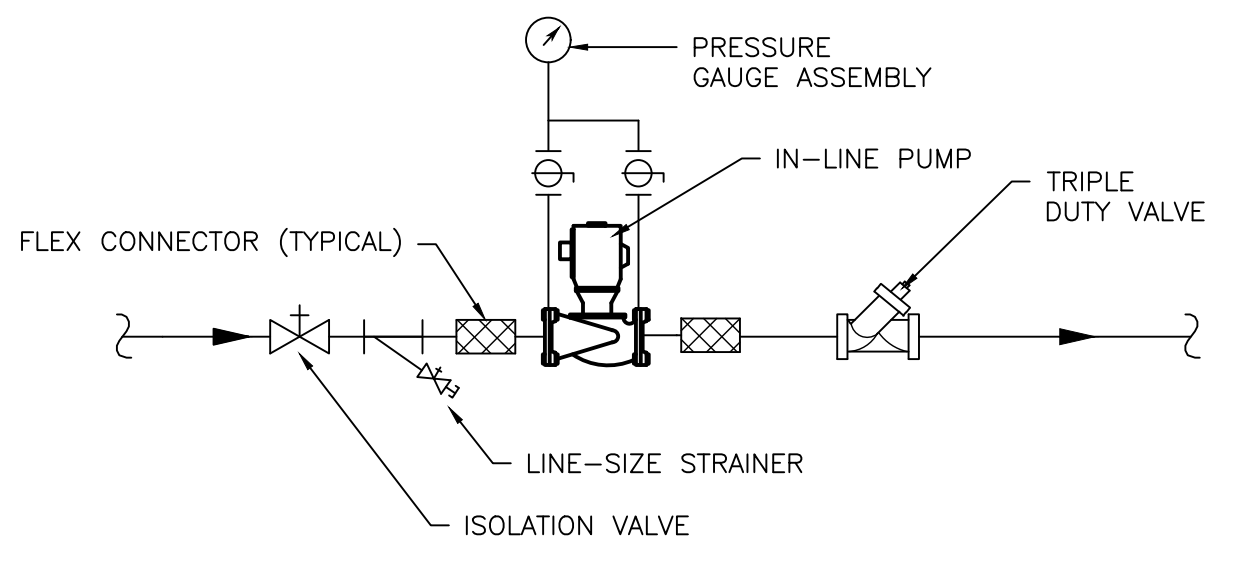


**4 BOILER SCHEMATIC**  
NOT TO SCALE

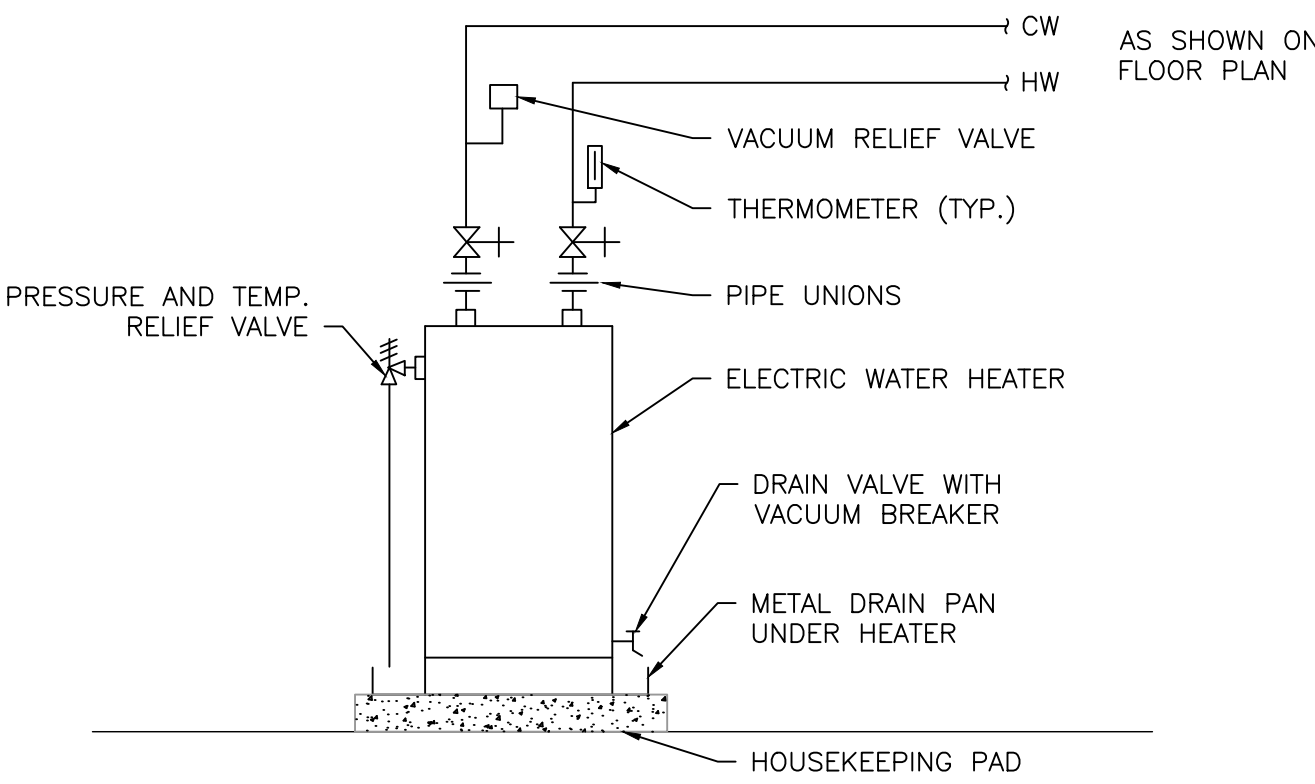


**1 EXTERIOR EQUIPMENT CONCRETE PAD DETAIL**  
NOT TO SCALE

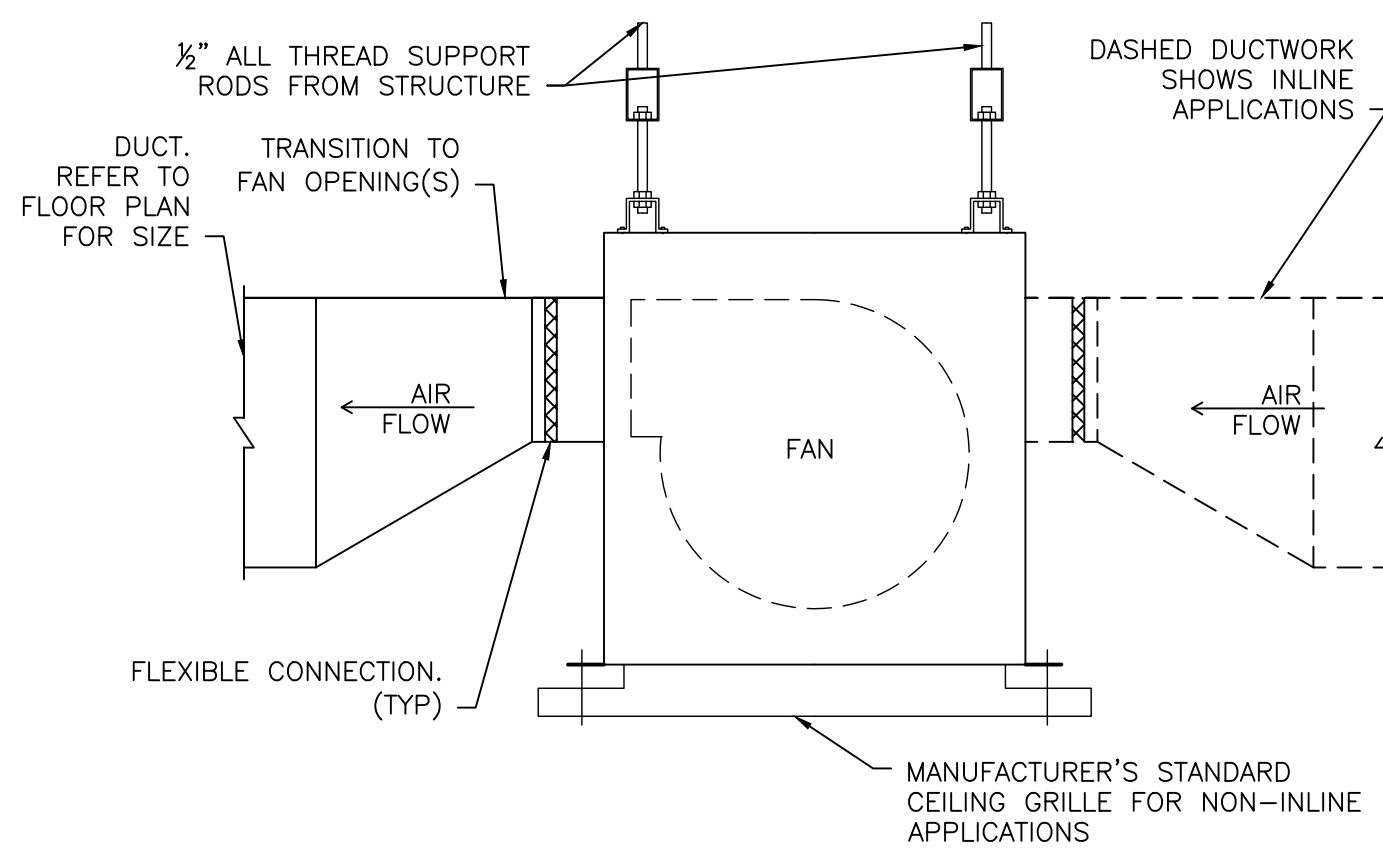
- CONCRETE SHALL BE STONE CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 4,500 PSI AT 28 DAYS.
- COORDINATE SIZES, LOCATIONS AND QUANTITIES WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.



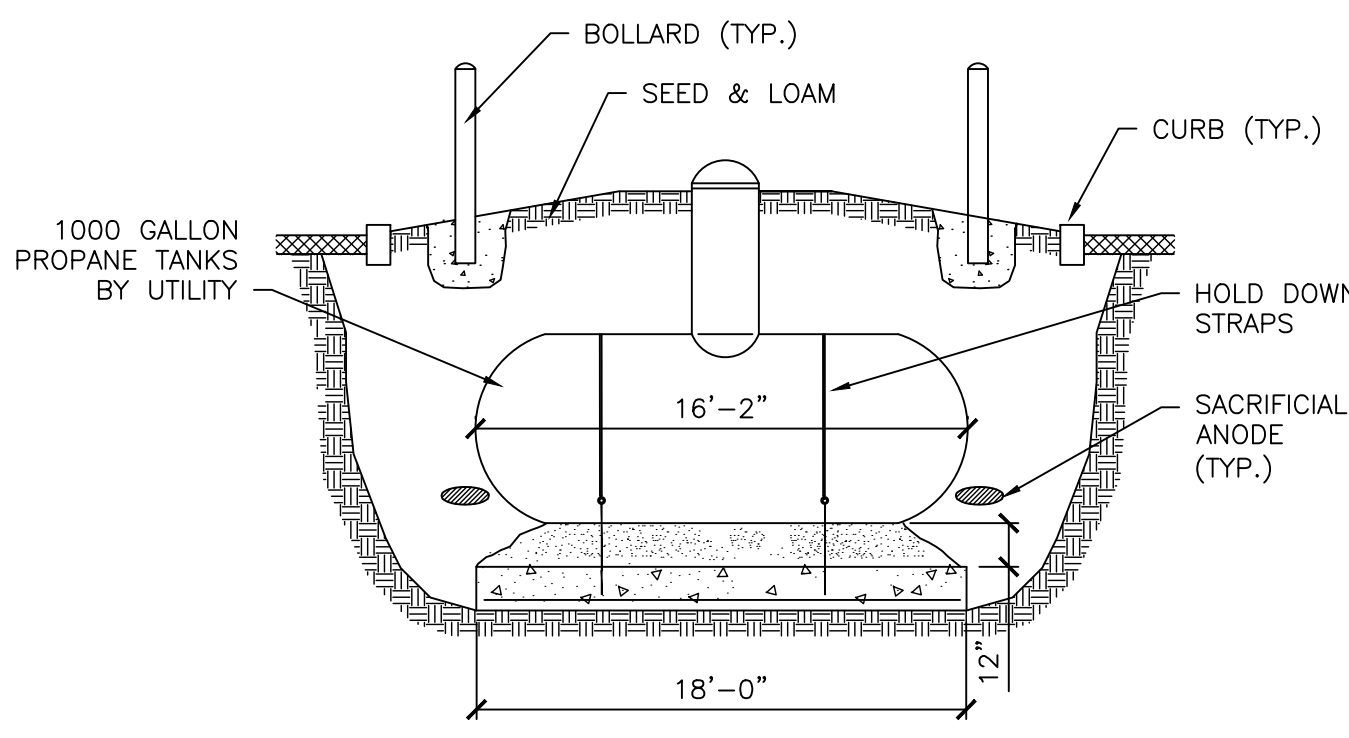
**7 INLINE PUMP DETAIL**  
NOT TO SCALE



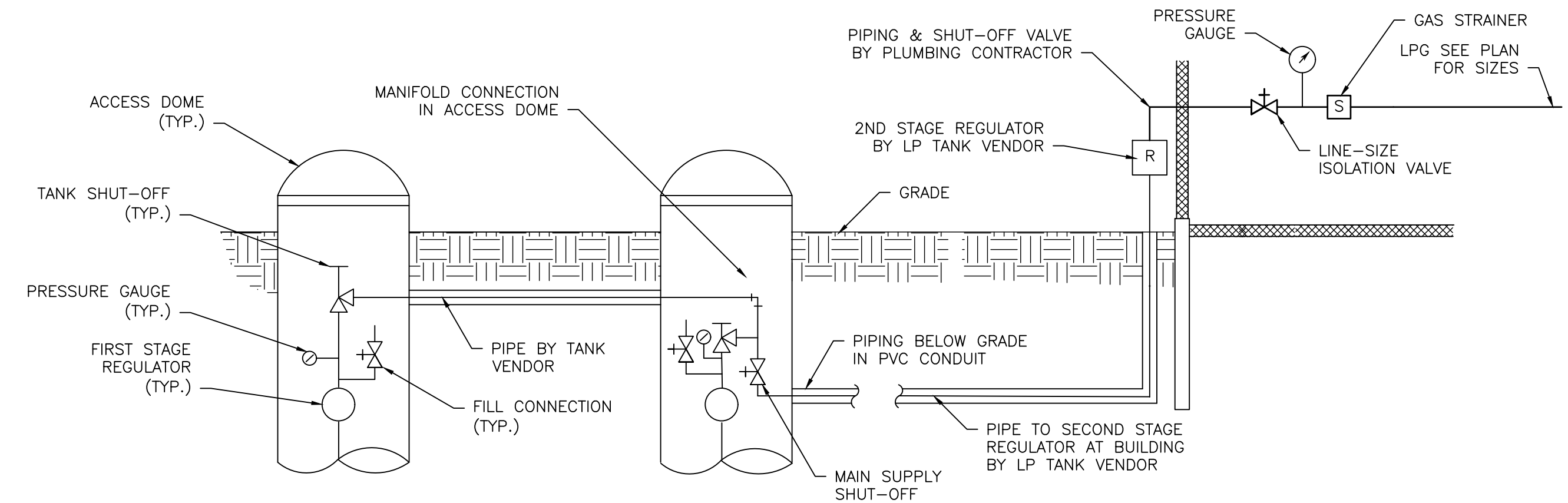
**5 ELECTRIC WATER HEATER DETAIL**  
NOT TO SCALE



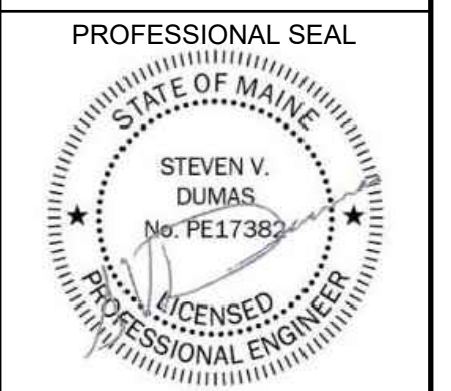
**2 CABINET FAN DETAIL**  
NOT TO SCALE



**8 UNDERGROUND LP GAS STORAGE TANK**  
NOT TO SCALE



**3 LP GAS STORAGE TANK PIPING DETAIL**  
NOT TO SCALE



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SHEET TITLE  
**MECHANICAL  
DETAILS**

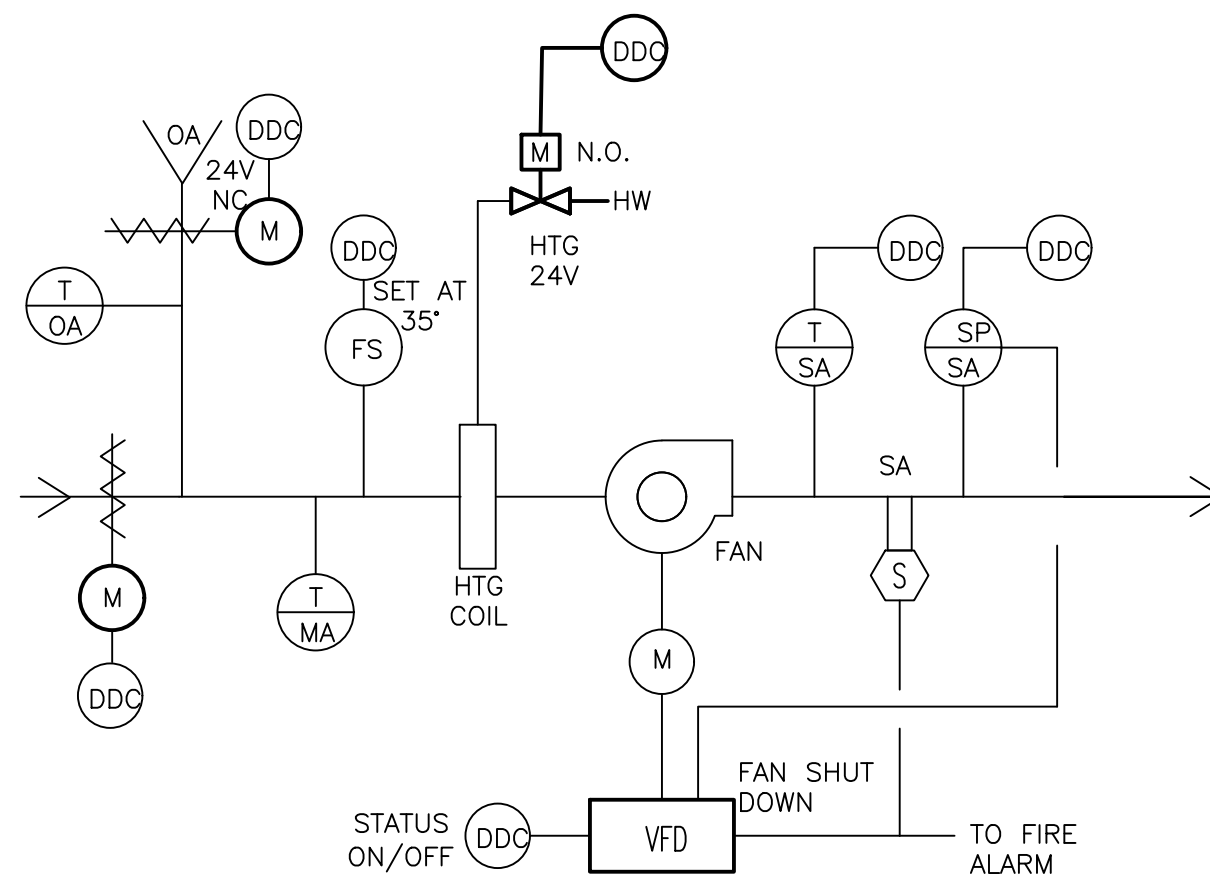
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SHEET NUMBER  
**M6.1**

SHEET 22 OF 30

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**AHU-1 SEQUENCE OF OPERATIONS**

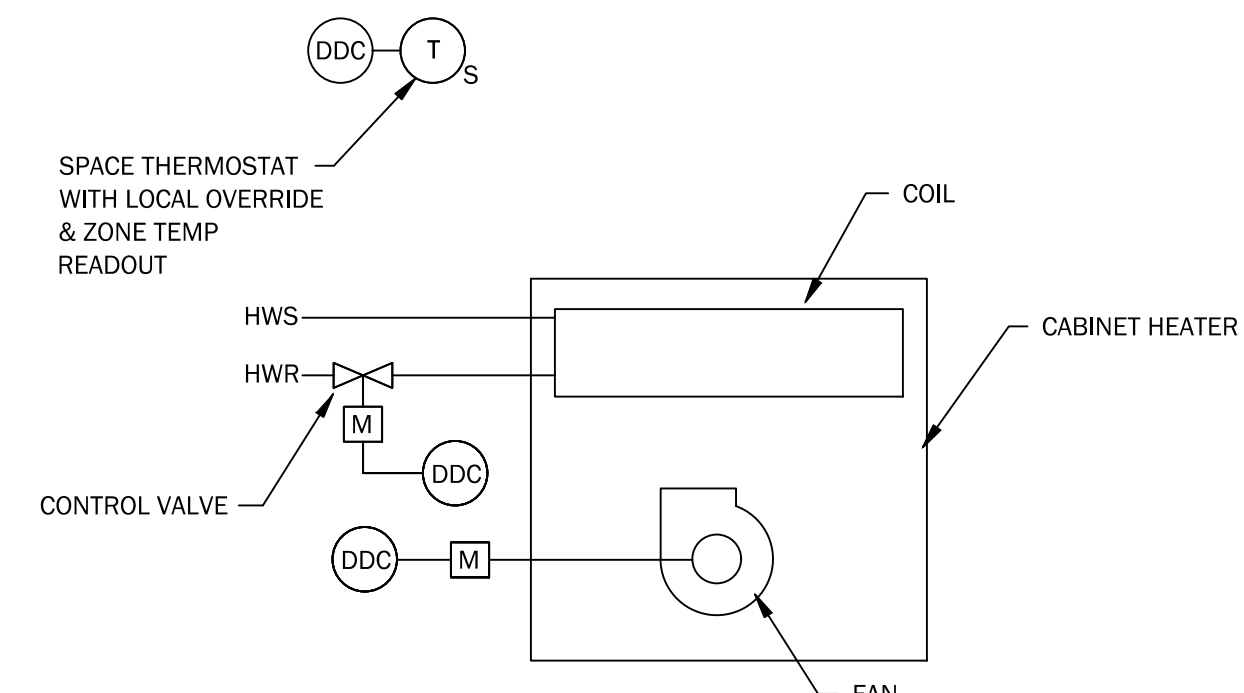
**GENERAL**

- 1. THE AHU SYSTEM SHALL COMMUNICATE TO THE BUILDING AUTOMATION SYSTEM (BAS) VIA BACNET MSTP INTERFACE PROTOCOL.
- 2. SCHEDULING OF THE OCCUPIED AND UNOCCUPIED PERIOD FOR THE AHU SHALL BE DONE AT THE BAS.
- 3. PROGRAMMING OF THE SETPOINT TEMPERATURES FOR BOTH OCCUPIED AND UNOCCUPIED PERIODS SHALL BE DONE AT THE BAS.

**SYSTEM CONTROL SEQUENCES**

- 1. AHU-1.
  - A. OCCUPIED MODE. DURING OCCUPIED MODE THE AHU FAN SHALL OPERATE TO PROVIDE CONSTANT AIRFLOW AND THE OUTSIDE AIR DAMPER SHALL BE SET AT MINIMUM OUTSIDE AIR POSITION. WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 65 DEG F (ADJUSTABLE) THE 2-WAY HOT WATER HEATING COIL SHALL MODULATE TO MAINTAIN A DISCHARGE AIR TEMPERATURE OF 70 DEG F (ADJUSTABLE). WHEN THE SPACE TEMPERATURE FALLS BELOW THE SETPOINT, THE BAS SHALL MODULATE THE COIL TO MAINTAIN SETPOINT. WHEN OUTSIDE AIR TEMPERATURE IS ABOVE 65 DEG F THE BAS SHALL NOT ALLOW HEATING.

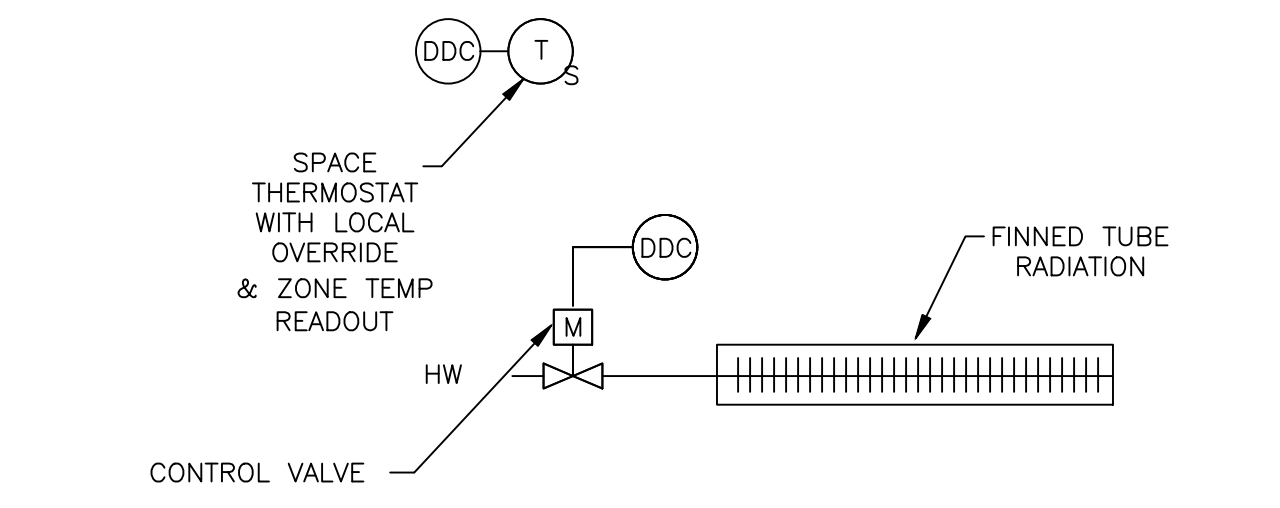
**6 AIR HANDLING UNIT CONTROL DIAGRAM AND SEQUENCE OF OPERATION NOT TO SCALE**



**CABINET UNIT HEATER/UNIT HEATER SEQUENCE OF OPERATIONS**

- 1. EXISTING HOT WATER HEATING: PROVIDE NEW 2-WAY HOT WATER CONTROL VALVES FOR EXISTING TERMINAL UNIT. THE BAS SHALL MODULATE THE HOT WATER FLOW TO THESE EXISTING HEATING ELEMENTS AS FOLLOWS.
- 2. TERMINAL UNITS: THE TERMINAL UNITS SHALL SERVE AS HEATING CAPACITY. WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 65 DEG F (ADJUSTABLE) AND SPACE TEMPERATURE IS BELOW SET POINT (70 DEG F (ADJUSTABLE)), THE BAS SHALL MODULATE HOT WATER FLOW TO MAINTAIN THE ZONE HEATING SETPOINT. WHEN OUTSIDE AIR TEMPERATURE IS ABOVE 65F, THE BAS SHALL NOT ALLOW HEATING.

**7 CABINET UNIT HEATER / UNIT VENTILATOR CONTROL DIAGRAM NOT TO SCALE**



**FIN TUBE RADIATION SEQUENCE OF OPERATIONS**

- 1. EXISTING HOT WATER HEATING: PROVIDE NEW 2-WAY HOT WATER CONTROL VALVES FOR EXISTING FIN TUBE RADIATION. THE BAS SHALL MODULATE THE HOT WATER FLOW TO THESE EXISTING HEATING ELEMENTS AS FOLLOWS.
- 2. HOT WATER RADIATION: THE HOT WATER RADIATION SHALL SERVE AS HEATING CAPACITY. WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 65 DEG F (ADJUSTABLE) AND SPACE TEMPERATURE IS 2 DEG F (ADJUSTABLE) BELOW SET POINT, THE BAS SHALL MODULATE HOT WATER FLOW TO MAINTAIN THE ZONE HEATING SETPOINT. WHEN OUTSIDE AIR TEMPERATURE IS ABOVE 65F, THE BAS SHALL NOT ALLOW HEATING.

**4 FIN TUBE RADIATION CONTROL DIAGRAM AND SEQUENCE OF OPERATION NOT TO SCALE**

**VRF SEQUENCE OF OPERATIONS**

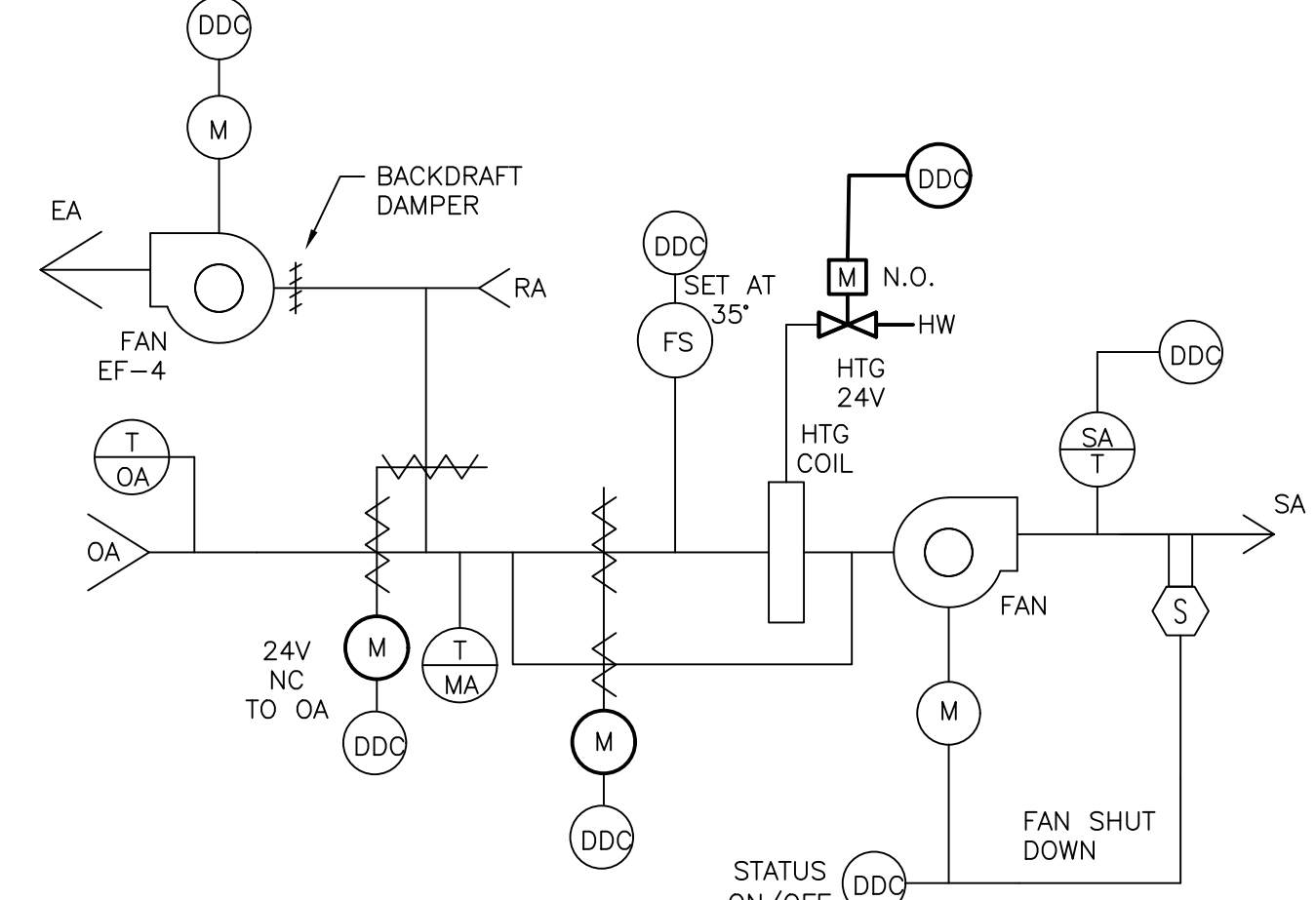
**GENERAL**

- 1. THE VARIABLE REFRIGERANT FLOW (VRF) HEAT PUMP SYSTEM SHALL COMMUNICATE TO THE BUILDING AUTOMATION SYSTEM (BAS) VIA BACNET MSTP INTERFACE PROTOCOL.
- 2. SCHEDULING OF THE OCCUPIED AND UNOCCUPIED PERIOD FOR EACH HEAT PUMP ZONE SHALL BE DONE AT THE BAS.
- 3. PROGRAMMING OF EACH ZONE'S HEATING AND COOLING SETPOINT TEMPERATURES FOR BOTH OCCUPIED AND UNOCCUPIED PERIODS SHALL BE DONE AT THE BAS.
- 4. BAS THERMOSTAT SHALL PROVIDE CURRENT ZONE TEMPERATURE, HEAT PUMP STATUS (ON/OFF), HEATING OR COOLING MODE STATUS, AND HEAT PUMP FAULT ALARM TO THE BAS. EACH HEAT PUMP HAS A CONDENSATE DRAIN PAN SENSOR TO SIGNAL A HIGH LEVEL ALARM. CONDENSATE DRAIN ALARM TO BE ON BAS.

**SYSTEM CONTROL SEQUENCES**

- 1. ZONE HEAT PUMPS AC-1A THROUGH AC-15B.
  - A. OCCUPIED MODE. DURING THE OCCUPIED PERIOD, THE HEAT PUMP FANS SHALL ONLY BE ACTIVATED IN RESPONSE TO A CALL FOR COOLING OR HEATING FROM THE ZONE THERMOSTAT/CONTROLLER TO MAINTAIN THE OCCUPIED SETPOINT TEMPERATURE. WHEN THE SETPOINT TEMPERATURE IS SATISFIED, THE HEAT PUMP SHALL DEACTIVATE.
  - B. UNOCCUPIED MODE. DURING THE UNOCCUPIED PERIOD, THE HEAT PUMPS SHALL ONLY BE ACTIVATED IN RESPONSE TO A CALL FOR COOLING OR HEATING FROM THE ZONE THERMOSTAT/CONTROLLER TO MAINTAIN THE UNOCCUPIED SETPOINT TEMPERATURE. WHEN THE SETPOINT TEMPERATURE IS SATISFIED, THE HEAT PUMP SHALL DEACTIVATE.
  - C. CONDENSATE HIGH LEVEL ALARM: PROVIDE THE HEAT PUMP MANUFACTURER'S CONDENSATE DRAIN PAN LEVEL SENSOR TO SIGNAL A HIGH WATER LEVEL BEFORE THERE IS AN OVERFLOW. UPON SENSING A HIGH LEVEL, THE HEAT PUMP SHALL DEACTIVATE, AND AN ALARM SIGNAL IS SENT TO THE BAS. THE HEAT PUMP SHALL BE RESET AT THE BAS.
- 2. HEAT PUMP CONDENSING UNIT HPCU-1, CU-2, CU-3. THE HEAT PUMP SYSTEM CONTROLS SHALL CONTROL THE CONDENSING UNIT. THE HEAT PUMP CONTROLS SHALL STAGE ON AND OFF THESE UNITS TO MAINTAIN THE NECESSARY REFRIGERANT TEMPERATURE CONTROL.

**5 VARIABLE REFRIGERANT FLOW SEQUENCE OF OPERATION NOT TO SCALE**



**AHU-2 SEQUENCE OF OPERATIONS**

**GENERAL**

- 1. THE AHU SYSTEM SHALL COMMUNICATE TO THE BUILDING AUTOMATION SYSTEM (BAS) VIA BACNET MSTP INTERFACE PROTOCOL.
- 2. SCHEDULING OF THE OCCUPIED AND UNOCCUPIED PERIOD FOR THE AHU SHALL BE DONE AT THE BAS.
- 3. PROGRAMMING OF THE SETPOINT TEMPERATURES FOR BOTH OCCUPIED AND UNOCCUPIED PERIODS SHALL BE DONE AT THE BAS.

**SYSTEM CONTROL SEQUENCES**

- AHU-2.
  - 1. OCCUPIED MODE.
    - 1.A. DURING OCCUPIED MODE THE AHU FAN SHALL OPERATE TO PROVIDE CONSTANT AIRFLOW SUBJECT TO THE LOW LIMIT THERMOSTAT AND SMOKE DETECTOR.
    - 1.B. THE MIXING BOX OUTSIDE AIR DAMPER SHALL BE SET AT MINIMUM OUTSIDE AIR POSITION (41%, 1950 CFM (ADJ.)).
    - 1.C. THE FACE AND BYPASS DAMPER, AND HEATING COIL VALVE SHALL MODULATE TO MAINTAIN THE DISCHARGE SETPOINT (68F (ADJ.)).
      - 1.C.A. WHEN THE OUTSIDE AIR TEMPERATURE IS ABOVE 40F (ADJ.) THE FACE AND BYPASS DAMPER SHALL BE LOCKED OPEN TO THE FACE AND THE HEATING COIL VALVE SHALL MODULATE TO MAINTAIN DISCHARGE SETPOINT.
      - 1.C.B. WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 40F (ADJ.) THE HEATING COIL VALVE SHALL BE FULLY OPEN AND THE FACE AND BYPASS DAMPER SHALL MODULATE TO MAINTAIN DISCHARGE SETPOINT.
  - 2. UNOCCUPIED MODE.
    - 2.A. DURING UNOCCUPIED MODE THE AHU FAN SHALL BE OFF AND THE OUTSIDE AIR DAMPER SHALL BE CLOSED.
  - 3. ALARMS.
    - 3.A. IF THE TEMPERATURE OF THE HEATING COIL DROPS BELOW 35F (ADJ.), THE OUTSIDE AIR DAMPER SHALL CLOSE AND THE FAN SHALL TURN OFF.
    - 3.B. IF SMOKE IS DETECTED IN THE SUPPLY, THE OUTSIDE AIR DAMPER SHALL CLOSE AND THE FAN SHALL TURN OFF.

**2 AIR HANDLING UNIT CONTROL DIAGRAM AND SEQUENCE OF OPERATION NOT TO SCALE**

**HOT WATER HEATING BOILERS SEQUENCE OF OPERATIONS**

- 1. BOILERS, B-A/1B: THE BOILERS SHALL BE CONTROLLED BY THE BMS. ON A CALL FOR HEATING FROM THE BOILER LOOP SENSOR, STEP FIRE BOILERS IN SEQUENCE. THE LEAD/LAG FOR BOILER OPERATION(S) SHALL BE SETUP IN THE BMS TO EQUALIZE BOILER RUNTIME BETWEEN BOTH BOILERS.
- 2. HOT WATER RESET SCHEDULE: CONTROL HEATING WATER AT MAXIMUM 180 DEGREES F AT OUTDOOR TEMPERATURE OF 0 DEGREES F, AND MINIMUM 120 DEGREES F AT OUTDOOR TEMPERATURE OF 60 DEGREES F, WITH LINEAR RELATIONSHIP BETWEEN.
- 3. BOILER COMBUSTION AIR SHALL BE PROVIDED FROM LOUVER IN BOILER ROOM WALL. MOTORIZED DAMPER SHALL BE INTERLOCKED WITH BOILERS AND SHALL OPEN TO PROVIDE COMBUSTION AIR WHEN ANY BOILER STATUS IS "ON". DAMPER SHALL BE CLOSED WHEN ALL BOILER STATUS IS "OFF".
- 4. CIRCULATION PUMPS, P-1,2,3: PUMPS SHALL BE CONTROLLED BY THE BMS. PUMPS SHALL BE ENERGIZED ON A CALL FOR HEAT FROM ANY SPACE THERMOSTAT ASSOCIATED WITH TERMINAL UNIT SERVED BY THE PUMPS. PUMPS SHALL OPERATE IN LEAD/LAG CONFIGURATION AND SHALL BE SETUP IN THE BMS TO EQUALIZE PUMP RUNTIME. PUMPS SHALL MAINTAIN DIFFERENTIAL PRESSURE SETPOINT. WHEN ALL SPACE TEMPERATURES ARE SATISFIED PUMPS SHALL BE OFF.
- 4. CIRCULATION PUMPS, P-4,5: PUMPS SHALL BE CONTROLLED BY THE BMS. PUMPS SHALL BE ENERGIZED ON A CALL FOR HEAT FROM ANY SPACE THERMOSTAT ASSOCIATED WITH TERMINAL UNIT SERVED BY THE PUMPS. PUMPS SHALL OPERATE IN LEAD/LAG CONFIGURATION AND SHALL BE SETUP IN THE BMS TO EQUALIZE PUMP RUNTIME. PUMPS SHALL MAINTAIN DIFFERENTIAL PRESSURE SETPOINT. WHEN ALL SPACE TEMPERATURES ARE SATISFIED PUMPS SHALL BE OFF.

**3 HOT WATER HEATING SEQUENCE OF OPERATION NOT TO SCALE**

**BUILDING AUTOMATION SYSTEM READ/WRITE CAPACITIES**

1. SCOPE: NEW DDC CONTROL SYSTEM.
2. THE BUILDING AUTOMATION SYSTEM (BAS) SHALL HAVE AS A MINIMUM, THE FOLLOWING READ/WRITE CAPACITIES AND GRAPHIC DISPLAYS.
  - 3. HEAT PUMP ZONES (HEAT PUMPS AC-1A THROUGH AC-15B).
    - A. SCHEDULING OF OCCUPIED AND UNOCCUPIED PERIODS.
    - B. CURRENT PERIOD: OCCUPIED OR UNOCCUPIED.
    - C. HEAT PUMP FAN STATUS (ON/OFF) AND FAN SPEED.
    - D. HEATING OR COOLING MODE.
    - E. HEAT PUMP FAULT ALARM.
    - F. HEAT PUMP CONDENSATE DRAIN PAN HIGH LEVEL ALARM.
    - G. ZONE TEMPERATURES.
    - H. ZONE HEATING AND COOLING SETPOINT TEMPERATURES FOR BOTH OCCUPIED AND UNOCCUPIED PERIODS.
    - I. OUTSIDE AIR TEMPERATURE - UTILIZE CURRENT WEBCtrl WEATHER DATA.
    - J. HOT WATER RADIATION CONTROL VALVE POSITION (PERCENT OPEN) AT EACH HEATING ELEMENT.
  - 3. CONDENSING UNITS HRCU-1, CU-2, CU-3.
    - A. CONDENSING UNIT STATUS (ON/OFF).
  - 4. AIR HANDLING UNIT (AHU-1).
    - A. SCHEDULING OF OCCUPIED AND UNOCCUPIED PERIODS.
    - B. CURRENT PERIOD: OCCUPIED OR UNOCCUPIED.
    - C. FAN STATUS (ON/OFF) AND FAN SPEED.
    - D. HEATING MODE (ON/OFF).
    - E. SPACE TEMPERATURE
    - F. SPACE HEATING SETPOINT TEMPERATURES FOR BOTH OCCUPIED AND UNOCCUPIED PERIODS.
    - G. OUTSIDE AIR TEMPERATURE - UTILIZE CURRENT WEBCtrl WEATHER DATA.
    - H. RETURN AIR TEMPERATURE.
    - I. MIXED AIR TEMPERATURE.
    - J. DISCHARGE AIR TEMPERATURE.
    - K. HOT WATER VALVE POSITION (PERCENTAGE OPEN).
    - L. HOT WATER VALVE SIGNAL.
    - M. HOT WATER COIL FREEZESTAT.
  - 4. AIR HANDLING UNIT (AHU-2).
    - A. SCHEDULING OF OCCUPIED AND UNOCCUPIED PERIODS.
    - B. CURRENT PERIOD: OCCUPIED OR UNOCCUPIED.
    - C. FAN STATUS (ON/OFF) AND FAN SPEED.
    - D. OUTSIDE AIR TEMPERATURE - UTILIZE CURRENT WEBCtrl WEATHER DATA.
    - E. RETURN AIR TEMPERATURE.
    - F. MIXED AIR TEMPERATURE.
    - G. DISCHARGE AIR TEMPERATURE.
    - H. DISCHARGE AIR TEMPERATURE SETPOINT.
    - I. FACE AND BYPASS DAMPER POSITION.
    - J. FACE AND BYPASS DAMPER SIGNAL.
    - K. HOT WATER VALVE POSITION (PERCENTAGE OPEN).
    - L. HOT WATER VALVE SIGNAL.
    - M. HOT WATER COIL FREEZESTAT.
  - 5. RADIATOR VALVE/RADIANT PANEL VALVE/CABINET UNIT HEATER
    - A. VALVE POSITION (OPEN/CLOSED)

**GENERAL NOTES:**

1. VENDOR PROVIDED, HVAC CONTROLS CONTRACTOR INSTALLED VENDOR ZONE TEMPERATURE SENSOR & CONTROLLER. DESIGN BASIS: MITSUBISHI MODEL PAC-US444CN-1 "THERMOSTAT INTERFACE". CONTROLLER SHALL COMMUNICATE TO THE BUILDING AUTOMATION SYSTEM (BAS) THROUGH VENDOR LOCAL NETWORK.
2. VENDOR HARDWARE & NETWORK, INSTALL AS SHOWN AND PER VENDOR WIRING INSTRUCTIONS.
3. DESIGN BASIS: MITSUBISHI BACNET MSTP INTERFACE & MITSUBISHI AE-200 VRF HP CENTRAL CONTROLLER.
4. CONTROL CONTRACTOR SHALL WIRE HEAT PUMP NETWORK PER VENDOR REQUIREMENTS.
5. HVAC CONTROLS CONTRACTOR SHALL FIELD-VERIFY & FUNCTIONALLY TEST ALL COMPONENT PARTS, DEVICE CABLING, ETC. PRIOR TO INSTALLATION OF NEW SYSTEMS.
6. CONTROL CONTRACTOR SHALL INTEGRATE VENDOR NETWORK SYSTEM TO THE NEW BMS & SHALL PROVIDE MONITORING, TRENDRING, GRAPHICS, ALARMS, ETC. CONTROLS CONTRACTOR SHALL PROVIDE NETWORK ADDRESSING FOR ALL VENDOR SIGNALS TO PROVIDE COMPLETE MONITORING & COMMUNICATION WITH ALL VENDOR EQUIPMENT.

**1 CONTROLS GENERAL NOTES NOT TO SCALE**

NO.	DATE	DESCRIPTION	BY	CHK'D



EDMUNDS SCHOOL  
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 21 HARRISON RD  
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SHEET TITLE  
  
 MECHANICAL  
 CONTROLS

DRAWN BY MJH	DATE 07/21/2023
CHECKED BY SVD	D&K PROJECT # 528137
PROJ. ENG. SVD	D&K ARCHIVE #

SHEET NUMBER

**M6.2**

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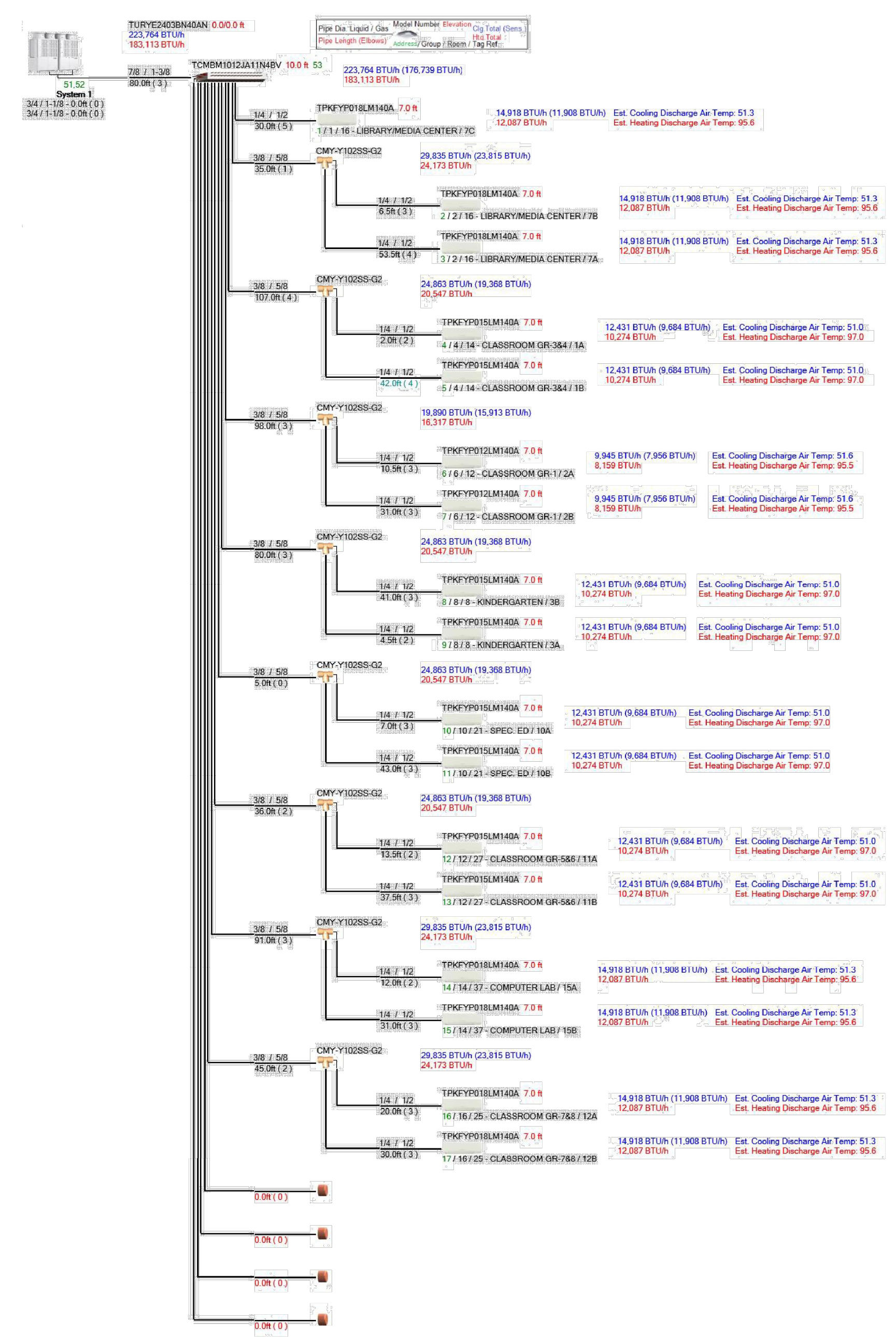
EDMUNDS SCHOOL  
ENCLOSURE REPAIRS &  
MECHANICAL SYSTEMS  
UPGRADES

21 HARRISON RD  
DENNYVILLE, ME 04628

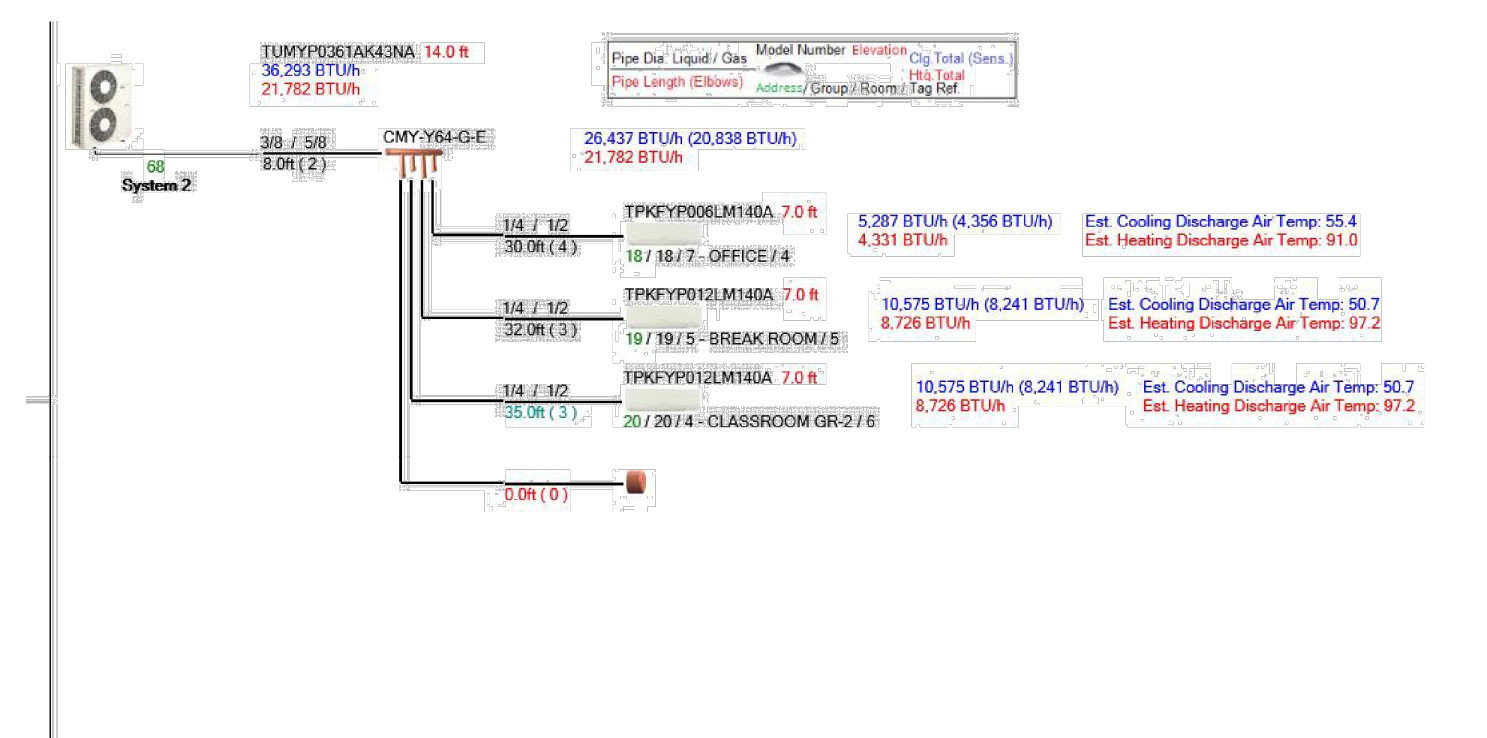
SHEET TITLE  
PIPING SCHEMATICS

DRAWN BY MJH	DATE 07/21/2023
CHECKED BY SVD	D&K PROJECT # 528137
PROJ. ENG. SVD	D&K ARCHIVE #

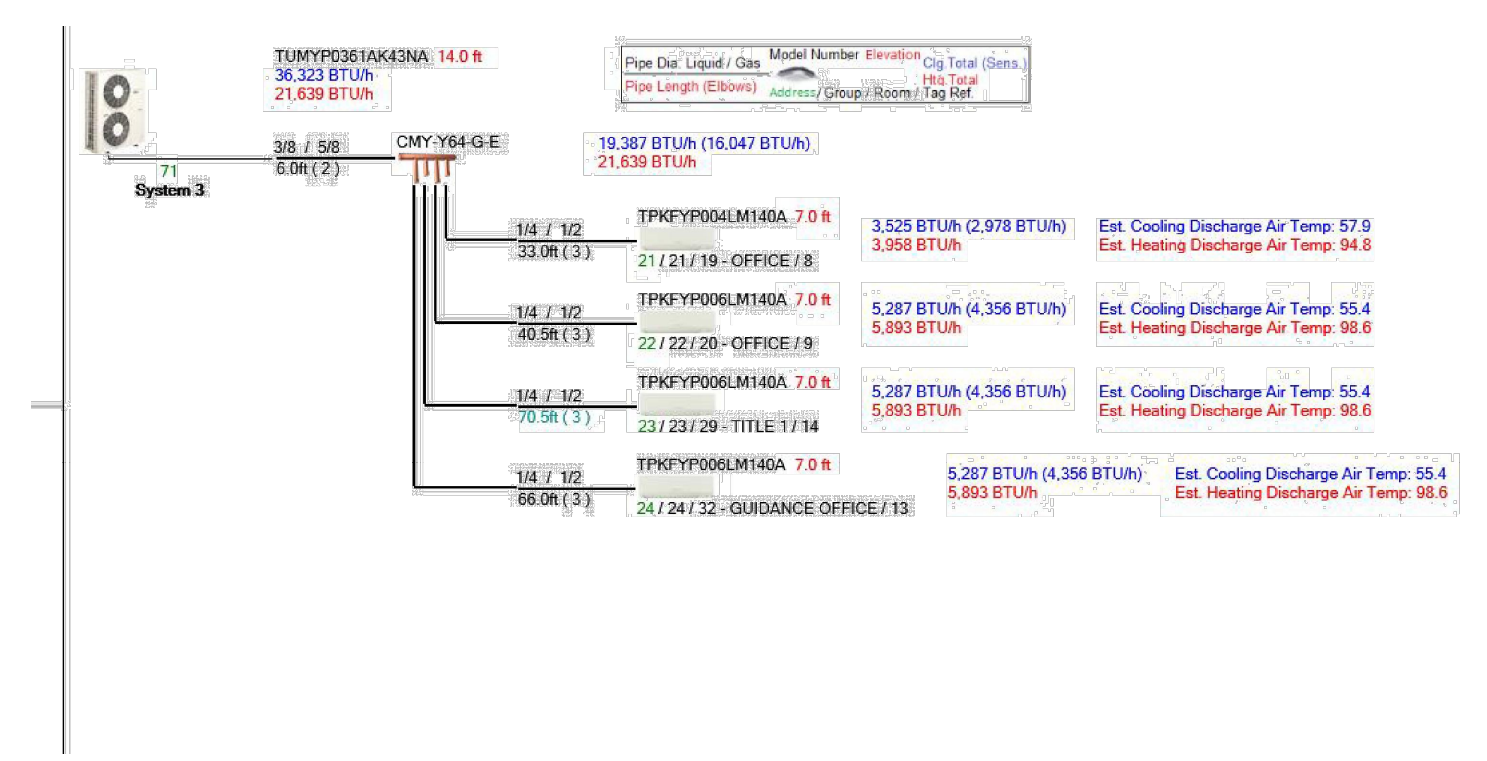
SHEET NUMBER  
**M6.3**  
SHEET 24 OF 30



**1** HRCU-1 PIPING SCHEMATIC  
NOT TO SCALE



**2** CU-2 PIPING SCHEMATIC  
NOT TO SCALE



**3** CU-3 PIPING SCHEMATIC  
NOT TO SCALE

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AIR HANDLING UNIT SCHEDULE																		
TAG	LOCATION	MANUFACTURER & MODEL NO.	TYPE	SA CFM	OA CFM	FAN PERFORMANCE			HEATING PERFORMANCE						MOTOR			
						CFM	E.S.P.	RPM	SENSIBLE MBH	EAT	LAT	GPM	EWT	LWT	HP	VOLTS	PH	HZ
AHU-1	GYM STORAGE ROOM	DAIKIN - CAH012GHAM	VERTICAL	5,000	2050	5,000	0.5	1252	292.7	40.8	95	29.3	180	160	5	208	3	60

- REMARKS:
- UNIT SHALL BE UL LISTED AND AHRI CERTIFIED FOR PERFORMANCE, EFFICIENCY, AND CROSS LEAKAGE PER AHRI 1060.
  - PROVIDE WITH FACTORY AUTHORIZED START-UP.
  - UNIT SHALL CONSIST OF MIXING BOX, FILTER SECTION, HOT WATER COIL, AND SUPPLY FAN.
  - SUPPLY FAN SHALL BE DIRECT DRIVE PLENUM FAN WITH PREMIUM EFFICIENCY MOTOR.
  - FLUID IS CLEAR WATER.

FAN SCHEDULE													
TAG	LOCATION	MANUFACTURER & MODEL NO.	FAN TYPE	FLOW (CFM)	SP (IN)	RPM	BHP	MAX (dBA)	MOTOR				REMARKS
									POWER	VOLTS	PH	HZ	
EF-1	ROOF	GREENHECK - G-090	CENTRIFUGAL DOWNBLAST	550	0.25	1416	0.05	52	1/2 HP	208	1	60	1, 2
EF-2A/2B	TOILET ROOMS	GREENHECK - SP-B80	CEILING INLINE	50	0.25	900	0.01	34	18 W	120	1	60	1, 3
EF-3	ATTIC	GREENHECK - CSP-A250	INLINE	50	0.25	1000	0.03	38	53 W	120	1	60	1
EF-4	ATTIC	GREENHECK - SQ-160-VG	CENTRIFUGAL INLINE	1800	0.5	926	0.29	56	3/4 HP	120	1	60	1
EF-5A/5B	LOCKER ROOMS	GREENHECK - SP-A90-130-VG	CEILING INLINE	125	0.25	1041	0.02	46	12 W	120	1	60	1

- REMARKS:
- PROVIDE WITH EC MOTOR.
  - PROVIDE WITH 12" ROOF CURB, BIRDSCREEN, AND BACKDRAFT DAMPER. INCLUDE BACKDRAFT DAMPER PRESSURE DROP IN FAN INTERNAL PRESSURE DROP CALCULATION.
  - PROVIDE WITH MANUFACTURER'S ROOF CAP.

PROFESSIONAL SEAL



BY CKD

DESCRIPTION

DATE

NO.



EDMUNDS SCHOOL ENCLOSURE REPAIRS & MECHANICAL SYSTEMS UPGRADES

21 HARRISON RD DENNYVILLE, ME 04628

SHEET TITLE

MECHANICAL SCHEDULES

DRAWN BY	DATE
MJH	07/21/2023
CHECKED BY	D&K PROJECT #
SVD	528137
PROJ. ENG.	D&K ARCHIVE #
SVD	

SHEET NUMBER

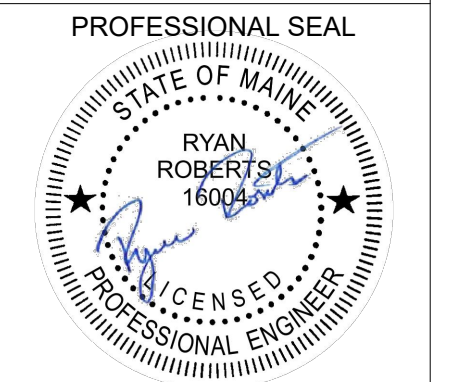
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07/21/2023

SHEET 26 OF 30

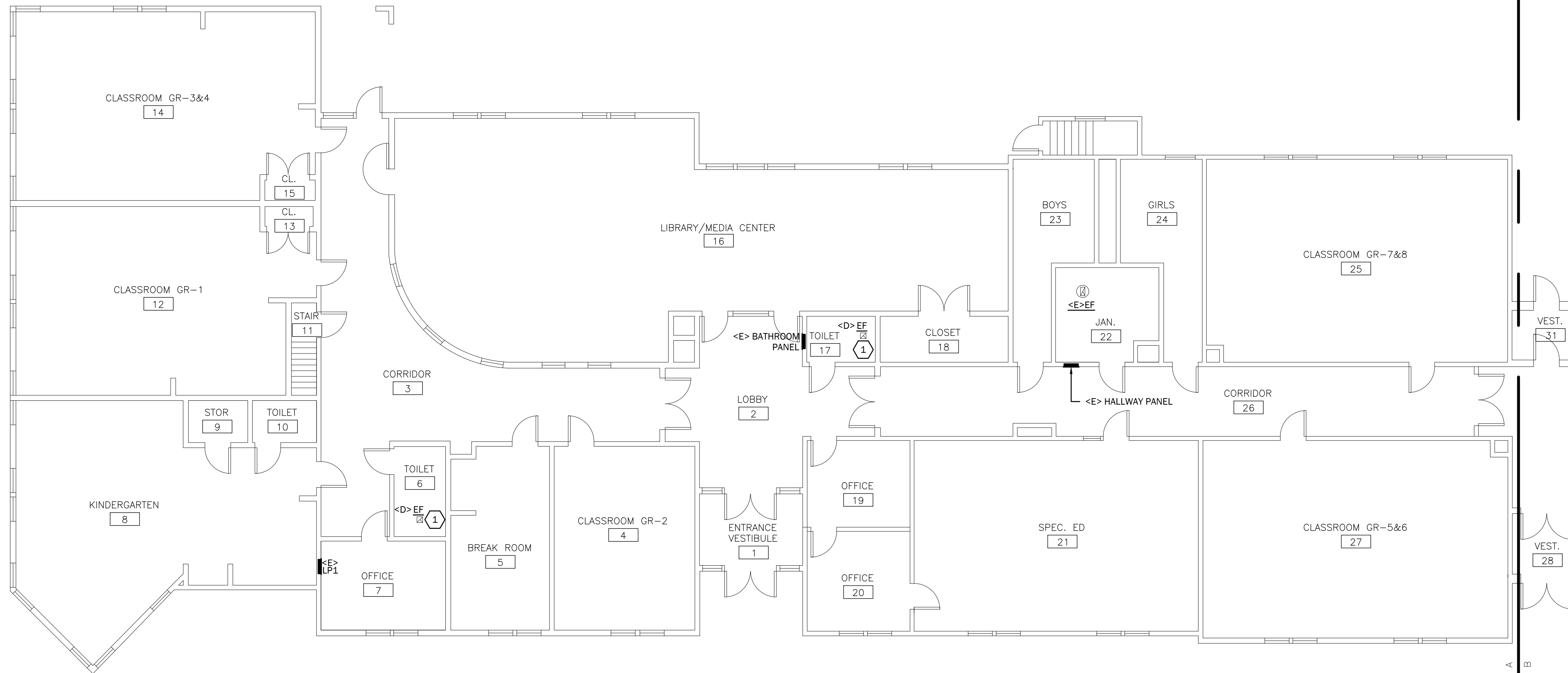
**ELECTRICAL LEGEND**

	ELECTRICAL DISTRIBUTION PANEL
	SWITCH - SINGLE POLE, SERVICE SWITCH FOR MOTORS
	SWITCH - TWO POLE, SERVICE SWITCH FOR MOTORS
	BRANCH CIRCUIT
	WEATHER PROOF DUPLEX GFCI RECEPTACLE - LEVITON #GFTR2
	HEAVY DUTY FUSED DISCONNECT PROVIDED AND INSTALLED BY EC
	JUNCTION BOX
	MOTOR STARTER PROVIDED BY MC, INSTALLED BY EC
	LOW WATER CUTOUT
	HIGH LIMIT
	GAS BURNER EMERGENCY SWITCH
	FIREMATIC SWITCH
AFF	ABOVE FINISH FLOOR
EC	ELECTRICAL CONTRACTOR (DIVISION 26)
MC	MECHANICAL CONTRACTOR (DIVISION 23)
CM	CONSTRUCTION MANAGER
GC	GENERAL CONTRACTOR
ES	EQUIPMENT SUPPLIER
TYP.	TYPICAL OF ALL
<D>	EXISTING DEVICE OR EQUIPMENT TO BE DEMOLISHED
<E>	EXISTING DEVICE OR EQUIPMENT TO REMAIN
<R>	EXISTING TO BE REMOVED AND RELOCATED
<N>	NEW EQUIPMENT OR DEVICE
---	ELECTRICAL DEVICES, WIRES, CONDUITS TO BE REMOVED
---	EXISTING ELECTRICAL DEVICES, WIRES, CONDUITS TO REMAIN



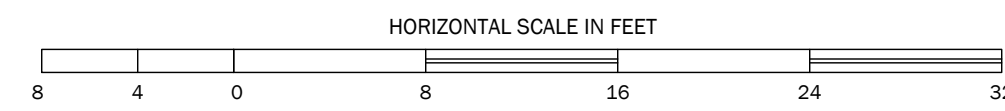
**KEYED NOTES:**

- 1 EXISTING EXHAUST FAN TO BE DEMOLISHED. EC TO DISCONNECT AND SALVAGE EXISTING CIRCUIT. EXISTING LOCAL SERVICE DISCONNECTING MEANS TO BE DEMOLISHED. EC TO COORDINATE ALL WORK WITH MC PRIOR TO DEMOLITION.



**1 FIRST FLOOR PLAN AREA A – ELECTRICAL DEMOLITION**

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



**GENERAL DEMOLITION NOTES:**

- A. EQUIPMENT AND MATERIALS REMOVED OR DEMOLISHED AND NOT TO BE REINSTALLED BY THE EC SHALL BE CLASSIFIED BY THE OWNER AS SALVAGE OR SCRAP. THOSE CLAIMED BY THE OWNER SHALL BE DELIVERED TO THE OWNER BY THE EC WHERE DIRECTED AT THE SITE. THOSE NOT CLAIMED BY THE OWNER SHALL BECOME PROPERTY OF THE EC AND SHALL BE LEGALLY REMOVED FROM THE SITE AND PREMISES.
- B. ANY PLACE WHERE THE CONTRACTOR PENETRATES, CUTS AND/OR REMOVES WALLS, CONTRACTOR IS TO REPLACE, PATCH AND PAINT WALLS TO ORIGINAL FINISHES.
- C. FIELD VERIFY ALL DIMENSIONS BEFORE COMMENCEMENT OF WORK. NOTIFY ENGINEER OF ANY ERRORS. CONTRACTORS SHALL FIELD INVESTIGATE ALL EXISTING CONDITIONS PRIOR TO THE BID DATE. NO EXTRA COMPENSATION SHALL BE GIVEN TO CONTRACTORS WHO FAIL TO VISIT THE SITE PRIOR TO THE BID DATE.
- D. REFER TO THE ARCHITECTURAL PLANS FOR EXTENT OF DEMOLITION WORK TO BE PERFORMED BY THE GENERAL CONTRACTOR. ALL ITEMS THAT NEED TO BE REMOVED BY THE GC SHALL HAVE THE POWER DISCONNECTED BY THE EC.
- E. NOT ALL DEVICES TO BE REMOVED OR DISCONNECTED ARE SHOWN. WHERE ENTIRE WALLS AND ROOMS ARE TO BE DEMOLISHED, ALL ELECTRICAL DEVICES IN THESE AREAS AND WALLS ARE TO BE DISCONNECTED, AND THE BRANCH CIRCUIT TO BE DISCONNECTED BACK TO THE SOURCE. ITEMS TO REMAIN AND RELOCATED WILL BE SHOWN. REFER TO MECHANICAL AND ARCHITECTURAL PLANS FOR TOTAL EXTENT OF DEMOLITION WORK.
- F. BUILDING IS EXISTING. WIRING IN EXTERIOR WALLS SHALL BE FISHED AS NECESSARY. SOME INTERIOR PARTITIONS ARE EXISTING. WIRING IN THESE WALLS MAY NEED TO BE FISHED. REFER TO ARCHITECTURAL PLANS FOR FULL EXTENT OF EXISTING CONDITIONS. NO SURFACE RACEWAY TO BE INSTALLED WITHOUT WRITTEN AUTHORIZATION FROM ARCHITECT.
- G. ALL NEW DEVICES AND LIGHTING SHALL BE WIRED TO NEAREST EXISTING RECEPTACLE OR LIGHTING CIRCUIT UNLESS OTHERWISE SHOWN. NEW CIRCUITS ARE SHOWN WITH A HOME RUN TO LISTED PANEL.



AUGUSTA, ME

EDMUNDS SCHOOL  
 ENCLOSURE REPAIRS &  
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 UPGRADES

21 HARRISON RD  
 DENNISVILLE, ME 04628

SHEET TITLE

**ELECTRICAL  
 DEMOLITION PLANS**

DRAWN BY BDF	DATE 07/21/2023
CHECKED BY RMR	D&K PROJECT # 528137
PROJ. ENG. RMR	D&K ARCHIVE #

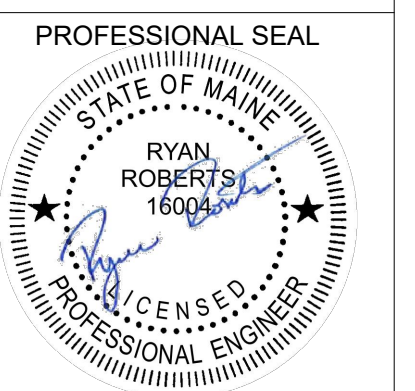
SHEET NUMBER

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 07/21/2023

SHEET 27 OF 30

ELECTRICAL LEGEND	
	ELECTRICAL DISTRIBUTION PANEL
	SWITCH - SINGLE POLE, SERVICE SWITCH FOR MOTORS
	SWITCH - TWO POLE, SERVICE SWITCH FOR MOTORS
	BRANCH CIRCUIT
	WEATHER PROOF DUPLEX GFCI RECEPTACLE - LEVITON #GFTR2
	HEAVY DUTY FUSED DISCONNECT PROVIDED AND INSTALLED BY EC
	JUNCTION BOX
	MOTOR STARTER PROVIDED BY MC, INSTALLED BY EC
	LOW WATER CUTOUT
	HIGH LIMIT
	GAS BURNER EMERGENCY SWITCH
	FIREMATIC SWITCH
AFF	ABOVE FINISH FLOOR
EC	ELECTRICAL CONTRACTOR (DIVISION 26)
MC	MECHANICAL CONTRACTOR (DIVISION 23)
CM	CONSTRUCTION MANAGER
GC	GENERAL CONTRACTOR
ES	EQUIPMENT SUPPLIER
TYP.	TYPICAL OF ALL
<D>	EXISTING DEVICE OR EQUIPMENT TO BE DEMOLISHED
<E>	EXISTING DEVICE OR EQUIPMENT TO REMAIN
<R>	EXISTING TO BE REMOVED AND RELOCATED
<N>	NEW EQUIPMENT OR DEVICE
- - -	ELECTRICAL DEVICES, WIRES, CONDUITS TO BE REMOVED
---	EXISTING ELECTRICAL DEVICES, WIRES, CONDUITS TO REMAIN



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 ENCLOSURE REPAIRS &  
 MECHANICAL SYSTEMS  
 UPGRADES

21 HARRISON RD  
 DENNISVILLE, ME 04628

SHEET TITLE

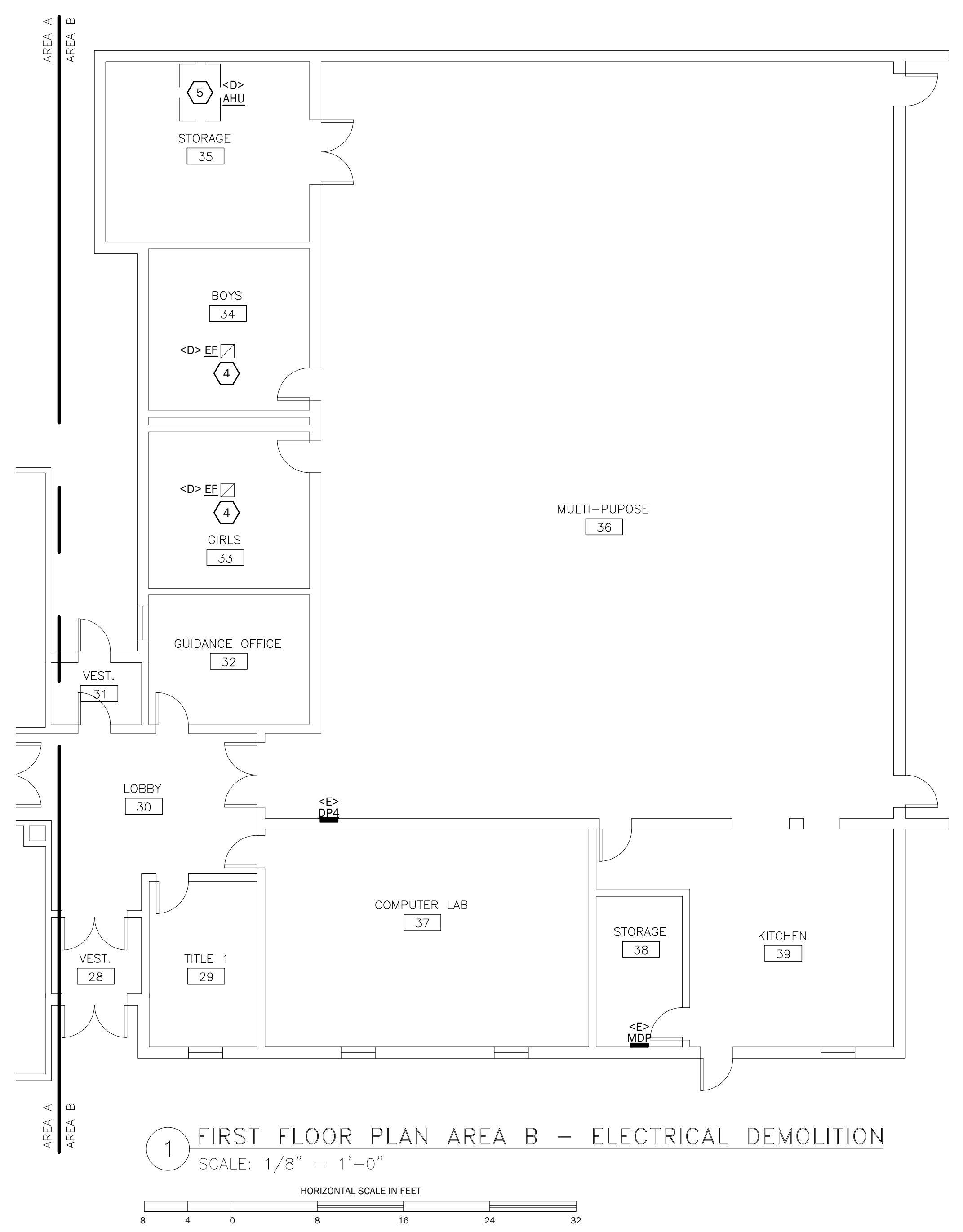
ELECTRICAL  
 DEMOLITION PLANS

DRAWN BY BDF	DATE 07/21/2023
CHECKED BY RMR	D&K PROJECT # 528137
PROJ. ENG. RMR	D&K ARCHIVE #

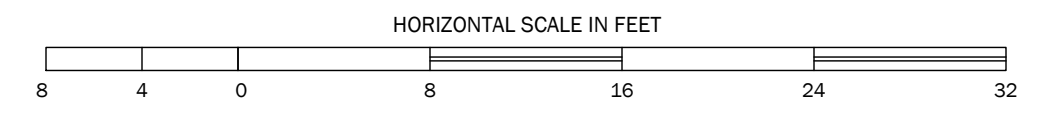
SHEET NUMBER

**E1.1**

SHEET 28 OF 30



**1 FIRST FLOOR PLAN AREA B - ELECTRICAL DEMOLITION**  
 SCALE: 1/8" = 1'-0"

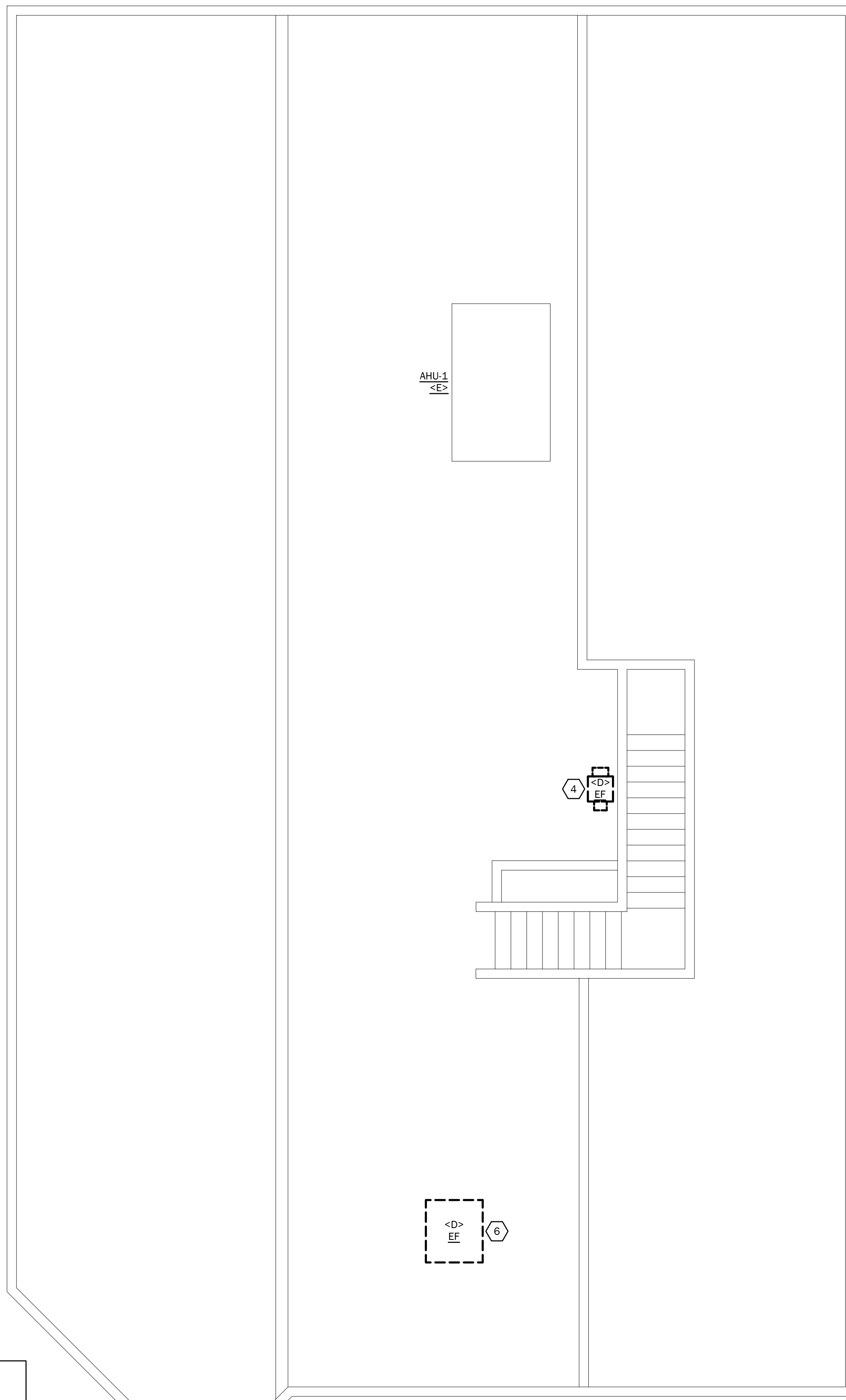


**GENERAL DEMOLITION NOTES:**

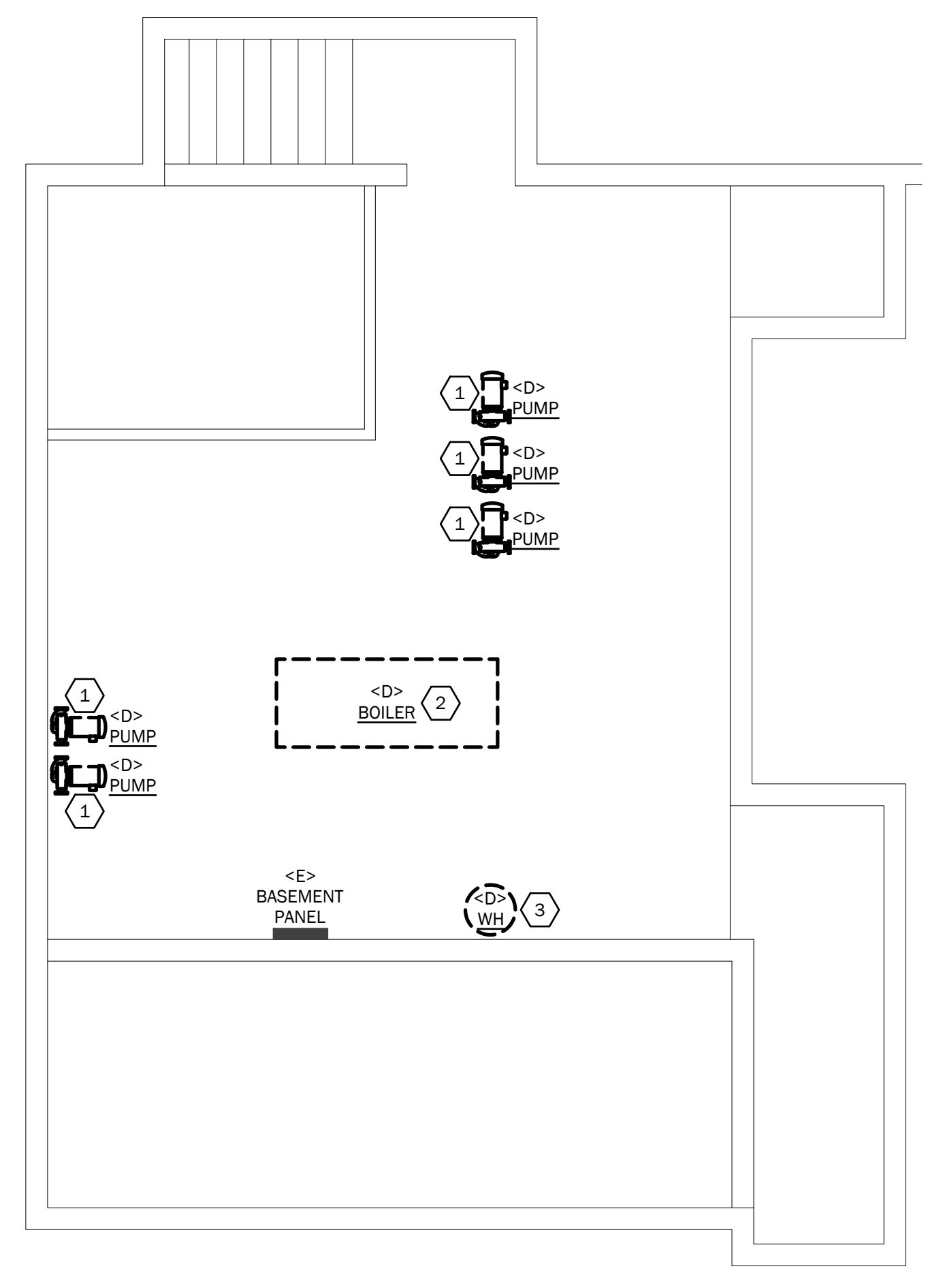
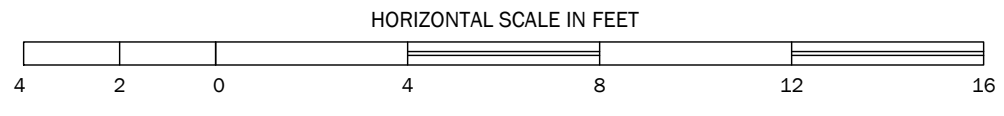
- EQUIPMENT AND MATERIALS REMOVED OR DEMOLISHED AND NOT TO BE REINSTALLED BY THE EC SHALL BE CLASSIFIED BY THE OWNER AS SALVAGE OR SCRAP. THOSE CLAIMED BY THE OWNER SHALL BE DELIVERED TO THE OWNER BY THE EC WHERE DIRECTED AT THE SITE. THOSE NOT CLAIMED BY THE OWNER SHALL BECOME PROPERTY OF THE EC AND SHALL BE LEGALLY REMOVED FROM THE SITE AND PREMISES.
- ANY PLACE WHERE THE CONTRACTOR PENETRATES, CUTS AND/OR REMOVES WALLS, CONTRACTOR IS TO REPLACE, PATCH AND PAINT WALLS TO ORIGINAL FINISHES.
- FIELD VERIFY ALL DIMENSIONS BEFORE COMMENCEMENT OF WORK. NOTIFY ENGINEER OF ANY ERRORS. CONTRACTORS SHALL FIELD INVESTIGATE ALL EXISTING CONDITIONS PRIOR TO THE BID DATE. NO EXTRA COMPENSATION SHALL BE GIVEN TO CONTRACTORS WHO FAIL TO VISIT THE SITE PRIOR TO THE BID DATE.
- REFER TO THE ARCHITECTURAL PLANS FOR EXTENT OF DEMOLITION WORK TO BE PERFORMED BY THE GENERAL CONTRACTOR. ALL ITEMS THAT NEED TO BE REMOVED BY THE GC SHALL HAVE THE POWER DISCONNECTED BY THE EC.
- NOT ALL DEVICES TO BE REMOVED OR DISCONNECTED ARE SHOWN. WHERE ENTIRE WALLS AND ROOMS ARE TO BE DEMOLISHED, ALL ELECTRICAL DEVICES IN THESE AREAS AND WALLS ARE TO BE DISCONNECTED, AND THE BRANCH CIRCUIT TO BE DISCONNECTED BACK TO THE SOURCE. ITEMS TO REMAIN AND RELOCATED WILL BE SHOWN. REFER TO MECHANICAL AND ARCHITECTURAL PLANS FOR TOTAL EXTENT OF DEMOLITION WORK.
- BUILDING IS EXISTING. WIRING IN EXTERIOR WALLS SHALL BE FISHED AS NECESSARY. SOME INTERIOR PARTITIONS ARE EXISTING. WIRING IN THESE WALLS MAY NEED TO BE FISHED. REFER TO ARCHITECTURAL PLANS FOR FULL EXTENT OF EXISTING CONDITIONS. NO SURFACE RACEWAY TO BE INSTALLED WITHOUT WRITTEN AUTHORIZATION FROM ARCHITECT.
- ALL NEW DEVICES AND LIGHTING SHALL BE WIRED TO NEAREST EXISTING RECEPTACLE OR LIGHTING CIRCUIT UNLESS OTHERWISE SHOWN. NEW CIRCUITS ARE SHOWN WITH A HOME RUN TO LISTED PANEL.

**KEYED NOTES:**

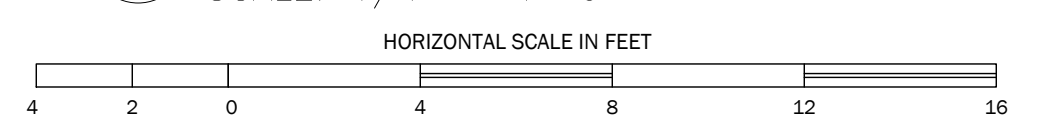
- EXISTING PUMP TO BE DEMOLISHED. EC TO DISCONNECT AND SALVAGE EXISTING CIRCUIT. EXISTING LOCAL SERVICE DISCONNECTING MEANS TO BE DEMOLISHED. EC TO COORDINATE ALL WORK WITH MC PRIOR TO DEMOLITION.
- EXISTING BOILER TO BE DEMOLISHED. EC TO DISCONNECT AND SALVAGE EXISTING CIRCUIT. EXISTING LOCAL SERVICE DISCONNECTING MEANS TO BE DEMOLISHED. EC TO COORDINATE ALL WORK WITH MC PRIOR TO DEMOLITION.
- EXISTING OIL FIRED HOT WATER HEATER TO BE DEMOLISHED. EC TO DEMOLISH EXISTING CIRCUIT BACK TO THE SOURCE IN ITS ENTIRETY. EC TO COORDINATE ALL WORK WITH MC PRIOR TO DEMOLITION.
- EXISTING EXHAUST FAN TO BE DEMOLISHED. EC TO DISCONNECT AND SALVAGE EXISTING CIRCUIT. EXISTING LOCAL SERVICE DISCONNECTING MEANS TO BE DEMOLISHED. EC TO COORDINATE ALL WORK WITH MC PRIOR TO DEMOLITION.
- EXISTING AIR HANDLER UNIT TO BE DEMOLISHED. EC TO DEMOLISH EXISTING CIRCUIT BACK TO THE SOURCE IN ITS ENTIRETY. EC TO COORDINATE ALL WORK WITH MC PRIOR TO DEMOLITION.
- EXISTING EXHAUST FAN TO BE DEMOLISHED. EC TO DISCONNECT AND DEMOLISH EXISTING WIRING BACK TO THE SOURCE. EXISTING LOCAL SERVICE DISCONNECTING MEANS TO BE DEMOLISHED. EC TO COORDINATE ALL WORK WITH MC PRIOR TO DEMOLITION.



**2 ATTIC PLAN - ELECTRICAL DEMOLITION**  
 SCALE: 1/4" = 1'-0"



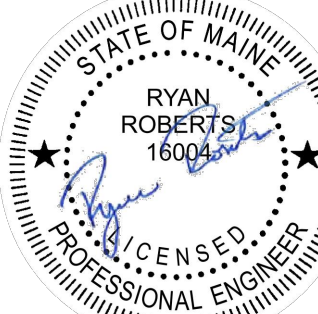
**3 MECHANICAL ROOM PLAN ELECTRICAL DEMOLITION**  
 SCALE: 1/4" = 1'-0"



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EDMUNDS SCHOOL  
ENCLOSURE REPAIRS &  
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21 HARRISON RD  
DENNYVILLE, ME 04628

SHEET TITLE

PROPOSED  
ELECTRICAL  
POWER PLANS

DRAWN BY	DATE
BDF	07/21/2023
CHECKED BY	D&K PROJECT #
RMR	528137
PROJ. ENG.	D&K ARCHIVE #
RMR	

SHEET NUMBER

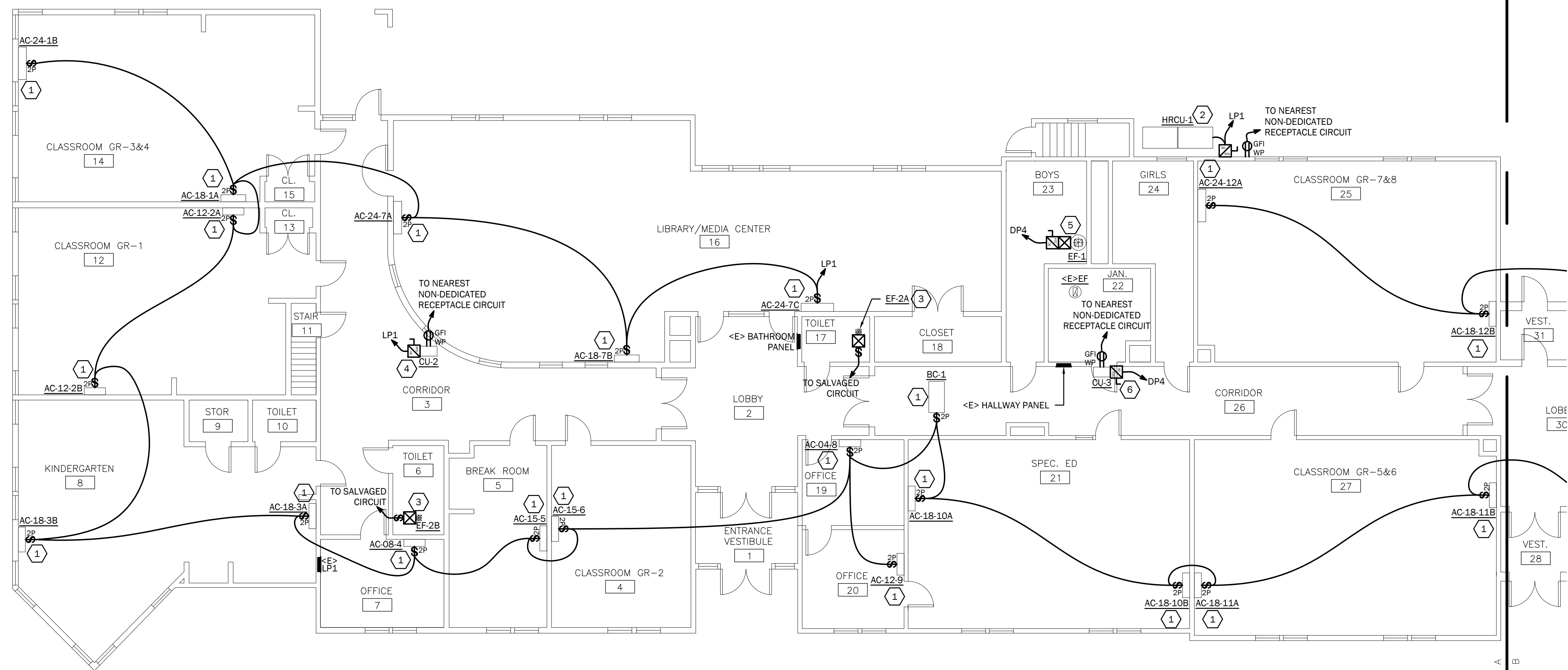
**E2.0**

ELECTRICAL LEGEND

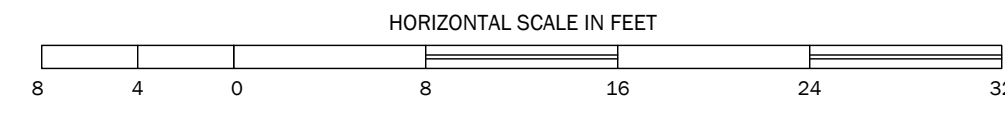
- ELECTRICAL DISTRIBUTION PANEL
- SWITCH - SINGLE POLE, SERVICE SWITCH FOR MOTORS
- SWITCH - TWO POLE, SERVICE SWITCH FOR MOTORS
- BRANCH CIRCUIT
- WEATHER PROOF DUPLEX GFCI RECEPTACLE - LEVITON #GFTR2
- HEAVY DUTY FUSED DISCONNECT PROVIDED AND INSTALLED BY EC
- JUNCTION BOX
- MOTOR STARTER PROVIDED BY MC, INSTALLED BY EC
- LOW WATER CUTOFF
- HIGH LIMIT
- GAS BURNER EMERGENCY SWITCH
- FIREMATIC SWITCH
- AFF ABOVE FINISH FLOOR
- EC ELECTRICAL CONTRACTOR (DIVISION 26)
- MC MECHANICAL CONTRACTOR (DIVISION 23)
- CM CONSTRUCTION MANAGER
- GC GENERAL CONTRACTOR
- ES EQUIPMENT SUPPLIER
- TYP. TYPICAL OF ALL
- <D> EXISTING DEVICE OR EQUIPMENT TO BE DEMOLISHED
- <E> EXISTING DEVICE OR EQUIPMENT TO REMAIN
- <R> EXISTING TO BE REMOVED AND RELOCATED
- <N> NEW EQUIPMENT OR DEVICE
- ELECTRICAL DEVICES, WIRES, CONDUITS TO BE REMOVED
- EXISTING ELECTRICAL DEVICES, WIRES, CONDUITS TO REMAIN

KEYED NOTES:

- 1 EC TO PROVIDE 208V, 15A, 1-PHASE CIRCUIT FROM PANEL LP1 TO FEED ALL NEW WALL MOUNTED VRF HEADS AND THE BC-1 UNIT. EC TO PROVIDE NEW HEAVY DUTY (2) POLE SERVICE DISCONNECT SWITCH AT THE UNIT. EC TO COORDINATE ALL WORK WITH MC PRIOR TO ROUGH-IN WIRING. EC TO PROVIDE AND INSTALL A NEW TWO POLE 15A RATED BREAKER - GENERAL ELECTRIC #THQB2115 IN PANEL LP1 TO FEED THE NEW CIRCUIT. ALL WORK TO BE COORDINATED WITH MC PRIOR TO ROUGH-IN WIRING.
- 2 EC TO PROVIDE NEW 208V, 60A, 3-PHASE CIRCUIT FROM PANEL LP1 TO FEED THE NEW HRCU-1. EC TO PROVIDE NEW 60A, 3-POLE BREAKER - GENERAL ELECTRIC #THQB32060 IN PANEL DP4. EC TO PROVIDE NEW NEMA-3R HEAVY DUTY FUSED DISCONNECT WITH 60A FUSES TO DISCONNECT POWER AT THE UNIT. ALL NEW BUILDING PENETRATIONS ARE TO BE COMPLETELY SEALED. ALL WORK TO BE COORDINATED WITH MC PRIOR TO ROUGH-IN WIRING.
- 3 EC TO PROVIDE NEW 120V 20A RATED SERVICE DISCONNECT SWITCH FOR NEW EXHAUST FAN. EXISTING 120V CIRCUIT FOR EXISTING EXHAUST FAN TO BE SALVAGED AND REUSED TO FEED NEW EXHAUST FAN.
- 4 EC TO PROVIDE NEW 208V, 45A, 1-PHASE CIRCUIT TO FEED THE NEW CONDENSER UNIT FROM PANEL LP1. EC TO PROVIDE AND INSTALL NEW 2-POLE, 45 AMP GENERAL ELECTRIC #THQB2145 BREAKER IN PANEL LP1 TO FEED THE NEW CIRCUIT. EC TO PROVIDE NEW NEMA-3R HEAVY DUTY FUSED DISCONNECT WITH 45 AMP FUSES TO DISCONNECT POWER AT THE UNIT. NEW CONDENSER UNIT TO BE LOCATED ON THE ROOF ALL WORK TO BE COORDINATED WITH MC PRIOR TO ROUGH-IN WIRING. EC TO PROVIDE NEW WEATHERPROOF GFCI SERVICE RECEPTACLE. NEW RECEPTACLE TO BE MOUNTED TO THE NEW CONDENSER UNIT. EC TO PROVIDE UNI-STRUT MOUNTING STRUCTURE AS REQUIRED. EC TO COORDINATE ALL ROOF PENETRATIONS WITH THE ARCHITECT AND GC.
- 5 EC TO PROVIDE NEW 208V, 15A, 1-PHASE CIRCUIT FROM EXISTING PANEL DP4 TO FEED THE NEW EXHAUST FAN. EC TO PROVIDE AND INSTALL NEW 2-POLE, 45 AMP GENERAL ELECTRIC #THQB2145 BREAKER IN PANEL DP4 TO FEED THE NEW CIRCUIT. EC TO PROVIDE NEW NEMA-3R HEAVY DUTY FUSED DISCONNECT WITH 15 AMP FUSES TO DISCONNECT POWER AT THE UNIT. NEW EXHAUST FAN TO BE LOCATED ON THE ROOF ALL WORK TO BE COORDINATED WITH MC PRIOR TO ROUGH-IN WIRING. EC TO COORDINATE ALL ROOF PENETRATIONS WITH THE ARCHITECT AND GC.
- 6 EC TO PROVIDE NEW 208V, 45A, 1-PHASE CIRCUIT TO FEED THE NEW CONDENSER UNIT FROM PANEL DP4. EC TO PROVIDE AND INSTALL NEW 2-POLE, 45 AMP GENERAL ELECTRIC #THQB2145 BREAKER IN PANEL LP1 TO FEED THE NEW CIRCUIT. EC TO PROVIDE NEW NEMA-3R HEAVY DUTY FUSED DISCONNECT WITH 45 AMP FUSES TO DISCONNECT POWER AT THE UNIT. NEW CONDENSER UNIT TO BE LOCATED ON THE ROOF ALL WORK TO BE COORDINATED WITH MC PRIOR TO ROUGH-IN WIRING. EC TO PROVIDE NEW WEATHERPROOF GFCI SERVICE RECEPTACLE. NEW RECEPTACLE TO BE MOUNTED TO THE NEW CONDENSER UNIT. EC TO PROVIDE UNI-STRUT MOUNTING STRUCTURE AS REQUIRED. EC TO COORDINATE ALL ROOF PENETRATIONS WITH THE ARCHITECT AND GC.

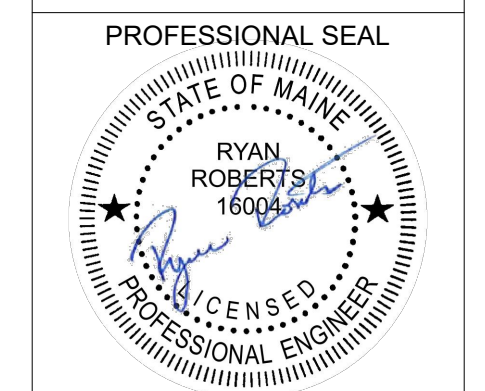


1 FIRST FLOOR PLAN AREA A - ELECTRICAL PROPOSED  
SCALE: 1/8" = 1'-0"  
HORIZONTAL SCALE IN FEET



ISSUED FOR BID  
07/21/2023

ELECTRICAL LEGEND	
	ELECTRICAL DISTRIBUTION PANEL
	SWITCH - SINGLE POLE, SERVICE SWITCH FOR MOTORS
	SWITCH - TWO POLE, SERVICE SWITCH FOR MOTORS
	BRANCH CIRCUIT
	WEATHER PROOF DUPLEX GFCI RECEPTACLE - LEVITON #GFTR2
	HEAVY DUTY FUSED DISCONNECT PROVIDED AND INSTALLED BY EC
	JUNCTION BOX
	MOTOR STARTER PROVIDED BY MC, INSTALLED BY EC
	LOW WATER CUTOUT
	HIGH LIMIT
	GAS BURNER EMERGENCY SWITCH
	FIREMATIC SWITCH
AFF	ABOVE FINISH FLOOR
EC	ELECTRICAL CONTRACTOR (DIVISION 26)
MC	MECHANICAL CONTRACTOR (DIVISION 23)
CM	CONSTRUCTION MANAGER
GC	GENERAL CONTRACTOR
ES	EQUIPMENT SUPPLIER
TYP.	TYPICAL OF ALL
<D>	EXISTING DEVICE OR EQUIPMENT TO BE DEMOLISHED
<E>	EXISTING DEVICE OR EQUIPMENT TO REMAIN
<R>	EXISTING TO BE REMOVED AND RELOCATED
<N>	NEW EQUIPMENT OR DEVICE
---	ELECTRICAL DEVICES, WIRES, CONDUITS TO BE REMOVED
---	EXISTING ELECTRICAL DEVICES, WIRES, CONDUITS TO REMAIN



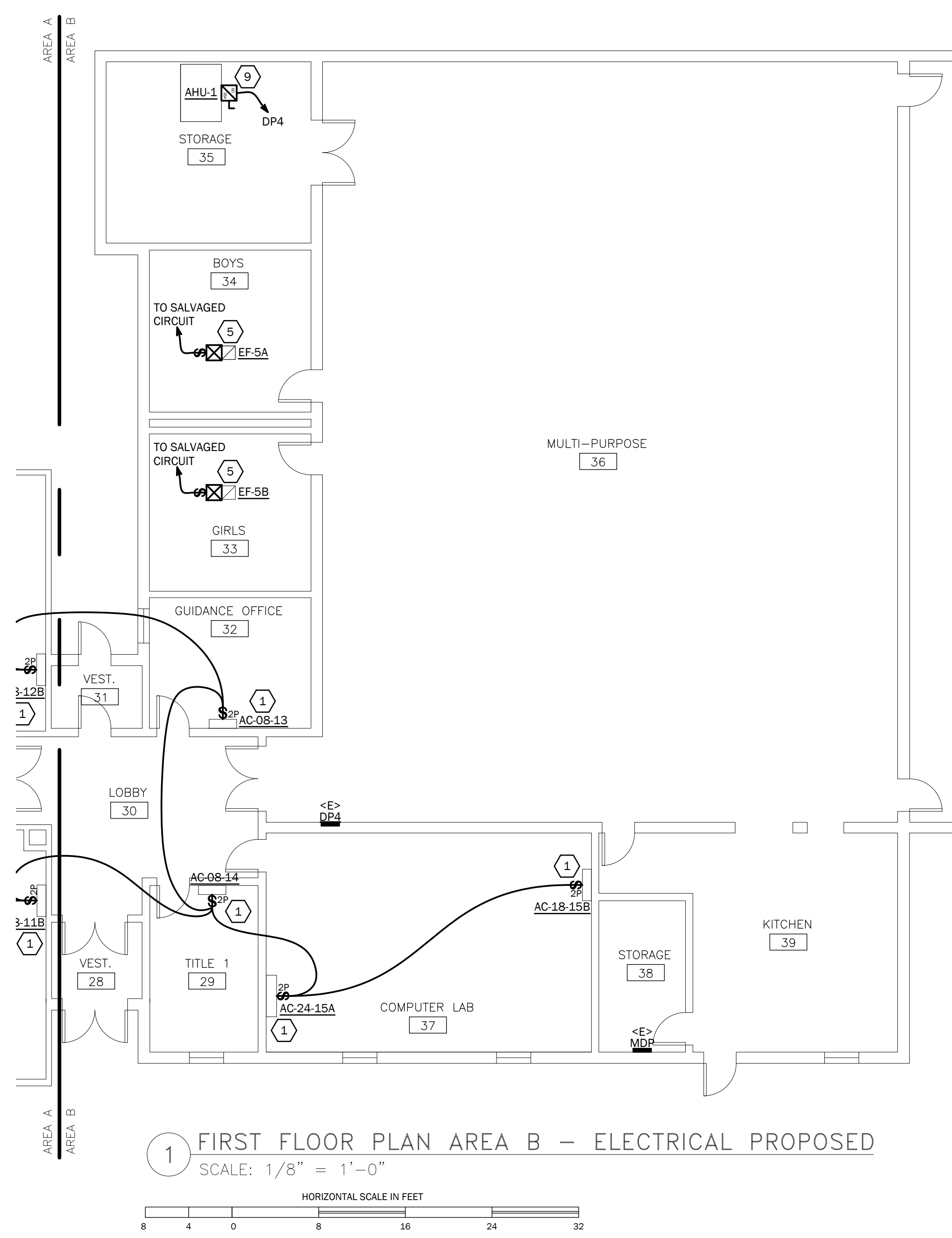
NO.	DATE	DESCRIPTION	BY	CK'D

**Maine DOE**  
 AUGUSTA, ME  
 EDMUNDS SCHOOL  
 ENCLOSURE REPAIRS &  
 MECHANICAL SYSTEMS  
 UPGRADES  
 21 HARRISON RD  
 DENNISVILLE, ME 04628

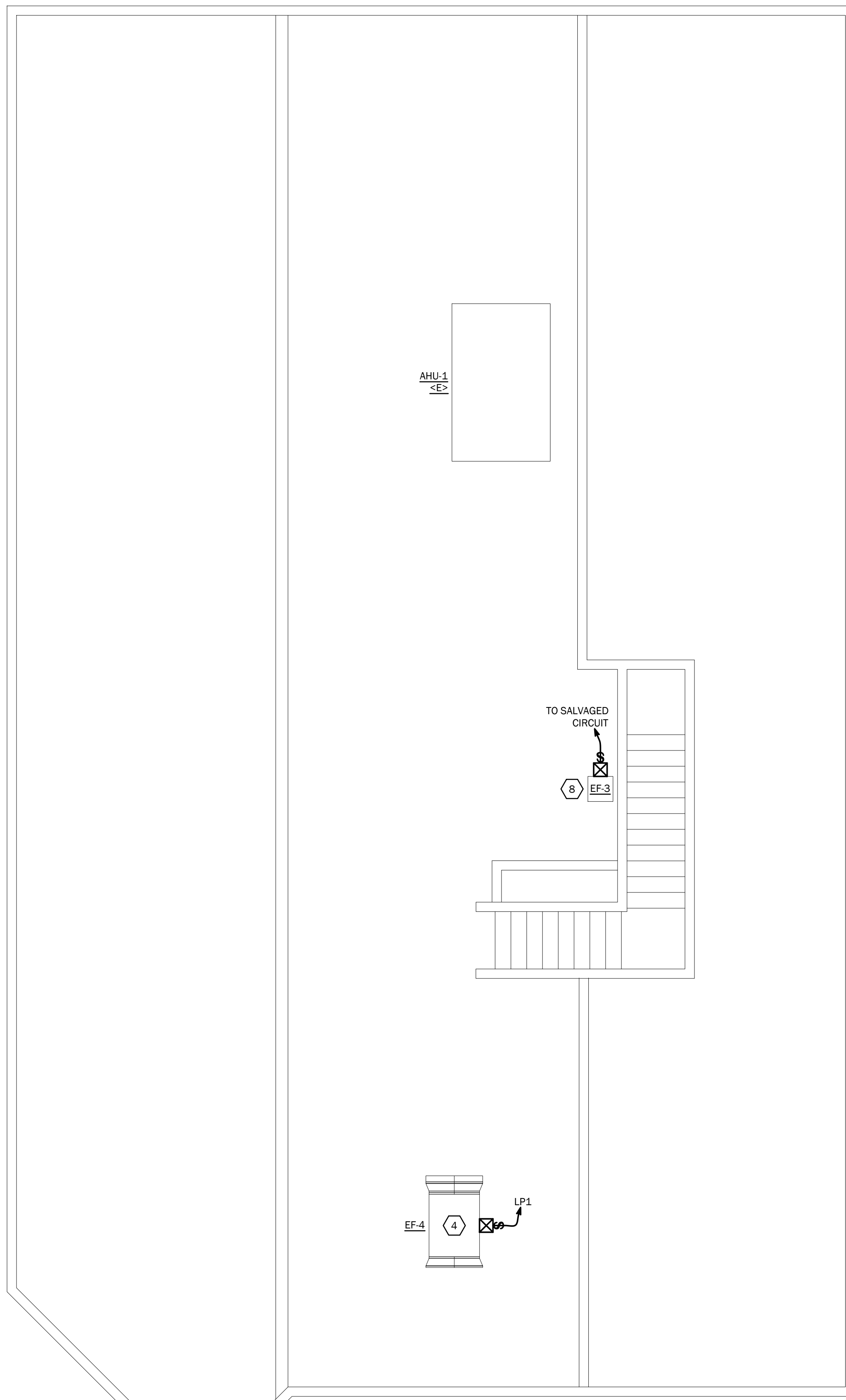
SHEET TITLE  
**PROPOSED  
 ELECTRICAL  
 POWER PLANS**

DRAWN BY	DATE
BDF	07/21/2023
CHECKED BY	D&K PROJECT #
RMR	528137
PROJ. ENG.	D&K ARCHIVE #
RMR	

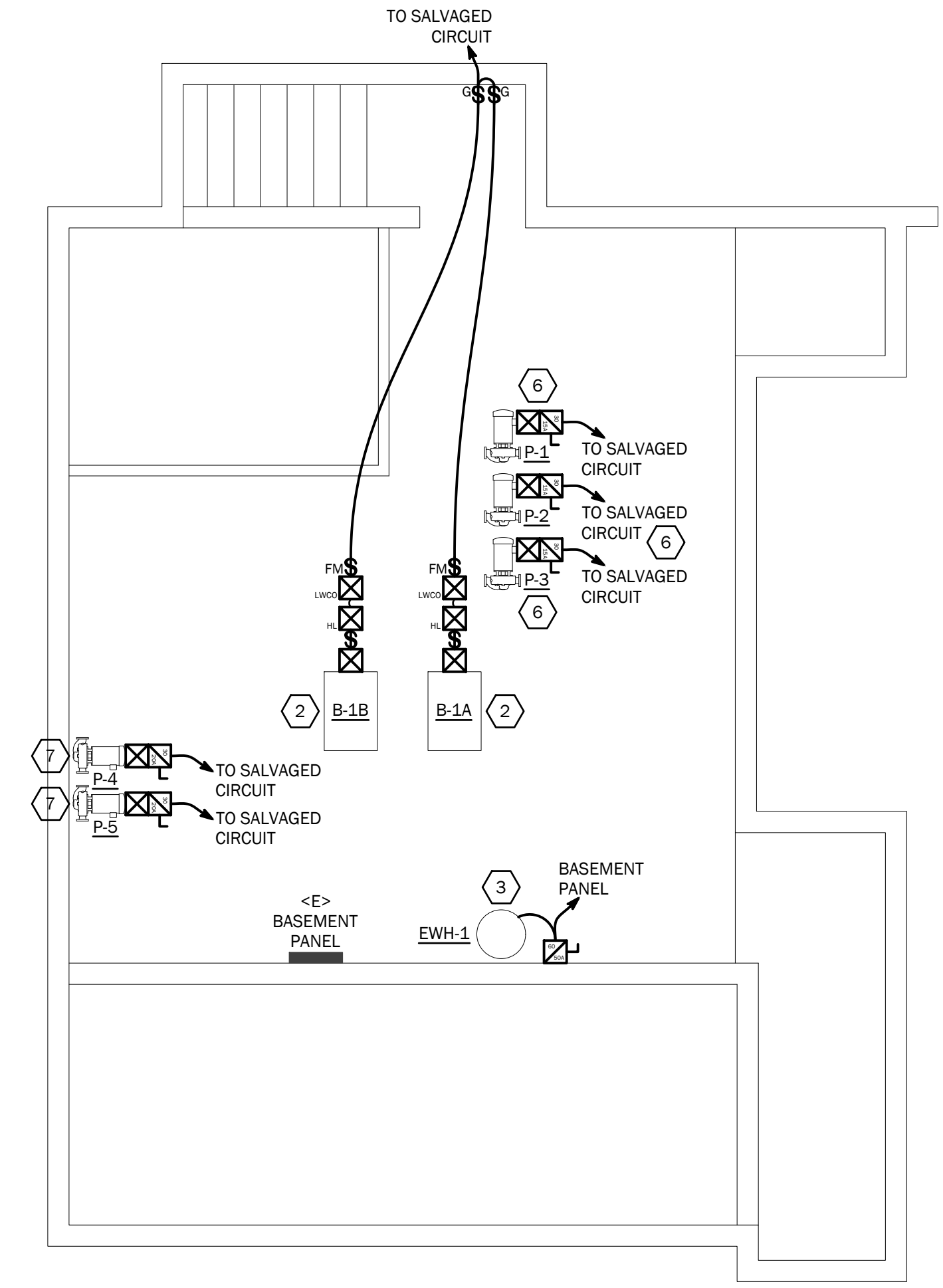
SHEET NUMBER  
**E2.1**  
 SHEET 30 OF 30



**1 FIRST FLOOR PLAN AREA B - ELECTRICAL PROPOSED**  
 SCALE: 1/8" = 1'-0"  
 HORIZONTAL SCALE IN FEET



**2 ATTIC PLAN - ELECTRICAL PROPOSED**  
 SCALE: 1/4" = 1'-0"  
 HORIZONTAL SCALE IN FEET



**3 MECHANICAL ROOM PLAN  
 ELECTRICAL PROPOSED**  
 SCALE: 1/4" = 1'-0"  
 HORIZONTAL SCALE IN FEET

- KEYED NOTES:**
- EC TO PROVIDE 208V, 15A, 1-PHASE CIRCUIT FROM PANEL LP1 TO FEED ALL NEW WALL MOUNTED VRF HEADS. EC TO PROVIDE NEW HEAVY DUTY (2) POLE SERVICE DISCONNECT SWITCH AT THE UNIT. EC TO COORDINATE ALL WORK WITH MC PRIOR TO ROUGH-IN WIRING. EC TO PROVIDE AND INSTALL A NEW TWO POLE 15A RATED BREAKER - GENERAL-ELECTRIC #THQB2115 IN PANEL LP1 TO FEED THE NEW CIRCUIT.
  - EC TO PROVIDE NEW 120V 20A RATED SERVICE DISCONNECT SWITCH, HIGH LIMIT, LOW WATER CUTOUT, FIREMATIC SWITCH AND REMOTE EMERGENCY GAS BURNER SWITCH FOR NEW BOILER B-1A AND B-1B. EXISTING 120V CIRCUIT FROM EXISTING BOILER TO BE SALVAGED AND REUSED TO FEED NEW BOILER B-1A AND B-1B.
  - EC TO PROVIDE A NEW 208V, 50A, 3-PHASE CIRCUIT FROM EXISTING PANEL IN BASEMENT TO FEED NEW ELECTRIC WATER HEATER. EC TO PROVIDE A NEW 208V, 3-PHASE, 60A HEAVY DUTY FUSED DISCONNECT WITH 50A FUSES FOR NEW ELECTRIC WATER HEATER EWH-1. EC TO COORDINATE ALL WORK WITH MC PRIOR TO ROUGH-IN WIRING. EC TO PROVIDE AND INSTALL A NEW THREE POLE 50A RATED BREAKER - GENERAL ELECTRIC #THQB32050 IN EXISTING BASEMENT PANEL TO FEED THE NEW CIRCUIT.
  - EC TO PROVIDE A NEW 120V, 1-PHASE, 30A CIRCUIT AND WIRING FROM EXISTING PANEL LP-1 TO FEED NEW EXHAUST FAN EF-4. EC TO PROVIDE A NEW 1-POLE 30A BREAKER GENERAL ELECTRIC #THQB1130 IN PANEL LP-1 TO FEED THE NEW CIRCUIT. EC TO COORDINATE ALL WORK THE MC PRIOR TO ROUGH-IN WIRING.
  - EC TO PROVIDE NEW 120V 20A RATED SERVICE DISCONNECT SWITCH FOR NEW BATHROOM EXHAUST FAN. EXISTING 120V CIRCUIT FOR EXISTING EXHAUST FAN TO BE SALVAGED AND REUSED TO FEED NEW EXHAUST FAN. ALL WORK TO BE COORDINATED WITH MC PRIOR TO ROUGH-IN WIRING.
  - EC TO PROVIDE NEW 208V, 3-PHASE, 30A RATED HEAVY DUTY FUSED DISCONNECT WITH 15 AMP FUSES FOR NEW PUMP P-1, P-2 AND P-3. EXISTING 208V 3-PHASE CIRCUIT FOR EXISTING PUMP TO BE SALVAGED AND REUSED TO FEED NEW PUMP P-1, P-2 AND P-3.
  - EC TO PROVIDE NEW 208V, 1-PHASE, 30A RATED HEAVY DUTY FUSED DISCONNECT WITH 20 AMP FUSES FOR NEW PUMP P-4 AND P-5. EXISTING 208V 1-PHASE CIRCUIT FOR EXISTING PUMP TO BE SALVAGED AND REUSED TO FEED NEW PUMP P-4 AND P-5.
  - EC TO PROVIDE NEW 120V 20A RATED SERVICE DISCONNECT SWITCH FOR NEW EXHAUST FAN EF-3. EXISTING 120V CIRCUIT FOR EXISTING EXHAUST FAN TO BE SALVAGED AND REUSED TO FEED NEW EXHAUST FAN EF-3. ALL WORK TO BE COORDINATED WITH MC PRIOR TO ROUGH-IN WIRING.
  - EC TO PROVIDE NEW 208V, 3-PHASE, 60A RATED HEAVY DUTY FUSED DISCONNECT WITH 35 AMP FUSES FOR NEW AHU-1. EC TO PROVIDE NEW 208V, 3-PHASE 35A CIRCUIT FROM EXISTING PANEL DP4. EC TO PROVIDE AND INSTALL A NEW 35A, 3-POLE BREAKER - GENERAL ELECTRIC #THQB32035. EC TO COORDINATE ALL WORK WITH MC PRIOR TO ROUGH-IN WIRING.



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